DFC Gemini

User Manual

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HEAD OFFICE
AMS NEVE PLC • BILLINGTON ROAD • BURNLEY
LANCS BB11 5UB • ENGLAND
TELEPHONE: +44 (0) 1282 457011 • FAX: +44 (0) 1282 417282

LONDON OFFICE
TELEPHONE: +44 (0) 20 7916 2828 • FAX: +44 (0) 20 7916 2827

NORTH AMERICAN OFFICES
AMS NEVE INC., NEW YORK
TEL: +1 (212) 965 1400 • FAX: +1 (212) 965 9306
AMS NEVE INC., HOLLYWOOD
TEL: +1 (818) 753 8789 • FAX: +1 (818) 623 4839

e-mail: enquiry@ams-neve.com
http://www.ams-neve.com

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GLOSSARY

AFU Function

This is a facility for expanding one signal path across the eight strips of the PreDub Zone so that all the signal processing settings for the signal path can be seen simultaneously. The AFU Function temporarily hides the signal paths in the PreDub Zone.

Alpha

The term alpha refers to the alphanumeric digital displays used on the console surface. For instance, each Logicator has an associated four character alpha, as have each of the PATH keys. Longer alphas are used on the Master Quadstrip and Surround Quadstrip panels.

Automation Mode

This refers to the states of controls that are used to record and re-play control moves against timecode. The two basic Automation Modes are Record and Play, and variations on these are used to perform different functions. Controls can also be in Isolate mode which is used to exclude them from the automation system.

Console Function States

The DFC Gemini has various modes of operation which allow the operator to change routing and the Desk Setup from the console surface without using Encore.

✍ *The numbers of paths of each type can only be changed with Desk Edit in Encore.*

Normal

The console will be in the Normal state when it has booted up.

Setup Function

The Setup Function is activated with the SETUP key on the Upper Routing Matrix and allows Path Process Switching, Turbo Allocation and Path Placement.

Path Process Switching allows the order of processing elements in a path to be changed.

Turbo Allocation allows the processing elements in a path to be changed.

Path Placement allows the assignment and movement of paths on the strips and layers on the console surface.

AFU Function

The AFU Function is activated with the AFU key on the Lower Routing Matrix and allows a path to be expanded across the predub zone.

I/O Patching

There are two basic Patching functions for Input and Output which are activated with the INPUT PATCH and OUTPUT PATCH keys respectively. I/O Patching allows port routing to be changed.

I/O Patching AFU Function

This happens when the AFU Function and an I/O Patching function is active at the same time. The advantage is that the first strip in the PreDub Zone shows patching information for the path called into the AFU. This allows the I/O Patching of any path to be changed without leaving the monitoring sweet-spot.

Copy Function

The Copy Function is used to copy the settings for signal processing and aux contribution from a selected path to any other path assigned to the console surface. It can be used in conjunction with the AFU Function so that it is clear which settings for which processing elements and auxes will be copied

Desk Setup

A Desk Setup is a file that contains the current configuration of the console.

The information stored in a Desk Setup is:

- ❑ The number of signal paths of each type (i.e. number of Channels, Tracks, shared Auxes, etc.)
- ❑ The signal processing allocated to each signal path and the current settings for processing parameters
- ❑ The user names for signal paths
- ❑ The internal routing between signal paths (e.g. which Channels are routed to which Tracks)
- ❑ The routing between signal paths and physical inputs and outputs (i.e. I/O patching)
- ❑ The assignment of signal paths to the console surface
- ❑ The configuration of the PreDubs
- ❑ The configuration of the Film Stems (i.e. which Tracks in which Stems)
- ❑ Which paths are inhibited from Solo, the automation system and/or being allocated
- ❑ Pan designation of Tracks and mono Groups
- ❑ The current configuration of Gangs and Link

Electronic Scribble Strip

The electronic scribble strips are the alpha displays associated with the PATH Access keys on the fader strips that show the name of the path currently assigned to the fader. They also show the fader level when the fader is touched.

Encore

Encore is used in conjunction with the console surface to provide functions for configuring and setting up the console, and automating the console.

Configuration functions include setting the tone (slate) frequency and volume, selecting the internal sample rate, deciding how the solo system operates and so on. Console setup functions include rapid port routing (similar to using a patch bay only much faster), setting how many paths of each type are to be used, applying the same signal processing functions to multiple paths, etc.

Encore provides management of automation data and automation functions such as labelling user selected timecode points, mix conforming and event list editing.

Events

Events are changes to control settings that are recorded against timecode by the automation system. They are recorded in timecode order to make the Event List. When a Mix/Pass is played back, it is the settings in the Event List that are used to automate the controls.

Function Key

The Function Keys are the row of keys at the top of the Encore keyboard that are marked F1 to F12. Some of them can be used as shortcuts to Encore functions and F1 is used to access the on-line help.

Glide

Glide is an automation function. This is when a continuously variable control (fader, Logicator controlling frequency, etc.) moves or is moved smoothly to match back to the Play Pass.

There are three types of Glide:

Manual Glide

This is when the GLIDE key for a control is pressed while the control is recording automation. The control matches back to the play pass using the Manual Glide time.

Auto Glide

This is when a control matches back to the play pass automatically when it is released. The Auto Glide time is used.

Manual Match

This is when the GLIDE key is pressed while a control that is recording automation is being touched. The alpha associated with the control will display an arrow indicating the direction to move the control to match to the play pass. The control will drop out of record when the play pass position is matched.

If the control is released before it is matched, it will remain in position waiting to be matched. If the play pass goes through the control position then the control will return to play back. If the transport is stopped before the control is matched then the control will drop out of record and snap back, the same as any control in record when transport is stopped.

Initial Snapshot (ISS)

The Initial Snapshot (ISS) list contains the initial state of all controls which are not in Isolate when the system is put into Play or which are taken out of Isolate while the system is in Play. There is also an option in Automation Preferences (First Mode Change Updates ISS) that will force the Initial Snapshot to be updated with the current setting for a control when it is taken out of Isolate for the first time.

The Initial Snapshot settings are stored as automation events at the beginning of a Mix/Pass.

Layers

The concept of layers is used to allow a digital console to control more signal paths (Channels, Tracks, etc.) than there are fader strips on the control surface. DFC Gemini allows up to four layers to be used (A, B, C and D). For instance, a 48 fader DFC Gemini could use three layers with two each of 48 Channels and one of 48 Tracks. Any of these can be selected to the fader strips. When a signal path is selected to a fader strip it is said to be "on the surface".

Switching between layers is instant and reduces the size of a console so that all controls in a partition are in reach all the time.

Logicator

Logicators are the rotary controls on the console surface that are touch sensitive and have illuminated tops. There are eight on each Channel Strip (referred to as Logicator 1 to Logicator 8 from top to bottom). Logicators are an AMS Neve patented design.

Mix/Pass

A series of automation events and associated data.

Mix/Pass Tree

A graphical representation of the current sequence of Mixes and Passes.

Any Mix/Pass can be selected from the Mix/Pass Tree to be the Play Pass.

Pan Designators

A pan designator is used to determine which portion of a panned signal will be received by a Track (bus) or Group. For example:

Channel 1 is routed to Track 1, Track 2 and some other destinations. Track 1 is pan designated as Mono (i.e. true mono) and Track 2 is pan designated as Front Left. Panning of Channel 1 will not affect Track 1 because it is a true mono destination. However, Track 2 will only receive the portion of Channel 1 for Front Left, according to the panning on Channel 1.

Mono

This is a normal mono path. The signal received Track or Group will not be affected by surround panning. A Track designated as Mono would not normally be used in a Film Stem.

Centre Mono

This causes a Track to act as a normal mono routing destination (i.e. un-affected by surround panning), but is routed to the Centre film monitor when used in a stem.

If the Centre Mono designator is used in Surround Sound Manager then the Tracks it is applied to are auto-routed to the Centre film monitor. This can be applied to Groups, but only has the same effect as normal Mono.

Left and Right

These are normal stereo left leg and right leg routing destinations. The signal received by a Track or Group is only affected by left/right panning (i.e. front/back, surround left/right and divergence controls have no effect). These should be used when Stereo is selected for Film paths in the Desk Edit Config page.

Front Centre, Front Left and Front Right

These are the surround destinations corresponding to the front speakers. Front Centre is often fed directly by dialogue to 'lock' dialogue to the screen.

Surround Mono

This panning destination that has two different uses. In LCRS format, it is the panning destination for rear surround. In wider formats (5.1 and 7.1) it is the destination corresponding to the sub-woofer.

Surround Left and Surround Right

These are the panning destinations for the rear left and right speakers. These are normally only used with the wide formats (5.1 and 7.1).

Surround Centre

This is the rear centre destination (i.e. opposite front centre) used by the 6.1 format (also known as Surround EX).

Inner Left and Inner Right

These are panning destinations that sit between Front Left/Front Centre and Front Right/Front Centre to provide a smoother image across the front. These are normally only used with 7.1 format.

Path

Path is the term used to describe a discrete part of the signal flow through the console that has a distinct input and output, either to the outside world or to another path. In an analogue console, there is a fixed number of signal paths and they are hard-wired into different parts (or modules) in the console. DFC Gemini is a digital system and this makes it 'assignable'. This means that the number of paths is not fixed but is selected according to the task in hand. This is done using the utility called Desk Edit that is part of Encore. The path type indicates the way that a path is used. For instance, Channels are the main console inputs, similar to channel modules in an analogue console.

Play Pass

The Play Pass is the Mix/Pass that is being used to play back a previous recording of automation moves (events).

The current Play Pass number is displayed in green on the Encore screen.

Pointer

The arrow shaped symbol that is moved across the screen by rolling the trackball. The point of the arrow is the active 'hotpoint' that selects items pointed to when the trackball button is clicked.

The shape of the pointer is context sensitive. For instance, the pointer sometimes changes shape to an hourglass (to indicate the computer is busy) or an I-beam (for selecting text).

Port Naming Conventions

The system names for input and output ports indicate the rack number, the port type, the port number, if the port is mono or stereo and whether the port is an input or output.

Rack Number

The leading digit(s) in the port name indicate the rack number, according to which MADI port the rack is connected to from the main DSP Rack. For instance, **2 lin 3 A** is a line input from an ADC card in the IOS Rack connected to the second MADI port, and this is referenced as Rack 2.

Port Type

The port type is summarised by the three letters following the rack number. For instance, **3 AES 1AB** is a stereo input from an AES/EBU card in Rack 3.

The exception is for ports that are connected by MADI that are not part of the DFC Gemini system. For instance **6 mad 10** is the tenth input on MADI port 6. This could be from AMS Neve outboard equipment (e.g. a TDIF/MADI Interface unit) or any third party device (e.g. a tape machine) that has a MADI interface.

Port Number and Mono/Stereo Status

The trailing numbers and letters indicate the port number within rack. For instance, **2 lin 5 A** is mono input that is the right leg of line input 5 in rack 2.

Any pair of ports can be combined as a stereo pair (this is the default for AES ports). Line and AES ports are numbered in the sequence 1A, 1B, 2A, 2B and so on. A matching pair of ports is combined to make a stereo pair, e.g. 1AB, 2AB, 3AB and so on.

Other port types can be combined into a stereo pair using an odd numbered port for the left leg and the following even numbered port for the right leg. For instance, **6 mad 11/12** is a stereo MADI input using MADI inputs 11 and 12 on MADI port 6.

Input or Output

The port type in system names for inputs are in lower case (i.e. small letters) and for outputs are in upper case (i.e. capital letters). For instance, **1 AES 2AB** is a stereo output and **1 aes 2AB** is the matching stereo input.

Port Routing

This refers to switching on an electronic connection between a physical input or output of the console and a console signal path (e.g. from a microphone to a Channel). This is the electronic equivalent of using a patchbay on an analogue console. Also known as digital patching, digital port routing or virtual patching.

Processing Element

DFC Gemini is a digital console that has a certain amount of processing power available. This depends on the number of signal processing cards in the main system rack.

Each signal path uses processing power and adding audio processing to a path, such as EQ or dynamics, uses more processing power. Anything that applies changes to a signal in a path uses processing - this even includes the fader.

A **processing element** is one of the individual items of audio processing that can be assigned to or removed from a signal path (e.g. fader, compressor, three band equaliser, etc.). The processing elements are allocated to the signal paths in advance of being used. This reserves the processing power and prevents resources from being overloaded.

The information about which processing elements are assigned to each path is stored as part of the Desk Setup.

Quadstrip

The DFC Gemini console is constructed from standard sections, each of which is four channel strips wide. Each of these sections is called a Quadstrip.

There are two special quadstrips called the Master Quadstrip (for global operations, routing, monitoring, etc.) and the Surround Quadstrip (with controls for surround monitoring, track arming, etc.).

Quantisation

Quantisation is an effect of converting analogue signals to digital signals. For instance, a pure sine wave is sampled at a the system sample rate (usually 44.1kHz or 48kHz), creating a series of stepped values (the level at each sample point along the wave form) which produce a close approximation of the sine wave.

However, if a wave is at a very low level, the smallest step size (or quanta) can become significant so that the approximation of the wave is inaccurate. This is when quantisation can distort a signal. A solution to this is to dither the signal on output and this has the apparent effect of smoothing the stepped values.

Record Pass

A Record Pass is made when the transport is in play and changes to control values are recorded against timecode.

At least one new automation event must be created by a control in a record mode.

A new Mix/Pass number is created and displayed in red on the Encore screen.

Routing

This refers to making electronic connections between the different signal paths within the console. The DFC Gemini provides routing control that is tailored for mixing down to surround sound formats in film post-production. In addition, 'standard' routing control is provided to give the console maximum flexibility and allow for non-post production applications.

Safety Snapshot

A record of the settings of all controls that can be automated, regardless of the automation mode the control is in. A Safety Snapshot is taken when New Mix/Clear Mix Memory is executed and when the system is put into Play.

For New Mix/Clear Mix Memory, the Safety Snapshot is stored with Mix/Pass 1.0.

When the system is put into Play, the Safety Snapshot is taken but it is not stored unless the Mix/Pass is saved by Autosave or a manual Keep after the transport has been stopped.

The Safety Snapshot is stored with a Mix/Pass but separately from the automation event data.

Sync Source

This is the source for the word clock synchronisation signal that is used to ensure that samples of digital audio are sent and received simultaneously by digital audio devices that are connected together.

The Sync Source is selected in the Sync Select page of Preferences.

Timecode

The source for timecode can be a tape machine (digital or analogue) or a pulse generator (video source).

The Timecode source is selected in the Automation page of Preferences.

The Timecode format is set using Timecode Options.

Turbo Allocation

Turbo Allocation is used to assign and remove processing to and from paths without using Encore. For instance, if a path requires EQ (such as a Main Output that would not usually have EQ) it can be added as a one off operation with Turbo Allocation.

Turbo Allocation can also be used to move paths to different fader strips.

Virgin Territory

This is an expression used to describe parts of a Mix/Pass (or a series of Mix/Passes) for which there is no return value for a control (i.e. the value it snaps back to when timecode stops). The DFC Gemini takes an Initial Snapshot of all controls that can be automated. The ISS value for each control is marked to indicate whether or not TO END has been used on each control.

If TO END has not been used, then the control has Virgin Territory after the last recorded control move.

If TO END has been used while the control was recording automation (i.e. the control was in 'hard record'), then the control has no Virgin Territory. The last recorded move is used as the return value, so that when further automation is recorded the control will snap back to the return value when timecode stops.

Word Clock

This is a synchronisation signal that is used by digital audio equipment. Word clock ensures that the digital audio itself is synchronised so that artefacts such as distortion, crackle and drop outs do not occur.

For instance, if DFC Gemini is recording to a digital multi-track tape machine then they must be synchronised to send and receive each digital sample of audio simultaneously. If they were not synchronised (out of phase) then the tape machine would record the samples incorrectly, so that the recording would not match the output from the console.

The rate at which word clock is running sets the sample rate (e.g. 44.1kHz) for the devices reading the word clock.

This should not be confused with timecode (or timeline) which is used to keep devices lined up at the same time position.

The Word Clock rate and Sync Source are selected in the Sync Select page of Preferences.

INTRODUCTION

About This Manual

Information in this Manual

The information in this manual is mainly presented as a reference for users who are familiar with the operation of mixing consoles. It is assumed that operators and engineers who will be using the DFC Gemini are familiar with concepts such as EQ, delay, etc.

However, DFC Gemini is an assignable digital system and this will be new territory for many users. If you are among those users who are new to digital systems then you should follow the guidelines below for finding out about key concepts for the DFC Gemini. You will soon find that DFC Gemini is very easy and intuitive to use.

Finding Information

There are two lists which may help with finding a topic that you are interested in: the contents and the index.

This manual is primarily a reference tool and is not designed to be read sequentially. Therefore, use the index (at the back of the manual) to find information quickly.

Software Versions

This manual was written with Encore version 1713 and Console version 2622v2.95. The manual is updated whenever software changes the operation of the console significantly. Please check the release notes supplied with new software releases for interim operational updates and for compatibility issues between old and new software.

Structure of this Manual

Basic Information and Getting Started

If you are a new user, and particularly if you are new to digital systems, then you should familiarise yourself with the information in the following chapters at the beginning of the manual:

Glossary Of Terms

This has definitions of terms as they are used in this manual and in the context of using DFC Gemini.

Introduction

The rest of this chapter provides supplementary information about this manual and the DFC Gemini.

DFC Gemini Console Surface

This is a section-by-section overview of DFC Gemini's console surface.

Getting Started

This describes how to get a signal through the console to the control room monitor speakers, from logging in to Encore to monitoring a surround mix. You should attempt to work through this chapter 'hands-on' as this will build confidence and show you how easy it is to use DFC Gemini.

Working With Signal Paths

This defines the various types of signal paths and what they are used for. You will find this useful if you have limited experience of digital systems.

Encore

This section of the manual describes how to use the functions in Encore. The functions are described in the order that they appear on the Encore menus.

Appendices

Appendices A and B describe the Logic routing and monitoring systems. These have been superseded by the DFC Gemini systems, but they can still be used if it is necessary.

Appendix C describes User Administration (for setting up and managing users within Windows NT).

Appendix D provides details of which machines are supported by the Machine Control System (MCS).

Appendix E describes Norton Ghost, a utility for taking 'rubber stamp' copies of the hard drive as a safety precaution. This procedure includes all program files, applications, operating system and all user files.

Conventions in this Manual

Instructions

Task instructions are given as a series of actions. Each of action is indicated by an arrowhead:

➤ This is an action. Do me!

A description of the results may follow an action (e.g. pointing out that a key will illuminate after being pressed).

Notes

Notes are provided to describe exceptions, options or other information that is relevant to the current topic. A note is shown in italics next to a writing hand symbol:

✍ *This is a note. Please read me.*

DFC Gemini Overview

The DFC Gemini is the first all digital console designed specifically for use in film post-production and can be tailored to the requirements of users in every area of mixing sound for film. It can handle large numbers of inputs, mixed down to any current surround format, within a comfortable physical layout. The DFC Gemini has dynamic automation of all signal processing controls, fully configurable DSP for processing and bussing, flexible I/O provision and an assignable control surface.

All aspects of feature film mixing are addressed:

- Multi-format surround panning
- Flexible monitor formatting with insertion of matrix processors
- Multi-operator capability (up to three) with separate console zones
- Shared or discreet auxiliary and recorder busses

Multiple configurations (setups) can be created and modified, and setups and automation are freely transferable between consoles of similar specification.

Signal Path Capabilities

The signal processing in the DFC Gemini is assignable to any signal path. Each signal path only needs to have the signal processing it requires. The processing available includes:

- Full stereo and surround panning.
- One to eight bands of fully parametric EQ.
- One or two high and/or low pass filters.
- Dynamics, in the form of Limiter, Compressor, Expander, Gate. The dynamics elements can have a key input, derived from any other signal path and sidechain EQ.
- One or two insert points, with analogue and/or digital interfacing.
- Up to 12 Auxiliary Sends per zone. Each auxiliary can be mono or stereo.
- Up to 10 seconds of delay (hardware dependent).

PreDubs

DFC Gemini allows up to 48 predubs of linked input paths to be defined. A predub is then assigned to one fader strip to conserve space. A predub can be expanded into the PreDub Zone for adjusting fader offsets and making individual changes to EQ, dynamics, etc.

Auxiliary Sends

Each operating zone of the console (partition) can feed up to 12 Auxiliary sends. There can be up to three partitions, as determined by the hardware specification. Auxiliaries can be shared across the whole console (e.g. Auxiliaries 1-4 could be common, with Auxiliaries 5-12 discrete to each partition).

Bussing

DFC Gemini can provide up to 48 record busses, with associated tape returns. These are referred as Tracks by this manual, by Encore and by displays on the console surface.

The Tracks are used to form up to six film stems. Each film stem can be up to eight Tracks wide. The film stems can be setup in different surround formats simultaneously.

Input Channels feature full surround pan capability and can be routed to any or all Tracks simultaneously. Intelligent pan configuration automatically establishes the correct pan law for each stem that a Channel contributes to.

If a Channel is routed to a single bus, or busses that have no surround designation, then panners are disabled. Individual panning controls can also be removed altogether and this allows Channels to be double punched to the outputs with no panning in the circuit.

Metering

The meters are high resolution TFT, operating with Digital Peak, VU, or PPM characteristics. The meters can be assigned to any signal path with the Meter Designer utility in Encore.

Monitoring

The surround monitoring system can be configured for any of the current surround formats, or customised for non-standard monitoring. Also, up to three playback-only machines can be monitored directly, and each machine can have up to 24 tracks.

Standard studio/control room monitoring is also available.

Recorder Control

The Tracks can be configured to feed up to 6 stem recorders. These are accessed through the PEC/Direct Panel, which provides:

- ❑ Bus/Tape (PEC/Direct) monitor switching
- ❑ Cut or Solo of any bus in the monitors
- ❑ Safe/Ready switching and Bias control for the recorders

Parallel hardware interfacing allows dubbers, multitrack AIRS or workstations to be connected, with record tallies from the machines displayed on the panel (if supported by the record device).

Similarly Bus/Tape (PEC/Direct) switching monitor logic accommodates the requirements of various types of recorder. Both monitor and bias switching can be Linked or Grouped.

Automation

The automation system for DFC Gemini is Encore. It provides full dynamic automation of all signal processing functions. Linear motor faders and Logicator controls with LED illumination actively show a Play Pass. Faders and Logicators are touch sensitive.

Automation functions include:

- ❑ Manual and Auto Glide matching for smooth transitions.
- ❑ Collect Touch facilitates scene changes by allowing a range of controls to be selected and then automation can be previewed and written in context.
- ❑ Safety Nets for restricting the action of controls to a defined period of timecode, such as a particular scene.
- ❑ Fader trimming for offsetting by small amounts.
- ❑ Automation conforming for adding, moving or removing sections when a reel is re-cut.

Automation modes can be selected globally but independently in each operating zone or individually for each control.

Encore can work with any of the common timecode rates and can also display time in film footage.

Mix/Passes can be automatically saved to the Encore hard drive and added to a graphical Mix/Pass Tree. At the end of a session any or all passes can be permanently saved in a multi-level filing system. Mix/Pass files can be exported or archived to a variety of media.

System Processing Limitations

SSP - Limited to 252 paths when running 500 Path compatible software.

ESP - Ulto 448 paths on a single mix setup (502 including necessary system paths ie Films, LSs etc).

XSP - Upto 448 paths on a single mix setup (502 including necessary system paths ie Films, LSs etc).

Setting Up The Console for Use

Desk Edit

Desk Edit (page 29:1) is always the starting point for a new Desk Setup and console configuration.

It is an Encore utility that is used for the basic Desk Setup which determines how many of each type of path is available.

Additional features of Desk Edit are placing signal processing elements in each path, assigning paths to the console surface (Desk Designer page) and setting up predubs.

I/O Manager

I/O Manager (page 29:38) is used for configuration of input and output ports (e.g. dither, delay, SRC, etc.) and assigning those ports to paths (Input/Output routing).

Console Setup Function and Input/Output Patching

Some of the functionality of Desk Edit and I/O Manager is duplicated using controls on the console surface.

The SETUP key activates three functions which duplicate some of the Desk Edit functionality:

Turbo Allocation - assigning signal processing elements to paths

Path Placement - assign paths to the console surface

Path Process Switching (PPS) - change the order of processing elements in a path

The INPUT PATCH and OUTPUT PATCH keys activate Input and Output Patching (page 1:2) respectively, which allows the ports assigned to paths to be changed without using I/O Manager.

Surround Sound Facilities

The DFC Gemini is designed for use in the film and post-production industries. Surround Sound Facilities (chapter 8) describes all the features for setting up routing and monitoring for film Stems.

Automation

Automation (chapter 19) provides an overview of using automation on the DFC Gemini, and describes the use of the console surface for selecting automation modes.

The reference chapters on Encore provide a menu-item by menu-item description of Encore. The main chapters relating to general automation activities are Automation Menu (chapter 24) and List Menu (chapter 27).

Getting Started

See the Getting Started chapter for step-by-step instructions on setting up a small Desk Setup, using this to route a signal through the console to the Surround Monitor outputs and then monitoring the surround mix.

Note on Routing and Monitoring

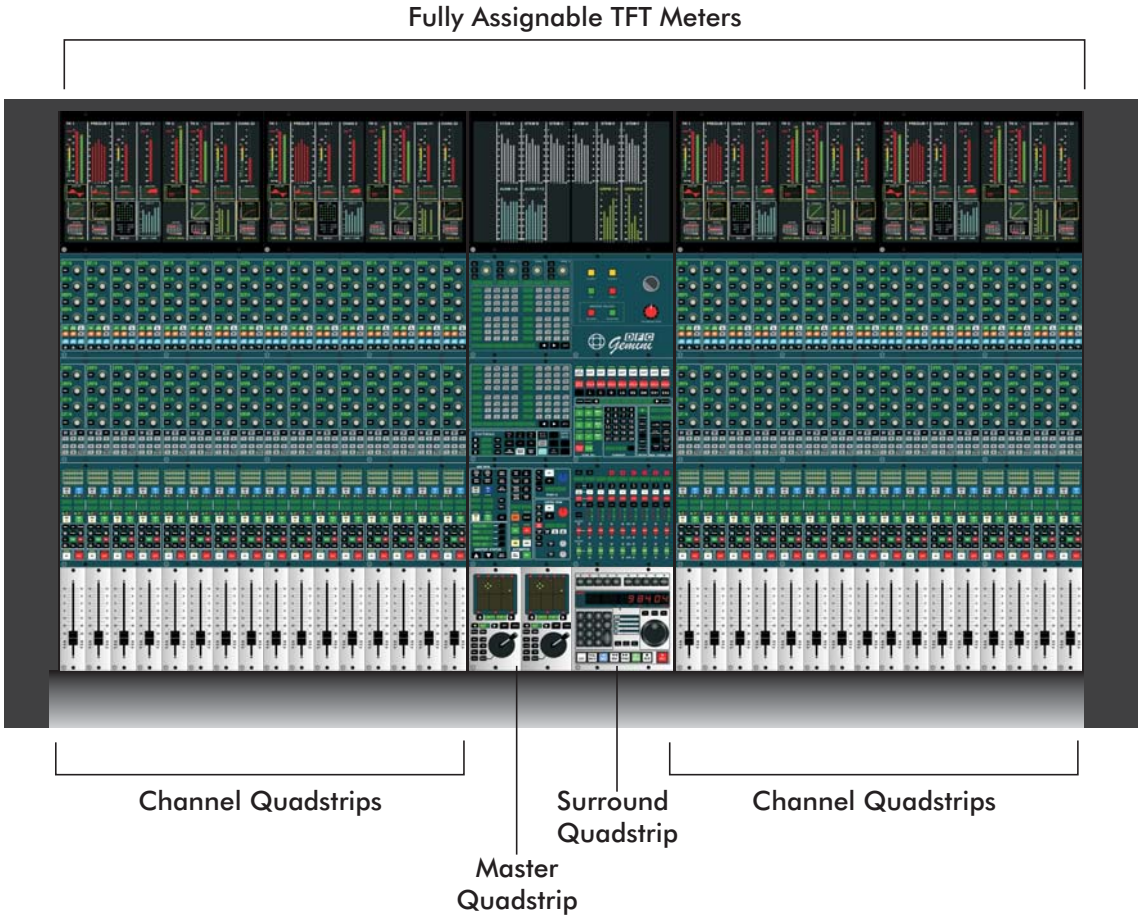
The Routing and Monitoring appendices at the end of this user manual describe the 'standard' routing and stereo monitoring capabilities of the DFC Gemini which are not specific to the film industry.

DFC GEMINI CONSOLE SURFACE

Quadstrips

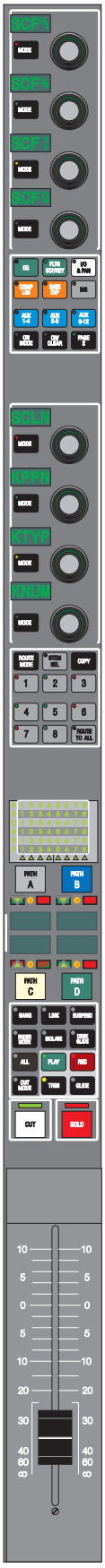
The DFC Gemini console is constructed from standard sections, each of which is four channel strips wide. Each of these sections is called a Channel Quadstrip.

There are two special Quadstrips called the Master Quadstrip (for global operations, routing, monitoring, etc.) and the Surround Quadstrip (with controls for surround monitoring, track arming, etc.).



A DFC Gemini also has a separate Encore workstation, and may have the optional Machine Control Panel, Graphic Equaliser Panel and/or Status Panel.

Channel Strip

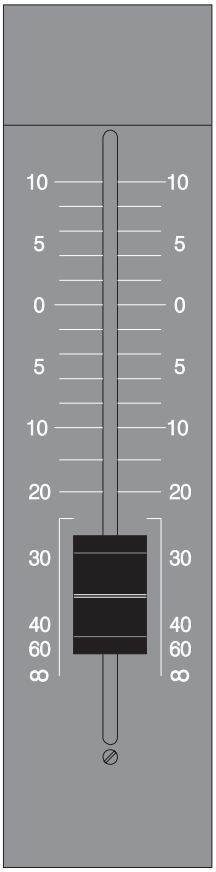


Each Channel Strip can be used to control up to four signal paths. Predub masters can also be assigned to a Channel Strip.

Each Channel Strip provides full control over the signal processing assigned to each path and the stem routing of inputs. Controls are also provided for automation, auxiliary sends, control linking, fader ganging and predub expansion.

A group of eight Channel Strips (which must use two whole Channel Quadstrips) can be designated as the PreDub Zone. The PreDub Zone is used for expanding predubs and for the AFU Function. The AFU Function is used to expand the signal processing controls for a single path across the eight strips in the PreDub Zone.

Channel Fader



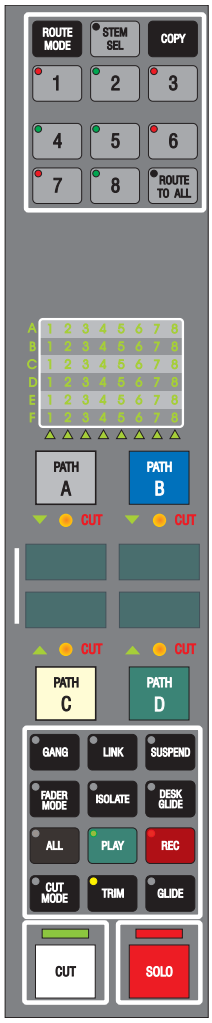
The faders are touch sensitive and use linear motor drives to dynamically indicate position.

Fader positions are read and translated digitally into the appropriate gain settings in the processing.

Faders can be driven by the dynamic automation system and also have their positions set by loading a Desk Setup, setting defaults or calling a path to the surface.

The faders have PFL switching which operates from an overpress against a spring after infinity has been reached. This is only relevant if the PFL bus is routed to some separate speakers (using the system path LS2) or if the console is not operating with Surround Monitoring (no Film paths).

Routing, Automation and Path Control



Routing Selection and Display

The Stem Routing keys are used to select which Stem to route the signal to, and which Paths within the Stem to route to. The Stem Routing Display shows which parts of which Stems the signal is routed to.

The triangular LEDs below the Stem Routing Display show the width of the current path. One will illuminate for a mono path and two for a stereo path. When a predub is on the surface, the LEDs will illuminate to show how many paths are in the predub.

Path Selection

The PATH access keys are used for a variety of special purposes. The primary use is to access the four signal paths which assigned to the channel strip. The second use is for routing where a Group or Main PATH access key may be held down while those of the Channels are pressed.

A similar procedure is used to route the Groups to the Main.

This action causes the Channel or Group PATH access keys to illuminate as long as the Group or Main key is held. The latter remain lit to confirm subsequent routing.

The Channel to Group routing can be forward interrogated by holding down the Channel key when the illumination of all but the Group/Main PATH access keys to which it is routed are extinguished.

By holding down the ALL key on a strip and pressing a PATH access key on the same strip that layer will be brought to the surface of the console for all channel strips.

Channel Automation and Mode Controls

GANG and LINK are used for setting up groups of controls across separate Channel Strips. SUSPEND is used to isolate a control from a linked group so that its offset can be changed.

PFL routes the pre-fader signal to the AFL mix whose output appears either at its own interface for an external amplifier and loudspeaker or over-riding the Main Monitor Output.

FADER MODE and CUT MODE determine the automation mode of the fader and CUT key as selected with the ISOLATE, PLAY, REC, TRIM and GLIDE keys.

The ALL key is used to control automation scope and to set the automation mode for all controls in a strip simultaneously.

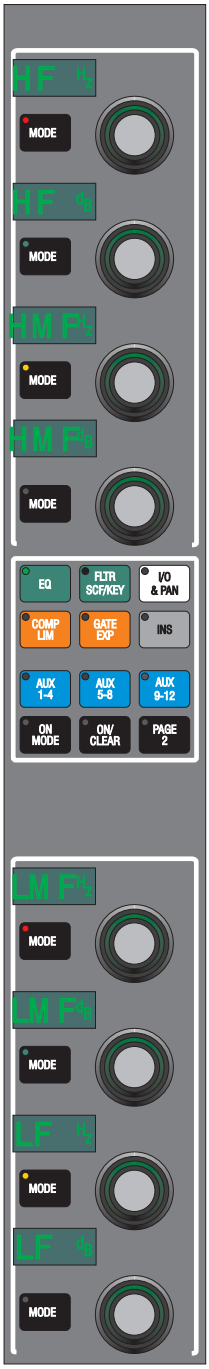
Cut and Solo Keys

CUT mutes the signal completely.

SOLO routes the after fader signal to the AFL mix.

When PFL is operated any AFL (SOLO) is removed.

Signal Processing and Auxiliary Control



The function of the Logicators depends on the selection made with the Function Selection keys in the middle.

By convention, the Logicators are referred to as Logicator 1 (top) to Logicator 8 (bottom).

Logicators

Each Logicator has an alpha display and a MODE key associated with it.

Logicators are touch sensitive and have LED indicators that illuminate the top of the Logicator to show the setting.

The 4 character alpha display shows the setting of the current parameter assigned to the Logicator. It also shows what parameter is assigned to the Logicator when a Function Selection key is pressed and held.

The MODE key is used for automation modes and scope, and in conjunction with ON/CLEAR to reset a value to its default.

Signal Processing Function Selection

Each key has an LED to show which functions are available and which is currently active.

The PAGE 2 key is used to access additional parameters for some of the functions. Its LED illuminates green when the active function has a second set of parameters and red when the PAGE 2 is pressed to access those parameters.

The ON/CLEAR key is used to enable and disable functions and reset values to defaults.

The ON MODE key is for automation of the on/off function on the ON/CLEAR key.

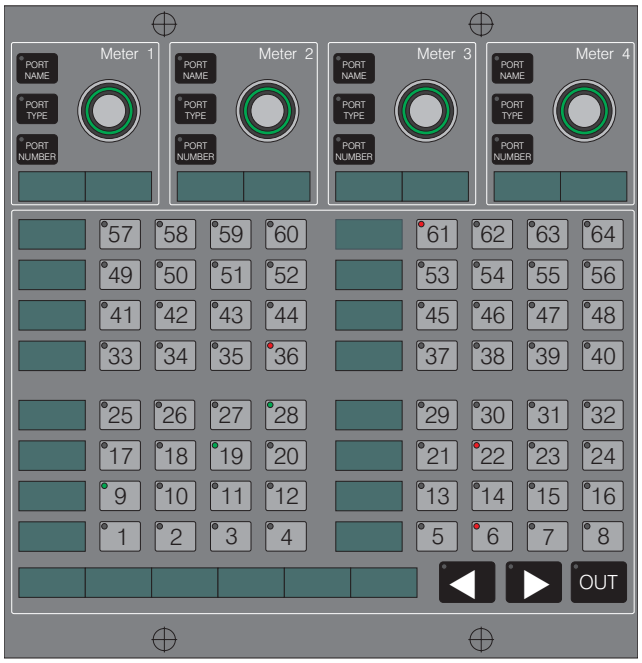
Master Quadstrip



There can be up to three Master Quadstrips in a DFC Gemini, each of which provides control over an operator zone (partition). Some functions (such as Turbo Allocation) are console-wide operations that can be activated from any Master Quadstrip.

Note that the Joystick Panel may not be fitted or may be fitted in the Surround Quadstrip.

Routing and Metering Panel



Metering Selection

The meter selection controls are used to assign a port to each of the Wild meters in a Meter Design. Note that the Wild meters need not necessarily be part of the currently displayed Meter Design.

The Logicator is used to select the port to be metered on the corresponding Wild Meter.

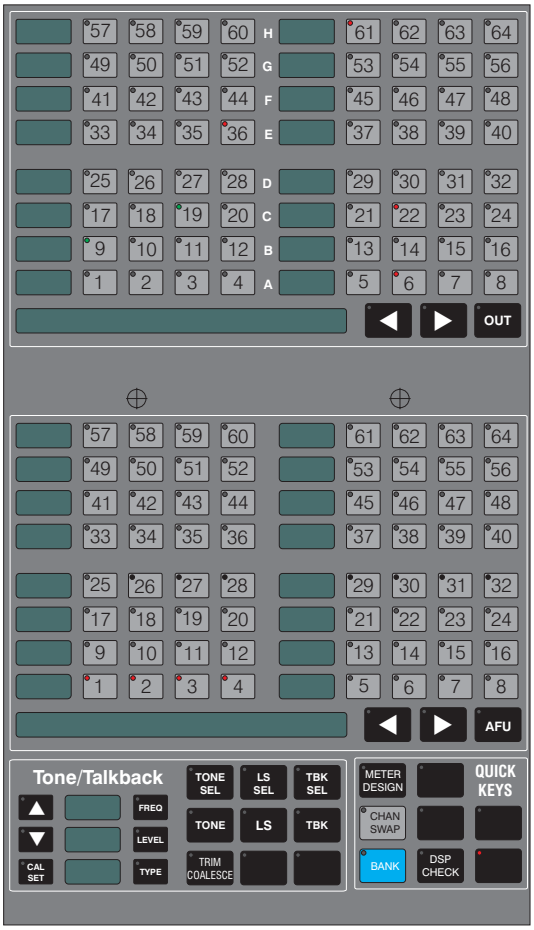
Upper Routing Section

The number keys and associated alpha displays are used to select internal routing destinations.

The left and right direction keys are called nudge keys and are mainly used for selecting the routing destination path type.

The section is also used for Path Process Switching (PPS) and the SETUP key activates Turbo Allocation.

Routing, Tone and Talkback Panel



Lower Routing Section

Routing mode is activated when a button is held down on the Upper Routing Section. The Lower Routing Section then displays available sources and allows them to be routed to the destination selected on the Upper Routing Section.

The AFU key activates AFU Mode when the panel is used to select the path expanded to the AFU.

The numbered keys 1 to 8 are also used for selecting the active meter design when the METER DESIGN key is pressed.

Tone/Talkback Section

The current Desk Setup must include a Talkback path for this section to work.

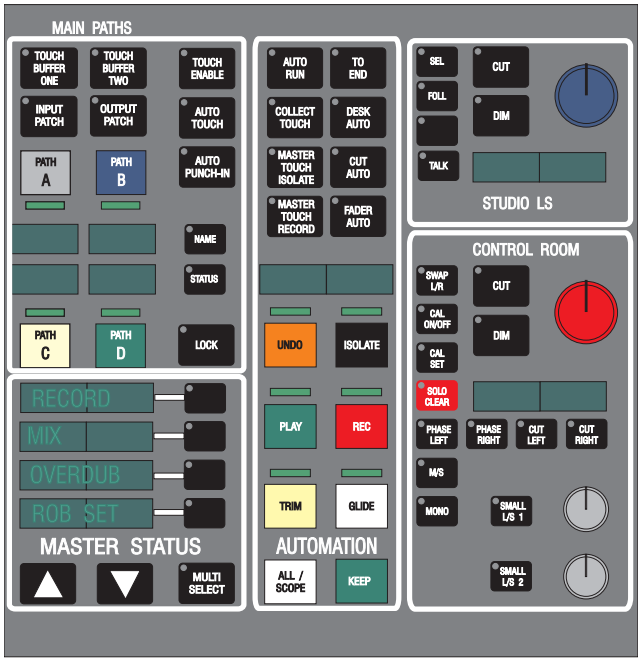
Tone and talkback can be injected separately or together.

The LS SEL and LS keys are used to select and temporarily route alternative mono or stereo sources to the Film monitor output paths.

Quick Keys Section

Currently, this is only used to select one of the eight designs in the loaded Meter Design file.

Master Automation and Monitoring Panel



Main Path Section

This section is mainly used to globally bring one of the four layers to the surface.

It is also used in conjunction with other parts of the console for a range of functions, including patch modes for rapid changes to input and output routing from the surface.

Master Automation Section

Used for setting automation modes globally, and changing or interrogating automation scope.

Studio LoudSpeaker Section

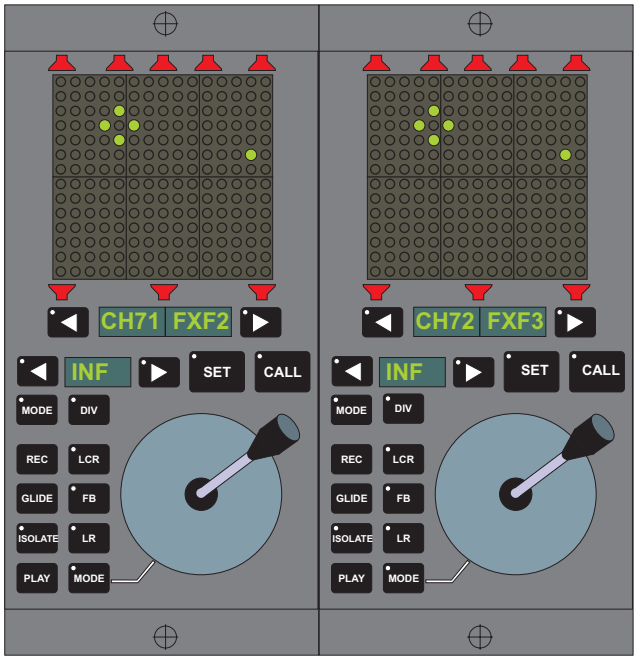
Used to control the level, status and source of the studio loudspeaker outputs.

This is only applicable when not using Surround Monitoring.

Control Room Section

Used to control the level and status of the control room speaker outputs. Note that the large pot can be used to provide overall level control of the surround monitor speakers but all other surround monitoring functions are controlled from the Surround Monitoring panel.

Twin Joystick Panel



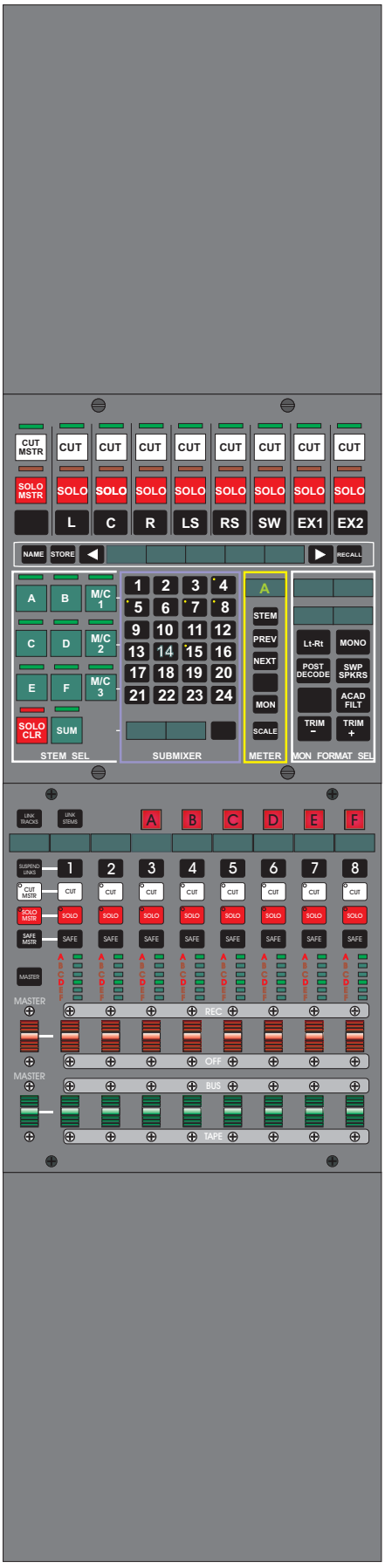
The twin joysticks allow fully automated surround panning of any two paths simultaneously. Any number of paths can be panned in turn using the joysticks with repeated passes.

The green LED matrix displays show the position of the joystick (a dot) and the panned position of the sound (a diamond). The dot is used to pick up the diamond and form a cross - the joystick then controls the panning of the sound.

The red speaker symbols illuminate to show the speakers which will be used in the target surround format.

The keys on the panel allow control over which path is being panned, the automation mode, freezing of a panning axis and whether or not the joystick has control of the panning.

Surround Quadstrip

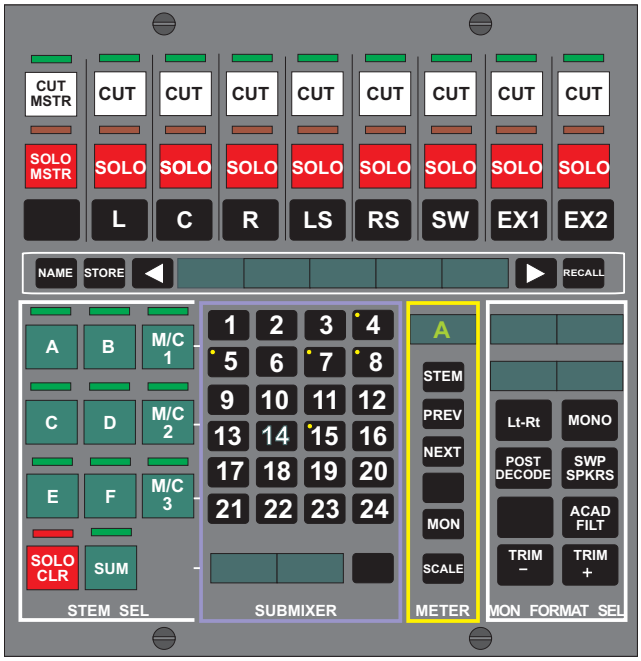


There can be up to three Surround Quadstrips according to the number of operator zones (partitions) that the console has.

If there is more than one partition then it is probable that only one Surround Quadstrip will have a Surround Monitor panel. This is because the controls on the Surround Monitor Panel will give duplicate functionality if there is more than one.

Multiple PEC/Direct Panels provide control over the same set of film stems, but different stems can be controlled on each PEC/Direct Panel.

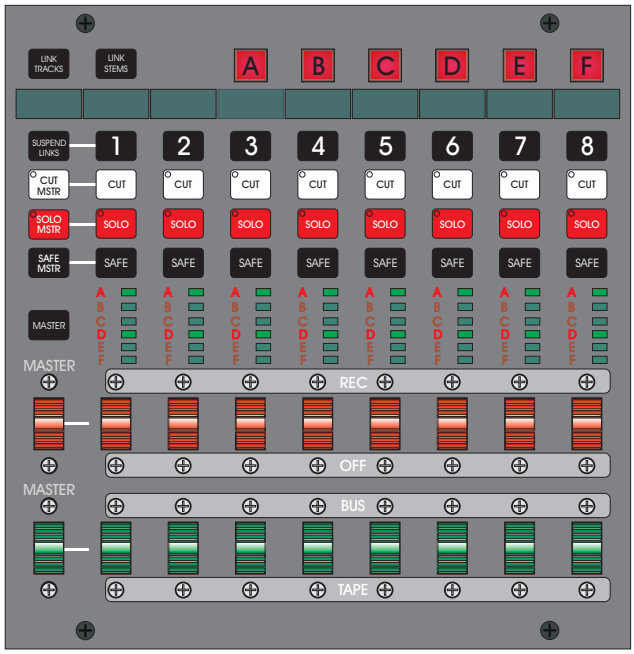
Surround Monitoring Panel



Allows the assignment of monitor outputs to six stems (A to F). There are also three sets of external inputs which can have up to 24 inputs each. The stems and external inputs are then routed to the speaker matrix and the FILM MON paths.

The panel allows for operation at 3 calibrated levels and includes insertion points for matrix surround decoders. Cut and Solo of any speaker along with small speaker, mono and Academy filter functions are provided.

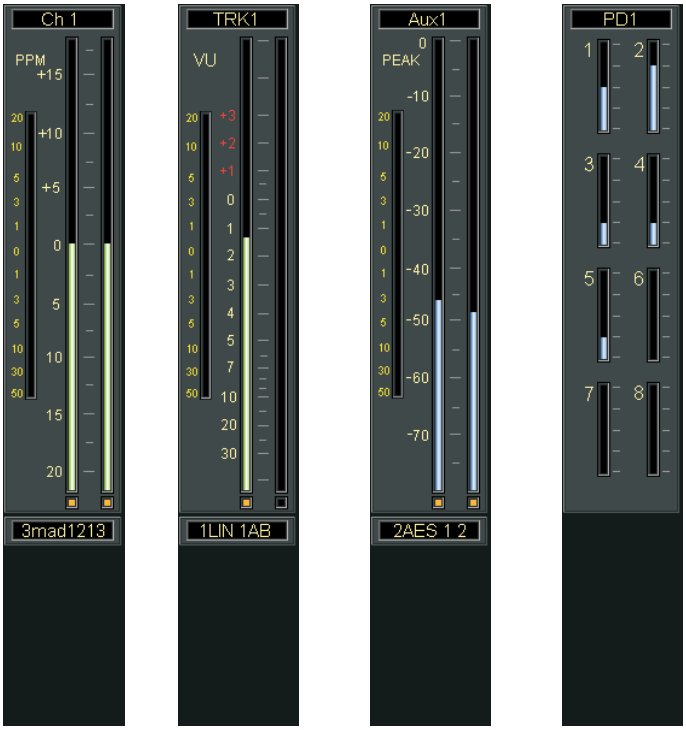
PEC/Direct Panel



The PEC/Direct panel provides stem recorder control and configuration of the film stems.

It is used in conjunction with the Surround Monitoring Panel for fully configurable routing of track monitors to speakers.

Meters



The meters in the Meter Bridge are fully assignable according to the currently loaded Meter Design. All the meters function in the same way.

Channel Number Display

Shows the System Name of the signal being metered.

Phantom Power and Overload Indicators

Shows when Phantom Power is active on a metered mic/line signal and when there is a signal overload.

Meter Mode Indication

Shows the currently selected metering mode, VU, PPM or PEAK.

Dynamics Scale and Indicators

Shows which Dynamic elements are active and their effect on the signal.

Signal Presence Indicator

Shows when a signal is present, even if the meter is not registering a level.

Stereo Bargraph Meters

Shows the level of the left and right legs of a stereo signal. A mono signal will be shown on the left bargraph. The overload bar shows how much the signal is overloading.

AB/MS and Phase Invert Indicators

Shows the stereo type being metered. The phase invert indicators illuminate separately for the left and right legs.

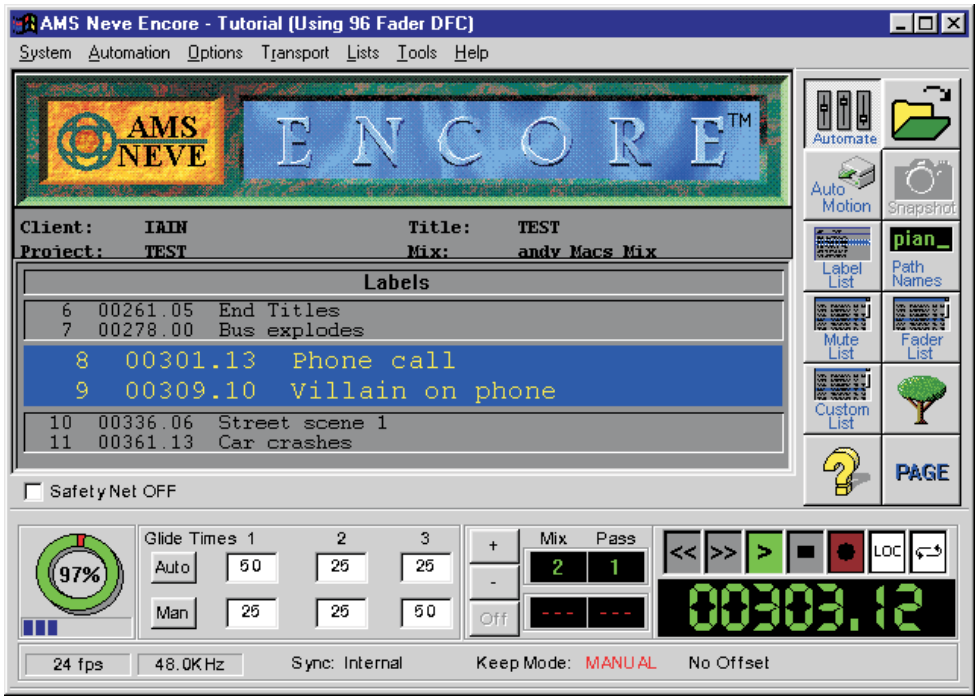
Port Indicator

Shows the Input, Output or Insert port associated with the path.

Encore Workstation

The Encore Workstation consists of a colour monitor, a mini keyboard and a trackball.

The monitor is used to display the main Encore screen and the screens and dialogue boxes for the various functions that Encore provides. The main Encore screen is described in the Encore Screen Guide chapter.



The mini keyboard and the trackball are used to enter information and select and control the Encore functions.



✍ *The trackball may differ from the model illustrated.*

Optional Panels

MCS Panel



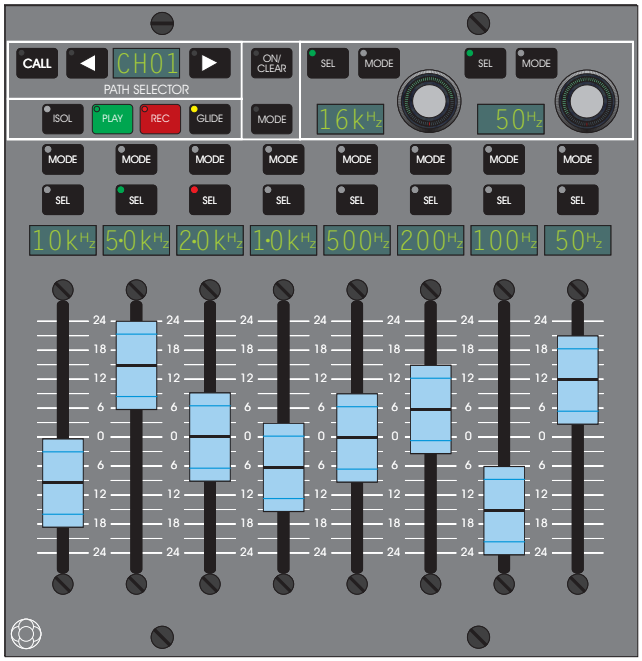
The MCS Panel is a hardware option that is used to control multiple transport devices (up to the first eight that are detected on power up).

It can be used and configured directly or in conjunction with the Encore screen and options on the Transport Menu.

Machines are controlled in groups. Only one group can be actively controlled at a time. Each group can contain up to eight machines.

✍ *Machines can be 'hot plugged' and will be automatically detected by the MCS.*

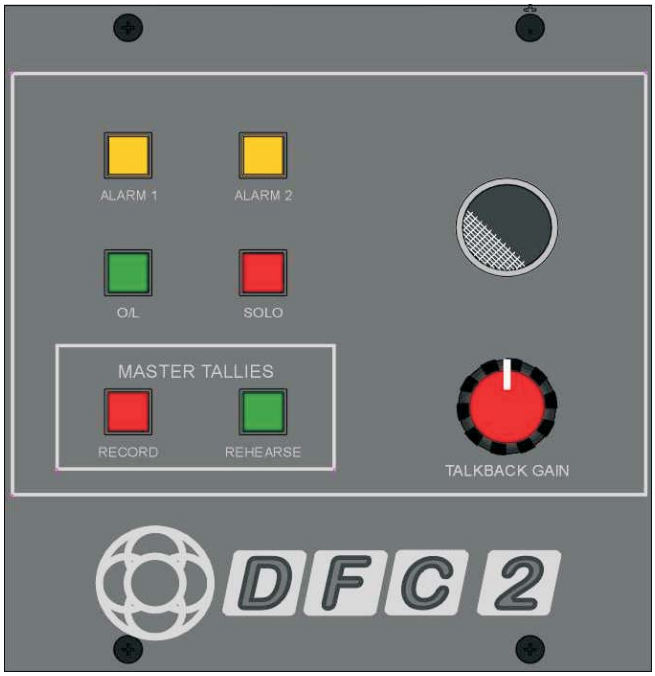
Graphic Equaliser Panel



The Graphic EQ Panel is an optional hardware upgrade which provides dedicated control of EQ on one Channel, Track or Group. The panel is used to control up to eight bands of EQ according to the EQ assigned to the path on the panel.

There can be up to two Graphic EQ Panels per console partition which can be assigned to any Channel, Track or Group in the same partition. They can not be assigned to the same path at the same time.

Status Panel

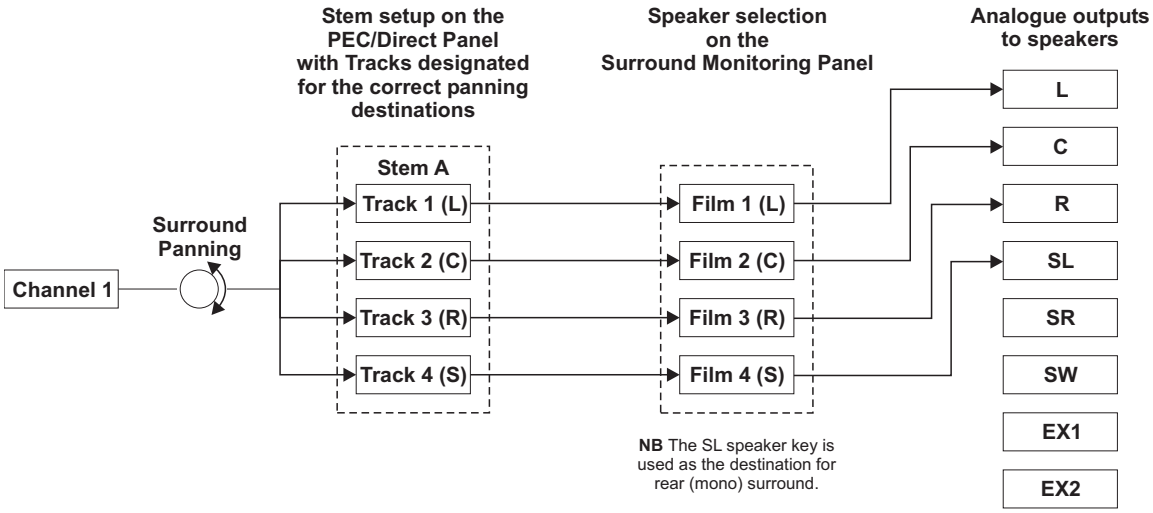


The optional Status Panel provides indication of overload, solo, automation lock (Alarm 1 goes out) and speaker swap (Alarm 2). The master tally indicators are not used. It also has a talkback microphone and talkback gain control.

GETTING STARTED

This section gives a practical example of configuring the console with a minimal Desk Setup that will be used to generate an LCRS surround mix. The eventual configuration is summarised in the Simplified Surround Monitoring diagram.

SIMPLIFIED SURROUND MONITORING



It is advisable to read through this tutorial before going through it on your console.

The steps in this tutorial are:

- ➤ Log in to Encore.
- ➤ Create a new Desk Setup with Desk Edit.
- ➤ Use I/O Manager to 'patch' the inputs and outputs.
- ➤ Setup the Film Stems on the console surface.
- ➤ Setup up the routing on the console surface.
- ➤ Monitor an audio source to demonstrate the surround panning.

Logging in to Encore

'Logging in' is a term used to describe to process of supplying a user name and password to a system so that the system can be used. This provides data security and segregation of different user's data.

A screen (or monitor), trackball and keyboard that are separate from the main DFC Gemini console are used to interact with Encore. It should be noted that although these items are not physically part of the console surface (except where this is requested) they are an integral component of the DFC Gemini system. The main uses for Encore are configuration and offline editing.

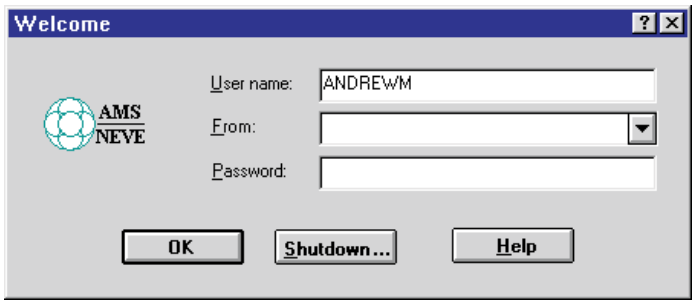
When there is no user logged in to Encore, the screen will display a Welcome dialogue box like this:



To log in

➤ Press and hold Ctrl and Alt and then press Del on the Encore keyboard.

The Welcome dialogue box will be displayed and this is used to provide the user name and password.



✍ *If a box appears with the title Service Control Manager then use the trackball to point and click on the OK button. The box will then be replaced with the Welcome dialogue box for logging in.*

➤ Use the keyboard and type Guest or User1 in the Username box.

✍ *If a specific user name has been provide to you then use this instead. Ignore the From box and enter the Password (if any) that you have been provided with.*

➤ Ignore the other boxes.

➤ Press Enter or click on OK.

The system will now launch Encore and the main Encore screen will be displayed on the monitor.

When the main Encore screen is displayed, a dialogue box may be displayed asking about Mix Recovery. If this happens then make sure that the New Mix radio button is selected (click on the words New Mix next to the radio button) and then click OK.

Creating a new Desk Setup

The utility used for basic configuration of the console is called Desk Edit.

This is used to setup the number of signal paths that are required, provide paths with basic processors such as EQ, filters, etc., and to decide the placement of the paths on the console surface.

The signal paths are called Channels, Tracks, Auxiliaries, etc. They are used for the same functions as they would be on an analogue console. E.g. Channels are used for inputs to the console, just as Channel Strips would be on an analogue console. The main difference when using the DFC Gemini is that the number of Channels (for instance) is not fixed and the appropriate number can be used according to a particular task.

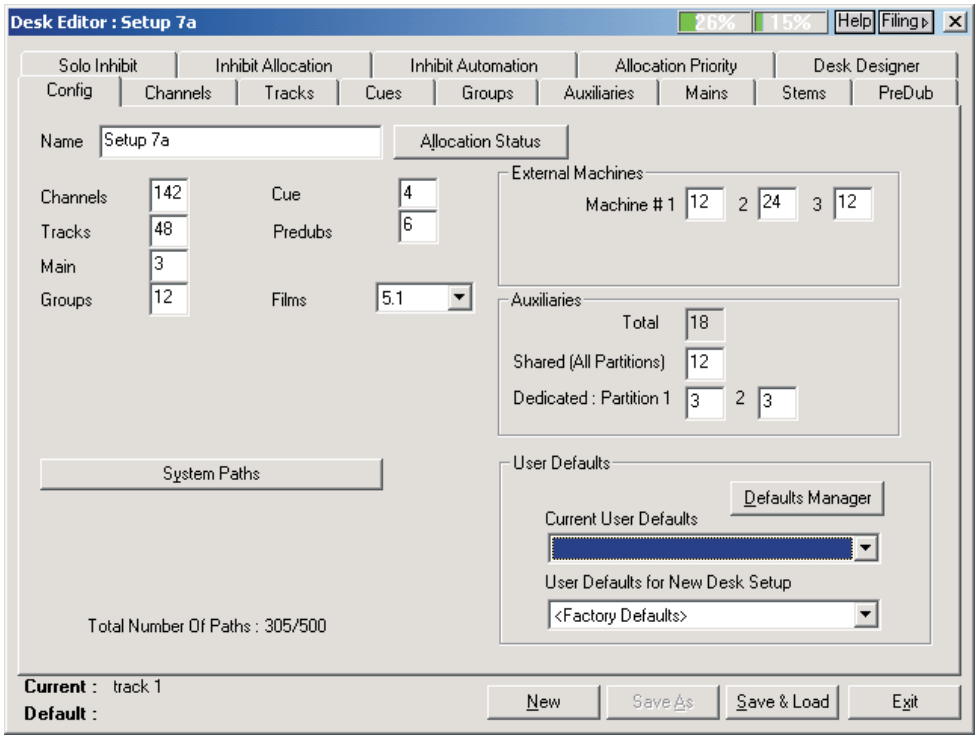
There are also some special path types used by the DFC Gemini (e.g. the Film paths that are used as part of the surround sound system).

To start a new Desk Setup

➤ Click the Desk Edit icon.



Desk Edit will be displayed with the Config page on top. Information about the currently loaded Desk Setup will be shown.



Desk Edit is used to provide a large amount of information. This would be too much to fit on one screen, so Desk Edit has multiple 'pages' selected with 'tabs' at the top of each page.

➤ Click the New button.

A dialogue box will be displayed asking which type of Desk Setup you wish to create.



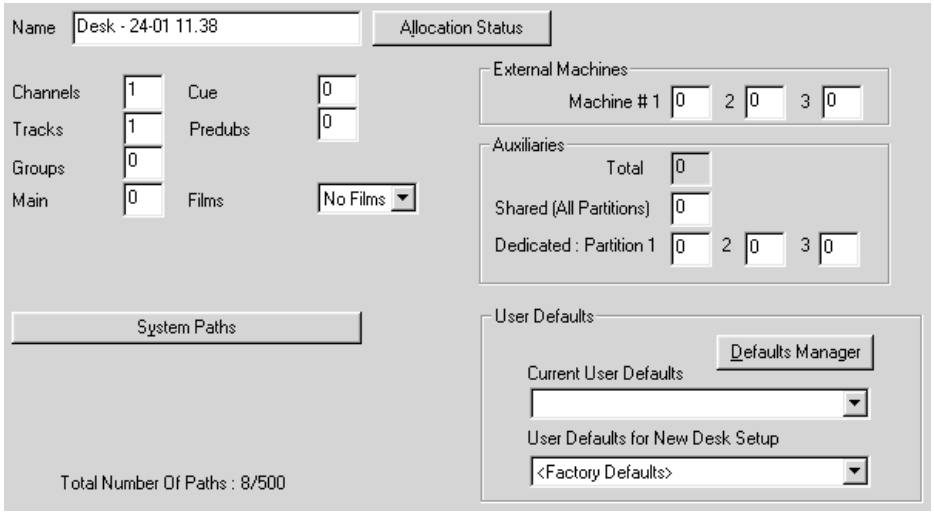
➤ Click User Desk Setup, if it is not already selected.

➤ Click OK.

The Config page will be cleared and a blank Desk Setup is now ready for configuration.

Number of Signal Paths

The Config page will show the default name and numbers of paths, similar to the following example:



This is where the basic configuration of the Desk Setup is created. The name is used to identify the purpose of the particular Desk Setup, and is also the name of the file that the Desk Setup will be saved in on the Encore hard disk.

➤ Type a name on the keyboard (e.g. 'Tutorial 1').

The default name will be replaced by whatever is typed.

➤ Press the TAB key to jump to the Channels box.

➤ Enter the number 8.

This means there will be 8 Channels in the Desk Setup.

➤ Press the TAB key to move to each path number box in turn and enter 8 Tracks, 4 Groups and 1 Main.

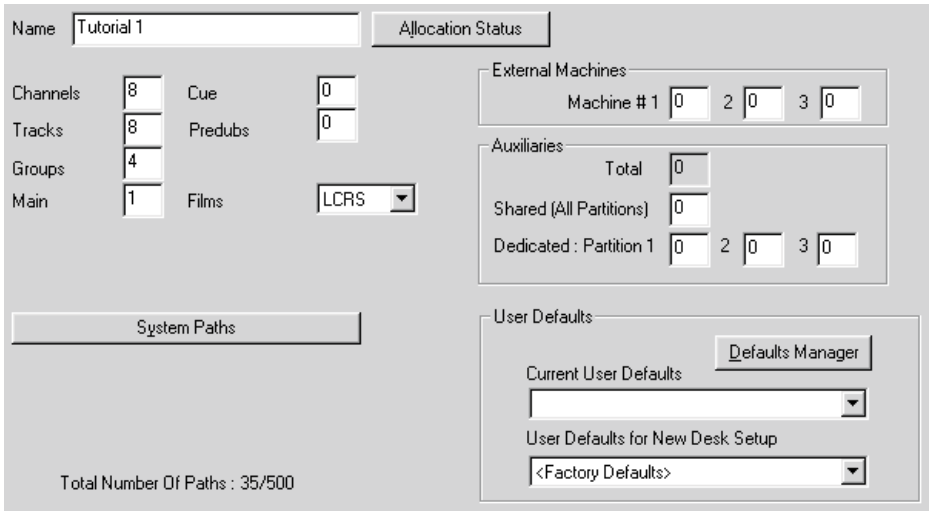
➤ Click on the down pointing arrow at the end of Films box.

A small drop down list will be displayed that shows the available Film monitoring formats.

➤ Click on LCRS in the list.

The list will close and LCRS will be shown in the Films box.

The Config page should now look like this:

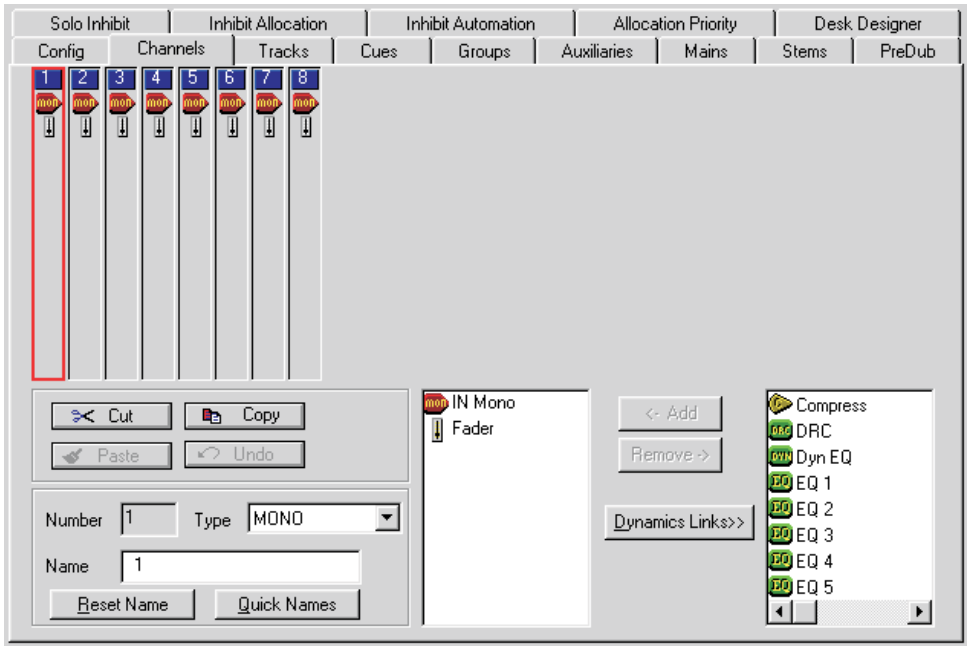


The next step is to setup the signal processing that will be available to the Channels.

Signal Processing in the Channels

➤ Click the Channels tab.

The Channels page will now be displayed. It shows eight channels, each of which has the default processing of a mono input and a fader. Channel 1 is currently selected with the red highlight.



You are going to add four bands of EQ, two filters, a DRC, a sidechain and an insert to Channel 1 and then copy this to all the other Channels.

✍ *A DRC is a Dynamic Range Controller. This is a special type of dynamics processor that is a combination of a Compressor and fixed ratio Expander. It is convenient because it uses less processing power than two separate dynamics processors and is sufficient for most purposes. However, it is not quite as flexible as a separate Compressor and Expander would be.*

At the bottom right of the page is a box showing the available processing. The scroll bar at the bottom of the box is used to view additional processing elements.

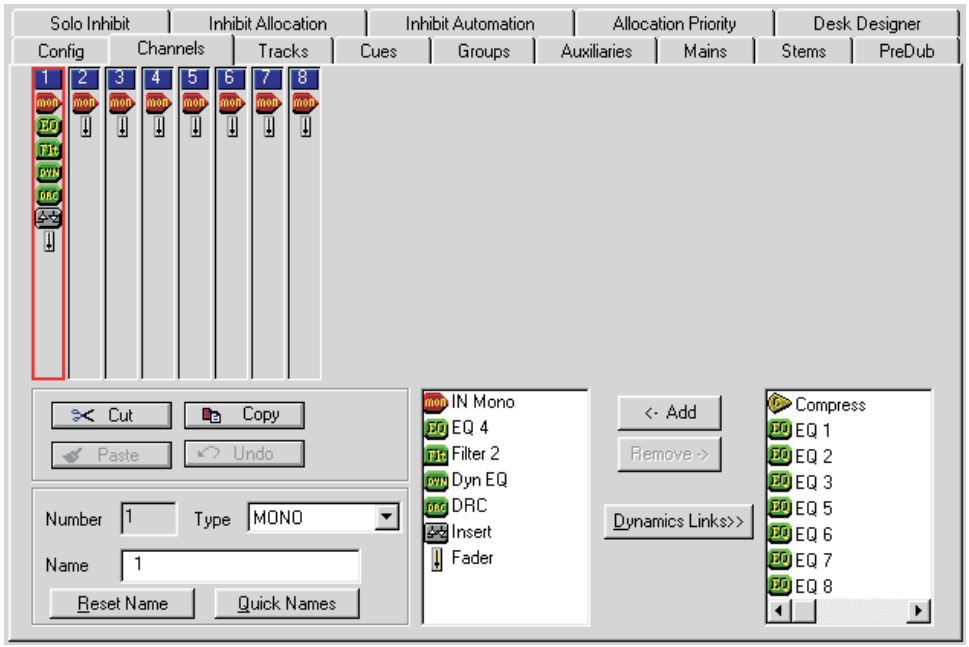


➤ Click the EQ icon labelled EQ 4 and then click the <-Add button.

The EQ 4 icon will move to the box that shows the processing that is designated for Channel 1.

➤ Click and <-Add the DRC, Dyn EQ, Filter 2 and Insert icons.

Note that the processing is also shown in Channel 1 where it is highlighted in red.

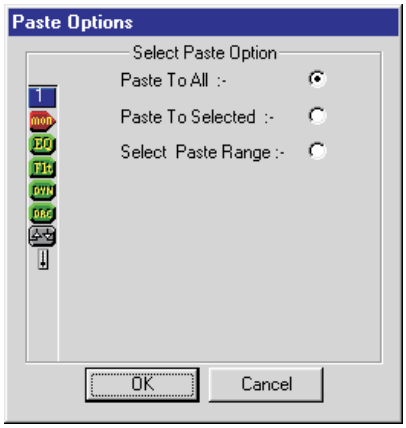


➤ Click the Copy button.

This copies the processing setup in Channel 1 and the Paste button becomes available.

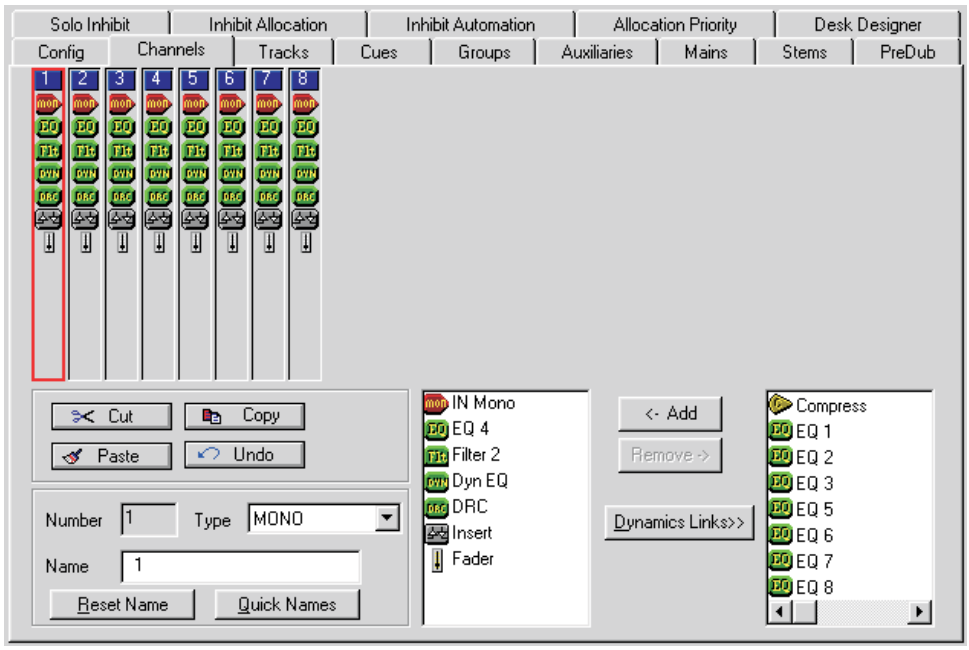
➤ Click the Paste button.

A dialogue box will be displayed that shows the processing that will be pasted and various options. The All radio button is selected by default and this is the required option.



➤ Click OK.

The processing will be duplicated across all eight Channels.



✍ *This Copy and Paste operation only affects the current page of paths. The processing in a Channel cannot be pasted to Tracks, for instance.*

Now that the Channels have been setup, it is necessary to designate the Tracks as surround panning destinations for our LCRS example.

Setup the Film Stems

Now that the Channels have been setup, it is necessary to create Film Stems that the Channels can be routed to. This can be done automatically on the Stems page of Desk Edit.

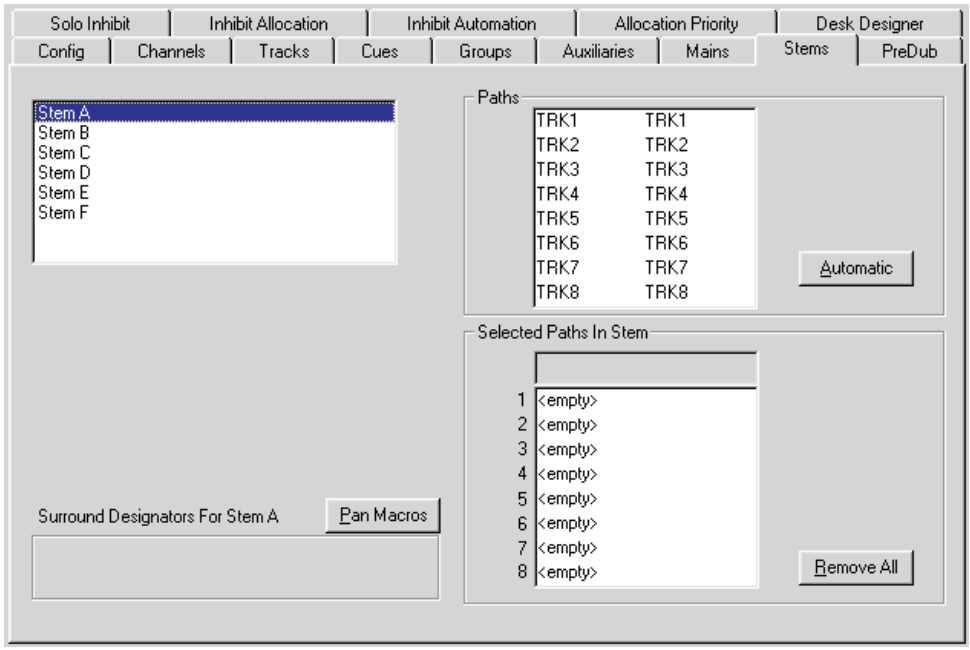
Each Film Stem is a set of Tracks, and a Track can only be used in one Film Stem. Each Track in a Film Stem is also given a pan designator that corresponds to a speaker position. For LCRS, each Film Stem uses four Tracks and the pan designators used are Left, Centre, Right and Surround Mono. In addition to this, automatically configuring the Film Stems will route each Track to the Film path that corresponds to the pan designator. The Film paths should already be routed to the outputs to the correct speakers.

The Simplified Surround diagram shows a schematic form of the final result. Notice that the diagram mentions using the PEC/Direct and Surround panels for achieving this configuration - this is because the DFC Gemini is highly flexible and allows for manual configuration of Film Stems and Surround Monitoring.

✍ *The Tracks on DFC Gemini are traditionally referred as the 'busses' on analogue consoles used for film mixing.*

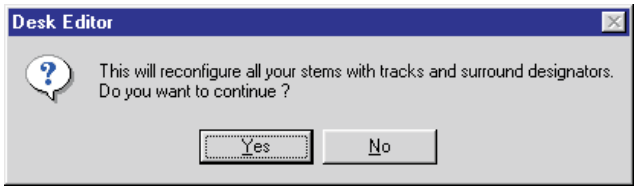
➤ Click the Stems tab.

The Stems page will be displayed.



➤ Click the Automatic button.

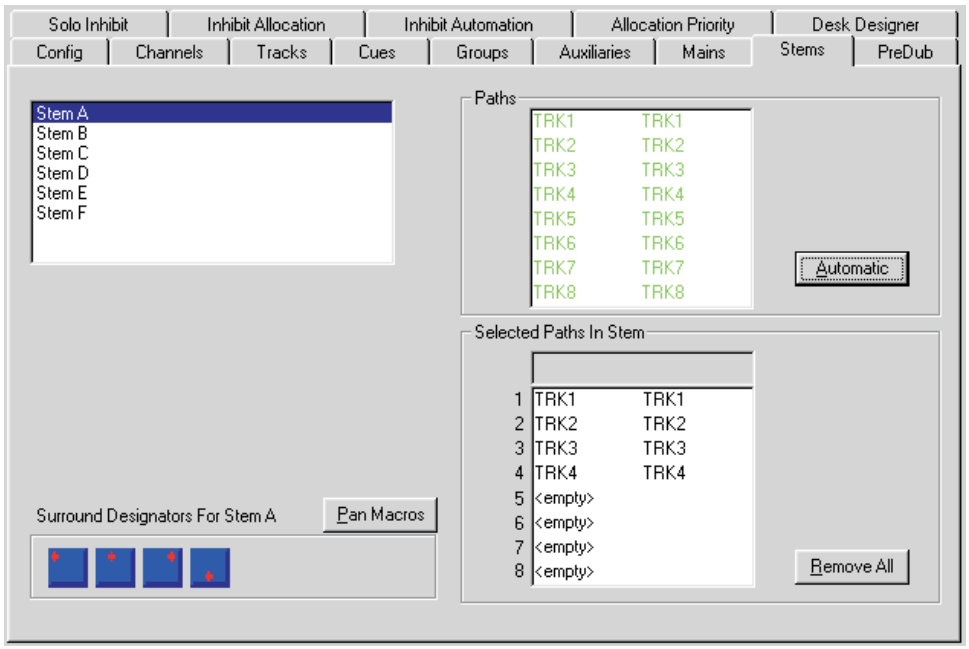
A warning dialogue box will be displayed, indicating that all Stems will be reconfigured.



➤ Click the Yes button.

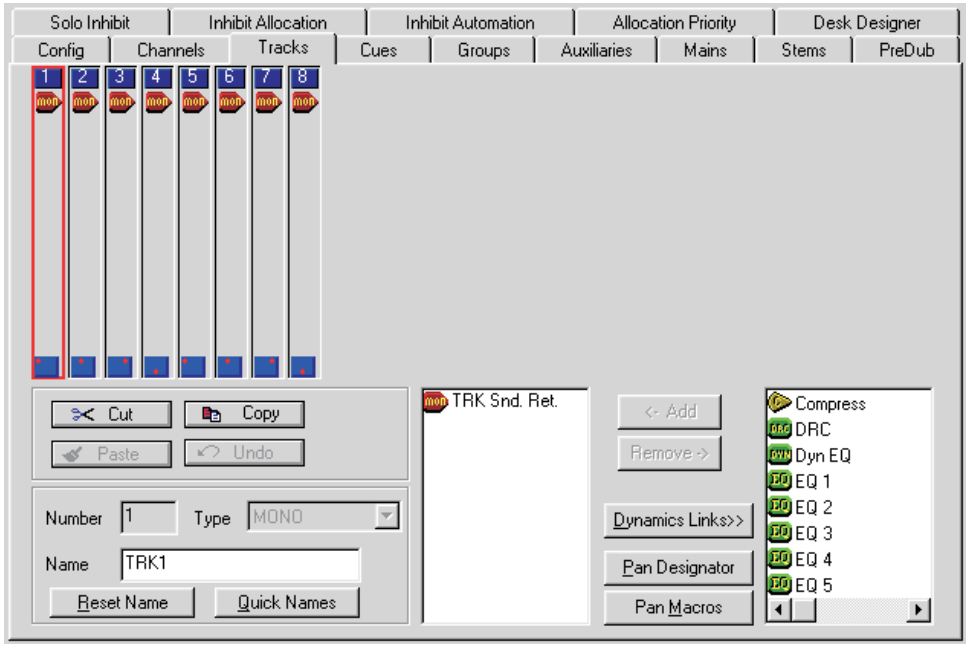
The Stems will be configured automatically.

Note that the Pan Designators are shown for Stem A.



➤ Click the Tracks tab.

Notice that the icons at the bottom of the Tracks show that Track 1 is a left speaker destination, Track 2 is a centre speaker destination, Track 3 is a right speaker destination, and Track 4 is a rear mono surround destination. This pattern is repeated across Tracks 5 to 8. If there were more Tracks it would continue repeating up to the last Track used in a Stem.



There are no more changes to be made to the paths in the Desk Setup, but it is worth having a look at the other pages.

➤ Click on each of the tabs for Cues, Groups, Auxiliaries and Mains.

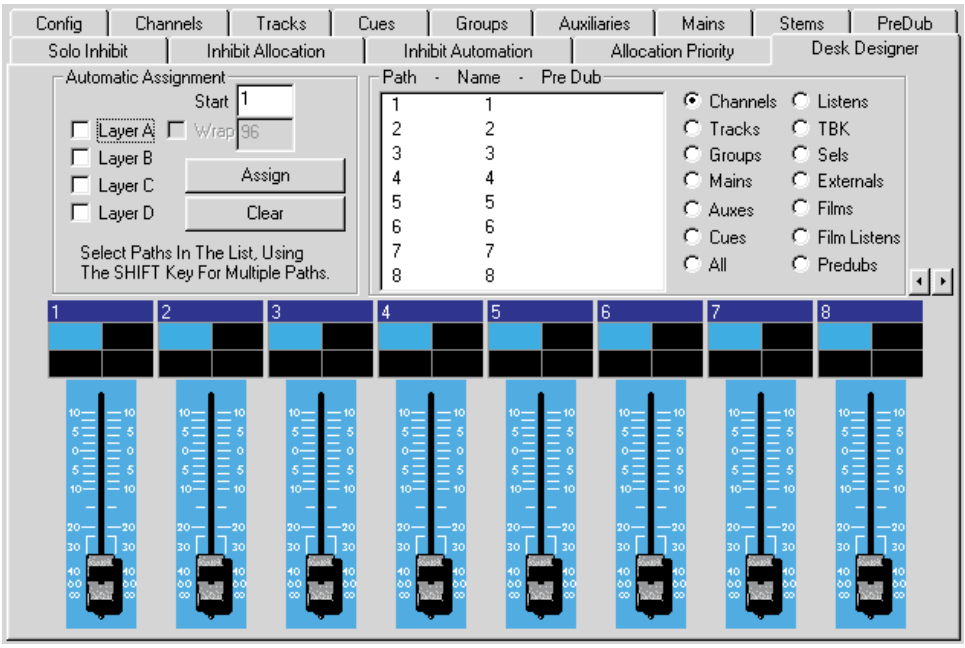
Note that the Cues and Auxiliaries pages are blank because you entered 0 for them on the Config page.

Path Placement

The next task is to decide the placement of paths on the console surface. For the purposes of this tutorial, only the Channels need to be assigned to the surface, but we will also assign the Tracks and Groups so that it becomes a familiar process.

➤ Click the Desk Designer tab.

The Desk Designer page will be displayed, with Channels listed for placement by default.



Placing the Channels

➤ Click the check box for Layer A.

The tick in the check box means that we are going to assign the Channels to the Path A Access keys on the surface.

➤ Click Channel 1 in the list to highlight it.

➤ Click the scroll bar so that Channel 8 is visible.

➤ Hold down one of the SHIFT keys on the keyboard and click on Channel 8.

All the Channels will be highlighted.

➤ Click the Assign button.

When the highlight in the list is removed, the channel numbers will change colour to indicate that they have been assigned.

The representation of the faders in the bottom half of the screen will show the numbers 1 to 8 in the boxes that correspond to the alpha displays for the Path A Access keys.

Placing the Tracks

➤ Click the check box for Layer A and the check box for Layer B.

There should now be a tick in the Layer B check box, but not in any of the other Layer check boxes.

➤ Click the radio button for Tracks.

➤ Click the first Track in the list and then SHIFT-click the last Track (remember to scroll down to Track 8).

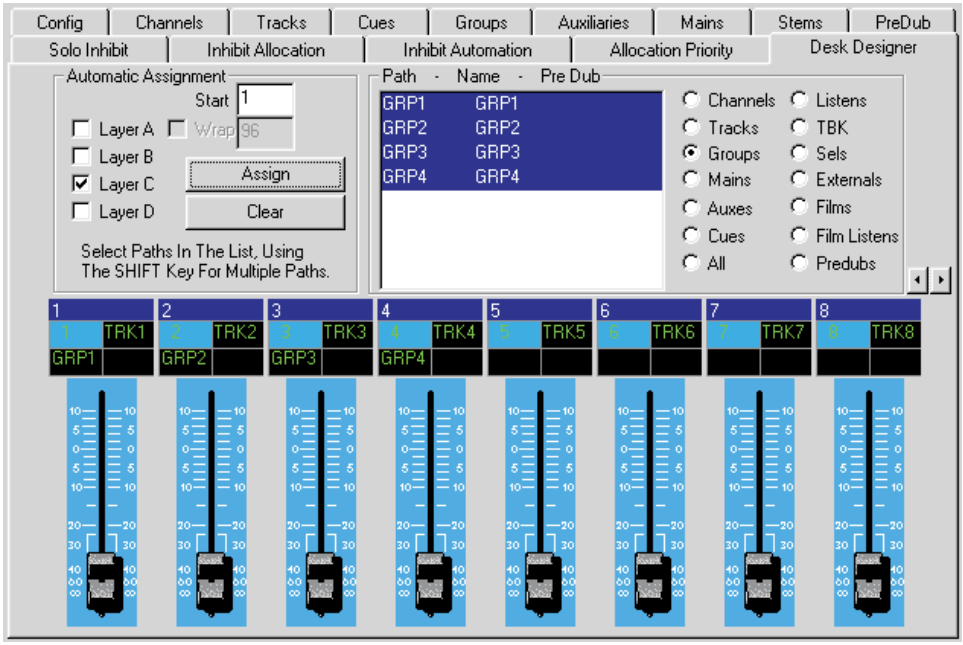
➤ Click the Assign button again.

The Tracks are now assigned to the first 8 Path B Access keys.

Placing the Groups

➤ Assign the Groups to Layer C, using a similar procedure to assigning the Tracks to Layer B.

The final result should be similar to the example shown here:



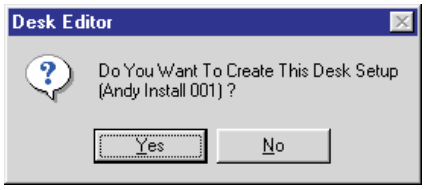
Save and Allocate

The new Desk Setup is complete so it must now be saved and allocated to the console.

✍ *We are not going to use any of the Inhibit pages, the Allocation Priority page or the PreDub page in this tutorial.*

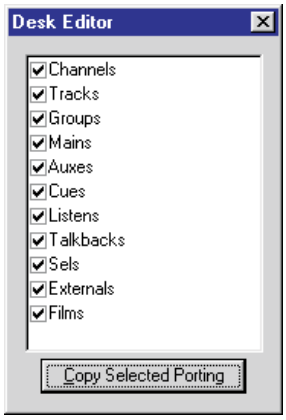
➤ Click the Save button.

A confirm Create Desk Setup dialogue box will be displayed showing the name you have given the Desk Setup.



➤ Click on Yes.

The copy porting dialogue box will now be displayed (before the Desk Setup is saved or allocated).



This is displayed because it is the first time that the new Desk Setup has been saved. It allows the port routing to be re-used from the Desk Setup that is currently allocated on the console before it is replaced by the new Desk Setup.

Notice that the porting of all path types is selected. This should save time in I/O Manager.

➤ Click the Copy Porting button.

The dialogue box will be replaced by a timer that is displayed while the Desk Setup is being saved and then allocated on the console.



When this is complete, a dialogue box will be displayed confirming that the allocation process has finished.

➤ Click the OK button.

➤ Click the Exit button to leave Desk Edit.

If you inspect the console surface, you will see that the first eight fader strips will have the Channels, Tracks and Groups assigned to Layers A, B and C respectively.

Setup Inputs and Outputs

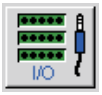
The next task is to use I/O Patching to check the Film paths are patched to the correct outputs, and then patch the Channels to suitable inputs.

Reminder

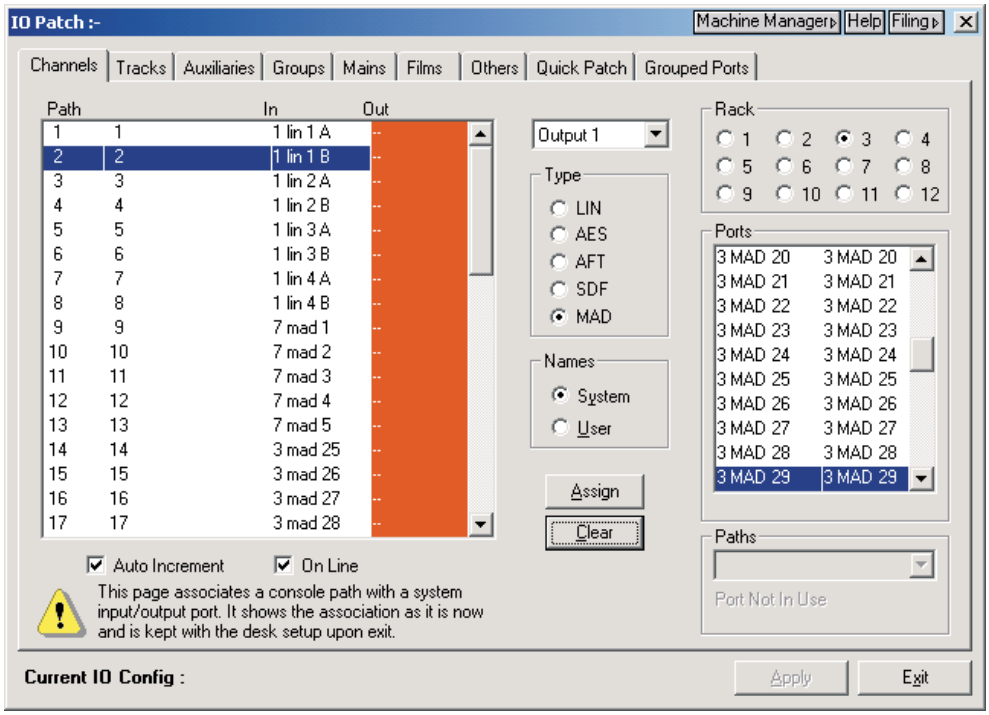
It is assumed that you have been informed of the correct input and output ports that are needed for this tutorial. The DFC Gemini is a highly flexible console and port usage will be different on each DFC Gemini.

Check the Film Outputs

➤ Click on the I/O Patching icon.



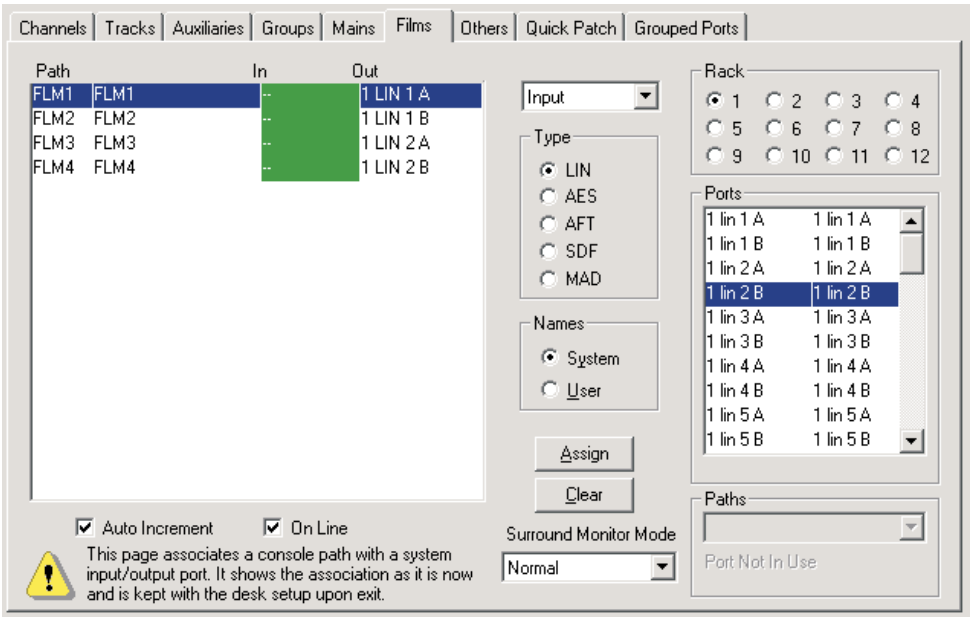
I/O Patching will be displayed. The tabbed Channels page will be on top.



✍ *If the I/O Patching icon is not shown then click the Page icon to change the set of icons.*

➤ Click the Films tab.

The Films page will be displayed with the four Film paths. Their current outputs are shown in the Out column.



➤ Inspect the port names to see if they are correct.

If the ports are not correct then go to Route Films to Output Ports below.

If the ports are correct then skip to Route Input Ports to Channels.

Route Films to Output Ports

➤ Click in the Out column.

This will set the port selection to outputs.

➤ Click a Film path that does not have the correct output port.

➤ Click the radio buttons for the Rack number and the correct port Type.

The Ports list will show all the output ports of the selected type in the selected rack number.

➤ Click the correct port name in the Ports list.

If the port is already being used, the Paths box will show the name of the path using the port and a flashing message indicating the port is used by 1 path.

➤ Click the Assign button.

If the port is already used, a dialogue box will be displayed asking for re-assignment confirmation. This is because output ports can only have one path routed to them.

➤ Click the Yes button.

The port will be assigned to the selected Film path. The port name will be shown against the Film path in the Out column.

➤ Repeat the procedure for any other Film paths that are not routed to the correct port.

A Note on Port Naming Conventions

The system names for input and output ports indicate the rack number, the port type, the port number, if the port is mono or stereo and whether the port is an input or output.

Rack Number

The leading digit(s) in the port name indicate the rack number, according to which MADI port the rack is connected to from the main DSP Rack. For instance, **2 lin 3 A** is a line input from an ADC card in the IOS Rack connected to the second MADI port, and this is referenced as Rack 2.

Port Type

The port type is summarised by the three letters following the rack number. For instance, **3 aes 1AB** is a stereo input from an AES/EBU card in Rack 3.

The exception is for ports that are connected by MADI that are not part of the DFC Gemini system. For instance **6 mad 10** is the tenth input on MADI port 6. This could be from AMS Neve outboard equipment (e.g. a TDIF/MADI Interface unit) or any third party device (e.g. a tape machine) that has a MADI interface.

Port Number and Mono/Stereo Status

The trailing numbers and letters indicate the port number within rack. For instance, **2 lin 5 A** is mono input that is the right leg of line input 5 in rack 2.

Any pair of ports can be combined as a stereo pair (this is the default for AES ports). Line and AES ports are numbered in the sequence 1A, 1B, 2A, 2B and so on. A matching pair of ports is combined to make a stereo pair, e.g. 1AB, 2AB, 3AB and so on.

Other port types can be combined into a stereo pair using an odd numbered port for the left leg and the following even numbered port for the right leg. For instance, **6 mad 11/12** is a stereo MADI input using MADI inputs 11 and 12 on MADI port 6.

Input or Output

The port type in system names for inputs are in lower case (i.e. small letters) and for outputs are in upper case (i.e. capital letters). For instance, **1 AES 2AB** is a stereo output and **1 aes 2AB** is the matching stereo input.

Route Input Ports to Channels

➤ Click the Channels tab.

The tabbed Channels page will be displayed on top.

➤ Click the In column.

➤ Click 1 in the Path column to select Channel 1.

➤ Click the radio buttons for the Rack number and the correct port Type according to the port names you have been supplied with.

The Ports list will show all the output ports of the selected type in the selected rack number.

➤ Click the correct port name in the Ports list.

If the port is already being used, the Paths box will show the name of the path using the port and a flashing message indicating how many paths are using the port. Any number of paths can use an input port.

➤ Click the Assign button.

The port will be routed to the Channel. The port name will be shown against the Channel number in the In column.

➤ Repeat the procedure for any other Channels that you wish to assign inputs to.

When you have finished making changes

➤ Click the Exit button.

The Desk Setup will be saved automatically and this will save the I/O Routing changes.

Routing Channel 1 to Stem A

➤ Press the PATH A key on either the master Main Paths panel or on the first fader strip on the console.

This will ensure that Channel 1 is assigned to the fader strip.

➤ Look at the Stem Routing Display on the fader strip for Channel 1.

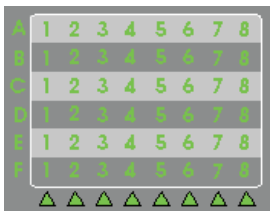
➤ If the letter A is not illuminated, press the STEM SEL key until it is.

The LEDs in the 1 to 4 keys will illuminate green.

➤ Press the ROUTE TO ALL key.



The LEDs in the 1 to 4 keys will change from green to red and the digits 1 to 4 next to A on the Stem Routing Display will illuminate.



Channel 1 is now fully routed to Stem A.

➤ Press and hold the I/O & PAN key for Channel 1.

You will see that the alpha displays associated with Logicators 6 to 8 will display F-b, Div and Lcr respectively. This shows that these panning controls have been enabled automatically by routing Channel 1 to Stem A.

➤ Release the I/O & PAN key.

✍ *Logicator 5 acts as a rear panning control (across LS and RS) when a suitable surround format is in use.*

At this point, do not route any more Channels to Stem A. This will allow you to use a single audio source to hear the effects of the panning controls. You can add more Channels at a later time.

Save Changes

➤ Press the KEEP key on the console surface.

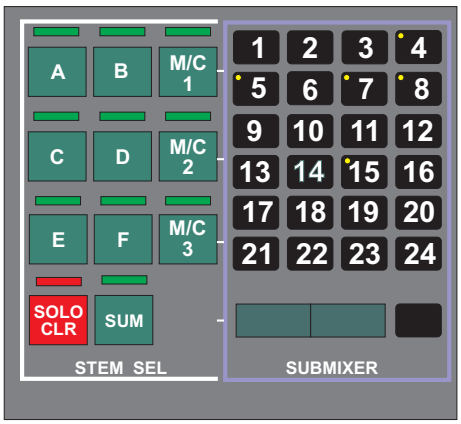
This will save the routing changes to your Desk Setup.

Monitoring the Surround Mix

Reminder

➤ Please make sure that the level control pot on the Control Room panel is turned to its lowest setting.

➤ Press the A key in the STEM SEL section of the Surround Monitoring panel.



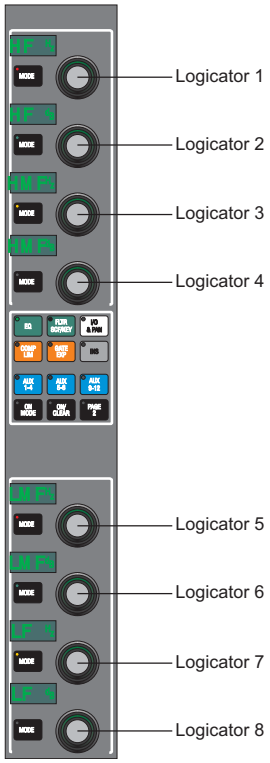
Channel 1 is now fully routed through to the Film outputs via Stem A.

➤ Activate the audio source that is connected to the input port for Channel 1 (e.g. if it is a tape machine, put it into play).

➤ Gradually turn up the level control pot on the Control Room panel until the signal is audible on the speakers at a satisfactory level.

➤ Press the I/O & PAN key on the fader strip for Channel 1.

➤ Turn Logicators 6 to 8.



You will hear the effects as the changes are made to the pan position.

Tutorial Summary

You have now configured your DFC Gemini for a simple surround mix.

At this stage, it may seem that the configuration is a long process, but it should be remembered that setting up the console for a particular session is a ‘once only’ task. Also, the actual work of making mixes and monitoring the results depends on proper configuration of the console for the project in hand. This is why this tutorial has concentrated mainly on the setup phase.

Following this tutorial will have taken much longer than is usual for the tasks that have been covered, and experience with the console will soon show that even setting up a large and complex configuration is quick and easy.

Some other points to note about the operation of the DFC Gemini are:

- ❏ Saving the configuration in the Desk Setup means that most of the work has already been done when a similar setup is required for a new project.
- ❏ The setup can be changed 'on-the-fly' from the console surface to refine each Desk Setup.
- ❏ The Desk Setup only uses and allocates the resources that are required for the task. No channel strips are active that do not need to be.

Other useful information for users new to DFC Gemini and digital consoles:

See

- ❏ How the Surround Sound System Works (page 8:4).
- ❏ Signal Paths (chapter 5).
- ❏ Automation (chapter 19).
- ❏ Metering (chapter 14) and Meter Designer (page 29:56).

SIGNAL PATHS

Path is the term used to describe a discrete part of the signal flow through the console that has a distinct input and output, either to the outside world or to another path.

A port is an interface to the outside world, e.g. a D to A output converter, an AES/EBU input or a digital MADI input or output.

Note that all path types can make use of any signal processing functions, including using up to two inserts each. The total amount of processing available depends on the hardware configuration.

Channels

Channels provide the main inputs to the console. They can be mono or stereo.

Channels are assigned to the faders according to the Desk Designer page of Desk Edit when a new Desk Setup is created.

The default path names for Channels are just the number for the path (e.g. 1, 2, 3, etc.).

Channels must be connected (port routed, patched) to an Input Port. This is achieved using I/O Manager or Input Patching.

A Channel can also have an output assigned to it.

Channels are usually routed to the Tracks that make up Film Stems. They can also be routed to Tracks that are not in stems, Main Outputs and Groups. They can also make contributions to Auxiliaries.

Channels are also where most of the initial signal processing is applied.

Tracks (Busses)

The Tracks provide the same functionality as 'busses' (tape monitors, track sends and film Stem elements) on conventional analogue consoles.

Tracks are mono only. They are used to create the Film Stems in the PEC/Direct panel. Bus/Tape switching is provided by the PEC/Direct panel.

The default path names are TRK1 to TRK9, then TK10, TK11, etc..

Tracks have a track send (output) and track return (input) at the beginning of the signal path. These can be connected (port routed, patched) to an Output and an Input Port. This is achieved using I/O Manager or Input Patching and Output Patching.

Tracks can have Channels, Groups and other Tracks as routing sources. Tracks are usually routed to Films (to feed the Surround Monitor), but they can also be routed to Main Outputs, Groups and other Tracks. The software that controls routing prevents any feedback loops from occurring.

They can also make contributions to Auxiliaries.

Groups

Groups are mono or stereo paths that can be used to provide extra outputs from the console.

Mono Groups can also have pan designators applied so that any Channels routed to them will pan to the Group according to the designated speaker position. This would be useful, for instance, in feeding an out-board effects unit with the panned signal(s) for the rear surround, which could then be looped back into the console via an input to a Channel.

✍ *Groups are not used in Film Stems. They cannot use Bus/Tape switching and are therefore unable to use the PEC/Direct panel.*

Channels and Tracks can be routed to Groups. Groups can be routed to Main Outputs and Tracks.

Auxiliaries

The Auxes provide additional auxiliary outputs that can be used for a variety of purposes to increase the flexibility of the DFC Gemini.

For instance, an Aux could gather several Channels together and output to an effects unit. The return from the effects unit can then be the input to another Channel which is in turn routed to a surround Stem.

Another useful application is to use an Aux to change the contribution levels from Channels to a sub-woofer. The Aux can output to a spare MADI port that loops back into another Channel which is in turn routed to the sub-woofer part of a surround Stem. Changing the contribution level from one Channel to the Aux would then change that Channel's contribution to the sub-woofer without affecting the rest of the surround mix.

Up to 36 stereo or mono Auxiliary Sends are available. The Auxes assigned to the AUX selection keys will depend on whether or not Split Console is in operation and how many Shared Auxes are configured. Only the first 12 Auxiliary Sends are available when not using Split Console.

Each Aux can be PRE or POST fader, have the contribution level adjusted from -102dB to +10dB and be balanced when in stereo.

Auxes can take contributions from Channels, Tracks and Groups, and can be routed to Cues or a physical output.

Cues

Cues are traditionally used (on non-film consoles) to provide audio to an artist in a studio, and so on. Cues are present on the DFC Gemini for compatibility with Logic series consoles.

It is not anticipated that the Cues will be used in a film post-production environment.

Cues provide outputs that are generally fed to headphones or extra sets of speakers in a studio. Auxiliaries and Main Outputs can be routed to Cues.

Main Outputs

Main Outputs (or Mains) traditionally provided the stereo mix and monitoring outputs from Logic systems.

Main Outputs would only be used if a plain stereo mix is required without using the Surround Monitoring system.

Films

Film paths are used by the Surround Monitoring system as outputs to the monitoring speakers.

Films can be assigned to the console surface, although this is not necessary for their operation.

The number of Film paths determines which speaker keys are available on the Surround Monitoring panel. There can be 0, 4, 6 or 8 Film paths with speakers keys available as follows:

No. of Film paths	Speaker keys available
0	None
4	L, C, R and LS
6	L, C, R, LS, RS and SW
8	All

The number of Films also determines the number of Film Listens.

The default path names for Films are FLM1 to FLM8.

Films must be routed to the outputs to the monitoring speakers with I/O Manager (or Output Patching can be used if the Films are assigned to the surface).

The Films also have Encode/Decode inserts, and Lt-Rt/Mono returns which must be patched to the appropriate inputs and outputs with I/O Patching (or see Patching Film Inserts for Post Decode and Lt/Rt if the Films are assigned to the surface).

✍ *When there are 2 Films (Stereo) the Pan Designators Left and Right are used (not Front Left and Front Right), and the ACAD (Academy filter), POST DECODE and Lt-Rt keys are disabled. Also, LS Sel, Tracks and Externals are routed to both left and right when MONO is selected.*

See the Surround Sound Facilities chapter.

Externals

Externals are used to provide additional direct inputs to the Surround Monitoring System from up to three tape machines (or other direct sources).

Each External machine can provide up to 24 inputs, giving a maximum of 72 Externals. The number of inputs from each external device is specified as part of the Desk Setup in the Config page of Desk Edit.

The Externals are selected for monitoring using the STEM SEL and SUBMIXER sections of the Surround Monitoring panel.

See Monitoring External Machines in the Surround Sound Facilities chapter.

PreDub Masters

PreDub Masters are a control only path type used to control the predub members (Channels or Tracks). A PreDub Master uses no processing resources. All controls in the predub members are linked to the PreDub Master.

PreDub Masters are assigned to the surface using the Desk Designer page of Desk Edit. If a PreDub Master is not assigned to the surface then it is not possible to expand it and access the member paths.

See PreDub Setup under Desk Edit in the Tools Menu chapter.

PreDub Masters can control a group of up to 8 Channels and/or Tracks. The predub members are 'stacked' under the PreDub Master and are accessed individually by expanding the predub across the PreDub Zone. A predub can not be expanded on a console (or partition) that does not have a PreDub Zone.

The PreDub Zone

The PreDub Zone is a block of eight channels strips (two quadstrips) on which Layer A is used for expanding predubs.

The PreDub Zone is also used for expanding the signal processing and aux controls in AFU Mode.

The location of the PreDub Zone is set using Partition Designer in Preferences.

A console that has multiple partitions can have a PreDub Zone for each partition.

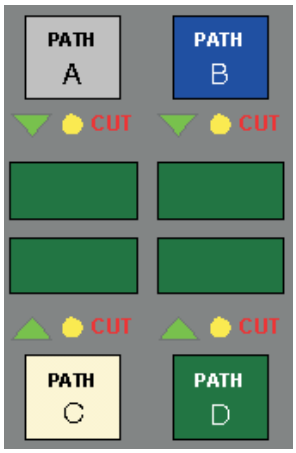
To change the overall level of a predub

➤ Press the PATH access key for the predub.

The signal width indicators below the Stem Routing matrix will indicate how many paths are in the predub.

➤ Move the fader.

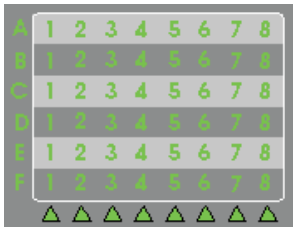
To expand predubs



➤ Press and hold the PATH access key for the predub master.

The associated alpha will display the user name for the predub.

The signal width indicators below the Stem Routing matrix will indicate how many paths are in the predub.



The LEDs in the GANG and LINK keys will illuminate red.



➤ Press the LINK key on the same channel strip.

➤ Release the PATH access key.

The paths in the predub will be expanded across Layer A in the predub zone.

Each path can now be controlled in the same way as a normal path (i.e. changing EQ, etc.).

The PreDub Master will remain in place and changing its controls will change the 'slaved' controls in the predub zone.

Continuous controls (faders, EQ frequencies, etc.) can be moved to change the offset from the PreDub Master. The offset is retained.

Stepped controls (phase reverse, aux pre/post, etc.) can be changed, but if the PreDub Master is changed then the predub members will follow the Master settings.

To collapse the predub slaves

➤ Press the and hold PATH access key for the predub master.

➤ Press the LINK key on the same channel strip.

➤ Release the PATH access key.

PreDub CUT and SOLO

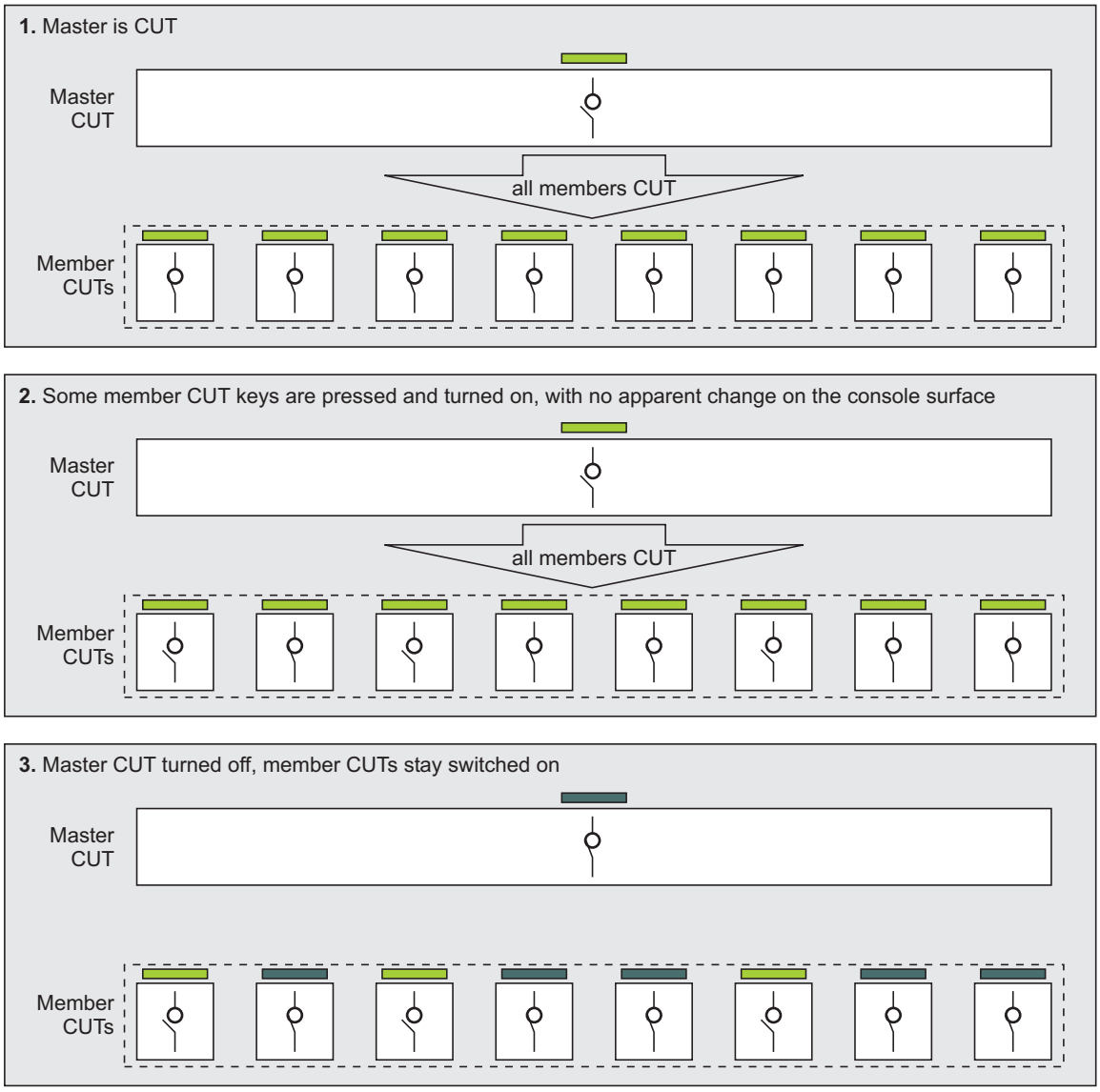
A CUT or SOLO on a PreDub Master will CUT or SOLO all the paths in the PreDub.

While a PreDub Master CUT or SOLO is on, the individual CUT or SOLO on a PreDub member can be switched on or off, but will not override the CUT or SOLO imposed by the Master.

The individual CUT or SOLO on a PreDub member only takes effect when the CUT or SOLO for the PreDub Master is off.

An individual CUT or SOLO on a PreDub member will remain on, even when CUT or SOLO on the PreDub Master is turned off. This is illustrated below.

For example, if a PreDub Master is CUT while the PreDub is expanded, the CUT keys for the PreDub members can be pressed with no apparent effect. However, the status of CUT keys for the PreDub members is registered, and when the CUT for the PreDub master is turned off there could still be PreDub members that are CUT. This could also happen if the PreDub is collapsed before the Master CUT is turned off (i.e. the member is cut but this can not be seen on the surface).



System Paths

The System Paths are special path types that are by DFC Gemini for the solo, talkback and tone functions to operate correctly.

The number of each type of System Path can be changed for a particular Desk Setup but it is strongly recommended to keep the normal defaults for these path types.

SEL

There are three stereo SEL paths by default (SEL is an abbreviation of 'select'), SEL1 to SEL3, that are used by the (legacy) monitoring system.

SEL1 is often used to output to near-field speakers (i.e. normal domestic quality speakers) to test compatibility of a surround mix with home hi-fi or stereo televisions.

LISTEN

There are two LISTEN paths by default, LS1 and LS2, that are used by the normal AFL and PFL solo busses.

✍ *These should not be confused with the small loudspeakers (L/S 1 and L/S 2) that can be fed by SEL1 and SEL3.*

TALKBACK

There is one TALKBACK path that is used for the talkback system and the tone/slate generator.

FILM LISTENS

These are used to provide a non-destructive AFL solo bus that feeds the Surround Monitors directly. The number of FILM LISTENS is automatically changed to match the number of Film paths, and this should not be changed manually. They are named FLS1 to FLS8.

Path Summary

The following table summarises the maximum quantities of each path type and the names used in different displays.

Path Description	Maximum Number of Paths	Name in Desk Edit Config Page	Encore Path Names	Name in Meter Designer	Name Displayed on Meters	Path Type Display on Matrix Panel
Channels	192	Channels	*n*	Channels	*n*	Chan
Tracks	96	Tracks	TRK*n* to TR*nn*	Tracks	{stem} A/ tr*nn*	Trk
Groups	32	Groups	GRP*n* to GR*nn*	Groups	Gr *n*	Grp
Auxiliaries	36	Auxiliaries	AU n	Auxes	Au *n*	Aux
External Machines	72, up to 24 per machine	External Machines	EXT*n* to EX*nn*	Externals	E *n*	MC 1, 2, 3
Predubs	48	Predubs	PD *n*	Pre Dubs	-	PD
Surround Monitor Buses	7.1	Films	FLM*n*	Films	FM *n*	Film
Talkbacks	1	Talkbacks	TBK	TBK	tb	Talk
Surround Solo Bus	8	Film Listens	FLS*n*	Film Lstn	FL *n*	Fls*n*
Mains	4	Main	MAIN then MAI*n*	Mains	Mn *n*	Main
Cues	12	Cue	CUE*n* to CU*nn*	Cues	Cu *n*	Cue
Stereo Monitor Buses	6	Sels	SEL*n*	Sels	SEL*n*	Sel
Stereo AFL/PFL Solo Buses	2	Listen	LS *n*	Listens	LS *n*	Lstn

n = path number

✍ *The Encore Path Name is used in the System Name column when paths are listed in Encore functions and utilities. This is also used on the alpha displays associated with the PATH Access keys and can be overridden with a User Name.*

✍ *Mains, Cues, Sels and Listens are shown separately because they are not necessary to normal operation of the DFC Gemini.*

LAYER SELECTION ON THE FADER STRIPS

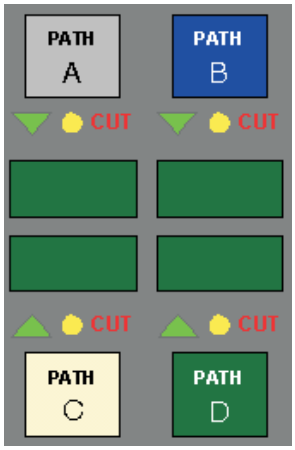
The DFC Gemini uses four layers, A, B, C and D. This means that any fader strip can have up to four signal paths assigned to it, one for each of the PATH Access keys.

Signal paths are initially assigned to the fader strips using the Desk Designer page of Desk Edit. The console surface Setup Function can also be used to change fader assignment.

See Path Placement with the Setup Function in the following chapter.

To select a path on a fader strip

➤ Press the PATH A, PATH B, PATH C or PATH D key as required.



These keys are referred to as the PATH Access keys.

The path name in the alpha display associated with the key will illuminate brightly.

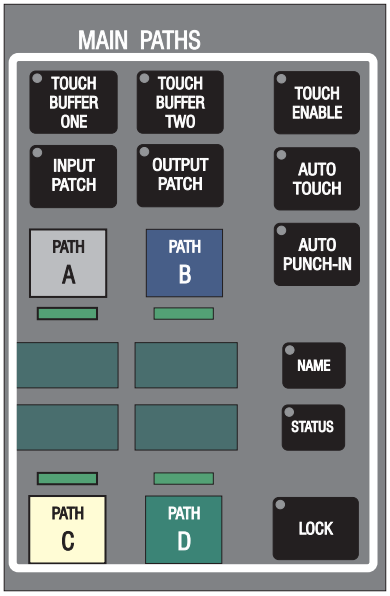
The fader will move and the other controls in the path will change their display according to their settings for the selected path.

The selected path is now 'on the surface'.

✍ *If a PATH Access key is pressed where there is no path assigned then it will be ignored.*

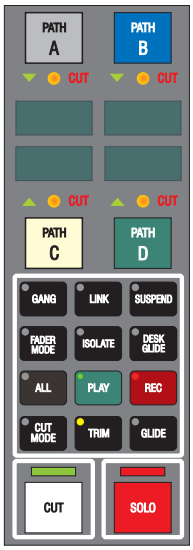
To select a layer across the whole console (or partition)

➤ Press the PATH A, PATH B, PATH C or PATH D key on the MAIN PATHS section of the master quadstrip.



or

➤ Press and hold the ALL key on any fader strip, press the PATH A, PATH B, PATH C or PATH D key on the same fader strip, then release the ALL key.



All the fader strips that have a path assigned to the selected layer will have that layer 'brought to the surface'.

To view the settings of controls on a layer

➤ Press and hold the PATH A, PATH B, PATH C or PATH D key on the MAIN PATHS section of the master quadstrip.

The controls on the fader strips will change according to the selection.

➤ Release the key.

The fader strips will return to their previous assignments.

CONSOLE SETUP FUNCTION

The Setup Function is activated with the SETUP key on the Upper Routing Matrix and allows Path Process Switching, Turbo Allocation and Path Placement.

The Setup Function provides a surface based alternative to some of the functionality of Desk Edit and Path Edit.

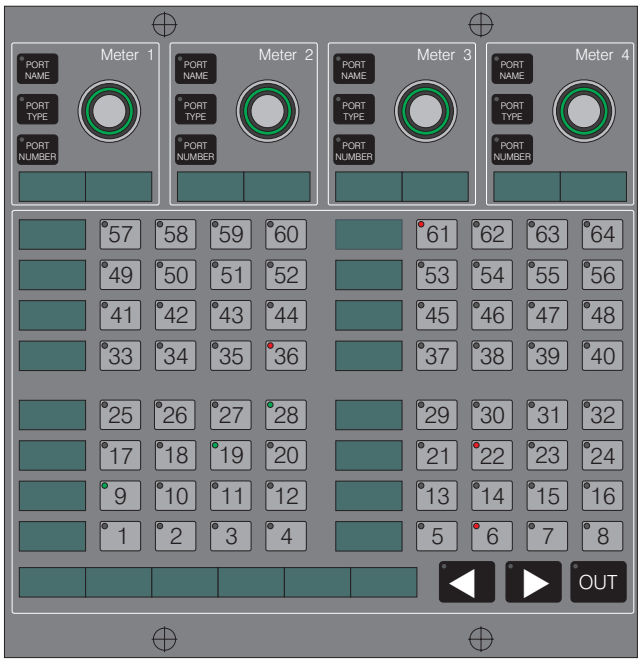
Path Placement allows the assignment and movement of paths on the strips and layers on the console surface.

Turbo Allocation allows the processing elements in a path to be changed.

Path Process Switching allows the order of processing elements in a path to be changed.

To activate the Setup Function

➤ Press the SETUP key on the Upper Routing Panel.



The long alpha will display Select Path.

Path Placement in Setup

Setup Mode allows paths to be assigned and de-assigned to strips/layers on the console surface and moved from one strip/layer to another.

To place a path on the console surface

➤ Press and hold a PATH access key where there is no path present.

The Lower Routing Panel will display available paths to allow a path to be selected.

The alphas will show the path type and CHAN will be displayed by default.

The LEDs in the numbered keys will illuminate green to show the available paths.

➤ If necessary, press the nudge keys to change the path type.

➤ Press the number key (on the Lower Routing Panel) corresponding to the required path.

The integral LED in the number key will illuminate red.

The alpha associated with the PATH access key will display the path name.

To de-assign a path from the console surface

➤ Press and hold the PATH access key for the required path.

The Lower Routing Panel will display available paths.

➤ If necessary, press the nudge keys to change the path type.

The LED in the corresponding numbered path key on the Lower Routing Panel will be illuminated red.

➤ Press the number key corresponding to the required path.

The alpha associated with the PATH access key will go blank.

To move a path

➤ Press and hold the PATH access key for the required path.

➤ Press the PATH access key for the destination.

The alpha displays will swap.

If a path was already allocated to the destination then the two paths will be swapped.

Turbo Allocation

Turbo Allocation (Setup Mode) allows signal processing to be assigned and de-assigned directly from the console surface.

The functions which can be assigned and de-assigned with Turbo Allocation are EQ, Filters, Sidechain Filter and Key Input, Output, Compressor, Limiter, Gate, Expander, Inserts and the Dynamic Range Controller.

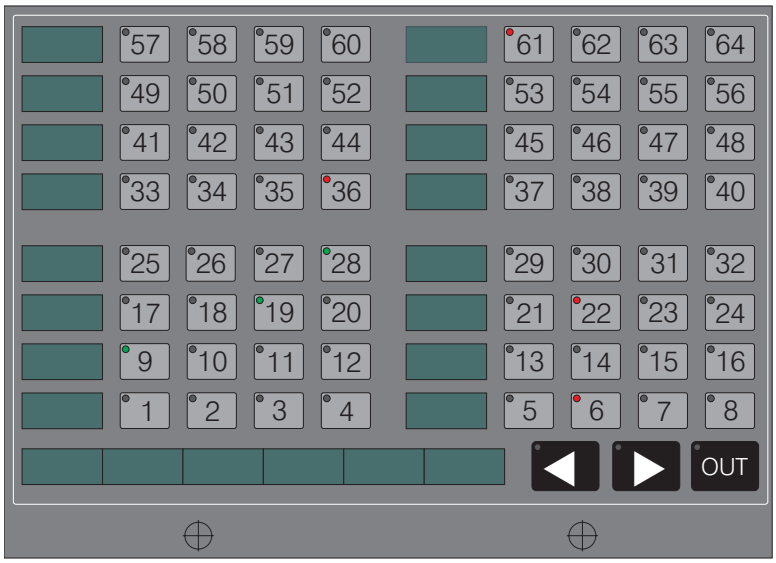
If Path Edit is active on the Encore screen and changes are made to the path displayed then the changes made in Turbo Allocation will be shown on the screen. If changes are made in Encore then the allocation process will disable Turbo Allocation.

On entering Setup Mode, Pre-dub members are collapsed, and the turbo-ing of Pre-dub members is disallowed.

✍ *The AUX and ON MODE keys are not active in Turbo Allocation.*

✍ *The order of processing may be changed using Path Process Switching.*

To Use Turbo Allocation



To enable Turbo Allocation

➤ Press the SETUP key on the Upper Routing Panel.

The long alpha display on the panel will display Turbo - Select Path.

The alphas associated with Logicator 1 on the channel strips will display SET.

The LEDs in keys with processes already assigned will illuminate red.

The console is now in Setup Mode.

To allocate a process where none is already allocated

➤ Press the required Signal Processing key.

The integral LED will illuminate green.

The alpha associated with Logicator 4 will display the processing available.

➤ Rotate Logicator 4 to select other processing options.

For example, if the EQ key is pressed the alpha will display EQ 1 meaning a single band of EQ. Rotating the Logicator clockwise allows up to four bands of EQ to be selected.

➤ Press the ON/CLEAR key.

A rotating bar will be displayed in alpha 2 while the process is allocated.

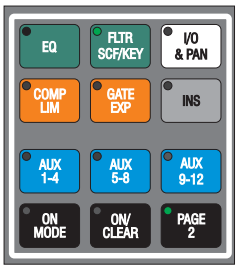
When allocation is complete, alpha 2 will display OK.

The integral LED in the selected Signal Processing key will illuminate orange.

The integral LED in the ON/CLEAR key will illuminate red.

Rotating Logicator 4 will now have no effect.

To un-allocate a process



➤ Press the required Signal Processing key which has its LED illuminated red.

The integral LED will illuminate orange.

The integral LED in the ON/CLEAR key will illuminate red.

➤ Press the ON/CLEAR key.

The integral LED will cease to be illuminated.

The LED in the selected Signal Processing key will illuminate green.

Logicator 4 may now be rotated to select a different processing option which can then be re-allocated using the ON/CLEAR key.

To end Turbo Allocation

➤ Press the SETUP key on the Upper Routing Panel again.

Turbo Allocation Processing Options

When Logicator 4 is rotated, alpha 4 will display options according to the selected signal processing as follows:

Key	Alpha 4 Display
EQ	EQ 1, EQ 2, EQ 3, EQ 4, EQ 5, EQ 6, EQ 7, EQ 8 (1 to 8 bands of EQ)
FILTER SCF/KEY	1FLT, 2FLT (One or two filters)
FILTER SCF/KEY + PAGE 2	SCEQ, KEY, S+K (Sidechain EQ, key input or both)
I/O & PAN + PAGE 2	MONO or AB, ABW, MS (Port signal type)
COMP LIM	CMP1, CMP2 (One or two compressor/limiters)
EXP GATE	EXPR, GATE, X+G, DRC (Expander, gate, both or dynamic range controller)

Notes on Turbo Allocation

8 Band EQ

If more than four bands of EQ are allocated then Filters and the sidechain elements may not be allocated. Similarly, if any Filters or sidechain elements are already allocated then a maximum of four bands of EQ can be allocated.

Sidechain Elements

The Sidechain Filter and Key Input are accessed using the PAGE 2 key.

If the FILTER SCF/KEY key is pressed and a Sidechain element is active then the LED in the PAGE 2 key will illuminate red.

✍ *If there is no dynamics processing in the path then a Sidechain may not be added.*

Similarly, if all dynamics is removed from the path then any Sidechain elements will also be removed and must be re-allocated, if required, after further dynamics have be re-allocated.

Ports

The ports are accessed using the PAGE 2 key.

Only Channels, Tracks, Groups and Mains may have their ports modified by Turbo Allocation.

If the I/O & PAN key is pressed, the LED in the PAGE 2 key will illuminate red. If the PAGE 2 key is pressed then alpha 4 will display the input/output type (e.g. MONO, AB, etc.).

Only Channels and Groups allow the optional output to be added and removed.

Tracks and Mains allow the port type to be modified if it is stereo.

✍ *In Turbo Allocation, only one output may be manipulated for Main paths. If two outputs are required on a Main path then the extra port must be allocated in Path Edit or Desk Edit.*

Path Process Switching

PPS allows instant changes in the order of processing elements within a path.

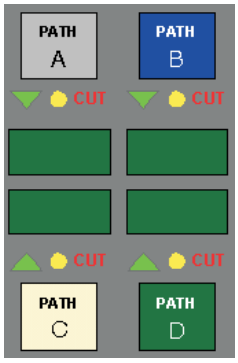
The results are immediately audible, allowing A/B comparisons to be made.

Accessing PPS

➤ Press the SETUP key on the Upper Routing panel.

The long alpha display will display “Turbo - Select Path”.

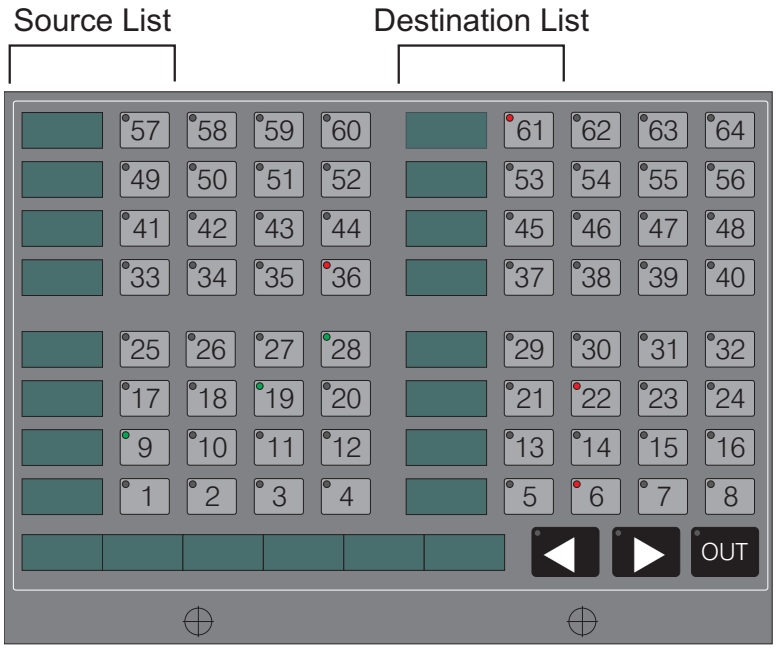
➤ Press the required PATH key on the console surface.



The long alpha display will show the channel selected and its Input/Output status.

The left-hand column of alphas (source) will show a list of processing in that path.

The LEDs on the keys next to the source list (57, 49, 41, etc.) will illuminate red.



Using PPS to change the order of processing elements

➤ Press and hold a matrix key next to a process in the source list.

➤ Press the matrix key to the right of the desired position in the destination list.

The destination alpha will show the copied processing and the LED on the key next to it will illuminate green.

The LED on the key to the right of the source key pressed will illuminate yellow as shown in the PPS Example.

➤ Repeat these two steps until all processing has been copied to its destination.

If there are more than eight processing modules in the source list

The source and destination lists may be scrolled up and down together.

To scroll up

➤ Press and hold the lowest key of the second numeric column from the left (i.e. 2).

To scroll down

➤ Press and hold the uppermost key of the second column from the left (i.e. 58).

To copy processing from the bottom of the source list to the top of the destination list (or vice versa) when there are more than eight processing modules present

➤ Scroll the lists to show the required element in the source list.

➤ Press and hold the key adjacent to the required processing module in the source list.

➤ Scroll down/up the destination list using either the 58 or 2 key.

➤ Press the destination key.

To implement the change (having established the new list)

➤ Press the  key to implement the change.

The LEDs for the source list will illuminate green and the destination LEDs will illuminate red to show the new processing order is active.

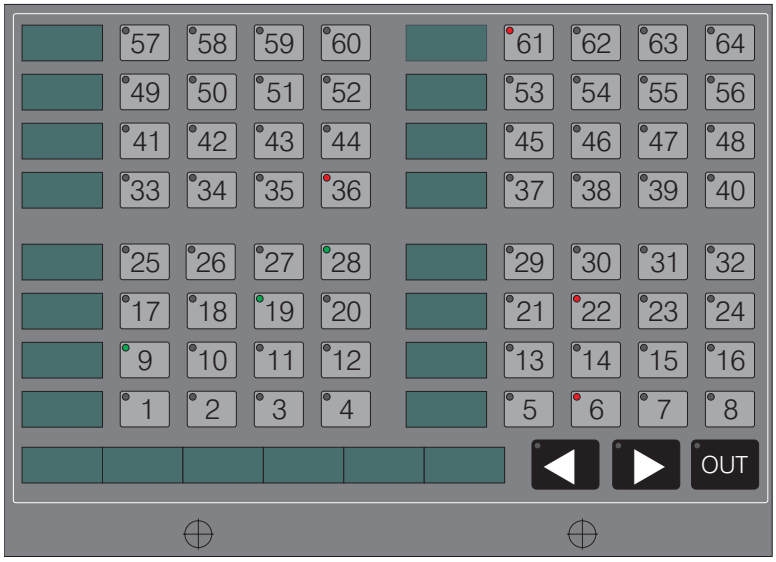
All parameter settings for processing elements are preserved throughout the switching process.

To select a different path for PPS

➤ Press the required PATH key on the console surface.

The changes to the existing path will be saved as part of the current Desk Setup before the new path is called into the panel.

PPS Example



This is a partially completed PPS example.

The source list is on the left hand set of alpha displays (red LEDs).

The destination list is on the right hand set of alpha displays (green LEDs).

Note the yellow LEDs in the second column of keys indicate which processes have been copied from the source list.

Using PPS for A/B comparisons

➤ Use the ◀ and ▶ keys to toggle between the processing order in the left and right windows.

The LEDs of the selected set of processing will turn red and the de-selected set will turn green.

The signal processing will toggle between the two different versions.

Any difference in audio will be heard.

To exit PPS

➤ Press the OUT key.

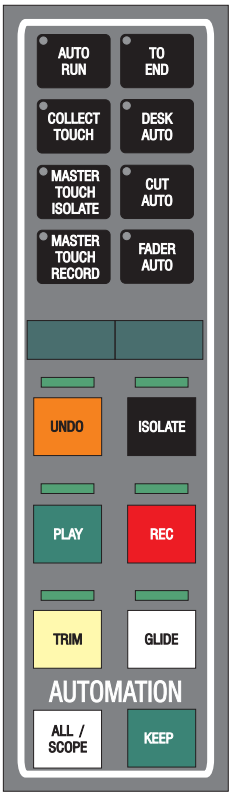
The new processing order will be saved as part of the current Desk Setup

Saving the Desk Setup

Changes made to the Desk Setup with the Setup function are not automatically saved. Changes can be saved manually from the console surface.

To save the Desk Setup after making changes from the console surface

➤ Press and hold the ALL/SCOPE key.



➤ Press the KEEP key.

➤ Release the ALL/SCOPE key.

✍ *This also saves any changes to control values, gang structures, etc.*

✍ *If automation is active and there is a Record Pass in the automation buffer then this will also be saved to the current Mix/Pass Tree.*

SURROUND SOUND FACILITIES

The surround features of the DFC Gemini are provided by the Surround Monitoring panel, PEC Direct panel, Joystick panel and controls in the Channel Strips.

5.1 Format Surround Sound Example

A 5.1 Format Surround Sound setup on Stem A is used as an example for some of the features in this chapter. This is a very simple setup for illustration purposes only.

This format is known as 5.1 because there are five surround destinations (Front Left, Front Centre, Front Right, Rear Surround Left and Rear Surround Right) plus the sub-woofer.

The setup will be as follows:

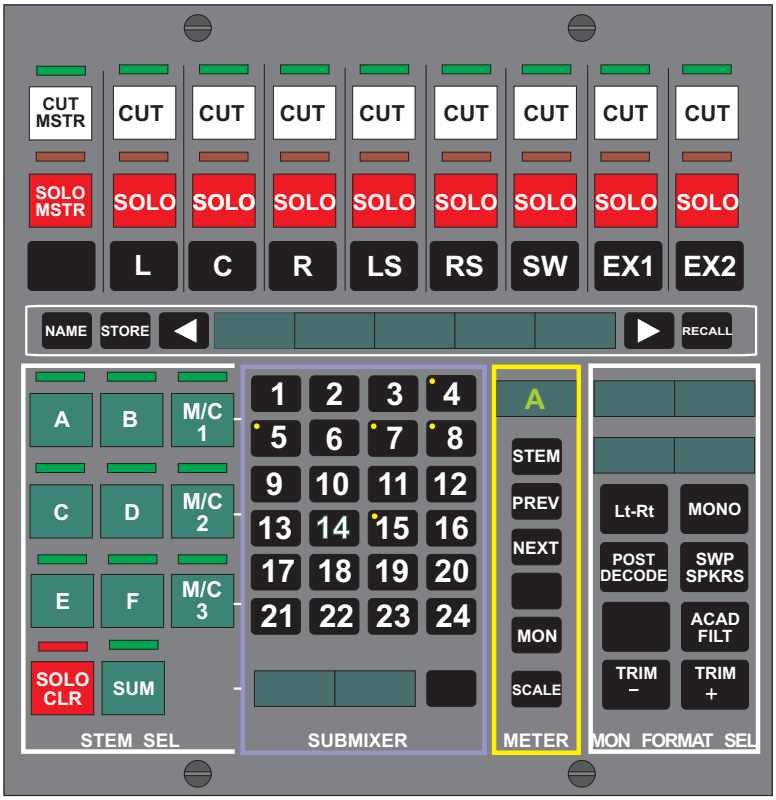
- 5.1 Format Surround Sound using L, C, R, LS, RS and SW (sub-woofer).
- Tracks 1 to 6 will form Stem A.
- Channel 10 as a stereo input from 1lin 1AB.
- Channels 11 and 12 as mono inputs 1lin 2A and 1lin 2B.
- Channels are on layer A, Tracks are on layer B and Film Mons are on layer D.

All the examples listed below refer to this setup and the steps towards obtaining it. It is assumed an appropriate Desk Setup with enough Channel, Track (bus) and Film paths has been loaded. It is also assumed that the Films are patched to the correct outputs for the speakers (the particular outputs used for the speakers will be different from one DFC Gemini to another).

The other panels that relate to this example are:

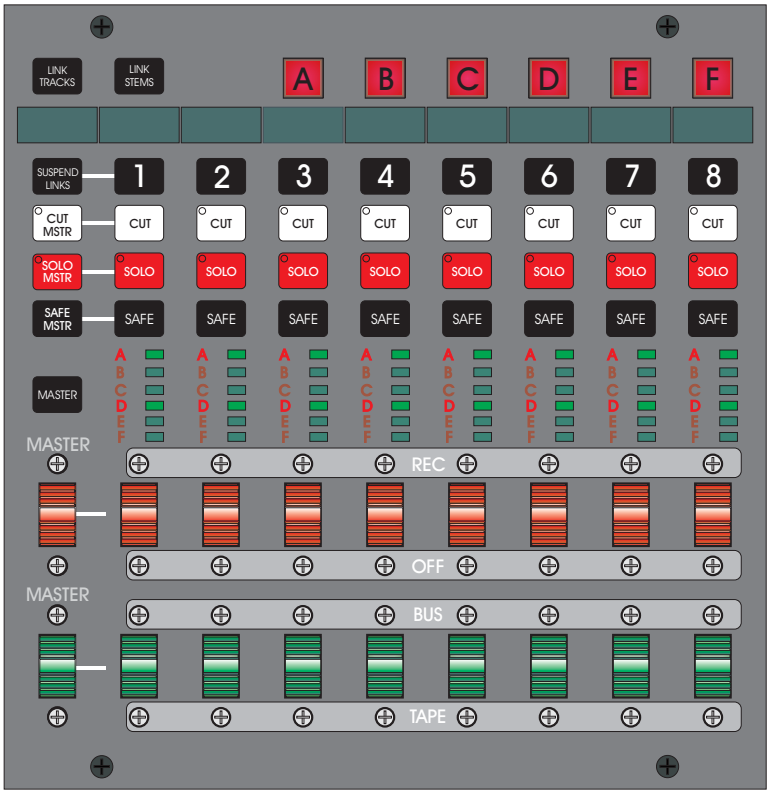
- Select Paths to form the Stem
- Select the speakers for monitoring the Stem
- Select inputs to the Stem
- Monitor the result

The Surround Monitoring Panel



Provides controls for selecting the Stems to be monitored and the formats to use for monitoring.

The PEC/Direct Panel



Used to configure up to six Stems, labelled A through F. Each Stem can consist of up to eight Tracks (busses) which are then routed to the Film paths in conjunction with the Surround Monitoring panel.

Each Track in each Stem also has Solo and Cut control. This only affects the signals routed to the Film paths and is the same as using AFL Solo and Cut on the corresponding fader strips.

It can be used to control the Record status of Mag and Multitrack tape machines, with Bus/Tape switching that allows monitoring of the Track Send (Bus) or Track Return (Tape).

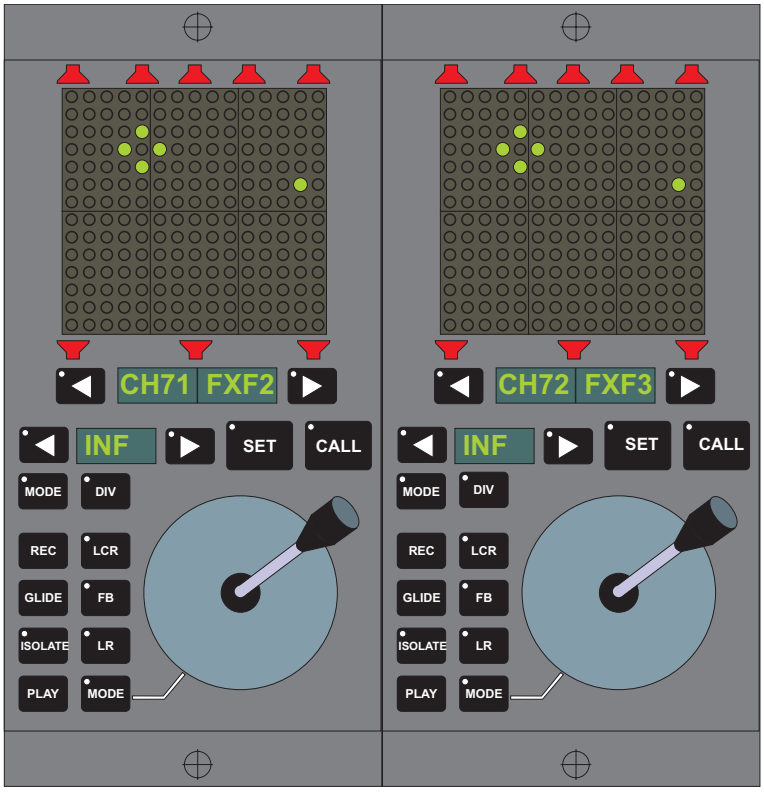
An array of red tally LEDs indicate the record status of tracks in the Stems. Green LEDs next to each tally show the Bus/Tape switching.

A safe mechanism is provided which operates internally to disable Record on individual Tracks and prevent further Record enable commands being sent to the tape machines for the safe Tracks.

Fully configurable master control grouping can also be used for Record, Bus/Tape and Safe.

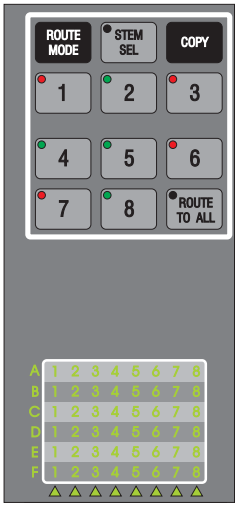
The Joystick Module

Provides an intuitive means of panning a signal in a surround sound field.



Channel Strip Controls

The channel strips have a special routing and display section, specifically designed for routing to film Stems.



How the Surround Sound System Works

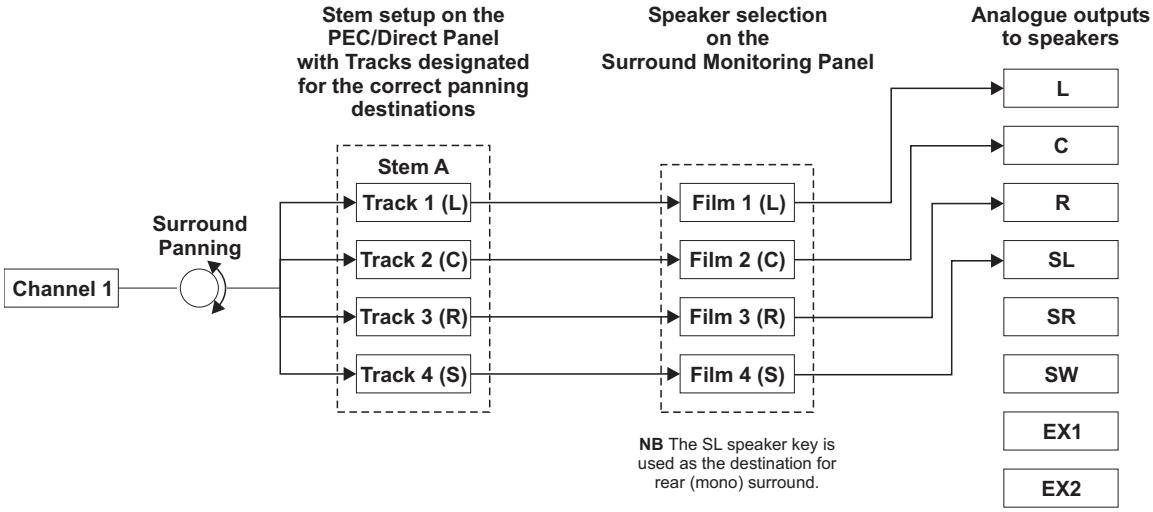
A surround sound setup on the DFC Gemini consists of three main parts:

- ❑ Signal sources that are panned.
- ❑ Film stems that accept the panned signals.
- ❑ Film monitoring that controls which stems are output to the speakers.

Film stems are made up of Tracks that have had suitable pan designators applied to them using Desk Editor. The pan designator means that when a Channel is routed to a particular Track then the Track only receives the relevant portion of the signal that is panned to that speaker position.

The Simplified Surround Monitoring diagram shows how this works:

SIMPLIFIED SURROUND MONITORING



Stem A consists of the first four Tracks in the current Desk Setup, and the LCRS Pan Macro has been used to designate the Tracks appropriately.

Channel 1 is routed to all the Tracks in Stem A.

If Channel 1 is panned fully to the left and front, then the only significant signal will be sent to Track 1 because Track 1 is designated in the panning position of (Front) Left. If the FB pan control (or a Joystick) is used to 'move' the signal back from this position then the signal will slowly diminish to the Left (Track 1) and gradually increase to the Mono Surround (Track 4).

The Tracks must then be routed to the correct Film paths in the Surround Monitoring Panel. The Film paths are automatically assigned to speaker positions according to the number of Film paths selected in the current Desk Setup. There can be 0, 4, 6 or 8 Film paths.

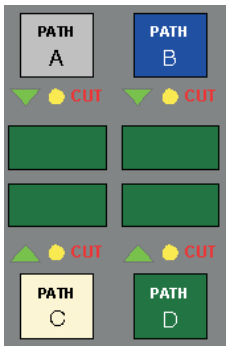
In the example in the Simplified Surround Monitoring diagram there are 4 Film paths that have been automatically assigned to the speaker buttons that are used for LCRS monitoring (L, C, R and LS).

Stem Configuration

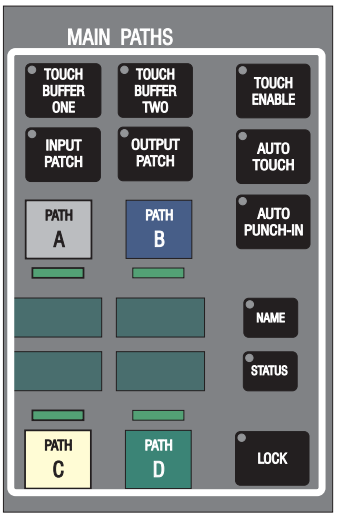
The Stems are normally pre-configured using Stem Setup in Desk Edit. However, the Stems can also be configured or modified from the console surface.

To change the pan designators for Tracks (busses) and Groups

➤ Bring the required Tracks (busses) and mono Groups to the surface with the PATH access keys.



➤ Press the OUTPUT PATCH key.



➤ Rotate Logicator 5 on the required paths to set the pan designators.

➤ Press the OUTPUT PATCH key again when all changes have been made.

5.1 Format Surround Sound Example: Selecting which Paths form the Stem

➤ Click on Desk Edit in the drop down Tools Menu.

The Filing page of Desk Edit will be displayed.

➤ Click on the Tracks tab to show the Tracks page.

➤ Click the Pan Macros key.

The Pan Macros dialogue box will be displayed.

➤ Click the radio button for 5.1 Format and click OK.

The 5.1 Format will be propagated across all the Tracks in sets of 6.

➤ Click the Filing tab.

Make sure the Allocate On Save check box is checked.

➤ Click the Save button.

The Desk Setup will be saved and the changes will be allocated to the console.

➤ Click the Exit button.

To assign Tracks 1 to 6 to Stem A

➤ Press the Stem A key on the PEC/Direct Panel.

➤ Press and hold the 1 key on the PEC/Direct Panel.

➤ Press the 1 key on the Lower Routing Panel.

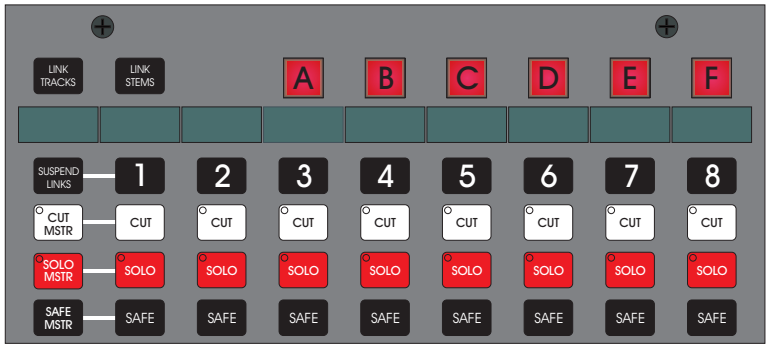
TRACK 1 will be displayed in the alpha above the 1 key.

The LED in the 1 key on the Lower Routing Matrix will illuminate red.

➤ Repeat for the 2 to 6 keys on the PEC/Direct Panel, assigning Tracks 2 to 6 respectively.

Tracks 1 to 6 now form Stem A.

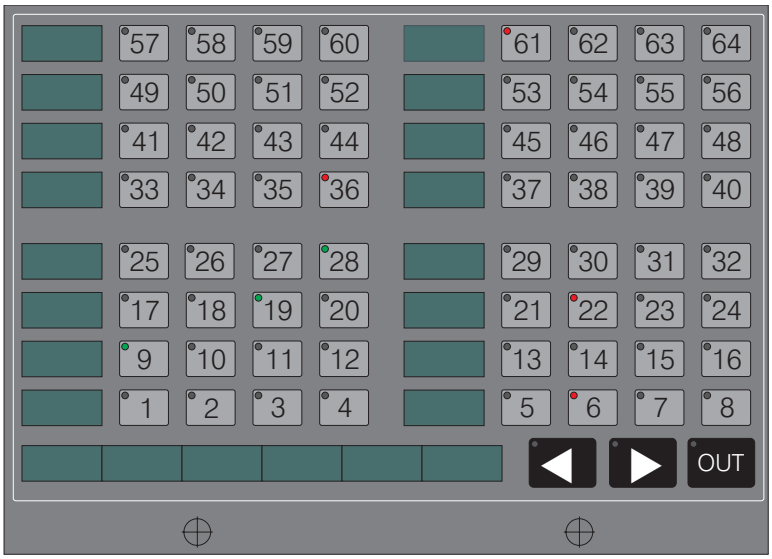
To select the Tracks (busses) for a Stem



➤ Press the required Stem key (A-F) on the PEC/Direct Panel.

➤ Press and hold the 1.

The Lower Routing Matrix will display available sources (green LEDs).



➤ Select the pages for Tracks (busses) by pressing the nudge keys if there are more than 64 Tracks.

➤ Press the number key of the required path on the Lower Routing Matrix.

The LED will illuminate red.

➤ Release the 1 key.

The Track name will be displayed above the 1 key.

➤ Repeat for the remainder of the Stem (keys 2, 3, 4, etc.) according to the Stem Type (e.g. 4 for LCRS, 6 for 5.1, etc.).

✍ *Tracks (busses) are de-routed from Stems in the same way by pressing the selected source (red LED) to toggle it out (green LED).*

✍ *Only Tracks (busses) can be used to build the Film Stems. This is because there is no Bus/Tape switching or Tape Sends/Returns on Groups, so Groups can not make used of the PEC/Direct Panel. However, pan designators on mono Groups can be useful to output a panned signal to an effects unit (for instance) which is then looped back into the console.*

To select the speakers for monitoring a stem

➤ Press the A-F key on the PEC/Direct Panel for the required stem.

➤ Press and hold the required speaker key on the Surround Monitoring panel.

➤ Press the 1-8 keys on the PEC/Direct panel with a Track (bus) which has the correct Pan Designation.

The integral LED in the number key will turn red or orange flashing according to whether or not the Stem is selected for

monitoring on the STEM SEL section of the Surround Monitoring Panel. Release the speaker key.

➤ Continue to select Stem elements to the speakers.

5.1 Format Surround Sound Example : Select the speakers for monitoring the Stem

➤ Press and hold the 1 key on the PEC/Direct panel.

➤ Press the L key on the Surround Monitoring panel.

The LED in the L key will change from green to either solid red or flashing orange, depending on whether or not Stem A is currently selected to the Monitor outputs.

➤ Release the 1 key.

➤ Repeat in sequence for the remaining Stem members (i.e. 2 on C, 3 on R, etc.).

It is also possible to do this routing in reverse by holding down a speaker key and selecting which track in a Stem is routed to it.

✍ *This can also be done in reverse - press and hold the number key then press the speaker key. The speaker select key LEDs will be illuminated according to the FILM type in the current Desk Setup. e.g. If four way surround sound (LCRS) is selected, the L, C, R and LS key LEDs will illuminate.*

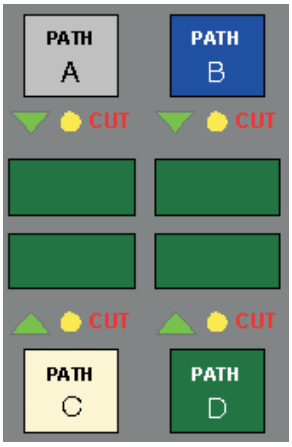
✍ *It is possible to use Stems for 'narrower' surround formats than the Desk Setup has provided with the number of Film paths. For instance, an LCRS Stem can be monitored on a 5.1 monitoring setup by routing the rear surround channel to both the left and right surround monitors.*

✍ ***Tip:** It is possible for more than one Track within a Stem to feed the same speaker, such as two LCR dialogue sets in one Stem.*

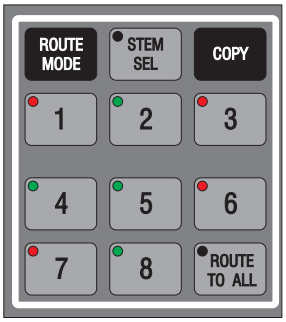
Stem Routing

This procedure is used to route Channels, Tracks (not used in Stems), Groups and PreDubs to Tracks (busses) in Stems.

➤ Bring the required path or predub to the surface by pressing its PATH access key.



➤ Press the STEM SEL key.



The Stem letters (A, B, C, etc.) will illuminate in sequence on the Stem Routing Display each time the STEM SEL key is pressed.

As each Stem is selected, the LEDs in the number keys will illuminate green to indicate the availability of Stem members which can be routed destinations. No LEDs will illuminate for Stems which have not been configured.

➤ Press the required number keys or ROUTE TO ALL.

The LEDs in the selected number keys will illuminate RED.

The corresponding numbers on the Stem Routing Display will illuminate.

5.1 Format Surround Sound Example: Select Inputs to the Stem

➤ Press the Path A key in the Main Paths section.

This will bring all the Channels on layer A to the surface.

On the strip for Channel 10

➤ Press the STEM SELECT key so that A is illuminated in the Stem Routing Display.

➤ Press the ROUTE TO ALL key.

The LEDs in the 1 to 8 keys will illuminate red.

➤ Press the I/O & PAN key.

➤ Press and hold the ON/CLEAR key.

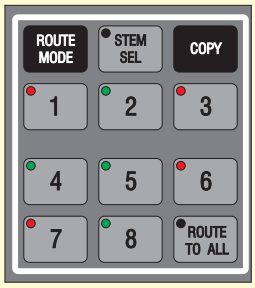
The alpha displays will change from displaying the default settings to Rear, F-b, Div and Lcr respectively. This shows that full surround panning is now available for the stereo input on Channel 10.

➤ Release the ON/CLEAR key.

➤ Repeat the steps for Channels 11 and 12.

Routing/Stem Selection Keys Example

This shows a 6-way Stem has been selected (i.e. a 5.1 surround format Stem) - keys 1 to 6 have LEDs illuminated.

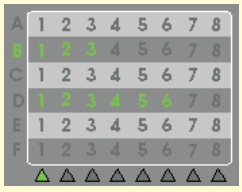


The channel has been routed to the front speakers only - keys 1 to 3 with red LEDs.

If the STEM SEL key has been used to select Stem B, then the display will be illuminated as shown in the Routing/Stem Display example.

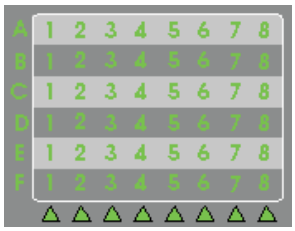
Routing/Stem Display Example

This example assumes the console has been set up for 6-way surround sound (5.1 format).



The channel has been routed to the front speakers on Stem B and all the speakers on Stem D.

Additionally, the STEM SEL key has been used to select Stem B for routing which will cause the Routing/Stem Selection keys to illuminate as shown in the Routing/Stem Selection keys example.



✍ *Tip: A shortcut is available for Stem selection. Hold down the STEM SEL key and then press number 1 for Stem A, 2 for Stem B, etc.*

Panning Controls

The appropriate panning controls are automatically enabled according to the pan designators on routing destinations (Tracks or Groups) for the path. The panning controls can be switched out completely from the strip, or a panning axis can be frozen when the path is panned by a Joystick.

To completely disable a panning axis

➤ Press I/O & PAN.

➤ Press and hold ON/CLEAR.

➤ Touch Logicators 5 to 8 as required.

The associated alphas will display OUT when the Logicators are disabled.

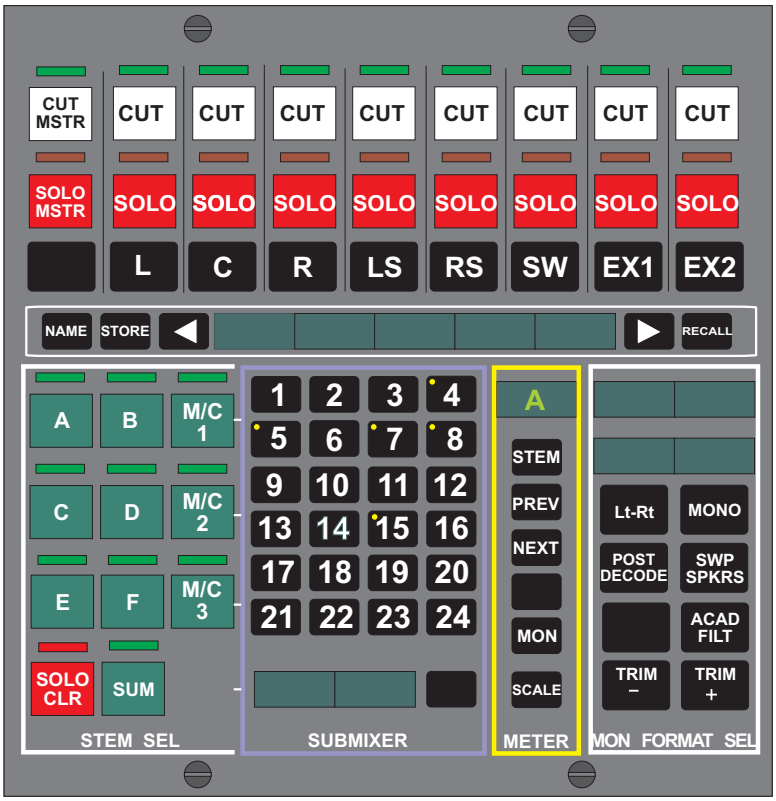
➤ Release ON/CLEAR.

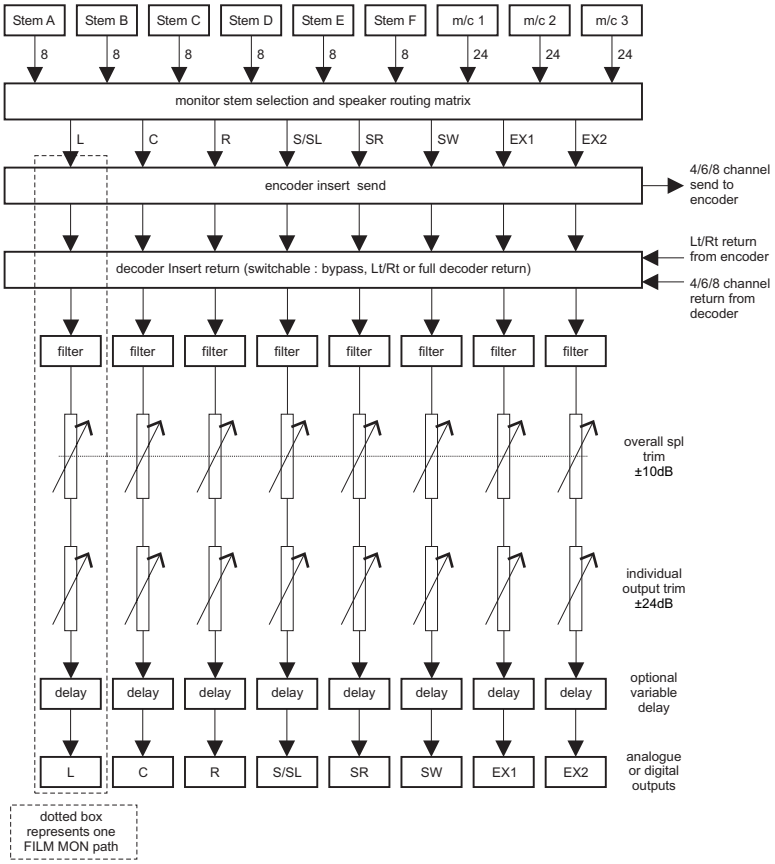
✍ *A panning axis can be frozen at a required setting (as opposed to being completely inactive) using the Joystick Module.*

✍ *It is advisable to press the DIM key or turn down the level control on the Control Room section before routing paths to Stems. This will prevent sudden loud noises if a signal is already present on an input.*

Surround Monitoring

When the film stems have been fully configured, the Surround Monitoring Panel allows various monitoring options, including pre-defined sets of active speakers, summing of film stems and/or external sources, mono sum, etc.





Monitoring the Stems

The STEM SEL section of the Surround Monitoring panel is used to select which Stem and/or external machine is being monitored.

To select a single Stem to monitor

➤ Make sure the LED above the SUM key is off (press the key if the LED is illuminated).

➤ Press the A to F key on the STEM SEL section.

The LED above the key will illuminate and the previous selection will be cancelled.

To select multiple Stems (and/or external machines) to monitor

➤ Press the SUM key.

The LED above the key will illuminate.

➤ Press the A to F keys and/or the M/C 1, M/C 2, M/C 3 keys as required.

The LEDs above the selected keys will illuminate. All the selected Stems and machines will be monitored.

Each time a key is pressed it will toggle on or off.

5.1 Format Surround Sound Example: Monitoring the Surround Sound Audio

➤ Press the A key in the STEM SEL section of the Surround Monitoring panel.

The Channels are now fully routed through to the Film outputs via Stem A.

➤ Activate the audio source(s) (e.g. if it is a tape machine, put it into play).

➤ Gradually turn up the level control pot on the Control Room panel until the signal is audible on the speakers at a satisfactory level.

➤ Press the I/O & PAN key on the fader strips for Channel 10 to 12.

➤ Turn Logicators 5 to 8.

You will hear the effects as the changes are made to the pan position.

Alternatively

➤ Call Channel 10, 11 or 12 to a Joystick and adjust the pan position with the Joystick.

See Panning with Joysticks later in this chapter.

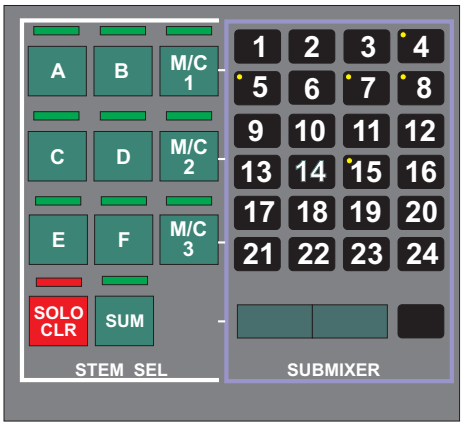
Monitoring External Machines

The Surround Monitoring Panel provides three keys (M/C 1, M/C 2 and M/C 3) for selecting up to three external multitrack sources which can be routed to the surround monitor outputs.

The Submixer section is used to route the signals from the external sources to the surround monitor outputs.

The number of tracks available on each external machine must be setup on the Config page of Desk Edit.

To select an external machine for routing



➤ Press and hold the blank key next to the alpha display on the Submixer section.

➤ Press the required machine key (M/C 1, M/C 2 or M/C 3).

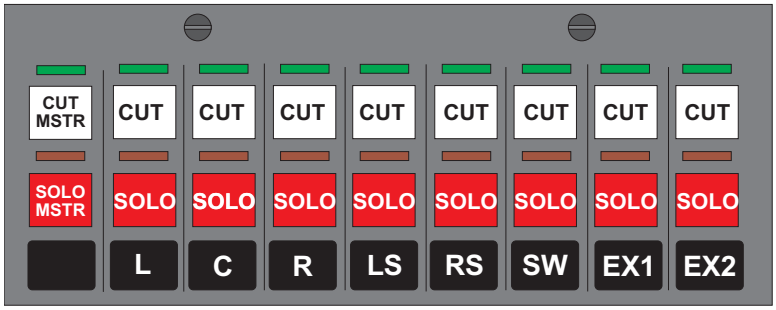
The alpha on the Submixer section will display the selected source.

The LEDs in the number keys will illuminate green to indicate the available number of tracks.

To route the external tracks to surround monitor outputs

➤ Press and hold the required track number key.

➤ Press the required surround speaker key(s) (L, IL, C, etc.) which has an LED illuminated green.



The LEDs in the number key and the speaker key will illuminate red.

➤ Release the track number key.

✍ *This can also be done in reverse by holding down the speaker key and selecting tracks.*

✍ *Tracks are de-routed in the same way by pressing keys with red LEDs to toggle the routing off.*

To interrogate external track routing

➤ Press and hold the track number key of interest.

The LEDs in the speaker keys the track is routed to will illuminate red.

or

➤ Press and hold the speaker key of interest.

The LEDs in the track number keys which are routed to the speaker will illuminate red or orange according to whether or not the Stem is selected for monitoring.

To monitor an external machine

➤ Place the machine into play.

➤ Press the required machine key (M/C 1, M/C 2 or M/C 3).

To monitor a mix of external machines and surround Stems

➤ Place the required machines into play.

➤ Press the SUM key.

➤ Press the A to F and M/C 1, M/C 2 and M/C 3 keys in the STEM SEL section as required.

CUT and SOLO Master Controls

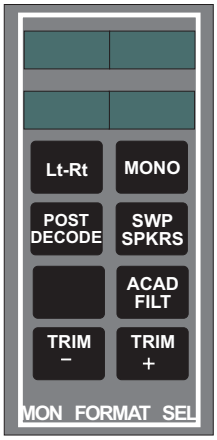
The CUT and SOLO master controls will follow the (Bus/Tape and Track Arming) Master selection on each stem. The CUT and SOLO controls can now be added to the PEC master groups. The CUT Master key will now action all the paths in the master group.

Stack Mode

This feature maps the master (paddle) PEC strip for each stem on to (Paddles) strips 1-6. In this mode, the Bus/Tape, Track Arming, SAFE, CUT and SOLO keys that are normally mapped to tracks 1-6 of a stem will be 'master' controls of Stem A-F. This mode is activated by pressing and holding the MASTER key on the PEC/Direst panel and MASTER RECORD PADDLE. The led in the MASTER key will indicate when this mode is active.

Surround Monitoring Formats

The Mon Format Sel section allows the operator to override the output to the surround monitoring speakers to check the mix in different formats. The section also has trim control for fine adjustment of the monitor level.



The section has two alpha displays.

The top alpha shows the current sound pressure level (SPL) which will be 82dB, 85dB, 88dB or Vari according to the selection on the Control Room section of the Master Automation and Monitoring Panel. The bottom alpha shows the trim set with the TRIM + and TRIM - keys.



To monitor a mono mix of the surround outputs

➤ Press the MONO key in the Mon Format Sel section.

The integral LED will illuminate red.

The output to all the speakers except Front Centre will be cut.

A true mono mix of the surround monitor output will be heard on the Front Centre speaker.

To trim the surround monitor outputs

➤ Press the TRIM + or TRIM - key.

Trim has a range of -20dB to +10dB.

The applied trim is shown in the bottom alpha on the Mon Format Sel section.

➤ If the TRIM + or TRIM - key is held down then the trim level will change continuously. For safety reasons, when this is done the trim stops at 0dB and the key must be pressed again to carry on increasing (or decreasing) the level.

To engage the Academy Filter

➤ Press the ACAD key.

The Academy Filter is a standard filter which cuts high and low frequencies for mono output.

To swap the front left/right outputs with the main monitor output (SEL 1)

➤ Press the SWAP SPKRS key.

The integral LED will illuminate red.

The LED(s) for the currently selected Stem(s) in the Stem Sel section will flash.

The output for front left and front right will be sent to SEL 1.

The output routed to SEL 1 will appear on the front left and front right speakers and the remaining surround speakers will be cut.

The SEL1 system path is often used as an output to near-field speakers. If near-field speakers are being used (to test mixes on domestic quality speakers) then the output format can be changed (e.g. using Lt-Rt or MONO) to test compatibility with non-surround domestic systems.

'Studio' Monitoring

A second SEL path has been activated to provide an additional stereo monitoring output. This activated the 'Studio LS' facility on the master section.

In LS mode (activated by LS SEL 1 key in the Tone/Talkback section), the FL and FR film outputs are also routed to SEL 1 (Control Room). In this mode, the Swap L/R, Phase Left / Right, Cut L / R, M/S and Mono keys in the control room section will affect the SEL1 output.

The source for SEL 2 (Studio) can be selected by pressing the SEL key in the Studio LS section which puts the lower matrix panel into Studio LS SEL mode. Alternatively, if Follow mode is selected by pressing the FOLL key, SEL2 will follow SEL1 (Control Room) selection. If TALK is held the Tone/Talkback path is temporarily routed to SEL 2.

LCRS Pre and Post Decode Monitoring

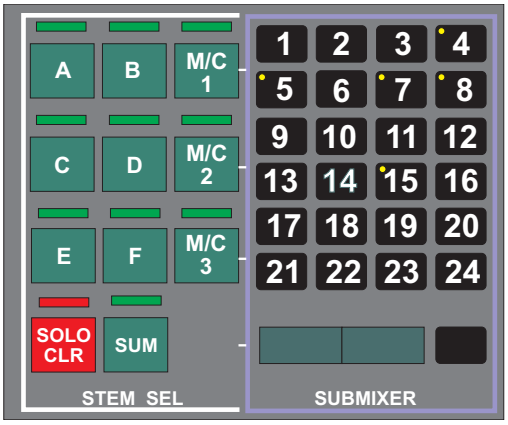
Both of these functions use inserts to switch the Film paths through external equipment for encoding and decoding.

To monitor the Left Total and Right Total output from the Dolby matrix encoder

➤ Press the Lt-Rt key.

The integral LED will illuminate orange.

The LED(s) for the currently selected Stem(s) in the Stem Sel section will flash.



The output to all the speakers except Front Left and Front Right will be cut.

This allows the operator to hear how an LCRS mix will sound on an ordinary left/right stereo system with the LCRS encoded in the stereo tracks.

✍ *The Lt-Rt and POST DECODE keys are latched with each other so selecting one will turn the other off if it was on.*

To monitor the decoded output from the Dolby matrix encoder

➤ Press the POST DECODE key.

The integral LED will illuminate orange.

The LED(s) for the currently selected Stem(s) in the Stem Sel section will flash.

The output to speakers other than Front Left, Front Centre, Front Right and Rear Surround Mono will be cut.

This allows the operator to hear the LCRS mix after it has been encoded into a stereo signal (Lt-Rt) and then decoded back to LCRS.

✍ *The Lt-Rt and POST DECODE keys are latched with each other so selecting one will turn the other off if it was on.*

Calibrated Monitor Level

This feature is intended for use with the VCA controlled 8-Way Remote Level Control Unit. When the system is installed, the 8-Way Remote Level Control Unit is calibrated to the sound pressure level so that the VCAs are set to the correct level for each preset.

To monitor at a pre-set sound pressure level

➤ Press the CAL ON/OFF key.



The integral LED will illuminate red.

The main level rotary control (red top) will be disabled.

➤ Press the CAL SET key.

Each time the key is pressed, the preset level will cycle round the values 82dB, 85dB and 88dB. The integral LED will be red for 82dB, orange for 85dB, or green for 88dB.

The selected SPL is displayed in the lower alpha on the MON FORMAT SEL section of the Surround Monitoring panel.

Surround Monitor Solo and Cut

The SOLO and CUT keys on the Surround Monitor panel only affect the output to the surround monitors (speakers).

To cut all speakers

➤ Press the CUT MSTR key.

The LED above the key will illuminate green.

To CUT an individual speaker

➤ Press the CUT key above the required speaker key.

The LED above the CUT key will illuminate green.

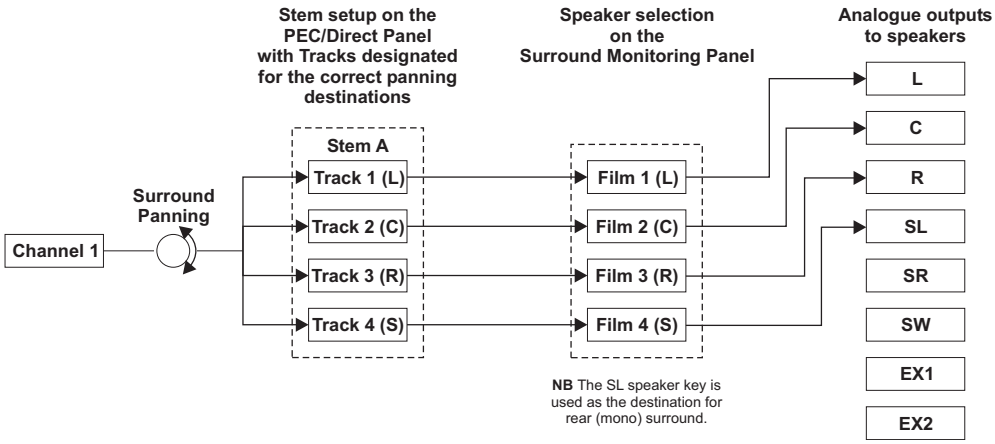
To SOLO an individual speaker

➤ Press the required SOLO key.

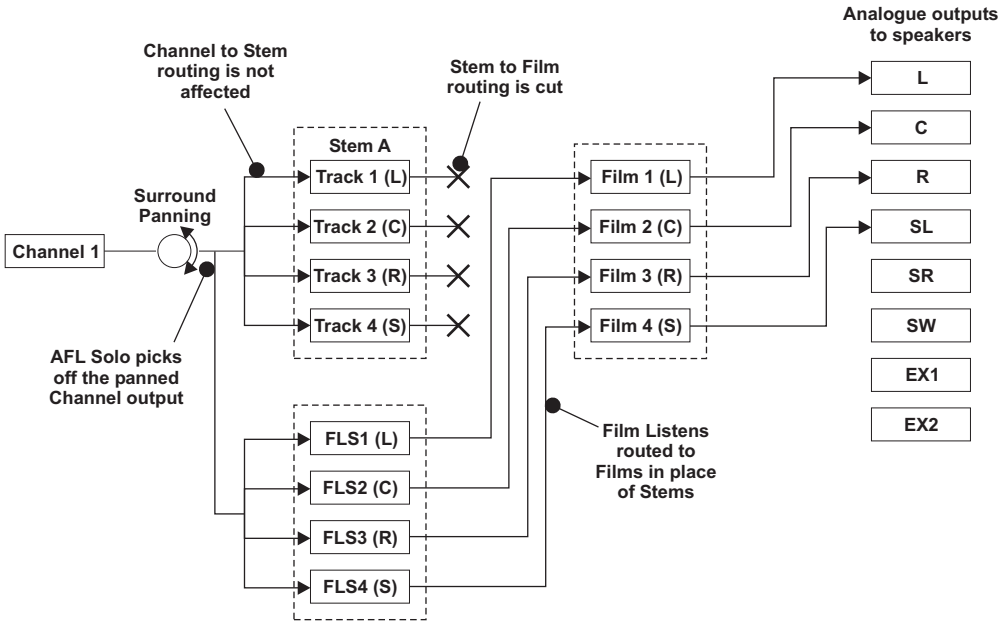
The LED above the key will illuminate red. The LEDs above the CUT keys for the other speakers will illuminate green.

✍ *Solo is additive so L and R could be soloed by pressing their SOLO keys in turn.*

SIMPLIFIED SURROUND MONITORING

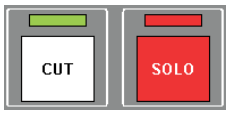


AFL SOLO



To use AFL solo

➤ Press the SOLO key on the required fader strip(s).



The panned signal from the selected path will now be routed to the Film Listen paths and then to the Film paths to output to the monitor speakers. The connection between the Stems and the Film paths is cut while AFL Solo is active.

The signal will appear on the speakers according to how it is panned. This should match the routing through any Stems, assuming that the Tracks in the Stems are routed to the correct speakers according to their pan designators.

All the surround monitoring capabilities in the Surround Monitoring panel can be used to test the Solo signal (e.g. Lt-Rt).

Any number of SOLO keys can be pressed, and the PATH Access keys can be used to bring other paths to the surface for solo.

The LED in the SOLO CLR key on the CONTROL ROOM section of the master quadstrip will flash orange.

To cancel solo

➤ Press the SOLO keys to turn them off.

or

➤ Press SOLO CLR on the CONTROL ROOM section of the master quadstrip.

The integral LED in the SOLO CLR key will stop flashing.



Monitoring Other Sources

Any signal path can be monitored un-panned on the centre mono or front left/right speakers. This is useful for checking that there is audio on a particular signal path, and so on.

This operates in a similar manner to the AFL Solo system. The monitored signal is routed to the Film Listens, and the Film Listens are routed to the Film paths for monitoring, replacing the current selection on the STEM SEL section of the Surround Monitoring Panel. All other routing remains intact, so that the Stems are unaffected and all panning remains the same (i.e. it is non-destructive in the same way as AFL Solo).

To select paths to monitor

➤ Press the LS SEL key on the Tone/Talkback section.



The integral LED will illuminate red and the output to the surround monitors will switch to the current selection. Number keys with green LEDs indicate valid sources.

➤ Press the lower matrix nudge keys to change the path type to be monitored.

➤ Press the number key for the path to be monitored.

The integral LED in the key will illuminate red flashing.

Each key press selects a source and toggles off the previous source.

The current selection is saved as part of the Desk Setup. The default is Main Output 1 for new Desk Setups.

To monitor the selected path

➤ Press the LS key.

The integral LED will illuminate red and the output to the surround monitors will switch to the current LS SEL selection.

If required, the LS SEL source can be changed.

Mono paths will be monitored (without panning) on the front centre speaker.

Stereo paths will be monitored (without pan/bal) on the front left and right speakers.

✍ *If Solo is used so that the AFL Solo system is activated, this will override the LS SEL monitor source. LS SEL monitoring will be restored when Solo is cancelled.*

To return the monitors to normal operation

➤ Press the LS key again.

The integral LED will cease to be illuminated.

Surround Panning

Surround panning is controlled using the panning Logicators when I/O & PAN is selected or by using the Joysticks.

The Joysticks provide an intuitive means of controlling the pan position, particularly where sound must be matched to objects moving about on film.

Panning with Logicators

To access the Panning controls

➤ Press the I/O & PAN key.

The integral LED will illuminate orange.

Logicators 5 to 8 are assigned to panning and the alpha descriptions are Rear, F-b, Div and Lcr respectively.

If appropriate Tracks (busses) in Stems have not been selected (i.e. the path is not routed through to the appropriate speakers), the alphas will display OUT.

✍ *All the Stems are taken into account for panning controls. For instance, if a path is routed to front speakers on one Stem and surround speakers on another Stem then all panning controls will be available.*

To adjust front pan/balance

➤ Rotate Logicator 8 to the required setting.

✍ *This is a pan control for mono signals and a balance control for stereo signals.*

To adjust divergence of a mono signal

➤ Rotate Logicator 7 to the required setting.

The Logicator displays an arc which spreads from the centre as divergence is increased.

✍ *This control is not available on stereo paths.*

To adjust width of a stereo wide signal

➤ Rotate Logicator 7 to the required setting.

The Logicator displays an arc which spreads from the centre as width is increased.

✍ *This control is not available on normal stereo or mono paths.*

To adjust front to back pan

➤ Rotate Logicator 6 to the required setting.

To adjust the rear surround pan/balance

➤ Rotate Logicator 5 to the required setting.

✍ *This control is only available when a surround format with both left and right rear surround speakers is in use.*

To switch a panning control in or out

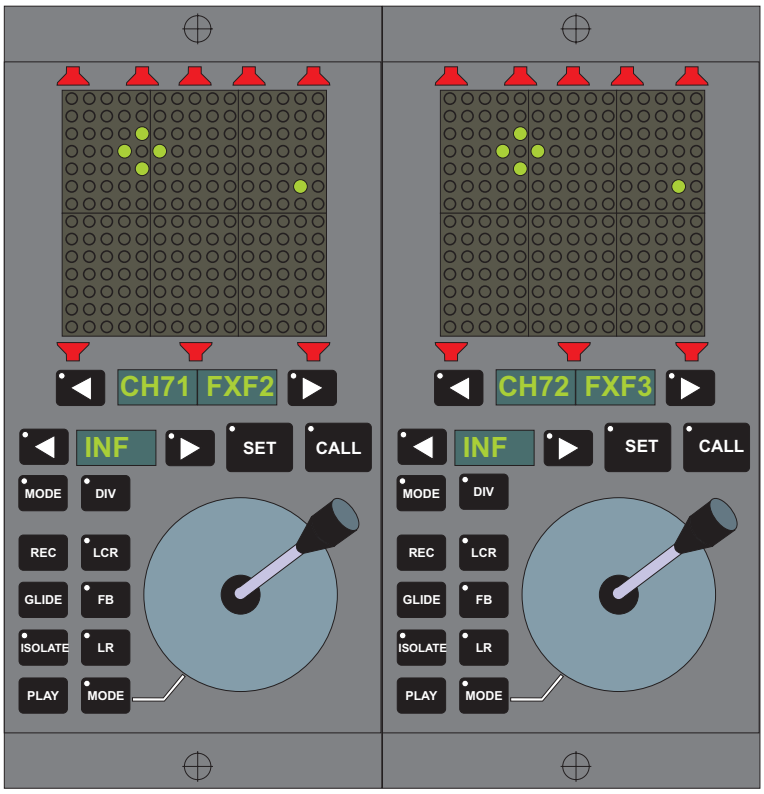
➤ Press and hold the ON/CLEAR key.

The alpha for controls which are on will display the current setting.

The alpha for controls which are off will display OUT.

➤ Touch the required Logicators to toggle the control in or out.

Panning with Joysticks



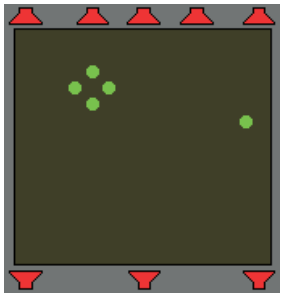
The twin Joystick module is used to pan up to two signals across surround speaker destinations.

Channels, Tracks and PreDub Masters can be assigned to a joystick. The regular panning controls on the channel strip are locked out. If I/O & PAN is selected for a path on which panning is controlled by a joystick then the alphas and Logicators will display changes as the joystick is moved.

Also, a path in a Link (of pan controls) can be assigned to a Joystick and this will lock out the pan controls on all the linked paths. Only one path from the Link can be assigned to a Joystick at any given time.

The joystick provides full automation for recording panning information. This makes it possible to pan as many paths as required with repeated passes.

PanPos Display



The LED matrix above each joystick is called the PanPos display.

The position of the joystick is indicated by a single dot. The notional panned position of the signal (i.e. where the signal seems to be when listening to it) is indicated by an open diamond of four dots.

When the joystick is in control of the panning, the dot and diamond join together to form a cross.

To select the path to be controlled by a joystick

➤ Press the nudge keys on either side of the alpha display below the PanPos and speaker display.



The alpha will cycle through the available paths and shows both the system and user names.

The speaker symbols will illuminate to show the speakers the path is routed to.

✍ *If a nudge key is held down then the paths names will scroll rapidly.*

or

➤ Press and hold the SET key.

➤ Select the required path from the Lower Routing Panel.

➤ Release the SET key.

In both cases, the alpha will flash the selected system path name and user path name.

To control the panning with a joystick

➤ Press the CALL key.

The integral LED will illuminate red.

The diamond on the PanPos display will jump to the dot to form a cross.

The path name will stop flashing.

➤ Move the joystick as required.

✍ *To prevent the sound jumping when the CALL key is pressed, first move the spot to the diamond.*

Calling multiple paths into the joystick

➤ Hold the SET key on the joystick panel and call in up to 8 paths using the layer keys or the matrix panel.

The panning controls of the called paths will be automatically linked. The link will be broken when another path or set of paths are called into the joystick.

To freeze a panning axis or divergence

➤ Press the DIV, LCR, FB and LR keys as required.



The integral LED will cease to be illuminated.

If LCR, FB or LR is frozen then the diamond will separate from the dot as it moves according to the remaining panning axes.

If a control is un-frozen then the diamond will jump to the dot.

✍ *If a control is switched OUT completely with the ON/CLEAR key then the axis will remain frozen at its default value regardless of whether the corresponding freeze key is on or off.*

✍ *If all panning controls are switched OUT completely with the ON/CLEAR key then there will be no diamond on the PanPos display.*

To adjust divergence

➤ Press the nudge keys on either side of the divergence alpha display.



Surround Metering



The Meter section of the Surround Monitoring Panel is used to select the signal displayed on the Stem meters which have been assigned to follow the Surround Monitoring Panel.

This depends on an appropriate Meter Design being displayed on the meter bridge.

To select the Stem to meter

➤ Press the STEM key.

The integral LED will illuminate red.

➤ Press the NEXT and PREV keys to cycle round Stems A to F.

The meters will show the current Stem letter at the top in the System Name display.

To meter the surround monitor outputs

➤ Press the MON key.

The integral LED will illuminate red.

The meter will display FILM at the top.

The PEC/Direct Panel

The PEC/Direct Panel has two main functions: Stem configuration and recorder control.

Stem Configuration

The PEC/Direct Panel is used to configure up to six Stems, labelled A through F. Each Stem can consist of up to eight Tracks (busses) which are then routed to the Film paths in conjunction with the Surround Monitoring panel.

Each Track in each Stem also has Solo and Cut control. This only affects the signals routed to the Film paths and is the same as using AFL Solo and Cut on the corresponding fader strips.

Recorder Control

The PEC/Direct Panel can be used to control the Record status of Mag and Multitrack tape machines.

Bus/Tape switching is provided to allow monitoring of the Track Send (Bus) or Track Return (Tape).

An array of tally LEDs indicates the record status with red letters which correspond to the Stems. Green LEDs next to each letter show the Bus/Tape switching.

A safe mechanism is provided which operates internally to disable Record on individual Tracks and prevent further Record enable commands being sent to the tape machines for the safe Tracks.

Fully configurable master control grouping can also be used for Record, Bus/Tape and Safe.

Using Recorder Control

Requirements

A relay control unit must be installed: either a Relay Control Unit (also known as a Fader Start Box) or a Recorder Interface Unit.

An I/O configuration must be loaded that associates the output ports on Track Sends with the correct relays. This can only be configured using I/O Patching (page 29:38).

multitrack and mag machines must be in play for REC enable to be possible.

Relay Control Unit

The Relay Control Unit can control either multitrack or mag machines.

For multitrack machines there are 48 record enable relays and tally inputs.

For mag machines there are 32 record enable relays and tally inputs.

The DFC Gemini Installation manual provided with the system will have details of the connections that are made to the Relay Control Unit.

Recorder Interface Unit

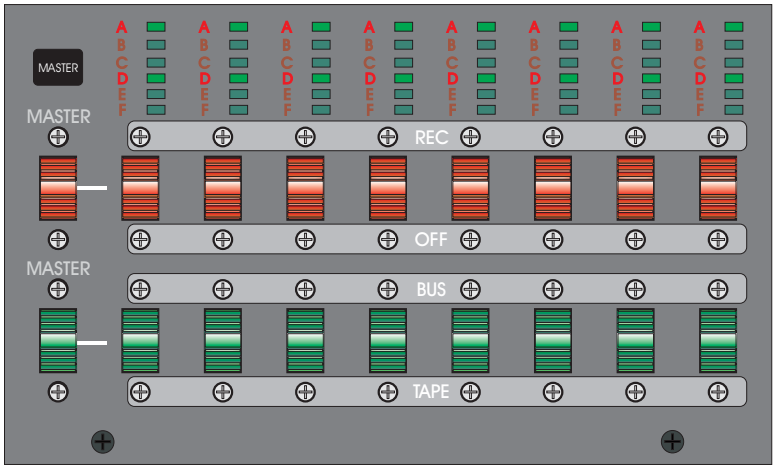
This is an updated version of the Relay Control Unit that provides relay connections to both mag and multitrack tape machines. The Recorder Interface Unit has 96 record enable relays: 48 for mag machines (dubbers) and 48 for multitrack machines. There are also 8 Master Control relays for multitrack machines. There are corresponding tally inputs for the record enable relays.

The Recorder Interface Unit User Guide has details of the connections that are made to the unit.

To put an individual Track (bus) into record

➤ Press the A-F key for the Stem with required Track.

➤ Push the REC/OFF paddle switch for the Track to REC.



The paddle will illuminate red and a Rec Enable will be sent to the tape machine. When the track on the tape machine goes into record, the tally line will cause the corresponding tally LED to illuminate red. The tally LEDs are the red letters showing which Tracks on which Stems are being recorded.

To take the track out of record

➤ Push the REC/OFF paddle switch to OFF.

To put a group of Tracks into record

➤ Push the MASTER record paddle switch to REC.

All the Tracks that are in the master control group (see Control Linking in this section) and that are not safe will send Rec Enables. The appropriate tally LEDs will illuminate to show which Tracks are being recorded.

Bus/Tape Switching

To use Bus/Tape

➤ Push the BUS/TAPE paddle switch to TAPE.

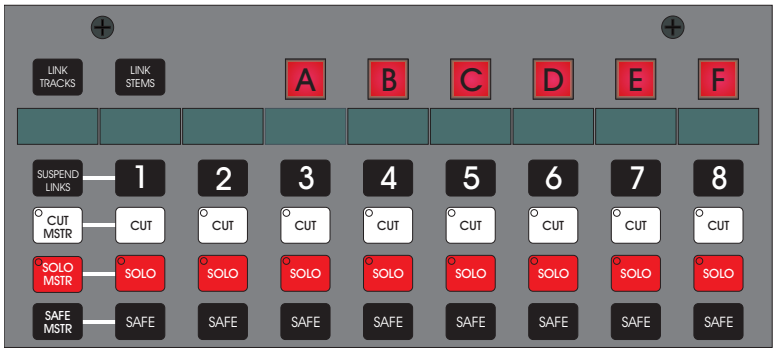
➤ Push the BUS/TAPE paddle switch to BUS.

The switch will illuminate green when BUS is selected, and the relevant green LED in the tally array will illuminate. The bus input to the Track will be selected for monitoring.

The MASTER Bus/Tape paddle switch can be used to switch all Tracks in the master control group (see Control Linking in this section).

Track Safe

The SAFE keys are used to prevent record enable from operating.



To make a Track safe

➤ Press the A-F key for the Stem with required Track.

➤ Press the SAFE key for the Track.

The LED in the SAFE key will illuminate green. If the Track was record enabled then this will be cancelled. The REC/OFF paddle for the Track will remain off. Bus/Tape switching is not affected.

To make a group of Tracks safe

➤ Press the SAFE MSTR key.

All Tracks in the master control group will be made safe (see Control Linking in this section).

Solo and Cut

This is the same as using SOLO or CUT on the corresponding fader strips.

To use Solo and Cut

➤ Toggle the SOLO keys on/off.

✍ *This uses the current AFL Solo system that is selected in Solo Settings & Relay Control Preferences. This will normally be the non-destructive surround AFL Solo, as described on page 8:17.*

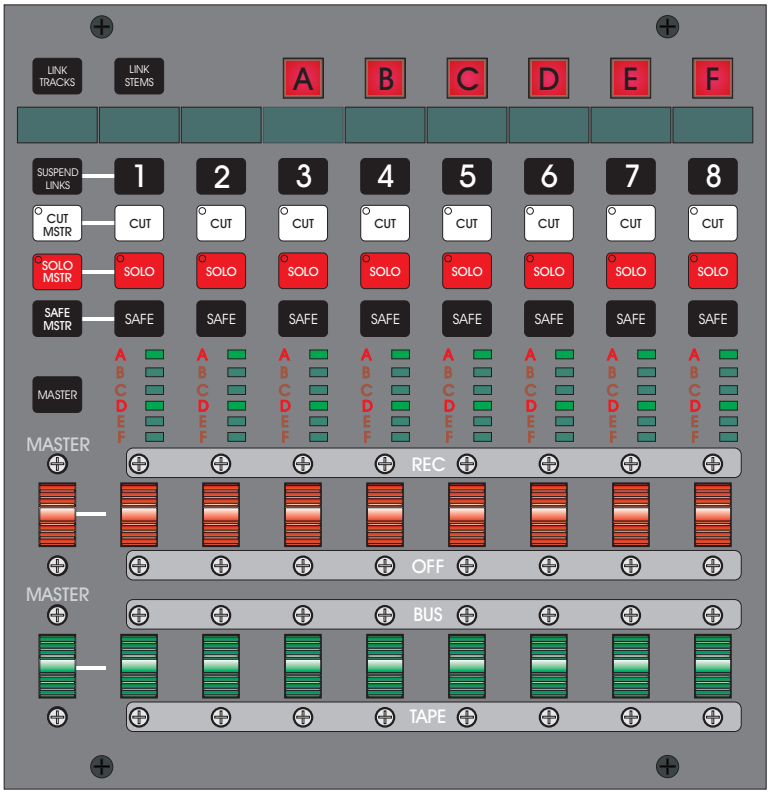
➤ Toggle the CUT keys on/off.

✍ *Signals cut by the SOLO and CUT keys on the /Direct panel are still sent to the Track outputs.*

To cancel Solo

➤ Press the SOLO CLR key on the Surround Monitoring Panel.

Control Linking



To use master linking

➤ Press the A-F key for the required stem.

➤ Press and hold the MASTER key next to the tally LEDs.

➤ Press the number keys for the required tracks.

The LEDs in the SAFE keys for the selected tracks will flash. The REC/OFF paddles for the selected tracks will illuminate red. The BUS/TAPE paddles for the selected tracks will illuminate green.

➤ Release the MASTER key.

When the SAFE MSTR key or the Master REC/OFF and BUS/TAPE paddles are operated for the selected stem then the selected tracks will be switched as a group.

To setup individual controls in a master group

Allows the master groups of REC/OFF and BUS/TAPE paddles and the SAFE keys to be customised by control type.

➤ Press the A-F key for the required stem.

➤ Press and hold the MASTER key.

➤ Press the required SAFE keys or toggle the required paddles.

➤ Release the MASTER key.

To force the track paddles to operate in stereo pairs

➤ Press the A-F key for the required stem.

➤ Press the LINK TRACKS key.

The integral LED will illuminate red.

The paddles will now operate in pairs (1 and 2, 3 and 4, 5 and 6, 7 and 8). When any paddle in a pair is operated then the other paddle in the pair will take the same setting.

If one paddle of a pair is in the master group for the stem and the master paddle is switched, then the paddle that is not in the group will be forced to follow the one that is.

To link a set of stems

➤ Press and hold the LINK STEMS key.

The integral LED will illuminate red.

➤ Press the A-F keys for the required stems.

The stem keys will illuminate.

➤ Release the LINK STEMS key.

The integral LED will remain illuminated until the set of stems is un-linked.

Operating the SAFE keys or the REC/OFF and BUS/TAPE paddles will switch the function for all stems in the linked set.

The tally LEDs will indicate this where applicable.

If master groups have been setup for any of the stems then operating the SAFE MSTR key or the Master paddles will switch all controls in master groups across all stems in the linked set. Tracks that have been set to operate in pairs (by LINK TRACKS) will also be affected in a similar manner.

To select the set of linked stems

➤ Press the LINK STEMS key or any of the A-F keys for stems in the linked set.

The A-F keys for the stems in the linked set will illuminate.

To un-link the stems

➤ Press and hold the LINK STEMS key.

➤ Press any A-F key.

All the A-F keys will cease to be illuminated in the integral LED in the LINK STEMS key will cease to be illuminated.

SIGNAL PROCESSING

Each channel strip has multi-function signal processing controls, consisting of eight Logicators and a set of Function Selection keys. The keys are used to select the function of the Logicators.

The availability of each function depends on whether or not the processing element has been assigned to the current path in Desk Edit, Path Edit or Turbo Allocation.

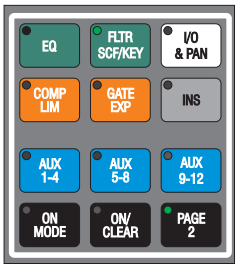
When a function is available, the integral LED in the key will illuminate green.

When a function is on (i.e. enabled), the integral LED in the key will illuminate red.

When a function is selected, the integral LED in the key will illuminate orange and the ON/CLEAR key will indicate the on/off status of the function.

✍ *Each of the descriptions for the processing elements assumes the element has been allocated to a path.*

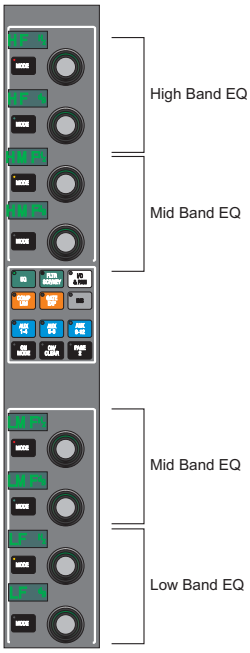
Equalisation



EQ is provided with up to eight bands. The bands of EQ available will depend on the processing assigned in Path Edit or Desk Edit.

The Logicators are assigned in pairs for each band. The first Logicator always controls Frequency on the first EQ page and Shape settings on the second EQ page. The function of the second Logicator on each page varies according to the Shape.

Logicator assignments for 4-band EQ



EQ Band Availability

The bands of EQ will be available as follows:

1 band assigned: High frequency (HF) band on Logicators 7 and 8.

2 bands assigned: HF band on Logicators 5 and 6, high mid frequency (HMF) band on Logicators 7 and 8.

3 bands assigned: HF band on Logicators 3 and 4, HMF band on Logicators 5 and 6, low mid frequency (LMF) band on Logicators 7 and 8.

4 bands assigned: HF band on Logicators 1 and 2, HMF and LMF bands on Logicators 3 to 6, low frequency (LF) band on Logicators 7 and 8.

5 to 8 bands assigned: The extra bands are assigned to the FILTER SCF/KEY key in the same way that bands 1 to 4 are assigned to the EQ key (e.g. with 5 bands, band 5 is an HF band on Logicators 7 and 8).

EQ Shape Settings

Shape	Filter Type	Page 1 Logicator	Page 2 Logicator
	High Pass	+/- 24dB Cut and Boost	Slope: FLAT, 6dB or 12dB
	Low Shelf	+/- 24dB Cut and Boost	As Page 1
	Bell	+/- 24dB Cut and Boost	Q
	High Shelf	+/- 24dB Cut and Boost	As Page 1
	Low Pass	+/- 24dB Cut and Boost	Slope: FLAT, 6dB or 12dB
	Notch	Q	As Page 1

Page 1 Logicator means the second Logicator for an EQ band when the EQ key has been pressed.

Page 2 Logicator means the second Logicator for an EQ band when the PAGE 2 key has been pressed for EQ.

Cut and Boost is continuously variable in 0.1dB steps over the +/-24dB range.

Q is continuously variable in increments of 0.1 from 0.1 to 10.

Default EQ Settings

The default settings for each band of EQ are as follows:

Band	Frequency	Filter Shape	Filter Name
HF	10kHz		High Shelf
HMF	1kHz		Bell
LMF	400Hz		Bell
LF	100Hz		Low Shelf

To enable EQ

➤ Press the EQ key.

✍ *The FILTER SCF/KEY key can also be selected if there are more than 4 bands of EQ.*

The LED will change from green to orange.

➤ Press the ON/CLEAR key.

The LED will change from green to red.

The LEDs on top of the Logicators for each EQ band will illuminate.

✍ *Changes may be made to the EQ settings before EQ is switched on.*

To set EQ frequency

➤ Press the EQ key for bands 1 to 4 or the FILTER SCF/KEY key for bands 5 to 8.

The LED in the EQ key will illuminate orange.

This will ensure that the first page of EQ controls is on the surface for the required path.

➤ Rotate the first Logicator of the band pair until the alpha shows the required setting.

The frequency range is 12Hz to 20kHz (values above 999Hz are displayed in kHz).

✍ *If Path Edit is active on the Encore screen, the shape of the EQ curve may be observed graphically be clicking on the EQ Curve button.*

To set EQ filter shape

➤ Press the EQ key for bands 1 to 4 or the FILTER SCF/KEY key for bands 5 to 8.

The integral LED will illuminate orange.

➤ Press the PAGE 2 key.

The integral LED will illuminate orange.

➤ Rotate the first Logicator in each band to set the filter shape.

The associated alpha will display the shape.

The function of the second Logicator will change according to the shape.

EQ Control Grouping

The ON/CLEAR key toggles the on/off status of EQ bands which are in the EQ group. Each band can be switched out of the group so that the ON/CLEAR key will be ignored.

To remove an EQ band from the group

➤ Press and hold the EQ key until the alphas display **EQ 1, EQ 2,** etc., and **In G**.

The indicator LEDs on the second Logicator for each EQ band will illuminate.

➤ While still holding the EQ key, touch the second Logicator in each band to be removed from the group.

The associated alpha displays will change to **OutG**.

If EQ is on (ON/CLEAR LED red) when this is done, then when ON/CLEAR is pressed again the bands which are out of the group will remain active (the LEDs on top of the Logicators will remain illuminated to confirm this).

This allows the effect of switching one or more bands of EQ on and off to be heard while the remaining EQ is still active.

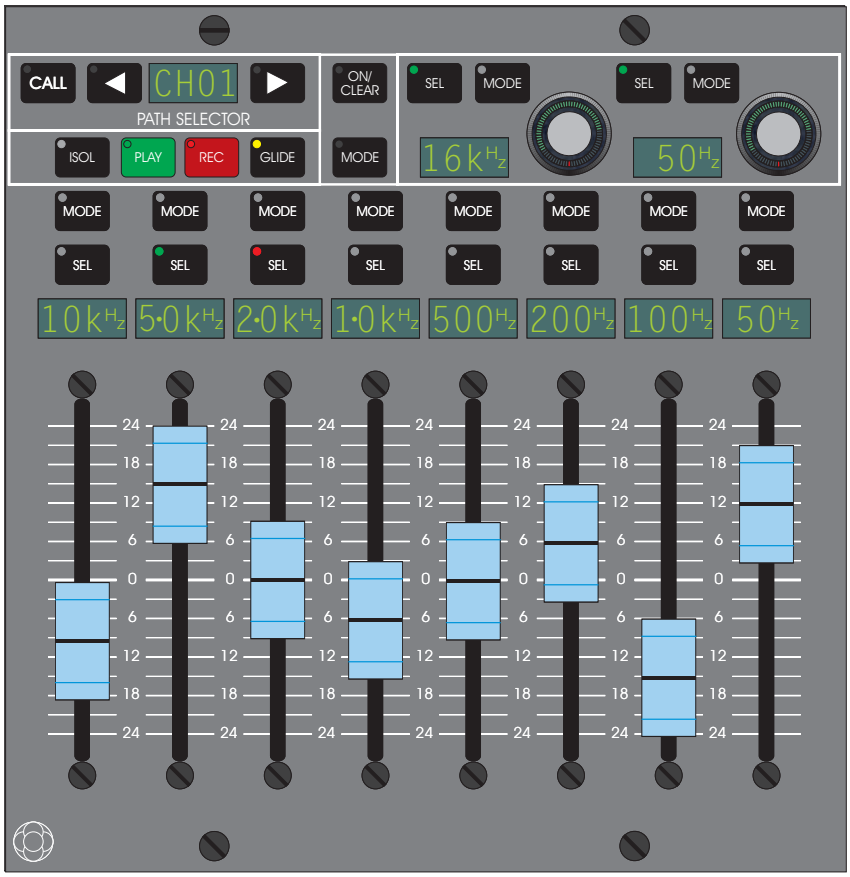
The same thing can also be done in reverse (i.e. if EQ is off, bands taken out of the group will remain off).

✍ *When bands are put back in the group, they do not automatically toggle to match the state of the other bands.*

✍ *Control grouping can be turned off in Solo Settings & Relay Control Preferences.*

Graphic Equaliser Option

The Graphic EQ Panel is an optional hardware upgrade which provides dedicated control of EQ on one Channel, Track or Group.



There can be up to two Graphic EQ Panels per console partition which can be assigned to any Channel, Track or Group in the same partition. They can not be assigned to the same path at the same time.

To switch EQ on and off

➤ Press the ON/CLEAR key.

All bands of EQ will be switched on or off (see EQ Control Grouping note at the end of this section).

Desk Setups and the Graphic EQ Panel

New Desk Setups

When a new Desk Setup is Loaded for the first time, the Graphic EQ Panels in each partition will be assigned to the first available Groups, Channels or Tracks (in that order) in the same partition. A path does not need any EQ processing to be assigned to the Graphic EQ Panel.

Existing Desk Setups

When an existing Desk Setup is Loaded for the first time after installing one or more Graphic EQ Panels then the panels in each partition will be assigned to the first available Groups, Channels or Tracks (in that order) in the same partition. A path does not need any EQ processing to be assigned to the Graphic EQ Panel.

Saving and Loading Desk Setups

The assignment of the Graphic EQ Panels is saved as part of the Desk Setup and will be restored when the Desk Setup is Loaded again.

If the partitions are changed before a Desk Setup is Loaded again then the Graphic EQ Panels may be reassigned to default paths if the path they were assigned to is no longer in the same partition. This also happens if the partitions are changed while a particular Desk Setup is loaded.

Assigning Paths to the Graphic EQ Panel

Loading a Desk Setup automatically assigns paths to the Graphic EQ Panels.

See Desk Setups and the Graphic EQ Panel above.

The path assignment can then be changed as required by the user.

To assign a path with the nudge keys

➤ Press the left or right arrow key on either side of the path name display.



The path names will cycle through the available Channels, Tracks and Groups as the keys are pressed.

➤ An arrow key can be held to cycle continuously.

To assign a path with the PATH Access keys

➤ Press and hold the CALL key.

➤ Press a PATH Access key for a Channel, Track or Group in the same partition.

➤ Release the CALL key.

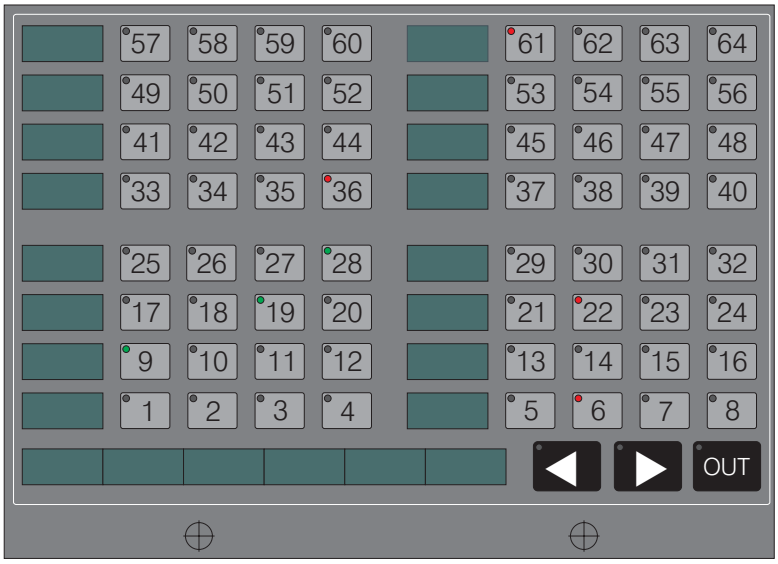
To assign a path with the Lower Matrix Panel

➤ Press and hold the CALL key.

The long alpha in the Lower Matrix Panel will display "Select Eq Path -" followed by the path type of the path currently assigned to the Graphic EQ Panel.

The LED in the number key for the currently assigned path will flash red. LEDs for available paths will flash green. LEDs for unavailable paths will flash orange (e.g. paths in other partitions).

➤ If required, press the nudge keys on the Lower Matrix Panel to change the path type and/or path numbers.



➤ Press the number key (with a green flashing LED) corresponding to the required path.

➤ Release the CALL key.

In all three cases

The Graphic EQ Panel is immediately reassigned to the selected path. Band 1 is assigned to the left-most fader, followed by Band 2 and so on.

The level faders will move to indicate the cut and boost in each EQ band and the alpha displays above the faders will indicate the precise level settings. The fader will be unassigned and the fader and alpha will indicate zero and blank respectively if a band is a Notch filter or is unused.

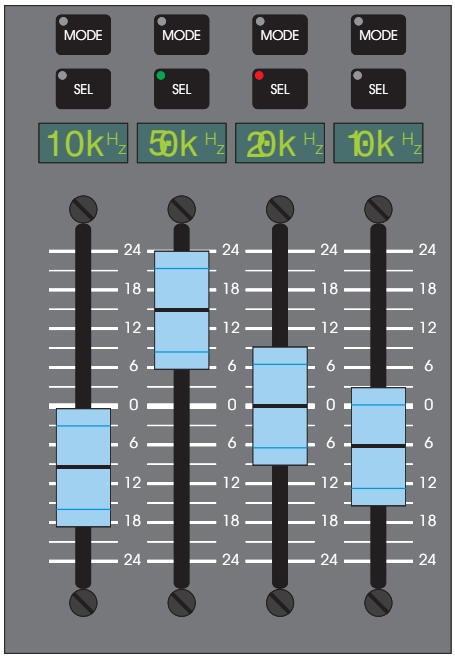
The LEDs in the fader SEL keys will illuminate orange for Bands which have parameters assigned to the Logicators.

✍ *The Logicator assignment depends on the assignment from the previously selected path. For instance: the previous path had 4 bands of EQ and the new one has 3 bands - the left Logicator was assigned to Band 1 Q, and the right Logicator was assigned to Band 4 Freq; the new path will still have the left Logicator assigned to Band 1 Q, but the right Logicator will now be assigned to Band 1 Freq because there is no Band 4.*

Assigning Parameters to the Logicators

To assign both Logicators to one band of EQ

➤ Press the fader SEL key for the required band.

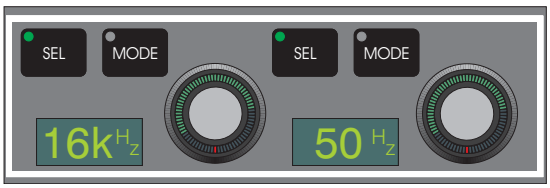


The integral LED will illuminate orange.

The left hand Logicator will be assigned to Frequency. The right hand Logicator will be assigned to Q, or Filter Shape if there is no Q parameter.

To assign one Logicator to a band of EQ

➤ Press and hold the SEL key associated with the Logicator.



➤ Press the fader SEL key for the required band of EQ.

The LED in the fader SEL key will illuminate orange and the Logicator will be assigned to Frequency.

➤ Release the Logicator SEL key.

To interrogate Logicator assignment

➤ Press and hold the SEL key associated with the Logicator.

The LED in the fader SEL key of the assigned band will flash orange.

➤ Release the Logicator SEL key.

➤ This is only necessary when the Logicators are assigned to different bands of EQ (.e. two fader SEL keys have orange LEDs).

To change the parameter on a Logicator

➤ Press and hold the SEL key associated with the Logicator.

The LED in the fader SEL key of the assigned band will flash orange.

➤ Press the fader SEL key with the orange flashing LED.

Each time the fader SEL key is pressed the parameter will change and the parameter name will be indicated in the alpha associated with the Logicator.

➤ Release the Logicator SEL key.

✍ *If the Filter Type is changed then the Logicator assignments will also change if the current parameter does not exist for the selected Filter Type. The fader will also be unassigned or assigned if the Filter Type is changed to or from Notch, respectively.*

Clearing the Graphic EQ Panel to Defaults

The ON/CLEAR key can be used to reset individual parameters or all EQ bands to default values.

To reset a parameter to the default value

➤ Press and hold the MODE key associated with a Logicator, a level fader or the ON/CLEAR key.

➤ Press the ON/CLEAR key.

➤ Release the MODE key.

✍ *When the MODE key for ON/CLEAR is selected then all bands of EQ will be reset to the default on/off status.*

To reset all parameter in all EQ bands to default values

➤ Press and hold the CALL key.

➤ Press the ON/CLEAR key.

➤ Release the CALL key.

✍ *The default values depend on the currently loaded User Defaults file. See Defaults Manager in the Tools Menu chapter.*

Automation of the Graphic EQ Panel

The panel has keys that can be used to set the Automation Mode of an individual EQ parameter, all EQ parameters in scope or all EQ parameters (overriding scope). This only affects the Automation Mode of EQ parameters for the path currently assigned to the Graphic EQ Panel. The Automation Control keys default to displaying the current Automation Mode of ON/CLEAR (i.e. EQ on/off automation).

To set the Automation Mode of an individual control

➤ Press and hold the MODE key for the required parameter.

The Automation Control keys will show the current status.



➤ Press the Automation Control keys as required.

➤ Release the MODE key.

To change the Automation Mode of all EQ parameters in scope

➤ Press the Automation Control keys as required.

✍ *Although the Automation Control keys show the on/off status by default, the MODE key for ON/CLEAR must be pressed to set the on/off Automation Mode.*

To override scope and change the Automation of all EQ parameters

➤ Press and hold the CALL key.

➤ Press the Automation Control keys as required.

✍ *See the Automation chapter for more information on setting specific Automation Modes.*

Notes:

Copy and Link

The MODE keys on the Graphic EQ Panel are not used by the Copy Function or Linking. Both of these operations must be done using the channel strip controls.

EQ Control Grouping

The Graphic EQ Panel is not used for EQ Control Grouping. The ON/CLEAR key switches all EQ bands to follow Band 1 on or off. EQ Control Grouping is not affected and the bands in the EQ Control Group can be toggled separately with the ON/CLEAR key on the channel strip.

Changing Path Processing

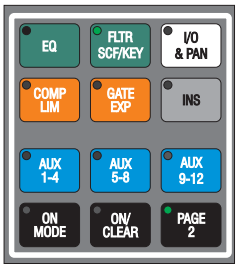
When Path Edit is used to alter the EQ assigned to a path then the Graphic EQ Panel is updated immediately with the changes if it affects the path on the panel.

When Turbo Allocation is used, all the Graphic EQ Panels are disabled and display "Disabled - Setup Mode Active" on the alphas above the faders. On exit from Turbo Allocation, the panels are updated if there are changes to EQ on the assigned paths.

Channel Strip and Graphic EQ Panel Controls

Controls on the Graphic EQ Panel can not be used in combination with controls on the channel strip for the assigned path (e.g. holding down MODE on a channel strip and selecting an automation mode on the Graphic EQ Panel will be ignored). However, changes made to controls on the channel strip will be shown on the Graphic EQ Panel and vice-versa.

Filter



One or two filters may be in the path, depending on the processing assigned in Path Edit or Desk Edit.

If two filters are assigned, they will be at the same position in the path. Each filter can be high or low pass.

When filters are assigned to a path then bands 5 to 8 of EQ are no longer available to that path.

If a single filter is in the path, it will default to a Low Frequency filter on Logicators 5 to 7 with a FLAT slope at 100Hz.

If two filters are in the path, the Low Frequency filter will appear on Logicators 1 to 3. Logicators 5 to 7 will control the High Frequency filter with a FLAT slope at 10kHz by default.

To use Filters

To enable the Filters

➤ Press the FILTER SCF/KEY key.

The LED will change from green to orange.

➤ Press the ON/CLEAR key.

The LED will change from green to red.

The LEDs on top of the Logicators for each EQ band will illuminate.

✍ *Changes may be made to Filter settings before the Filters are switched on.*

To change the Filter Shape

➤ Rotate the first Logicator for each Filter to the left and right to toggle between high or low pass.

The associated alpha will display the selected shape.

To change the Filter slope

➤ Rotate the second Logicator.

The associated alpha will display the selected value.

The available values are FLAT (0dB/octave), 6dB/octave and 12dB/octave.

To change the frequency

➤ Rotate the third Logicator.

The associated alpha will display the selected value.

The range is 12Hz to 20kHz (values above 999Hz are displayed in kHz).

Filter Control Grouping

The ON/CLEAR key toggles the on/off status of the Filters which are in the Filter group. Each Filter may be switched out of the group so that the ON/CLEAR key will be ignored.

To remove a Filter from the group

Press and hold the FILTER SCF/KEY key until the first alphas display **Flt1** and **Flt2** and the second alphas display **In G**.

The indicator LEDs on the second Logicator for each Filter will illuminate.

➤ While still holding the FILTER SCF/KEY key, touch the second Logicator of the Filter to be removed from the group.

The associated alpha display will change to **Out G**.

If the Filters are (ON/CLEAR LED red) when this is done, then when ON/CLEAR is pressed again the Filter which is out of the group will remain active (the LEDs on top of the Logicators will remain illuminated to confirm this).

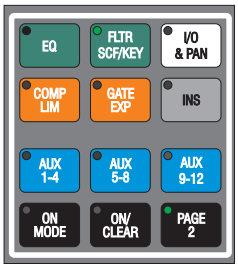
This allows the effect of switching one of the Filters on and off to be heard while the other Filter is still active.

The same thing can also be done in reverse (i.e. if the Filters are off, the Filter taken out of the group will remain off).

✍ *When a Filter is put back in the group, it does not automatically toggle to match the state of the other Filter.*

✍ *Control grouping can be turned off in Solo Settings & Relay Control Preferences.*

Panning



The panning controls which are available will depend on the path type (mono, stereo, stereo wide) and which surround destinations the path is routed to (front speakers, surround speakers, etc.).

Logicators 5 to 8 are used for panning across surround sound and stereo destinations.

The twin joysticks are also used as an intuitive means of controlling the pan position of a soundfield

Panning with Logicators

To access the Panning controls

➤ Press the I/O & PAN key.

The integral LED will illuminate orange.

Logicators 5 to 8 are assigned to panning and the alpha descriptions are Rear, F-b, Div and Lcr respectively.

If appropriate Tracks in Stems have not been selected (i.e. the path is not routed through to the appropriate speakers), the alphas will display OUT.

✍ *All the Stems are taken into account for panning controls. For instance, if a path is routed to front speakers on one Stem and surround speakers on another Stem then all panning controls will be available.*

To adjust front pan/balance

➤ Rotate Logicator 8 to the required setting.

✍ *This is a pan control for mono signals and a balance control for stereo signals.*

To adjust divergence of a mono signal

➤ Rotate Logicator 7 to the required setting.

The Logicator displays an arc which spreads from the centre as divergence is increased.

✍ *This control is not available on stereo paths.*

To adjust front to back pan

➤ Rotate Logicator 6 to the required setting.

To adjust the rear surround pan/balance

➤ Rotate Logicator 5 to the required setting.

✍ *This control is only available when a surround format with both left and right rear surround speakers is in use.*

To switch a panning control in or out

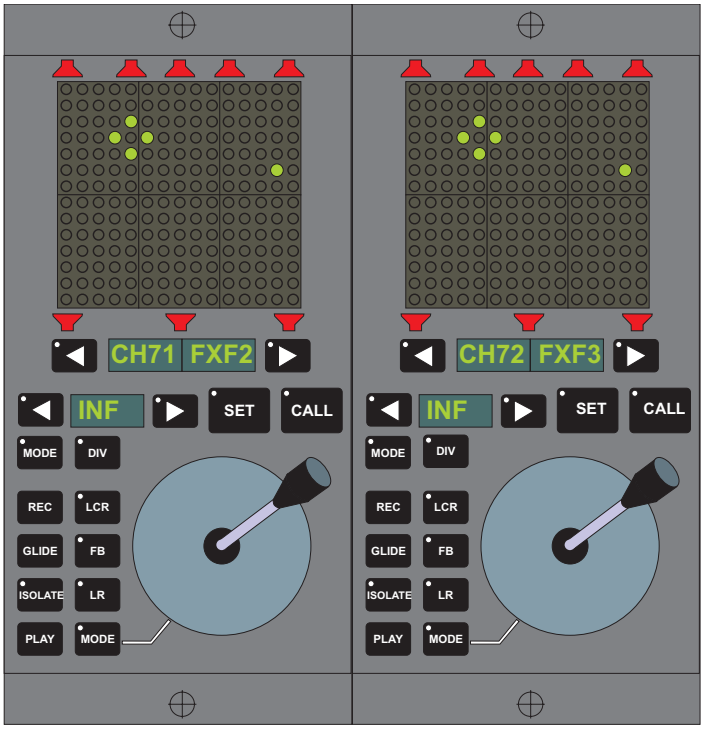
➤ Press and hold the ON/CLEAR key.

The alpha for controls which are on will display the current setting.

The alpha for controls which are off will display OUT.

➤ Touch the required Logicators to toggle the control in or out.

Panning with Joysticks



The twin Joystick module is used to pan up to two signals across surround destinations.

Channels, Tracks and PreDub Masters can be assigned to a joystick. The regular panning controls on the channel strip are locked out. If I/O & PAN is selected for a path on which panning is controlled by a joystick then the alphas and Logicators will display changes as the joystick is moved.

Also, a path in a Link (of pan controls) can be assigned to a Joystick and this will lock out the pan controls on all the linked paths. Only one path from the Link can be assigned to a Joystick at any given time.

The joystick provides full automation for recording panning information. This makes it possible to pan as many paths as required with repeated passes.

PanPos Display

The LED matrix above each joystick is called the PanPos display.

The position of the joystick is indicated by a single dot. The notional panned position of the signal (i.e. where the signal seems to be when listening to it) is indicated by an open diamond of four dots.

When the joystick is in control of the panning, the dot and diamond join together to form a cross.

To select the path to be controlled by a joystick

➤ Press the nudge keys on either side of the alpha display below the PanPos and speaker display.

The alpha will cycle through the available paths and shows both the system and user names.

The speaker symbols will illuminate to show the speakers the path is routed to.

✍ *If a nudge key is held down then the paths names will scroll rapidly.*

or

➤ Press and hold the SET key.

➤ Select the required path from the Lower Routing Panel.

➤ Release the SET key.

In both cases, the alpha will flash the selected system path name and user path name.

To control the panning with a joystick

➤ Press the CALL key.

The integral LED will illuminate red.

The diamond on the PanPos display will jump to the dot to form a cross.

The path name will stop flashing.

➤ Move the joystick as required.

✍ *To prevent the sound jumping when the CALL key is pressed, first move the spot to the diamond.*

✍ *If panning controls are in a record ready mode (e.g. Lock Record) then automation data will start to be written when the CALL key is pressed (this is the same as touching the relevant Logicators).*

To freeze a panning axis or divergence

➤ Press the DIV, LCR, FB and LR keys as required.

The integral LED will cease to be illuminated.

If LCR, FB or LR is frozen then the diamond will separate from the dot as it moves according to the remaining panning axes.

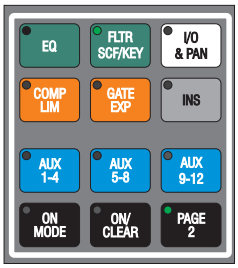
If a control is un-frozen then the diamond will jump to the dot.

✍ *If a control is switched OUT completely with the ON/CLEAR key then the axis will remain frozen at its default value regardless of whether the corresponding freeze key is on or off.*

To adjust divergence

➤ Press the nudge keys on either side of the divergence alpha display.

Inserts



Inserts are used to provide send/returns to external processing devices such as special effects units, reverb boxes, special delay units, etc.

A path can have up to two inserts for which the input and output ports must be selected.

To access controls for the first insert

➤ Press the INS key.

The integral LED will illuminate orange.

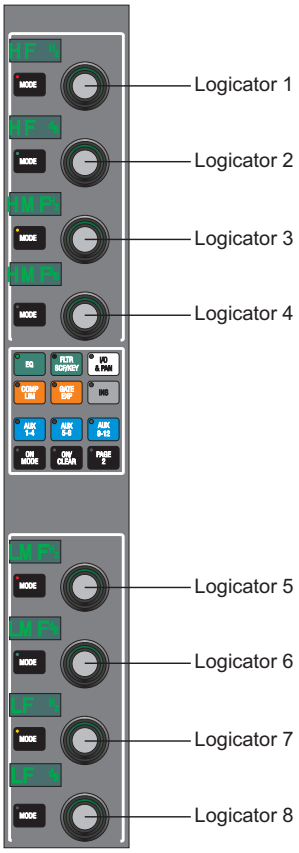
If a second insert is present then the LED in the PAGE 2 key will illuminate green.

To access the controls for the second insert

➤ Press the PAGE 2 key.

The integral LED will illuminate orange.

The controls for both inserts are identical and the Logicators are assigned as follows (the alpha descriptions are shown in brackets):



Logicator 1	Insert send port type
Logicator 2	Insert send port number
Logicator 3	Send level trim (Levl)
Logicator 5	Insert return port type
Logicator 6	Insert return port number
Logicator 7	Insert return level trim (Levl)
Logicator 8	Insert on/off toggle (Ins1 or Ins2)

To enable the insert

➤ Press the ON/CLEAR key.

or

➤ Rotate Logicator 8 clockwise.

Alpha 8 will display **ON**.

The LED in the ON/CLEAR key will illuminate red.

The insert is now switched into the signal path.

Note that the ports for the insert send and return must have been selected and switched on, otherwise the insert will do nothing. However, the ports for the insert send and return are not patched until the insert is enabled. If the output port is already in use elsewhere when the insert is enabled then alphas 1 to 4 will display **OP USED BY** *path* and the insert will not be enabled. The *path* indicated must be de-routed before the port can be used by the insert.

Insert Send Port Select

Logicators 1 and 2 are used to select the output port for the insert send.

To select the rack/port type

➤ Rotate Logicator 1.

The alpha display will cycle through the available racks/port types (e.g. 1LIN is rack 1, line level output ports).

✍ *The rack numbers correspond to the MADI port they are connected to on the SPS rack. If the MADI port is not connected to a rack the display will show MAD (e.g. if MADI 4 is not connected, the alpha will show 4MAD).*

To select the port number

➤ Rotate Logicator 2.

The alpha display will cycle continuously through the output ports (i.e. when the Logicator is rotated clockwise past the last available port then the first port will be displayed again).

If the insert is allocated to a stereo path then the ports will be displayed in pairs (e.g. 4AB).

If the output port is already in use elsewhere and an attempt is made to enable the insert then alphas 1 to 4 will display **OP USED BY** *path*. The *path* indicated must be de-routed before the port can be used by the insert.

✍ *The insert ports do not have default settings.*

Insert Send Level Trim

The signal level sent to the output port can be trimmed using Logicator 3.

To change the insert send level

➤ Rotate Logicator 3.

The range is +/-24dB with a default of 0dB.

Insert Return Port Select

Logicators 5 and 6 are used to select the input port for the insert return.

To select the rack/port type

➤ Rotate Logicator 5.

The alpha display will cycle through the available racks/port types (e.g. 1lin is rack 1, line level output ports).

✍ *The rack numbers correspond to the MADI port they are connected to on the SPS rack. If the MADI port is not connected to a rack the display will show MAD (e.g. if MADI 4 is not connected, the alpha will show 4mad).*

To select the port number

➤ Rotate Logicator 2.

The alpha display will cycle continuously through the output ports (i.e. when the Logicator is rotated clockwise past the last available port then the first port will be displayed again).

If the insert is allocated to a stereo path then the ports will be displayed in pairs (e.g. 4AB).

✍ *The insert ports do not have default settings.*

Insert Return Level Trim

The signal level returned from the input port can be trimmed using Logicator 7.

To change the insert return level

➤ Rotate Logicator 7.

The range is +/-24dB with a default of 0dB.

Sidechain Filter and Key Input

The sidechain provides control over the dynamics processing in the path based on the pre-dynamics signal in the path or the pre or post fader signal from another path.

The sidechain output acts as a trigger to determine when the dynamics in the path become active.

✍ *A path may not have a sidechain if there are 5 or more bands of EQ assigned to the path.*

Sidechain Filter

Also referred to as Dynamic EQ or Sidechain EQ.

The Sidechain Filter is assigned to Logicators 1 to 4.

The shape defaults to a Bell filter with 0dB of cut/boost, Q of 0.7 and a frequency of 400Hz.

Listen

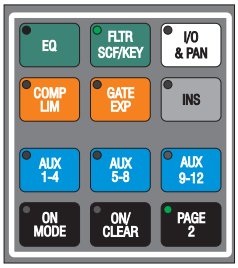
Logicator 5 controls the listening mode for the whole sidechain.

Key Input

The Key Input controls are assigned to Logicators 6 to 8.

The sidechain input defaults to the pre-dynamics signal in the path.

Using the Sidechain Filter and Key Input



To access the Sidechain Filter and Key Input controls

➤ Press the FILTER SCF/KEY key.

The integral LED will illuminate orange.

If the Sidechain is in the path, the PAGE 2 key LED will illuminate green.

➤ Press the PAGE 2 key.

The integral LED will illuminate orange.

The Sidechain Filter is assigned to Logicators 1 to 4 and the Key Input is assigned to Logicators 6 to 8. Logicator 5 is used by both the Filter and Key Input to allow monitoring of the sidechain.

To use the Sidechain Filter (Dynamic EQ)

To change the filter shape

➤ Rotate Logicator 1 to the left and right.

The shapes available are:

	Low Shelf
	Bell
	High Shelf

To change the level

➤ Rotate Logicator 2.

The selected level will be displayed in alpha 2. The range is +/-24db of cut and boost.

To change Q

➤ Rotate Logicator 3.

The selected value will be displayed in alpha 3. The range is 0.1 to 10.

To change the frequency

➤ Rotate Logicator 4.

The selected frequency will be displayed in alpha 4. The range is 12Hz to 20kHz.

To listen to the sidechain

➤ Rotate Logicator 5 clockwise

Alpha 5 will display **LSTN**.

The sidechain output will be inserted in the path before any post-dynamics processing.

✍ *If this is done in conjunction with a solo on the path, the operator will be able to hear the signal from the sidechain. If the Sidechain Filter is being used then the operator can tune the filter to the specific part of the key input which is required to trigger the dynamics in the path.*

To stop listening to the sidechain

➤ Rotate Logicator 5 anti-clockwise.

Alpha 5 will display **NORM**.

The path output will return to normal.

To select the Key Input

The key input is selectable between the pre-dynamics signal of the path and a pre or post fader key source from another path.

To select the path input

➤ Rotate Logicator 6 anti-clockwise.

Alpha 6 will display NORM and the signal will be picked off immediately before the dynamics in the path.

To select a key source from another path

➤ Rotate Logicator 6 clockwise.

Alpha 6 will display KEY.

To select the path for the key input

➤ Press and hold the PAGE 2 key.

Alpha 7 will display Num or Type.

➤ Touch Logicator 7 so that alpha 7 displays Type.

✍ *Each time the Logicator is touched the alpha display will toggle between Num and Type.*

➤ Release the PAGE 2 key.

➤ Rotate Logicator 7 to select the desired path type (CHAN, TRK, GRP, etc.).

➤ Press and hold the PAGE 2 key.

➤ Touch Logicator 7.

Alpha 7 will display Num.

✍ *Release the PAGE 2 key.*

✍ *Rotate Logicator 7 to select the desired path number of the selected type.*

To select the pre or post fader signal from the key input path

➤ Rotate Logicator 8 to the left and right.

Alpha 8 will toggle between PRE (default) and POST.

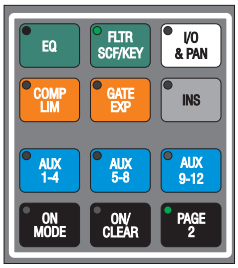
✍ *The key input source path and pre or post fader tap point can be selected before the key input is switched to KEY.*

To enable the sidechain

➤ Press the ON/CLEAR key.

The integral LED will illuminate red.

Compressor/Limiter



Up to two compressor/limiters can be assigned to a path.

If a is assigned in the path then no compressor/limiters can be assigned.

To access the controls for the first compressor/limiter.

➤ Press the COMP/LIM key.

The integral LED will illuminate orange.

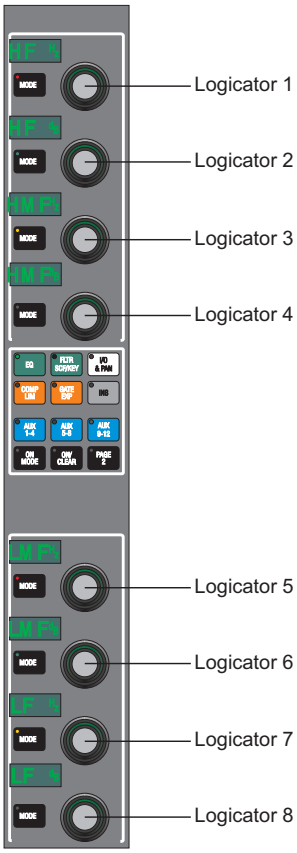
If a second compressor/limiter is present then the LED in the PAGE 2 key will illuminate.

To access the controls for the second compressor/limiter

➤ Press the PAGE 2 key.

The integral LED will illuminate orange.

The controls for both compressor/limiters are identical and the Logicators are assigned as follows (the alpha descriptions are shown in brackets):



Logicator 1	Threshold level (Thrs)
Logicator 2	Compression ratio (Rtio)
Logicator 3	Attack time (Atk)
Logicator 4	Release time (Rel)
Logicator 5	Knee (Knee)
Logicator 6	Manual or automatic gain make-up selection (MkUp)
Logicator 7	Manual gain make-up setting (MkGn)

Threshold

This is the dB level above which gain reduction of the signal will occur. This is expressed in decibels relative to normal program line-up level and has a range of –60dB to +30dB with a default of +8dB.

The Logicator shows an arc with the fixed point at the maximum position (+30dB) increasing in size anti-clockwise as the threshold is lowered. This provides a visual display of the size of the region under compression (or being limited).

To change the threshold level

➤ Rotate Logicator 1 to the desired setting.

Compression Ratio

This is the level of gain reduction applied to the signal above the threshold point (i.e. the ratio between changes in level (in dB) of the input to the compressor/limiter and its output). This has a range of 1:1 to 99:1.

The default is 1:1 (i.e. no compression) and can be changed in steps of 0.1 up to 9.9:1. From 10:1 to 99:1 the ratio is changed in steps of 1.

To increase the ratio

➤ Rotate Logicator 2 clockwise.

The logicator will show a dot to indicate the setting.

Attack Time

The attack time is speed at which the compressor/limiter responds to a signal once it has entered the compression region.

The attack and release filter section (peak detection circuit) is one bilinear filter fed by a dB value of audio level minus compressor/limiter curve level for that input. If audio is below the threshold, 0dB is passed in.

The attack filter is used when the input level is larger than the output of the peak detection circuit (switching to release when it drops below). The attack time has a range from 0.7μs to 50ms with a default of 1ms.

To increase the attack time

➤ Rotate Logicator 3 clockwise.

The Logicator will illuminate in an increasing arc.

Release Time

This is the time taken for the compressor/limiter to switch off when the signal level falls below the threshold.

The range is 0 (instant release) to 5sec. The default is 0.10s and is changed in steps of 0.01s.

To increase the release time

➤ Rotate Logicator 4 clockwise.

The Logicator will illuminate in an increasing arc.

Soft Knee

This is the number of dBs below the threshold at which compression/limiting is gradually introduced (increasing smoothly to full compression/limiting above the Threshold point).

The range is 0dB to 60dB with a default of 1dB.

To increase the knee size

➤ Rotate Logicator 5 clockwise.

The Logicator shows an arc increasing in both directions from the centre as the knee size is increased.

Gain Make-Up Method

Make up gain is used to compensate for the noticeable average gain level drop as compression is increased. This can be added manually or automatically.

To select manual gain make-up

➤ Rotate Logicator 6 anti-clockwise.

The alpha will display Man. The Logicator will show a point at the 11 o'clock position.

The make-up gain set on Logicator 7 will be applied.

To select automatic gain make-up

➤ Rotate Logicator 6 clockwise.

The alpha will display Auto. The Logicator will show a point at the 1 o'clock position.

Make-up gain will only be applied when the threshold level is below 0dB. The amount of positive gain applied is that which will restore a 0dB level signal back to 0dB.

Manual Gain Make-Up

This is the amount of Manual make-up gain added if Manual is selected. It is not added in Auto mode. The range is 0dB to 20dB with a default of 0dB and is adjusted in steps of 0.1dB.

To increase make-up gain

➤ Rotate Logicator 7 clockwise.

The Logicator will illuminate in an increasing arc.

To switch a compressor/limiter into circuit

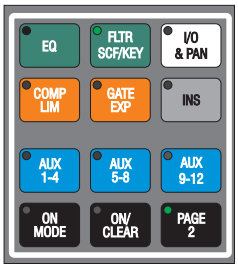
➤ Press the ON/CLEAR key.

The integral LED will illuminate red.

The Logicators will illuminate to show their settings.

✍ *If two compressor/limiters are present, they are switched in and out of the signal path independently.*

Gate



The gate can be used to cut out signal noise which may be apparent when the level of program material drops off.

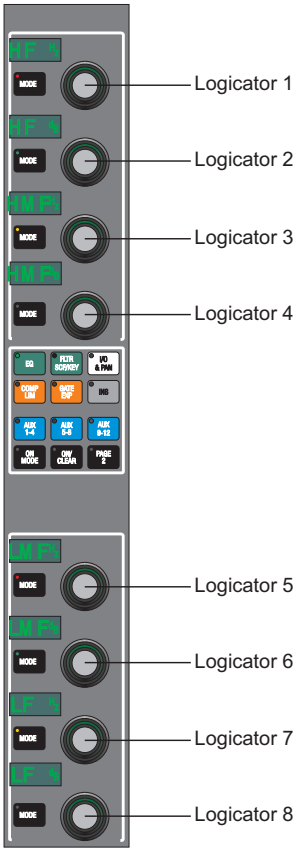
A gate can not be allocated to a path which already has a DRC allocated.

To access the controls for the gate

➤ Press the GATE EXP key.

The integral LED will illuminate orange.

The controls are assigned to the Logicators as follows (the alpha descriptions are shown in brackets):



Logicator 1	Threshold level (Thrs)
Logicator 3	Attack time (Atk)
Logicator 4	Release time (Rel)
Logicator 5	Hysteresis (Hyst)
Logicator 7	Depth (Dpth)

Threshold Level

This is the dB level at which the Gate switches on and allows the signal to pass through. This is expressed in decibels relative to normal program line-up level and variable between –60 and +30dB. The default is –20dB and changes in steps of 1dB.

To change the threshold level

➤ Rotate Logicator 1 to the desired setting.

The Logicator illuminates in arc for a visual display of the setting.

Attack Time

This determines the rate at which the gate switches on (opens) once the input signal has risen above the Threshold level.

The range is 0 (instant attack) to 50ms with a default of 1ms.

To increase the attack time

➤ Rotate Logicator 3 clockwise.

The Logicator shows an arc which increases with attack time.

Release Time

This determines the rate at which the gate switches off (closes) when the input signal level drops below the threshold level minus the hysteresis size.

The range is 0 (instant release) to 5sec with a default of 0.1sec.

To increase the release time

➤ Rotate Logicator 4 clockwise.

The Logicator shows an arc which increases with release time.

Hysteresis

The hysteresis control is used to select the level below threshold at which the gate closes.

The threshold at which the gate turns off is always below the threshold at which the gate turns on.

The range is 0dB to 20dB with a default of 6dB.

To change the hysteresis

➤ Rotate Logicator 5 to the desired setting.

The Logicator shows an arc starting in the centre which increases as hysteresis increases.

Depth

This is the number of dBs below Threshold at which the input/output gain change returns to 1:1, with a fixed gain reduction of depth dBs.

The range is 0dB to 60dB with a default of 30dB.

To change the depth

➤ Rotate Logicator 7 to the desired setting.

The Logicator will show an arc which increases in both directions from the centre as depth increases.

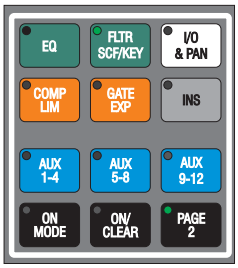
To switch the gate into circuit

➤ Press the ON/CLEAR key.

The integral LED will illuminate red.

The Logicators will illuminate to indicate their settings.

Expander



The expander is used to reduce the signal level below the expander threshold.

An expander can not be allocated to a path which already has a DRC allocated.

To access the controls for the expander

➤ Press the GATE EXP key.

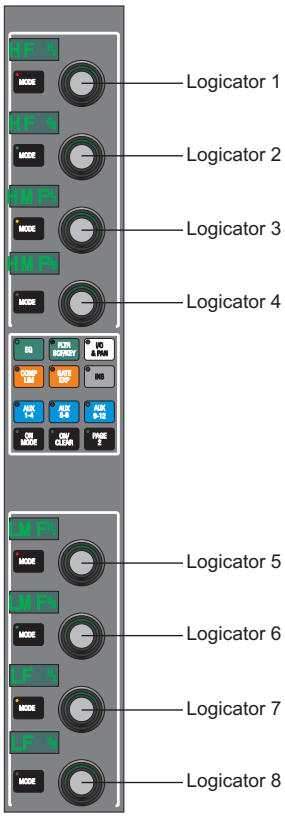
The integral LED will illuminate orange.

The LED in the PAGE 2 key will illuminate green.

➤ Press the PAGE 2 key.

The integral LED will illuminate orange.

The controls are assigned to the Logicators as follows (the alpha descriptions are shown in brackets):



Logicator 1	Threshold level (Thrs)
Logicator 2	Compression ratio (Rtio)
Logicator 3	Attack time (Atk)
Logicator 4	Release time (Rel)
Logicator 5	Knee (Knee)
Logicator 7	Depth (Dpth)

Threshold

This is the dB level below which gain reduction of the signal will occur. This is expressed in decibels relative to normal program line-up level and has a range of –60dB to +30dB with a default of -20dB.

To change the threshold level

➤ Rotate Logicator 1 to the desired setting.

The Logicator shows an arc which increases with the threshold level to indicate the size of the region under expansion.

Ratio

This is the level of gain reduction applied to the signal below the threshold point (i.e. the ratio between changes in level (in dB) of the input to the expander and its output). This has a range of 1:1 to 9.9:1 with a default of 1:1.

To increase the ratio

➤ Rotate Logicator 2 clockwise.

The Logicator shows a dot to indicate the setting.

Attack Time

The attack time determines the rate at which the gain applied to the input signal is increased from the depth setting to 0dB. The range is 0 (instant attack) to 50ms with a default of 1ms.

To increase the attack time

➤ Rotate Logicator 3 clockwise.

The Logicator will illuminate in an increasing arc.

Release Time

The release time determines the rate at which the gain applied to the input signal decreases from 0dB to the Depth setting. The range is 0 (instant release) to 5sec with a default of 0.10sec.

To increase the release time

➤ Rotate Logicator 4 clockwise.

The Logicator will illuminate in an increasing arc.

Soft Knee

The soft knee is the number of dBs above Threshold at which expansion is gradually introduced (increasing smoothly to full expansion below the Threshold point).

The range is 0dB to 60dB with a default of 1dB.

To increase the knee size

➤ Rotate Logicator 5 clockwise.

The Logicator shows an arc increasing in both directions from the centre as the knee size is increased.

Depth

This is the number of dBs below Threshold at which the input/output gain change returns to 1:1 with a fixed gain reduction of depth dBs.

The range is 0dB to 60dB with a default of 30dB.

To change the depth

➤ Rotate Logicator 7 to the desired setting.

The Logicator will show an arc which increases in both directions from the centre as depth increases.

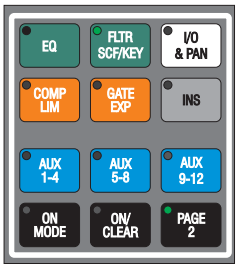
To switch the expander into circuit

➤ Press the ON/CLEAR key.

The integral LED will illuminate red.

The Logicators will illuminate to indicate their settings.

Dynamic Range Controller



The DRC is a combined dynamics processor which is a combination of a compressor and an expander with a fixed-ratio of 2:1.

It uses significantly less processing than two separate dynamics elements.

The DRC is mutually exclusive of other dynamics processing in the path.

A sidechain can be used to control a DRC.

To access DRC compressor controls

➤ Press the COMP LIM key.

The LEDs in the COMP LIM and GATE EXP keys will illuminate orange.

Logicators 1 to 4 will be assigned as follows (the alpha descriptions are shown in brackets):

Logicator 1	Threshold level (CmpT)
Logicator 2	Compression ratio (Rtio)
Logicator 3	Attack time (Atk)
Logicator 4	Release time (Rel)

To access DRC expander controls

➤ Press the GATE EXP key.

The LEDs in the COMP LIM and GATE EXP keys will illuminate orange.

Logicators 1 to 4 will be assigned as follows (the alpha descriptions are shown in brackets):

Logicator 1	Threshold level (ExpT)
Logicator 3	Attack time (Atk)
Logicator 4	Release time (Rel)

DRC Compressor Threshold

This is the dB level above which gain reduction of the signal will occur. This is expressed in decibels relative to normal program line-up level and has a range of –60dB to +30dB with a default of +8dB.

The Logicator shows an arc with the fixed point at the maximum position (+30dB) increasing in size anti-clockwise as the threshold is lowered. This provides a visual display of the size of the region under compression (or being limited).

To change the threshold level

➤ Rotate Logicator 1 to the desired setting.

DRC Compressor Ratio

This is the level of gain reduction applied to the signal above the threshold point (i.e. the ratio between changes in level (in dB) of the input to the compressor and its output). This has a range of 1:1 to 99:1.

The default is 1:1 (i.e. no compression) and can be changed in steps of 0.1 up to 9.9:1. From 10:1 to 99:1 the ratio is changed in steps of 1.

To increase the ratio

➤ Rotate Logicator 2 clockwise.

The logicator will show a dot to indicate the setting.

DRC Compressor Attack Time

The attack time is speed at which the compressor responds to a signal once it has entered the compression region.

The attack and release filter section (peak detection circuit) is one bilinear filter fed by a dB value of audio level minus compressor curve level for that input. If audio is below the threshold, 0dB is passed in.

The attack filter is used when the input level is larger than the output of the peak detection circuit (switching to release when it drops below). The attack time has a range of 0.7μs to 50mS with a default of 1ms.

To increase the attack time

➤ Rotate Logicator 3 clockwise.

The Logicator will illuminate in an increasing arc.

DRC Compressor Release Time

This is the time taken for the compressor to switch off when the signal level falls below the threshold.

The range is 0 (instant release) to 5sec. The default is 0.10s and is changed in steps of 0.01s.

To increase the release time

Rotate Logicator 4 clockwise.

The Logicator will illuminate in an increasing arc.

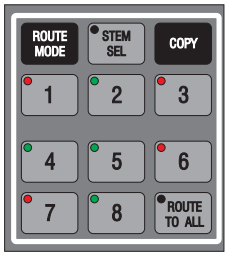
To switch the DRC into circuit

➤ Press the ON/CLEAR key.

The integral LED will illuminate red.

✍ *When a different signal processing selection key is pressed after the DRC is enabled, the LEDs in the COMP LIM and GATE EXP keys will both illuminate red. Similarly, if the DRC is disable but still allocated the LEDs will both illuminate green when a different signal processing selection key is pressed.*

Copy Function



The COPY key allows signal processing settings to be copied between paths.

✍ *If a different console function (e.g. AFU or Input Patching) is activated while Copy is being used then Copy will be terminated.*

✍ *Links are ignored by Copy.*

To select a source path

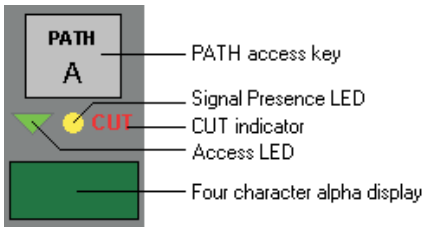
➤ Press the PATH access key of the required path.

This will ensure the path is on the surface.

➤ Press the COPY key on the same channel strip.

The LED in the COPY key will flash.

The console will enter Copy Mode. The alpha displays associated with the PATH access keys will flash alternately between the path names and COPY.

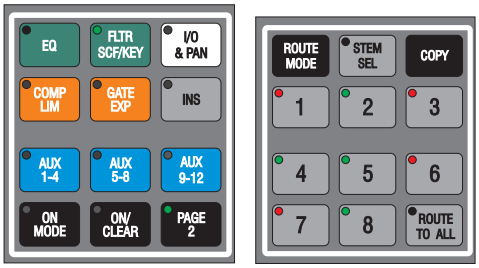


The long alpha on the lower matrix panel will display 'Select Copy Dest' and the path type that was selected for copying. The LED in the number key that corresponding to the source path will flash red. The LEDs in the available destination keys will illuminate green.

All processes in the path and the stem routing will be selected for copying.

To select a sub-set of items to be copied (create a copy template)

➤ Press the required Signal Processing Selection key or the ROUTE MODE key.



➤ Press the same key again (except ROUTE MODE).

All other items will be de-selected for the copy operation.

➤ Press a different Signal Processing Selection key and/or the ROUTE MODE key.

➤ Press the same key again (except ROUTE MODE).

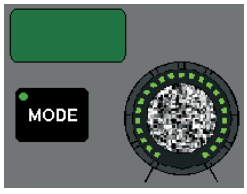
The item will be added to the copy template.

✍ *The ROUTE MODE key toggles the stem routing in and out of the copy template with a single press.*

To select the settings in an individual processor to be copied

➤ Press the required Signal Processing Selection key.

The LEDs in the MODE keys associated with the Logicators will illuminate orange to indicate the settings that will be copied.



➤ Press the Logicator MODE keys to toggle individual parameters in and out of the copy template.

✍ *The settings for the Aux contributions can also be copied.*

✍ *Input/Output Ports can not be copied.*

✍ *The ON MODE and ON/CLEAR keys are not relevant in Copy Mode.*

To copy the selected settings to other paths

➤ Press the PATH Access keys on the required target paths.

or

➤ Press the number keys on the lower matrix panel.

The keys for the selected destination paths in the lower matrix panel will illuminate orange.

To copy to a range of faders

The Recall button in the Master Status section of the Master Panel is redefined to be a latching "Select" key. It can only be activated when automation is not running.

If Select is active, paths can be added and removed from the Copy selection without applying the Copy operation.

➤ Individual paths can be toggled in and out of the selection by pressing the channels' path access key.

➤ A range of paths on the active layer can be specified by pressing and holding the layer key of the first path and pressing the layer key of the last path.

➤ All the paths on a layer can be specified by pressing and holding the master ALL key and pressing one of the channel layer keys.

➤ Pressing SELECT then applies the Copy operation from the source path to the selected destination paths.

➤ Pressing COPY again on the source path exits copy mode without applying the copy operation to the selected paths.

To change the source path

➤ Press the COPY key on the required path.

The copy template will remain un-changed but it can now be modified as required.

➤ Destination paths will have to be re-selected.

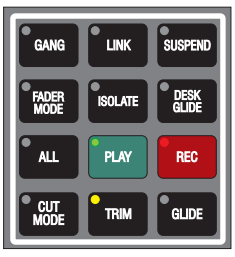
To end Copy Mode

➤ Press the COPY key on the source path.

The copy template is reset to the default (all processes and stem routing).

Tips on Copy

To see the settings being copied for a particular function



➤ Press and hold the ALL key.

➤ Press the required Signal Processing Selection key.

The selected function will be displayed across the console.

➤ Release the ALL key.

When settings are copied they will be seen immediately in the alpha displays for the function brought to the surface.

Using the AFU Function with Copy

AFU Mode can be used to set and select the settings to be copied.

➤ Press the AFU key in the Lower Routing Panel.

AFU Mode will be activated. The default path will be expanded in the predub zone.

➤ Select the path in the AFU using the Lower Routing Panel.

➤ Press the Signal Processing Selection and MODE keys in the AFU as required.

➤ Press the COPY key in the first channel strip in the AFU (predub zone).

The LEDs in all the COPY keys in the AFU will flash.

➤ Press the PATH access keys to copy the settings to.

➤ Press the COPY key in the first channel strip in the AFU to turn off Copy Mode.

➤ Press the AFU key to turn off AFU Mode.

Logicator Function Summary

Equaliser

Logicator	1 Band Page 1	1 Band Page 2	2 Bands Page 1	2 Bands Page 2	3 Bands Page 1	3 Bands Page 2	4 Bands Page 1	4 Bands Page 2
1	-	-	-	-	-	-	HF Freq	HF Shape
2	-	-	-	-	-	-	±24dB or Q	Slope, ±24dB or Q
3	-	-	-	-	HF Freq	HF Shape	HMF Freq	HMF Shape
4	-	-	-	-	±24dB or Q	Slope, ±24dB or Q	±24dB or Q	Slope, ±24dB or Q
5	-	-	HF Freq	HF Shape	HMF Freq	HMF Shape	LMF Freq	LMF Shape
6	-	-	±24dB or Q	Slope, ±24dB or Q	±24dB or Q	Slope, ±24dB or Q	±24dB or Q	Slope, ±24dB or Q
7	HF Freq	HF Shape	HMF Freq	HMF Shape	LMF Freq	LMF Shape	LF Freq	LF Shape
8	±24dB or Q	Slope, ±24dB or Q	±24dB or Q	Slope, ±24dB or Q	±24dB or Q	Slope, ±24dB or Q	±24dB or Q	Slope, ±24dB or Q

Filters and Sidechain

Logicator	1 Filter (Page 1)	2 Filters (Page 1)	Sidechain Filter/ Key Input (Page 2)
1	-	LF Filter Shape	SCF Shape
2	-	Slope	SCF Level
3	-	Freq	SCF Q
4	-	-	SCF Freq
5	LF Filter Shape	HF Filter Shape	Sidechain Listen On/Off
6	Slope	Slope	Key Input On/Off
7	Freq	Freq	Key Input Path
8	-	-	Key Input Pre/Post

I/O, Panning, I/O Patching and Inserts

Logicator	I/O & Pan	Input Patch	Output Patch	Insert 1 (Page 1)	Insert 2 (Page 2)
1	-	Port Type	Port Type	Send Port Type	Send Port Type
2	Trim	Port Number	Port Number	Send Port Number	Send Port Number
3	Delay	Input Trim	Output Trim	Send Level Trim	Send Level Trim
4	Phase	-	-	-	-
5	Rear Surround	-	Pan Designator	Return Port Type	Return Port Type
6	Front-Back	-	Pre/Post Output Pickoff	Return Port Number	Return Port Number
7	Divergence	Phase Reversal	-	Return Trim Level	Return Trim Level
8	LCR Pan, Front Pan or Balance	Input Delay	Output Delay	Insert 1 In/Out	Insert 2 In/Out

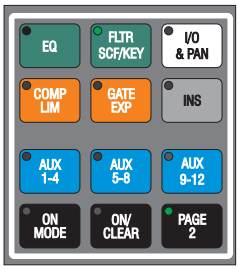
Dynamics

Logicator	Compressor (Page 1)	Limiter (Page 2)	Gate (Page 1)	Expander (Page 2)	DRC Compressor	DRC Expander
1	Threshold	Threshold	Threshold	Threshold	Threshold	Threshold
2	Ratio	Ratio	-	Ratio	Ratio	-
3	Attack Time	Attack Time	Attack Time	Attack Time	Attack Time	Attack Time
4	Release Time	Release Time	Release Time	Release Time	Release Time	Release Time
5	Knee	Knee	Hysteresis	Knee	-	-
6	Manual or Automatic Gain Make-Up	Manual or Automatic Gain Make-Up	-	-	-	-
7	Manual Make-Up Gain	Manual Make-Up Gain	Depth	Depth	-	-
8	-	-	-	-	-	-

Auxiliaries

Logicator	Aux Sends 1-4 Page 1	Aux Sends 1-4 Page 2	Aux Sends 5-8 Page 1	Aux Sends 5-8 Page 2	Aux Sends 9-12 Page 1	Aux Sends 9-12 Page 2
1	Aux 1 Contrib Level	Aux 1 Pre/Post	Aux 5 Contrib Level	Aux 5 Pre/Post	Aux 9 Contrib Level	Aux 9 Pre/Post
2	Aux 1 Pan/Balance	Aux 1 On/Off	Aux 5 Pan/Balance	Aux 5 On/Off	Aux 9 Pan/Balance	Aux 9 On/Off
3	Aux 2 Contrib Level	Aux 2 Pre/Post	Aux 6 Contrib Level	Aux 6 Pre/Post	Aux 10 Contrib Level	Aux 10 Pre/Post
4	Aux 2 Pan/Balance	Aux 2 On/Off	Aux 6 Pan/Balance	Aux 6 On/Off	Aux 10 Pan/Balance	Aux 10 On/Off
5	Aux 3 Contrib Level	Aux 3 Pre/Post	Aux 7 Contrib Level	Aux 7 Pre/Post	Aux 11 Contrib Level	Aux 11 Pre/Post
6	Aux 3 Pan/Balance	Aux 3 On/Off	Aux 7 Pan/Balance	Aux 7 On/Off	Aux 11 Pan/Balance	Aux 11 On/Off
7	Aux 4 Contrib Level	Aux 4 Pre/Post	Aux 8 Contrib Level	Aux 8 Pre/Post	Aux 12 Contrib Level	Aux 12 Pre/Post
8	Aux 4 Pan/Balance	Aux 4 On/Off	Aux 8 Pan/Balance	Aux 8 On/Off	Aux 12 Pan/Balance	Aux 12 On/Off

RESETTING CONTROLS



The ON/CLEAR key can be used with processing controls to reset them to their default values.

The default value that the control takes depends on the setting in the currently loaded User Defaults, as set with Defaults Manager.

Resetting controls is also known as 'clearing to line-up'.

✍ *Faders and CUTs can only be reset using the Reset Wizard in Defaults Manager (see Defaults Manager in the Tools Menu chapter).*

To reset a whole processing element

➤ Press and hold the key for the required processing element or Aux bank.

➤ Press the ON/CLEAR key.

All the settings for the selected element will be reset to the default values according to the currently loaded User Default file created with Defaults Manager.

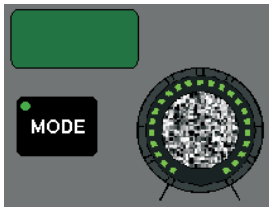
✍ *When resetting I/O & PAN, only the surround panning controls are reset unless Input or Output Patching is active, in which case the port settings are cleared to their defaults (the port will not be de-routed).*

To clear faders only

➤ Pressing FADER MODE and PATH A, B, C or D will clear that fader to it's default value on each channel strip.

To reset Logicator settings to their default values

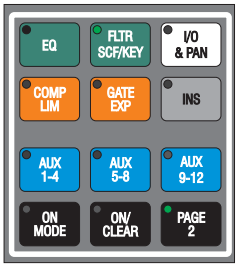
➤ Press and hold the MODE key associated with the required Logicator.



➤ Press the ON/CLEAR key.

The alpha display associated with the Logicator will show the default setting.

AUXILIARIES



Up to 36 stereo or mono Auxiliary Sends are available. The Auxes assigned to the AUX selection keys will depend on whether or not Split Console is in operation and how many Shared Auxes are configured. Only the first 12 Auxiliary Sends are available when not using Split Console.

Each Aux can be PRE or POST fader, have the contribution level adjusted from -102dB to +10dB and be balanced when in stereo.

Auxes can take contributions from Channels, Tracks and Groups, and can be routed to Cues or a physical output.

Enabling Auxiliary Sends

To select AUX 1 to 4

➤ Press the AUX 1-4 key.

The green LED in the key illuminates to confirm selection.

The Logicators are assigned in pairs to the Auxes for Contribution Level and Pan/Balance, i.e. the first available Aux on Logicator 1 and 2, the second available Aux on Logicator 3 and 4, etc.

To switch on Auxes

➤ Press and hold the ON/CLEAR key.

The alpha for the first Logicator for each AUX will display OFF.

➤ Rotate the required Logicators clockwise so the alphas display ON.

➤ Release the ON/CLEAR key.

Or

➤ Press the PAGE 2 key.

The alpha for the second logicator for each Aux will display OFF.

➤ Rotate the required Logicators clockwise so the alphas display ON.

➤ Press the AUX 1-4 key to return to Page 1.

The Logicators for the activated Auxes will illuminate to show the current settings for Contribution Level and Pan/Balance.

Additional Auxes available in the console partition are selected and switched on in the same way using the AUX 5-8 and AUX 9-12 keys.

Changing the settings for Auxiliary Sends

To change the Contribution Level

➤ Press the required AUX selection key to show Page 1 of the aux settings.

The auxes are assigned to pairs of Logicators.

➤ Rotate the first Logicator for the required AUX.

The Logicator shows an arc relative to the setting and the alpha shows the actual value.

To adjust Pan/Balance

➤ Press the required AUX selection key to show Page 1 of the aux settings.

The auxes are assigned to pairs of Logicators.

➤ Rotate the second Logicator for the required AUX.

The Logicator displays a spot relative to the Pan/Balance setting.
Pan/Balance ranges to a typical balance taper over 180° (being 0dB at full left or right and 3dB at the centre).

Balance control is not geared.

The alpha displays ranges -44° to +44° with CNTR at the centre, LEFT when full left (-45°) and RGHT when full right (+45°).

To select Pre or Post fader

➤ Press the required AUX selection key to show Page 1 of the aux settings.

The auxes are assigned to pairs of Logicators.

➤ Press the PAGE 2 key to select the second set of aux parameters.

The first Logicator for each AUX acts as a two position switch for selecting between PRE and POST.

The alpha shows the current setting.

➤ Rotate the first Logicator for each AUX as required.

Shared Auxiliaries

Shared Auxes are only applicable when Split Console is enabled and the console is split into two or three sections.

There are 36 Auxes available in total. They can only all be used when the console is split into three sections and no Auxes are shared (i.e. each section has 12 separate Auxes each available).

The number of shared Auxes plus the number of 'private' Auxes for each partition is configured as part of the basic Desk Setup using Desk Edit.

When Auxes are shared, all of the console may make contributions to those Auxes. For instance, if 4 Auxes are shared then each partition can contribute to the first 4 Auxes, while still having up to 8 Auxes for 'private' use in each partition.

Note that the AUX 1-4, AUX 5-8 and AUX 9-12 keys are for selecting the first four, next four and last four Auxes assigned to the partition.

Auxiliary Control Grouping

The Auxiliaries send controls on each strip are not grouped by default. The grouping function allows more than one Auxiliary send to be switched on and off simultaneously with the ON/CLEAR key. This can only be done within each bank of Auxes so that Auxes 1 to 4 can be grouped, as can Auxes 5 to 8 and 9 to 12, but Auxes 3 and 7 could not be grouped together, for instance.

To add an Aux send to a group

➤ Press and hold the required AUX key until the first alphas for each band display the aux name, and the second alphas for each band display OutG.

➤ While still holding the AUX key, touch the second Logicator for each Aux to be added to the group.

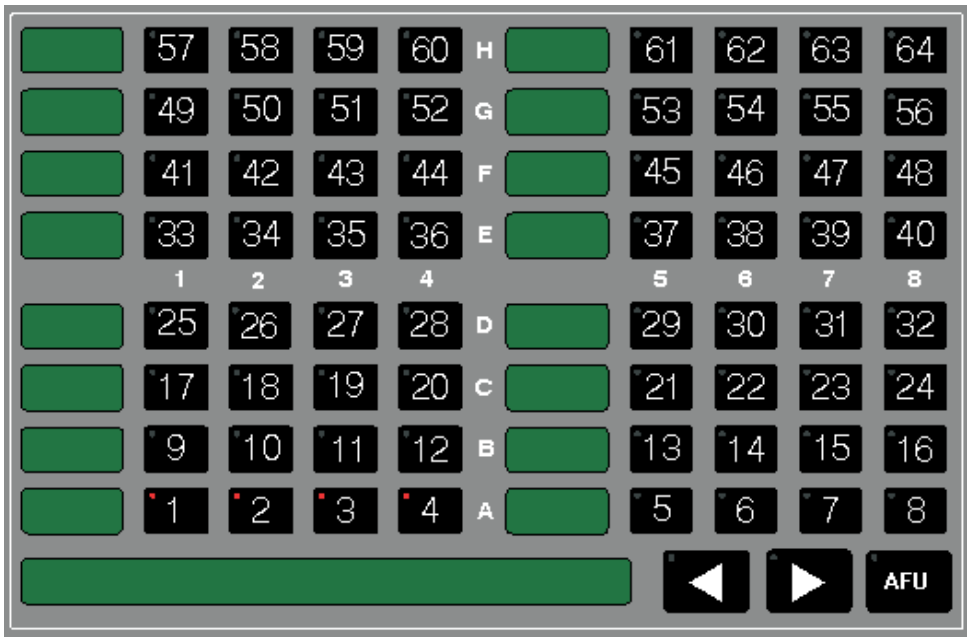
The associated alpha displays will change to In G.

The indicator LEDs on the second Logicator for each Aux selected will illuminate.

The ON/CLEAR key can now be used to switch the selected Auxes on and off together.

✍ *Control grouping can be turned off in Solo Settings & Relay Control Preferences.*

ASSIGNABLE FACILITIES UNIT (AFU) FUNCTION



AFU Mode allows instant access to all controllable parameters in any path without leaving the monitoring sweet-spot.

AFU Mode uses the predub zone as a fully assignable virtual AFU and allows simultaneous adjustment of more than one signal processing element.

Using the AFU Function

To start the AFU

➤ Press the AFU key on the Lower Routing Panel.

The AFU will be placed in the predub zone.

The alpha display associated with the PATH A key in the first predub zone strip will display afu.

The long alpha display on the Lower Routing Panel will display AFU Path - and the name of the path expanded on the AFU.

If any other function is active (e.g. Copy, Link, Input Patch, etc.) then it will be cancelled.

The first time that AFU Mode is invoked the first available path on the console surface will be assigned to the AFU. The console is searched from left to right for a path assigned to Layer A, then Layer B and so on until a path is found.

To select the path expanded on the AFU

➤ Use numbered keys on the Lower Routing Panel to select the path number.

➤ Use the nudge keys to change the path type.

or

➤ Press the PATH Access key for the required path.

To change the functions displayed on the AFU

➤ Press the Signal Function Selection keys as required on each strip.

E.g. Press the INS key on the eighth strip to access the Insert controls instead of the AUX 9-12 controls.

The assignments within the AFU (i.e. which strip displays which controls) will be saved as part of the current Desk Setup.

To interrogate which path is expanded on the AFU

➤ Press and hold the PATH A key on the first predub zone strip.

The associated alpha will display the path name.

To cancel the AFU

➤ Press the AFU key on the Lower Routing Panel.

AFU Strip Usage

The first time that AFU mode is invoked, Page 1 of the functions will be assigned to the strips in the predub zone in the following order:

AFU Strip	Function
1	EQ
2	Filter
3	I/O
4	Compressor/Limiter
5	Gate
6	Aux 1-4
7	Aux 5-8
8	Aux 9-12

The LEDs in the corresponding Signal Processing Selection keys will illuminate orange (E.g. the LED in the EQ key will illuminate orange on the first strip).
All of the first strip in the predub zone will be used for the path expanded on the AFU. Only the Logicators and Signal Processing Selection keys in the other seven strips will be used for the AFU.

✍ *The actual Auxes will depend on whether or not Shared Auxes are in use on a split console.*

✍ *The I/O shown will depend on the Path Type and port assignment.*

✍ *The Logicator alphas will be blank for functions which have not been configured into the selected path (e.g. if there is no Gate then strip 5 will not show anything).*

Using Paths in the PreDub Zone when the AFU is active

When AFU Mode is active, the paths in the predub zone will be overlayed by the AFU. The whole of the first strip in the predub zone will be assigned to the AFU.

The other seven strips will have their Logicators and Signal Processing Selection keys assigned to the AFU and the Stem Selection and Routing keys will be inactive. The remaining controls (fader, automation, cut, solo, etc.) can still be used for each of the paths on the surface.

To use all the controls for a path overlayed by the AFU

➤ Press the required PATH key.

The selected path will be expanded across the AFU. The strips assigned to the AFU can now be used to change settings for the selected path.

Using the AFU with I/O patching

The AFU can be used in conjunction with Input and Output Patching so that the I/O routing can be changed from the console surface without leaving the monitoring sweet-spot.

To start Input Patch AFU or Output Patch AFU

➤ Press the AFU key.

The LED in AFU key will flash.

➤ Select the path to be expanded on the AFU.

➤ Press the INPUT PATCH or OUTPUT PATCH key.

The AFU will now use only the first strip in the predub zone to show input or output patch information as selected.

The path called to the AFU can be selected as normal with the Lower Routing Panel.

The mode can be toggled between input and output patching with the interlocked SHOW INPUT PATCH or SHOW OUTPUT PATH keys.

If the SHOW INPUT PATCH or SHOW OUTPUT PATH key is pressed to turn the patch mode off, the AFU will be restored to all eight strips in the predub zone.

Using the AFU with Expanded PreDubs

If a predub is expanded when the AFU is active

AFU Mode will be terminated.

The LED in the AFU key will cease to be illuminated.

The long alpha display in the Lower Routing Panel will return to displaying Select Monitor Source.

If the AFU is activated when a predub is already expanded

The AFU will be overlayed on top of the expanded predub.

When the AFU is subsequently cancelled, the expanded predub will be restored in the predub zone (and will override any path selected in the predub zone).

INPUT AND OUTPUT PATCHING

The INPUT PATCH and OUTPUT PATCH keys in the Main Paths section of the Master Quadstrip are used for fast input and output routing on the console surface.

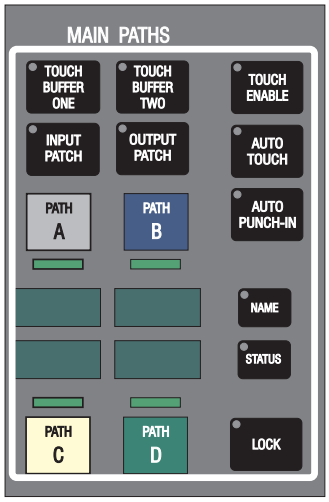
This is an alternative to using I/O Patching or Path Edit.

Input Patching

Input Patching allows fast assignment of Input Ports to channels from the console surface.

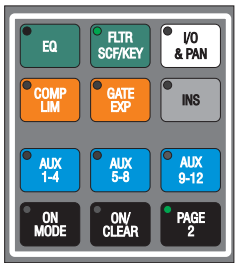
To activate Input Patching

➤ Press the INPUT PATCH key.



The integral LED will illuminate.

The I/O & PAN key will be automatically selected on all channel strips.



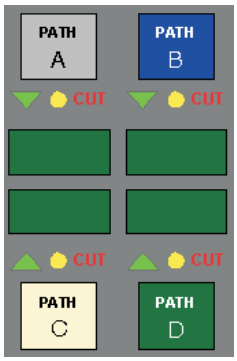
✍ *INPUT PATCH and OUTPUT PATCH are interlocked (pressing one will toggle the other one off if it is active).*

The Logicators on paths with inputs will be assigned as follows:

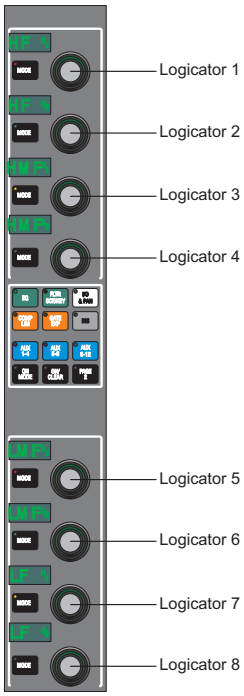
Logicator 1	Port type
Logicator 2	Port number
Logicator 3	Input trim
Logicator 7	Phase
Logicator 8	Delay

To select an input port

➤ Press the PATH access key for the required path.



➤ Rotate Logicator 1 to select the port type.



The associated alpha display will cycle through the available inputs (e.g. 1lin indicates line inputs in rack 1).

➤ Rotate Logicator 2 to select the port number.

The alpha display will cycle through the available ports in the rack. This depends on how many cards of the selected type are in the rack.

The alpha display cycles continuously so that when the last port number is shown, turning the Logicator a little further clockwise will cycle round to the first port and vice versa.

To enable the input to the path

➤ Press the ON/CLEAR key.

The integral LED will illuminate red.

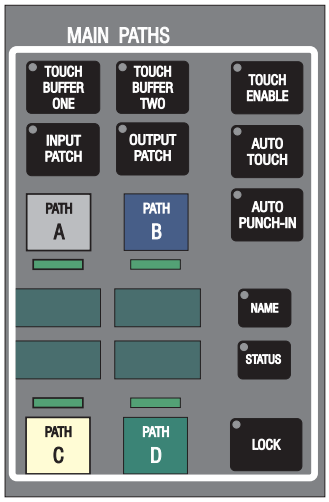
Logicators 1 and 2 will not change the port selection while it is enabled.

Output Patching

Output Patching allows fast assignment of Output Ports to Tracks (busses), Mains, etc. from the console surface.

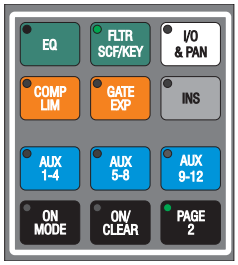
To activate Output Patching

➤ Press the OUTPUT PATCH key.



The integral LED will illuminate.

The I/O & PAN key will be automatically selected on all channel strips.



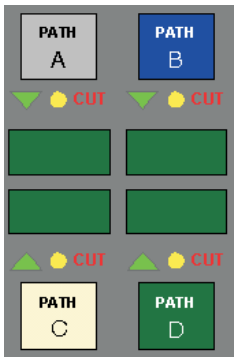
✍ *INPUT PATCH and OUTPUT PATCH are interlocked (pressing one will toggle the other one off if it is active).*

The Logicators on paths with outputs will be assigned as follows:

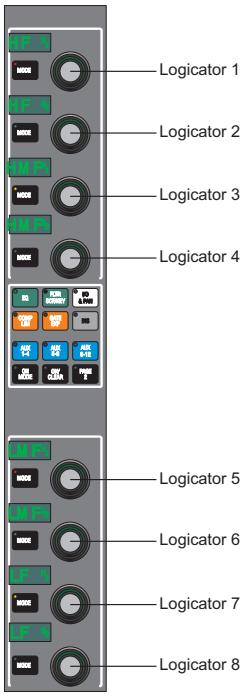
Logicator 1	Port type
Logicator 2	Port number
Logicator 3	Output trim
Logicator 5	Pan type
Logicator 6	Pre/Post fader selection
Logicator 8	Delay

To select an output port

➤ Press the PATH access key for the required path.



➤ Rotate Logicator 1 to select the port type.



The alpha display will cycle through the available outputs (e.g. 1LIN indicates line outputs in rack 1).

➤ Rotate Logicator 2 to select the port number.

The alpha display will cycle through the available ports in the rack. This depends on how many cards of the selected type are in the rack. The alpha display cycles continuously so that when the last port number is shown, turning the Logicator a little further clockwise will cycle round to the first port and vice versa.

To enable the output to the port

➤ Press the ON/CLEAR key.

The integral LED will illuminate red.

Logicators 1 and 2 will not change the port selection while it is enabled.

If the port is already used by another path

When the ON/CLEAR key is pressed the output to the port will not be enabled. Alphas 1 to 4 will display PORT USED BY path. The LED in the ON/CLEAR key will not illuminate.

Patching Film Inserts for Post Decode and Lt-Rt

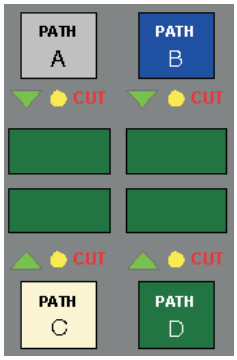
The insert sends and returns that are used by Post Decode and Lt-Rt can be patched from the console surface. The sends are shared, but the returns are set separately.

✍ *If Stereo is selected as the current Film format in Desk Edit then Post Decode and Lt-Rt are not used.*

To patch the Post Decode and Lt-Rt inserts

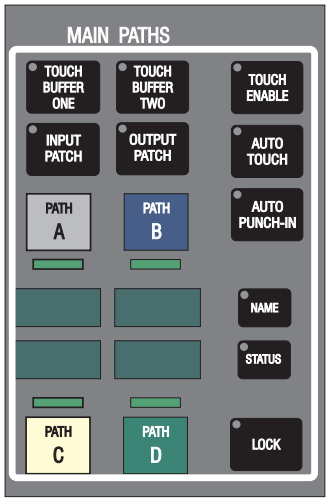
➤ Make sure Film paths are assigned to fader strips (e.g. with Desk Designer).

➤ Press the PATH access keys for the Film paths.



This is to assign them to the surface so that they will be visible during patching.

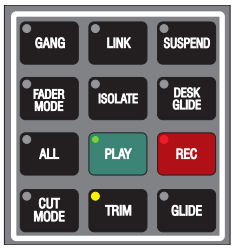
➤ Press the INPUT PATCH or OUTPUT PATCH key.



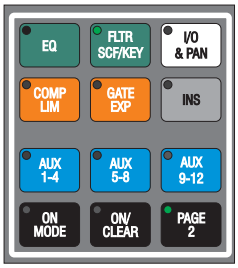
The console will enter Input Patch or Output Patch mode as selected.

On any of the Film paths

➤ Press and hold the ALL key.



➤ Press the INS key on the same fader strip.

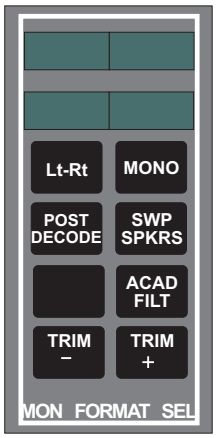


➤ Release the ALL key.

The Film paths are now ready for the appropriate set of inserts to be selected.

To set the Post Decode sends and returns.

➤ Press the POST DECODE key.



The integral LED will illuminate red.

The current ports used by the send and return on each Film path will be shown on the Logicators, sends (outputs) on the top four Logicators and returns (inputs) on the bottom four.

Ports must be turned off with ON/CLEAR before they can be changed.

Logicators 1 and 2 are used to change the send ports and Logicators 5 and 6 are used to change the return ports.

Logicators 3 and 7 provide trim control.

To set the return for Lt-Rt

➤ Press the Lt-Rt key.

The insert returns for Lt-Rt will be shown on FLM1 (Left) and FLM3 (Right). They can not be modified individually.

➤ Press the MONO key.

The insert returns will be shown as a stereo pair on FLM2 (Centre).

The stereo port must be turned off with ON/CLEAR before it can be changed.

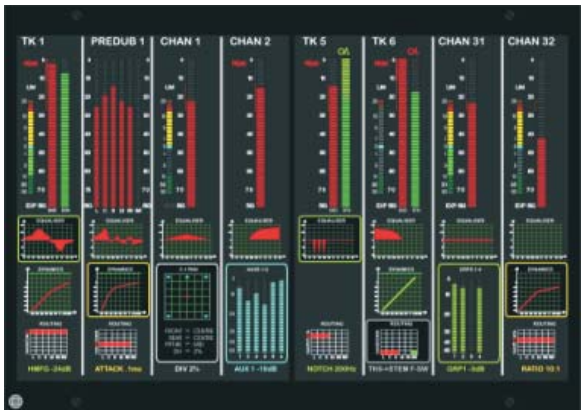
Logicators 5 and 6 are used to change the return port and Logicators 7 provides trim control.

When all changes have been made

➤ Turn off POST DECODE or Lt-Rt and MONO.

➤ Turn off the INPUT PATCH or OUTPUT PATCH key, as selected earlier.

METERING



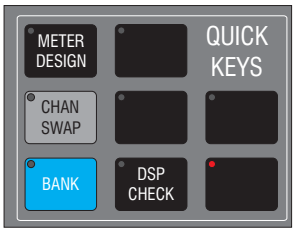
The DFC Gemini has a fully assignable meter bridge. The overall meter assignments are selected from the eight Meter Designs in the currently loaded Meter Design file. Each Meter Design can contain a mixture of 'fixed' meter assignments (e.g. a meter assigned to the input on Channel 1) and selectable meter assignments (e.g. a set of four meters assigned to the Wild Meter controls).

The file of designs is configured using the Encore utility Meter Designer. The files are managed using the Filing utility.

Once a file of Meter Designs has been loaded, the individual designs are selected using the console surface. The signals on the Stem, Surround Monitor and Wild Meters are also selectable from the console surface, when they are included in a design.

Using meter designs from the console surface

➤ Press and hold the METER DESIGN key in the Quick Keys section.



The 1 to 8 keys on the Lower Routing Panel can now be used to select the required design number.

The long alpha will display Select Meter Design and the small alphas (next to the 1 and 5 keys) will display MDES.

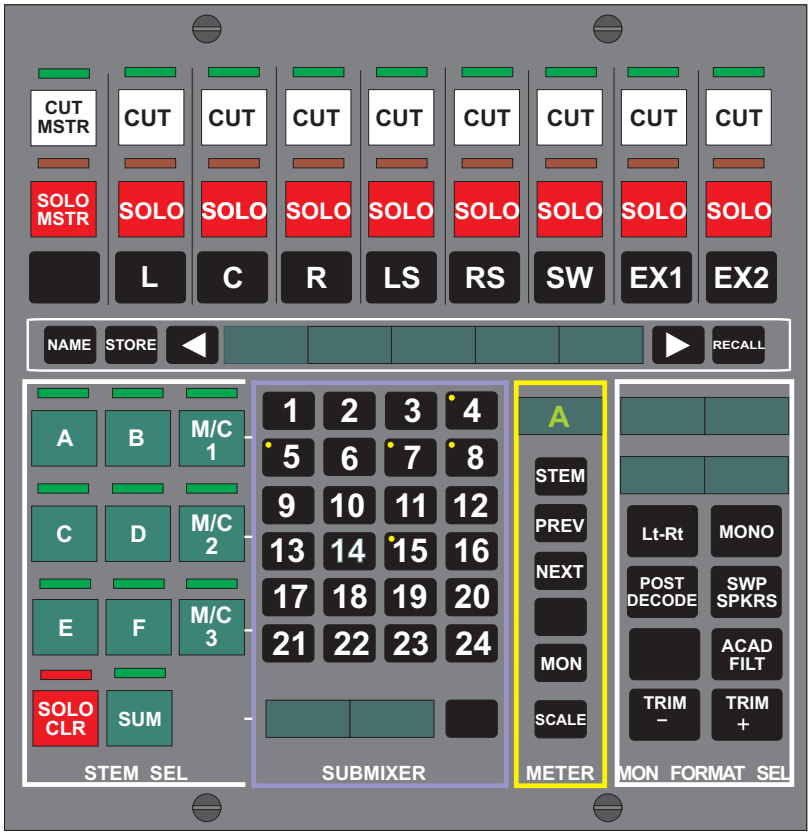
The LED in the number key corresponding to the current design on the meters will illuminate red and the remaining LEDs in the 1 to 8 keys will illuminate green.

➤ Press the required number key.

The selected design number will be displayed on the meters.

➤ Release the METER DESIGN key.

Surround Metering



The Meter section of the Surround Monitoring Panel is used to select the signal displayed on the Stem meters which have been assigned to follow the Surround Monitoring Panel.

This depends on an appropriate Meter Design being displayed on the meter bridge.

To select the Stem to meter

➤ Press the STEM key.

The integral LED will illuminate red.

➤ Press the NEXT and PREV keys to cycle round Stems A to F.

The meters will show the current Stem letter at the top in the System Name display.

To meter the surround monitor outputs

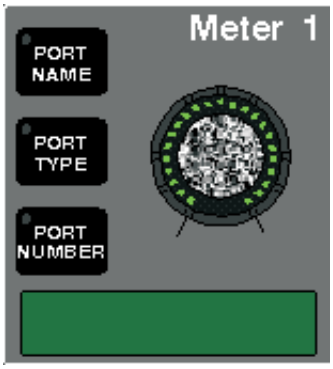
➤ Press the MON key.

The integral LED will illuminate red.

The meter will display FILM at the top.

Wild Meters

The Wild Meter controls in the Routing and Metering panel are used to select the port metered by the Wild Meters.



The Wild Meters are a block of four meters which are placed on the meter bridge according to the selected meter design (it is usual to place them above or near the Wild Meter controls).

✍ *In Split Console operation there will be one set of Wild Meters available for each console section and Meter Designer makes it possible to have Wild Meters on the bridge for any or none of the sections.*

To select input or output ports

➤ Press the PORT TYPE key.

The integral LED will toggle between red and green each time the key is pressed.

Red indicates input ports. Green indicates output ports.

A Note on Port Naming Conventions

The system names for input and output ports indicate the rack number, the port type, the port number, if the port is mono or stereo and whether the port is an input or output.

Rack Number

The leading digit(s) in the port name indicate the rack number, according to which MADI port the rack is connected to from the main DSP Rack. For instance, **2 lin 3 A** is a line input from an ADC card in the IOS Rack connected to the second MADI port, and this is referenced as Rack 2.

Port Type

The port type is summarised by the three letters following the rack number. For instance, **3 aes 1AB** is a stereo input from an AES/EBU card in Rack 3.

The exception is for ports that are connected by MADI that are not part of the DFC Gemini system. For instance **6 mad 10** is the tenth input on MADI port 6. This could be from AMS Neve outboard equipment (e.g. a TDIF/MADI Interface unit) or any third party device (e.g. a tape machine) that has a MADI interface.

Port Number and Mono/Stereo Status

The trailing numbers and letters indicate the port number within rack. For instance, **2 lin 5 A** is mono input that is the right leg of line input 5 in rack 2.

Any pair of ports can be combined as a stereo pair (this is the default for AES ports). Line and AES ports are numbered in the sequence 1A, 1B, 2A, 2B and so on. A matching pair of ports is combined to make a stereo pair, e.g. 1AB, 2AB, 3AB and so on.

Other port types can be combined into a stereo pair using an odd numbered port for the left leg and the following even numbered port for the right leg. For instance, **6 mad 11/12** is a stereo MADI input using MADI inputs 11 and 12 on MADI port 6.

Input or Output

The port type in system names for inputs are in lower case (i.e. small letters) and for outputs are in upper case (i.e. capital letters). For instance, **1 AES 2AB** is a stereo output and **1 aes 2AB** is the matching stereo input.

To select the port name

➤ Press the PORT NAME key.

The integral LED will illuminate orange.

➤ Rotate the Logicator.

The alpha display will cycle round the available hardware port names (i.e. the card types in each rack).

To select the port number

➤ Press the PORT NUMBER key.

The integral LED will illuminate orange.

➤ Rotate the Logicator.

The right hand half of the alpha display will cycle round the port numbers for the selected port name.

The corresponding Wild Meter will display the level on the selected port.

Monitoring the signal on a Wild Meter

The METER key in the LS SEL section allows a Wild Meter to be selected from the Lower Routing Panel. The signal on the selected Wild Meter can then be monitored on the control room or studio loudspeakers.

To select the Wild Meter to be monitored

➤ Press the METER key in the LS SEL section.

The integral LED will illuminate red.

The alpha next to the 1 key on the Lower Routing Matrix will display **METR**.

The LEDs in the 1 to 4 keys will be illuminated green, with the currently selected key illuminated red.

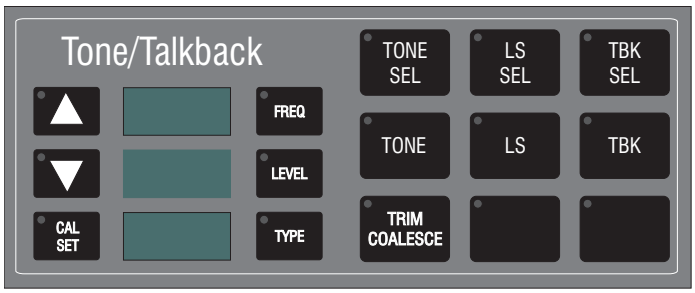
➤ Press the number key corresponding to the required Wild Meter.

✍ *If split console is in operation, there will be four meters selectable per console zone (i.e. 1-4 for Zone 1, 5-8 for Zone 2, 9-12 for Zone 3).*

TONE AND TALKBACK

For Tone and Talkback to operate, a Talkback path must be included in the current Desk Setup. This is in the System Paths on the Config page of Desk Edit.

To route Tone/Talkback destinations



➤ Press and hold the TONE SEL or TBK SEL key.

The long alpha on the Lower Routing Matrix will display Route Talkback/Tone.

Available destinations will have green LEDs.

Selected destinations will have red LEDs.

➤ Press the required number keys on the Lower Routing Matrix to select and de-select destinations.

➤ Release the TONE SEL or TBK SEL key.

To select the Tone to inject

➤ Press the TYPE key.

➤ Press the nudge keys to select the tone type.

The lower alpha next to the TYPE key will display the tone types which are SINE, EBU and BBC.

➤ Press the LEVEL key.

➤ Press the nudge keys to change the level.

The middle alpha next to the LEVEL key will display the selected level. The range is -60dB to +10dB.

➤ Press the FREQ key.

➤ Press the nudge keys to change the frequency.

The top alpha next to the FREQ key will display the selected frequency. The range is 20Hz to 16kHz.

To select common frequencies

➤ Press the blank key next to the lower alpha.

The top alpha will cycle round the frequencies 100Hz, 1kHz and 10kHz each time the key is pressed.

To inject Tone and Talkback

➤ Press the TONE and TBK keys as required.

The integral LED(s) will illuminate red.

Tone and talkback will be injected to the selected destinations.

✍ *The TONE and TBK keys have momentary action if they are held down, i.e. they switch off when released.*

Using the Talkback output to trigger an external talkback system

The Talkback path must be routed to a destination.

Operating the TBK key will control the LED and the relay.

✍ *The Talkback input does not need to be routed.*

GANGING

A multi-level "VCA" style ganging system is supported for faders. This has a maximum depth of four layers.

Slaves and Sub-Master Slaves

The faders of slaves or sub-masters will move when the master fader is moved and always indicate the true gain through the fader element in the path.

Offsets between slaves and other masters are always maintained and can be changed at any time by moving a slave's fader.

PreDubs in Gangs

A PreDub Master can be selected as a Gang Sub-Master, but are automatically only a Sub-Master to the paths in the PreDub. They can not be a Sub-Master of other paths. The PreDub members are Slaves the PreDub Master only.

When the Gang Master or Sub-Master is moved, the PreDub Master and the subsequent predub members move to follow the Master or Sub-Master.

Gangs and Links

If a fader is already part of a Link then it can not be added to a Gang.

To setup and use Gangs

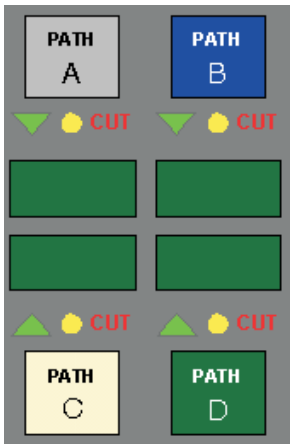
To setup a Gang Structure

➤ Press and hold the GANG key on the path which is to be the master.



The integral LED will illuminate.

The PATH LEDs of the master and its slaves will illuminate green to indicate members of the gang.



The alpha displays will alternate between the path names and the status of the path within the gang as follows:

MST for an overall master, **SLV** for a slave, **sub X** for a submaster of level X relative to the overall master, **xMST** for masters of other gangs (including PreDubs), **n/a** for paths that can not be added to the gang.

➤ Press the PATH access keys on the paths to be controlled as slaves by that master.

➤ When the gang is complete, press the GANG key again on the master path.

The integral LED will cease to be illuminated and the console will return to normal operation.

✍ *Gang slaves can also be selected from the Lower Routing Matrix. When this is done, paths on other partitions can be selected as slaves.*

Gang Member LEDs

When the master GANG key is released the LEDs on the gang members' GANG keys will remain illuminated as follows:

Master	Red
Slave	Green
Sub-Master	Yellow

To interrogate a gang structure

➤ Press and hold the GANG key of any member of the gang.

The path LEDs and alphas will then display the gang structure as above.

AFU

If a gang master or sub-master is placed on the AFU (Assignable Facilities Unit) then slaves may be added and subtracted from it.

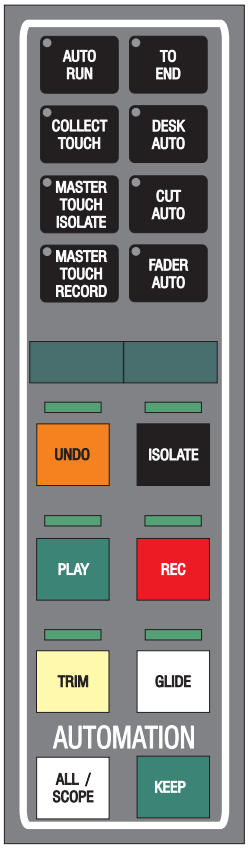
To add or subtract slaves to a Master on the AFU

➤ Hold down the GANG key on the first strip in the predub zone.

➤ Press the keys on the Lower Routing Panel for paths required to be slaves.

The key LEDs illuminate RED for a MASTER, YELLOW for a SUBMASTER, STEADY GREEN for a SLAVE and FLASHING GREEN for an uncommitted path.

To save the Gang Structure



➤ Press and hold the ALL/SCOPE key.

➤ Press the KEEP key.

➤ Release the ALL/SCOPE key.

The relative values of a master and its slaves are established as a new mix.

Only the movements of a master or submaster are recorded to the mix path unless an individual slave is forced into write when its new relative value will also be saved with the mix.

Gang CUT and SOLO

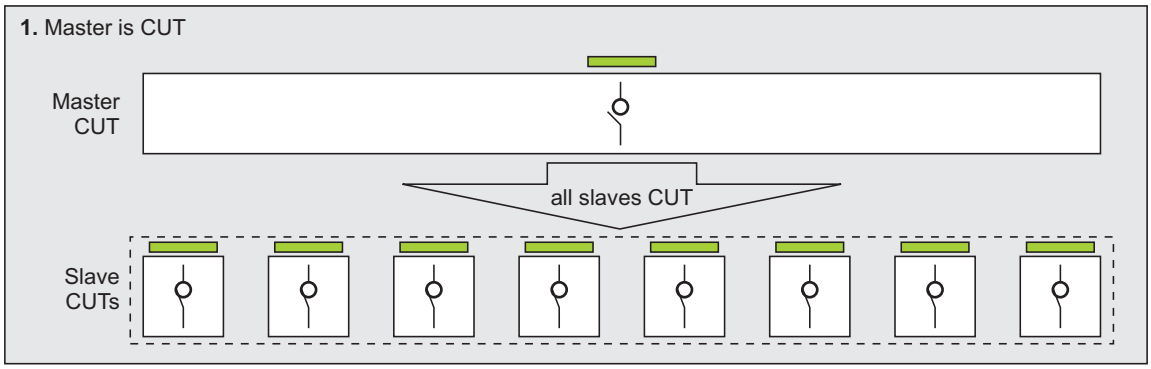
A CUT or SOLO on a Gang Master (or Sub-Master) will CUT or SOLO all the paths in the Gang hierarchy.

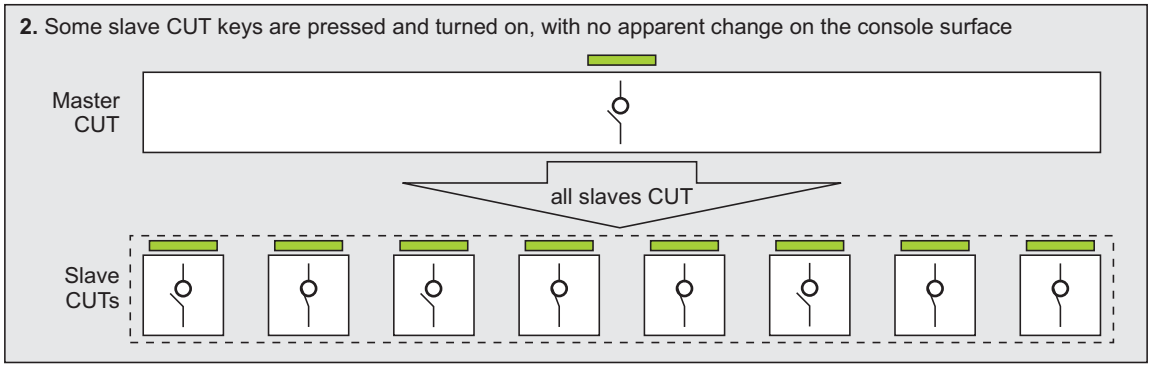
While a Master CUT or SOLO is on, the individual CUT or SOLO on a Slave can be switched on or off, but will not override the CUT or SOLO imposed by the Master.

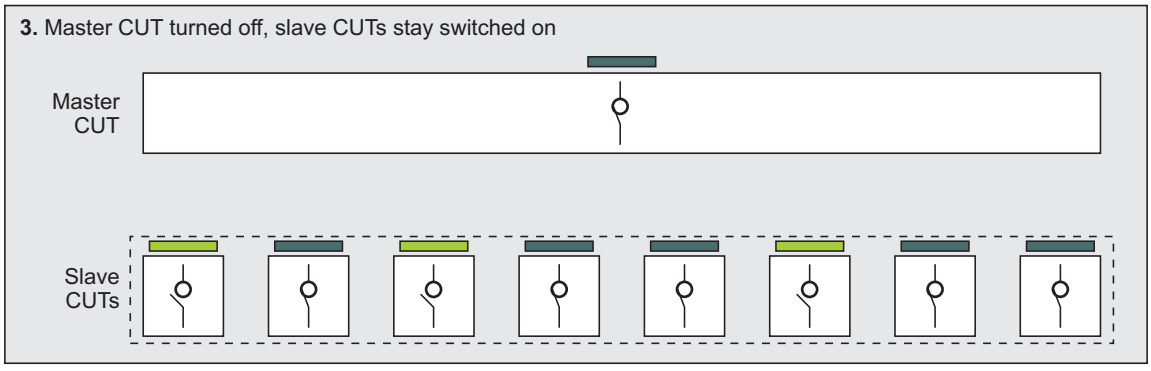
The individual CUT or SOLO on a Slave only takes effect when the CUT or SOLO for the Master is off.

An individual CUT or SOLO on a Slave will remain on, even when CUT or SOLO on the Master is turned off. This is illustrated below.

For example, if a Master is CUT then the CUT keys for the Slaves can be pressed with no apparent effect. However, the status of CUT keys for the Slaves is registered, and when the CUT for the Master is turned off there could still be Slaves that are CUT.







LINKING

Paths can be Linked together so that when a control is changed on any path in the Link then the same control on all the other paths also changes. Offsets are retained for continuous controls (faders, EQ frequency, etc.).

Gangs and Links

If a fader is already part of a Gang then it can not be added to a Link. This does not affect any other controls in the Link or the Link Template on other paths.

✍ *PreDub Masters can not be included in a Link.*

Links and Automation

Controls in a Link will have the same Automation Modes (i.e. all faders will have the same Automation Mode, all CUT keys will have the same Automation Mode, etc.). This means that the Automation Modes can be changed from any member of the Link (e.g. all EQ Band 1 frequency controls in the Link can be Isolated in one operation).

The Automation Modes remain the same even when controls are Suspended from the Link. This is because Suspending the control from the Link allows its setting to be changed independently, but the Automation Mode will still remain in force.

If a different Automation Mode is required then the requisite path must be removed from the Link.

If a path is added to a Link then its controls will be forced into the same Automation Modes as the same controls in the Link (e.g. if faders are in Lock Record then the fader in the path added to the Link will have its Automation Mode changed to Lock Record).

Configuring Links

To link paths together

➤ Press the LINK key on one of the paths that is to be part of the Link.



The integral LED will flash red.

The long alpha in the lower matrix will display 'Select Link Paths' and the path type that the LINK key was pressed on.

The LED in the number key on the lower matrix that corresponds to the selected path will flash red.

The LEDs in number keys of paths available to the Link will illuminate green.

Link Template

By default, all controls except Stem Routing are included in a Link. This can be changed. When the first item is selected for the Link Template, everything else is excluded. Items are then added to the Link Template.

To select the first control in a Link Template

➤ Press the ROUTE MODE, FADER MODE or CUT MODE key.

or

➤ Press the selection key for the required processing element twice (if it is already active, just press it once).

This is used to select a whole processing element for the Link Template.

or

➤ Press the selection key for the required processing element, then press the Logicator MODE key for the required parameter.

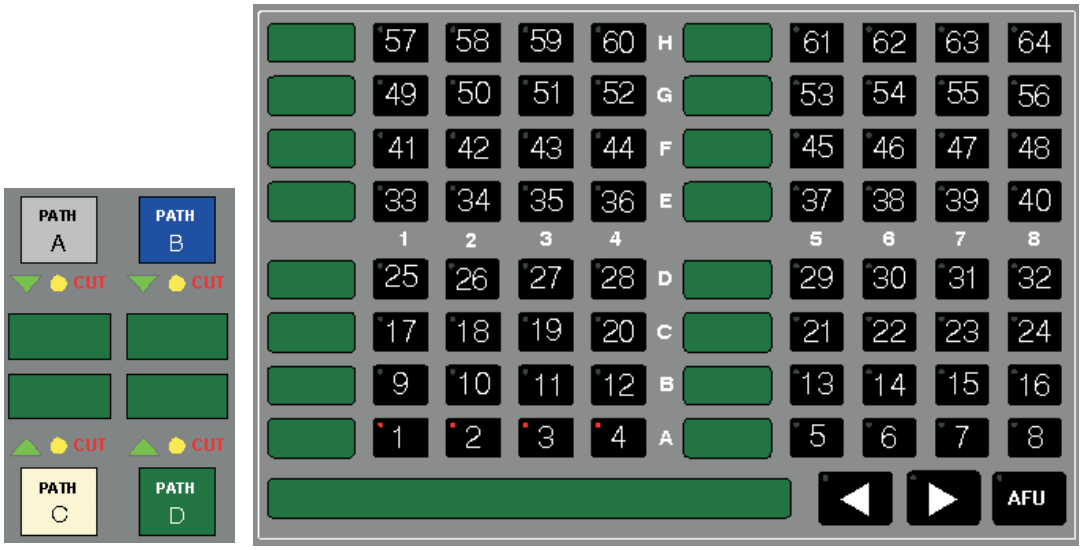
This is used to select an individual parameter for the Link Template.

The integral LED in the MODE key(s) for the selected item will illuminate orange.

➤ Use the same actions to add further items to the Link Template.

To select the other Link members

➤ Press the PATH Access keys or number keys on the lower matrix for paths that are to be in the Link.



The LEDs in the number keys of selected paths will flash orange.

To end link creation

➤ Press the LINK key that is flashing red.

The console will revert to its previous state.

To Delete a Link

➤ Press the LINK key for one of the LINK members.

The integral LED will flash red.

The LED in the number key on the lower matrix that corresponds to the selected path will flash red.

The LEDs in the number keys of other paths in the Link will flash orange.

➤ Press the number keys with orange flashing LEDs.

The LEDs will turn green.

When all LEDs are green (except the red flashing one) the Link is deleted.

Suspending Links

Links and parts of Links can be suspended to temporarily turn off the Link for the selected controls. This allows offsets to be changed or the rest of a Link to be changed without affecting the selected path or controls.

To Suspend the entire Link

➤ Press and hold the ALL key on one of the Link member paths.

➤ Press the SUSPEND key on the same path.

➤ Release the ALL key.

The LEDs in the SUSPEND keys for the Link members will illuminate orange.

➤ Repeat the procedure to restore the Link.

To Suspend a Path from a Link

➤ Press and hold the SUSPEND key on the required path.

➤ Press the PATH Access key for the path.

➤ Release the SUSPEND key.

The LED in the SUSPEND key will illuminate orange.

➤ Repeat the procedure to restore the path to the Link.

To Suspend individual controls from a Link

➤ Press and hold the SUSPEND key on the required path.

➤ Press the MODE keys for the required controls.

✍ *The processing selection keys can be used while SUSPEND is held down to select which processing element is displayed to provide access to the MODE keys for individual parameters.*

✍ *Pressing a MODE key for a control that is not in the Link will have no effect.*

The LEDs in the selected MODE keys will flash orange.

➤ Release the SUSPEND key.

The LED in the SUSPEND key will illuminate orange.

➤ Repeat the procedure to restore controls to the Link.

It is also possible to use SUSPEND and the PATH Access key to toggle all of a path into Suspend and then out again to restore controls that have been individually Suspended.

SPLIT CONSOLE OPERATION

A DFC Gemini that has more than one Master Section (Master and Surround Quadstrip pair) will operate as a Split Console. A console with one Master Section cannot operate as a Split Console.

In Split Console, the surface is divided into a number of partitions, equal to the number of Master Sections (Master Quadstrip and Surround Quadstrip) the console has. This will be two or three, depending on the installed system. The Partition Designer page of Preferences in Encore can be used to see where the split points are.

The number of channel strips and the location of the predub zones is determined by the Partition Designer in Preferences.

Master Layer Selection

The layer selection keys in the Main Paths section only affect the partition they are in.

Console Setup Function

The SETUP key activates Turbo Allocation, Path Placement and Path Process Switching (PPS).

Turbo Allocation is a console-wide process.

Path Placement is local to each partition. However, a path can be removed from the surface in one partition and then put back on the surface in a different partition.

PPS is local to each partition.

PreDub Zones

Each console partition will have its own predub zone which will be used for the predubs assigned to channel strips in that partition and the AFU Function when the AFU key in the partition's Master Quadstrip is used.

Automation

Making a Mix/Pass is a single operation across the console but the Master Automation Controls operate independently over each partition.

Routing

The Stems are shared across the console, so any input path can be routed to any Tracks (busses) or Groups which are formed into Stems.

Surround Monitoring and PEC/Direct Panels

The resources for surround monitoring are shared.

If there is more than one Surround Monitoring Panel then they will operate in tandem. Only the Meter controls will operate independently on each partition.

If there is more than one PEC/Direct Panel then changes made on one panel will happen on the other(s), but different Stems may be selected on each panel.

Joysticks

The Joystick Modules can only select and call paths which are assigned to the partition they are in or paths which are not assigned to the console surface.

Control Room Level Controls

The rotary controls (pots) for monitoring level control on the Control Room section are disabled on the second and third partitions.

Meters

The Partition Designer page of Preferences in Encore is used to set the number of meters assigned to each partition.

AUTOMATION

Introduction to DFC Gemini Automation

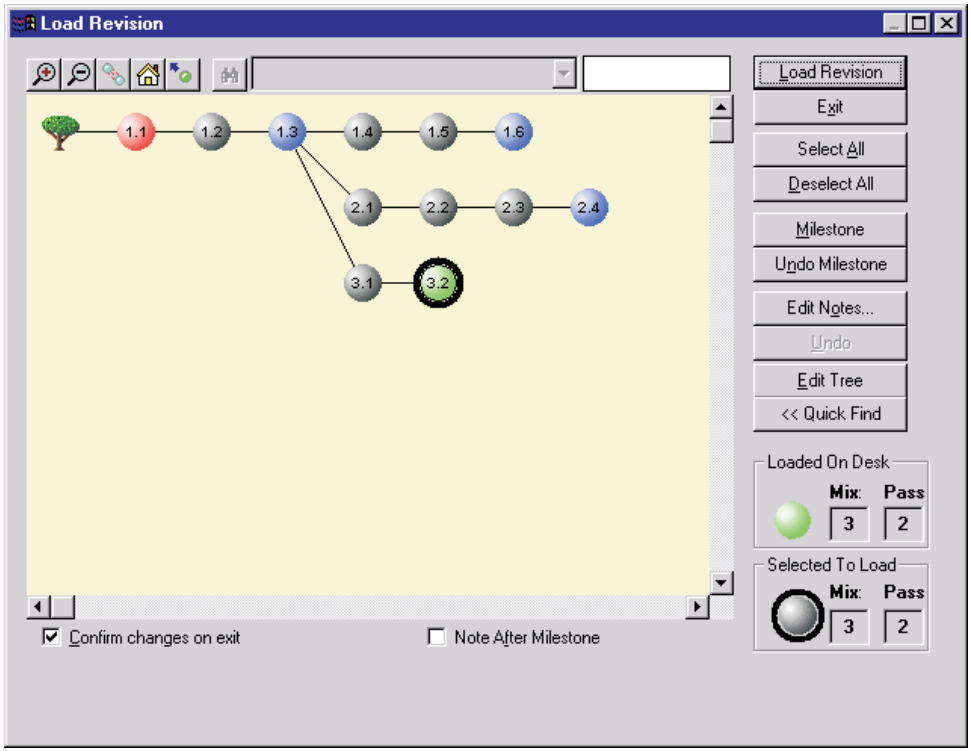
This introduction provides an overview of DFC Gemini automation for users who may have had limited experience with automation systems in general.

The automation system on the DFC Gemini uses Mix/Passes to store timecoded control changes as they are made on the console surface.

A control change is recorded as an Automation Event and is initially stored in a Record Pass. A control change is recorded when a suitable Automation Record Mode is selected for a control, the system is in play and the control is adjusted. When the system is taken out of play, the Record Pass is complete and can be saved (kept) as a Mix/Pass in the current Mix/Pass Tree.

Mix/Passes are organised in a Mix/Pass Tree. The Mix/Pass Tree stores the structure of dependence between Mix/Passes - this means that it shows the order in which Mix/Passes were created and the lines of revision used to create each Mix/Pass.

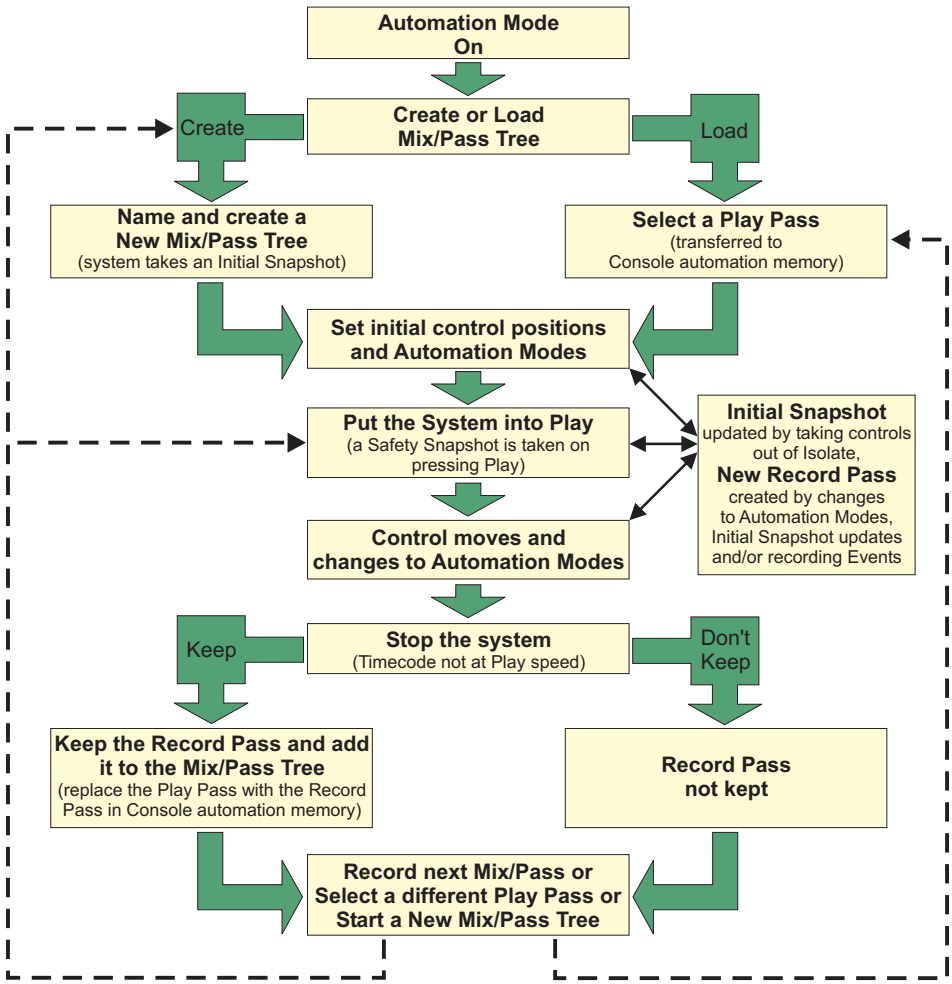
The Mix/Pass Tree is displayed graphically so that Mix/Pass dependencies can be clearly seen.



A new Mix/Pass starts to record when timecode is running at play speed (i.e. the system is in play) and a recordable control change is made. The new Mix/Pass is called the Record Pass. The Mix/Pass that is playing back is called the Play Pass.

The Record Pass is a revision of the Play Pass. If the Record Pass is kept to the Mix/Pass Tree then it will become the Play Pass. The dependence between these two Mix/Passes can be seen by displaying the Mix/Pass Tree.

The following diagram shows a simplified representation of how the automation system is used for creating Mix/Passes:



Offline Automation

Mix/Passes are also created when using Encore's offline automation functions (Copy Path Data, Mix Conforming, Fader Moves List, etc.). When an offline automation function is used to make changes, a new Mix/Pass is created so that the existing Mix/Pass (i.e. source Mix/Pass) is preserved.

Mix/Pass Trees and individual Mix/Passes can also be transferred to a separate computer that has Offline Encore installed on it. This allows offline automation functions to be performed without interrupting work on the DFC Gemini.

Switching Automation On and Off

Switching automation on and off is controlled by Automation Mode in Encore and the AUTO RUN key on the console surface.

The AUTO RUN key can start the automation system overall, but it can only suspend automation on the console surface.

Switch on the Automation System

To start the automation system

➤ Press the AUTO RUN key.

The integral LED will illuminate.

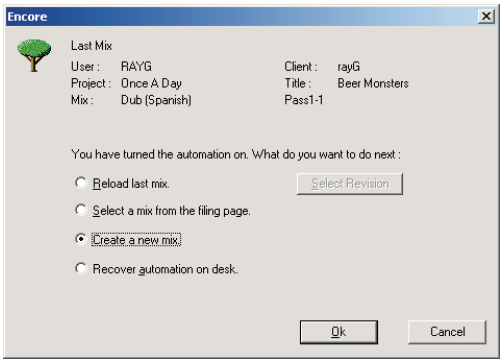
or

➤ Click Automation Mode in the drop down System Menu in the main Encore screen.

or

➤ Click the Automate icon in the main Encore screen.

In all cases, a dialogue box will be displayed to select how to start up the Automation System.



➤ Click the radio button for the required option (each option is described on the following pages).

➤ Click OK.

Reload last Mix

This reloads the most recently loaded Mix/Pass, as displayed at the top of the screen.

The Restore Modes dialogue box will be displayed.



➤ Click the required check boxes.

Safety Snapshots loads the pre-automation control settings that were stored with the Mix.

Modes will reset the Automation Modes of controls to those that were kept in the Mix being loaded.

Gangs restores the Gang structure that is stored in the Mix.

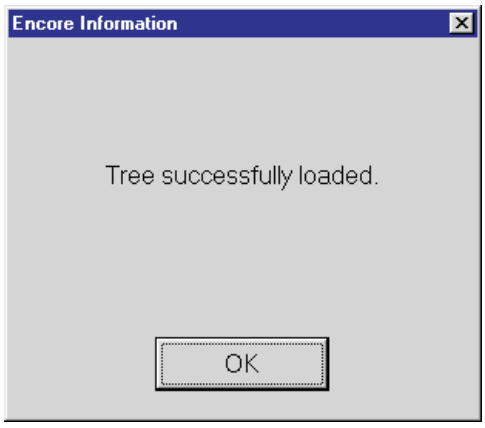
Links restores the control link structures that are stored in the Mix.

➤ Select the required option for labels. Options are Load, Keep, Clear & Merge.

The settings for this screen are saved upon each entry and exit.

➤ Click OK.

The mix and Mix/Pass Tree will be loaded.



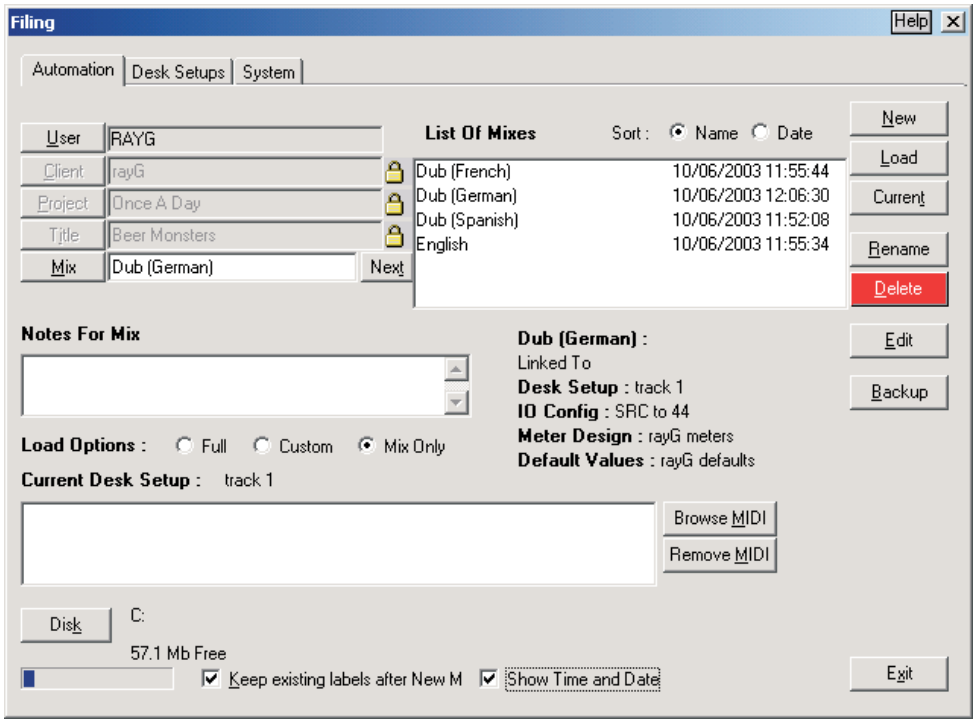
When this is complete, a dialogue box will be displayed.

➤ Click OK or wait for the box to close automatically after the Self-Closing Dialogues timeout.

Select a Mix from the Filing Page

This is the same as running the Filing utility and loading a Mix/Pass Tree.

The Automation page of Filing will be displayed.



Select the Mix/Pass Tree

➤ Click the Client button.

The list box for automation data will be outlined in red and a List Of Clients will be shown.

➤ Double click the required Client name, or type the required Client name in the box next to the Client button and press ENTER.

The Client will be locked. The list box for automation data will display a List Of Projects for that Client.

➤ Double click the required Project name, or type the required Project name in the box next to the Project button and press ENTER.

The Project will be locked. The list box for automation data will display a List Of Titles for that Project.

➤ Double click the required Title name, or type the required Title name in the box next to the Title button and press ENTER.

The Title will be locked. The list box for automation data will display a List Of Mixes for that Title.

➤ Click the required Mix or type in the Mix name in the box next to the Mix button.

Using Auto-Fill
If a Client, Project, Title or Mix/Pass Tree name is typed the auto-fill system will attempt to match the letters typed in to existing names. If one is found then the box will automatically display the remainder of the name. This can either be accepted by pressing tab to jump to the next filing level (e.g. from Project to Title), or continue typing until the correct name is selected. If a name that does not exist is typed in then it will be created.

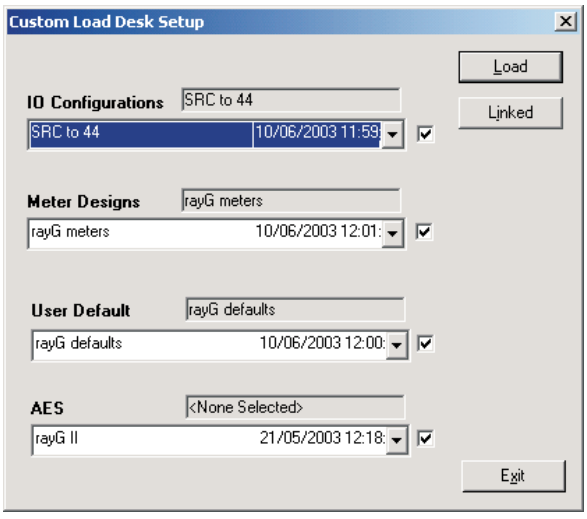
The linked Desk Setup will be displayed next to the Notes box. If the Desk Setup is linked to any configuration files then these will be shown as well.

Change the Configuration Files Loaded with a Mix Tree

To make a custom selection of Configuration Files

➤ Click the Custom radio button.

When the Load button is clicked to load the Mix Tree, the Custom Load Mix dialogue box will be displayed.



The configuration files selected by default are the files that are already loaded.

➤ Click the check boxes at the right hand side of each configuration file type to load or not load a particular file.

➤ Click the selection box for the Desk Setup, IO Configuration, Meter Design or User Defaults file.

➤ Click the drop-down arrow next to the box.

A list of available files will be shown.

➤ Click the required file.

➤ When the custom selection is complete, click the Load button.

The loading process will continue as usual, except that the custom file selection will be used.

If the Exit button is clicked, the load procedure will be cancelled.

To load only the Mix Tree

➤ Click the Mix Only radio button.

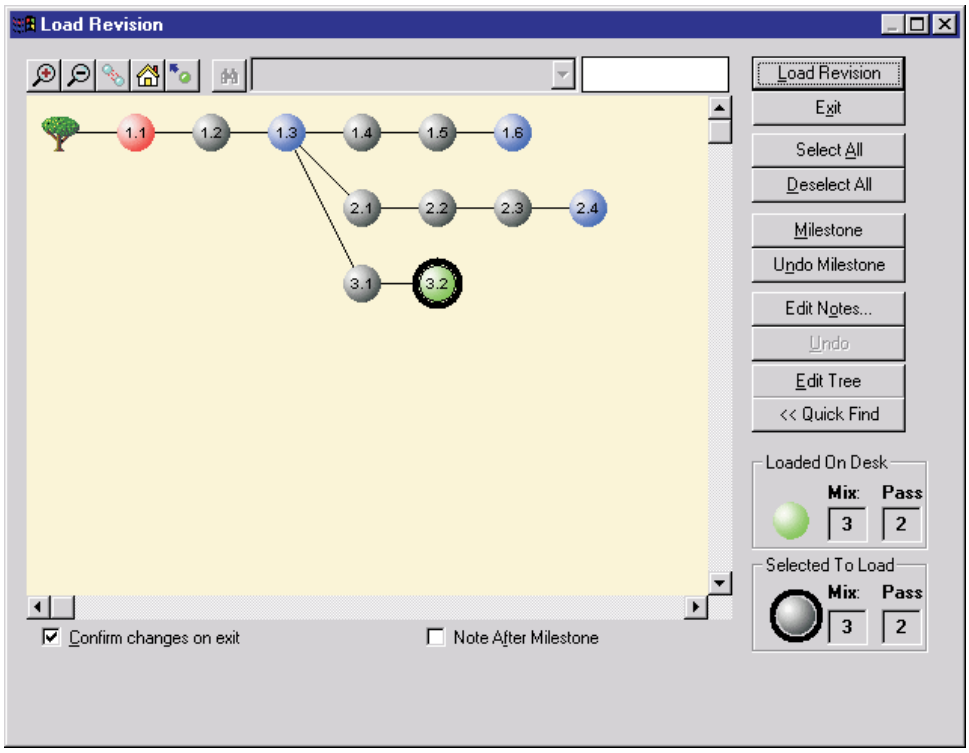
When the Mix Tree is loaded, no configuration files will be loaded (i.e. the currently loaded configuration files will be used).

Load the Mix/Pass Tree

When all the information is correct

➤ Click the Load button.

The Mix/Pass Tree will be displayed.



➤ Click the required Mix/Pass number.

A black ring will be shown around the selected Mix/Pass.

➤ Click the Load Revision button.

The Restoring Modes dialogue box will be displayed.



➤ Click the check boxes as required.

Safety Snapshots loads the pre-automation control settings that were stored with the Mix.

Modes will reset the Automation Modes of controls to those that were kept in the Mix being loaded.

Gangs restores the Gang structure that is stored in the Mix.

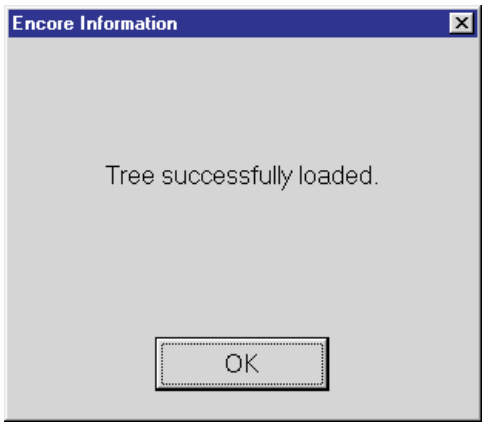
Links restores the control link structures that are stored in the Mix.

➤ Select the required option, Load, Keep, Clear or Merge.

➤ Click on OK.

The Mix will load and progress information will be shown on the screen.

When the Mix is loaded a dialogue box will be displayed to indicate success.

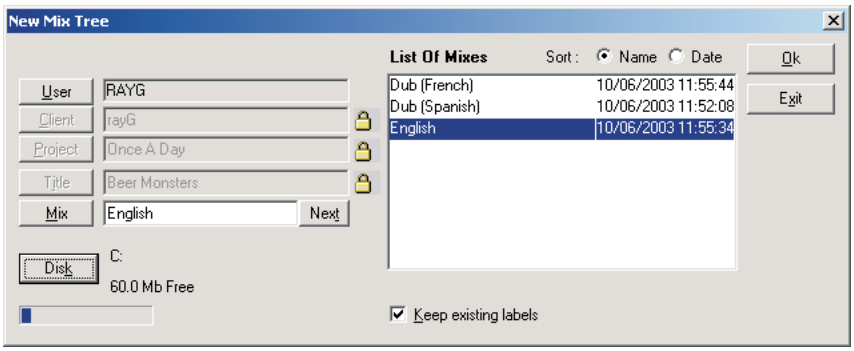


➤ Click OK or wait for the box to close automatically after the Self-Closing Dialogues timeout.

Create a New Mix

This is the same as running New Mix Tree from the Automation Menu.

The New Mix Tree dialogue box will be displayed.



If the Client, Project and Title are locked then the next number for Mix Trees will be selected automatically.

➤ Otherwise, select the Client, Project and Title in the same way as in the Filing utility, or create a new Client, Project or Title as required.

The Next button can then be used to automatically select the next Mix Tree number.

➤ If required, edit the Mix Tree name.

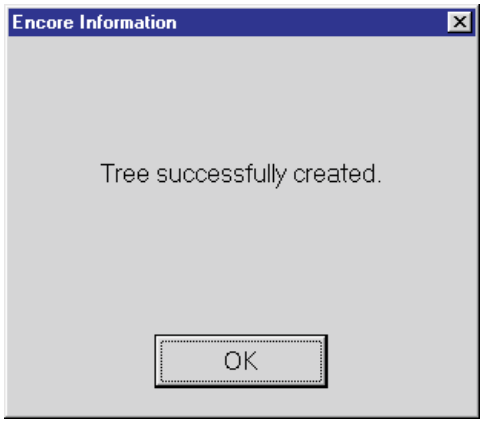
➤ When the details are correct, click the OK button.

If *Keep Existing Labels* is ticked, the current labels will be carried forward to the New Mix, otherwise they will be cleared.

The new Mix Tree will be created. A progress bar will be displayed while the Initial Snapshot is taken and the new files are created.

The Initial Snapshot and the automation modes of controls are stored as Mix/Pass 1.1.

When the process is complete a confirmation dialogue box will be displayed.



➤ Click OK.

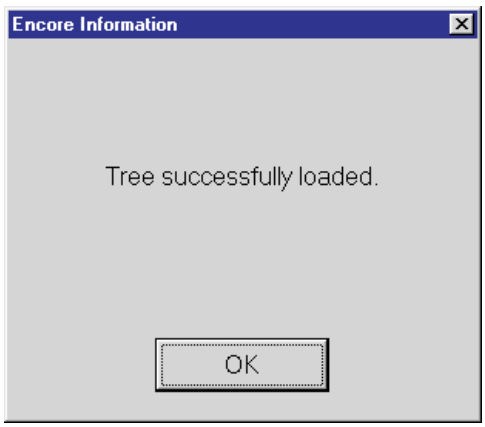
Append current automation to last Mix

When a Mix/Pass is recorded, the automation data is initially stored in the DFC Gemini's automation buffer. When timecode stops then this is saved to the current Mix/Pass Tree automatically if the Keep Mode is set to Auto.

If the Keep Mode is set to Manual then it is possible that an un-saved automation pass is stored in the automation buffer. This option is used to save that pass as a new Mix/Pass that is added to the most recently loaded Mix/Pass Tree. The Mix/Pass is added to the tree at the last loaded Mix/Pass.

The mix and Mix/Pass Tree will be loaded.

When this is complete, a dialogue box will be displayed.



➤ Click OK.

To suspend the automation system on the console surface

➤ Press the AUTO RUN key while timecode is stopped.

The integral LED will cease to be illuminated.

Timecode will not run when machines are in play, fast forward, etc., although the MCS panel will still have control of attached machines.

The automation system is still active in Encore, so any automation functions in Encore that do not directly use the console can be executed.

Selecting an offline automation function in Encore (e.g. Mix Conforming, Fader Moves List) will also automatically switch off the AUTO RUN key. The AUTO RUN key will be switched on again when the offline function is closed.

Controls that can be Automated

All controls that can form part of a signal path can be automated (e.g. fader, cut, aux contribution levels, etc.). In addition to this, the Stem Routing switches (for routing Channels and Tracks to Film Stems) can be automated.

Controls that are not automated include all the monitoring controls, transport controls and other miscellaneous functions. This includes Solo, as this is part of the monitoring system.

Each control that can be automated has an associated MODE key. The MODE key shows the current automation status and can also show if a control is in Automation Scope.

All controls that are in Automation Scope can have their automation modes changed by the Master Automation Controls and the Fader Strip Automation Controls.

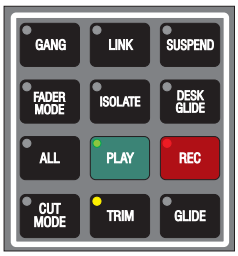
MODE Keys

Each control on a fader strip that can be automated has a MODE key. This is so that each control can, if required, have its automation mode set independently. The MODE keys are:

- ❑ FADER MODE Key
- ❑ CUT MODE Key
- ❑ Logicator MODE Key
- ❑ ON MODE Key
- ❑ ROUTE MODE Key

The MODE keys are also used by other functions, such as Automation Scope and Link Suspend.

FADER MODE Key



The FADER MODE key is used to set and display the automation mode of the fader. The fader can use the full range of automation modes. The automation keys on the fader strip show the automation status of the fader unless another MODE key is held down somewhere on the fader strip.

When the FADER MODE key is held down, the automation keys on the fader strip can be used to change the automation mode of the fader without affecting any other controls.

Automation Status Indication

The LED in the FADER MODE key displays the automation status of the fader:

Off indicates the fader is in Isolate
Green indicates the fader is in Play
Red steady indicates the fader is armed (e.g. for Lock Record)
Red flashing indicates the fader is recording automation
Orange steady indicates the fader is armed for Trim
Orange flashing indicates the fader is recording Trim moves

CUT MODE Key



The CUT MODE key is used to set and display the automation mode of the CUT key. The CUT key can be set to Isolate, Play, Lock Record and Touch Record. The CUT key can also be set to AutoGlide when the CUT MODE key is held down, but it will behave in the same way as for Touch Record.

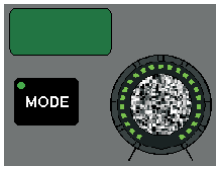
When the CUT MODE key is held down, the LEDs in the automation keys on the fader strip will illuminate to show the automation mode of the CUT key, and the automation keys can be used to change the automation mode of the CUT key without affecting any other controls.

Automation Status Indication

The LED in the CUT MODE key displays the automation status of the CUT key:

Off indicates the CUT key is in Isolate
Green indicates the CUT key is in Play
Red steady indicates the CUT key is armed (e.g. for Lock Record)
Red flashing indicates the CUT key is recording automation

Logicator MODE Key



Each Logicator MODE key is used to set and display the automation mode of the function currently assigned to the Logicator. When a different function is selected (e.g. switching from EQ to COMP) then the MODE key will indicate and control automation for the newly selected function. The previously selected function will retain its automation status, although this will not be visible until the function is selected again.

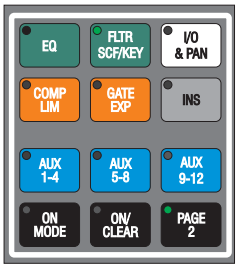
When a Logicator MODE key is held down, the LEDs in the automation keys on the fader strip will illuminate to show the automation mode of the current function on the Logicator (e.g. Frequency for EQ Band 1), and the automation keys can be used to change the automation mode of the Logicator function without affecting any other controls.

Automation Status Indication

The LED in a Logicator MODE key displays the automation status of the current Logicator function:

Off indicates the Logicator is in Isolate
Green indicates the Logicator is in Play
Red steady indicates the Logicator is armed (e.g. for Lock Record)
Red flashing indicates the Logicator is recording automation

ON MODE Key



The ON MODE key is used to set and display the automation mode of the ON/OFF switch for the function currently selected to the Logicators (e.g. when EQ is selected, ON MODE shows the automation mode of the EQ ON/OFF switch).

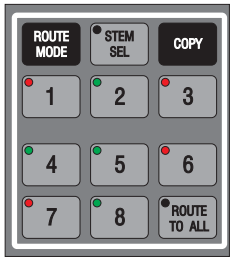
When the ON MODE key is held down, the LEDs in the automation keys on the fader strip will illuminate to show the automation mode of the ON/OFF switch for the current function selected to the Logicators (e.g. the EQ ON/OFF switch), and the automation keys can be used to change the automation mode of the ON/OFF switch without affecting any other controls.

Automation Status Indication

The LED in the ON MODE key displays the automation status of the ON/OFF switch for the current function selected to the Logicators:

Off indicates the ON/OFF switch is in Isolate
Green indicates the ON/OFF switch is in Play
Red steady indicates the ON/OFF switch is armed (e.g. for Lock Record)
Red flashing indicates the ON/OFF switch is recording automation

ROUTE MODE Key



The ROUTE MODE key is used to set and display the automation mode of the adjacent Stem Routing keys. This is the only part of the routing system that is automated. When automation of the Stem Routing keys is recorded, each switch is recorded individually.

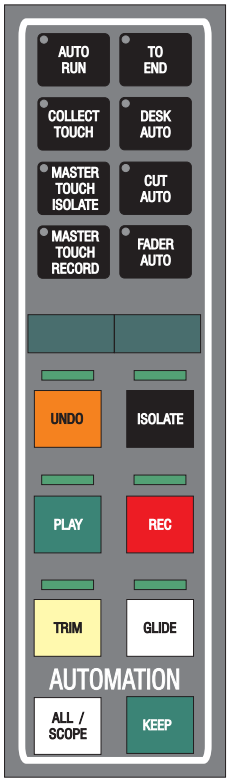
When the ROUTE MODE key is held down, the LEDs in the automation keys on the fader strip will illuminate to show the automation mode of the Stem Routing keys, and the automation keys can be used to change the automation mode of the Stem Routing keys without affecting any other controls.

Automation Status Indication

The LED in the ROUTE MODE key displays the automation status of the Stem Routing keys:

Off indicates the Stem Routing keys are in Isolate
Green indicates the Stem Routing keys are in Play
Red steady indicates the Stem Routing keys are armed (e.g. for Lock Record)
Red flashing indicates the Stem Routing keys are recording automation

Master Automation Controls



The Master Automation Controls are used for global control of automation.

The AUTO RUN key is used to switch the automation system online and offline. It operates in conjunction with Automation Mode control in Encore. Automation must be on-line for Mix/Passes to be made. The automation system may not be taken offline when the system is in play.

The ISOLATE, PLAY, REC, TRIM and GLIDE keys change the automation mode of controls across the whole of the console (i.e. globally), including controls for paths which are not on the surface.

The set of controls which is changed by the global mode keys can be limited by taking controls out of Scope or by switching off the DESK AUTO, CUT AUTO and FADER AUTO keys.

The ALL/SCOPE key can be used to override Scope but not the effect of the DESK AUTO, CUT AUTO and FADER AUTO keys.

The KEEP key is used to make a manual keep of the current Record Pass to the Mix/Pass tree, and also saves the any changes to the current Desk Setup.

The COLLECT TOUCH, MASTER TOUCH ISOLATE and MASTER TOUCH RECORD keys are used for Collect Touch.

Fader Strip Automation Controls

The Automation Controls on each fader strip fall into two groups:

- MODE keys for the controls that can be automated
- Automation keys for selecting automation modes

MODE Keys

Each control on a fader strip that can be automated has a MODE key. This is so that each control can, if required, have its automation mode set independently. The MODE keys are:

- FADER MODE Key
- CUT MODE Key
- Logicator MODE Key
- ON MODE Key
- ROUTE MODE Key

They are described earlier in this chapter (page 19:10).

Automation Keys

These are the ISOLATE, PLAY, REC, GLIDE and TRIM keys used to select automation modes, and the ALL key used for automation scope and overriding automation scope.

Automation Modes and Scope are described on the following pages.

Overview of Automation Modes

The automation modes determine whether a control will:

- Have moves recorded
- Have moves played back
- Use a combination of record and play back
- Be ignored by the automation system

Automation modes are controlled locally on the fader strips and globally by the master automation controls.

The basic automation modes are:

Isolate The control will not have automation recorded or played back.

Lock Record The control will replay previously recorded moves until it is touched or used. The control will then Record until the mode is changed manually, glide is initiated or timecode stops.

Play The control will only replay previously recorded moves.

Touch Record The control will replay previously recorded moves until it is touched or used. The control will then Record until it is released, at which point it will snap back to the Play Pass position and resume replay.

Auto Glide The control will replay previously recorded moves until it is touched or used. The control will then Record until it is released, at which point it will Glide back to the Play Pass position and resume replay. The control uses the Auto Glide Time to match back to the Play Pass.

Faders have two additional modes which are:

Trim The fader moves to the centre of its travel (centre trim position) and plays back by staying there. When it is touched it starts to record moves as offsets from the Play Pass. The fader stays in record the mode is changed manually, glide is initiated or timecode stops.

Auto Trim This is the same as Trim, except that when it is released the fader matches back to the Play Pass position using the Auto Glide Time.

The term arm is used to describe the action of selecting a record mode for a control, so that it is ready to start recording when it is touched.

Automation Scope

Controls that are within Automation Scope can have their automation modes changed in groups, either globally with the Master Automation Controls or locally with the Fader Strip Automation Controls.

This is described in detail in the following section on Setting Automation Modes.

The Master ALL/SCOPE and Fader Strip ALL keys can be used as an override to also change modes of controls which are out of Scope.

Scope can be suspended using the FADER AUTO, CUT AUTO and DESK AUTO keys.

The ISOLATE, PLAY, REC, TRIM and GLIDE keys on a channel strip change the automation mode of the controls for the path on the surface.

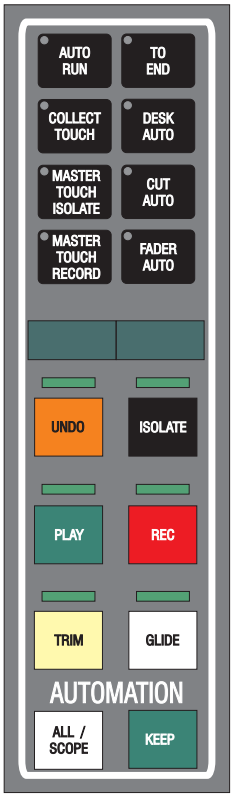
The Master ISOLATE, PLAY, REC, TRIM and GLIDE keys change the automation mode of controls across the whole of the console, including controls for paths which are not on the surface.

Controls are automatically put in Scope the first time that their automation mode is changed from Isolate to something else.

If a Mix/Pass has not yet been made, then putting a control back into Isolate will take it out of Scope. Once a Mix/Pass has been started then all controls which are in Scope will remain so unless specifically taken out of Scope.

To interrogate which controls are in Scope

➤ Press and hold the ALL/SCOPE key.



The LEDs in the MODE keys for controls on the surface which are in Scope will flash orange.

or

➤ Press and hold the ALL key on a channel strip.



The LEDs in the MODE keys for controls in that strip which are in Scope will flash orange.

Putting Controls in and out of Automation Scope

To remove an individual control from Scope

➤ Press and hold the ALL/SCOPE key or the ALL key on the required channel strip.

➤ Press the MODE key for the required control.

The control will be taken out of Scope and the LED in the MODE key will cease to be illuminated.

✍ *Each press of a MODE key will toggle the control in and out of Scope.*

When the ALL/SCOPE or ALL key is released, the MODE keys will resume indication of automation status.

To remove an entire path from Scope

➤ Press the required PATH access key to bring the path to the surface.

➤ Press and hold the ALL/SCOPE key.

➤ Press the ALL key on the channel strip the path is assigned to.

All the controls for the path will be taken out of Scope and all the MODE keys will cease to be illuminated.

✍ *Each press of the ALL key will toggle the controls in the path in and out of Scope.*

When the ALL/SCOPE key is released, the MODE keys will resume indication of automation status.

To remove all of one type of control from Scope

➤ Press and hold the MODE key for the required control.

➤ Press the ALL/SCOPE key.

✍ *Each press of the ALL/SCOPE key will toggle the controls in and out of Scope.*

To remove all controls on the console from Scope

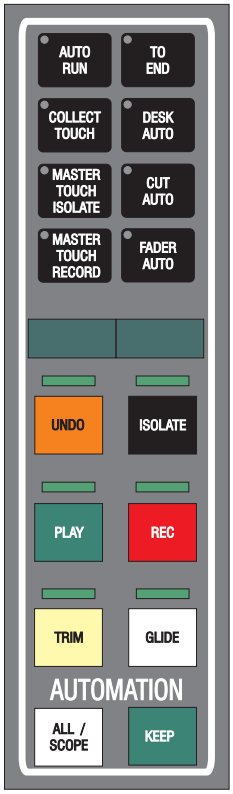
➤ Press and hold the ALL/SCOPE key.

➤ Press the UNDO key.

✍ *There is no method of putting all controls on the console back in Scope.*

Suspending Fader, Cut and Desk Scope

The DESK AUTO, CUT AUTO or FADER AUTO keys are used to suspend controls from Automation Scope.



For instance, if the FADER AUTO key is used to suspend Faders from Automation Scope then the Master Automation Controls and the Fader Strip Automation Controls can be used to change Automation Modes of other controls without affecting the faders.

To toggle Faders in and out of Automation Scope

➤ Press the FADER AUTO key.

Faders in Scope are suspended from Scope when the integral LED in the FADER AUTO key is not illuminated.

To toggle CUT keys in and out of Automation Scope

➤ Press the CUT AUTO key.

CUT keys in Scope are suspended from Scope when the integral LED in the CUT AUTO key is not illuminated.

To toggle all other controls in paths in and out of Automation Scope

➤ Press the DESK AUTO key.

Desk Controls in Scope are suspended from Scope when the integral LED in the DESK AUTO key is not illuminated.

Mix/Pass Trees

Mix/Pass Trees

Mix/Passes are organised in a Mix/Pass Tree. The Mix/Pass Tree stores the structure of dependence between Mix/Passes - this means that it shows the order in which Mix/Passes were created and the lines of revision used to create each Mix/Pass. The Mix/Pass Tree is displayed graphically so that Mix/Pass dependencies are shown clearly.

A Mix/Pass Tree always starts with Mix/Pass 1.1.

A Mix/Pass Tree is displayed graphically for selecting a Mix/Pass revision as the Play Pass or editing the Tree.

Mix/Passes

Each Mix/Pass contains:

- An Event List containing an Initial Snapshot (ISS) followed by Automation Events
- Automation Modes and Automation Scope as they were when timecode stopped at the end of the pass
- A Label List
- A Safety Snapshot

Play Pass

The Play Pass is used to play back control moves.

As timecode runs at play speed, the automation system uses the times stored against the Automation Events to determine when the control value in each event should be played back.

Record Pass

A new Record Pass is made when changes are made to the Play Pass. When a Record Pass is kept then it becomes the new Play Pass.

Timecode Considerations for Mix/Passes

The timecode at which an event is recorded is stored in a format that is independent of timecode. However, each event time that is stored will depend on the current frame rate.

This means that the frame rate is significant for a particular Mix/Pass. For instance, a Mix/Pass that is recorded at 25 frames per second (fps) should be played back at 25fps.

This does not prevent a Mix/Pass from being played back at a different frame rate. However, AMS Neve advise against this as it will probably cause frame slippage and may have other unpredictable effects.

Timecode Display

A consequence of the method of storing time values is that the display format can be changed at will (although this would probably not be done in practice). Timecode can be displayed in standard HH:MM:SS:FF format or as Foot-Frames, as long as the same frame rate is used.

Safety Snapshot

A Safety Snapshot is taken when Play is pressed to start timecode running. It is a Snapshot of the whole console (i.e. it is not affected by Automation Scope). The Safety Snapshot is not affected by and does not affect the automation system. However, it is stored with a Mix/Pass (when a Record Pass is kept).

A Safety Snapshot is only used when loading a Mix/Pass revision from the Mix/Pass Tree. It can optionally be loaded or ignored at this point. One way in which this can be used is to have an empty Mix/Pass Tree that has a Safety Snapshot with favourite control settings. This could be loaded so that, for instance, the Safety Snapshot is applied before a New Mix/Pass Tree is created.

Initial Snapshot

The Initial Snapshot (ISS or Initial SS) is at the beginning of the Event List.

The ISS contains the settings of all controls that can be automated when a New Mix/Pass Tree is created. The ISS settings are saved in special Automation Events which all have a Timecode of zero. Only ISS events can have a Timecode of zero. ISS events can not be edited with the Event List functions in Encore.

The ISS is updated when a control is taken out of Isolate for the first time. The ISS takes the control setting either when the system goes into Play (for controls that are taken out of Isolate before Play) or when a control is taken out of Isolate if the system is already in Play.

Updating the ISS creates a Record Pass (when the system goes into Play or if it is already in Play). The new ISS settings are not saved unless the Record Pass is saved.

The primary function of the ISS is to provide an initial setting for any control. This is so that the control has a value to return to, such as when using Glide or when the system comes out of Play.

Automation Events

A dynamic automation event is a record of a change made to a control.

Each event records:

- The path it occurred on
- The control that was changed
- The timecode (resolved at frame level)
- The value of the setting

For instance, if a fader is moved continuously then a change in level will be recorded against every frame of timecode until the fader is released. This can be seen in the Event List as a series of individual events at each frame.

Setting Automation Modes

The Automation Modes are:

- ❑ Isolate
- ❑ Play
- ❑ Lock Record
- ❑ Touch Record
- ❑ AutoGlide
- ❑ Trim and AutoTrim

The following pages describe each Automation Mode and how each is selected and used.

To interrogate the Automation Mode

➤ Press and hold the required Mode key.

The automation function keys will indicate the automation mode (e.g. the LEDs in the PLAY and REC keys being illuminated indicates Touch Record).

When the Mode key is released, the automation function keys will return to indicating the automation mode of the fader.

Automation Modes and the Mix/Pass

The current Automation Modes are part of the Mix/Pass. If no other actions have or would cause a Record Pass to be created then any changes to Automation Modes will create a Record Pass (when the system goes into Play or if it is already in Play).

Changes to Automation Modes are not saved unless the Record Pass is saved.

✍ *A transition from armed to recording (e.g. in Lock Record) does not count as a change to the Automation Mode.*

Record Modes and Stop

When the system comes out of Play (i.e. timecode is no longer running at Play speed, usually because of a Stop command), any controls that are Recording will return to their armed state. No glide rates are used, so the control will snap back in one frame. This will also happen to controls that are part way through a glide (i.e. they will snap back from whatever value they have when the system comes out of Play).

Modifiers to Automation Modes

DFC Gemini has two extra automation function keys that are used to make two specialised modifications to the behaviour of the automation system: AUTO TOUCH and TO END.

- ❑ Auto Touch
- ❑ To End
- ❑ Touch Enable

They are described on the pages following the Automation Mode descriptions.

Isolate

A control in Isolate will not play back or record moves.

If a control in Isolate is moved then the audio will be affected but no automation data will be recorded. This can be useful for testing a move without recording a new Mix/Pass.

To Isolate a control

➤ Press and hold the MODE key for the control.

➤ Press the ISOLATE key on the same fader strip.



➤ Release the MODE key.

The LED in the MODE key will be extinguished to show that the control has no active automation mode.

To Isolate all controls in a path that are in automation scope

➤ Press the ISOLATE key on the required fader strip.

The LEDs in MODE keys for controls in automation scope on the fader strip will be extinguished.

To Isolate all controls in a path

➤ Press and hold the ALL key on the required fader strip.

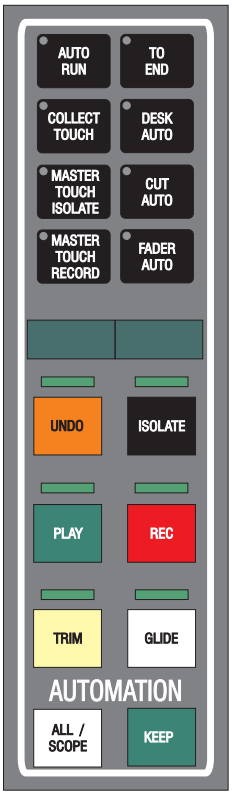
➤ Press the ISOLATE key on the same fader strip.

The LEDs in all MODE keys on the fader strip will be extinguished.

➤ Release the ALL key.

To Isolate all controls in Automation Scope

➤ Press the Master ISOLATE key.



To Isolate all controls

➤ Press and hold the ALL/SCOPE key.

➤ Press the Master ISOLATE key.

➤ Release the ALL/SCOPE key.

Play

A control in Play will replay previously recorded moves.

If a control is moved then the audio will not be affected and no automation data will be recorded. Also, the control will snap back to the Play Pass position as soon as it is released.

The Play Pass position (control value) will be displayed in the appropriate alpha display while the control is touched (e.g. if a fader is touched, the Play Pass values will be displayed in the fader strip alpha display until the fader is released, assuming that Fader Level Indication On Touch is enabled).

To put a control into Play

➤ Press and hold the MODE key for the control.

➤ Press the PLAY key on the required fader strip.



The integral LED in the MODE key will illuminate green.

➤ Release the MODE key.

To put all controls that are in automation scope in a single path into Play

➤ Press the PLAY key on the required fader strip.

The integral LEDs in the MODE keys of controls in automation scope will illuminate green.

To put all controls in a path into Play (overriding scope)

➤ Press and hold the ALL key on the required fader strip.

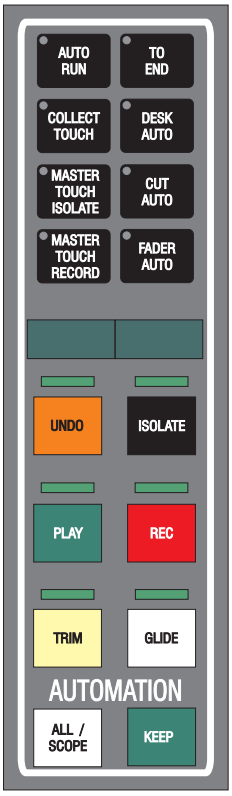
➤ Press the PLAY key on the same fader strip.

The integral LEDs in the MODE keys will illuminate green.

➤ Release the ALL key.

To put all controls in automation scope into Play

➤ Press the Master PLAY key.



To put all controls into Play

➤ Press and hold the ALL/SCOPE key.

➤ Press the Master PLAY key.

➤ Release the ALL/SCOPE key.

✍ *This should not be confused with the system being in Play, which is receiving good timecode at Play speed.*

Lock Record

A control in Lock Record will play back moves until it is touched, at which point it will start to Record.

When a control is released it will stay at the current position until it is moved again, Lock Record is reselected, a different automation mode is selected or the control is glided back to the Play Pass.

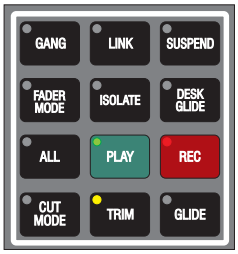
When the system drops out of play (e.g. timecode stops), a control that is recording will snap back to the Play Pass if there are existing moves at the point where the system drops out of play. If there is no Play Pass value, then a control will stay at its current position unless it has previously been To Ended. When the system drops out of play beyond the end of the Play Pass, controls in record that have been To Ended will jump back to the positions they had when TO END was used.

Put Controls into Lock Record

To put a control into Lock Record

➤ Press and hold the MODE key for the control.

➤ Press the REC key on the same fader strip.



The integral LED in the MODE key will illuminate red.

The control is now armed for Lock Record and will play back any moves in the Play Pass.

➤ Release the MODE key.

To put all controls that are in automation scope in a single path into Lock Record

➤ Press the REC key on the required fader strip.

The integral LEDs in the MODE keys of controls in automation scope will illuminate red steady.

To put all controls in a path into Lock Record (overriding scope)

➤ Press and hold the ALL key on the required fader strip.

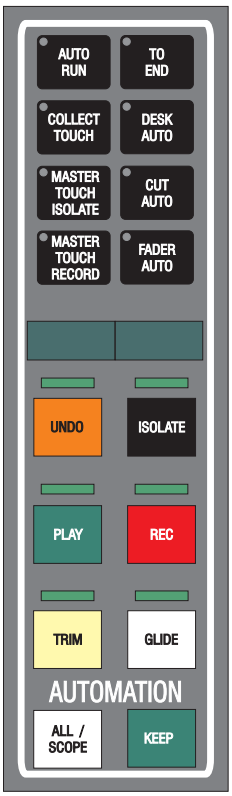
➤ Press the REC key on the same fader strip.

The integral LEDs in the MODE keys will illuminate red steady.

➤ Release the ALL key.

To put all controls in automation scope into Lock Record

➤ Press the Master REC key.



To put all controls into Lock Record

➤ Press and hold the ALL/SCOPE key.

➤ Press the Master REC key.

➤ Release the ALL/SCOPE key.

Recording Automation in Lock Record

To Record control changes

➤ Adjust the control as required.

The LED in the relevant MODE key will flash red when touch is detected.

Any moves in the Play Pass will be overwritten.

When the control is released, it will stay at the same value, the LED in the MODE key will continue to flash red and moves in the Play Pass will continue to be overwritten.

To glide a control back to the Play Pass

➤ Press and hold the MODE key for the control.

➤ Press the GLIDE key.

The control will start matching back to the Play Pass when the GLIDE key is released. For continuous controls (e.g. the fader), the Manual Glide Time is used. Switches (e.g. the CUT key) will return to the play pass in one frame.

➤ Release the MODE key.

When the glide is complete, the LED in the MODE key will stop flashing and return to steady red.

To glide all controls in automation scope in a path back to the Play Pass

➤ Press the GLIDE key on the required fader strip.

The controls will start matching back to the Play Pass when the GLIDE key is released. For continuous controls (e.g. the fader), the Manual Glide Time is used. Switches (e.g. the CUT key) will return to the play pass in one frame.

When the glide is complete, the LEDs in the MODE keys will stop flashing and return to steady red.

To glide all controls in a path back to the Play Pass

➤ Press and hold the ALL key on the required fader strip.

➤ Press the GLIDE key on the required fader strip.

The controls will start matching back to the Play Pass when the GLIDE key is released. For continuous controls (e.g. the fader), the Manual Glide Time is used. Switches (e.g. the CUT key) will return to the play pass in one frame.

➤ Release the ALL key.

When the glide is complete, the LEDs in the MODE keys will stop flashing and return to steady red.

To manually match a control back to the Play Pass

Manual match is only used with continuous controls (the fader, EQ frequency, etc.).

➤ Hold the control.

➤ Press the GLIDE key.

The alpha display for the control will display arrows to show which way the control should be moved to match back to the Play Pass.

For a fader, the alpha display will arrows pointing up or down.

For a Logicator, the alpha display will display an arrow pointing left (turn anti-clockwise) or right (turn clockwise).

➤ Move the control in the direction indicated.

When the control passes through the Play Pass, it will drop out of Record, the alpha display will stop displaying arrows and the LED in the relevant MODE key will stop flashing.

➤ Release the control.

The control will move to the Play Pass position and continue replaying the Play Pass.

Touch Record

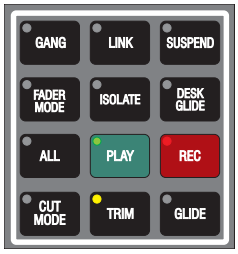
A control in Touch Record will play back moves until it is touched, at which point it will start to record. The control will snap back to the Play Pass position when it is released.

Put Controls into Touch Record

To put a control into Touch Record

➤ Press and hold the MODE key for the control.

➤ Press the REC and PLAY keys together on the same fader strip.



The integral LED in the MODE key will illuminate red.

The control is now armed for Touch Record and will play back any moves in the Play Pass.

➤ Release the MODE key.

To put all controls that are in automation scope in a single path into Touch Record

➤ Press the REC and PLAY keys together on the required fader strip.

The integral LEDs in the MODE keys of controls in automation scope will illuminate red steady.

To put all controls in a path into Touch Record (overriding scope)

➤ Press and hold the ALL key on the required fader strip.

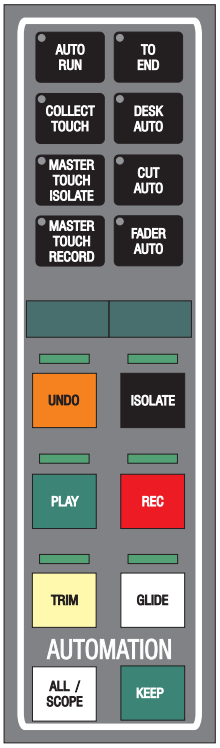
➤ Press the REC and PLAY keys together on the same fader strip.

The integral LEDs in the MODE keys will illuminate red steady.

➤ Release the ALL key.

To put all controls in automation scope into Touch Record

➤ Press the Master REC and PLAY.



To put all controls into Touch Record

➤ Press and hold the ALL/SCOPE key.

➤ Press the Master REC and PLAY keys together.

➤ Release the ALL/SCOPE key.

Recording Automation in Touch Record

To Record control changes

➤ Adjust the control as required.

The LED in the relevant MODE key will flash red when touch is detected.

Any moves in the Play Pass will be overwritten.

When the control is released, it will snap back to the Play Pass in one frame.

To manually match back to the Play Pass

Manual match is only used with continuous controls (the fader, EQ frequency, etc.).

➤ Press the GLIDE key without releasing the control.

The alpha display for the control will display arrows to show which way the control should be moved to match back to the Play Pass.

For a fader, the alpha display will arrows pointing up or down.

For a Logicator, the alpha display will display an arrow pointing left (turn anti-clockwise) or right (turn clockwise).

➤ Move the control in the direction indicated.

When the control passes through the Play Pass, it will drop out of Record, the alpha display will stop displaying arrows and the LED in the relevant MODE key will stop flashing.

➤ Release the control.

The control will move to the Play Pass position and continue replaying the Play Pass.

AutoGlide

AutoGlide is normally only used with faders and other continuously variable controls (i.e. EQ Level, Gate Attack Time, etc.).

The control will replay moves until it is touched, at which point it will start to record. The control will glide back to the previous play pass position when it is released, using the Auto Glide Time.

Switching controls (e.g. CUT, EQ ON/OFF, etc.) that are put into AutoGlide will behave as if they are in Touch Record (i.e. they will snap back to the Play Pass in one frame when they are released). This will happen when they are put into AutoGlide by specifically using their MODE keys and selecting AutoGlide. Otherwise, when AutoGlide is selected (e.g. by the Master REC and GLIDE keys) it is ignored by switching controls (this is also true when using ALL or ALL/SCOPE to override scope).

To put a control into AutoGlide

➤ Press and hold the MODE key for the control.

➤ Press the REC and GLIDE keys together.



The integral LEDs will illuminate. The control is now armed for Record and will play back any moves in the Play Pass.

➤ Release the MODE key.

To put all continuous controls in automation scope in one path into AutoGlide

➤ Press the REC and GLIDE keys together on the required fader strip.

The integral LEDs in the MODE keys of continuous controls in automation scope will illuminate red steady. The controls are now armed for Record and will play back any moves in the Play Pass.

To put all continuous controls in one path into AutoGlide

➤ Press and hold the ALL key on the required fader strip.

➤ Press the REC and GLIDE keys together.

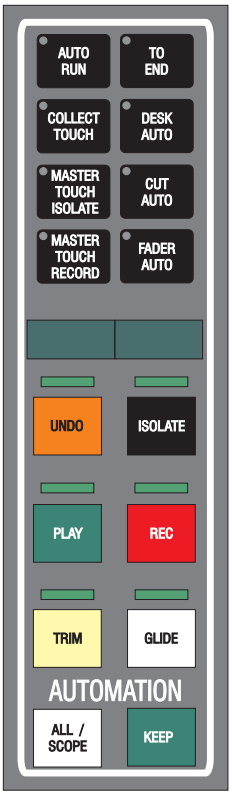
The integral LEDs in the MODE keys of continuous controls in the path will illuminate red steady.

The controls are now armed for Record and will play back any moves in the Play Pass.

➤ Release the ALL key.

To put all continuous controls in automation scope into AutoGlide

➤ Press the Master REC and GLIDE keys together.



To put all continuous controls into AutoGlide

➤ Press and hold the ALL/SCOPE key.

➤ Press the Master REC and GLIDE keys together.

➤ Release the ALL/SCOPE key.

To Record control moves

➤ Move the control as required.

The LED in the relevant MODE key will flash red when touch is detected.

Any moves in the Play Pass will be overwritten.

When the control is released, it will glide back to the Play Pass using the Auto Glide time.

Trim and AutoTrim

This is for Faders only.

The fader will move to the Trim position (by default the centre of the fader travel) and will start to record on touch. Moves are recorded as an offset from the Play Pass according to the fader position. Trim can be applied in the range from +20dB to -92dB. The trim value is shown in the alpha display.

If the cumulative effect of the Play Pass and trim drops the signal below -102dB then the signal is cut. For instance, if a particular fader has a Play Pass position of -20dB, then applying -83dB of trim (or below) will cut the signal.

Trim

To put a fader into Trim

➤ Press the TRIM keys on the required fader strip.

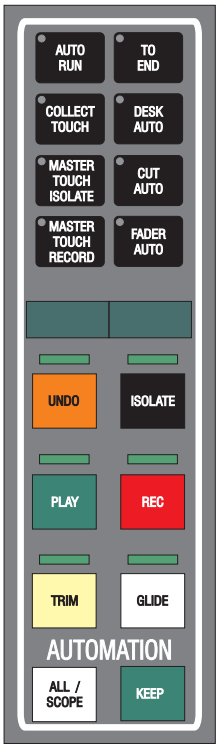


The LED in the FADER MODE key will illuminate orange and the fader will move to the centre trim position. The fader is now armed. The fader will stay at the centre trim position as the Play Pass is played back.

✍ *If the fader is not in automation scope then it will be necessary to hold down the FADER MODE key before pressing TRIM.*

To put all faders in automation scope into Trim

➤ Press the Master TRIM key.



All faders in automation scope are now armed. The faders will stay at the centre trim position as the Play Pass is played back.

To put all faders into Trim

➤ Press and hold the ALL/SCOPE key.

➤ Press the Master TRIM key.

All faders are now armed. The faders will stay at the centre trim position as the Play Pass is played back.

➤ Release the ALL/SCOPE key.

To record Trim adjustments

➤ Move the fader as required.

The LED in the FADER MODE key will flash orange when fader touch is detected. The alpha display shows the trim offset.

Any moves in the Play Pass will be overwritten according to the offset position of the fader.

When the fader is released, it will stay in the same position, the LED in the FADER MODE key will continue to flash orange and moves in the Play Pass will continue to be overwritten.

To glide back to the Play Pass

➤ Press the GLIDE key.

The fader will match back to the Play Pass by returning to the centre trim position. The Manual Glide Time is used.

The LED in the TRIM key will stop flashing and return to steady yellow.

To manually match back to the Play Pass

➤ Hold the fader.

➤ Press the GLIDE key.

The alpha display for the path will display arrows to show which way the fader should be moved to match back to the Play Pass.

➤ Move the fader through the centre trim position.

When the fader passes through the Play Pass (centre trim), the fader will drop out of Record, the alpha display will stop displaying arrows and the LED in the TRIM key will stop flashing.

➤ Release the fader.

The fader will snap back to the centre trim position (i.e. the Play Pass).

To snap back to the Play Pass

➤ Press the TRIM key again on the required fader strip.

AutoTrim

To put a fader into AutoTrim

➤ Press the TRIM and GLIDE keys together.

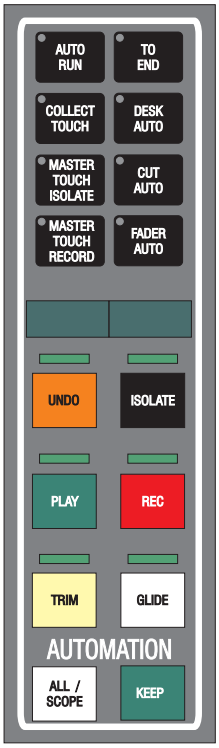


The LED in the FADER MODE key will illuminate orange and the fader will move to the centre trim position. The fader is now armed. The fader will stay at the centre trim position as the Play Pass is played back.

✍ *If the fader is not in automation scope then it will be necessary to hold down the FADER MODE key before pressing TRIM and GLIDE.*

To put all faders in automation scope into Trim

➤ Press the Master TRIM and GLIDE keys together.



All faders in automation scope are now armed. The faders will stay at the centre trim position as the Play Pass is played back.

To put all faders into Trim

➤ Press and hold the ALL/SCOPE key.

➤ Press the Master TRIM and GLIDE keys together.

All faders are now armed. The faders will stay at the centre trim position as the Play Pass is played back.

➤ Release the ALL/SCOPE key.

To record Trim adjustments

➤ Move faders as required.

The LED in the FADER MODE key will flash orange when fader touch is detected. The alpha display shows the trim offset.

Any moves in the Play Pass will be overwritten according to the offset position of the fader.

When the fader is released, it will glide back to the centre trim position using the AutoGlide time.

Coalesce Trim

When applied, any faders' trim events are combined (merged) with their corresponding fader level events, the trim events are then deleted and the trim fader returned to its Null position.

The button is situated directly below the TONE button in the Tone/Talkback panel



TRIM COALESCE can only be performed when the automation is not running.

Coalesce Trim - coalesce all paths in the partition which are currently in 'trim write'.

Pressing Master All + Coalesce Trim - coalesce all paths in the partition.

Pressing the Lock button + Coalesce Trim - enables automatic coalesce on stop.

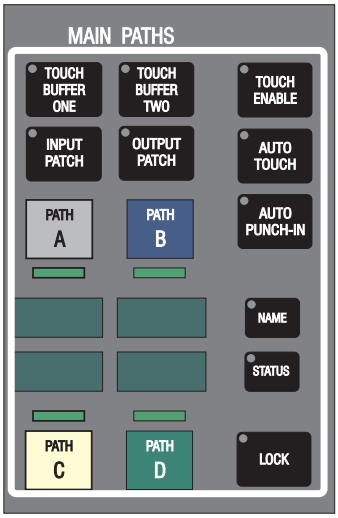
Auto Touch

This is used to automatically treat controls as being touched when they are armed for Touch Record or Trim (only faders can be in Trim).

AUTO TOUCH is switched on in advance of selecting Touch Record or Trim. When Touch Record or Trim is selected, all the controls put into the selected mode are treated as if they had been touched at the same time as the automation mode was selected.

To use Auto Touch with Touch Record or Trim

➤ Press the AUTO TOUCH key.



The LED above the key will flash.

➤ Put the required controls into Touch Record and/or the required faders into Trim.

The LEDs in the relevant MODE keys that would normally illuminate steady will flash instead. This is because the controls have been 'touched' at the same time as being armed.

To End

The TO END key is used to force all Recording controls to record their current values to the end of the Record Pass and then return to being armed. This will overwrite any subsequent moves that there may be in the Play Pass, and also clears virgin territory on the affected controls.

This is useful when the controls that are Recording need to overwrite all subsequent moves and there is a long time to wait for the end of the Play Pass.

Controls affected by TO END will drop back to being armed (e.g. if a control is Recording in Lock Record it will return to being armed for Lock Record).

Timecode can be stopped or other moves can be made after executing TO END.

If ALL/SCOPE is held down when TO END is pressed then the whole Pass will be overwritten with the current control setting.

Example

A fader in Lock Record is moved. The fader is now Recording (in Lock Record) and the LED in the FADER MODE key is flashing to indicate this. The fader is overwriting any moves there may be in the Play Pass. There may be other fader moves a long way into the Play Pass (for instance, an hour later) that also need overwriting with the new fader position.

One option would be to wait until the Play Pass reached that time. This would waste time resources and reduce the amount of work that could be done.

Another option would be to use the Fader Moves List to delete the unwanted moves. This could also take some time and wasted effort.

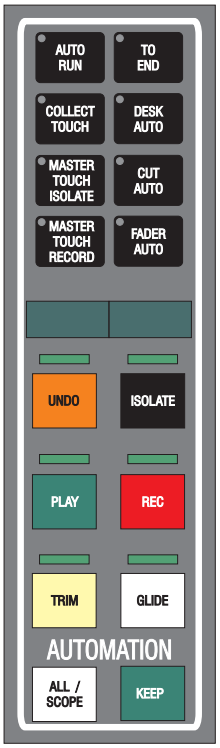
The final, and most efficient, option is to use TO END. When the TO END key is pressed, all subsequent moves are overwritten with the current fader setting - this is done by deleting all fader moves that would come after the current time so that the current setting is used to the end.

To End and Safety Nets

If Safety Nets are active then the operation of TO END behaves as if the Safety Net Start Time was the beginning of the mix and the Safety Net End Time was the end of the mix.

To use the current settings of controls in Record up to the end of the current Mix/Pass

➤ Press the TO END key.



All controls which are in Record (i.e. MODE key LED red flashing) will write the current value when TO END is pressed to the end of the Mix/Pass.

If Safety Nets are active then the current values will be written to the Safety Net End time instead of the end of the Mix/Pass.

To use the current settings of controls in Record for the whole of the current Mix/Pass

➤ Press and hold the ALL/SCOPE key.

➤ Press the TO END key.

All controls which are in Record (i.e. MODE key LED red flashing) will write the current value when TO END is pressed to the whole of the Mix/Pass.

If Safety Nets are active then the current values will be written to the extent of the Safety Net Start and End times instead of the whole of the Mix/Pass.

Touch Enable

Touch Enable is used to enable and disable touch detection on controls while the system is in stop (i.e. timecode is not running at play speed).

This prevents controls from accidentally being put into record (by being moved or touched) before the system is put into play, so that existing automation is not overwritten downstream from the point at which the system is put into play.

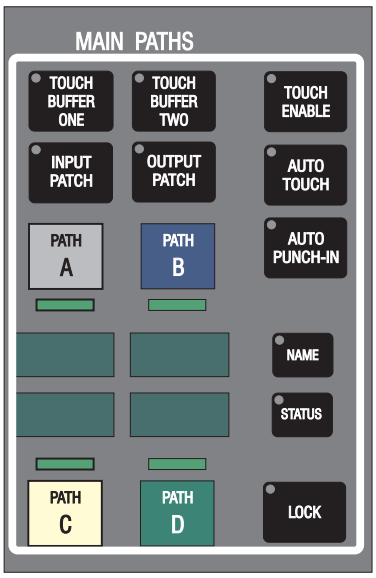
Touch detection is enabled on all controls by default.

The controls are split into three groups for enabling and disabling touch:

- ❑ Faders
- ❑ CUT keys
- ❑ All other controls (Desk Controls)

To disable touch on a group of controls

➤ Press and hold the TOUCH ENABLE key.



The LEDs in the FADER AUTO, CUT AUTO and DESK AUTO keys will illuminate to show which groups currently have touch enabled.

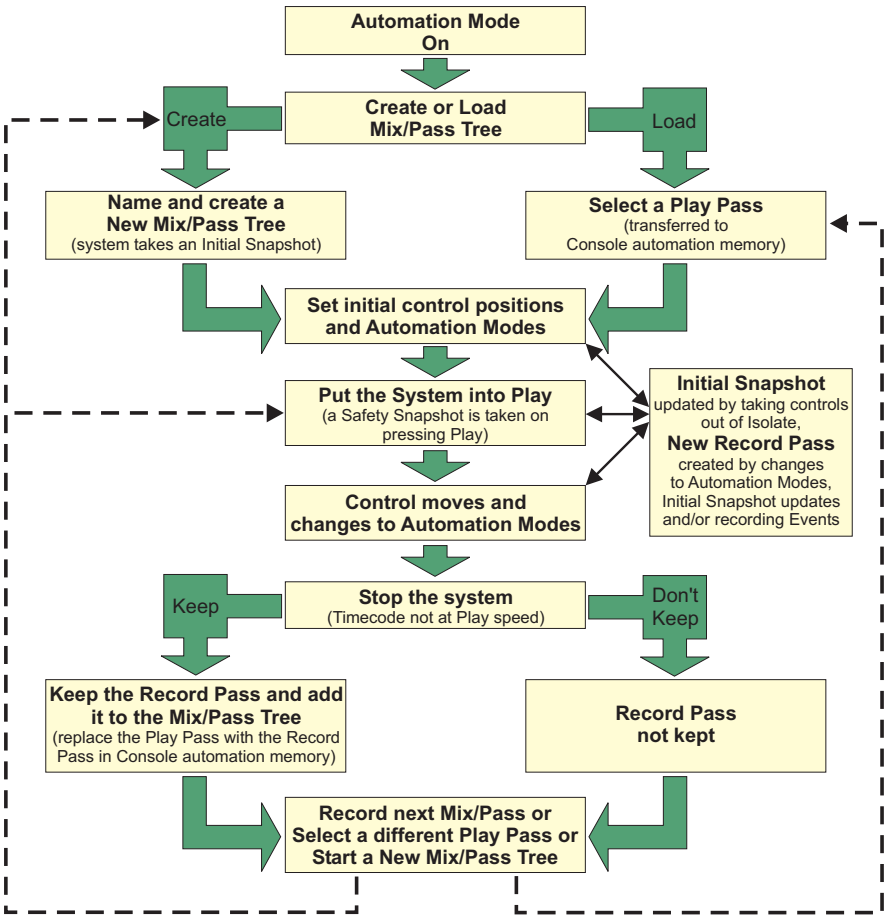
➤ Press the FADER AUTO, CUT AUTO and DESK AUTO keys as required.

Each time one of the keys is pressed the integral LED will toggle on or off. Touch is enabled when the LED is lit.

➤ Release the TOUCH ENABLE key.

Making a Mix/Pass

The Mixing procedure is summarised in the Making Mix/Passes diagram:

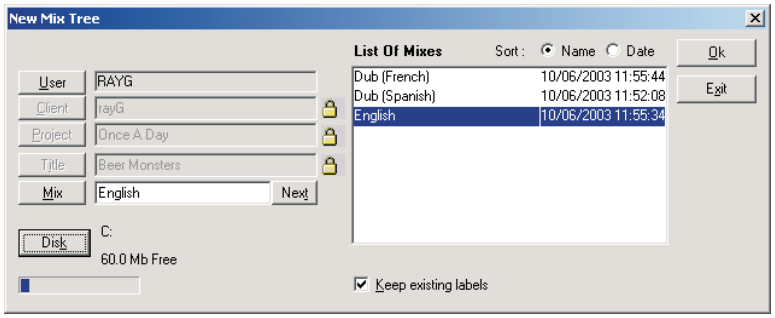


Start a New Mix Tree

✍ *If the automation system is off then it will be switched on when the new Mix Tree is created.*

➤ Click on New Mix Tree in the drop down Automation menu.

The New Mix Tree dialogue box will be displayed.



If the Client, Project and Title are locked then the next number for Mix Trees will be selected automatically.

➤ Otherwise, select the Client, Project and Title, or create a new Client, Project or Title as required.

The Next button can then be used to automatically select the next Mix Tree number.

➤ If required, edit the Mix Tree name.

➤ When the details are correct, click the OK button.

The new Mix Tree will be created. A progress bar will be displayed while the Initial Snapshot is taken and the new files are created. The Initial Snapshot and the automation modes of controls are stored as Mix/Pass 1.1.

When the process is complete a confirmation dialogue box will be displayed.



➤ Click OK.

If the automation system was off, it will be switched on.

Make the first Mix/Pass

➤ Set controls to the required starting values.

Also, controls can be reset with the Reset Wizard in Defaults Manager or with the ON/CLEAR key.

➤ Arm the required controls with an appropriate Record mode.

It is usual to make initial moves in Lock Record.

➤ Put the System into Play.

➤ Make control moves and change Automation Modes as required

➤ Take the system out of Play.

Taking the system out of Play means that timecode is no longer running at Play speed. This can be done by issuing any transport command that ends Play (e.g. Stop, Fast Forward, etc.).

If a Record Pass was made then it is now complete. A Record Pass is made if there are changes to Automation Modes, Automation Scope or the Event List.

✍ *Going from armed to recording does not count as a change in Automation Mode (e.g. if a fader in Lock Record is touched).*

Put the System into Play

Either:

➤ Click the Play transport icon on the Encore Screen.

or

➤ Press the Play transport key.

or

➤ Press Play on the transport that is acting as the master device.

In the first two cases, the Safety Snapshot is taken and the Initial Snapshot is updated (if necessary) as soon as Play is clicked or pressed.

In the third case, the Safety Snapshot is taken and the Initial Snapshot is updated when good timecode is received and the system goes into Play.

✍ *Touching an armed control will not necessarily cause an Event to be recorded (e.g. touching a fader in Lock Record without moving it). However, this may cause Events to be overwritten, in which case the Event List will change.*

AutoKeep the Record Pass

If AutoKeep is enabled in Automation Preferences then the Record Pass will be automatically kept to the Mix/Pass Tree when the system drops out of Play.

The Record Pass will become the Play Pass. The new Mix/Pass numbers are shown in the Play boxes on the Encore Screen.

Manually Keep the Record Pass

If the Keep Mode is manual then the word MANUAL will flash red on the status line of the Encore Screen to show that there is an un-saved Record Pass.

➤ Press the KEEP key.

The Record Pass will be saved to the Mix/Pass Tree and will become the Play Pass. The new Mix/Pass numbers are shown in the Play boxes on the Encore Screen.

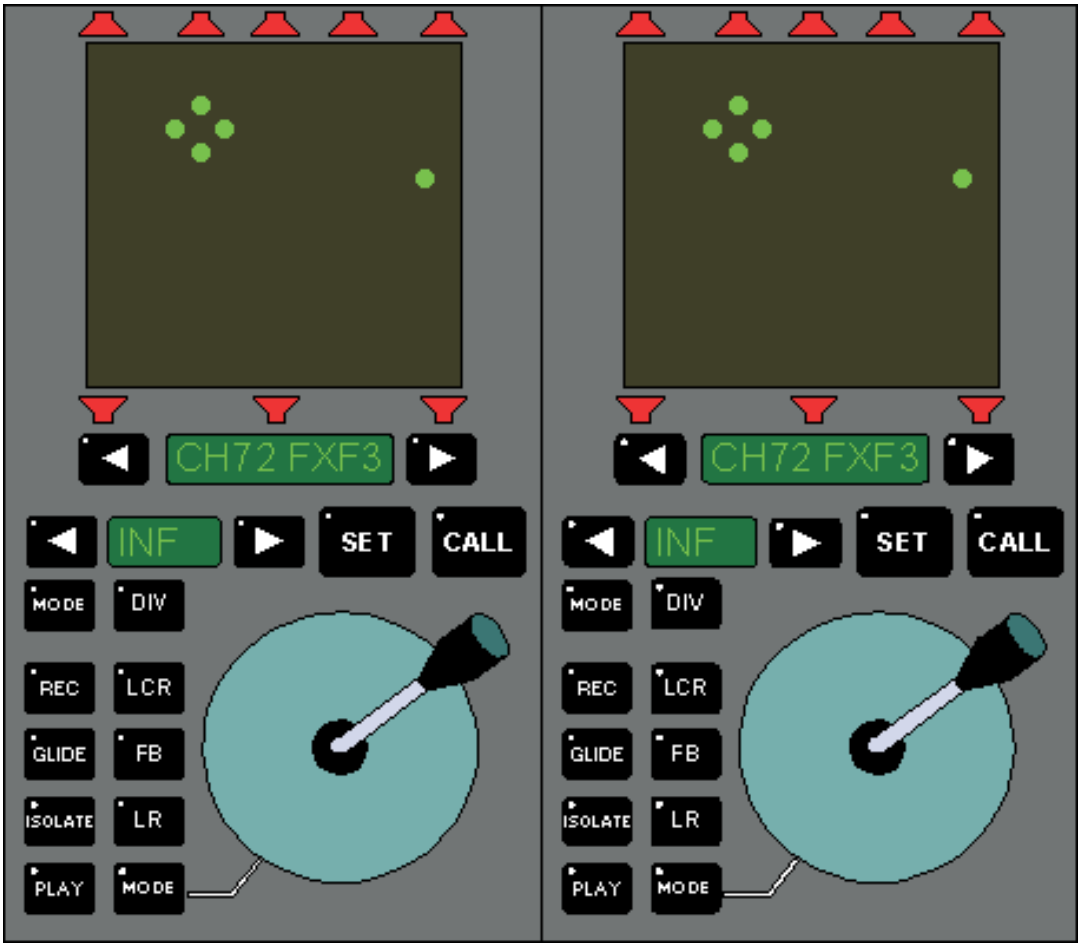
Making further Mix/Passes

The procedure is very similar to that above, except that a New Mix Tree does not need to be started.

When the transport is put into play, the moves recorded in the previous Mix/Pass will be played back (according to the Automation Modes selected).

Also, controls for which moves are now correct can be put into Play to prevent the recorded moves from being changed.

Joystick Automation



The Joystick Module has two MODE keys for selecting automation modes of the Divergence controls and the panning axes.

The path to be assigned to a joystick is selected with the nudge keys or by using the SET key in conjunction with the Lower Matrix Panel. The path can then be called to the Joystick by the CALL key. The Joystick Automation Controls will take over from the automation controls for panning on the fader strip.

This allows the full functionality of the panning controls to be controlled and automated from one location.

The upper MODE key for each Joystick controls the automation mode of the Divergence controls.

The lower MODE key with a line leading to the joystick controls the automation mode of the panning controls as a group.

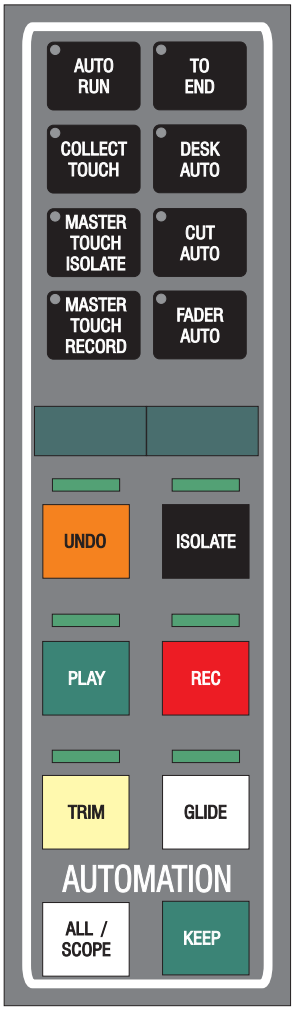
If an automation mode has already been selected for the panning controls then the MODE key will indicate the automation status of the LCR panner.

The selection of automation modes is identical to that for a channel strip.

Note that there is no TRIM key because trim is for faders only.

Automation is recorded against the panning controls for the path called to a Joystick, and the Joystick module is treated as an extension of the channel strip for Scope.

Collect Touch



For a quick introduction to Collect Touch see Making a Scene Change.

Collect Touch Scope

Collect Touch Scope is set in the same way as normal Automation Scope but is completely separate to Automation Scope. The method used to put controls into Collect Touch Scope depends on the Collect Touch Auto Scoping option in Automation Preferences.

To interrogate Collect Touch scope

➤ Press and hold the ALL/SCOPE key while COLLECT TOUCH is active.

The mode indicators for all controls in scope will flash orange.

To clear Collect Touch scope

➤ Press and hold ALL/SCOPE while COLLECT TOUCH is active.

➤ Press UNDO.

or

➤ Press COLLECT TOUCH to turn it off.

✍ *This last depends on the Clear Scope/Buffers On Exit option in Automation Preferences. The Collect Touch Buffers will also be cleared.*

Using Collect Touch

Collect Touch can be used to create an 'arming group' for use with the normal Automation Modes. Everything that is in Collect Touch Scope will be affected by changing the global automation modes.

✍ *To take full advantage of Collect Touch, the Collect Touch Hard Write option should be checked in Automation Preferences. This allows all controls in Collect Touch Scope to drop directly into hard record when a Record mode is selected (e.g. if global REC is pressed to activate Lock Record, the controls in scope will write automation data).*

An example of using Collect Touch

➤ Press COLLECT TOUCH.

➤ Put the required controls into scope.

➤ Press the global ISOL key.

All controls in scope are now in Isolate and will not be affected by playing back automation.

➤ Adjust controls to the required settings.

➤ Start the transport.

➤ Press the global REC key at the point where the new control values are required.

The automation mode indicators for controls in scope will flash red (this assumes the Collect Touch Hard Write option is active).

➤ Toggle between ISOL and REC to switch between Play Pass settings and the new settings.

➤ If required, use GLIDE to smoothly transition controls back to the Play Pass.

➤ Stop the transport.

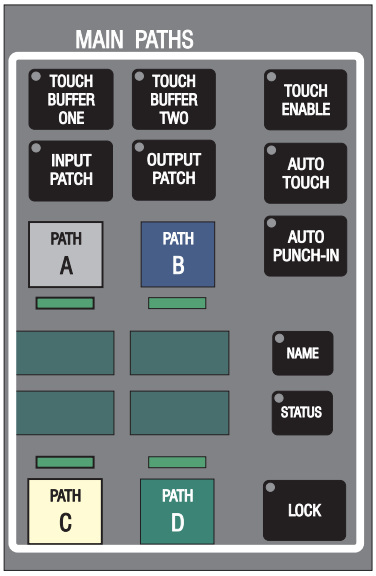
➤ Press COLLECT TOUCH to turn it off.

✍ *Individual controls can also be Isolated, Glided, etc., by selecting their Automation Modes as normal. However, the controls will remain in scope until scope is cleared.*

Notes

It is highly recommended to experiment with Collect Touch, including changing the Automation Preferences for Collect Touch to get a feel for how it operates. It is also recommended to leave the Collect Touch preferences at their defaults for real work until a thorough familiarity is established.

Using Collect Touch Buffers



The Collect Touch Buffers provide an extra level of control for Collect Touch, especially for such tasks as scene changes.

Using both Buffers is ideal for rapid scene changes, the classic example being a phone conversation that is cut from one participant to the other. In addition, the buffers allow new control values to be rehearsed in context without creating a new Record Pass.

The Collect Touch Buffers are controlled by MASTER TOUCH ISOLATE (for rehearsing) and MASTER TOUCH RECORD.

✍ *If Collect Touch Buffers are disabled then MASTER TOUCH ISOLATE and MASTER TOUCH RECORD operate identically to ISOL and REC as above.*

To set the contents of a buffer

➤ Press COLLECT TOUCH.

➤ Press MASTER TOUCH ISOLATE.

The integral LED will illuminate green flashing.

➤ Press TOUCH BUFFER ONE or TOUCH BUFFER TWO as required.

The integral LED will illuminate red.

➤ Make changes to the settings of required controls.

The new settings of all touched controls will be saved in the selected buffer.

Rehearsing Collect Touch

➤ Put the transport into play.

➤ Toggle MASTER TOUCH ISOLATE on and off as required.

➤ Switch between Buffer One and Buffer Two as required.

➤ Make control adjustments as required.

➤ Stop the transport and rewind to the beginning of the required section.

MASTER TOUCH ISOLATE is turned off when timecode stops unless it has been locked on.

➤ Repeat the whole procedure as often as required.

To keep buffering active when timecode stops

➤ Press and hold LOCK.

➤ Press MASTER TOUCH ISOLATE.

To clear a buffer

➤ Press and hold TOUCH BUFFER ONE or TOUCH BUFFER TWO as required.

➤ Press UNDO.

To use buffers to write automation

➤ Put the transport into play.

➤ Press TOUCH BUFFER ONE or TOUCH BUFFER TWO as required

➤ Toggle MASTER TOUCH RECORD on and off as required.

When MASTER TOUCH RECORD is activated, the settings in the selected buffer will be recorded by the automation system.

➤ Stop the transport.

MASTER TOUCH RECORD is turned off automatically when timecode stops running.

Making a Scene Change

The main strength of Collect Touch lies in making scene changes.

These instructions assume that there is existing automation up to the beginning of a new scene and that Collect Touch Scope and the Collect Touch Buffers are clear. It is also assumed that the installation defaults have been used for the Collect Touch options in Automation Preferences.

Setting and rehearsing the control values

➤ Press COLLECT TOUCH.

The integral LED will illuminate red.

➤ Press MASTER TOUCH ISOLATE.

The integral LED will illuminate green flashing.

➤ Press TOUCH BUFFER ONE if it is not already selected.

The integral LED will illuminate red.

➤ Make the required control changes for the scene.

The selected controls will be added to Collect Touch Scope and their Mode indicators will flash green.

Controls in Collect Touch Scope can be verified by holding down ALL/SCOPE. This will cause the Mode indicators to flash orange.

The new settings for the controls will be saved in Collect Touch Buffer One.

➤ Put the transport into play for the new scene.

➤ Press MASTER TOUCH ISOLATE to toggle monitoring between the new settings stored in Touch Buffer One and the settings for the Play Pass.

➤ Make further adjustments to controls as necessary when MASTER TOUCH ISOLATE is active.

Extra control values

If another set of control values is required for the scene, these can be stored in Touch Buffer Two. The Play Pass settings will be used as the starting point, but any controls that are already in Collect Touch Scope will also be in scope for Buffer Two.

Note that using LOCK + MASTER TOUCH ISOLATE will cause MASTER TOUCH ISOLATE to remain active when the transport is stopped. This is useful if it is not necessary to hear the Play Pass (e.g. if both buffers are being used alternately to replace a section of the Mix).

Recording the new Mix/Pass

➤ Put the transport into play.

➤ Press MASTER TOUCH RECORD to write values in the selected buffer to the Record Pass.

MASTER TOUCH RECORD can be toggled on and off at the punch in and out points and/or switch between Buffer One and Buffer Two.

➤ Stop the transport.

Using Safety Nets for automatic punch in and out

➤ Rehearse the control settings for the new scene with MASTER TOUCH ISOLATE.

➤ Create labels for the beginning and end of the scene being worked on.

➤ Rewind the transport to shortly before the beginning of the scene.

➤ Use Safety Nets in the Options Menu to set the Safety Net Start and End to the new labels, and activate the Safety Nets.

➤ Press MASTER TOUCH RECORD.

➤ Put the transport into play before the beginning of the scene.

When timecode passes the beginning of the Safety Net, the selected controls will automatically drop into Record and new data will be written to create a new Mix/Pass. This will be according to the control values stored in Collect Touch Buffer One. The effects will be heard.

When timecode reaches the end of the Safety Net, the controls will revert back to the Play/Pass values.

➤ Stop the transport.

✍ *This has assumed that the new control values are applicable to the whole scene. Safety Nets can be activated as part of the rehearsal stage to judge the effect of the automatic punch in and out.*

When the scene is complete

➤ Press COLLECT TOUCH to turn it off.

This will clear Collect Touch Scope and the buffers.

TRANSPORT CONTROL

Transport devices can be controlled from either the main Encore screen or using the optional MCS Panel.

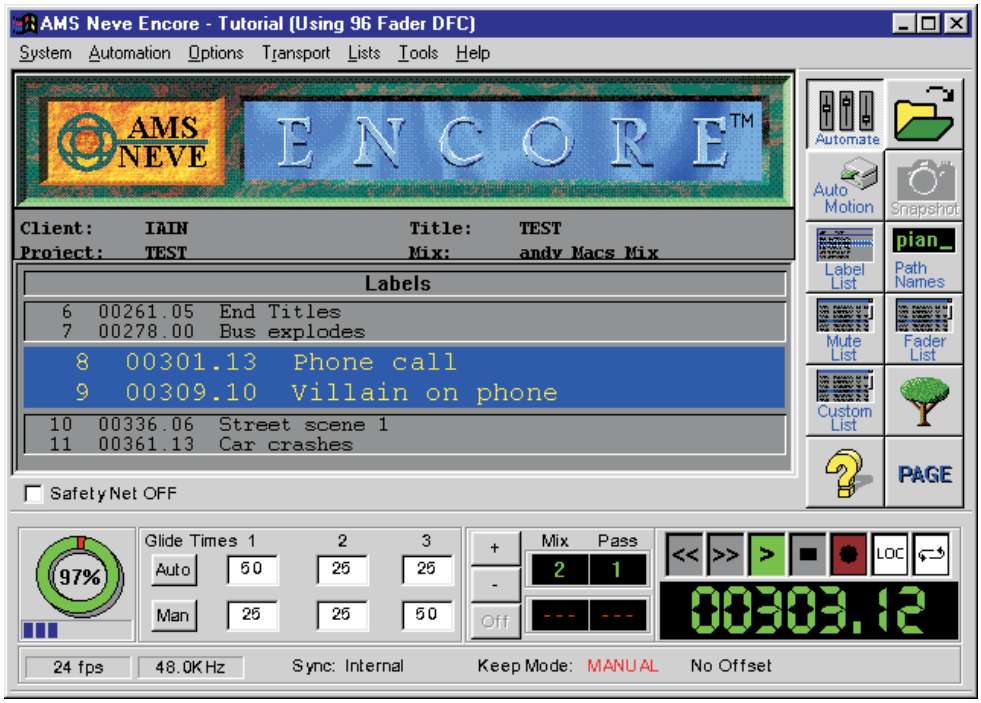
Encore Screen

The main Encore screen has a set of Transport Control buttons (above the timecode display) that can be used to control a tape machine or other transport device via the MCS controller.

The icons can be used control a single tape machine or the first group of transports attached to the MCS controller.

If a machine cannot be controlled directly by the MCS card then the buttons “illuminate” to show the machine status.

The Transport Menu is used to setup the MCS system and display additional information. The F5 key can be used as a shortcut to the Group Setup page, and Ctrl+F5 can be used as a shortcut to the MCS Preferences.



MCS Panel Option



The MCS Panel is a hardware option that is used to control multiple transport devices (up to the first eight that are detected on power up).

It can be used and configured directly or in conjunction with the Encore screen and options on the Transport Menu.

Machines are controlled in groups. Only one group can be actively controlled at a time. Each group can contain up to eight machines.

✍ *Machines can be 'hot plugged' and will be automatically detected by the MCS.*

Grouping Machines

The MCS system uses Groups to select which machines are currently controlled by the system. Machines can not be controlled until they are assigned to a Group.

On power up for the first time, Group 1 is selected by default. There are no machines assigned to any Groups and video reference is enabled. This condition will also occur if the selection of machines connected to the MCS is changed.

To select which Group is current

➤ Press and hold the M/C GROUP key.

The integral LED will illuminate green.

➤ Press a numeric key between 1 and 8.

The corresponding number will be illuminated in the GROUP row of the LED array.

If there are machines in the group then the corresponding numbers in the ONLINE row will illuminate and the ONLINE number for the group master will flash.

➤ Release the M/C GROUP key.

Machines in the group will be sent a command to locate to the position of the group master. This prevents machines from being out of position because they have been used in another group.

To assign a machine to the current Group

➤ Press the M/C GROUP key.

The integral LED will illuminate red.

Available machines are shown by the illuminated LEDs in the MACH row of the LED array.

➤ Press a numeric key between 1 and 8 that corresponds to an available machine.

The corresponding number in the ONLINE row of the LED array will illuminate.

If it is the first machine assigned to the group then it will be the Group Master and its ONLINE LED will flash.

Further machines can be added to the group while the M/C GROUP key is active (red LED).

To remove a machine from the current Group

➤ Press the M/C GROUP key.

The integral LED will illuminate red.

Machines in the Group are shown by the illuminated LEDs in the ONLINE row of the LED array.

➤ Press a numeric key between 1 and 8 that corresponds to a machine in the Group.

The corresponding number in the ONLINE row of the LED array will cease to be illuminated.

Further machines can be removed from the group while the M/C GROUP key is active (red LED).

Set Film Machine Position

Timecode is not encoded onto film, so the timecode position of a film machine is arbitrary (e.g. a Colin Broad or a film machine controlled via Synchronet ES/2).

The current position of a film machine can be given a timecode so that the film can be synchronised to audio.

To set the film machine position

➤ Recall a stored time.

or

➤ Type in the timecode (or foot-frame) value on the numeric keypad.

✍ *When entering times, the + key operates as 00 when it is pressed after a numeric key has been pressed.*

➤ Press the STORE key.

➤ Press the M/C SOLO key.

➤ Press the numeric key between 1 and 8 that corresponds to the film machine.

Standard Machine Control Functions

Status Indication

When a transport control is in operation the timecode display shows the position of the current group master.

The BUSY LEDs flash to indicate which machines are executing transport operations. When a machine locks to the master and timecode is resolved then the LOCK LED illuminates for the machine instead of the BUSY LED. When all machines are locked then the master LOCK LED illuminates.

To put the transport into Play

➤ Press the PLAY key or click the Play icon on the screen.

The PLAY key will flash until timecode is resolved, when it will illuminate green steady.

The Play icon on the screen will change from dark green to light green when timecode is resolved and timecode is running on the screen.

To Stop the transport

➤ Press the STOP key or click the Stop icon on the screen.

Any other transport mode (Play, Locate, Shuttle, etc.) will be cancelled and the group will stop.

With some machines, the SHUTTLE key will flash as the group master shuttles to a stop.

To use Fast Forward

➤ Press the FAST FORWARD key or click the Fast Forward icon on the screen.

The FAST FORWARD key will illuminate.

If the Single press Fast Forward and Rewind option is set to "y" then the transport will fast forward; otherwise, the SHUTTLE key will also illuminate and the transport will shuttle forward.

➤ Press the FAST FORWARD key again.

The transport will toggle between fast forward and shuttle. This happens each time the FAST FORWARD key is pressed.

To use Rewind

➤ Press the REWIND key or click the Rewind icon on the screen.

The REWIND key will illuminate.

If the Single press Fast Forward and Rewind option is set to "y" then the transport will rewind; otherwise, the SHUTTLE key will also illuminate and the transport will shuttle in reverse.

➤ Press the REWIND key again.

The transport will toggle between rewind and reverse shuttle. This happens each time the REWIND key is pressed.

To use Record

This applies when single press record is not selected.

➤ Press and hold the PLAY key until it illuminates green steady.

➤ Press the RECORD key at the required point.

The RECORD key will illuminate red steady to indicate that the armed Tracks are recording.

If no Tracks are armed then the RECORD key will flash red.

➤ Release the PLAY key.

➤ Press any transport key (other than RECORD) to terminate record mode.

✍ *If Jog is used to terminate record then the group will stay in record until the jog wheel is moved. Cycle and Locate terminate record when the cycle or locate process actually starts.*

To select Single Press Record

➤ Press and hold the RECALL key.

➤ Press the STORE key.

➤ Release the RECALL key.

The alphanumeric display on the MCS panel will change to show options.

➤ If "Sngl Rec n" is not displayed, press + or - to scroll through the options.

➤ Press the ENTER key to toggle the option to "Sngl Rec y".

The selection (y or n) will remain in force until it is changed.

➤ Press and hold the RECALL key and press the STORE key to end options mode.

To use Single Press Record

➤ Set Single Press Record to yes as above.

➤ Press the PLAY key to start the transport.

➤ At the required point, press the REC key (i.e. without holding down PLAY).

The REC key will illuminate red steady to indicate that the armed Tracks are recording.

If no Tracks are armed then the REC key will flash red.

➤ Press any transport key (other than REC) to terminate record mode.

or

➤ Press PLAY to terminate record and keep the transport running.

➤ Press REC again to punch-in at a different point.

This can be repeated as many times as necessary if multiple punch-ins are required.

MCS Panel Options

There are two user selectable options for altering the operation of the MCS Panel:

- ❑ Single press record
- ❑ Single press Fast Forward and Rewind

To enter options mode

➤ Press and hold the RECALL key.

➤ Press the STORE key.

➤ Release the RECALL key.

The alphanumeric display on the MCS panel will change to show options.



To select the required option

➤ Press + and - on the MCS Panel to scroll through the options.

✍ *There are unused options which display as "option 3" through to "option 8".*

To toggle an option setting

➤ Press the ENTER key on the MCS Panel.

The selection (y or n) will remain in force until it is changed.

Single press Record

This option is shown as "Sngl Rec" in the alphanumeric display. When it is set to "y", record can be activated with the REC key only, rather than holding down PLAY and pressing REC.

Single press Fast Forward and Rewind

This option is shown as "Sngl FF" in the alphanumeric display. It is used to change the order of shuttle and fast forward/rewind when the FAST FORWARD and REWIND keys are used. When it is set to "n", the transport will shuttle forward or reverse on the first press. When it is set to "y", the transport will fast forward or rewind on the first press.

Subsequent presses of FAST FORWARD and REWIND toggle between full speed and shuttle.

To end options mode

➤ Press and hold the RECALL key.

➤ Press the STORE key.

➤ Release the RECALL key.

✍ *Pressing PLAY or any other transport control key will also end options mode.*

Shuttle and Jog

Shuttle

Shuttle is used to run the current group of machines forwards or backwards at variable rates.

To use Shuttle

➤ Press the SHUTTLE key.

The key will flash.

➤ Rotate the jog wheel in the required direction.

The SHUTTLE key will illuminate steady.

Initially, clockwise will shuttle forwards and anti-clockwise will shuttle backwards. The faster or further the wheel is moved, the faster the group will shuttle.

If the maximum shuttle speed is exceeded then the group will go into fast forward or rewind, as appropriate. The jog wheel will still have control of the group.

The shuttle speed can be reduced by moving the jog wheel slowly in the opposite direction.

Jog

Jog is used to move the current group of machines forwards or backwards without running constantly. The group will only shuttle while the jog wheel is being moved.

To use Jog

➤ Press the JOG key.

The key will flash.

➤ Rotate the jog wheel in the required direction.

The group will shuttle according to how much the wheel is moved. The JOG key will illuminate steady while the group is shuttling.

When the wheel is not being moved, the group will stop shuttling and the JOG key will flash again.

To Jog frame-by-frame

➤ Press the + and - keys on the MCS Panel while the JOG key is flashing.

The + key moves the group forward by one frame and the - key moves the group back by one frame.

The + and - keys can be pressed several times at once to jog a multiple number of frames without waiting for each frame jog to complete. For instance, rapidly pressing "+++" will jog forward three frames, even though the transport may only have moved by one frame by the time the third "+" is entered.

Grabbing and Storing Times

To dynamically capture the machine position

➤ Press the GRAB TIME key.

The time at which the key is pressed will be saved as the current Grab Time.

➤ Press the STORE key.

➤ Press one of the IN, OUT, F1, F2 or F3 keys or one of the numeric keypad digits (0 to 9).

The time at which the GRAB TIME key was pressed will be saved under the selected key.

To store a fixed time

➤ Type in the timecode value on the numeric keypad.

✍ *When entering times, the + key operates as 00 when it is pressed after a numeric key has been pressed.*

The timecode display will show the value as it is entered.

➤ Press the STORE key.

➤ Press one of the IN, OUT, F1, F2 or F3 keys or one of the numeric keypad digits (0 to 9).

The entered value will be saved under the selected key.

To recall a stored time

➤ Press the RECALL key.

➤ Press the one of the IN, OUT, F1, F2 or F3 keys or one of the numeric keypad digits (0 to 9).

The selected time can then be used for the next operation; e.g. the time could be stored in a different location.

Locate

Locate is used to position the current group of machines at a particular point in timecode. Locate can be executed from the MCS Panel, or by using Locate Labels from the Encore screen.

Locate with the MCS Panel

There are four different methods of locating with the MCS Panel:

To Locate to a specific time

➤ Press the LOC key.

➤ Type in the timecode value on the numeric keypad.

The timecode display will show the value as it is entered.

➤ Press the ENTER key.

The transport will locate to the entered time.

To Locate to a time stored by a function key

➤ Press the LOC key.

➤ Press the IN, OUT, F1, F2 or F3 key.

➤ Press the ENTER key.

The transport will locate to the recalled time.

To Locate to a time stored by a numeric key

➤ Press the LOC key.

➤ Press the ENTER key.

➤ Press one of the numeric keys 0 to 9.

The transport will locate to the recalled time.

To repeat the last Locate

➤ Press the LOC key twice in succession.

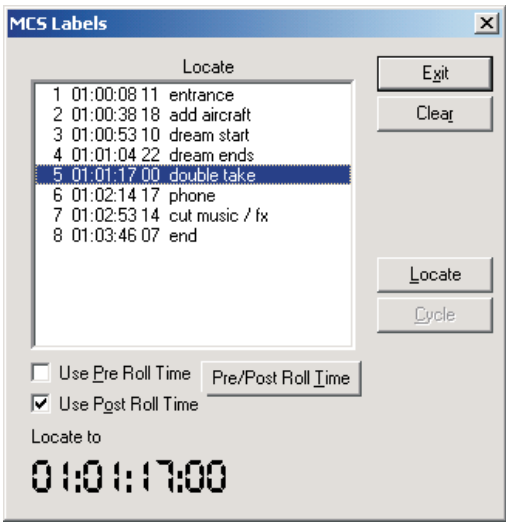
Locate Labels

The Label selected for Locate can be chosen using the MCS Labels dialogue box on the screen. A timecode can also be adjusted or entered manually in the MCS Labels dialogue box.

To select a Label on the screen

➤ Click on the LOC icon on the screen.

The MCS Labels dialogue box will be displayed on the screen showing the current Label List.



➤ Click on a Label.

The Label will be highlighted in blue and the Locate button will become available.

➤ Make sure only one Label (with the required timecode) is highlighted.

➤ If required, make manual changes to the timecodes.

➤ Click the Locate button, press the LOC key, press the Enter key or press the Play key.

The transport will wind or rewind to the required timecode. If the Play key was used, it will drop into play.

✍ *The Label List can also be used to create or edit a Label if there is no Label with the required timecode.*

To change a Timecode manually

➤ Click on the Timecode.

The cursor will change to a plus or minus sign according to whether the cursor is over the top or bottom half of a digit.

➤ Click on a digit to increment or decrement it.

To zero the Timecode

➤ Press the Z key on the Encore keyboard.

The displayed timecode will be set to zero.

To use a Timecode Preset

➤ Press the A, B, C, D, E or F key on the Encore keyboard.

The Timecode will be set to the value from the selected preset.

Loop

The current group of machines can loop between two timecodes. The MCS Panel uses the IN and OUT keys to set these times. Encore can only use Cycle, and the Cycle From and Cycle To times are selected from the MCS Labels dialogue box.

To use any looping modes from the MCS Panel, times must be stored by the IN and OUT keys as described in Grabbing and Storing Times.

✍ *If the IN time is set after the OUT time then the OUT time will be automatically set to 1 second before midnight. If the OUT time is set before the IN time then the IN time will be set to the same as the OUT time.*

The three loop functions are Cycle, Rehearse and Edit

Cycle

There are two methods of starting a cycle: from the MCS Panel or using Labels on the Encore screen.

To Cycle from the MCS Panel

➤ Press the CYCLE key.

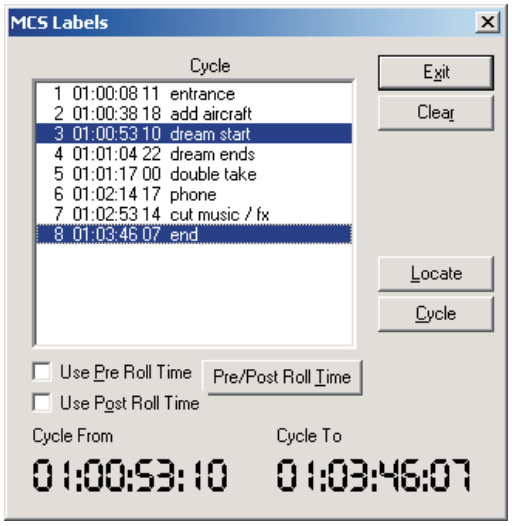
The CYCLE key will illuminate. The current group will locate to 4 seconds before the IN time and play through until 1 second after the OUT time. This will repeat until a different transport mode is selected.

The other transport keys will indicate the transport status (i.e. rewind, play, stop, etc.).

To Cycle with Labels from MCS Labels dialogue box

➤ Click on the Cycle icon on the Encore screen.

The MCS Labels dialogue box will be displayed on the Encore screen showing the current Label List.



➤ Highlight the required pair of Labels.

➤ If required, make manual changes to the timecodes.

➤ Click the Cycle button.

The CYCLE key will illuminate. The current group will locate to 4 seconds before the Cycle From time and play through until 1 second after the Cycle To time. This will repeat until a different transport mode is selected.

The other transport keys will indicate the transport status (i.e. rewind, play, stop, etc.).

Rehearse

Rehearse is used to check the effect of making a recording without actually recording any audio. Rehearse uses the IN and OUT times for automatic punching of the EE command.

To rehearse

➤ Press the REH key.

The current group will locate to 4 seconds before the IN time, play through until 1 second after the OUT time and then stop.

EE commands will be sent to machines with armed tracks at the IN and OUT times. If no machines in the current group have armed tracks then a warning will be displayed.

The other transport keys will indicate the transport status (i.e. rewind, play, stop, etc.).

Edit

This uses the IN and OUT times for automatic punching of record commands to armed machines.

To use Edit for automatic record punching

➤ Press the EDIT key.

The current group will locate to 4 seconds before the IN time, play through until 1 second after the OUT time and then stop.

Record commands will be sent to machines with armed tracks at the IN and OUT times. If no machines in the current group have armed tracks then a warning will be displayed.

The other transport keys will indicate the transport status (i.e. rewind, play, stop, etc.).

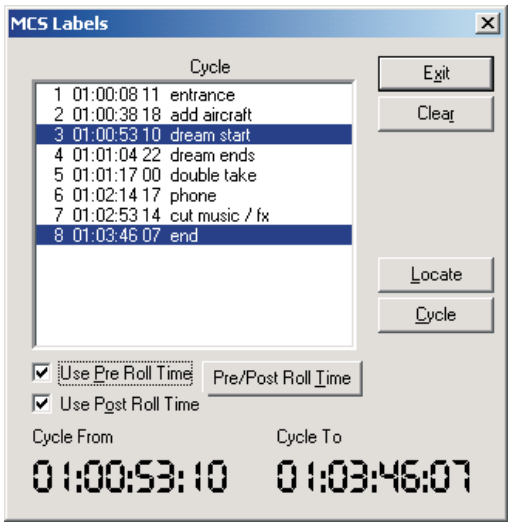
Pre Roll

The Pre Roll Time set in MCS Preferences can be used with Locate and Cycle.

Pre Roll places the transport an extra amount in front of the Locate To or Cycle From time to allow the automation system to resolve timecode correctly before reaching the Locate To or Cycle From time.

To use the Pre Roll Time

➤ Click the Use Pre Roll Time check box.



✍ *This is the same as checking the Enable check box in the MCS Preferences page.*

To change the Pre Roll Time

➤ Click the Pre/Post Roll Time button.

The MCS Preferences page will be displayed.

➤ Change the Pre Roll Time as required and Exit from Preferences.

Post Roll

The Post Roll Time set in MCS Presets can be used with Cycle.

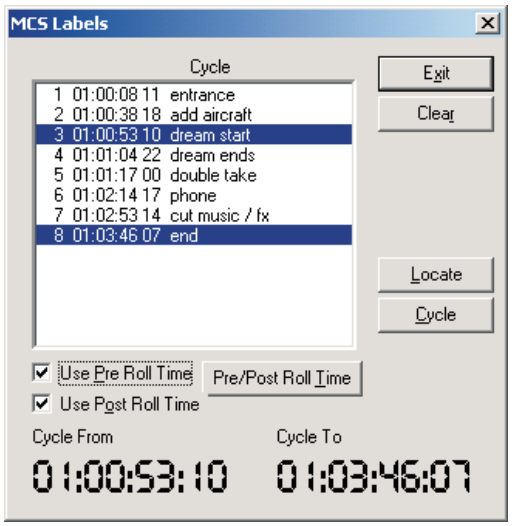
Post Roll causes the transport to continue playing by an extra amount after the Cycle To time has been reached. When the Cycle To time plus the Post Roll is reached then the transport will rewind back to the Cycle From time (minus Pre Roll).

Post Roll is useful for preventing sudden transitions at the Cycle To time.

Post Roll can also be useful when Safety Nets are enabled. If the Safety Net times are matched to the Cycle times (e.g. using the same Labels), then Post Roll will allow some audio to be heard immediately after the Safety Net end time so that the changeover can be heard in context.

To use the Post Roll Time

➤ Click the Use Post Roll Time check box so that an X is shown.



This is the same as checking the Post Roll Enable check box in the MCS Presets page.

To change the Post Roll Time

➤ Click the Pre/Post Roll Time button.

The MCS Presets page will be displayed.

➤ Change the Post Roll Time as required and Exit from Preferences.

Roll Back

Roll Back is the amount by which the transport is moved back when the ROLL BACK key is pressed.

The Roll Back time is set with Encore or directly from the MCS panel.

When the MCS Panel starts up (when the console is switched on), the Roll Back time is set to a default of 10 seconds.

When Encore starts up, the current Roll Back time set in MCS Preferences is sent to the MCS.

To use Roll Back

➤ Press the ROLL BACK key.

The ROLL BACK key will illuminate.

Depending on how the machine executes a Roll Back, the REWIND key or the SHUTTLE key will also illuminate while the transport is rolling back.

When the Roll Back is complete, the ROLL BACK key and REWIND or SHUTTLE key will cease to be illuminated.

or

➤ Type a time value on the numeric keypad.

➤ Press the ROLL BACK key.

The ROLL BACK key will illuminate.

Depending on how the machine executes a Roll Back, the REWIND key or the SHUTTLE key will also illuminate while the transport is rolling back.

When the Roll Back is complete, the ROLL BACK key and REWIND or SHUTTLE key will cease to be illuminated.

The time entered on the keypad will be saved until Encore overwrites it or the console is re-started

Track Arming

To arm (or disarm) Tracks

➤ Press the REC key while the machines are stopped.

The key will flash.

➤ Press the numeric key between 1 and 8 corresponding to the required machine.

The display will show which row is currently accessed for arming (e.g. tr1 row2 means machine 1, second row of tracks).

➤ Press the + and - keys to move to different rows of tracks.

The display will indicate the current row accordingly.

➤ Press the numeric key between 1 and 8 corresponding to the required track.

The corresponding LED in the array will illuminate steady.

A track will toggle between armed and safe each time it is selected.

To change the machine being armed (without coming out of track arming mode)

➤ Press the M/C SOLO key.

➤ Press the numeric key between 1 and 8 corresponding to the required machine.

When all the required tracks have been armed

➤ Press the REC key.

The key will stop flashing.

The REC indicators in the LED array will illuminate to show which machines have armed tracks.

Machine Solo

The Machine Solo function allows a machine to be operated in isolation from its Group.

To Solo a Machine

➤ Press and hold the M/C SOLO key.

➤ Press the numeric key between 1 and 8 corresponding to the required machine.

➤ Release the M/C SOLO key.

The integral LED will flash to show that the Solo function is active.

Transport operations will now only control the machine selected for solo. The keys will indicate the state of the selected machine.

To cancel Solo

➤ Press the M/C SOLO key again.

The integral LED will cease flashing.

The panel will return to normal operation.

Machine Offset

A machine's offset is the difference between its position and the group master position. The offset value for the group master is always zero.

✍ *Automation can be offset from the transport position using Set Offset in the Automation Menu.*

To set a machine's offset to a specific value

➤ Type in the timecode value on the numeric keypad.

The timecode display will show the value as it is entered.

➤ Press the STORE key.

➤ Press the M/C OFFSET key.

The integral LED will illuminate red.

➤ Press the numeric key between 1 and 8 corresponding to the required machine.

The offset entered will be stored against the selected machine.

To use auto-offset

➤ Press and hold the M/C OFFSET key.

➤ Press the numeric key between 1 and 8 corresponding to the required machine.

The machine's offset will be set to the difference between its position and the position of the master of the current group.

To briefly display a machine's offset

➤ Press the M/C OFFSET key.

The integral LED will illuminate red.

➤ Press the numeric key between 1 and 8 corresponding to the required machine.

The timecode display will show the offset. The display will revert to normal after a short time.

To persistently display a machine's offset

➤ Press the RECALL key.

➤ Press the M/C OFFSET key.

The integral LED will illuminate red.

➤ Press the numeric key between 1 and 8 corresponding to the required machine.

The timecode display will show the offset.

➤ Press the M/C OFFSET key again to return the timecode display to normal.

To trim a machine's offset

➤ Press the TRIM key.

➤ Press the M/C OFFSET key.

The integral LED will illuminate red.

➤ Press the numeric key between 1 and 8 corresponding to the required machine.

The timecode display will show the offset.

➤ Rotate the jog wheel.

The offset value will be adjusted according to how much the jog wheel is moved.

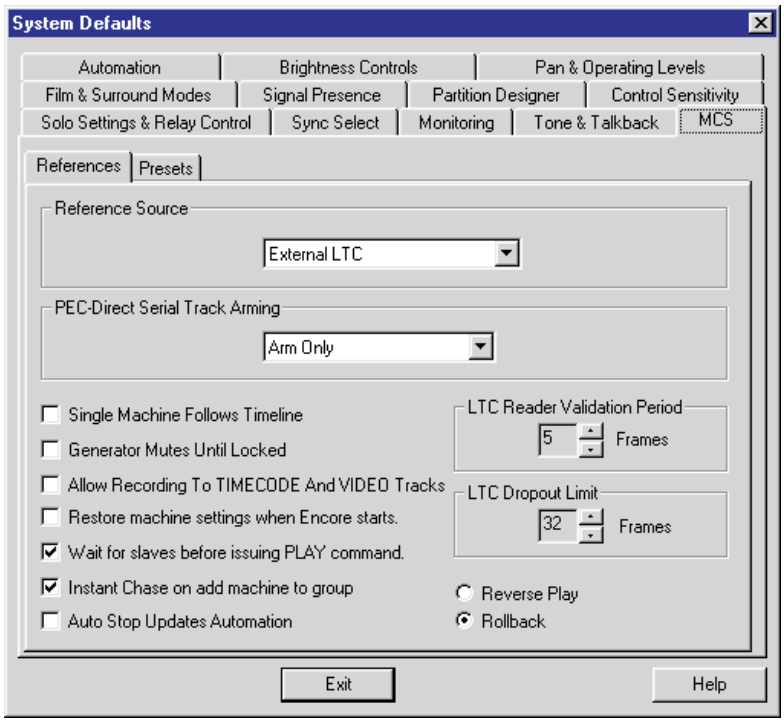
➤ Press the TRIM or M/C OFFSET key again to end offset trim.

MCS Preferences

The MCS Preferences page is used to set the preferences for the Machine Control System.

The page is split into two sub-pages for References and Presets.

MCS References



The MCS References page is used to set the timeline source and various other machine control options.

Reference Source

This option informs the MCS how the timeline is sourced.

External LTC
Timecode is read from the Timecode Track on a tape machine. The MCS has no control over this machine. The transport controls show the machine status according to incoming timecode.

9 Pin And Internal
The timeline position is taken from the master machine. The timeline is generated internally and the master machine is servoed until it locks to the timeline. The MCS controls the master machine.

9 Pin And Video
The timeline position is taken from the master machine. The timeline is generated and read from a video pulse generator and the master machine is servoed until it locks to the timeline. The MCS controls the master machine.

LTC From Master Machine
The MCS controls the tape machine through the 9 Pin serial port but timecode is read from the Timecode Track on the tape machine.

PEC-Direct Serial Track Arming

This option only applies to systems with the optional Surround Sound Panel installed. The panel has PEC/Direct track arming.

Arm Only causes tracks to be armed ready for record.

Arm & Punch-In causes tracks to arm and receive a punch-in command to start recording immediately.

LTC Reader Validation Period

This is the number of consecutively incremented timecode frames that are received before MCS acknowledges that the timecode source is in play.

LTC Dropout Limit

This is the maximum amount of time (in frames) that bad timecode will be received before MCS drops synchronisation and timecode display is stopped on the screen. This is also known as the flywheel period.

Single Machine Follows Timeline

When checked, the attached tape machine is servoed until it locks to the timeline. This is the usual setting. When un-checked, the timeline does not start (take the initial position and start running) until the machine has servoed into lock.

Generator Mutes Until Locked

When checked, the internal timecode generator does not generate a signal until lock has been established. This option is un-checked by default.

Allow Recording to TIMECODE And VIDEO Tracks

When checked, this allows the TIMECODE and VIDEO tracks on any attached machine to be recorded over. This option is un-checked by default and should be used with caution.

Restore machine settings when Encore starts

This is used to make sure that the machine settings (offsets, servo parameters, etc.) are restored to the same condition when Encore starts. This will ensure that the machines are in a known state (i.e. as configured from Encore).

Wait for slaves before issuing PLAY command

This is used to make sure all machines in a group are at the same position before the Group Master starts to play.

Instant Chase on add machine to group

This causes machines to immediately position themselves to the Group Master position when added to a group.

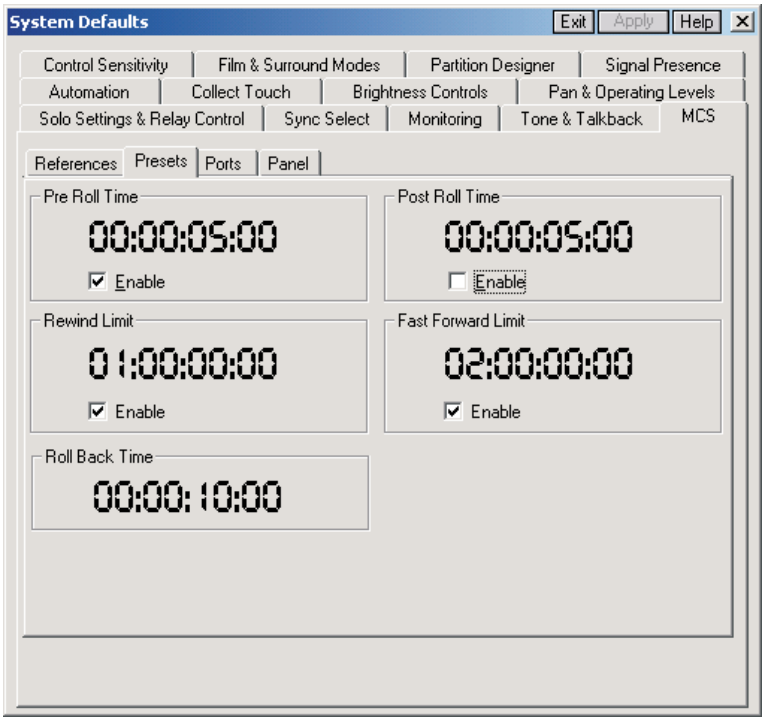
Auto Stop Updates Automation

This is used when STOP is pressed twice to issue an ALL STOP command. The automation system will then locate to the time at which ALL STOP was issued and the desk will be updated with the control settings at that point. This is typically used when rewinding or fast forwarding and it is necessary to see the state of the Play Pass at the point where ALL STOP is pressed.

Reverse Play or Rollback

This determines whether the MCS issues a Reverse Play or Rollback command to the transports when ROLL BACK is pressed.

MCS Presets



The MCS Presets page is used to set timecode values for different MCS command options.

Pre Roll Time

This is a timecode value that sets the amount of extra timecode that a tape is re-wound by when executing a Locate or Cycle.

For instance, if the tape is located to 00:01:00.00 (1 minute) and a Pre Roll Time of 5 seconds is in use then the tape will actually locate to 00:00:55.00 (55 seconds) and then start to play. This allows plenty of time for the automation system to resolve the incoming timecode.

Set the timecode value manually.

The Enable check box must be checked for the Pre Roll Time to be used. It is not checked by default.

Post Roll Time

This is a timecode value that sets the amount of extra time that a tape will continue for at the end of a Cycle before rewinding to go back to the Cycle Start time.

Set the timecode value manually.

The Enable check box must be checked for the Post Roll Time to be used. It is not checked by default.

Rewind Limit

This is the lowest timecode (or foot-frame) position that machines will go to when rewinding before they stop automatically.

Set the timecode value manually.

The Enable check box must be checked for this to be used.

Fast Forward Limit

This is the highest timecode (or foot-frame) position that machines will go to when fast-forwarding before they stop automatically. This is useful when using reel-to-reel tape machines to prevent the machine from over-running the end of the tape.

Set the timecode value manually.

The Enable check box must be checked for this to be used.

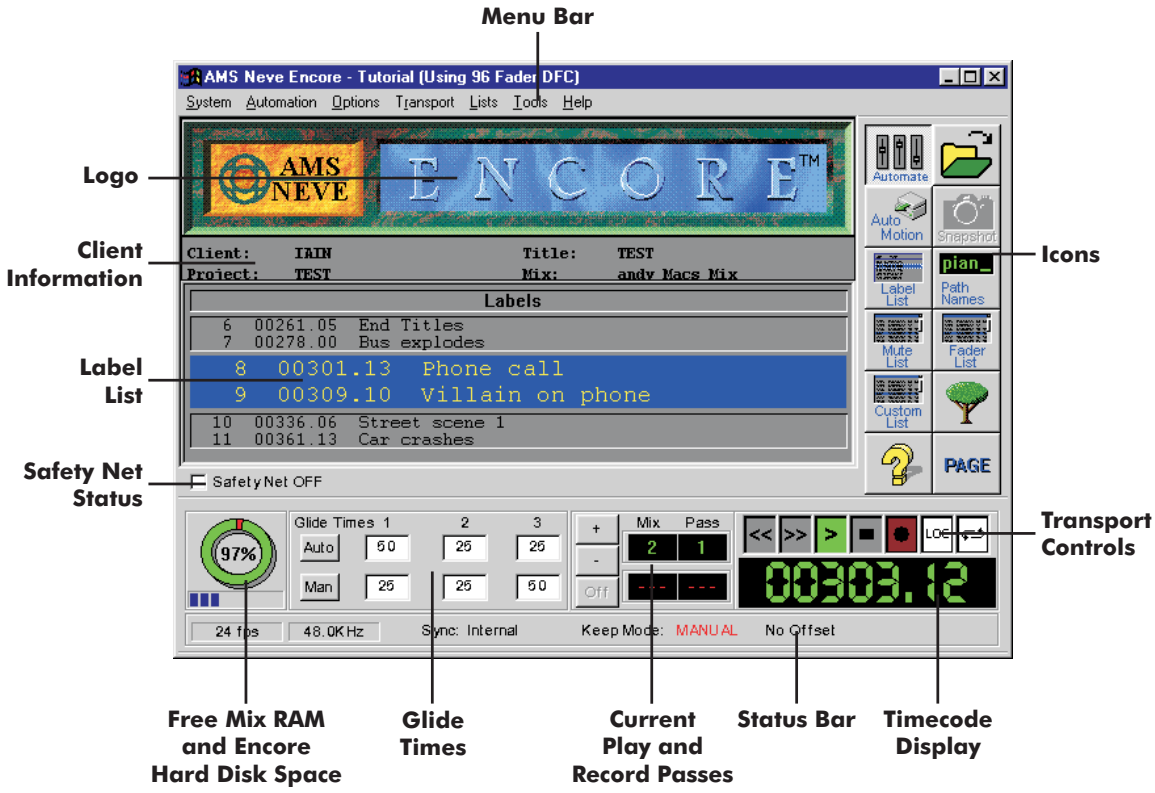
Roll Back Time

This is a timecode value that sets the amount of re-wind when a Roll Back command is sent to the transport device(s).

Set the timecode value manually.

USING ENCORE

The Main Encore Screen



Menu Bar

The menu bar shows the titles of the drop-down menus. Each menu has various options for using different Encore functions. The menu options are described in detail in the following chapters. Note that certain menus and menu items are greyed out. These options are not available on the DFC Gemini.

Logo

The logo can be removed to create more space for the Label List. This is useful when the MCS Machine Status and/or the MCS Group Status is displayed.

Client Information

Contains information about the current project and mix. This is taken from the locked Client, Project and Title in the Automation page of the Filing utility.

Icons

There are two 'pages' of icons that provide one-click access to selected Encore functions.

Label List

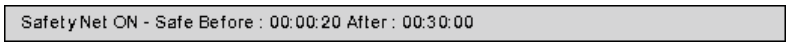
Shows the labels in the Label List. When Timecode is running the list scrolls and shows the label matching the current Timecode in the enlarged label display.

Clicking on the Label List Display will open the Label List dialogue box.

Safety Net Status

This shows whether the automation Safety Nets are on or off.

When the Safety Nets are on then the start and end timecodes are displayed as shown in the example below.



Free Mix RAM and Encore Hard Disk Space

The ring displays the current level of free Mix RAM in the system, giving a rough indication of how much space there is for automation data in the current Play and Record Passes.

More detailed information about the available RAM can be seen by selecting Show Mix Statistics from the Automation Menu.

The bargraph shows approximate Encore hard disk usage. This is a useful guide to showing when it may be necessary to start archiving old data and removing it from the hard disk.

Glide Times

The Match and Auto Match Glide Times are shown for each console partition, and can be changed at any time (including when automation is running).

✍ *Because a Glide is written into Fader/Logicator data, any change in Glide Time settings does not affect previously written Glides.*

To adjust glide rates

➤ Click directly on a Glide Time value and enter the required number of frames.

or

➤ Click on either the Auto or the Man button in the glide times display.

The Glide Times dialogue box will be displayed for setting the glide times.

Current Play and Record Passes

The Play Pass numbers show the Mix/Pass number (from the Mix/Pass Tree) which will be Played if automation is started.

The Record Pass numbers show the Mix/Pass number which will be added to the Mix/Pass Tree if the Record Pass is kept.

The Record Pass numbers show --- until a new Record Pass is started.

If AutoKeep is enabled in Automation Preferences then the Record Pass will saved to the Mix/Pass Tree automatically when the Transport is stopped. The Mix/Pass numbers show * when a Record Pass is being saved to the Mix/Pass Tree.

Clicking on either the Play or Record Pass will display the Mix/Pass Tree.

Timecode Display

Shows the current Timecode in green when Timecode is running. The display is red when Timecode is stopped.

Clicking in the Timecode Display will open the Timecode Options dialogue box.

Transport Controls

These are used to control and display the current state of the transport. The icons 'illuminate' when active.

If the Play icon is green, Timecode should be running.

The Locate and Cycle icons can be clicked to bring up the MCS Labels dialogue box that is used to set Locate and Cycle times.

Status Bar

This area of the screen shows the timecode rate, the system sync rate, the source of Synchronisation for the console, the current Keep Mode (AUTO or MANUAL) and the current system offset.

Tool Tips

Resting the cursor on each area of the screen will activate a temporary display explaining that area's function.

Screen Shortcuts - Hints and Tips

You can use areas of the screen directly to activate various operations, providing a shortcut to some functions instead of using the drop down menus or icons.

To access the Label List dialogue box from the Screen

➤ Click in the Label area of the screen.

The Label List dialogue box will appear.

✍ *See the Lists Menu chapter for more details on Label Lists.*

To access the Mix/Pass tree from the screen

➤ Click on either the Play or the Rec button located in the Mix/Pass area of the screen (located at the bottom of the screen).

The Mix/Pass dialogue box will appear.

✍ *See the Automation Menu chapter for more details on using the Mix/Pass Tree.*

To access the Glide Times from the screen

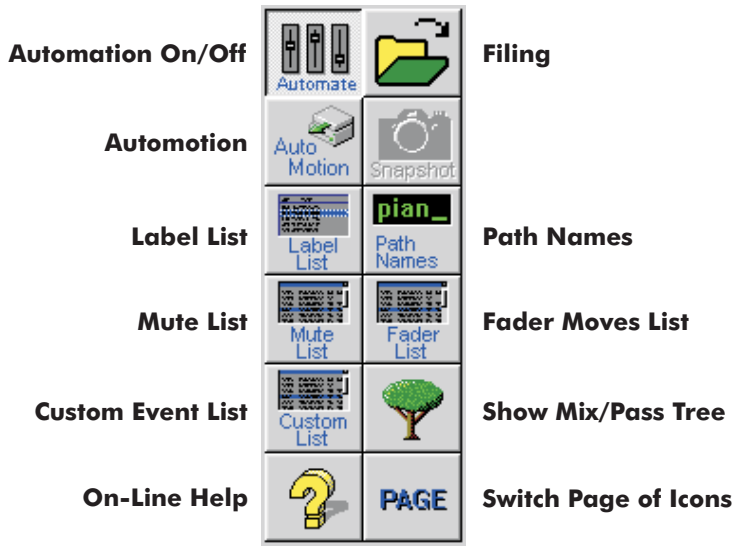
➤ Click the Auto or Manual buttons next to the Glide Time boxes.

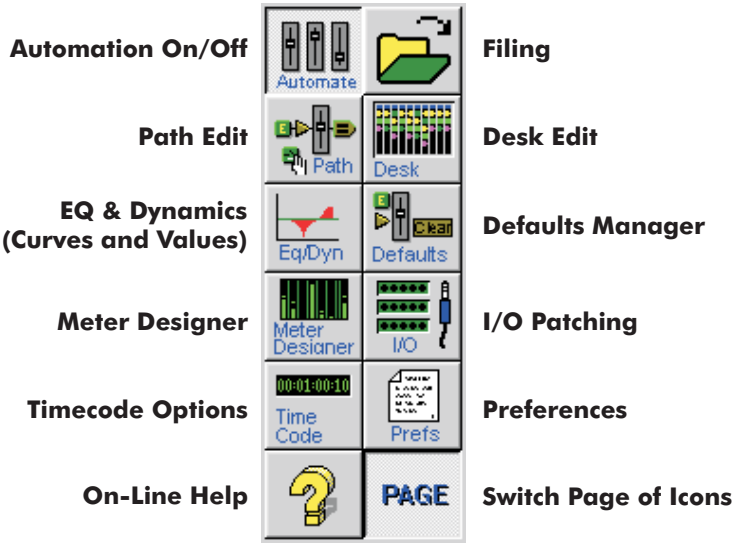
The Glide Times dialogue box will be displayed.

✍ *See the Options Menu chapter for details on setting Glide Times.*

Icons

The icons provide one-click access to a selected range of Encore functions. There are two 'pages' of icons, one of which is oriented to configuration functions and the other is oriented to automation functions.





Manually Editing Timecode

Many of the Encore functions have timecode fields. These can be set using the Label List (see the Lists Menu chapter) and/or adjusted manually, as follows.

To change a Timecode manually

➤ Click on the Timecode.

The cursor will change to a plus or minus sign according to whether the cursor is over the top or bottom half of a digit.

➤ Click on a digit to increment or decrement it.

To zero the Timecode

➤ Press the Z key on the Encore keyboard.

The displayed timecode will be set to zero.

To use a Timecode Preset

➤ Press the A, B, C, D, E or F key on the Encore keyboard.

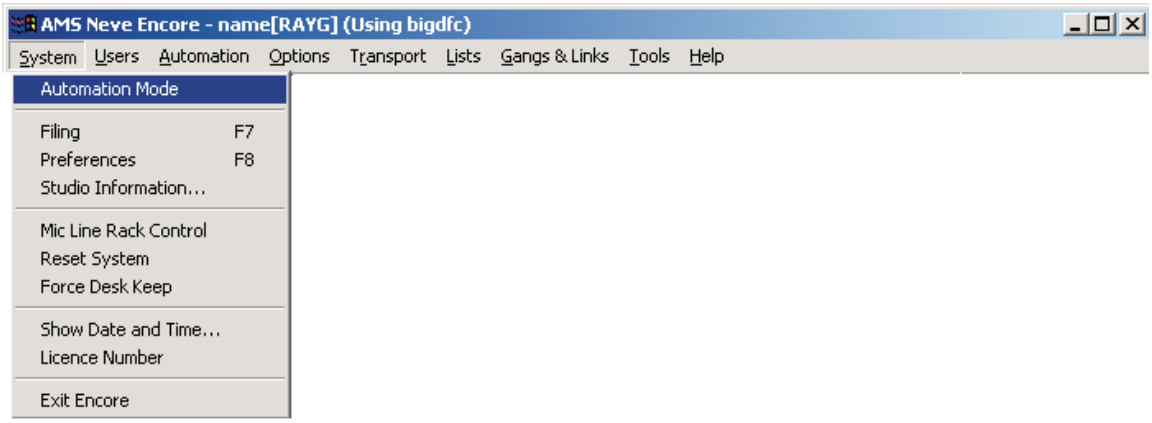
The Timecode will be set to the value from the selected preset.

Keyboard Shortcuts

The following list shows which keys can be used in place of pointing and clicking with the trackball.

Key	Action
F1	Display Help. The help file will be displayed. If F1 is pressed when a particular dialogue box is on the screen then the relevant page of Help will be displayed.
F2	Mute List.
F3	Fader Moves List.
F4	Custom Event List.
F5	Group Setup (MCS).
Ctrl-F5	MCS Preferences (References sub-page).
Ctrl-Shift-F5	MCS Presets
F6	Show Mix/Pass Tree.
F7	Filing.
F8	Preferences.
F10	Timecode Options.
F12	Label List.
Esc	Close dialogue box. Equal to clicking the Cancel button.
Alt-Backspace	Undo changes to data in a dialogue box.
Tab	Jump between fields in a dialogue box.
a, b, c, d, e or f	Set currently selected Timecode field to value held in the Timecode Preset for the key pressed.
z	Set currently selected Timecode field to zero.
Ctrl-k	Capture current Timecode and store it in Preset A.
Ctrl-n	New Mix Tree.
Ctrl-s	Toggle the Safety Net on and off.
Ctrl-i	Set Safety Net in point (i.e. start time) to the current timecode and switch on the Safety Net. This also sets the Safety Net end time to the start time plus two hours.
Ctrl-o	Set Safety Net out point (i.e. end time) to the current timecode and switch on the Safety Net.

SYSTEM MENU



Automation Mode

This is used to turn the automation system on and off. When automation is off, all the automation functions in Encore are unavailable.

Switch On the Automation System

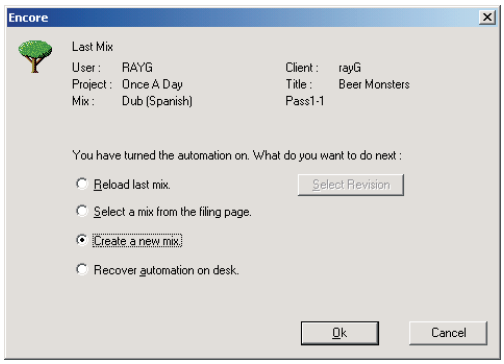
To start the Automation System

➤ Click Automation Mode in the drop down System Menu.

or

➤ Click the Automate icon.

In both cases, a dialogue box will be displayed to select how to start up the Automation System.



➤ Click the radio button for the required option.

➤ Click OK.

Reload last Mix

This reloads the most recently loaded Mix/Pass.

The Restore Modes dialogue box will be displayed.



➤ Click the required check boxes.

Safety Snapshots loads the pre-automation control settings that were stored with the Mix.

Modes will reset the Automation Modes of controls to those that were kept in the Mix being loaded.

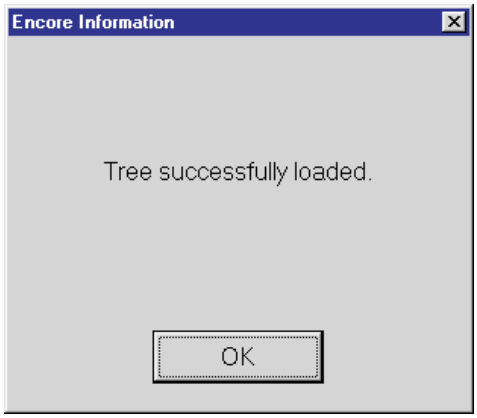
Gangs restores the Gang structure that is stored in the Mix.

Links restores the control link structures that are stored in the Mix.

✍ *The Restore Modes, Restore Gangs and Restore Links check boxes are linked, so that clicking one is the same as clicking all three. However, they can be selected individually by holding down Ctrl on the keyboard and then clicking the required check boxes.*

➤ Click OK.

The mix and Mix/Pass Tree will be loaded. When this is complete, a dialogue box will be displayed.



➤ Click OK.

Select a Mix from the Filing Page

This is the same as running the Filing utility and loading a Mix/Pass Tree.

Create a New Mix

This is the same as running New Mix Tree from the Automation Menu.

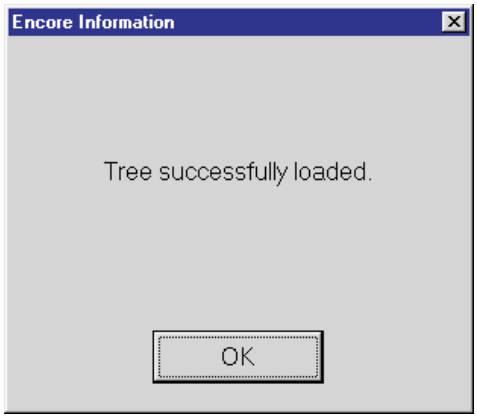
Append current automation to last Mix

When a Mix/Pass is recorded, the automation data is initially stored in the Libra Post's automation buffer. When timecode stops then this is saved to the current Mix/Pass Tree automatically if the Keep Mode is set to Auto.

If the Keep Mode is set to Manual then it is possible that an un-saved automation pass is stored in the automation buffer. This option is used to save that pass as a new Mix/Pass that is added to the most recently loaded Mix/Pass Tree. The Mix/Pass is added to the tree at the last loaded Mix/Pass.

The mix and Mix/Pass Tree will be loaded.

When this is complete, a dialogue box will be displayed.



➤ Click OK.

Switch Off the Automation System

To stop the Automation System

➤ Click the ticked Automation Mode option in the drop down System Menu.

or

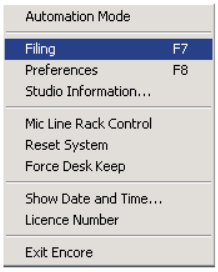
➤ Click the Automate icon.

The automation system will be switched off.

The Client Information area will display **Encore Automation Is Disabled**.

The Label List will be cleared and no Play Pass number will be displayed.

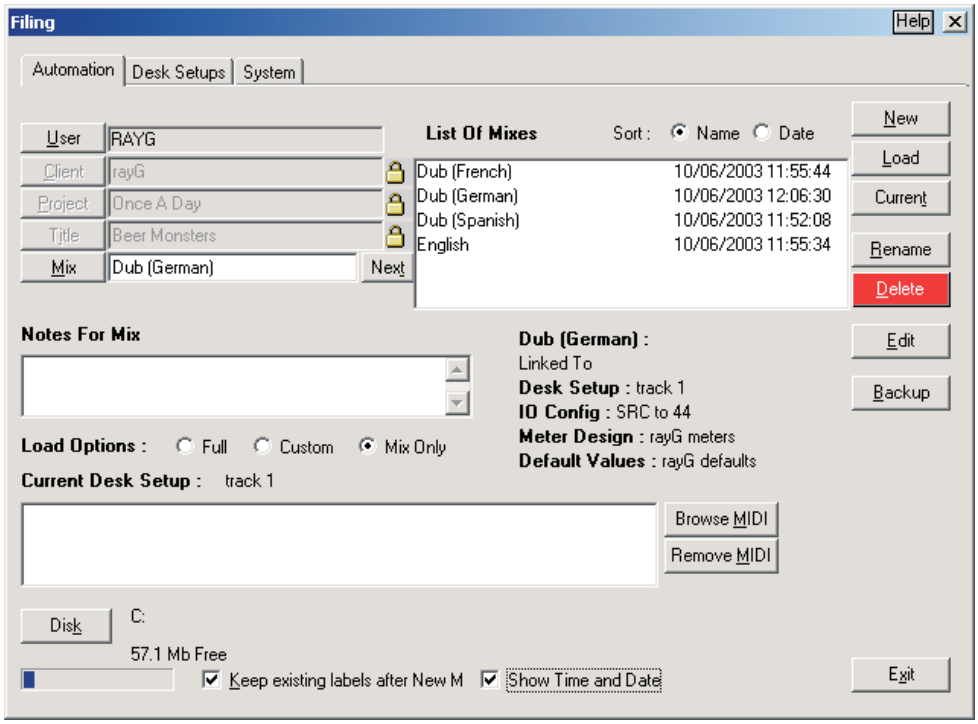
Filing



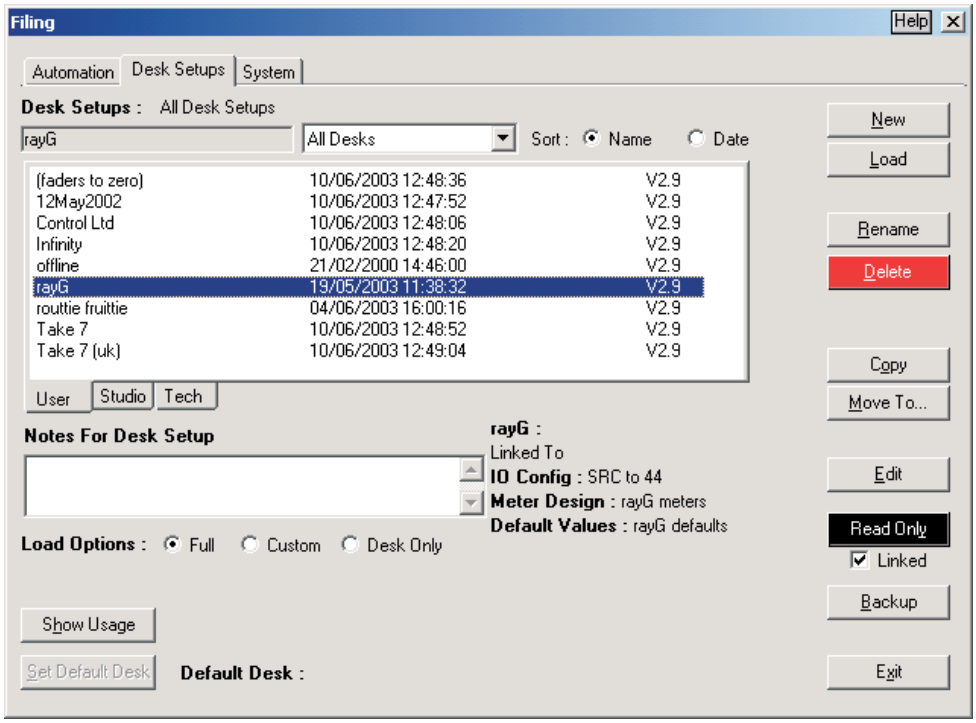
Filing is the central utility for managing automation and configuration data that has been saved to the Encore hard disk.

Filing is divided into three pages for Automation Filing, Desk Filing and System Filing.

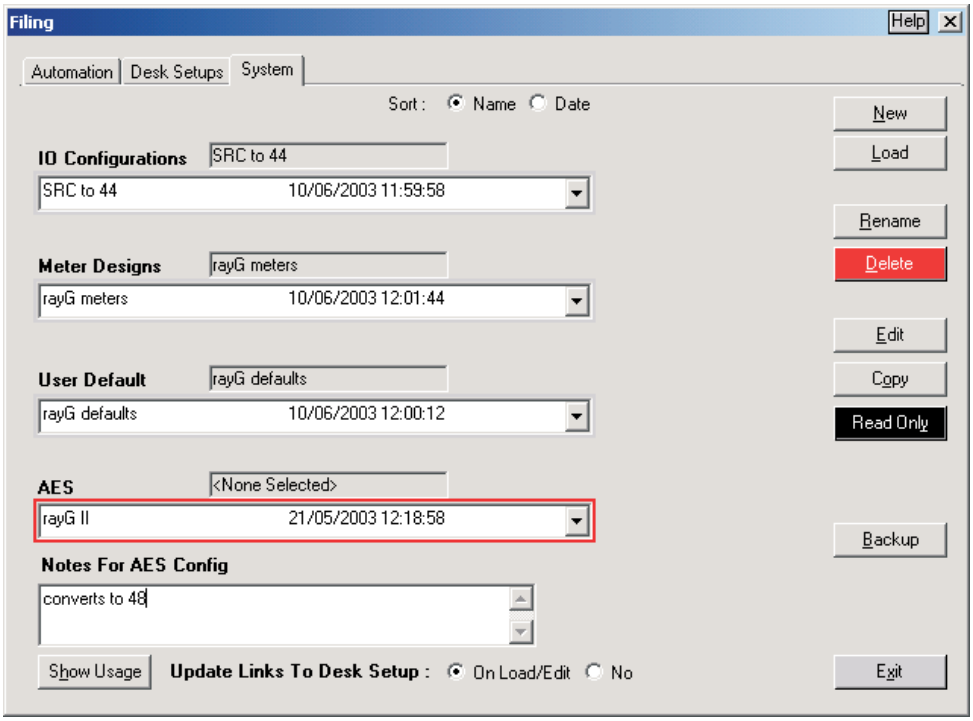
The Automation Filing page is used to organise and manage automation data.



The Desk Filing page is used to organise and manage Desk Setups.



The System Filing page is used to organise and manage the other configuration files: IO Configuration, Meter Designs and User Defaults files.



To start the Filing utility

➤ Click Filing in the drop-down System Menu.

or

➤ Click the Filing icon.

The Filing screen will be displayed.

✍ *Desk Edit, I/O Config, Meter Designer, AES Config and Defaults Manager each have a Filing> button in the title bar. When this button is clicked, the program will close (with any appropriate exit messages as normal) and the Filing screen will be displayed.*

Automation Filing

The files that contain actual automation data are the Mixes. These are saved according to the current User ID within an organised structure (hierarchy).

✍ *The User is determined by who logged on to Encore. If the Administrator user is logged on, the User button can be used to select the data for any user names in the system. This allows the Administrator to maintain the Encore filing system.*

File Hierarchy

The top level of Mix filing is the User. Each User can have any number of Clients, and each Client can have any number of Projects. The Project level can be used as the overall level for music albums or films and other post-production projects. A Project can have any number of Titles (e.g. individual music tracks, or episodes from a television series) and the Mix/Pass Trees are stored within the Titles.

Creating New Clients, Projects and Titles

This can be done at any time, but usually when starting a new Mix Tree.

➤ Click the Client button.

The Client name will be cleared and the text cursor will flash in the Client name box.

➤ Type in the new name as required.

✍ *The Autofill feature will attempt to match anything typed with existing names. Carry on typing to ignore the matches made by Autofill, or press DEL to remove the Autofill match.*

➤ Click the New button or press TAB or ENTER.

The text cursor will move to the Project box. There will be no Projects listed for the new Client.

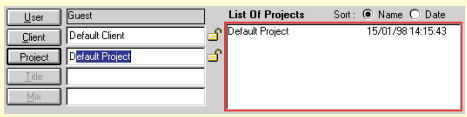
If TAB or ENTER was pressed, the Client will be locked automatically.

Follow the same process for new Projects and Titles.

✍ *When a new Client is created for Keeping a Mix then a new Project and Title must also be created, otherwise the Default Project and Default Title will be used. These can, however, be renamed later if required.*

Using Auto-Fill

If a Client, Project, Title or Mix name is typed the auto-fill system will attempt to match the letters typed in to existing names. If one is found then the box will automatically display the remainder of the name.



This can either be accepted by pressing tab to jump to the next filing level (e.g. from Project to Title), or continue typing until the correct name is selected. If a name that does not exist is typed in then it will be created, except for the Mix which will be renamed.

Creating New Mix Trees

New Mix Trees can be created withing Filing as well as using New Mix Tree.

A new Mix Tree is linked to the currently loaded Desk Setup, so it may be necessary to first load a different Desk Setup as described in Desk Filing.

To create a new Mix Tree

➤ If required, first Create a new Client, Project and/or Title.

With the cursor in the Mix box either

➤ Type in a name for the new Mix Tree.

or

➤ Click the Next button.

When the Next button is clicked, the list of Mix Trees for the current Title is checked to see which number was used last with the current default name (the default name is set in Mix/Pass Tree Options). The default name is automatically entered with the next number.

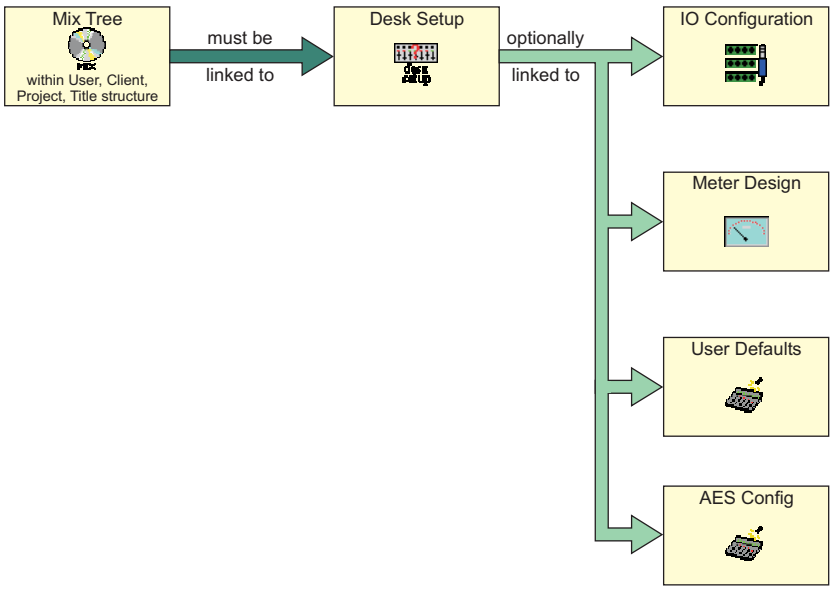
➤ If required, edit the default name.

When the new Mix Tree name is correct

➤ Click the New button.

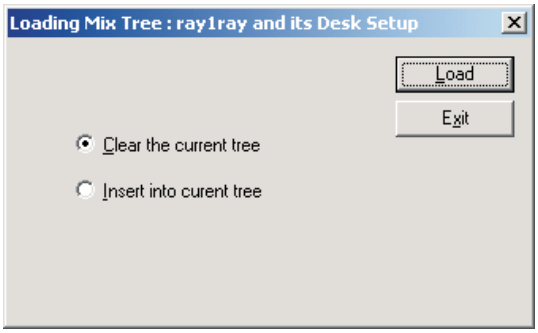
If the automation system is off

The Mix Tree will be created and automation will be switched on. The Mix Tree will be linked to the currently loaded Desk Setup, as shown in the File Linking diagram.



If the automation system is on

The Creating Mix Tree dialogue box will be displayed.



There are various options for the new Tree:

Start a new tree from scratch
This will simply start a new Mix/Pass Tree, with a new Initial Snapshot.

Advanced options
Either or both of these options can be selected (if both are deselected, this is the same as Start a new tree from scratch).

Insert the new tree into the current tree
The Mix/Pass Tree will be combined with the current Tree. A new Initial Snapshot is taken.

Start a new tree from the current revision
A new Mix/Pass Tree will be created, using the currently loaded Mix/Pass as a starting point. The Initial Snapshot is inherited from the currently loaded Mix/Pass.

➤ Select the required option(s) and click Create.

The Mix Tree will be created. The Mix Tree will be linked to the currently loaded Desk Setup, as shown in the File Linking diagram.

Locking the Client, Project and Title

The selected Client, Project or Title can be locked so that the current names are set for the current session. This means that the locked names will be used automatically when creating or loading a Mix/Pass Tree. The locked names are shown in the Client Information area on the main Encore screen.

To lock a Client, Project or Title name

➤ Click the open padlock symbol next to the required name.

The padlock will close and the locked names will be greyed out, indicating that they can not be changed while they are locked.

Locking a low level will lock the previous levels (e.g. locking the Title will also lock the Client and Project).

To unlock a Client, Project or Title name

➤ Click the closed padlock symbol next to the required name.

The padlock will open and the names can be edited again.

Unlocking a high level will unlock the lower levels (e.g. unlocking the Client will also unlock the Project and Title).

Loading A Mix/Pass Tree

Select the Mix/Pass Tree

➤ Click the Client button.

The list box for automation data will be outlined in red and a List Of Clients will be shown.

➤ Double click the required Client name, or type the required Client name in the box next to the Client button and press ENTER.

The Client will be locked. The list box for automation data will display a List Of Projects for that Client.

➤ Double click the required Project name, or type the required Project name in the box next to the Project button and press ENTER.

The Project will be locked. The list box for automation data will display a List Of Titles for that Project.

➤ Double click the required Title name, or type the required Title name in the box next to the Title button and press ENTER.

The Title will be locked. The list box for automation data will display a List Of Mixes for that Title.

➤ Click the required Mix or type in the Mix name in the box next to the Mix button.

Using Auto-Fill
If a Client, Project, Title or Mix/Pass Tree name is typed the auto-fill system will attempt to match the letters typed in to existing names. If one is found then the box will automatically display the remainder of the name. This can either be accepted by pressing tab to jump to the next filing level (e.g. from Project to Title), or continue typing until the correct name is selected. If a name that does not exist is typed in then it will be created.

The linked Desk Setup will be displayed next to the Notes box. If the Desk Setup is linked to any configuration files then these will be shown as well.

Change the Configuration Files Loaded with a Mix Tree

➤ Click the Custom radio button.

When the Load button is clicked to load the Mix Tree, the Custom Load Mix dialogue box will be displayed.

The configuration files selected by default are the files that are already loaded.

➤ Click the check boxes at the right hand side of each configuration file type to load or not load a particular file.

➤ Click the selection box for the Desk Setup, IO Configuration, Meter Design or User Defaults file.

➤ Click the drop-down arrow next to the box.

A list of available files will be shown.

➤ Click the required file.

➤ When the custom selection is complete, click the Load button.

The loading process will continue as usual, except that the custom file selection will be used.

If the Exit button is clicked, the load procedure will be cancelled.

To load only the Mix Tree

➤ Click the Mix Only radio button.

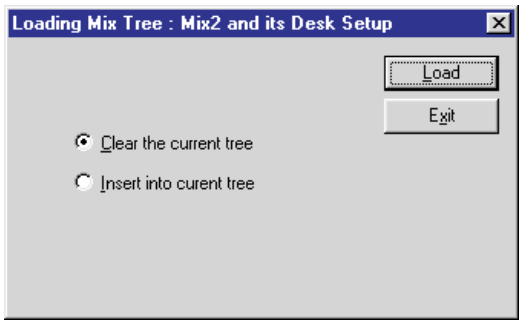
When the Mix Tree is loaded, no configuration files will be loaded (i.e. the currently loaded configuration files will be used).

Load the Mix/Pass Tree

When all the information is correct

➤ Click the Load button.

If a Mix/Pass Tree is already loaded then the Loading Mix Tree dialogue box will be displayed.



This has two options:

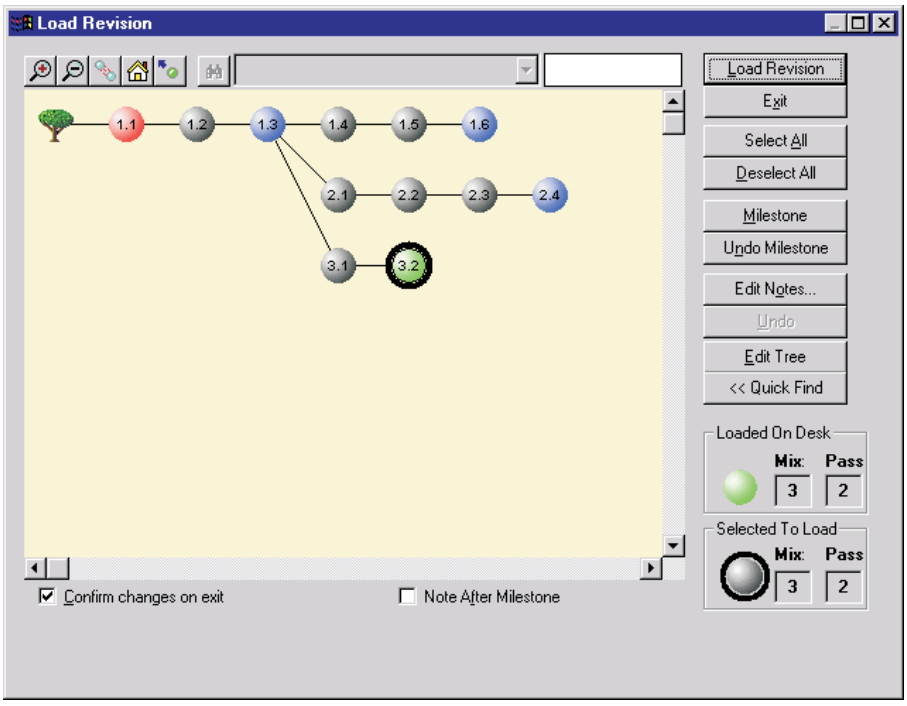
Clear the current tree
This removes the current Mix/Pass Tree from the active automation system before the selected Tree is loaded.

Insert into current tree
This is used to combine the selected Mix/Pass Tree with the currently loaded Mix Tree.

➤ Click the required radio button.

➤ Click the Load button.

The Mix/Pass Tree will be displayed.



➤ Click the required Mix/Pass number.

A black ring will be shown around the selected Mix/Pass.

➤ Click the Load Revision button.

The Restoring Modes dialogue box will be displayed.



➤ Click the check boxes as required.

Safety Snapshots loads the pre-automation control settings that were stored with the Mix.

Modes will reset the Automation Modes of controls to those that were kept in the Mix being loaded.

Gangs restores the Gang structure that is stored in the Mix.

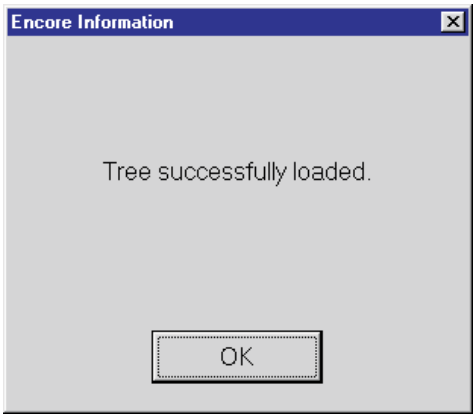
Links restores the control link structures that are stored in the Mix.

✍ *The Restore Modes, Restore Gangs and Restore Links check boxes are linked, so that clicking one is the same as clicking all three. However, they can be selected individually by holding down Ctrl on the keyboard and then clicking the required check boxes.*

➤ Click on OK.

The Mix will load and progress information will be shown on the screen.

When the Mix is loaded a dialogue box will be displayed to indicate success.



The box will close automatically after the Self-Closing Dialogues timeout.

Managing Automation Files

To rename a Client, Project, Title or Mix

➤ Select the Client, Project, Title or Mix.

➤ Click the Rename button.

A rename dialogue box will be displayed.

➤ Edit the name as required.

➤ Click OK or press Enter.

The item will be renamed and moved in the relevant list.

If the name already exists, a dialogue box will be displayed showing all existing entries. Re-type the name so that there is no conflict and click OK.

To delete a Client, Project, Title or Mix

➤ Select the Client, Project, Title or Mix.

➤ Click the Delete button.

A warning dialogue box will be displayed.

➤ Click Yes or No as required.

The item will be removed.

To edit a Mix Tree

➤ Select the required Mix name.

➤ Click the Edit button.

If automation has been switched on, a dialogue box will be displayed to indicate that the tree cannot be edited.

If automation is off, the selected Mix Tree will be loaded into the Prune Tree dialogue box.

Editing the Mix/Pass Tree is described in the Automation Menu chapter.

To backup a Client, Project, Title or Mix

➤ Select the Client, Project, Title or Mix.

➤ Click the Backup button.

Backup Manager will be launched and the Client, Project, Title or Mix will be selected for backup automatically. Backup Manager is described in the Tools Menu (page 29:99).

To enter notes about a Client, Project, Title or Mix

➤ Select the required Client, Project, Title or Mix.

➤ Click in the Notes box.

➤ Enter and/or edit text as required.

The note is stored with the Client, Project, Title or Mix immediately.

This is in addition to the notes entered against individual Mix/Passes in the Mix/Pass Tree display.

Desk Filing

The Desk Filing page is used to organise and manage Desk Setups. The main utility for changing Desk Setups is Desk Edit.

The Desk Setups are organised into three groups:

User
Custom Desk Setups designed by specific users for their projects. These can be linked to Mix Trees and other configuration files.

Studio
Standard Desk Setups, used as starting points for User Desk Setups, or used by visiting engineers who need a standard setup. Only a Studio Desk Setup can be selected as the Default Desk Setup.

Tech
Custom Desk Setups for use by technical staff who need to load special setups for testing purposes. Tech Desk Setups are automatically set as Read Only.

Selecting Desk Setups

To select a Desk Setup to work with

➤ If required, click the Show All check box.

If the Show All check box is not ticked (checked) then only the Desk Setups which are linked to the item currently selected on the Automation Filing page will be shown. This can be used to view Desk Setups according to which User, Client, Project, Title or Mix is selected.

➤ Click the User, Studio or Tech tab.

➤ Click the required file name in the Desk Setup list.

Creating Desk Setups

To start a new Desk Setup

➤ Click the New button.

Creating new Desk Setups is described under Desk Edit in the Tools Menu chapter.

Loading Desk Setups

To load a Desk Setup

➤ Select the required Desk Setup.

➤ Click the Full, Custom or Desk Only Load Option radio button.

➤ Click the On Load/Edit or No Update Links radio button.

➤ Click the Load button.

or

➤ Double click the required Desk Setup.

If the On/Load Edit radio button is selected for Update Links

When the Desk Setup is loaded, it will be linked to the currently selected User, Client, Project, Title or Mix selected on the Automation Filing page. This is a 'soft link' that is used to control which Desk Setups are shown when the Show All check box is not ticked (checked).

If the Full radio button is selected for Load Options

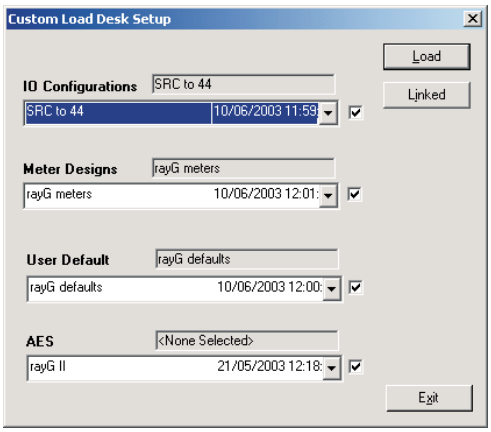
The Desk Setup and any linked configuration files will be loaded.

If the Desk Only radio button is selected for Load Options

Only the Desk Setup will be loaded. No linked configuration files will be loaded.

If the Custom radio button is selected for Load Options.

The Custom Load Desk Setup dialogue box will be displayed.



The configuration files selected by default are the files that are already loaded.

➤ Click the check boxes at the right hand side of each configuration file type to load or not load a particular file.

➤ Click the selection box for the IO Configuration, Meter Design or User Defaults file.

➤ Click the drop-down arrow next to the box.

A list of available files will be shown.

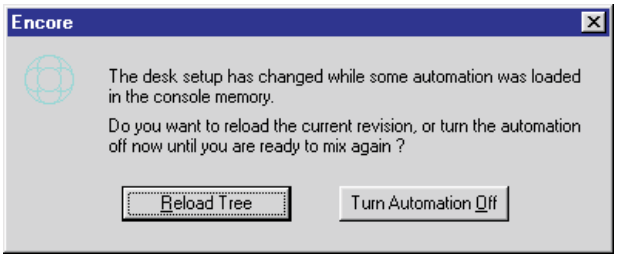
➤ Click the required file.

➤ When the custom selection is complete, click the Load button.

The Desk Setup and any selected files will be loaded.

If a Mix/Pass Tree is loaded when a Desk Setup is loaded

A dialogue box will be displayed to warn that the Desk Setup has been changed while automation data is loaded.



➤ Click the Reload Tree or Turn Automation Off button.

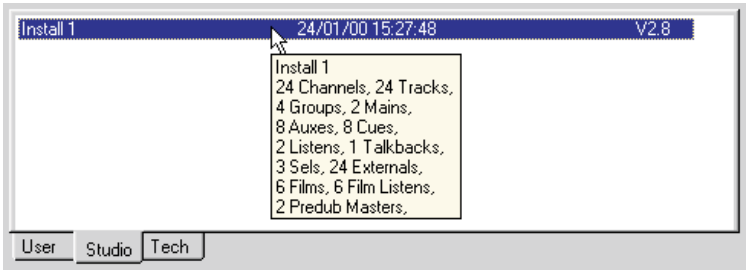
If the Reload Tree button is clicked, the current Mix/Pass will be reloaded from the Mix/Pass Tree. This is so that Encore can determine whether or not there is automation data that is out of the scope of the loaded Desk Setup. For instance, if the loaded Mix/Pass has automation data for Channel 23 and there are only 12 Channels in the new Desk Setup, then Encore will identify that the automation data for Channel 23 is to be ignored.

Information about Desk Setups

To see details of a Desk Setup

➤ Rest the pointer on a Desk Setup name.

A popup box will display the number of each type of path in the Desk Setup.

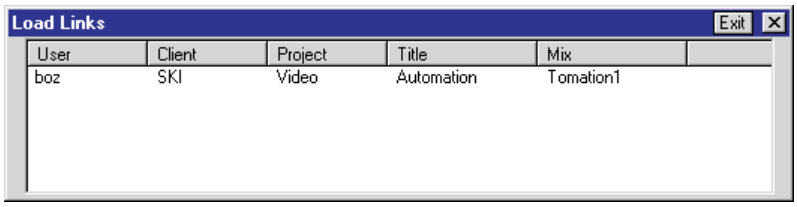


To view Mix Tree links to a User Desk Setup

➤ Select the required User Desk Setup.

➤ Click the View Links button.

The Load Links dialogue box will be displayed, showing the Mix Trees that use the selected Desk Setup.



➤ Click the Exit button in the title bar of Load Links dialogue box to close it.

To enter notes about a Desk Setup

➤ Select the required Desk Setup.

Any existing Notes will be displayed in the Notes box.

➤ Click in the Notes For Desk Setup box.

➤ Enter and/or edit text as required.

The note is stored with the Desk Setup immediately.

Default Desk Setup

The Default Desk Setup is loaded when the system starts up. Only a Studio Desk Setup can be set as the Default Desk Setup.

To set the Default Desk Setup

➤ Select the required Studio Desk Setup.

➤ Click the Set Default Desk button.

The name of the selected Desk Setup will be shown as the Default Desk.

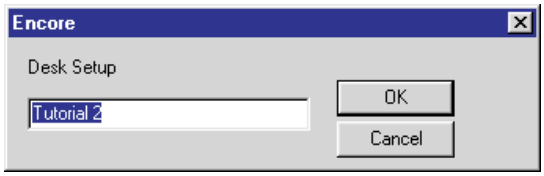
Rename Desk Setups

To rename a Desk Setup

➤ Select the required Desk Setup.

➤ Click the Rename button.

A rename dialogue box will be displayed.



➤ Edit the name as required.

➤ Click OK or press Enter.

The Desk Setup will be renamed and moved in the list.

or

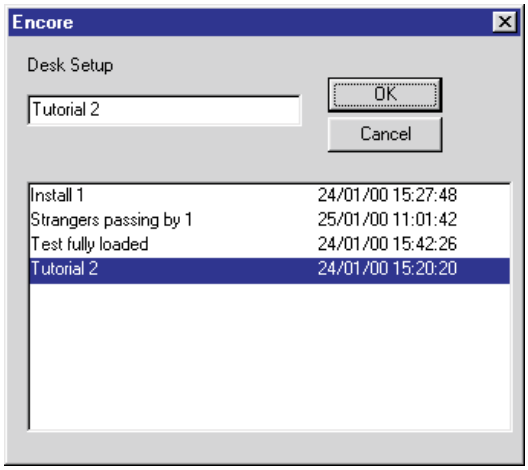
If the Desk Setup name is already used

A warning message will be displayed indicating that the name is already used.



➤ Click OK to clear the warning.

A different rename dialogue box will be displayed with a complete list of existing Desk Setup names.



➤ Edit the name so that it is unique.

➤ Click OK or press ENTER.

The Desk Setup will be renamed and moved in the list.

✍ *The currently loaded Desk Setup, the Default Desk Setup and Read Only Desk Setups cannot be renamed.*

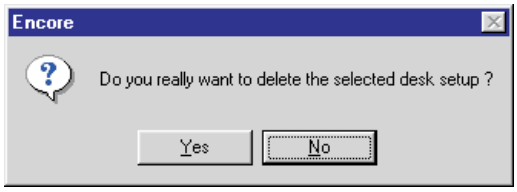
Delete Desk Setups

To delete a Desk Setup

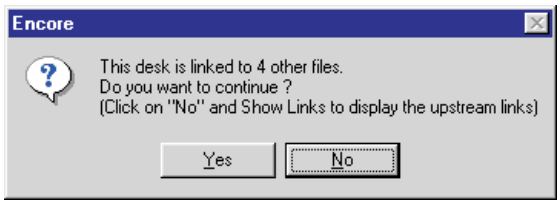
➤ Select the required Desk Setup.

➤ Click the Delete button.

A confirmation dialogue box will be displayed.



If a User Desk Setup is selected then the confirmation dialogue box will indicate how many files the Desk Setup is linked to.



➤ Click the Yes button.

The Desk Setup will be deleted.

✍ *The currently loaded Desk Setup, the Default Desk Setup and Read Only Desk Setups cannot be deleted. If it is necessary to delete the currently loaded Desk Setup, first load a different Desk Setup.*

Copy and Move Desk Setups

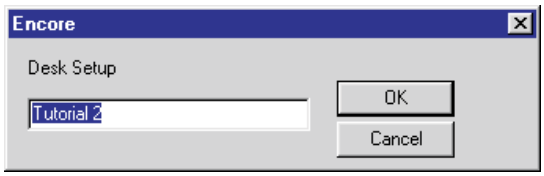
Desk Setups are copied within the same group. For instance, a User Desk Setup can only be copied as another User Desk Setup. After being copied, a Desk Setup can then be moved to another group.

To copy a Desk Setup

➤ Select the required Desk Setup.

➤ Click the Copy button.

A naming dialogue box will be displayed for the name to be used for the copy.



➤ Edit the name.

➤ Click OK or press ENTER.

The Desk Setup will be copied to the current group (Studio, Tech or User).

or

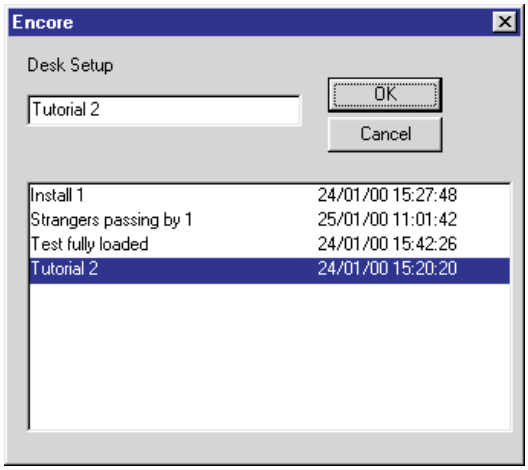
If the Desk Setup name is already used in the target group

A warning message will be displayed indicating that the name is already used.



➤ Click OK to clear the warning.

A different naming dialogue box will be displayed with a complete list of existing Desk Setup names.



➤ Edit the name so that it is unique.

➤ Click OK or press ENTER.

The Desk Setup will be copied to the current group (Studio, Tech or User).

To move a Desk Setup

➤ Select the required Desk Setup.

➤ Click the Move To button.

A small flyout menu will appear with options for the other two groups.

For instance, if you are moving a User Desk Setup, you will have options to move the Desk Setup to Studio or Tech.

➤ Click the required group.

A confirmation dialogue box will be displayed.

➤ Click Yes.

The Desk Setup will be moved.

Edit Desk Setups

To edit a Desk Setup

➤ Select the required Desk Setup.

➤ Load the Desk Setup.

➤ Click the Edit button.

Desk Edit will start with the loaded Desk Setup. Desk Edit is described in the Tools Menu chapter.

Set Desk Setups as Read Only

To make a Desk Setup read only

➤ Select the required Desk Setup.

➤ If required, click the Linked check box under the Read Only button.

When the Linked check box is ticked (checked) then any configuration files (IO Configuration, Meter Designs, User Defaults) linked to the selected Desk Setup will also be made read only.

➤ Click the Read Only button.

A dialogue box will be displayed to confirm changing the Read Only status.

➤ Click OK.

The Desk Setup will be marked with the words Read Only.

✍ *The same process is used to un-mark the file. Simply select a file with the Read Only flag and click the Read Only button.*

Backup Desk Setups

To backup a Desk Setup

➤ Select the required Desk Setup.

➤ Click the Backup button.

Backup Manager will start and the Desk Setup will be selected automatically for Backup.

Backup Manager is described in the Tools Menu chapter.

System Filing

There are three types of configuration file managed on the System Filing page:

IO Configuration

This contains the configuration of the input and output ports that are available to the system, including port names, mono/stereo port types, SRC configuration, delay available on a port, dither on a port and if a relay is associated with a port.

The main utility for changing the IO Configuration is I/O Config, which is described in the Tools Menu chapter.

Meter Designs

Meter Designs are used to setup which meters show which signal, and what type of metering each meter uses.

A file of Meter designs is changed using Meter Designer, which is described in the Tools Menu chapter.

User Defaults

The User Defaults are used to change the values that controls have by default (i.e. line-up settings).

A file of User Defaults is changed using the Defaults Manager, which is described in the Tools Menu chapter.

Currently Loaded File

Above the selection box for each file type is a black rectangle. This shows the currently loaded file. This can be blank for I/O Configurations, Meter Designs and User Defaults, indicating that no file of the relevant type is currently loaded.

Selected Type

A red rectangle is used to highlight which file type is currently selected for actions with the filing buttons. For instance, when the red rectangle is shown around the Meter Designs box then the filing buttons will affect Meter Designs files.

Selecting System Files

To select an IO Configuration, Meter Design or User Defaults file to work with

➤ Click the selection box for the required IO Configuration, Meter Design or User Defaults file.

The red rectangle will jump to the selected box.

➤ Click the drop-down arrow next to the box.

A list of available files will be shown.

➤ Click the required file.

The filing buttons will now operate on the selected file.

➤ Click the drop-down arrow next to the box.

The list will roll up again and the selected file will be displayed in the selection box.

✍ *If the file name in the list is double clicked, the file will be loaded.*

Loading System Files

To load a file

➤ Double-click on the required file.

or

➤ Select the required file.

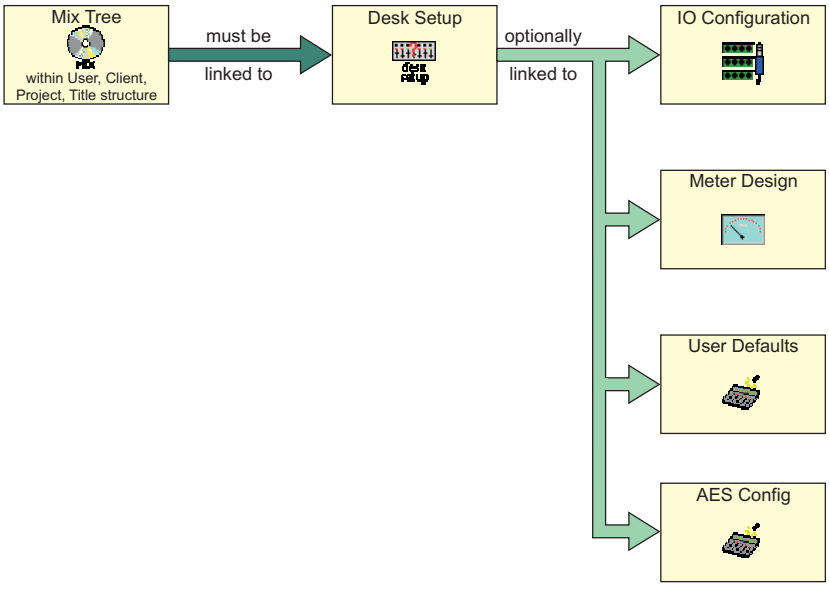
➤ Click the On Load/Edit or No radio button for Update Links to Desk Setup.

➤ Click the Load button.

The selected file will be loaded.

If the On/Load Edit radio button is selected for Update Links to Desk Setup

The file will be linked to the currently loaded Desk Setup, as shown in the File Linking diagram:



The file will be loaded at the same time as the Desk Setup when Full is selected in the Desk Setup Load Options.

The file will also be loaded automatically by Mix Trees linked to the Desk Setup when Full is selected in the Mix Load Options.

✍ *There is a <None Selected> option in each drop down list for IO Configuration and Meter Designs, and a <Factory Defaults> option for User Defaults files. If this is Loaded then the Desk Setup will have no file associated with it of the type for which this is done.*

Creating New System Files

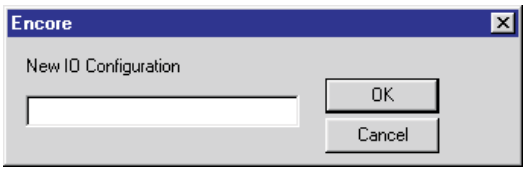
To create a new file

➤ Click the selection box for the required file type.

The red rectangle will jump to the selected box.

➤ Click the New button.

A dialogue box will be displayed to provide a name for the new file.



➤ Enter the required name.

➤ Click OK or press ENTER.

The relevant utility (I/O Config, Meter Designer or Defaults Manager) will be launched with a blank template.

or

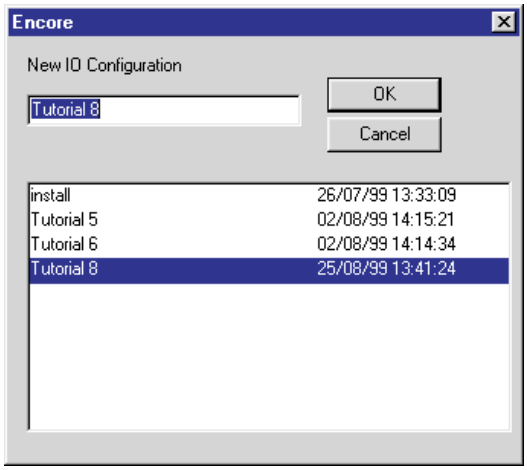
If the name is already used

A warning message will be displayed indicating that the name is already used.



➤ Click OK to clear the warning.

A different new name dialogue box will be displayed with a complete list of existing files.



➤ Edit the name so that it is unique.

➤ Click OK or press ENTER.

The relevant utility will be launched with a blank template.

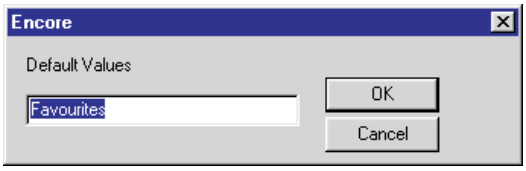
Renaming System Files

To rename a file

➤ Select the required file.

➤ Click the Rename button.

A rename dialogue box will be displayed.



➤ Click OK or press Enter.

The file will be renamed and moved in the relevant list.

or

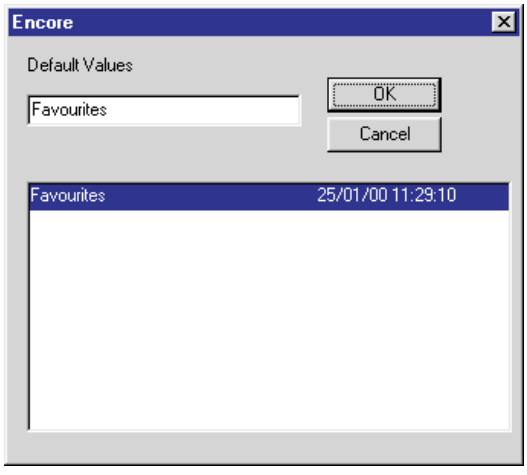
If the name is already used

A warning message will be displayed indicating that the name is already used.



➤ Click OK to clear the warning.

A different naming dialogue box will be displayed with a complete list of existing files.



➤ Edit the name so that it is unique.

➤ Click OK or press ENTER.

The file will be renamed and moved in the relevant list.

✍ *Currently loaded and Read Only files cannot be renamed.*

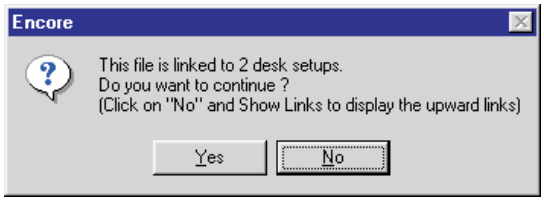
Deleting System Files

To delete a file

➤ Select the required file.

➤ Click the Delete button.

A warning dialogue box will be displayed indicating how many Desk Setups the file is linked to.



➤ Click the Yes button.

The file will be deleted.

✍ *Currently loaded and Read Only files cannot be deleted.*

Editing System Files

To edit a file

➤ Select the required file.

➤ Click the Edit button.

The relevant Encore utility (I/O Config, Meter Designer or Defaults Manager) will be launched.

✍ *If the file is not Loaded, but the Edit button is used to Edit the file, the file will be Loaded when it is saved in the relevant utility.*

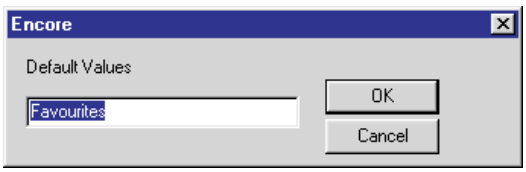
Copying System Files

To copy a file

➤ Select the required file.

➤ Click the Copy button.

A dialogue box will be displayed for the new name.



➤ Click OK or press Enter.

The file will be copied and stored with the new name.

or

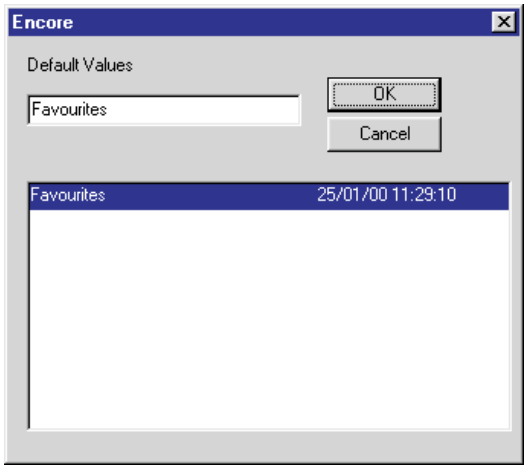
If the name is already used

A warning message will be displayed indicating that the name is already used.



➤ Click OK to clear the warning.

A different naming dialogue box will be displayed with a complete list of existing files.



➤ Edit the name so that it is unique.

➤ Click OK or press ENTER.

The file will be copied to and stored with the new name.

Set System Files as Read Only

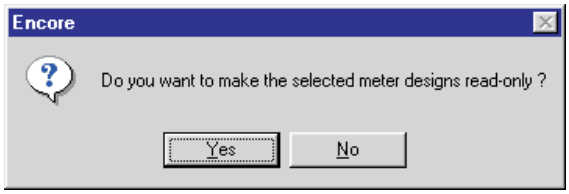
To mark a file as Read Only

This protects a file from being edited, deleted or renamed.

➤ Select the required file.

➤ Click the Read Only button.

A dialogue box will be displayed to confirm changing the Read Only status.



➤ Click OK.

The file will be marked with the words Read Only.

✍ *The same process is used to un-mark the file. Simply select a file with the Read Only flag and click the Read Only button.*

Backup System Files

To backup a file

➤ Select the required file.

➤ Click the Backup button.

Backup Manager will start and the file will be selected automatically for Backup.

Backup Manager is described in the Tools Menu chapter (page 29:99).

Enter Notes about System Files

To enter notes about a configuration file

➤ Select the required file.

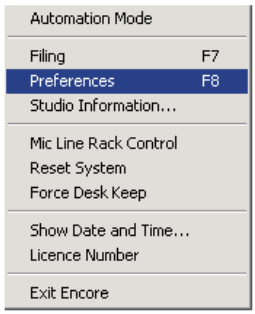
Any existing Notes will be displayed in the Notes box.

➤ Click in the Notes For Desk Setup box.

➤ Enter and/or edit text as required.

The note is stored with the Desk Setup immediately.

Preferences



Preferences (or System Defaults) is used to setup various constant settings for the console which are not changed on a daily basis.

To access Preferences (System Defaults)

➤ Click on System in the Encore menu bar.

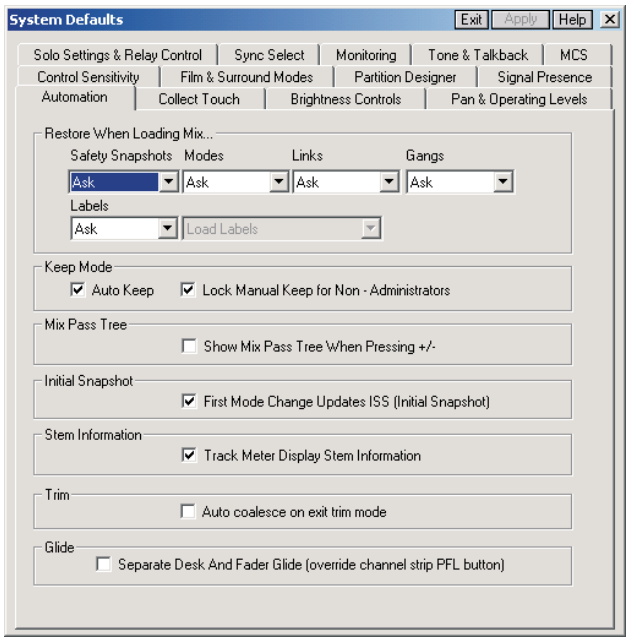
➤ Click on Preferences.

or

➤ Click on the Preferences icon.

The tabbed preferences screen will be displayed. The Automation page will appear on top by default.

Automation Preferences



The Automation page is displayed by default when Preferences is selected.

Restore When Loading Mix

This affects what happens when a Load Mix is executed.

Restore Safety Snapshots determines whether or not the Safety Snapshot is loaded, *Restore Modes* determines whether or not the Automation Modes of controls are loaded, *Restore Links* determines if control links will be restored and *Restore Gangs* determines if ganging information is loaded.

In all cases the options are Ask (let the user decide), Always (automatically restore) and Never (do not restore at all).

Labels

The user can select how labels are treated when loading a pass. The three options are:

Never: Labels are never loaded with a mix/pass.

Ask: Allows the user to decide how labels are treated each time he loads a pass.

Always: Automatically performs one of the following options:

Load (deletes current label list and loads labels kept in the mix/pass)

Merge (keeps both current labels and those in the mix/pass)

Keep (keeps the current labels and doesn't load the label list from the mix/pass)

Clear (clears the current label list and doesn't load the labels from the mix/pass).

Keep Mode

When *Auto Keep* is enabled (checked) then a Record Pass will be added to the Mix/Pass Tree automatically when transport (i.e. Timecode) is stopped.

Note that a Record Pass must have been created for it to be added to the Mix/Pass Tree.

Mix Pass Tree

Show Mix/Pass Tree When Pressing +/- means that when you press the +/- buttons on the console to load the next or previous pass, the Mix Tree window will open.

Initial Snapshot

First Mode Change Updates Automation means that when the control is taken out of Isolate for the first time and placed in an Automation mode (whether it be Record or Play), then the Initial Snapshot will be updated with this new value, and the control will also be added into Automation Scope.

If this option is turned off, then the ISS will remain unaffected by the control setting and the control will not be added into Automation Scope.

Stem Information

Track Meter Display Stem Information option causes meters that are assigned to tracks to show the stem at the top of the meter and the pan designation at the bottom of the meter. The meter bridge normally shows the path names at the top of the meter and the port name at the bottom.

Trim

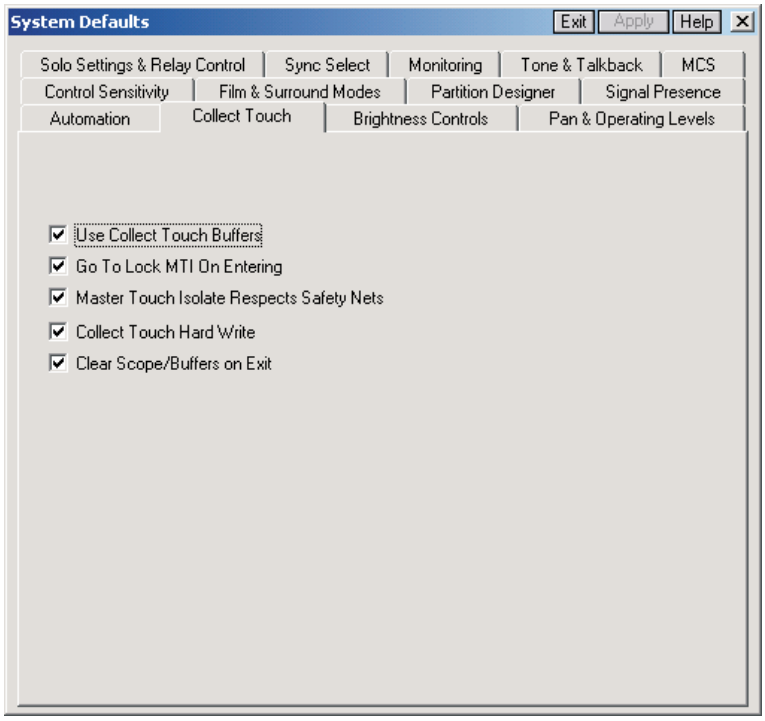
Auto Coalesce On Exit With this option ticked, the fader Trim values will be added to the fader values when timecode is stopped. This ensures that there is only one set of fader information, rather than fader value + trim offset.

If the user exits Trim while the transport is running, the coalesce will be done when the transport is stopped.

Glide

Separate Desk And Fader Glide separates the Automation Glide button on each channel strip into desk glide and fader glide, so that desk and fader controls can be independently matched back to the play pass.

Collect Touch Preferences



When the *Use Collect Touch Buffers* option is checked then using Collect Touch allows extra control setting data to be stored in the Buffers. This is so that the Collect Touch Buffers can be used to rehearse and store settings for overdubs, special audio effects and scene changes. This option is checked by default.

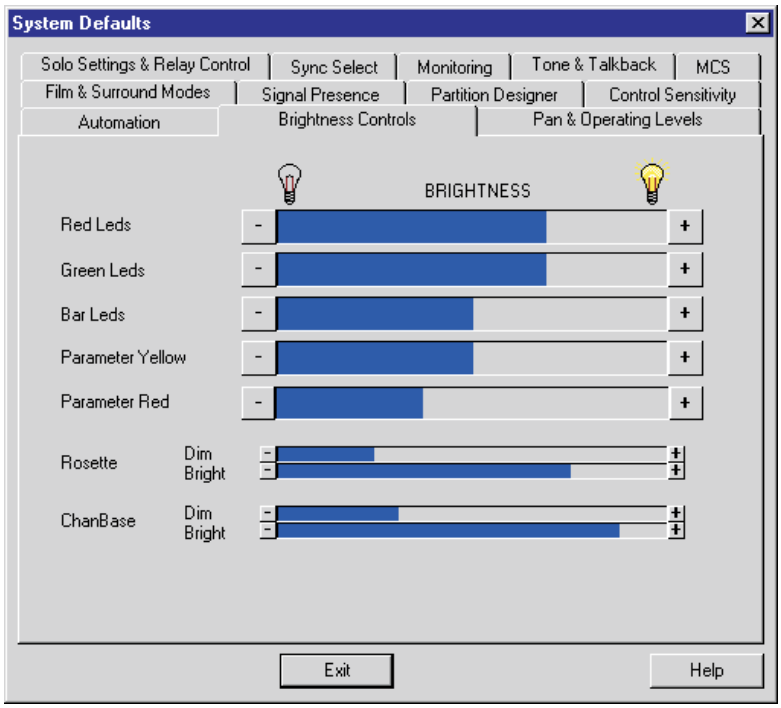
Go To Lock MTI On Entering forces Master Touch Isolate to be Locked when Collect Touch is initiated. This prevents Master Touch Isolate from dropping out when the transport is stopped. This option is checked by default.

Master Touch Isolate Respects Safety Nets causes the new settings in the buffer(s) to be ignored outside the Safety Nets. This means that a scene change can be previewed and rehearsed entirely in context, as it will be recorded when Master Touch Record is engaged. This option is checked by default.

Collect Touch Hard Write causes controls that are put into Collect Touch Scope to automatically drop into full record when a record mode is selected (i.e. as if the control was put into Lock Record and then touched - see Automation Modes). This option is checked by default.

Clear Scope/Buffers on Exit causes Collect Touch Scope and the Collect Touch Buffers to be cleared when the COLLECT TOUCH key is turned off. This option is checked by default. If this option is unchecked then Collect Touch Scope and Buffers will retain the settings from the last time Collect Touch was used and Scope and the Buffers will have to be cleared manually.

Brightness Control Preferences



The Brightness Controls page is used to set the illumination levels for LEDs and displays on the console surface.

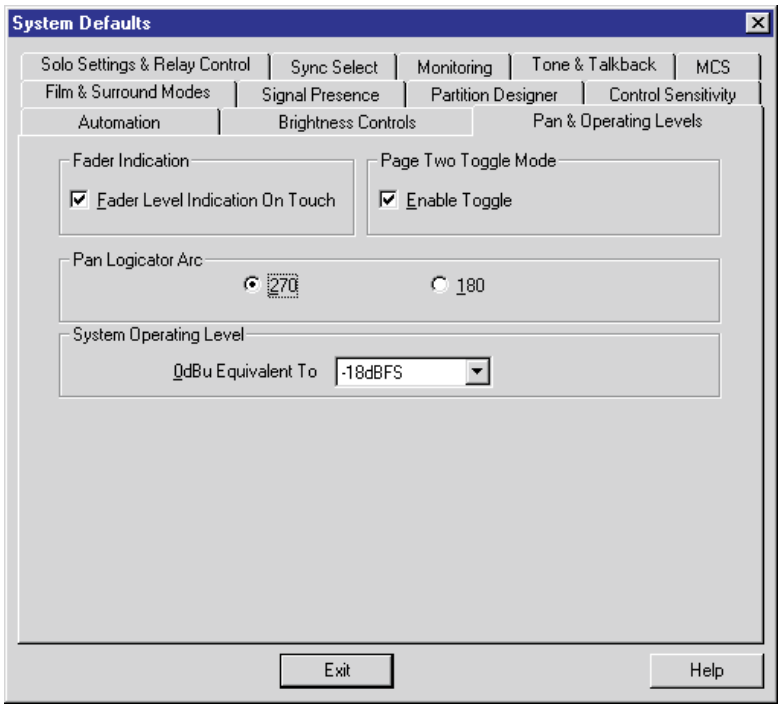
To increase an illumination level

➤ Click on the plus button to the right of the bar for the required item.

To decrease an illumination level

➤ Click on the minus button to the left of the bar for the required item.

Pan & Operating Level Preferences



The Pan & Operating Levels page is used to set the indication response of faders and Logicators and the overall operating levels for the console.

Fader Indication

By default, the alpha for the path on the surface will indicate the fader level when the fader is touched. *Fader Level Indication On Touch* will be checked to enable this. If the check box is unchecked then the alphas will display the path names at all times.

Page Two Toggle Mode

When *Enable Toggle* is checked then the PAGE 2 key will switch between page 1 and page 2 of processing each time it is pressed. This is instead of pressing the required processing key to return to page 1.

Pan Logicator Arc

The sweep of the Logicators can be set to 180° or 270° for when they are used for panning. The lower value allows the pan to be changed more rapidly with a greater panning effect for less Logicator movement.

System Operating Level

This sets the digital headroom to a value between 8dBu and 30dBu. The default is 18dBu.

Changing the operating level alters the PPM and VU meter sensitivity, offsets the level of the tone generator and changes the dynamic processing threshold levels accordingly.

Operating Level Notes

0dBu = 18dBFS. Levels are expressed in dBFS because the only useful reference point for digital signals is full modulation of the digital signal path (similar to defining 0.775v rms as 0dBu).

Choosing Operating Level

The choice of operating level is primarily a question of the headroom preferred for a particular application. However the need to interface with external equipment with operating levels that cannot be adjusted can also determine operating levels.

Both operating levels and ADC/DAC scaling can be matched so that the console is consistent with external devices in those circumstances. Having set the operating level the PPM and VU meters read zero (as marked on the meter scale) when a signal at the operating level is present.

The console tone generator will produce a signal at the operating level when set to 0dB and dynamics thresholds will be at the operating level when set to 0dB.

This will be sufficient for all digital interfacing but the utility only sets the operating level within the digital domain, therefore further adjustments may be required to ADCs and DACs to set the desired operating level in the analogue domain.

When setting ADCs and DACs the important parameters are firstly, the scaling of the conversion and secondly, the maximum analogue signal level (or clip level) which the converters are capable of producing or accepting before clipping.

Setting the analogue clip level on AMS Neve converters as described, will simultaneously scale the converter so that the clip level corresponds to full digital modulation (therefore optimising performance).

For 16-bit converters, the clip level may be set between +16 and +24dBu, and for 20-bit between +16 and +26dBu in 2dB steps.

Example 1

+18dBu analogue clip level, 18dB nominal headroom (EBU standard).

ADC clip level:	+18dBu (Factory standard)
DAC clip level:	+18dBu (Factory standard)
Console 0dB reference:	set to -18dBFS
Meter zero:	0dBu
0dB tone level:	0dBu

Example 2

+22dBu analogue clip level, 20dB nominal headroom.

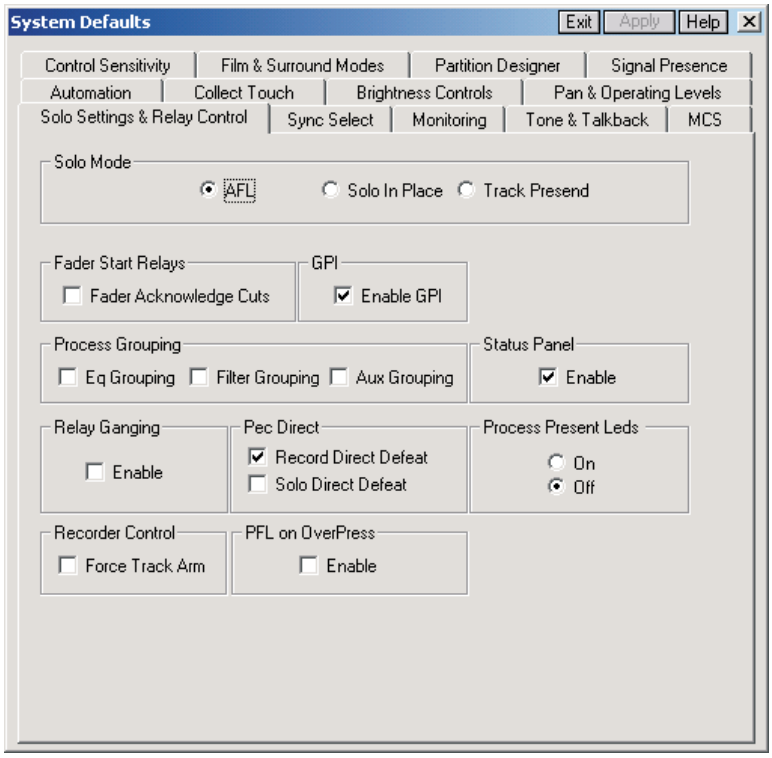
ADC clip level:	set to +22dBu
DAC clip level:	set to +22dBu
Console 0dB reference:	set to -20dBFS
Meter zero:	+2dBu
0dB tone level:	+2dBu

Example 3

+24dBu analogue clip level, 20dB nominal headroom (Sony/US convention).

ADC clip level:	set to +24dBu
DAC clip level:	set to +24dBu
Console 0dB reference:	set to -20dBFS
Meter zero:	+4dBu
0dB tone level:	+4dBu

Solo Settings & Relay Control Preferences



Used to select the Solo mode, how the (optional) relays are operated and other functions.

Solo Mode

The DFC Gemini operates with AFL by default.

AFL — When AFL is selected, the SOLO signal will be routed to the AFL bus (normally FILM LISTENS, but LISTEN1 when no FILM paths are used).
The signal to the control room monitors will be replaced with the AFL signal. All signals will still be routed through the console but will not be audible. See AFL Solo in the Surround Sound Facilities chapter.

Solo In Place — When Solo In Place is selected, operating a SOLO key will cause all the other paths to be cut, leaving only the SOLOd path to be monitored. This makes Solo In Place a destructive operation. Solo Inhibit in Desk Edit can be used to prevent selected paths from being cut.

Track Presend — Track Presend is the same as Solo In Place, except that the Track Monitor auxiliary pre-sends are not cut.

Fader Start Relays

This determines whether or not the optional Relay Control Unit recognises faders being cut. Fader cuts are recognised when *Fader Acknowledge Cuts* is checked.

Process Grouping

This allows Eq Grouping, Filter Grouping and Aux Grouping to be enabled and disabled. When grouping is disabled (not checked) then all of the process items (e.g. all EQ bands) are switched on and off together. In the case of the Aux controls, this option is used to prevent the Auxes from being grouped.

Status Panel

The Enable check box is used to enable or disable the relays which control the indicators in the optional Status Panel.

Relay Ganging

This option is used to simultaneously drive relays for an AudioFile and dubbing machine. Do not enable this option unless it is necessary.

Pec Direct

The Pec Direct panel normally operates in Record Direct mode where switching a paddle from OFF to REC will also switch the associated bus/tape paddle from TAPE to BUS. This is necessary for older tape machine designs that do not have a tape return when the machine is in record.

Record Direct Defeat can be enabled to prevent the bus/tape paddles from switching automatically. This is for use with modern tape machine designs that have a tape return when the machine is in record.

Solo Direct Defeat is used to prevent Tracks from automatically switching back to bus when solo is engaged and Solo In Place is the current solo mechanism.

Process Present Leds

This allows the green LEDS in the Signal Processing Selection Keys to be turned off when processing is present but not switched on. The On or Off check box should be clicked as required.

Recorder Control

Force Track Arm when ticked will:

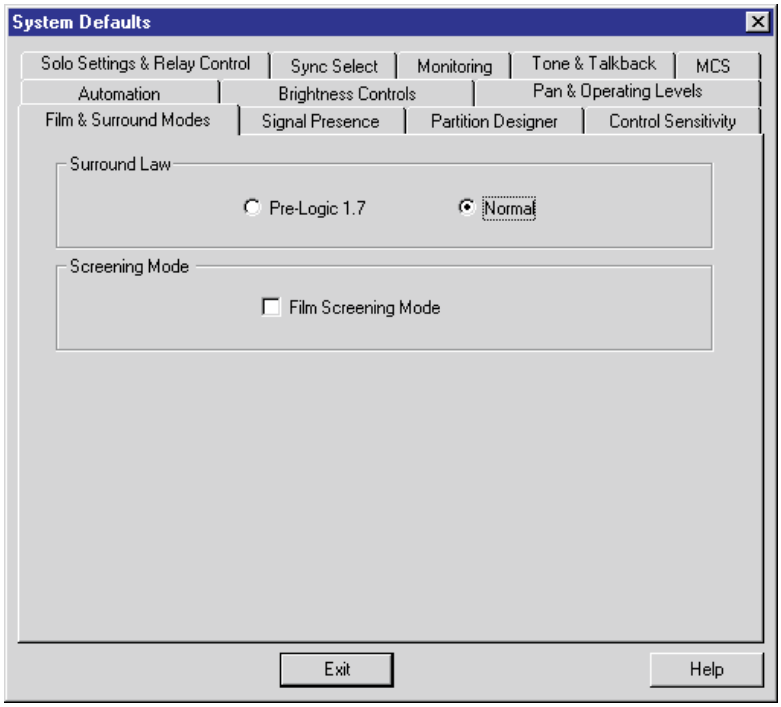
a) Resend the Record command. If the relay is already set to 'record on', it will be set to 'record off' for 100mS before re- instigating the 'record on' state.

b) Not fire the Master Record/Play relays.

PFL on Overpress

Sets whether the faders go into PFL when they are pushed beyond their lower end-stop.

Film & Surround Mode Preferences



The Film & Surround Modes page is used to determine which Pan Law to use and whether or not the console is being used for film screening.

Surround Law

The surround panning law is selectable between an older format which was used in standard Logic consoles until version 1.7 of Logic software was released and the Normal (i.e. correct) format. The Pre 1.7 option is for backwards compatibility with automation data recorded with the Pre 1.7 pan law. It should not be selected unless it is necessary to use old automation data which requires it.

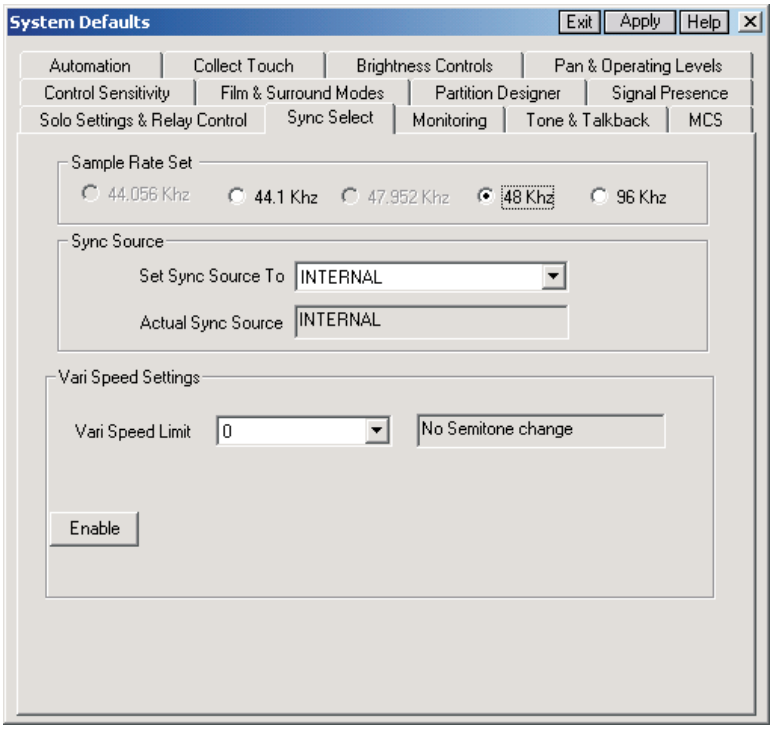
Normal is selected by default.

Screening Mode

The *Film Screen Mode* option enables an automatic reel change projector (or similar machine) to use an opto-isolated input to switch Stem Sel on the Surround Monitor Panel automatically between M/C1 and M/C2 so that there is no break in the audio from the projector.

This feature is specifically designed for film screening.

Sync Select Preferences



The Sync Select page is used to determine the console sample rate, where the synchronisation source is and whether or not vari-speed is in operation.

Sample Rate Set

This is used to select the console sample rate.

To set the console sample rate

➤ Click on the required radio button.

✍ *The pull-down rates will only be available from VIDEO sources.*

Sync Source

This is used to select the synchronisation source for the console.

The Actual Sync Source will automatically set to INTERNAL if the selected external source is not available.

To select the synchronisation source

➤ Click on the pull-down arrow next to the Set Sync Source box.

➤ Click on the required source.

Vari Speed Settings

This is used to select the limit to which the system sample rate will take a variation in signal frequency.

To set the Vari Speed Limit

➤ Click on the drop down arrow next to the Vari Speed Limit.

➤ Select the required option.

The Vari Speed Limit is in 2% steps up to 10%, and sets the processing headroom allowed for vari speed calculations.

To set the actual Vari Speed

➤ Click on the Enable check box, if it is not enabled already.

The Enable check box will change to a checked Disable check box.

A bar will appear with a + and - at each end and boxes indicating the selected vari speed.

➤ Click on the + and - buttons to change the vari speed.

The buttons can be pressed and held for continuous change.

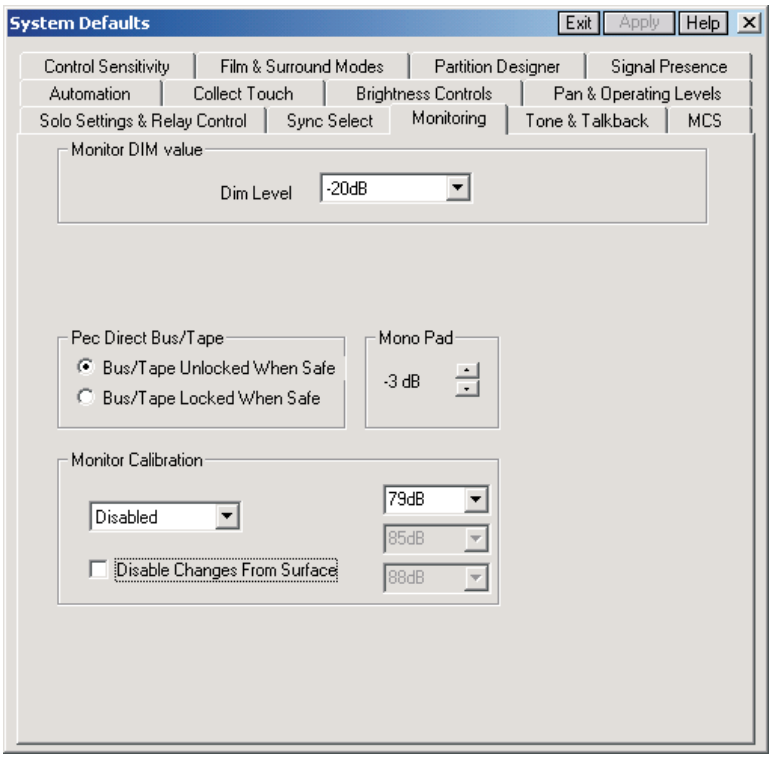
The Reset To Zero button will set the vari speed back to zero.

To save the changes to the Sync Select page

➤ Click the Enable button.

The system will attempt to use the requested settings. If a source is not available, the Actual Sync Source will automatically set to INTERNAL and the Sample Rate will jump to the nearest of 44.1kHz or 48kHz if a pull down rate was selected.

Monitoring Preferences



The Monitoring page is used to set the dim level the monitors are reduced to by DIM keys and how Bus/Tape switching operates.

Monitor DIM Value

This sets the dB level the monitor outputs drops to when the relevant DIM key is pressed.

PEC/Direct Bus/Tape

This determines whether the SAFE keys on the PEC/Direct panel are active or not.

Bus/Tape Unlocked When Safe simply disables the SAFE keys.

Bus/Tape Locked When Safe means that if a SAFE key is on it will prevent the corresponding Bus/Tape switch from operating.

Mono Pad

This is the amount that the level of each Film path is reduced by when MONO is engaged on the Surround Monitor Panel. This offsets the accumulated level to prevent loud noises from the centre speaker.

✍ *Mono pad is not applied when Lt-Rt Mono is selected.*

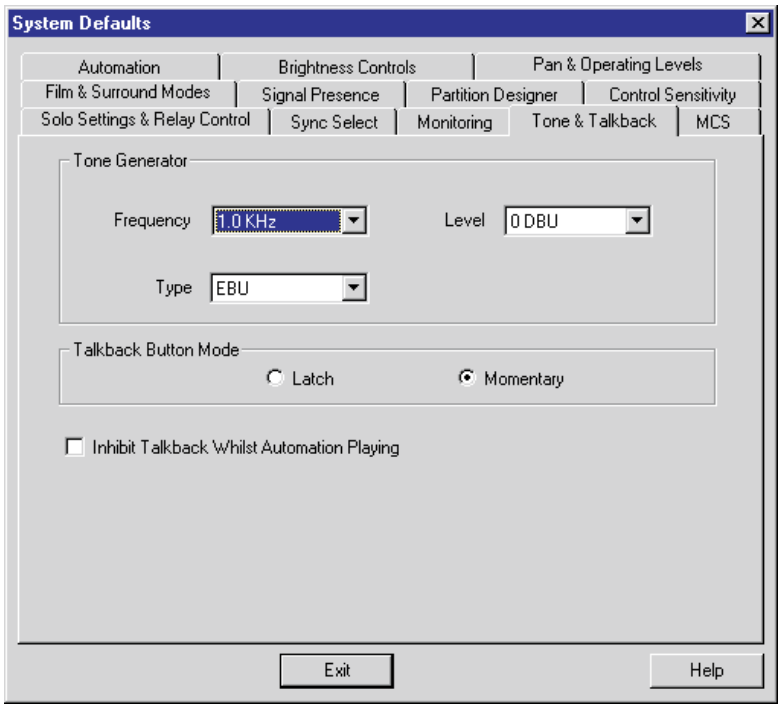
Monitor Calibration

Allows the user to set the output from the desk to preset levels. The options are 82dB, 85dB and 88dB. When any of these options are selected, the main Control Room volume pot will be ineffectual.

Set this option to Disabled if you wish the Output to be variable and controlled from the console.

If *Disable Changes From Surface* is ticked, then the CAL SET and CAL ON/OFF on the console surface will have no effect until it is unticked.

Tone & Talkback Preferences



The Tone & Talkback page sets the defaults for the tone generator (oscillator) and the operation of the talkback (TBK) key.

Tone Generator

Frequency	The tone frequency can be set in the range 20Hz to 16kHz.
Level	The level can be set from -60dBu to +10dBu in 1dB steps.
Type	The tone type is selectable between EBU, BBC and Sine.

Talkback Button Mode

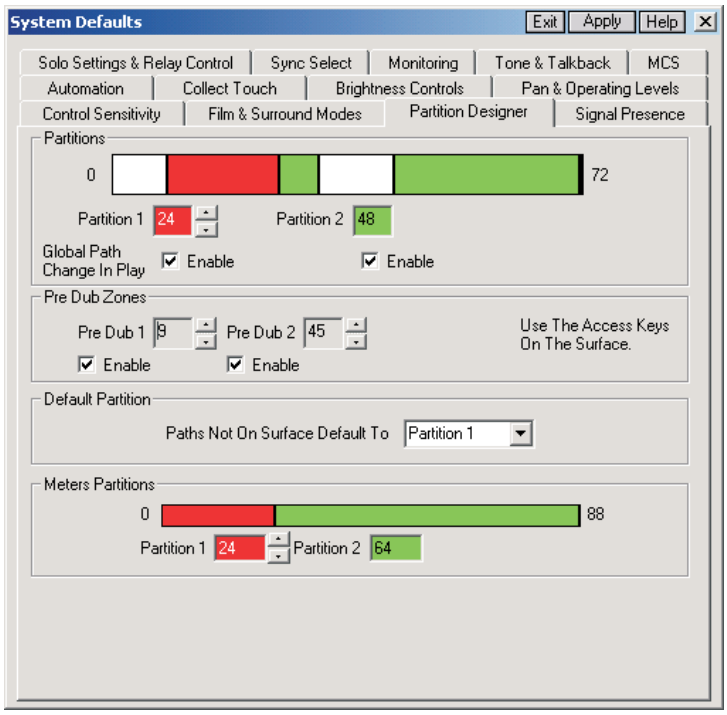
Latching Each press of the TBK key will toggle the talkback output on and off.

Momentary The TBK key will only be on when it is held down.

Inhibit Talkback Whilst Automation Playing

When this is enabled (checked) then Talkback will not operate if automation is active (.e. when Timecode is running).

Partition Designer



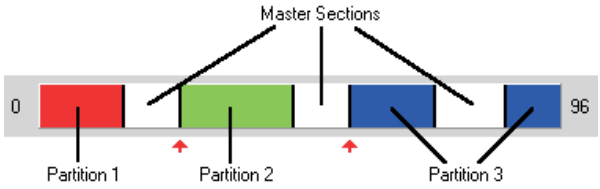
The Partition Designer page is used to determine how many faders belong to each console partition in Split Console mode and where the predub zone is positioned within each partition.

The top part of the page is a schematic representation of the console showing how many Master Sections (Master and Surround Quadstrips) are installed in the console.

Partitions

Used to set the number of faders in each partition. The starting position of the first partition is always the first fader on the console (left hand side). The other partition starting positions are restricted by the placement of the Master Sections so that the partition boundaries can only include one Master Section.

The Master Sections are shown by the white zones. The split point(s) can be set by either dragging the black divider bar(s) on the coloured bar, or using the scroll arrows next to the number of faders.



The arrows show the bars that can be dragged. They can only be dragged to the right of their current positions.

Global Path Change In Play

This allows global path changes to each parition while the automation is running.

PreDub Zones

Each partition can have a predub zone set on any adjacent pair of quadstrips within a partition. The Enabled check box turns the predub zone on and off for each partition.

✍ *If there is no predub zone in a partition then predubs cannot be expanded and the AFU function cannot be invoked on that partition.*

Default Partition

The *Paths Not On Surface Default To* option sets the partition that will control the automation and management of any paths that are not assigned to a fader strip or predub.

Meters Partitions

This is used to set the split points on the Meter Bridge for consoles that have more than one partition. This option does not appear when there is only one partition.

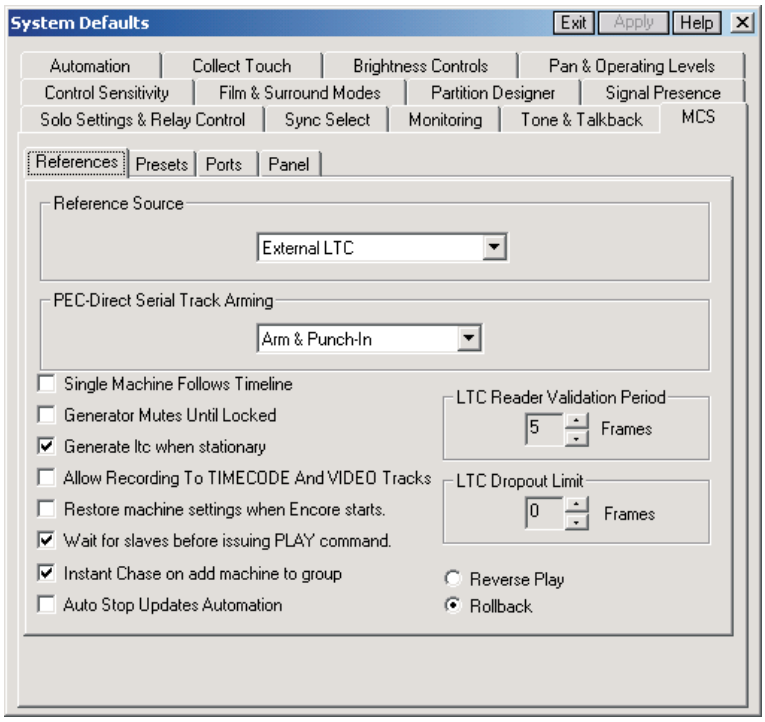
The split point(s) can be set by either dragging the black divider bar(s) on the coloured bar, or using the scroll arrows next to the number of meters.

MCS Preferences

The MCS page is used to set the preferences for the Machine Control System.

The page is split into two sub-pages for MCS References and MCS Presets.

MCS References



Reference Source

This option informs the MCS how the timeline is sourced.

External LTC
Timecode is read from the Timecode Track on a tape machine. The MCS has no control over this machine. The transport controls show the machine status according to incoming timecode.

9 Pin And Internal
The timeline position is taken from the master machine. The timeline is generated internally and the master machine is servoed until it locks to the timeline. The MCS controls the master machine.

9 Pin And Video
The timeline position is taken from the master machine. The timeline is generated and read from a video pulse generator and the master machine is servoed until it locks to the timeline. The MCS controls the master machine.

LTC From Master Machine
The MCS controls the tape machine through the 9 Pin serial port but timecode is read from the Timecode Track on the tape machine.

Slave to 9 pin
This is VTR Emulation mode. Any machine attached to port #0 on the MCS rack becomes the system master.

PEC-Direct Serial Track Arming

This option only applies to systems with the optional Surround Sound Panel installed. The panel has PEC/Direct track arming.

Arm Only causes tracks to be armed ready for record.

Arm & Punch-In causes tracks to arm and receive a punch-in command to start recording immediately.

LTC Reader Validation Period

This is the number of consecutively incremented timecode frames that are received before MCS acknowledges that the timecode source is in play.

LTC Dropout Limit

This is the maximum amount of time (in frames) that bad timecode will be received before MCS drops synchronisation and timecode display is stopped on the screen. This is also known as the flywheel period.

Single Machine Follows Timeline

When checked, the attached tape machine is servoed until it locks to the timeline. This is the usual setting. When un-checked, the timeline does not start (take the initial position and start running) until the machine has servoed into lock.

Generator Mutes Until Locked

When checked, the internal timecode generator does not generate a signal until lock has been established. This option is un-checked by default.

Generate LTC When Stationary

This should be ticked if using TASCAM tape machines, and relates to how Encore and tape machines communicate with regard to Stop/Play commands.

Allow Recording to TIMECODE And VIDEO Tracks

When checked, this allows the TIMECODE and VIDEO tracks on any attached machine to be recorded over. This option is un-checked by default and should be used with caution.

Restore machine settings when Encore starts

This is used to make sure that the machine settings (offsets, servo parameters, etc.) are restored to the same condition when Encore starts. This will ensure that the machines are in a known state (i.e. as configured from Encore).

Wait for slaves before issuing PLAY command

This is used to make sure all machines in a group are at the same position before the Group Master starts to play.

Instant Chase on add machine to group

This causes machines to immediately position themselves to the Group Master position when added to a group.

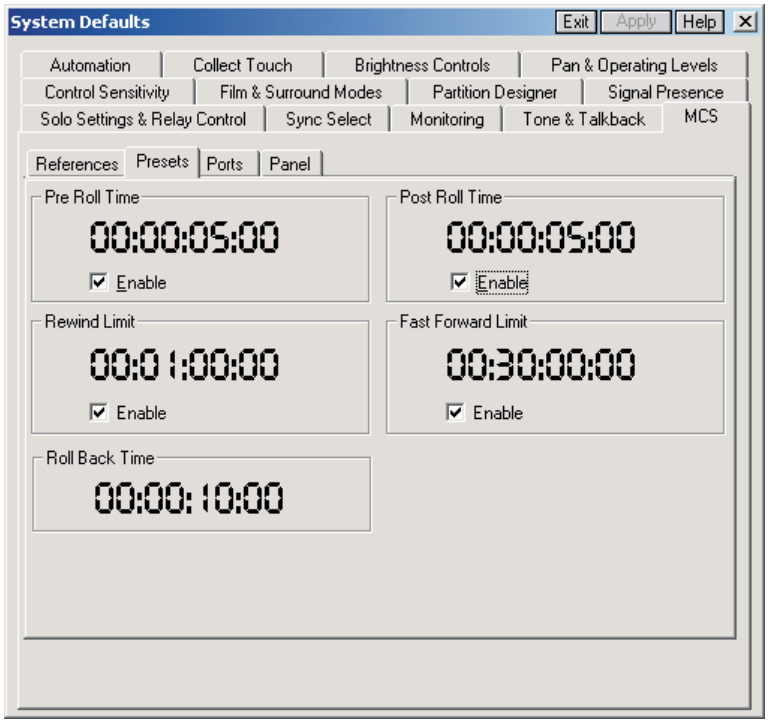
Auto Stop Updates Automation

This is used when STOP is pressed twice to issue an ALL STOP command. The automation system will then locate to the time at which ALL STOP was issued and the desk will be updated with the control settings at that point. This is typically used when rewinding or fast forwarding and it is necessary to see the state of the Play Pass at the point where ALL STOP is pressed.

Reverse Play or Rollback

This determines whether the MCS issues a Reverse Play or Rollback command to the transports when ROLL BACK is pressed.

MCS Presets



Pre Roll Time

This is a timecode value that sets the amount of extra timecode that a tape is re-wound by when executing a Locate or Cycle. For instance, if the tape is located to 00:01:00.00 (1 minute) and a Pre Roll Time of 5 seconds is in use then the tape will actually locate to 00:00:55.00 (55 seconds) and then start to play. This allows plenty of time for the automation system to resolve the incoming timecode.

The timecode value should be set manually.

The Enable check box must be checked for the Pre Roll Time to be used. It is not checked by default.

Post Roll Time

This is a timecode value that sets the amount of extra time that a tape will continue for at the end of a Cycle before rewinding to go back to the Cycle Start time.

Set the timecode value manually.

The Enable check box must be checked for the Post Roll Time to be used. It is not checked by default.

Rewind Limit

This is the lowest timecode (or foot-frame) position that machines will go to when rewinding before they stop automatically.

Set the timecode value manually.

The Enable check box must be checked for this to be used.

Fast Forward Limit

This is the highest timecode (or foot-frame) position that machines will go to when fast-forwarding before they stop automatically. This is useful when using reel-to-reel tape machines to prevent the machine from over-running the end of the tape.

Set the timecode value manually.

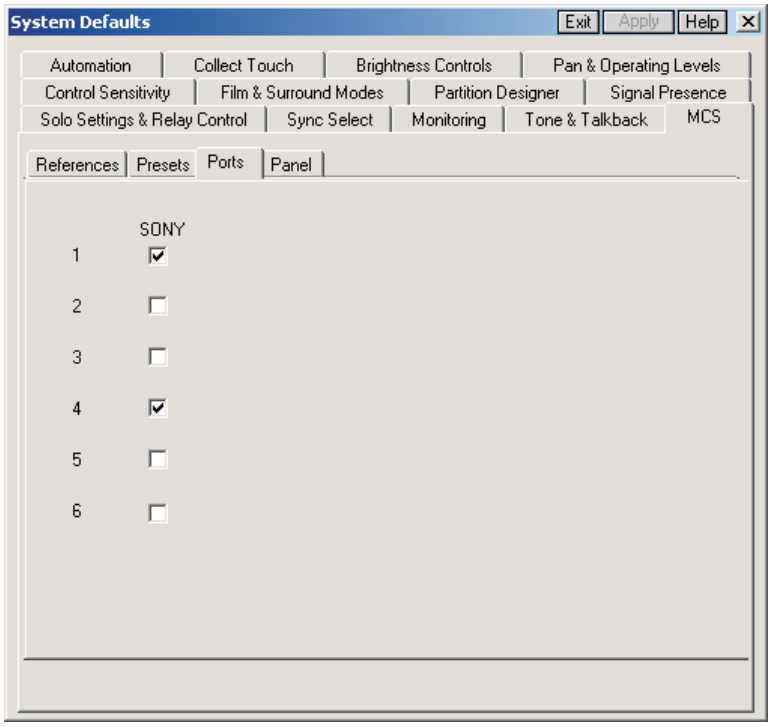
The Enable check box must be checked for this to be used.

Roll Back Time

This is a timecode value that sets the amount of roll back to keep the timecode in Encore synchronised with tape machines that have automatic roll back when they are stopped.

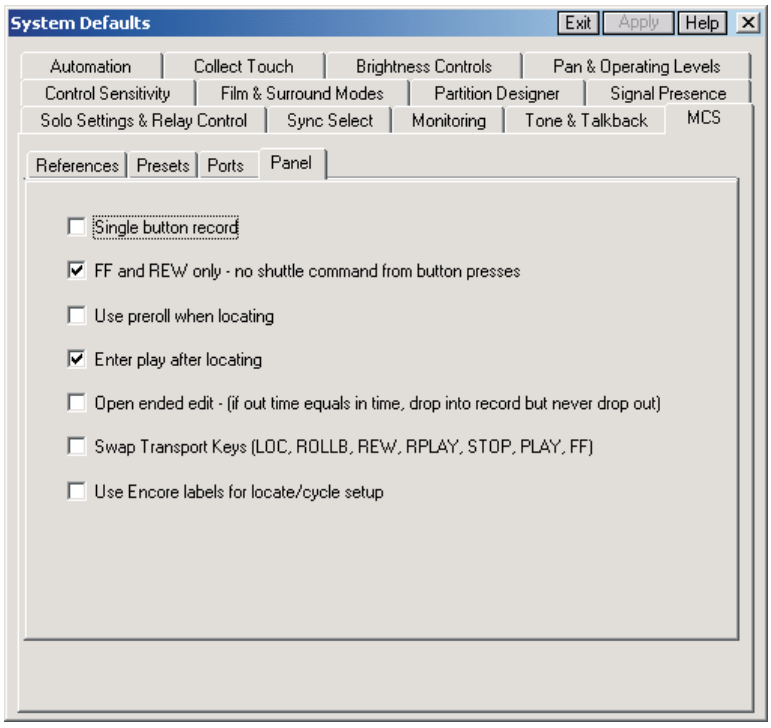
Set the timecode value manually.

MCS Ports



If any Sony machines are connected, then the corresponding port should be ticked in this page. This is due to Sony machines having their own machine control protocol.

MCS Panel



Single Button Record

Allows machines to be put into Record by pressing the MCS Record button. With this unchecked, the user must press Play at the same time.

FF & REW only - no shuttle command from button presses

With this checked, pressing the << or >> keys will put the machines into fast forward or rewind. Without this option checked, then the first press of the key will put the machines into Shuttle; the second, wind or rewind.

Use Preroll when locating

When checked, the MCS will take into account the amount of Preroll time set in Preferences.

Enter Play after locating

When checked, the machines will drop into Play after they have located, otherwise they will go into Stop.

Open ended edit

With this checked, the machines are not un-armed on a Stop command.

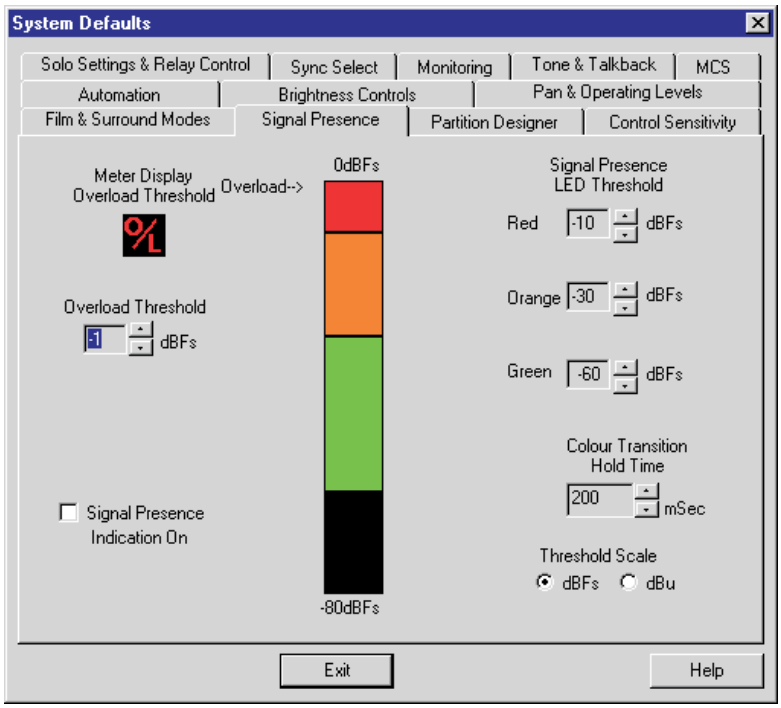
Swap Transport Keys

Allows a second set of functions to be called to the same set of MCS keys.

Use Encore Labels

Allows Encore's labels to be used by the automation system and the MCS as locator markers.

Signal Presence Preferences



The Signal Presence page is used to set the thresholds at which the signal presence LEDS on the Channel Strips illuminate, how long the hold time for overload indication is and whether or not signal presence is active. The page also illustrates the overload symbol that is used on the meters. Signal presence only operates on an input.

To change the overload level

➤ Click and hold on the overload indicator to the left of the coloured bar.

➤ Drag the overload indicator up or down to the required setting.

or

➤ Click on the scroll arrows next to the Overload value box.

The overload value can be set anywhere in the red zone.

To change the overload hold time

➤ Click on the scroll arrows next to the hold time box.

To change the threshold value for an LED colour

➤ Click and hold on the boundary bar at the bottom of the required colour.

➤ Drag the bar up or down to the required setting.

or

➤ Click on the scroll arrows next to the value box for the required colour.

To enable signal presence indication

➤ Click the Signal Presence Indication On check box.

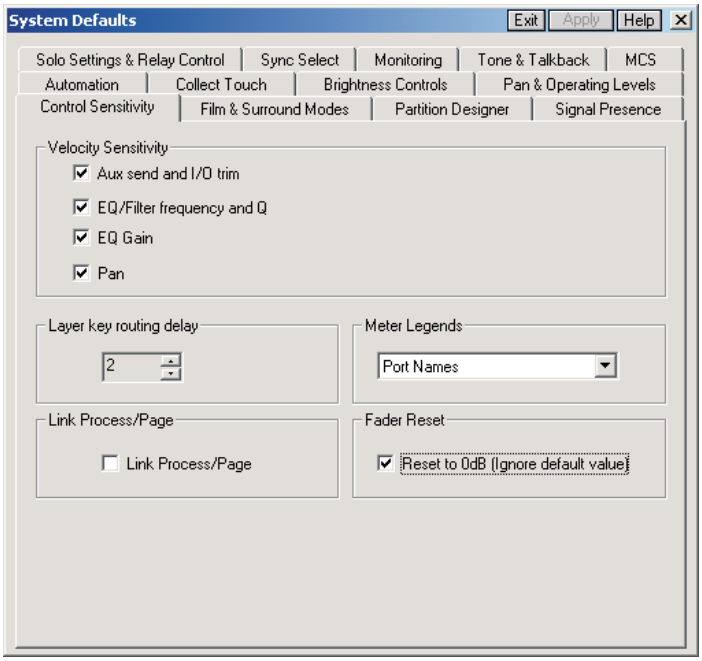
✍ *Disabling indication reduces the amount of signal processing required for input paths.*

To change the scale used

➤ Click the dBFS or dBu radio button as required.

The scale next to the threshold colour bar and all values will change accordingly.

Control Sensitivity



The Control Sensitivity page is used to select velocity sensitivity for different functions that can be assigned to the Logicators, and the layer key routing delay.

Velocity Sensitivity

Velocity sensitivity causes a control value to change slightly faster when a Logicator is rotated more rapidly.

To enable Velocity Sensitivity

➤ Click the check boxes for the required functions.

Layer key routing delay

This is the number of seconds a PATH access key must be held down before the PATH access key to PATH access key routing function is activated. If it is set to zero, the PATH access key to PATH access key routing function is disabled.

Meter Legends

This option determines what is shown underneath the meters, either port names (Normal), Path Names or the current Process and Page (ie EQ, Comp etc).

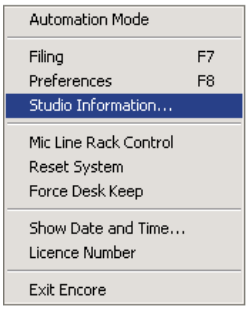
Link/Process Page

If the *Link/Process Page* option is ticked, then for paths that form part of a link, calling a process to the surface for one path will call the same process to the surface for all paths by the link.

Fader Reset

This option will allow the faders to be reset to 0dB, regardless of the faders default value as set in Defaults Manager. This is done by pressing Fader Mode + On/Clear on each fader to be reset.

Studio Information



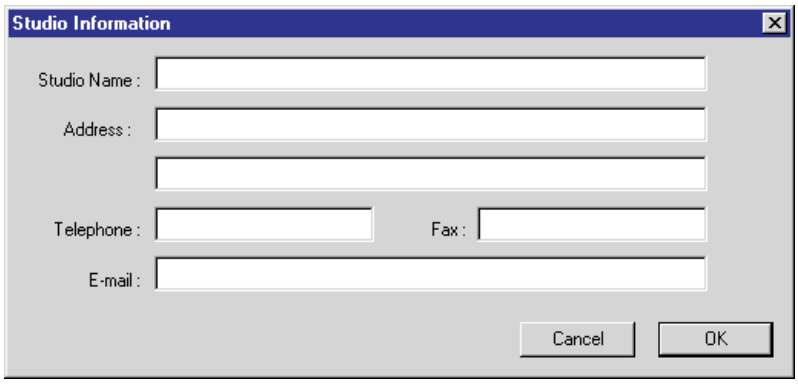
This is used to set the name of the studio where the console is located. Contact information can also be provided, if required.

The studio name is displayed in the title bar of the main Encore screen.

To enter Studio details

➤ Click Studio Information in the drop down System Menu.

The Studio Information dialogue box will be displayed.



➤ Enter the information as required.

Tip

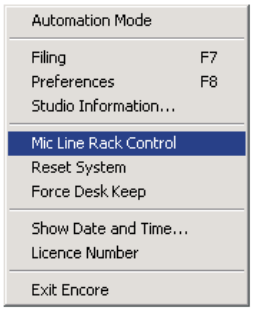
➤ Press the TAB key to jump between data entry boxes.

When all the information is correct

➤ Click the OK button.

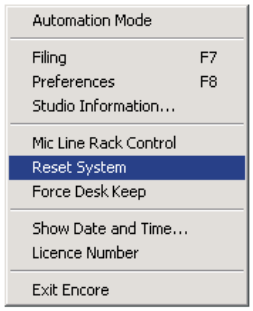
The text entered in the Studio Name will be displayed in the Encore title bar.

Mic Line Rack Control



This is only available if you are trying to control AMS Neve remote mic amps. Please refer to separate user manual on this product.

Reset System



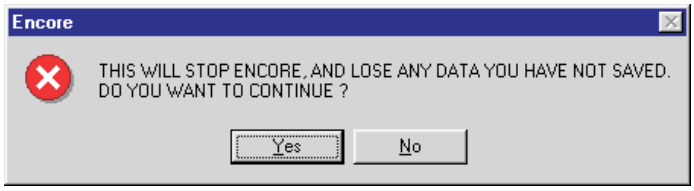
Reset System can be used to restart the whole system (the console and Encore) or just shut down Encore.

✍ *Use caution when executing reset, the Mix/Pass Tree will be deleted. If required, save the Record Pass before executing reset.*

To reset system

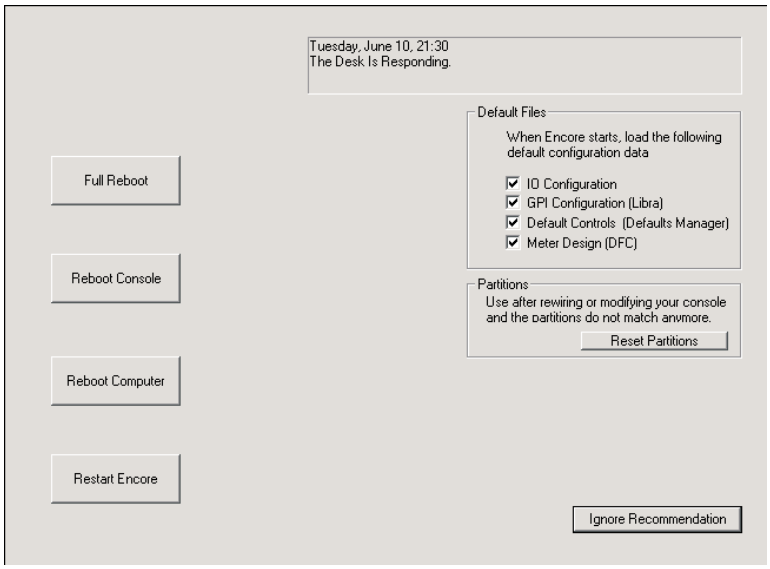
➤ Click on Reset System in the drop down System menu.

A warning dialogue box will appear asking for confirmation.



➤ Click the Yes button.

Encore will close and the Service Control dialogue box will be displayed.



➤ Click the required option.

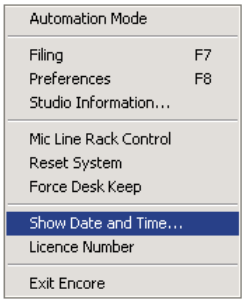
The screen will flash the word 'Recommended' against the most appropriate option.

✍ *If required, you can click Reboot Console and wait. When the console has booted you can then click Restart Encore. This combination will reset the system completely.*

Force Desk Keep

This is the same as pressing the Keep Desk button on the console, and overwrites control values on the currently saved Mix Setup with the control values as they currently are on the console surface.

Show Date and Time

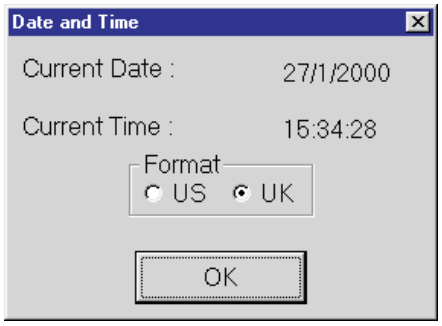


Allows users to view the current date and time from the Encore main screen.

To show date and time

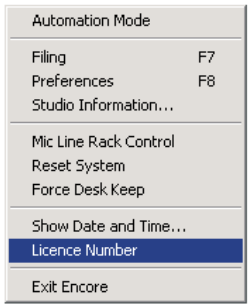
➤ Click on Show Date and Time in the drop down System menu.

The Date and Time dialogue box will appear.



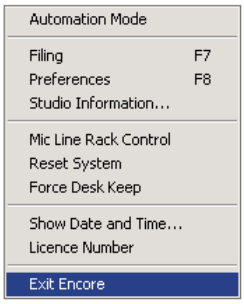
➤ Click on OK to close the dialogue box.

Licence Number



This option refers to Offline versions of Encore only.

Exit Encore



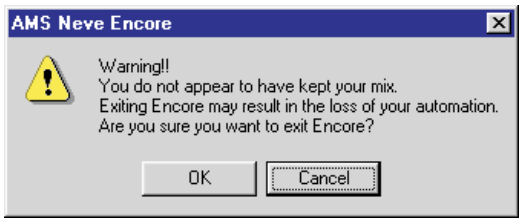
Allows users to exit Encore in a controlled way.

To exit Encore

➤ Click on Exit Encore in the drop down System menu.

If the current mix has not be kept

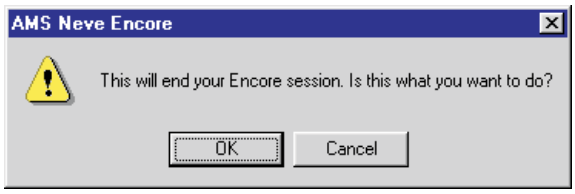
A warning prompt will be displayed to indicate this.



➤ Click on OK to exit or Cancel to remain in Encore.

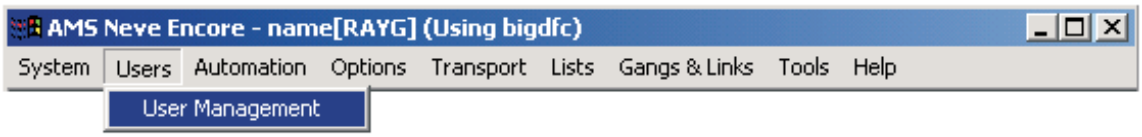
If the current mix has been kept

A dialogue prompt box will be displayed asking for confirmation.



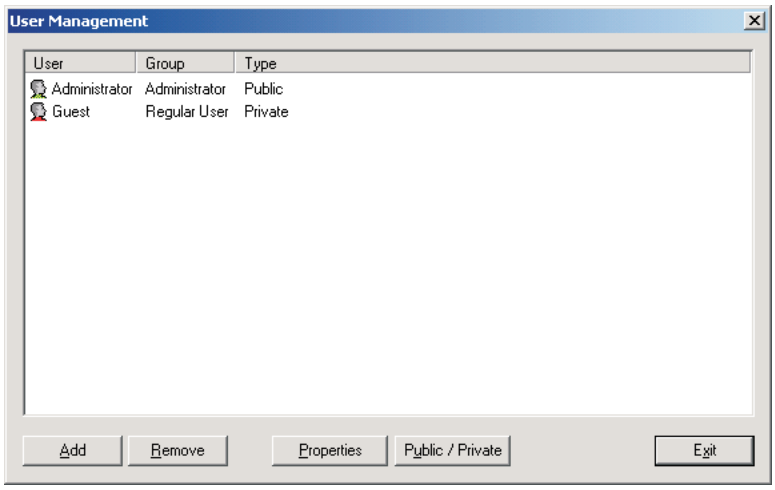
➤ Click on OK to exit or Cancel to remain in Encore.

USER MENU

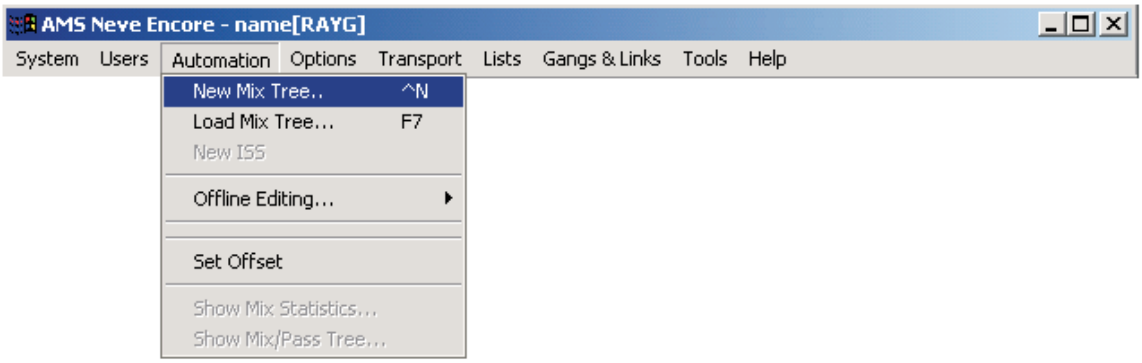


User Management

Please refer to your operating systems documentation on how to integrate the Microsoft User Manager into Encore.



AUTOMATION MENU



New Mix Tree

To create a new Mix Tree

➤ Set controls on the console surface to the required settings.

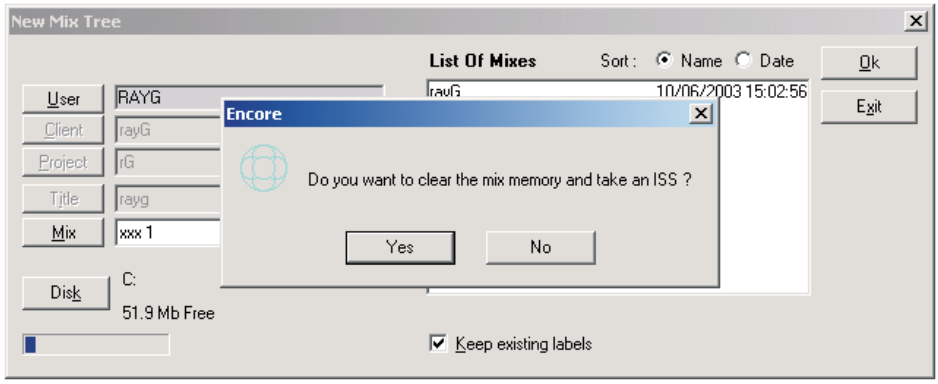
These will be the positions recorded in the Initial Snapshot (ISS) when the Mix Tree is created.

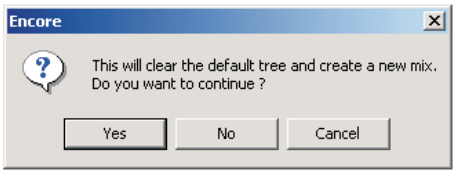
➤ Set the automation modes as required.

➤ Click on New Mix Tree in the drop down Automation menu.

The New Mix Tree dialogue box will be displayed, with a dialogue on top of it.

➤ Click Yes to continue or No to stay in non-automation mode and abort the new ISS.





➤ Click Yes to create the new ISS and keep the shown Client/Project/Title/Mix information before creating the new ISS.

➤ Click Cancel to abort logging onto automation altogether.

If the Client, Project and Title are locked then the next number for Mix Trees will be selected automatically.

➤ Otherwise, select the Client, Project and Title in the same way as in the Filing utility, or create a new Client, Project or Title as required.

The Next button can then be used to automatically select the next Mix Tree number.

➤ If required, edit the Mix Tree name.

➤ When the details are correct, click the OK button.

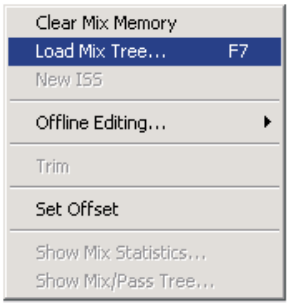
The new Mix Tree will be created. A progress bar will be displayed while the Initial Snapshot is taken and the new files are created. The Initial Snapshot and the automation modes of controls are stored as Mix/Pass 1.1.

When the process is complete a confirmation dialogue box will be displayed.



➤ Click OK.

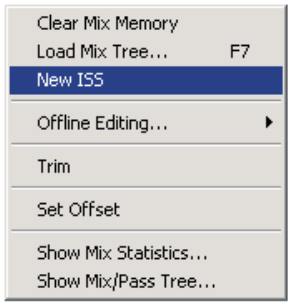
Load Mix Tree



This is used to run the Filing utility for Loading, Renaming, Copying and Deleting Mix/Pass Trees. The Filing utility will be displayed with the Automation page on top.

See Filing (page 22:4) in the System Menu chapter for more information.

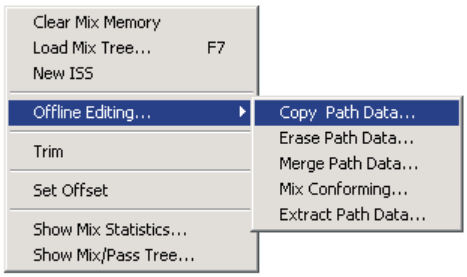
New ISS



This option is only available if you are logged onto Automation. It creates a ne ISS with the current Client/Project/Title/Mix at the next available pass number.

Offline Editing

Copy Path Data



Copy Path Data is used to copy automation data in the current Play Pass from one path to any other paths (including itself).

A timecode range can be specified and the destination timecode can be offset. A new Mix/Pass is created and becomes the current Play Pass.

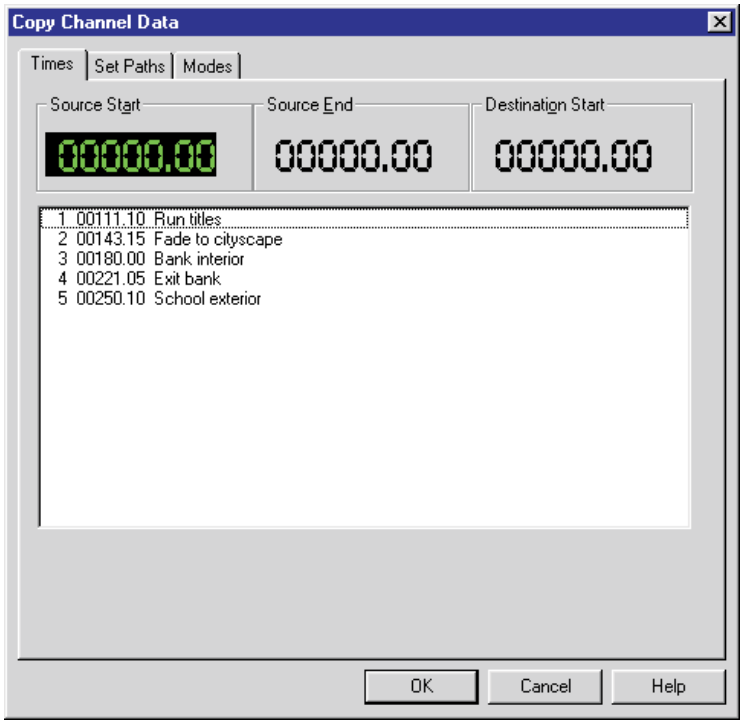
✍ *First select the correct Mix/Pass from the Mix/Pass Tree or use Load Mix if the current Play Pass does not contain the required automation data.*

To copy automation data

➤ Click on Copy Path Data in the Offline Editing Sub-Menu of the Automation Menu.

The Copy Path Data window will be displayed. There are three tabbed pages for timecode, path selection and copy mode.

The Times page will be on top.



To set the source and destination timecodes

➤ Click on the Source Start, Source End or Destination Start timecode.

➤ Click on the Label with the appropriate timecode.

➤ Click on the Source Start, Source End or Destination Start timecode again.

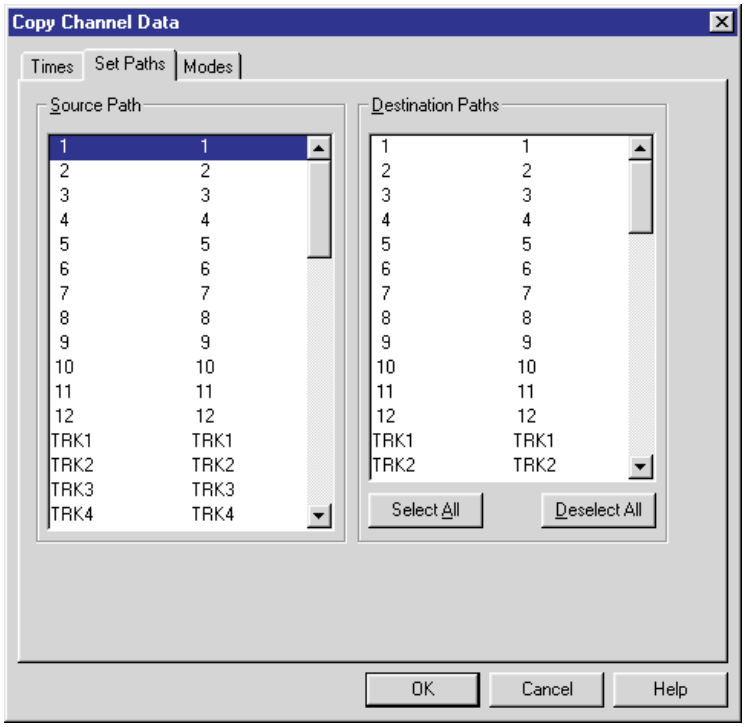
➤ Make manual adjustments to the timecode as required.

✍ *If all the timecodes are left at zero then all of the automation data from the source path will be used.*

To set the source and destination paths

➤ Click the Set Paths tab.

The Set Paths page will be displayed.



➤ Click on the required source path in the source list.

The path will be highlighted.

➤ Click on the required paths in the destination list.

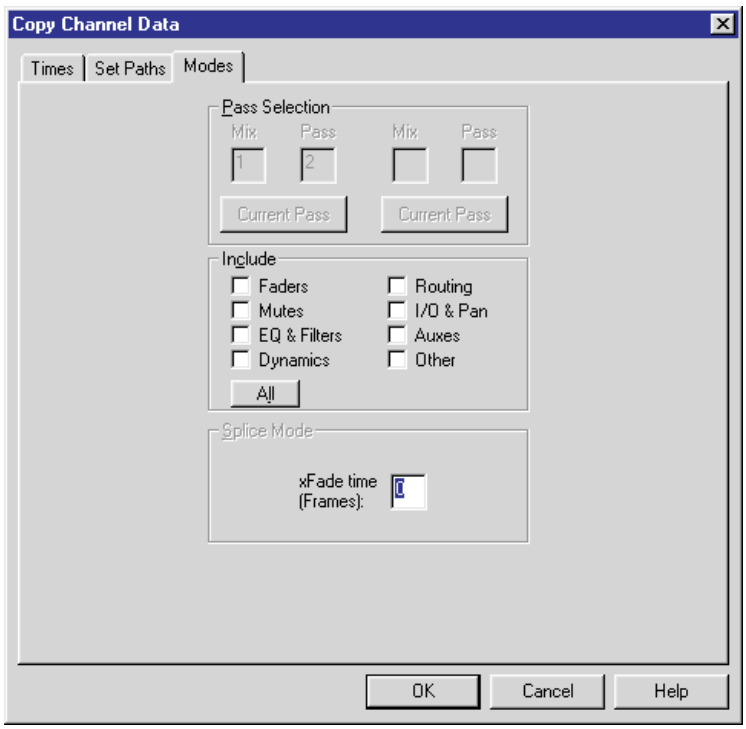
Each selected path will be highlighted.

The Select All button will cause all the destination paths to be highlighted. The Deselect All button can be used to reset the selection if it is necessary to start again.

To set the copy modes

➤ Click on the Modes tab.

The Modes page will be displayed.



➤ Click the Faders, Mutes, etc. check boxes to select which parts of the automation data to Include in the copy.

The item is included when the check box is checked.

➤ Enter the required crossfade time in the xFade Time box.

✍ *Pass Selection is not currently implemented.*

To make the new Mix/Pass

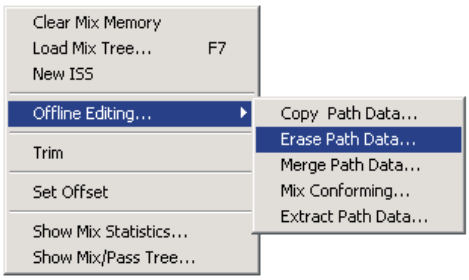
➤ Click on OK.

The data will be copied as selected and the Copy Path Data window will close.

The new Mix/Pass number will be shown as the current Play Pass on the main screen.

✍ *If no source or destination paths or have been selected then a dialogue box will appear to request the selection to be made and the copy will not be executed. The same will also happen if no controls have been included.*

Erase Path Data



Used to delete automation data (fader moves, mute events, channel button events) from selected paths, yet keeps the timeline intact.

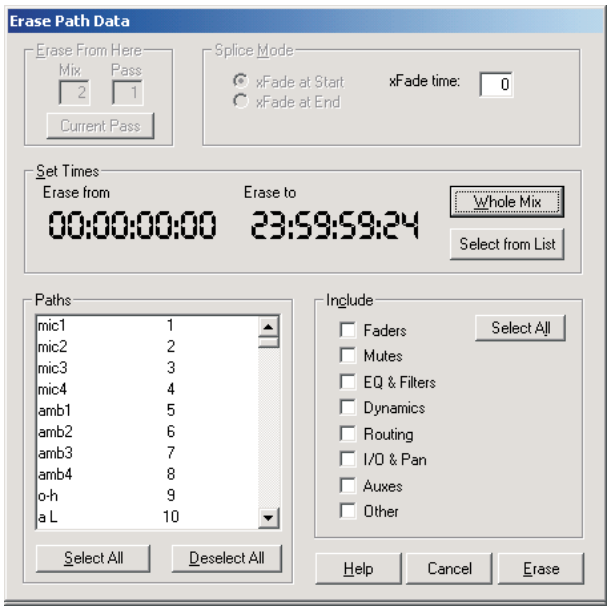
Path information can be erased over any period in timecode.

✍ *It does not alter the designated Mix/Pass, but it will create a new mix (displayed in the Mix/Pass area of the main screen).*

To select the data to erase

➤ Click on Erase Path Data in the Offline Editing Sub-Menu of the Automation Menu.

The Erase Path Data dialogue box will appear.

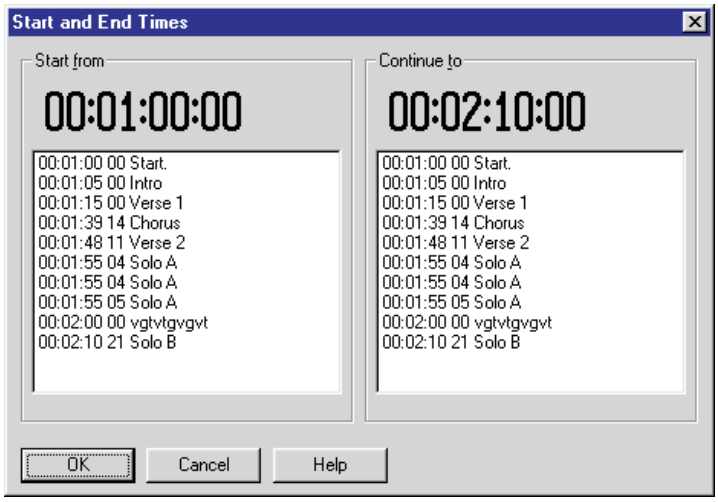


➤ Click the Faders, Mutes, etc. check boxes to select which parts of the automation data to erase.

➤ Enter the xFade Time in the Splice Mode box.

✍ *Only one xFade time can be used at present. This will be used at both the beginning and the end of the timecode range.*

➤ Enter the Erase From and Erase To times in the Set Times box either manually or clicking on Select from List and selecting the times in the Start and End Times dialogue box.



➤ Click the Whole Mix button to set the start to zero and the end to 23:59:59:24.

➤ Click the required paths in the Paths list (click the Select All button to choose all paths).

The selected paths will be highlighted.

➤ Click on Deselect All to deselect all paths.

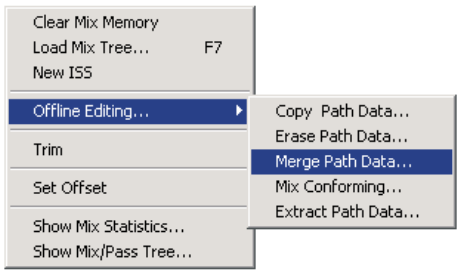
To create the new mix pass

➤ Click the Erase button.

The Erase Path Data dialogue box will close and a dialogue box will appear confirming that a new Mix/Pass was created.

✍ *The new Mix/Pass is automatically selected as the Play Pass.*

Merge Path Data



Used to replace automation data from one Mix/Pass in another Mix/Pass. Each Mix/Pass must be in the current Mix/Pass Tree.

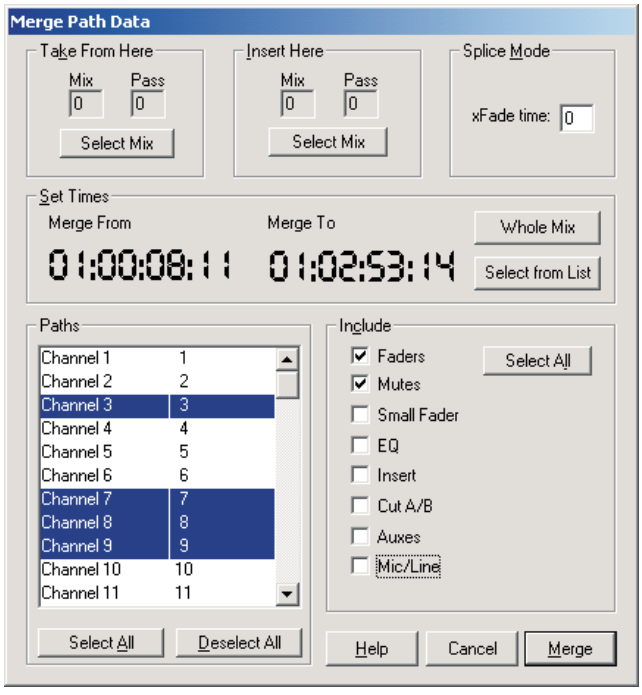
A new Mix/Pass is created (displayed in the Mix/Pass area).

✍ *The source and destination Mix/Passes are not affected.*

To select the data to merge

➤ Click on Merge Path Data in the drop down Mix menu.

The Merge Path Data dialogue box will be displayed.



➤ Enter the required source Mix/Pass in the Take From Here box.

➤ Click the Select Mix button to display the Mix/Pass Tree and select a pass.

➤ Enter the required destination Mix/Pass in the Insert Here box.

➤ Click the Select Mix button to display the Mix/Pass Tree and select a pass.

✍ *The same Mix/Pass cannot be used for both the source and destination.*

➤ Click the Faders, Mutes, etc. check boxes in the Include box to select which controls to merge automation data for.

➤ Enter the xFade Time in the Splice Mode box for the crossfade period at the beginning and the end of the merged data.

➤ Click on the required paths in the paths list.

The selected paths will be highlighted in the list.

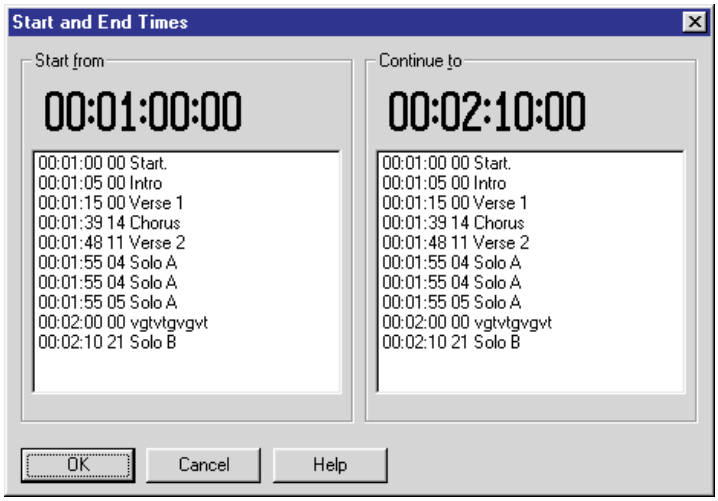
➤ Click the Select All button to highlight all paths.

To set the timecode range

➤ Enter the Merge From and Merge To times manually.

or

➤ Click the Select From List button to choose times from the Label List in the Start And End Times dialogue box.



or

➤ Click the Whole Mix button to set the start to zero and the end to 23:59:59:24.

✍ *A timecode range must be specified.*

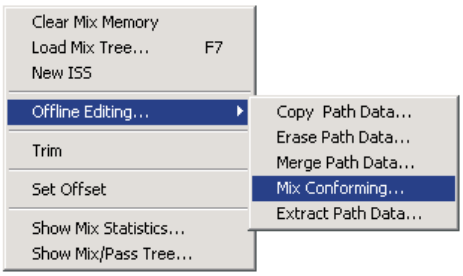
To merge the data

➤ Click the Merge button.

The Merge Path Data dialogue box will close and a dialogue box will be displayed to confirm that the new Mix/Pass was created.

The new Mix/Pass will be shown on the main screen as the current Play Pass.

Mix Conforming



Provides functions for making mixes conform to film edits.

By definition, a conformed move affects all controls/values across all paths, so there is no path select list for these functions.

Move

Used to move part of the current mix, creating a new conformed mix/pass.

All automation events for the selected paths are moved.

Move first cuts the section out of the mix and then inserts it at the destination time (e.g. Scene 2 has been relocated to appear after Scene 3 and as the picture and sound for this edit are conformed the automation is conformed to match).

Delete

Deletes channel information from the current mix, creating a new conformed mix/pass.

All information including fader moves, events and mutes is deleted.

The Delete operation changes the timecodes on events following the removed section so that the new mix has no gaps.

Insert Stock

Inserts a blank space into the current mix, creating a new, conformed mix/pass.

Used for example when a new scene is added to a film (during this space/time all faders, events and mutes have the same initial settings as the start of the inserted time).

✍ *The source Mix/Pass is not changed by Mix Conforming.*

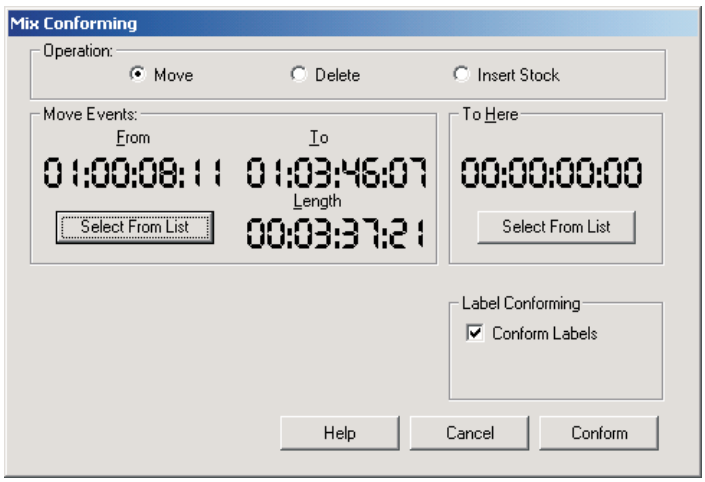
To select the Mix Conforming operation

➤ Click on Mix Conforming in the Offline Editing Sub-Menu of the Automation Menu.

or

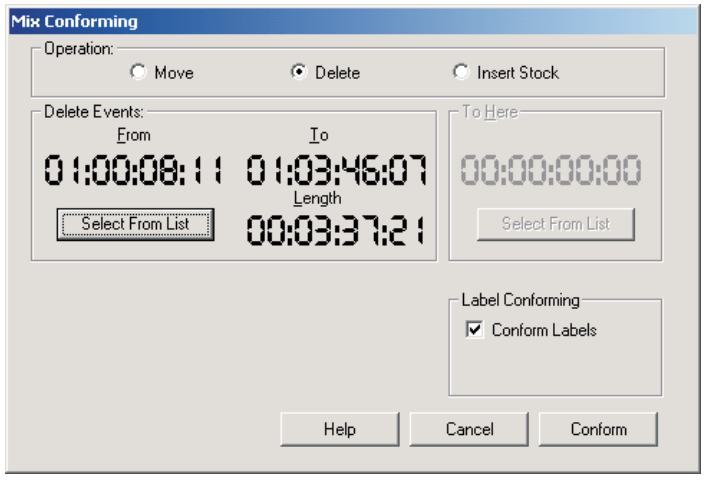
➤ Press the F9 key on the dockable Encore keyboard.

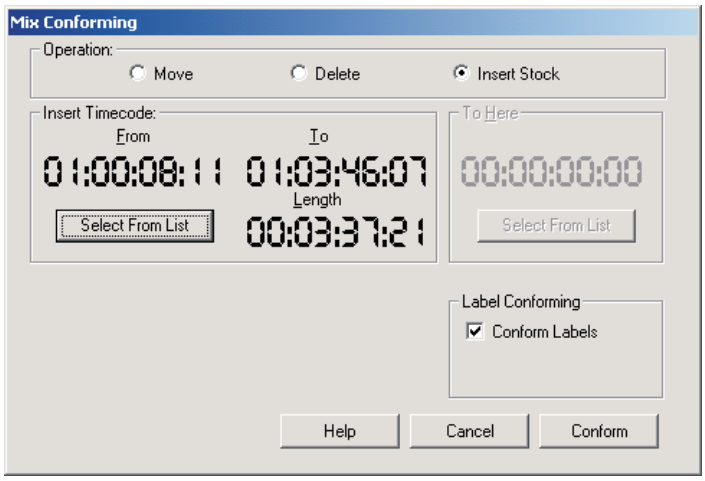
The Mix Conforming dialogue box will displayed with Move selected by default.



➤ Click on Move, Delete or Insert Stock in the operation box.

The options available will change according to the operation selected:



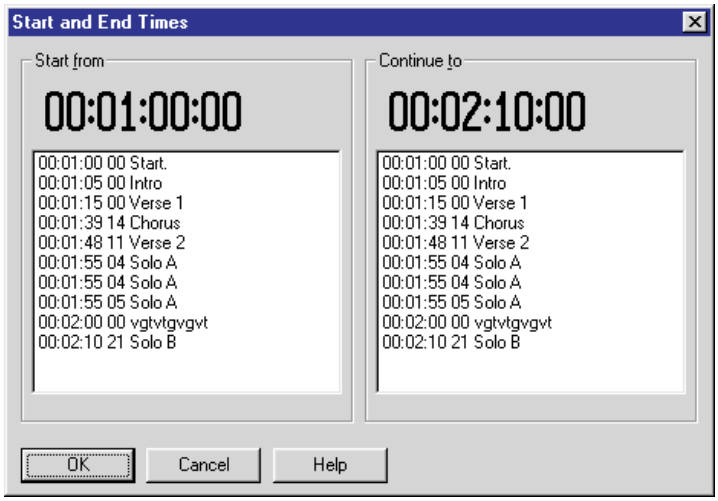


To set the From and To times

➤ Click on each timecode and alter it manually.

or

➤ Click the Select From List button to set the times from the Start and End Times dialogue box.



The Length timecode will automatically show the amount of time that will be conformed.

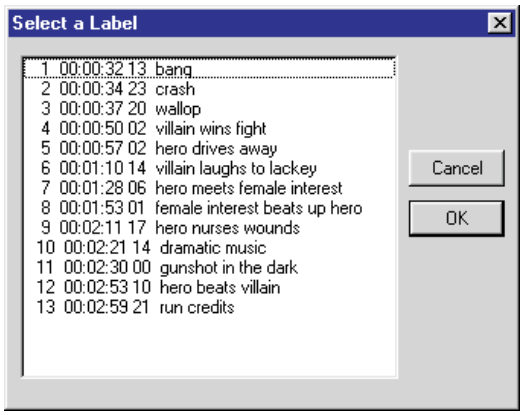
➤ Change the Length timecode manually if required.

To set the To Here timecode for a Move operation

➤ Click on the timecode and alter it manually.

or

➤ Click the Select From List button to set the time from the Select A Label dialogue box.



To select the paths to conform

➤ Click on the required paths in the list.

The selected paths will be highlighted.

➤ Click the Select All button to highlight all paths.

To change the crossfade time

➤ Click in the xFade Time box and enter the required number of frames of crossfade.

This will be used at both the beginning and the end of the conform, or at the "join" for a delete operation.

To force the Label List to follow the conform operation

➤ Click the Conform Labels check box so that it is checked.

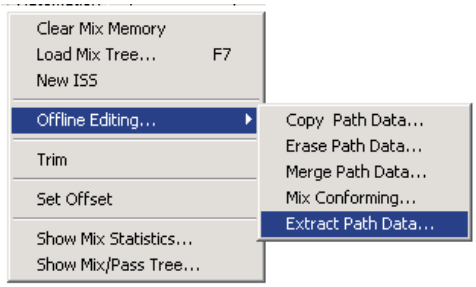
✍ *Note that when this is done, the previous Mix/Passes will no longer match the Label List.*

To create the new conformed mix

➤ Click the Conform button.

The Mix Conforming dialogue box will be removed and a confirmation box will appear to indicate a new Mix/Pass has been created. The new Mix/Pass will be shown as the Play Pass on the main Encore screen.

Extract Path Data



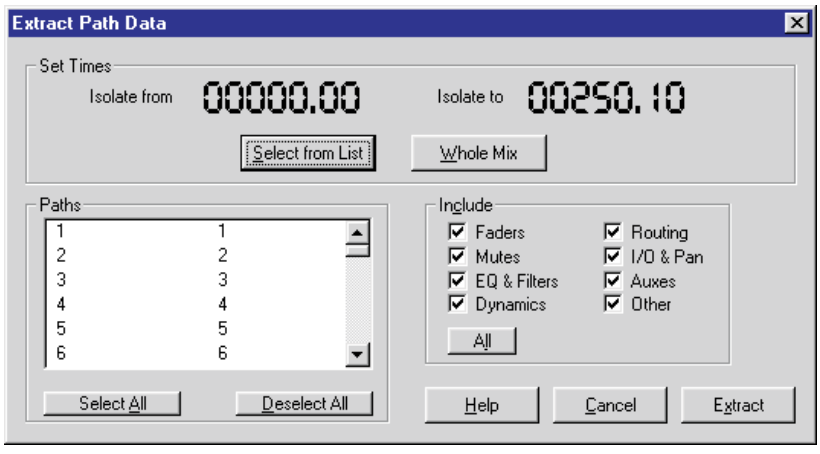
This is used to select part of the current Play Mix/Pass and create a new Mix/Pass.

This is useful, for instance, for extracting a scene (or a short sequence of scenes) to concentrate on that particular part of a Mix. The extracted section can then be merged to combine it with other completed work.

To extract Path Data

➤ Click on Extract Path Data in the Offline Editing Sub-Menu of the Automation Menu.

The Extract Path Data dialogue box will be displayed.



➤ Click the Faders, Mutes, etc. check boxes to select which parts of the automation data to extract.

➤ Enter the Isolate From and Isolate To times in the Set Times box either manually or by clicking the Select from List button and selecting the times in the Start and End Times dialogue box.

➤ Click the Whole Mix button to set Isolate from to zero and Isolate to 23:59:59:24.

➤ Click the required paths in the Paths list (click the Select All button to choose all paths).

The selected paths will be highlighted.

➤ Click on Deselect All to deselect all paths.

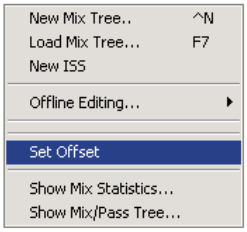
To create the new mix pass

➤ Click the Extract button.

The Extract Path Data dialogue box will close and a dialogue box will appear confirming that a new Mix/Pass was created.

✍ *The new Mix/Pass is automatically selected as the Play Pass.*

Set Offset

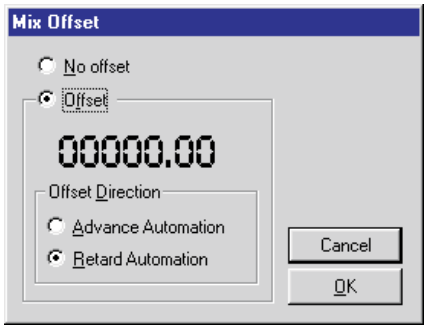


This is used to offset the automation system from the incoming timecode.

To set a Mix Offset

➤ Click on Set Offset in the Automation Menu.

The Mix Offset dialogue box will be displayed.



➤ Change the timecode manually or use a preset (A to F).

➤ Click the Advance Automation or Retard Automation dialogue box as required.

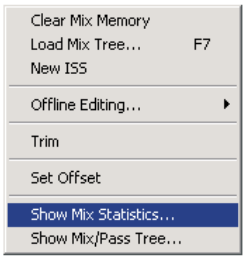
Advance Automation will deduct the timecode value from the timecode displayed on the Encore screen (i.e. automation events will happen in advance of the actual incoming timecode value they were recorded at).

Retard Automation will add the timecode value to the timecode displayed on the Encore screen.

➤ Click OK.

The status bar on the Main Encore Screen will show the offset value.

Show Mix Statistics



Allows users to view details of the current Mix/Pass. (e.g. points in timecode between which all fader moves have occurred).

Also displayed is the amount of memory used by the current Mix/Pass chain.

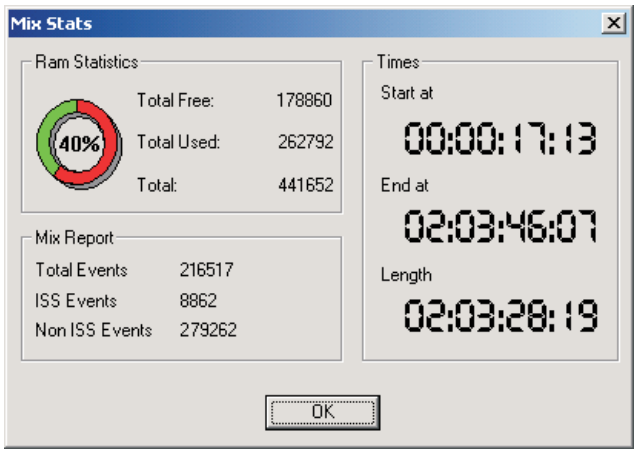
To show mix statistics

➤ Click on Show Mix Statistics in the drop down Mixes sub-menu of the Automation Menu

or

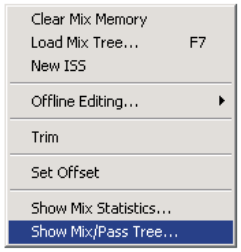
➤ Click on the circular Free Mix RAM gauge on the main screen.

The Mix Stats dialogue box will now appear.



➤ Click on OK to close the dialogue box.

Show Mix/Pass Tree



To display the Mix/Pass Tree

➤ Click on Show Mix/Pass Tree in the drop-down Mix menu.

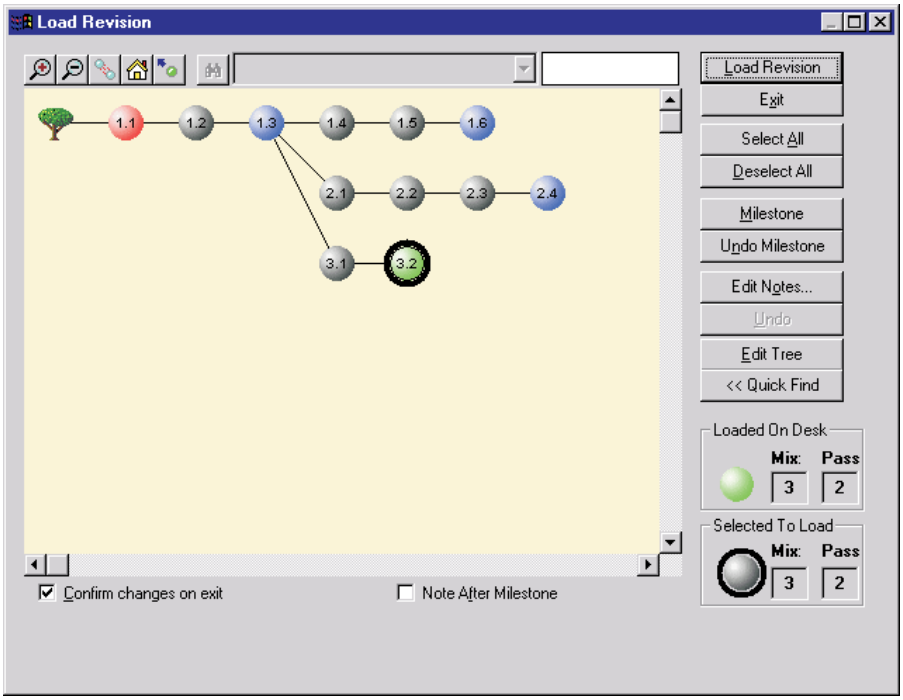
or

➤ Click on the Mix/Pass Tree icon.

or

➤ Click on the current Mix/Pass number on the Encore screen.

In all three cases, the Load Revision dialogue box will appear which displays the Mix/Pass Tree.



If the automation system has been switched off then the Prune Tree dialogue box will be displayed instead (see Editing the Mix/Pass Tree).

✍ *If automation has not been switched on since Encore was started then nothing will happen.*

The current Mix/Pass will be selected. This is shown in green with a black outline.

Milestone Mix/Passes are shown in red (Mix/Pass 1.1 is a permanent milestone and may not be 'un-milestoned').

Significant Mix/Passes are shown in blue. These are Mix/Passes at branch points and at the ends of branches.

Other Mix/Passes (i.e. in between stages) are shown in grey.

When a Mix/Pass is selected it will be given a black outline.



Load Options

These are the same as those displayed on the Load Options window. The state of the tickboxes is remembered between each exit and re-entry.

To select and load a Mix/Pass

➤ Click on the required Mix/Pass number.

The Mix/Pass will be given a black outline.

➤ Click the Load Revision button.

The selected Mix/Pass will become the current Play Pass and it's number will be shown in the Play Pass boxes on the main screen.

The Load Revision dialogue box will close.

Navigating the Mix/Pass Tree

The Mix/Pass Tree display can be zoomed in and out, can jump to the top of the tree or the loaded revision and can be compressed. The display area can also be moved around to show different parts of the Mix/Pass Tree.

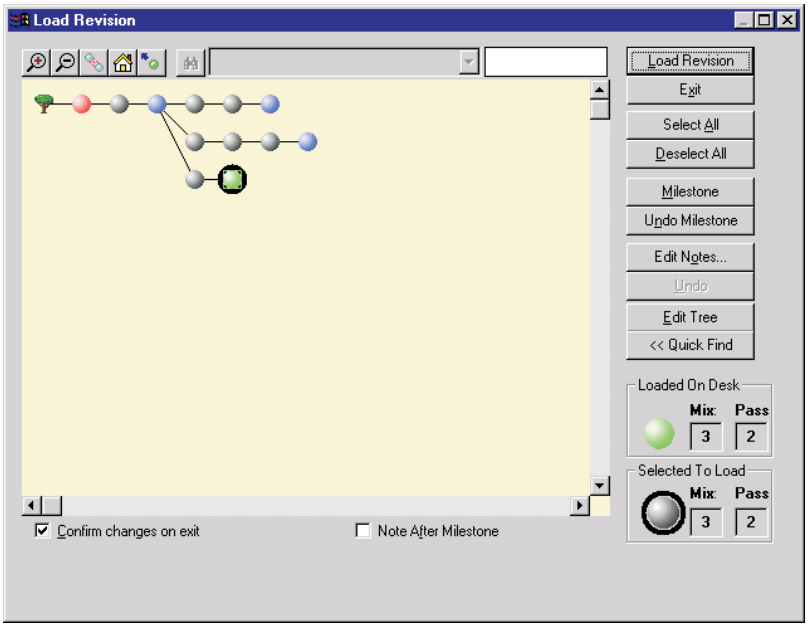
To zoom in and out

➤ Click the magnifying glass icons above the tree display.



There are five zoom levels. The Mix/Pass numbers are not shown at the smallest size

.

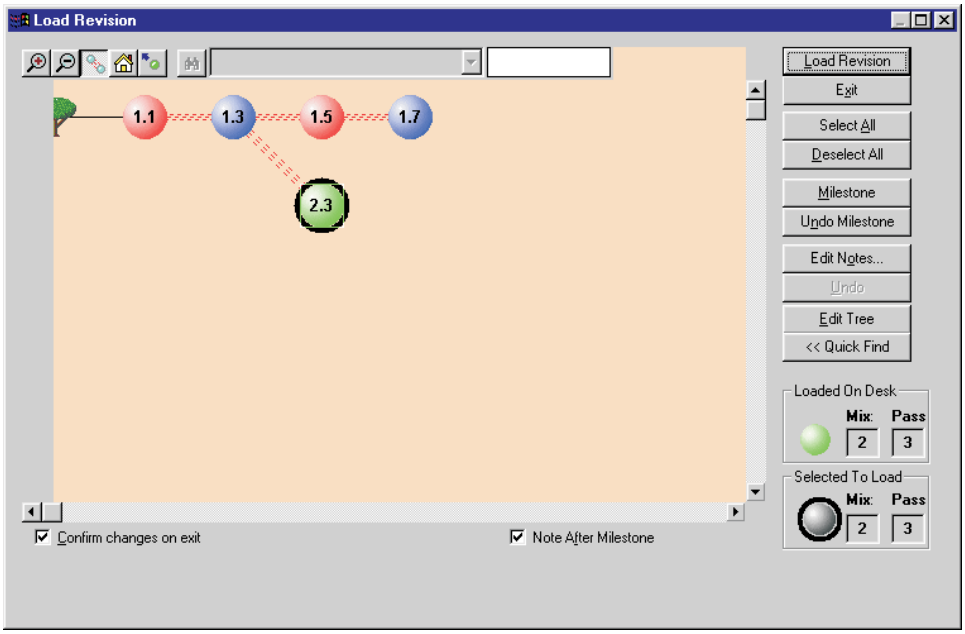


To compress the tree

➤ Click the Compress Tree icon.



Continuous sequences of Mix/Passes (i.e. Mix/Passes coloured grey) will be replaced by dashed red lines to leave significant Mix/Passes on display.



To un-compress the tree

➤ Click the pressed in Compress icon.



To jump to the start of the tree

➤ Click the Goto Parent Tree icon.



The display will jump to show the start of the tree in the top left hand corner.

To jump to the currently loaded revision

➤ Click the Goto Loaded Revision icon.



The display will jump to show the loaded revision (Mix/Pass) in the top left hand corner.

To move the Mix/Pass tree around the display

➤ Use the horizontal and vertical scroll bars.

Mix Notes

Notes in plain text can be applied to any Mix/Pass.

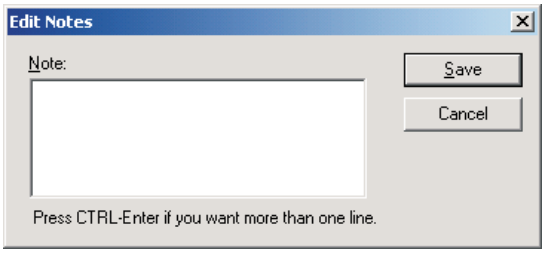
To add a note to a Mix/Pass

➤ Click on the required Mix/Pass number.

The Mix/Pass number will be given a black outline.

➤ Click in the Edit Notes button.

The Edit Notes dialogue box will be displayed.



➤ Type in the required text using the dockable keyboard.

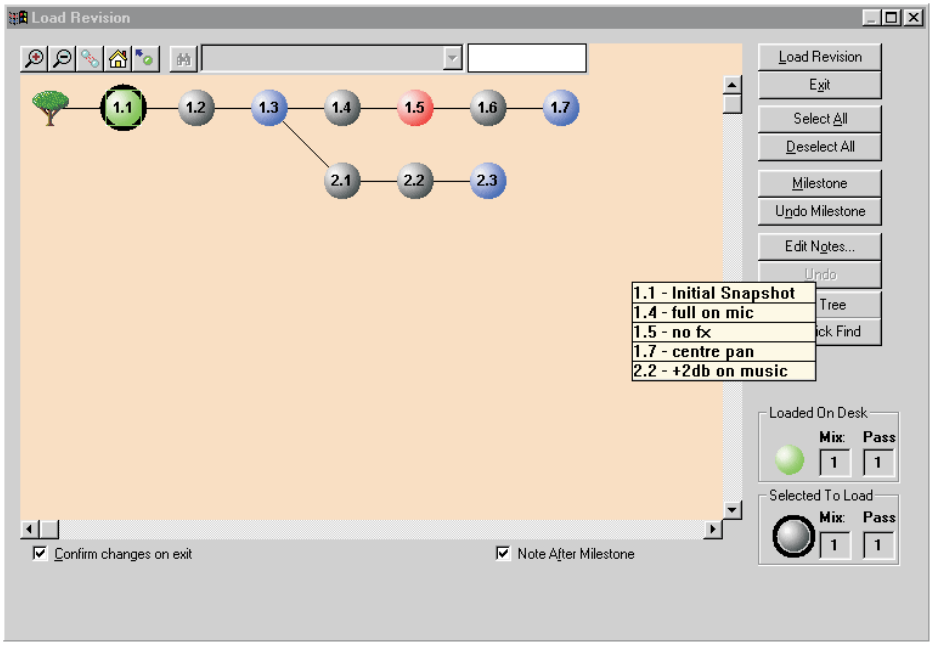
➤ Click the Save button.

To View Mix Passes as Text

Once text has been added to a pass, the full list of this text can be viewed by clicking the Quick Find button.

A small flyout menu will appear showing all the passes with text. To load the pass, scroll down the list and double-click on the line of text. The pass will load.

This text can also be viewed in the main Encore front page, by right clicking in any of the pass indicator boxes. Double-clicking on the desired line of text will then load that pass.



Milestones

A Mix/Pass can be marked as a 'milestone'. This is useful if a Mix/Pass in a long sequence is considered to be significant in some way (e.g. it marks a finished scene). Milestones are protected from editing operations when editing the Tree. Milestones are also shown when the tree display is compressed.

To mark a Mix/Pass as a Milestone

➤ Click on the required Mix/Pass number.

The Mix/Pass number will be given a black outline.

➤ Click the Milestone button.

The Mix/Pass will turn red, unless it is the currently loaded revision in which case it will stay green.

Mix/Pass 1.1 is a permanent Milestone.

To un-mark a Milestone

➤ Click on the required Mix/Pass number.

The Mix/Pass number will be given a black outline.

➤ Click the Undo Milestone button.

The Mix/Pass will turn from red to the colour it would normally be, unless it is the currently loaded revision in which case it will be green and stay green.

Editing the Mix/Pass Tree

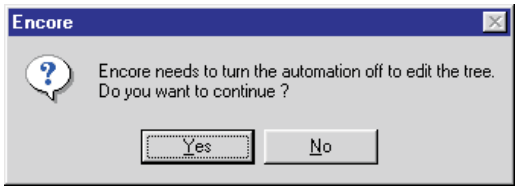
When a Mix/Pass Tree becomes very large, due to multiple refinements during a session, it may be desirable to reduce the size of the Tree. This also reduces the amount of storage space used by the Tree on the Encore hard disk.

This is done using the Prune Tree dialogue box.

To display the Prune Tree dialogue box

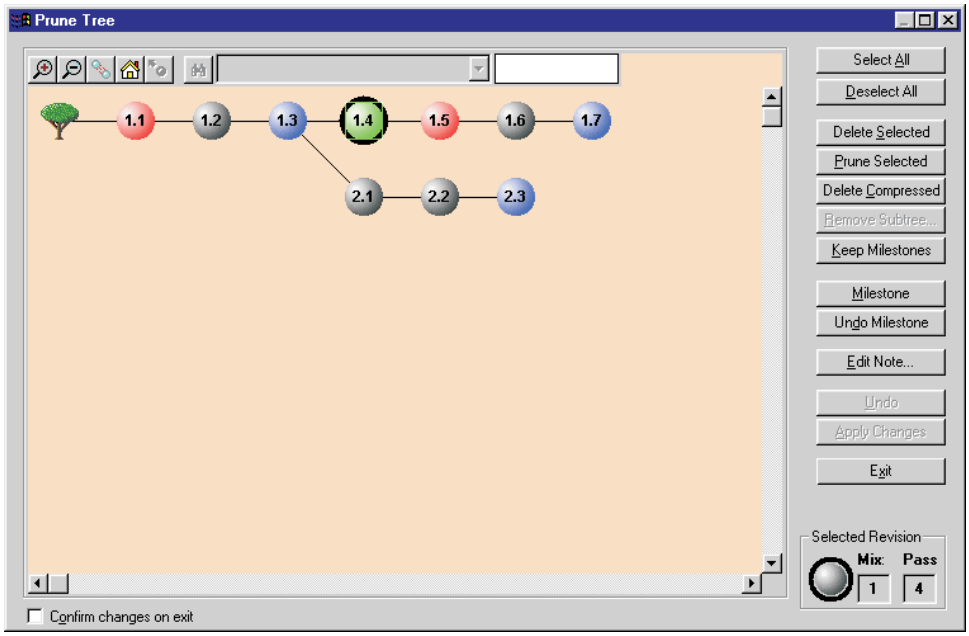
➤ Click the Edit Tree button.

It is necessary to turn the automation system off to edit the Mix/Pass Tree so a confirmation dialogue box is displayed.



➤ Click the Yes button.

The Prune Tree dialogue box will be displayed.



The Prune Tree dialogue box is also displayed if any of the display Mix/Pass Tree options is used when the automation system is off.

Delete Mix/Passes

To delete a selection of Mix/Passes

➤ Click on the required Mix/Pass number.

The Mix/Pass number will turn green and be given a black outline.

➤ Hold down the Shift key on the dockable keyboard and click on additional Mix/Passes as required.

When more than one Mix/Pass is selected the black outline disappears.

The selected Mix/Passes will turn green.

➤ Click the Delete Selected button.

The selected Mix/Passes will be removed from the Tree. If any Milestones were selected then they will not be deleted.

If all but a few Mix/Passes are to be deleted

➤ Click the Select All button.

All the Mix/Passes will be highlighted green.

➤ Hold down the Ctrl key on the dockable keyboard and click on the Mix/Passes to be kept.

➤ Click the Delete Selected button.

The selected Mix/Passes will be removed from the Tree. If any Milestones were selected then they will not be deleted.

To delete a Mix/Pass and all subsequent Mix/Passes

➤ Click on the required Mix/Pass number.

The Mix/Pass number will be given a black outline.

➤ Click the Prune Selected button.

The selected Mix/Pass and any dependant Mix/Passes that would be hidden when the Tree is compressed are deleted (i.e. grey coloured Mix/Passes). This can be thought of as 'pruning a branch'.

To delete all non-significant Mix/Passes

➤ Click the Delete Compressed button.

All the Mix/Passes that would be hidden when the Tree is compressed are deleted (i.e. grey coloured Mix/Passes).

To delete all Mix/Passes except the Milestones

➤ Click the Keep Milestones button.

All Mix/Passes except the Milestones are deleted.

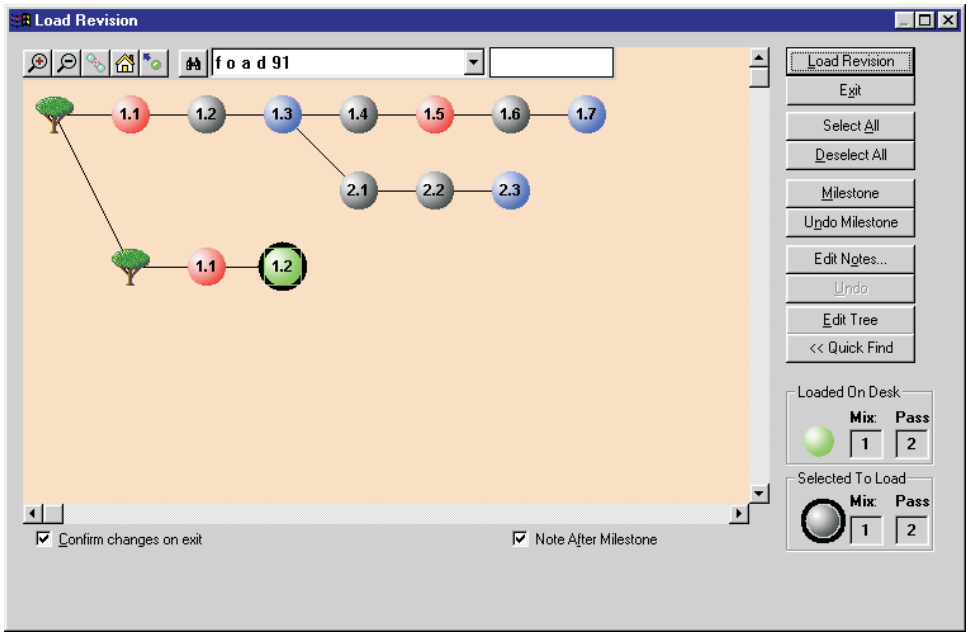
Subtrees

Subtrees are added when a tree is inserted during a Load operation.

To remove a Subtree

➤ Click the subtree that is to be deleted.

The tree will turn bright green and the Remove Subtree button will become available.



➤ Click the Remove Subtree button.

A confirmation dialogue box will be displayed.

➤ Click Yes.

The subtree will be removed.

Undo

Undo is used to reverse the previous operation.

To undo operations

➤ Click the Undo button.

The most recent operation will be reversed.

The Undo button can be used to undo all changes. When there are no changes left to undo then the button is greyed-out (unavailable).

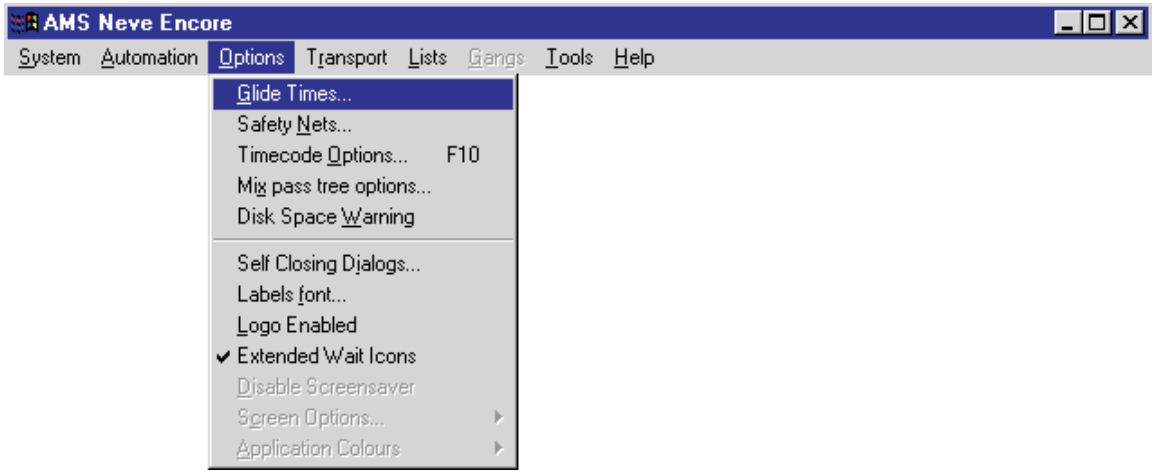
Save Edits

To save changes to the Mix/Pass Tree

➤ Click the Apply Changes button.

This action and any previous actions can not be undone.

OPTIONS MENU



Glide Times

Used to adjust Glide rates for manual Glide and Auto Glide mode.

Glide times can be changed at any time (including during the running of automation).

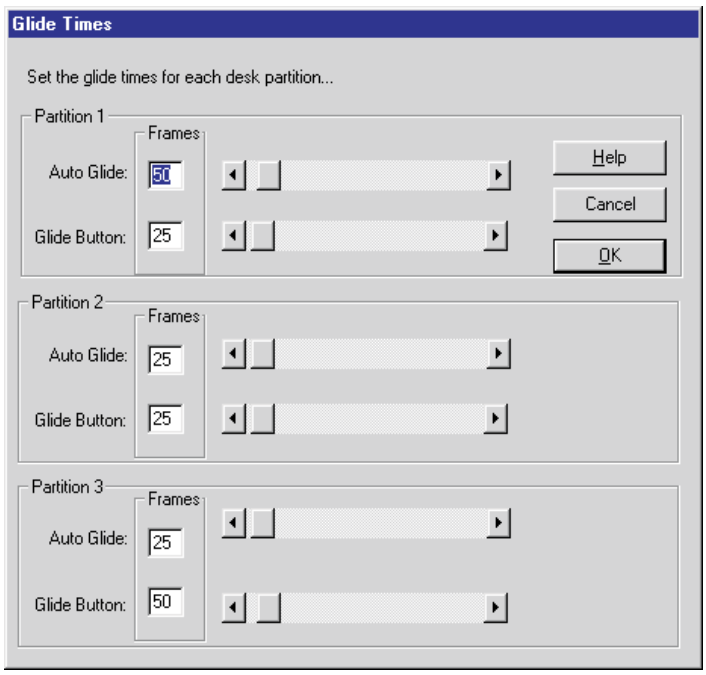
The Glide times are independent for each console partition.

✍ *Because a Glide is written into the fader data, any change in Glide Time settings does not affect previously written Glides.*

To set glide times

➤ Click on Glide Times in the drop down Options menu or click on the Auto or Glide button in the Glide Times display on the main screen.

The Glide Times dialogue box will appear.



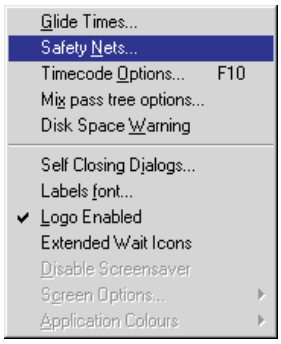
➤ Adjust the times as required by either using the horizontal scroll bars.

or

➤ Click in each box and edit the number of Frames directly (using the keyboard).

➤ Click on OK to close the dialogue box.

Safety Nets



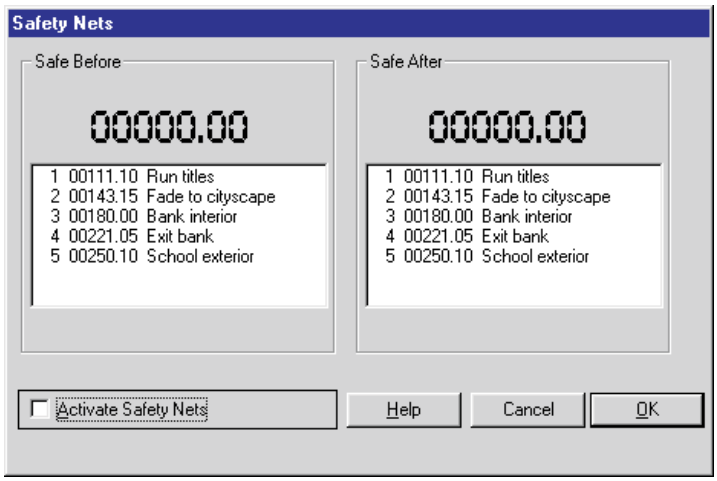
Used to set up a timecode window that will prevent automation events from being recorded outside the window.

This is ideal for restricting automation events to a single scene in a post-production mix.

To set safety nets

➤ Click on Safety Nets in the drop down Options Menu.

The Safety Nets dialogue box will appear.



➤ Enter the Safe Before and Safe After times either manually or by clicking in the Label List under each timecode.

➤ Click the Activate Safety Nets check box so that it is checked.

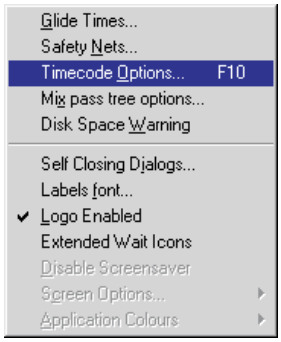
➤ Click on OK to return to the main screen.

The Safety Net Status Line under the Label List on the main screen will show the safety net times.

If an automation pass is stopped before the Safety Net End time is reached then the control positions will match to the Play Pass Position at the Safety Net End time.

✍ *See Collect Touch in the Automation Chapter for more information on using Safety Nets.*

Timecode Options



Used to set timecode type, timecode display options, local zero times and to create timecode presets (for later recall).

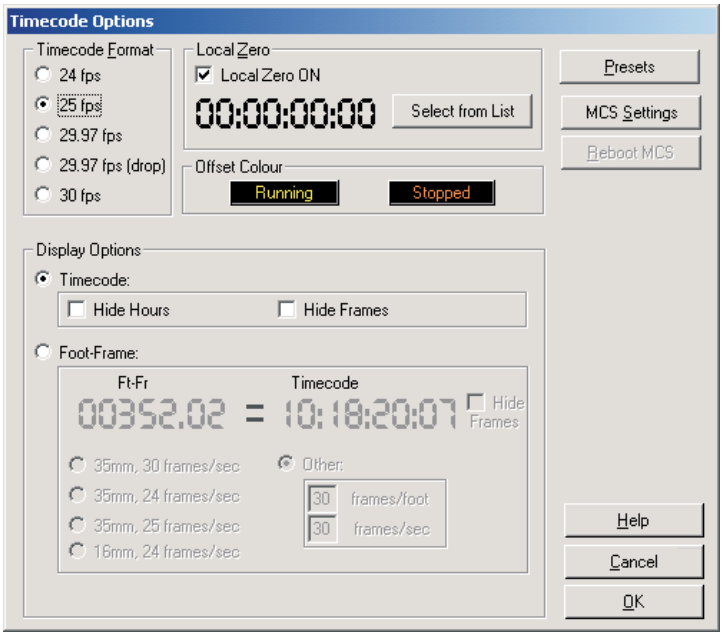
To access Timecode Options

➤ Click on Timecode Options in the Options drop down menu.

or

➤ Click on the Timecode display area in the Encore screen.

The Timecode Options dialogue box will be displayed.



The Timecode Presets button is provided to allow the Presets to be changed without closing the Timecode Options dialogue box. See Timecode Presets in the Tools Menu chapter.

Timecode Format

Used to set the frame rate for incoming Timecode.

To set the Timecode type

➤ Click on the radio button for the required timecode type in the Timecode Format box.

The choices are 24, 25, and 30 (drop or nondrop) frames per second.

✍ *Encore does not automatically determine the incoming code type.*

It is advisable to verify the code type before mixing.

A message will be displayed if incoming Timecode differs from the selected type.

The default is set to the type of code used most often.

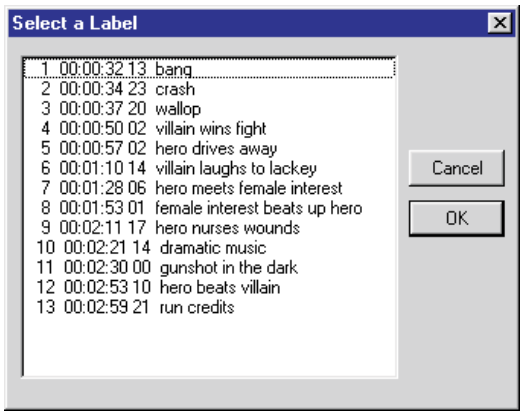
Local Zero

Used to display the running time of a Mix instead of the Timecode in use.

When Local Zero is activated running code will be offset so that the chosen point is displayed as 00:00:00:00 in all Timecode fields.

To set Local Zero

➤ Enter the desired timecode in the Local Zero box either manually or by clicking on Select From List and making a selection from the Select A Label dialogue box.



➤ Click on Local Zero ON.

✍ *Local Zero is saved and automatically reloaded with the Mix.*

Offset Colour

If there is an offset applied to the mix, this option sets the two colours for when timecode is running (usually green) and stopped (usually red).

➤ Click on either of the two buttons to set the colours

Encore will open the standard Windows Colour Selection box.

➤ Select the desired colour and click OK.

These colours will apply to all automation under the current user until the offset is removed.

Display Options

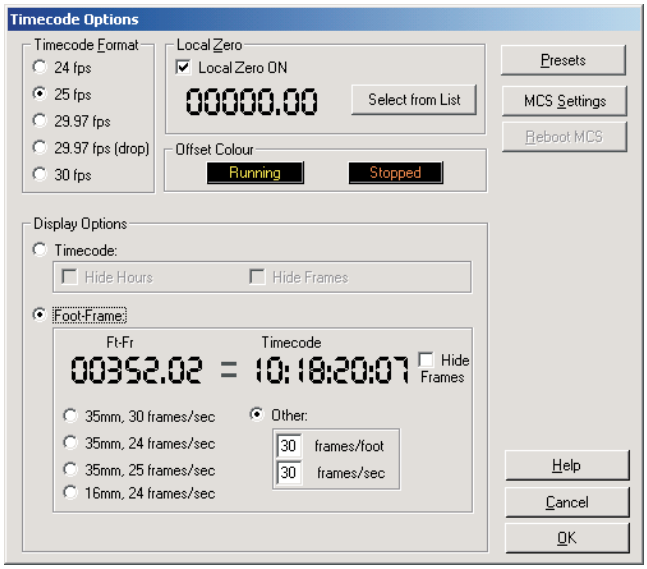
Used to set the display format for Timecode within Encore.

To set the timecode display options

➤ Click the Timecode or Foot-Frame radio button.

When Timecode is selected the dialogue box will allow the standard timecode display options to be modified.

When Foot-Frame is selected the Foot-Frame options will become available.



➤ Click on the required display settings in the Display Options box.

Timecode Radio Button

Timecode will be displayed in HH:MM:SS:FF format.

Hide Frames

Suppresses the display of frames on the screen.

Hide Hours

Suppresses the display of hours on the screen.

✍ *Complete entry of Timecode is required even if hours or frames are suppressed.*

Foot-Frame Radio Button

Timecode will be displayed in Foot-Frames format.

FT-FR = Timecode

Allows users to synchronise the Foot-Frames display and actual SMPTE time (e.g. to make the foot-frame counter read zero feet at a timecode of one hour, enter 0.00 under Ft-Fr and 01:00:00:00 under Timecode).

Film Format

Buttons are provided to set the type of film being used.

If a custom format is desired, enter the number of frames per foot and frames per second using the Other facility.

MCS

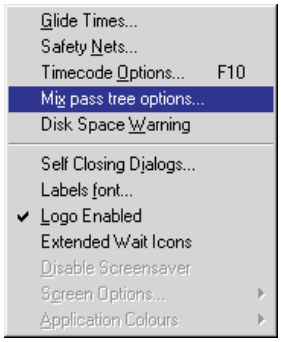
To access the MCS Preferences page

➤ Click the MCS Settings button.

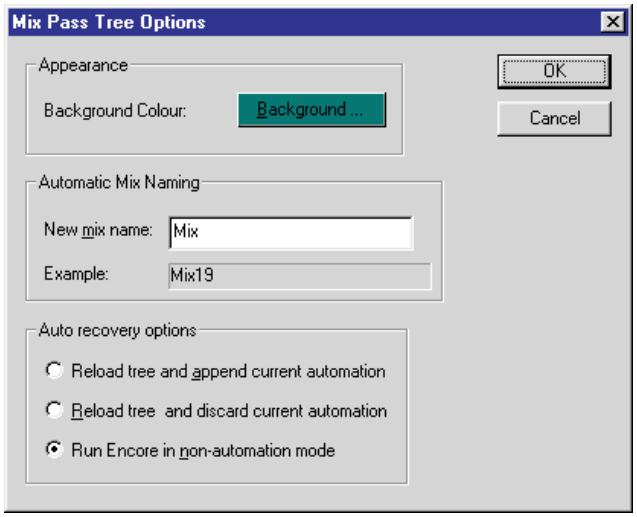
To reset the MCS Controller card

➤ Click the Reboot MCS button

Mix/Pass Tree Options



Used to set the background colour of the Mix/Pass Tree displays, the default names for new Mix Trees and the startup option for Encore.



Mix/Pass Tree Appearance Option

Used to set the background colour of the Mix/Pass Tree displays (Load Revision and Prune Tree dialogue boxes).

To change the background colour for Mix/Pass Trees

➤ Click the Background button.

The Color dialogue box will be displayed.



➤ Click the square with the required colour.

➤ Click OK.

The Background button will show the selected colour.

✍ *The set colours shown in the Color dialogue box are from the standard Windows palette. Alternative colours can be selected by clicking the Define Custom Colours>> button and selecting a colour from the continuous palette.*

Automatic Mix Naming

Used to enter a default name for new Mix Trees.

To change the default Mix Tree name

➤ Click in the New Mix Name box.

➤ Edit the name as required.

The example box will be updated as the name is edited.

Next time a Mix Tree is started, the new name will be used by default in the New Mix Tree dialogue box.

Auto Recovery Options

Used to select the startup option for the automation system. This also determines what Encore does automatically with any automation data that has been left in the automation buffer (e.g. if Encore lost the automation link with the console and had to be restarted).

To select the default startup condition

➤ Click the radio button for the required option.

Reload tree and append current automation

This causes the last Mix/Pass Tree to be reloaded automatically when Encore starts. The automation data in the automation buffer will be added to the Tree at the last Mix/Pass revision that was loaded. The new Mix/Pass will become the Play Pass.

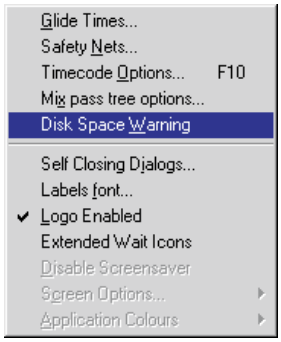
Reload tree and discard current automation

This causes the last Mix/Pass Tree to be reloaded automatically when Encore starts. The Mix/Pass revision that was the Play Pass will be re-loaded as the Play Pass.

Run Encore in non-automation mode

The Automation system will be off when Encore starts and must be started manually (see Automation Mode in the System Menu chapter.) This also allows either of the other two options to be used when the automation system is started.

Disk Space Warning

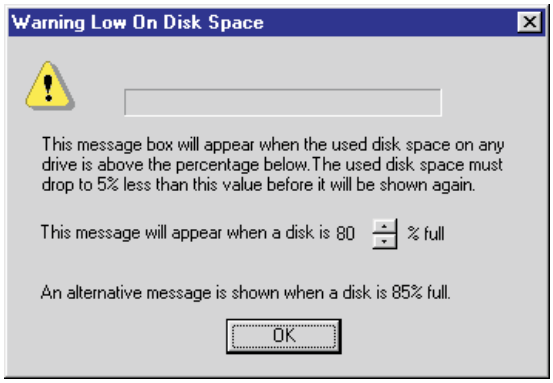


This is used to determine how much space must be used up on a hard disk before warnings are issued on the Encore screen.

To set the disk space low warning level

➤ Click on Disk Space Warning in the Options menu.

The Warning Low On Disk Space dialogue box will be displayed.

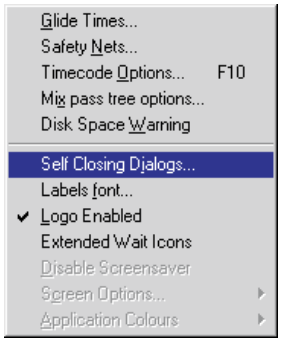


➤ Enter a percentage as required, or click the up/down buttons next to the percentage box.

When one of the hard disks in the system reaches the percentage entered, this dialogue box will be displayed again with information about which hard disk has reached the level set. This is so that a new percentage can be entered, if required.

✍ *A different dialogue box is displayed at the 85% full level. This is because this is considered to be a point at which some administrative maintenance should be carried out.*

Self Closing Dialogs

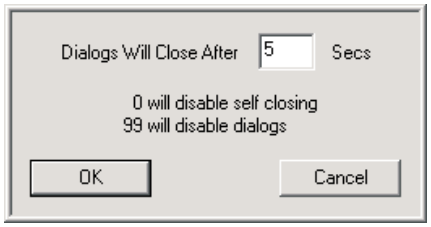


Allows users to set (establish) the period of time that transient messages (e.g. The Mix Has Been Saved Successfully) appear on screen.

To use self closing dialogs

➤ Click on Self Closing Dialogs in the Options drop down menu.

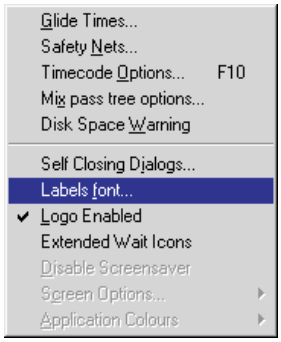
The self closing dialogue box will appear.



➤ Enter the required time using the numeric keyboard.

➤ Click on OK.

Labels Font

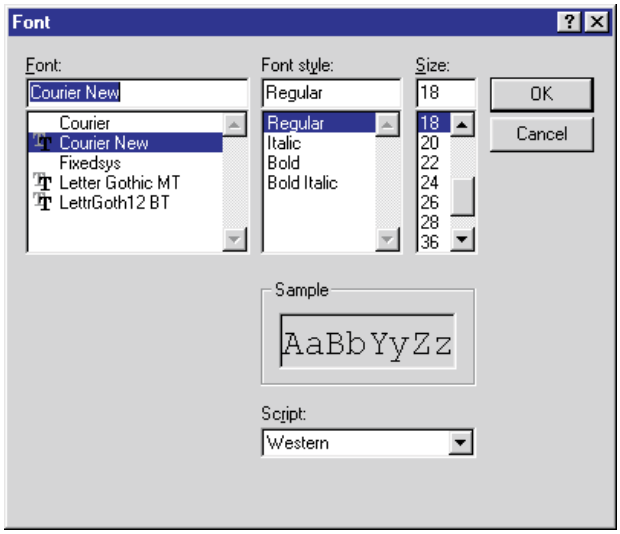


Allows users to select the type of font displayed in the label area of the Encore screen.

To select a font

➤ Click on Main application font in the drop down Options Menu.

The Font Options dialogue box will appear.



➤ Use the vertical scroll bar to view the selection of available fonts in the Font box and click on desired choice.

The selection made is displayed in the Sample box.

➤ Click on the desired style in the Font Style box.

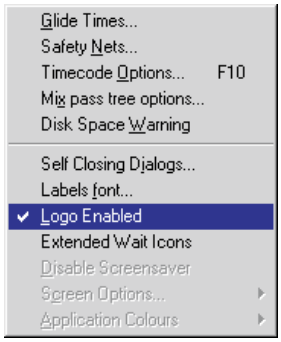
The selection made is displayed in the Sample box.

➤ Use the vertical scroll bar in the Size box to select the required font size.

The selection made is displayed in the Sample box.

➤ Click OK to confirm selection and quit the Font dialogue box.

Logo Enabled



The Encore logo can be disabled to create a larger working space on the screen. This allows more room for the Label List, particularly when displaying the MCS Machine Status and/or the MCS Group Status.



To enable/disable logo

➤ Click on Logo Enabled in the drop down Options menu.

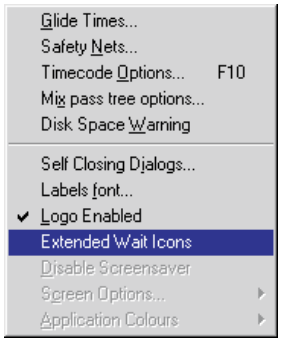
If the logo is enabled a tick is located to the left of Logo Enabled.

If the logo is disabled there is no tick to the left of Logo Enabled.

➤ Click on another option or move the cursor away from the drop down menu and click.

✍ *There is no dialogue box for this facility.*

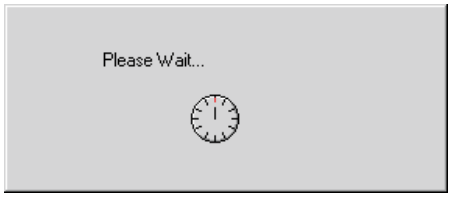
Extended Wait Icons



This is used to select the extended set of animated wait icons that are displayed when Encore is busy (e.g. when loading a Desk Setup).

The extended set of wait icons are more visually appealing.

The standard wait icon is the timer dial. This will be used when this option is not selected.



Standard Timer Dial

To selected the extended set of wait icons

➤ Click on Extended Wait Icons in the drop down Options Menu.

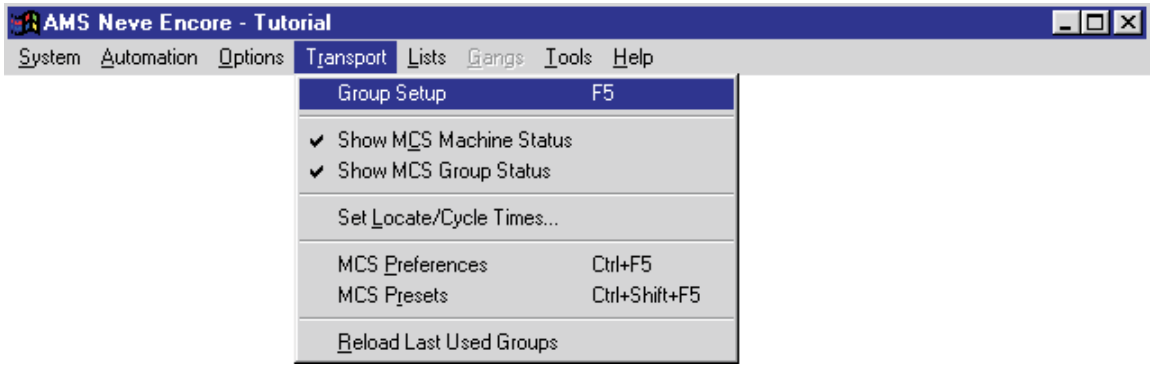
Next time the Options Menu is selected, a tick will be displayed adjacent to Extended Wait Icons.

The extended icons are de-selected by repeating the operation.

✍ *There is no dialogue box for this facility.*



TRANSPORT MENU



Group Setup

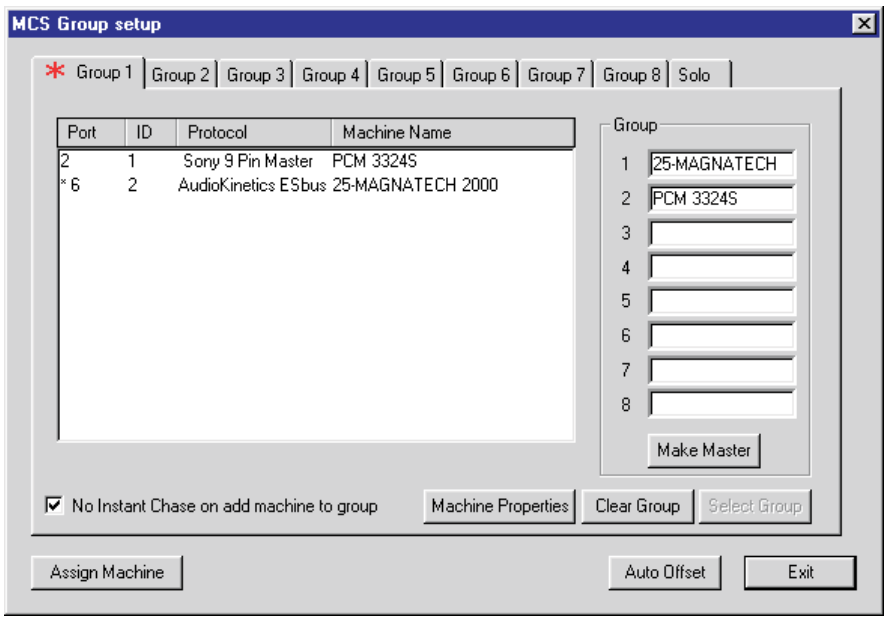
Group Setup is used to setup groups of machines and configure individual machines.

Changes made will be shown immediately on the optional MCS Panel (if it is installed).

Setup Groups of Machines

When Group Setup is selected, the MCS Group Setup dialogue box is displayed with the page for the Current Group on top.

The F5 key can be used as a shortcut to MCS Group Setup.



There are 8 tabbed pages for the eight MCS groups. Each page is identical except for which group it relates to. A red asterix is displayed on the tab for the currently selected group.

The page shows a list of the currently available machines, and a Group list which shows the machines in the Group. The group master is indicated by an asterix (*) next to the master's Port number.

To add a machine to a Group

➤ Click on the numbered tab for the required Group.

This also selects the Group as the Current Group that is controlled by the MCS card.

➤ Click on the required machine in the machine list.

➤ Click the Assign Machine button.

The machine will be added to the Group list.

If it is the first machine assigned to the Group then it will be the Group Master and a * will be displayed next to the machine's Port number.

To take a machine out of a Group

➤ Click on the numbered tab for the required Group.

This also selects the Group as the Current Group that is controlled by the MCS card.

➤ Click on the required machine in the Group list.

➤ Click the Remove Machine button.

The machine will be removed from the Group list.

If the machine is the group master then the next machine in the Group list will be made the Group Master.

To remove all machines from a Group

➤ Click on the numbered tab for the required Group.

This also selects the Group as the Current Group that is controlled by the MCS card.

➤ Click the Clear Group button.

There will be no machines assigned to the current group.

To change the currently selected (active) Group

➤ Click on the numbered tab for the required Group.

➤ Click the Select Group button.

The red asterix will move to the newly selected Group.

Configuring Individual Machines

To configure an individual machine

➤ Click on the required machine in the machine list on any MCS Group Setup page.

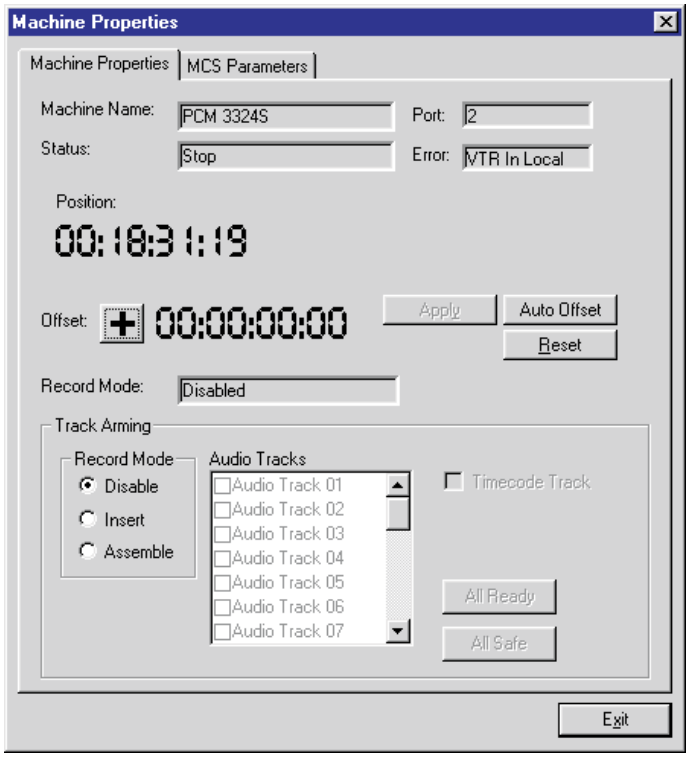
➤ Click the Machine Properties button.

The Machine Properties dialogue box will be displayed.

The dialogue box has two pages: one for properties and one for MCS parameters for the selected machine.

Machine Properties

The Machine Properties page shows the status of the selected machine, including the machine name and type.



The Machine Properties page has controls for changing the offset and track arming.

Machine Offset

The offset for a machine is applied as a difference between the position of the machine and the position of the group master. A group master may not have an offset.

To set the offset

➤ Click the +/- button in front of the timecode value to set it to plus or minus.

➤ Change the timecode manually to the required value.

To use Auto Offset

➤ Click the Auto Offset button.

This sets the offset to the current difference between the position of the machine and the position of the group master.

Track Arming

The Audio Tracks list shows the tracks for the selected machine. Armed tracks are highlighted and each track has a check box which will be ticked when the track is armed.

To arm a track

➤ Click the check box for the required track.

Each click will toggle the track between armed and safe.

To arm all tracks for the current machine

➤ Click the All Ready button.

All the tracks will be highlighted and the check boxes will be ticked.

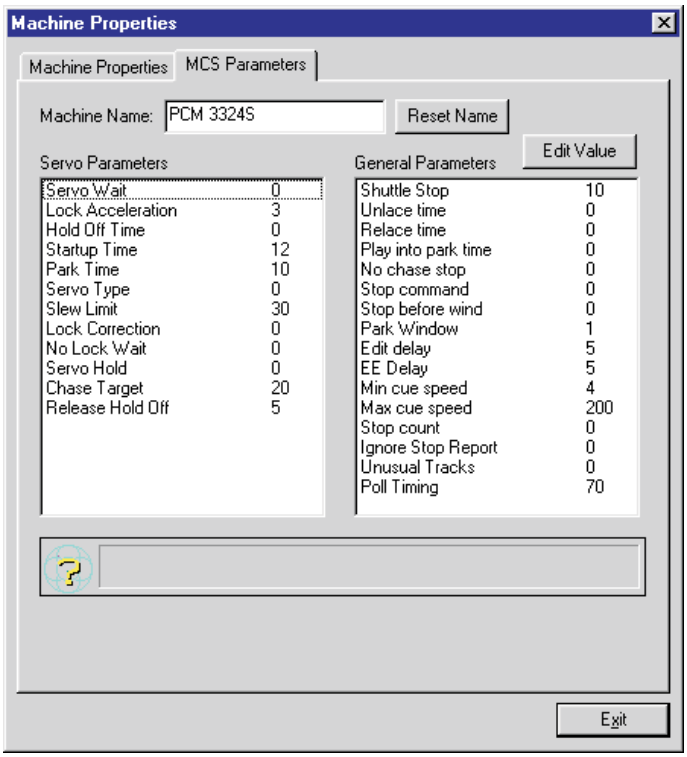
To disarm all tracks for the current machine

➤ Click the All Safe button.

No tracks will be highlighted or ticked.

MCS Parameters

The MCS Parameters page is used to change settings for individual machines to optimise performance. The machine name can also be altered (e.g. to identify machines of the same type).



To change the machine name

➤ Click in the Machine Name box.

➤ Type the required name.

➤ Click the Reset Name button to change the name back to the default for the machine type.

To change a parameter

➤ Click the required parameter in either list box.

The parameter will be highlighted.

➤ Click the Edit Value button.

➤ Type in the required value and press Enter.

✍ *Each parameter has a specific range of values it can use. A value within range for the parameter must be provided.*

Values outside the range will be rejected.

Servo Parameter Definitions

Used to "fine tune" the machine for servo into lock.

Servo Wait (frames)

Wait this number of frames after a play command before beginning servo action.

This parameter is used to delay the onset of servo action for a given number of frames. This can be set to allow time for the machine's transport to stabilise before beginning servo action. Some machines may give inaccurate information to the MCS when servo is begun too quickly. Increasing this value may help to compensate for this.

Lock Acceleration (frames)

Number of frames away from lock that minimum servoing is applied.

Servo action is applied in 3 stages by the MCS, each stage being more aggressive. If the machine persistently overshoots the lock position during locking, increasing this value will apply gentler servoing as the machine approaches lock and may help reduce this.

Hold Off time (frames)

Wait for this number of frames after fine slewing into lock has achieved a zero error before releasing.

Normally, when zero error has been achieved the machine is released from servo in order to lock to the video frame edge. However, depending upon the transport ballistics, some machines may have moved through zero error and be moving away from zero error at this point. If released in this situation the machine may repeatedly report lock & locking. Increasing the hold off time causes the MCS to wait after zero error has been achieved before releasing the machine.

Start-up time (frames)

Play command is issued when the timeline is this many frames behind the machine position.

When machine synchronisation is begun after the PLAY key has been pressed, the system will pre-roll by 16 frames and then run the timeline through the machine position. If the machine error is observed to count down slowly from 16 frames to zero, adjusting this parameter by 2 frames may correct this. If the machine can be seen to have several frames to servo after receiving its play command, adjusting this parameter may correct this.

Park Time (frames)

Machine parks ahead when chasing to a moving timeline by this many frames.

Servo type (0, 1 or 2)

Final approach : 0 means servo up from 1 frame behind; 1 means servo directly into lock; 2 means come back from 1 frame in front.

This parameter determines the way the machine servos into lock. The most common method is to servo up from 1 frame behind. However, this is not suitable for some machines, which will be unable to lock by this method. If the machine hovers between zero error and 1 frame error, try an alternate servo type. NOTE: The servo software can make automatic changes to this value.

Slew limit (frames)

Maximum number of frames of error which will be made up by servoing rather than shuttling.

Error above this value will cause the machine to go into shuttle mode rather than servo mode.

Lock correction (frames)

Number of frames a machine will 'jump' when releasing.

The parameter allows correction for machines who's reported position "jumps" when it is released from servoing. Adjustment of this parameter is normally not necessary.

No Lock Wait

Non zero means assume lock when zero error is achieved before machine reports servo lock.

Setting this to a non zero value will decrease machine lock up time in some cases (for example 7030). This is because certain machines may achieve and hold zero error for some time before actually reporting lock.

Servo Hold (frames)

Hold servoing for this number of frames before issuing play.

Once zero error has been achieved, the MCS will continue to servo at play speed for the time specified. This can help avoid situations where the machine is servoed up from behind and is possibly speeding up when released and therefore could be into the next frame when released.

Release Hold off (frames)

Number of frames to wait after releasing before LOCK is confirmed.

This parameter controls the last stage of the servo process for a machine. After zero error is achieved and the machine is released, the MCS will wait for the specified time before lock is confirmed. This gives more leeway for final errors to be corrected if required. Adjusting this value may help if lock errors are observed after lock has been reported.

General Parameter Definitions

Shuttle Stop

Non-zero means that machine will be slowed down to stop. The larger the number the gentler the action of the stop command.

Unlace time (seconds)

Distance to target in locate/chase above which unlaced or high speed wind will be engaged.

When the "locate to" or chase difference is greater than this time the machine will unlace and fast wind until the difference is within the relace time. Setting this value to 255 will cause "infinite" unlace time to be adopted. This will permit devices capable of instant locates to avoid entering shuttle or wind modes.

Relace time (seconds)

Distance to target in locate/chase below which laced or shuttle wind will be engaged.

This parameter is essentially the opposite of the above and operates if "unlaced wind" has been engaged. When spooling to a locate time shuttle mode is engaged when the difference between the current position and the locate target is below this value.

Play into park time

Allowed overshoot in a locate operation before new locate command is issued.

When locating, the machine may overshoot the specified location. If the overshoot becomes greater than the value specified in this default the MCS will issue a new locate command rather than allowing the machine to park at the "overshot" position. This is primarily used to cater for devices which have a built in "play into park" mode (for example Tascam DA60).

No chase stop (0 disabled, 1 enabled)

1 = Don't issue stop command when parked next to master.

If this option is enabled then this machine will be set to shuttle at zero speed when it is parked next to the master position.

Stop command (0 or 1)

0 = Shuttle at zero speed and 1 = STOP command.

This option determines how the machine will behave when the STOP key is pressed on the AudioFile. If it is set to 0, then the machine will shuttle at zero speed. If it is set to 1, then the machine will be sent a stop command.

Stop before wind (0 or 1)

1 = issue stop command before going into wind from play.

Setting this option to 1 will cause a stop commend to be sent to this machine between a wind and a play operation.

Park window (frames)

Allowed error after a locate or chase operation.

This is the maximum allowed difference between the position required by the locate or chase operation and the actual final machine position. If the difference exceeds this value, than another locate will be performed.

Edit delay (frames)

Number of frames the machine takes to respond to an EDIT ON command.

This setting should be used to compensate for the time required by the machine to perform an edit on (i.e. enter record) after receiving the command. The compensation is applied during programmed external recording.

EE delay (frames)

Number of frames the machine takes to respond to an E to E (input monitor) command.

This parameter is similar to the previous value but applies to the response time to an E to E command.

Min cue speed

Smallest permitted value of shuttle speed command. Units - 1/64th of play speed, i.e. 4 = 1/16th , 128 = 2*play speed.

This value should be used to set the minimum shuttle speed for the machine. Higher values will result in the machine moving in response to shuttle wheel movements below the normal minimum shuttle speed.

Max cue speed

Largest permitted value of shuttle speed command. Units - multiples of play speed.

This value should be used to set the maximum shuttle speed. Larger values will result in higher shuttling. This parameter can be used to slow down machine shuttling if desired.

Stop count (frames)

Machine must be motionless for this number of frames before stop is reported.

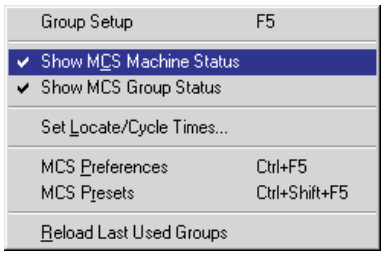
Increasing this value will force the MCS to wait for the specified number of motionless frames before considering the machine to be stopped.

Poll Timing

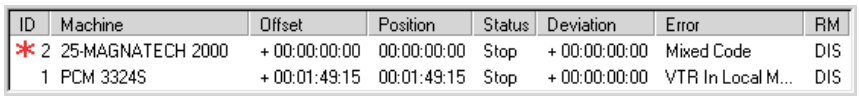
Time after frame edge that machine position reports are requested from the machine. Each "unit" in the value is 128 uS (i.e. 10 = 1.3mS, 80 = 10mS).

Some machines do not update their internal position values until some distance into the frame. Use this parameter to remove any ambiguity about machine position values. A typical result of this parameter needing adjustment is persistent and random 1 frame lock errors.

Show MCS Machine Status



This displays or hides the Machine Status information.



ID	Machine	Offset	Position	Status	Deviation	Error	RM
* 2	25-MAGNATECH 2000	+ 00:00:00:00	00:00:00:00	Stop	+ 00:00:00:00	Mixed Code	DIS
1	PCM 3324S	+ 00:01:49:15	00:01:49:15	Stop	+ 00:00:00:00	VTR In Local M...	DIS

This shows either the status of the machines in the current group (the group master is indicated by a red * in the Machine name) or the status of the current machine in solo.

The Machine Status is displayed above the Label List on the main Encore screen.

To show or hide the MCS Machine Status

➤ Click the Show MCS Machine Status option in the Transport Menu.

When the Status is shown, the option is ticked.

The ID column shows the port number the machine is using.

The Machine column shows the name of the machine, usually indicating the model name.

The Offset column shows the offset from the Group Master.

The Position column shows the current position of the machine.

The Status column shows the current activity of the machine, i.e. Stop, Play, etc.

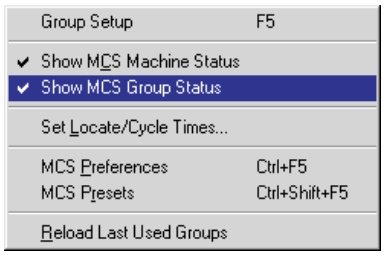
The Deviation column shows the difference between the machine's position and the timeline position. This takes any offset into account (i.e. if the difference is equal to the offset then the deviation is zero).

The Error column shows any errors reported by the serial connection to the machine.

The RM column shows the current record mode. This will be DIS for disabled, INS for insert edit mode or ASS for assemble edit mode.

✍ *There is no dialogue box for this function.*

Show MCS Group Status



This displays or hides the MCS Group Status information.



This shows the overall status of the Group and the status of each individual machine in the Group. The status of the group master is shown above the number 1.

The Group Status is displayed above the Label List on the main Encore screen.

The box at the right hand end shows the current system reference. This will be LTC (linear timecode) or VIDEO. The background colour indicates the status of the reference, with green for good code or red for bad code.

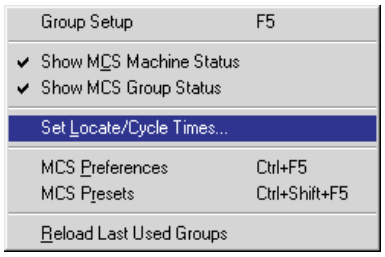
To show or hide the MCS Group Status

➤ Click the Show MCS Group Status option in the Transport Menu.

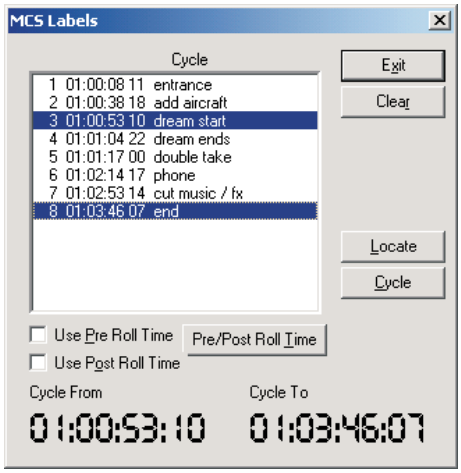
When the Status is shown, the option is ticked.

✍ *There is no dialogue box for this function.*

Set Locate/Cycle Times

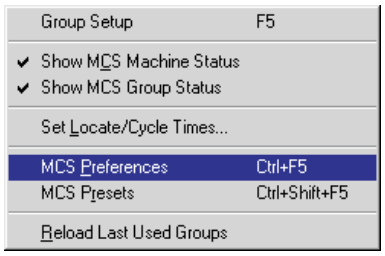


This causes the MCS Labels dialogue box to be displayed.

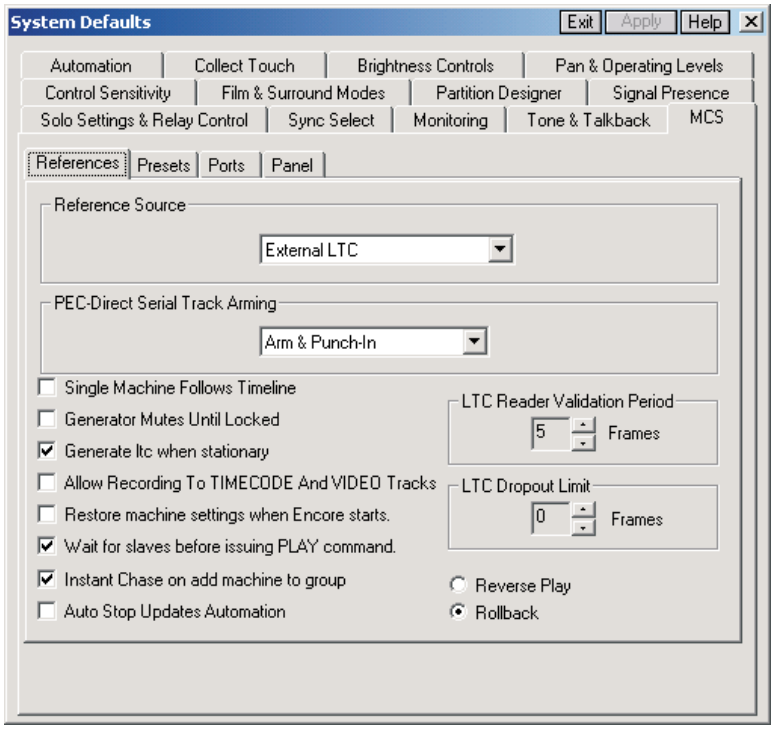


A Locate or Cycle can then be executed. See Locate and Cycle in Transport Control.

MCS Preferences

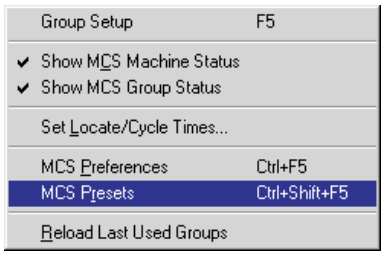


This causes the References page of MCS Preferences in the System Defaults to be displayed.

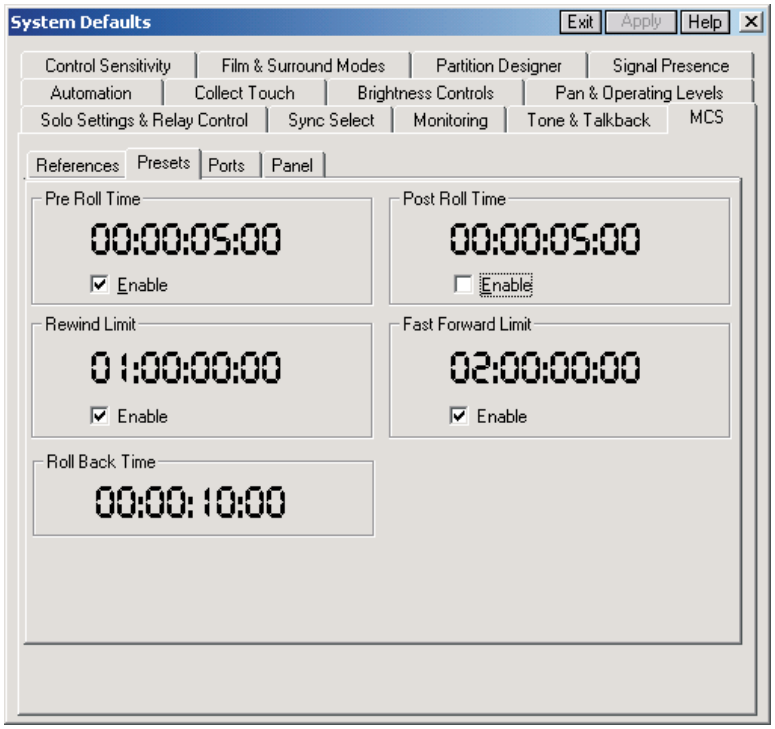


MCS Preferences is described in the System Menu chapter.

MCS Presets

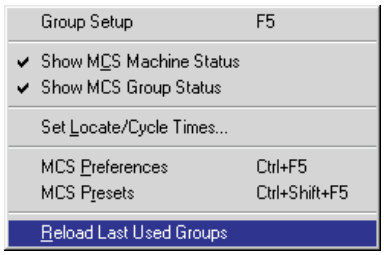


This causes the Presets page of MCS Preferences in the System Defaults to be displayed.



The MCS Preferences are described in the Transport Control and System Menu chapters.

Reload Last Used Groups



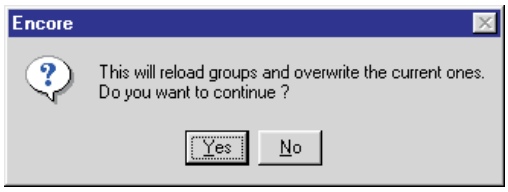
This is used when Encore is started to restore the groups of machines as they were setup the last time that Encore was running.

This option only needs to be selected when Encore is re-started. Subsequent changes to the machine groups will be saved.

To restore the group setup

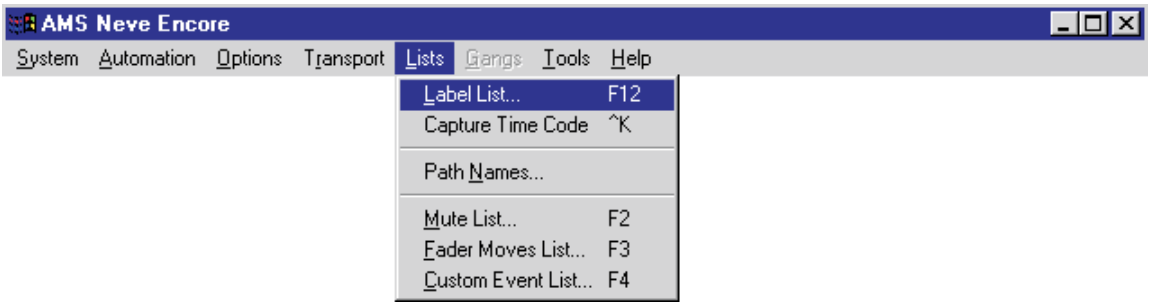
➤ Click on Reload Last Used Groups in the Transport Menu.

A confirmation dialogue box will be displayed. This warns that any groups that have been setup using the MCS Panel directly will be overwritten.



➤ Click the Yes or No button as required.

LISTS MENU



Label List

Used to create or capture (grab) a point in Timecode, modify (if required) and assign a name and number to it. Labels can be associated with specific events in the audio or simply used as an extended set of preset Timecodes.

The Label List is organised in Timecode order.

The Label List is stored as part of the Mix information for a Title. All Mix/Passes saved under a specific Title will have the same Label List.

To access the Label List

➤ Click on Label List in the drop down Lists Menu.

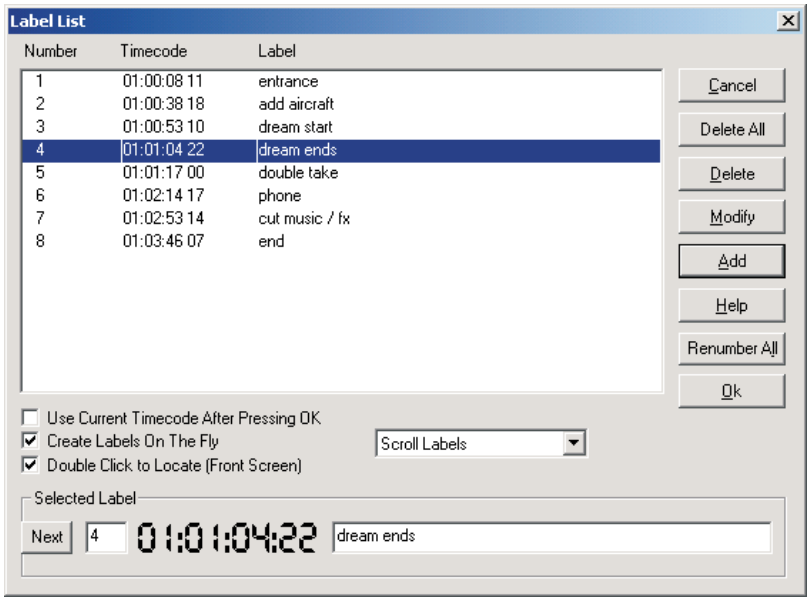
or

➤ Click on the Labels area of the main screen.

or

➤ Click on the Label List icon.

The Label List dialogue box will appear.



To create a label

➤ Enter the Timecode manually in the Timecode box.

➤ Enter the label name in the Selected Label box.

➤ Click the Next button to provide a unique number for the Label.

➤ Click the Add button.

The Label will be inserted in the Label List according to its Timecode.

To enable Timecode grabbing

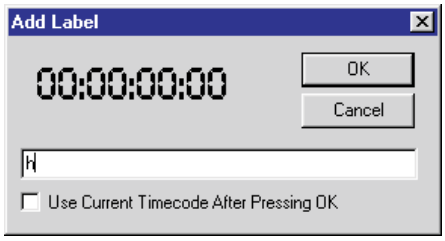
➤ Check the Create Labels On The Fly check box in the Label List dialogue box.

➤ Click OK to return to the main screen.

To grab Timecode and create a Label 'on the fly'

➤ Press any key on the keyboard when the main Encore screen is displayed.

The Add Label dialogue box will appear displaying the timecode that was captured when the key was pressed.



➤ Type in the rest of the Label.

➤ If desired edit the timecode.

➤ Click OK or press Enter.

If *Use Current Timecode After Pressing OK* is checked then the Timecode will be grabbed again when OK is clicked or Enter is pressed and that Timecode will be used for the Label.

Double-click to locate allows the user to double-click on a label on the Main Encore page, and all the attached machines will locate to this time.

With this unticked, performing the same operation will open the Label list.

To grab Timecode and create a Label with the name New Label

➤ Press <ENTER> on the Encore keyboard.

The New Label will be shown immediately on the main list on the Encore screen. It can be modified later if required.

To modify a Label

➤ Click on the required Label in the Label List dialogue box.

The label will appear in the Selected Label box.

➤ Modify the entry in the Selected Label box.

➤ Change the Timecode manually as required.

➤ Click the Modify button and the label will be changed in the list.

To delete a Label

➤ Click on the required Label in the Label List dialogue box.

It will appear in the Selected Label box.

➤ Click the Delete button.

The label will be removed from the list.

To delete all Labels

➤ Click the Delete All button in the Label List dialogue box.

All labels will be deleted.

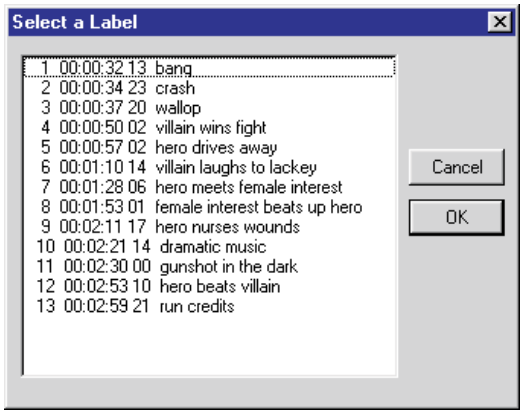
To force the Label List to keep pace with Timecode

➤ Click the Autoscroll List With Timecode check box so that it is checked.

The Label List display on the main Encore screen has an enlarged section. This will track through the label list as timecode progresses.

Select a Label

The Select a Label dialogue box provides a quick way of using the Label List to set a Timecode.



To select a Timecode from the Label List

➤ Click on the Label in the list with the required Timecode.

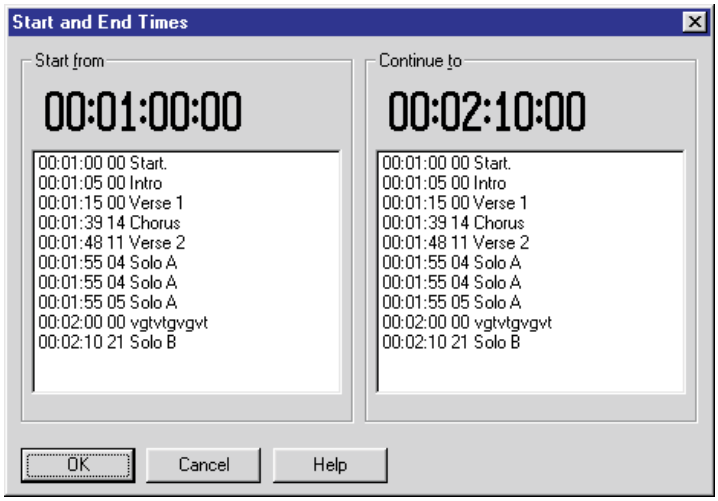
➤ Click on OK.

The Timecode from the Label will be entered in the Timecode field associated with the Select From List button which launched the Select a Label dialogue box.

The Timecode can be subsequently modified if required.

Start and End Times

The Start and End Times dialogue box provides a quick way of using the Label List to set a pair of Timecodes defining a starting time and ending time.



To select a Timecode from the Label List

➤ Double click on the Label with the required Timecode in the list under the Start from time.

➤ Double click on the Label with the required Timecode in the list under the Continue to time.

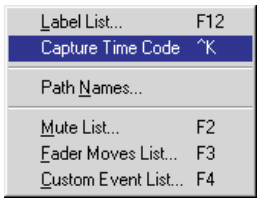
➤ If required, manually modify either of the Timecode fields.

➤ Click on OK.

The Timecodes will be entered in the fields associated with the button which launched the Start and End Times dialogue box.

The Timecodes can be subsequently modified if required.

Capture Timecode



Allows the current Timecode value to be captured and stored in Timecode Preset A.

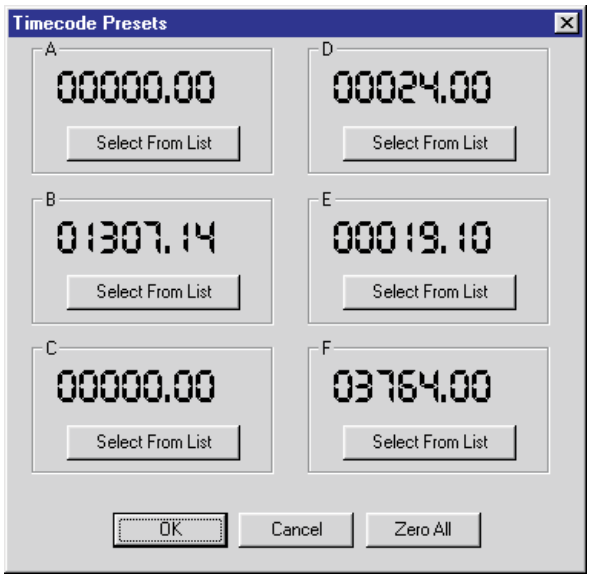
To capture Timecode

➤ Click on Capture Timecode in the drop down Tools Menu.

or

➤ Press Ctrl-K on the Encore keyboard (hold down the Ctrl key and press K).

The current Timecode (as displayed on the main Encore screen) will be stored in Timecode Preset A.



Path Names



Allows a name to be assigned to any of the paths displayed in the list.

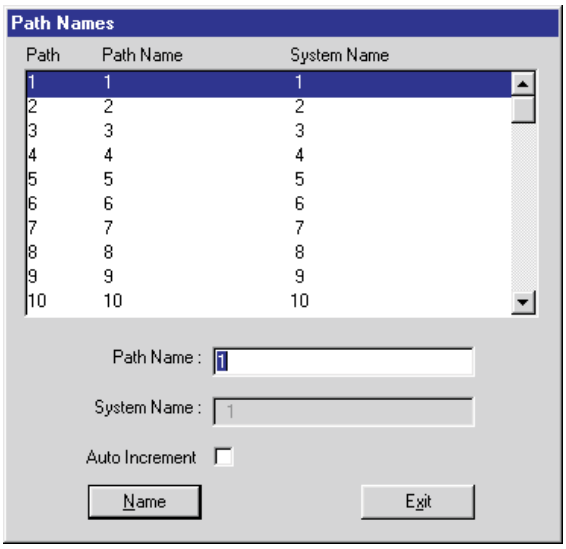
To name a path

➤ Click on Path Names in the drop down Lists menu.

or

➤ Click on the Path Names icon.

The Path Names dialogue box will appear.



➤ Click a Path in the list.

The Path will be highlighted and the system and user assigned Path Names will be displayed in the System Name and Path Name boxes respectively.

➤ Edit the Path Name.

✍ *A Name cannot contain more than four characters.*

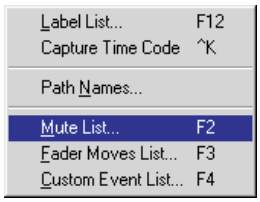
➤ Click on Name.

The new name will be inserted into the list.

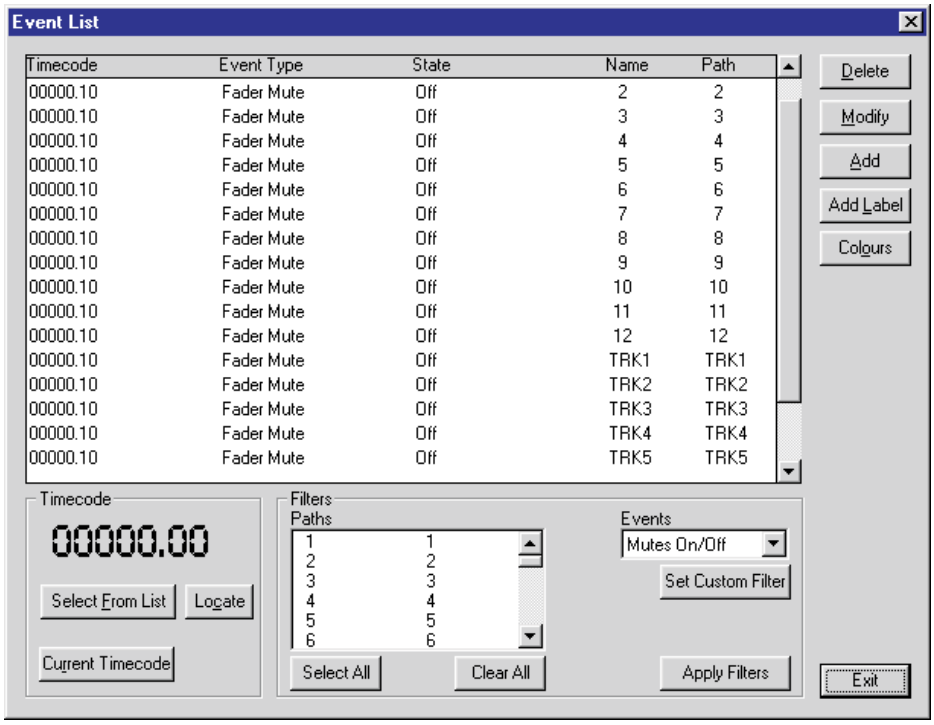
If Auto Increment is ticked (checked), the next path in the list will be selected.

➤ Click on Exit to close the dialogue box.

Mute List



Mute List in the Lists Menu and the Mute List icon display the Event List with Mute events automatically selected.



The Event List shows

- Timecode at which the event occurred - a special case of this is the Initial S.S. which is the initial snapshot of the state of the control.
- Event Type which is the type of control.
- State which is the setting the control was changed to.
- Name is the user name for the path the event took place on.
- Path is the System Name for the path the event took place on.

Events can be added, deleted or modified. Labels can be created from Events.

✍ *Initial Snapshot events can not be modified or deleted.*

Browse through the Event List

To move up and down the Event List

➤ Use the scroll bar for the list of Events.

or

➤ Press the PgUp and PgDn keys on the dockable keyboard.

To jump to a Timecode point in the Event List

➤ Click on the Timecode in the Timecode box and enter the Timecode manually.

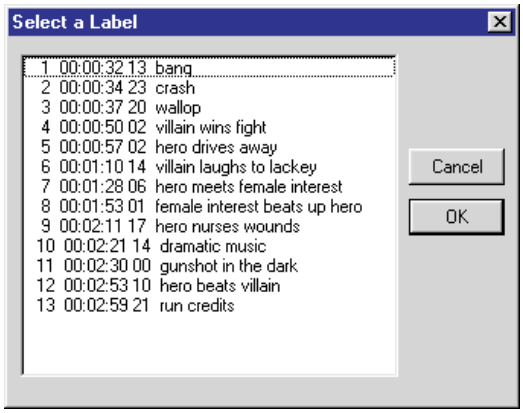
➤ Click the Locate button to jump to the Timecode set.

The list of events will jump to the Timecode entered.

To jump to a Timecode point from the Label List

➤ Click the Select From List button in the Timecode box.

The Select a Label dialogue box will appear.



➤ Click the label with the required Timecode.

➤ Click OK.

The Timecode in the Timecode box will be set to the value from the selected label.

➤ Click the Locate button.

The list of events will jump to the Timecode selected.

To jump to the current Timecode

➤ Click the Current Timecode button in the Timecode box.

The Timecode will be set to the Timecode displayed on the main Encore screen.

➤ Click the Locate button.

The list of events will jump to the Timecode selected.

✍ *If the Timecode selected to Locate to is beyond the last item in the Event List then a dialogue box will appear to indicate that no item can be Located.*

Change the selection of Events displayed

To change the Event Type listed

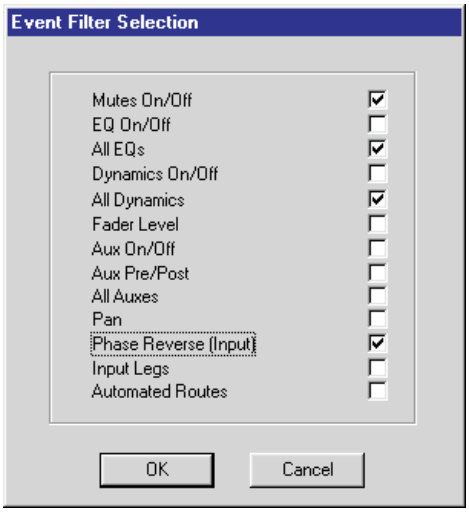
➤ Click on the drop down arrow next to the Event Type in the Filters box.

➤ Click on the required Event Type in the list.

To view more than one Event Type in the list

➤ Click the Set Custom Filter button in the Filter box.

The Event Filter Selection dialogue box will appear.



➤ Click on the check boxes to set the required selection of Event Types.

➤ Click OK to return to the Event List dialogue box.

➤ Click on the drop down arrow next to the Event Type in the Filter box.

➤ Click on Custom Selection in the list.

The list of events will show the selected Event Types.

To change the Paths listed

➤ Click the Selection radio button in the Paths box.

➤ Click the required paths in the Path list.

➤ Click the Clear button to reset the selection and start again.

➤ Click the Go button.

The Events for the selected set of paths will be shown in the list.

When all selections have been made

➤ Click the Apply Filters button.

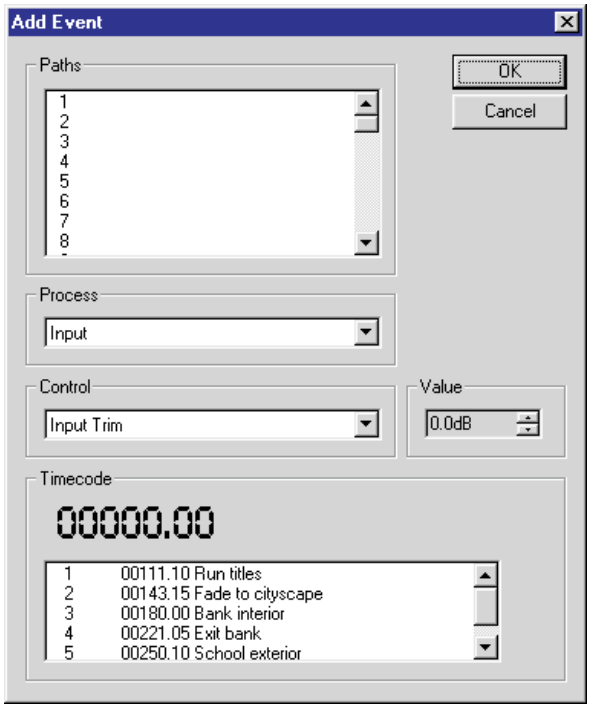
The selected combination of event types and paths will be displayed in the list.

Add New Events

To add new Events

➤ Click the Add button.

The Add Event dialogue box will appear.



Select paths

➤ Click the required path in the list.

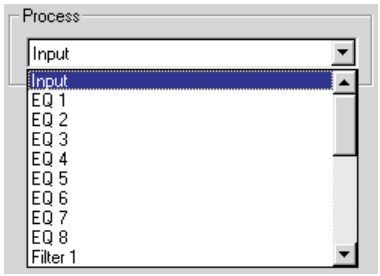
The path will be highlighted.

Up to 20 paths can be selected, using shift-click to select a range of paths, or ctrl-click to pick individual paths.

Select a process

➤ Click the drop down arrow at the end of the Process selection box.

A list of processes will be displayed.

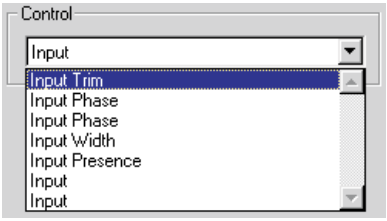


➤ Click the required process type.

Select a control

➤ Click the drop down arrow at the end of the Control selection box.

A list of Controls for the selected Process will be displayed (the example shows Controls for the Input process).



➤ Click the required control type.

Set the control value

➤ Click the scroll arrows next to the Value box to set the required control value.

Numerical values can be entered directly in the box.

Set the Event time

➤ Select the Timecode for the Event from the Label List in the Timecode box.

The Timecode can also be changed manually.

When all the details are correct

➤ Click OK.

The new Event(s) will be added to the Event List.

✍ *When Events have been added or deleted, a new Mix/Pass will be created and added to the Mix/Pass Tree on exiting the Event List dialogue box.*

Delete Events

To delete an Event

➤ Click on the Event to be deleted.

The Timecode for the selected Event will be highlighted.

➤ Click on Delete.

The Event will be deleted.

There is no confirmation dialogue box for this action.

✍ *When Events have been added or deleted, a new Mix/Pass will be created and added to the Mix/Pass Tree on exiting the Event List dialogue box.*

Modify Events

The Timecode and the control State (value) can be modified for all Events except Initial Snapshot (ISS) Events.

➤ Click on an Event in the list.

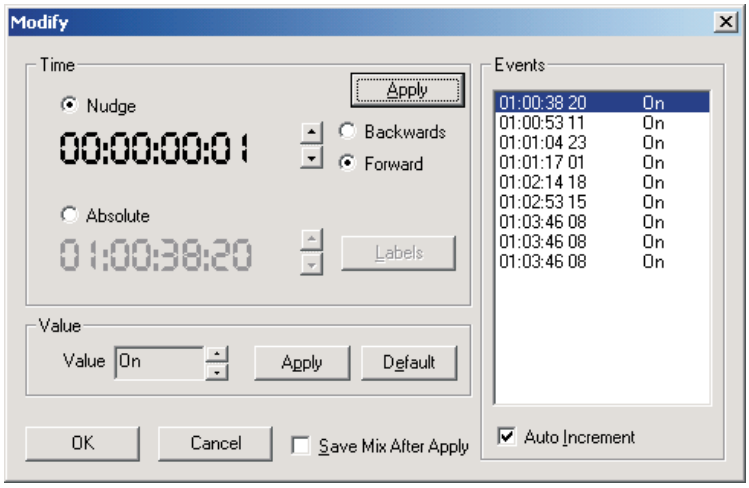
or

➤ Select a range of Events (e.g. click and drag down part of the List).

✍ *Initial SnapShot (ISS) Events may not be selected for modification.*

➤ Click the Modify button.

The Modify Event dialogue box will be displayed.



The small Events list on the right of the dialogue box will show the selected Event(s).

There are two separate areas for modifying Event times and values. Each has an individual Apply button.

➤ Click on an Event.

The Absolute timecode will change to match the Event timecode.

To modify an Event Time

➤ Click Nudge or Absolute radio button as required.

If Nudge is selected

➤ Click on the scroll arrows to adjust the timecode by frame amounts or change the timecode manually.

➤ Click the Forwards or Backwards radio button as required.

Forwards will subtract the Nudge value from the event time and Backwards will add the nudge value to the event time.

➤ Click the Apply button in the Time area.

The timecode for the selected Event will be adjusted in the list.

If Absolute is selected

➤ Click on the scroll arrows to adjust the timecode by frame amounts.

or

➤ Change the timecode manually.

or

➤ Click the Labels button to choose a time from the Select a Label dialogue box.

➤ When the timecode is correct, click the Apply button in the Time area.

The timecode for the selected Event will be set to the Absolute timecode value.

Save Mix After Apply

With this ticked, a new pass is created when either of the Apply buttons is clicked, rather than when OK is clicked.

To modify an Event Value

➤ Click on the scroll arrows next to the Event Value.

The amount by which the value changes depends on the control type. Switches can be set to On or Off.

or

➤ Click the Default button.

The Event Value will be set to the default according to the currently loaded User Defaults file.

➤ Click the Apply button in the Value area.

The value for the selected Event will be adjusted in the list.

When all modifications are complete

➤ Click the OK button.

The Modify dialogue box will close and the Event List will be updated with any changes that were made.

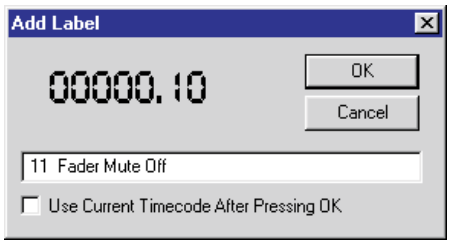
✍ *When Events have been modified, a new Mix/Pass will be created and added to the Mix/Pass Tree on exiting the Event List dialogue box.*

Create Labels from Events

To create a Label from an Event

➤ Click the Label Event button.

The Add Label dialogue box will be displayed.



The timecode on the label will be taken from the Event. The name of the label will show details of the Event (path name or number, control type and the control value).

➤ If required, edit the label name and/or the timecode.

➤ Click OK.

The label will be added to the Label List.

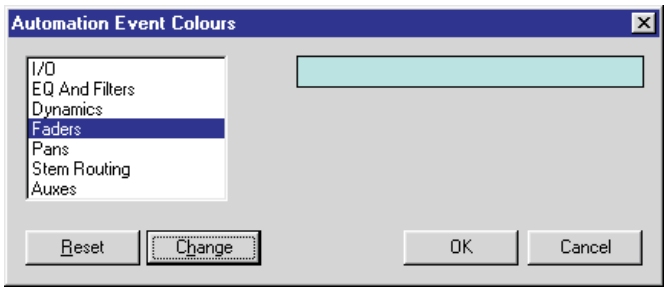
Event Colours

This is used to change the background colour of Events in the Event List display. This is so that different types of Events can be easily distinguished.

To change the colours used for Events

➤ Click the Colours button.

The Automation Event Colours dialogue box will be displayed.



To change the colour for an Event type

➤ Click an Event type in the list.

The current colour will be shown in the colour sample bar.

➤ Click the Change button.

A colour dialogue box will be displayed.



➤ Select the required colour.

Additional colours from the full palette are available via the Define Custom Colours>> button.

➤ Click OK.

The selected colour will be shown in the colour sample bar.

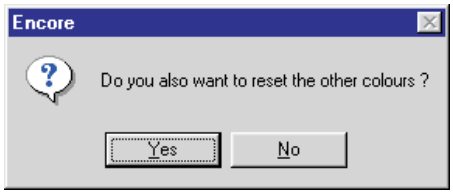
To change the Event colour back white (default)

➤ Click an event type in the list.

The current colour will be shown in the colour sample bar.

➤ Click the Reset button.

A dialogue box will be displayed, asking if you also want to reset the other colours.



➤ Click No to reset the colour for the selected Event type only.

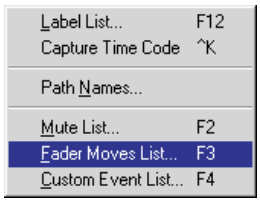
➤ Click Yes to reset colours for all Event types.

To save the current selection of colours

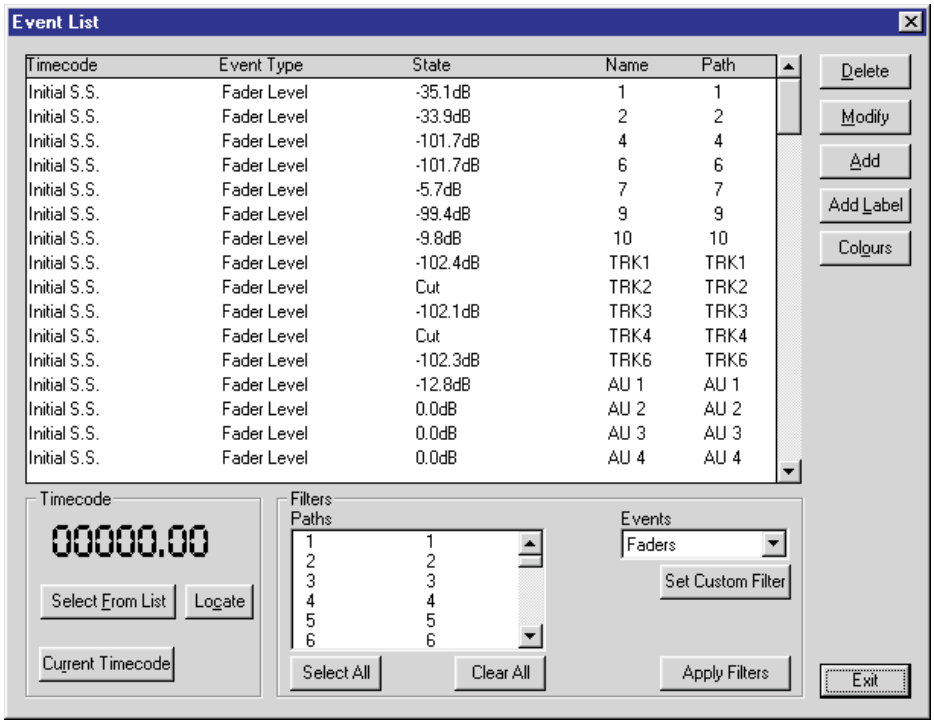
➤ Click OK.

The Event List will be redisplayed with the new colours.

Fader Moves List



Fader Moves List in the Lists Menu and the Fader Moves List icon display the Event List with Fader Move events selected automatically.



The Event List shows

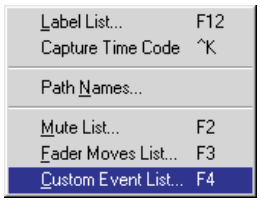
- Timecode at which the event occurred - a special case of this is the Initial S.S. which is the initial snapshot of the state of the control.
- Event Type which is the type of control.
- State which is the setting the control was changed to.
- Channel Name is the user name for the path the event took place on.
- Path is the System Name for the path the event took place on.

Events can be added or deleted.

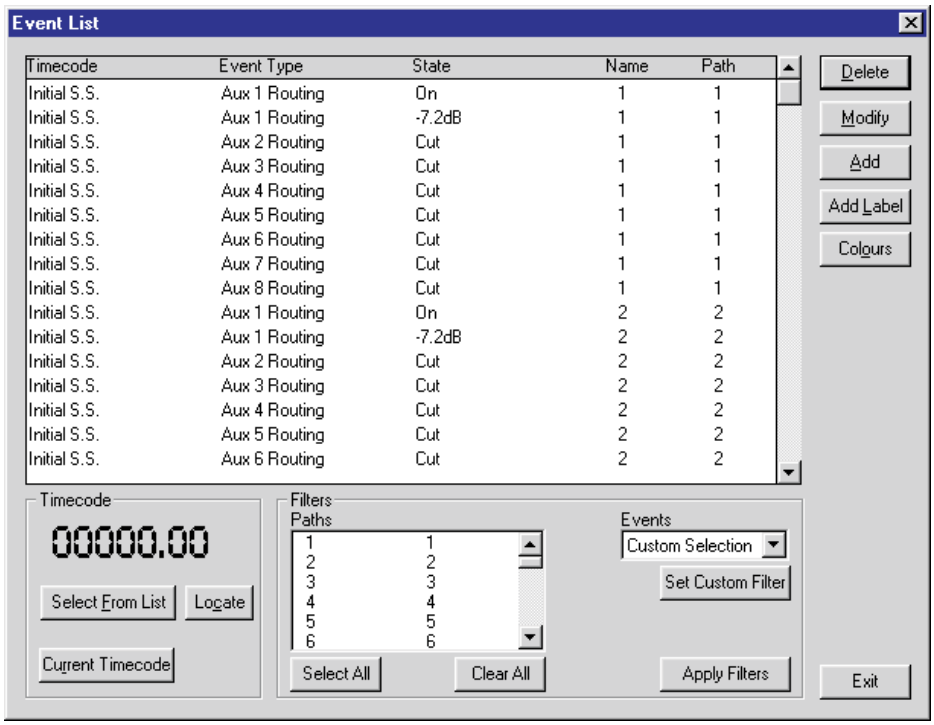
✍ *Initial Snapshot events can not be modified or deleted.*

See the preceding section on Mute List for more information about the Event List.

Custom Event List



Custom Event List in the Lists Menu and the Custom Event List icon display the Event List dialogue box with the current Custom Selection of event types selected automatically.



The Event List shows

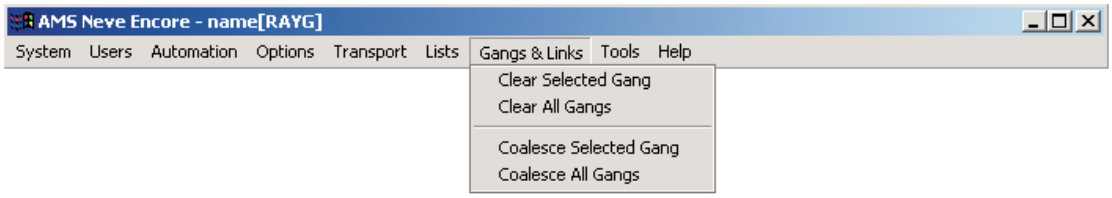
- Timecode at which the event occurred - a special case of this is the Initial S.S. which is the initial snapshot of the state of the control.
- Event Type which is the type of control.
- State which is the setting the control was changed to.
- Channel Name is the user name for the path the event took place on.
- Path is the System Name for the path the event took place on.

Events can be added or deleted.

✍ *Initial Snapshot events can not be modified or deleted.*

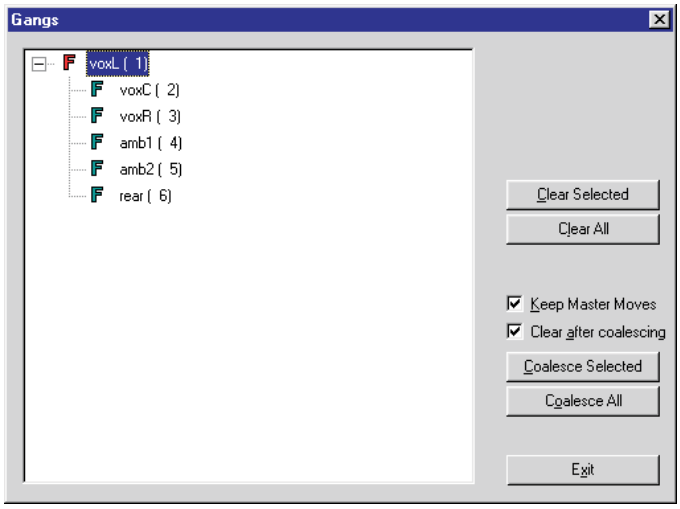
See the preceding section on Mute List for more information about the Event List.

GANGS & LINKS MENU



Clear Selected Gang

When selected the Gangs box will be displayed



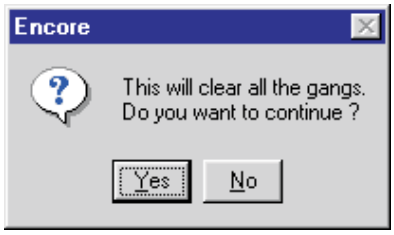
➤ Select the gangs you want to clear.

➤ Click the Clear Selected button.

The gang structure is deleted, the master and slave moves are preserved.

Clear All Gangs

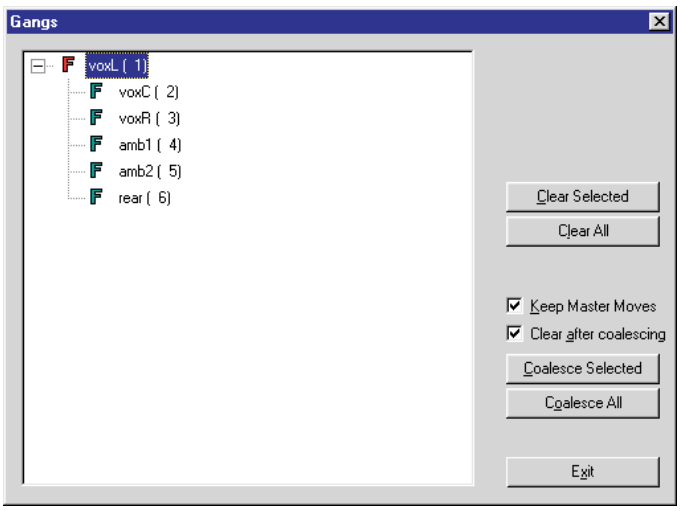
When selected a dialogue box will be displayed.



➤ Click the Yes button.

Coalesce Selected Gangs

When selected the Gangs box will be displayed



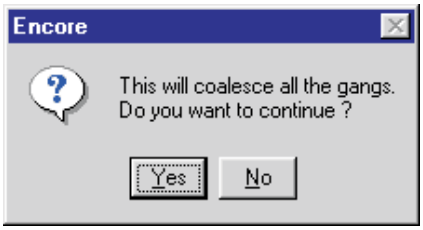
➤ Select the gangs you want to coalesce.

➤ Click the Coalesce Selected button.

Any master fader moves are written to the slaves and then the master moves are deleted. A new Mix/Pass is created.

Coalesce All Gangs

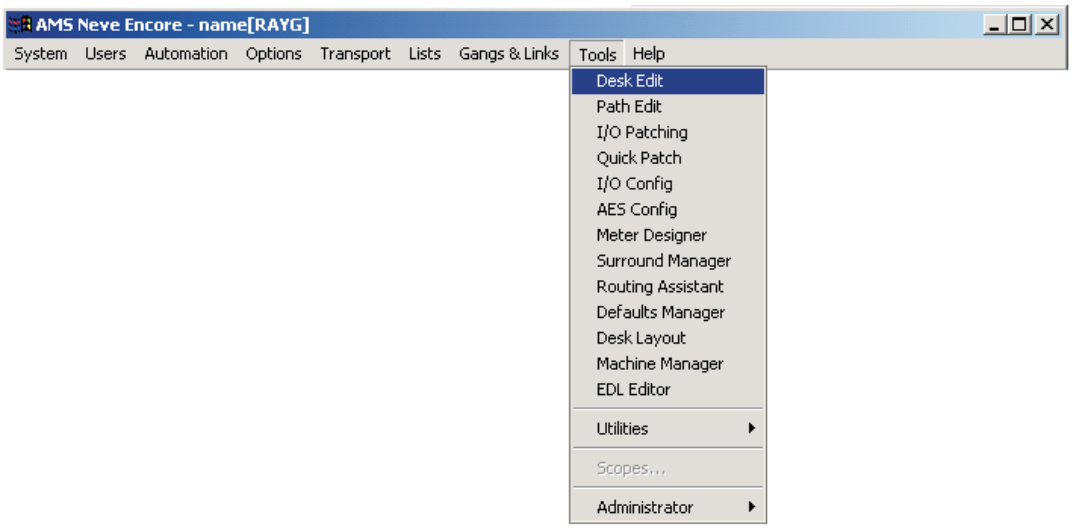
When selected a dialogue box will be displayed.



➤ Click the Yes button.

Master fader moves are written to the slaves and the master moves are retained. The gang structure is deleted and a new Mix/Pass is created.

TOOLS MENU



Desk Edit

Desk Edit is used to create, manage and modify the basic structure of Desk Setups.

The Desk Setup defines how many of each type of path is available, the processing allocated to each path, the placement of paths on the console, the paths that are formed into predubs and the routing configuration. Desk Edit is used to setup all these elements except the routing configuration.

To access Desk Edit

➤ Click on Desk Edit in the drop down Tools menu.

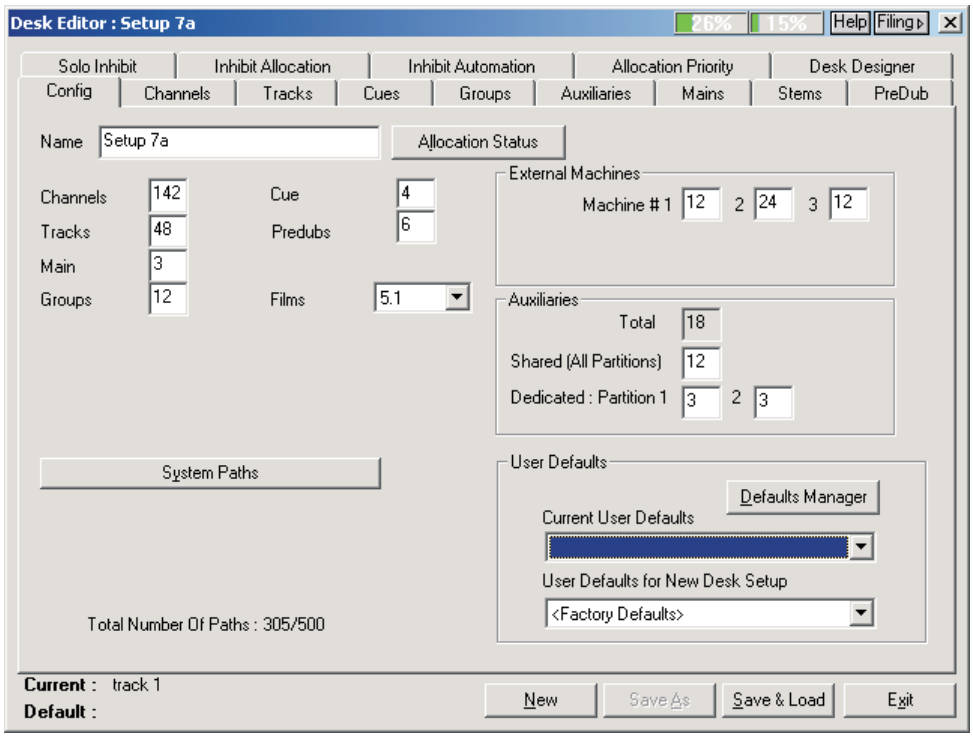
or

➤ Click on the Desk Edit icon.

or

➤ Select a Desk Setup within the Filing utility and click the Edit button.

The Desk Editor will be displayed with the Config page on top. The currently loaded Desk Setup can now be edited.



In the Desk Editor title bar, there are two fuel gauges showing percentages. The left shows the percentage of processing power used; the second shows the amount of system backplane activity required.

If the first fuel gauge goes over 100%, then paths will fail to allocate. However, it is possible to have the second fuel gauge exceed 100%, and still assign processing to paths already allocated. This is because there is a physical limitation to the amount of digital audio that the system backplane can handle, and this can be greater than the amount of DSP processing required.

To run the Filing utility from any page

➤ Click the Filing> button in the Desk Edit title bar.

Desk Edit will close and be replaced with the Filing utility.

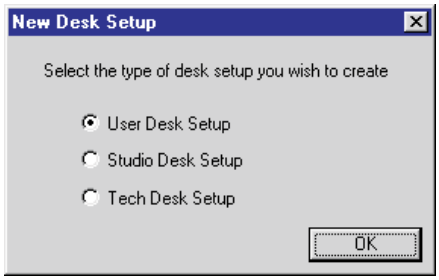
✍ *Desk Edit is not used for any routing operations.*

New Desk Setups

To start a new Desk Setup

➤ Click the New button.

A dialogue box will be displayed asking for confirmation.

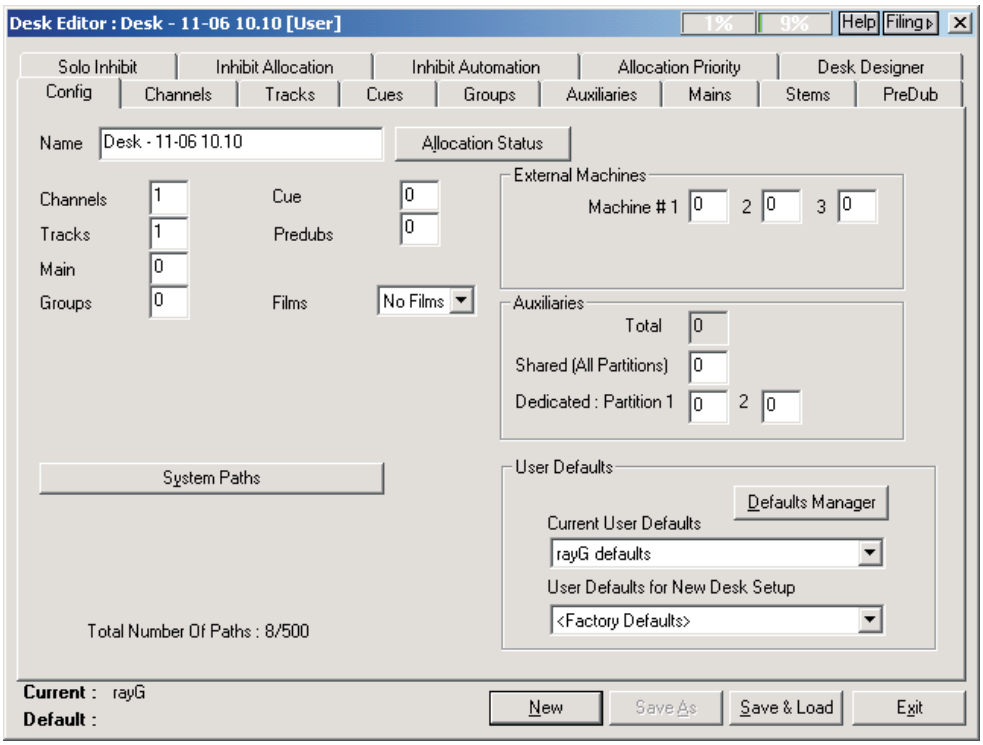


➤ Click User, Studio or Tech Desk Setup as required.

User Desk Setups are custom Desk Setups for users who like to work in particular ways, Studio Desk Setups are standard Desk Setups for the studio and Tech Desk Setups are used by technicians for diagnostics and testing.

➤ Click OK.

Desk Edit will switch to the Config page if it is not already on top.



The Name box will display a default name using the date and time (e.g. Desk - 24-01 13.21).

The number of paths of each type will be zero, except for one Channel and one Track (bus).

The Current User Defaults box will show the same as the selection in the User Defaults for New Desk Setup box. This determines the values that controls will be set to when they are cleared (i.e. reset).

To change the Desk Setup name

➤ Click in the name box and type in the required name using the keyboard.

✍ *This is also the name of the file that will be used when the Desk Setup is saved.*

To change the Current User Defaults

➤ Click on the drop down arrow at the end of the Current User Defaults box.

A list of available files will be shown, plus an option for <Factory Defaults>.

➤ Click the required name.

The selected item will be displayed in the Current User Defaults box.

The minimal remaining steps in Desk Edit that are required to start a functional Desk Setup are:

- ❑ Change Numbers of Paths so there are signal paths to work with.
- ❑ Select Pan Designators for Tracks so that the Surround Monitoring system can be used.
- ❑ Use Desk Designer to assign signal paths to the console surface.
- ❑ Finally, Save the Desk Setup to permanent storage on the Encore hard disk.

Further refinements can be made in Desk Edit by:

- ❑ Changing Path Processing
- ❑ Changing Path Names
- ❑ Setting up PreDubs
- ❑ Setting Dynamics Links

Changing Numbers of Paths

To enter the number of paths of each type

➤ Click in the Channels box and type in the required number.

➤ Click in the Tracks (busses), Groups, Main, Cue, PreDubs and External Machines (1, 2 and 3) boxes in turn and type in the required numbers of each path type.

➤ Click in the boxes for dedicated Auxiliaries in each partition and then the number of shared auxes and enter the required numbers.

➤ Click on the drop down arrow for Films and select the required Film monitoring type.

The options are Stereo, LCRS, 5.1, 6.1 and 7.1 which use 2, 4, 6, 7 or 8 Film paths respectively. The number of Film Listens (used for AFL Solo) will also be changed to match.

✍ *There can only be a maximum of 12 auxes in each partition (e.g. 6 dedicated and 6 shared).*

✍ *If a number is entered which is out of range (e.g. a negative number, more than 4 Mains, etc.,) a dialogue box will appear which will indicate the maximum number allowed.*

✍ *The External Machines correspond to the M/C 1, M/C 2 and M/C 3 keys on the Surround Monitoring Panel which are used for routing multitrack sources directly to the surround monitors with the Submixer section.*

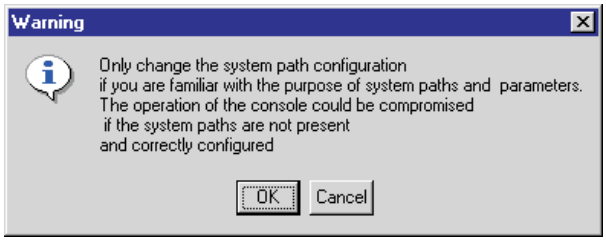
Tip

➤ To save using the trackball to select each box, press Tab to jump from one box to the next.

To change the number of System Paths

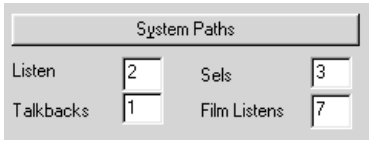
➤ Click on the System Paths button.

A warning prompt will appear advising users not to continue unless they are familiar with the purpose of the system paths and parameters.



➤ Click on OK to continue (or Cancel to quit).

The system paths boxes will appear.



➤ Enter the required number of Listen, Talkbacks and Sels.

✍ *The number of Film Listens is matched to the number of Film paths used by the selected surround format. If the number of Film Listens is changed, it will be reset to match the number of Film paths when a different Desk Edit page is selected.*

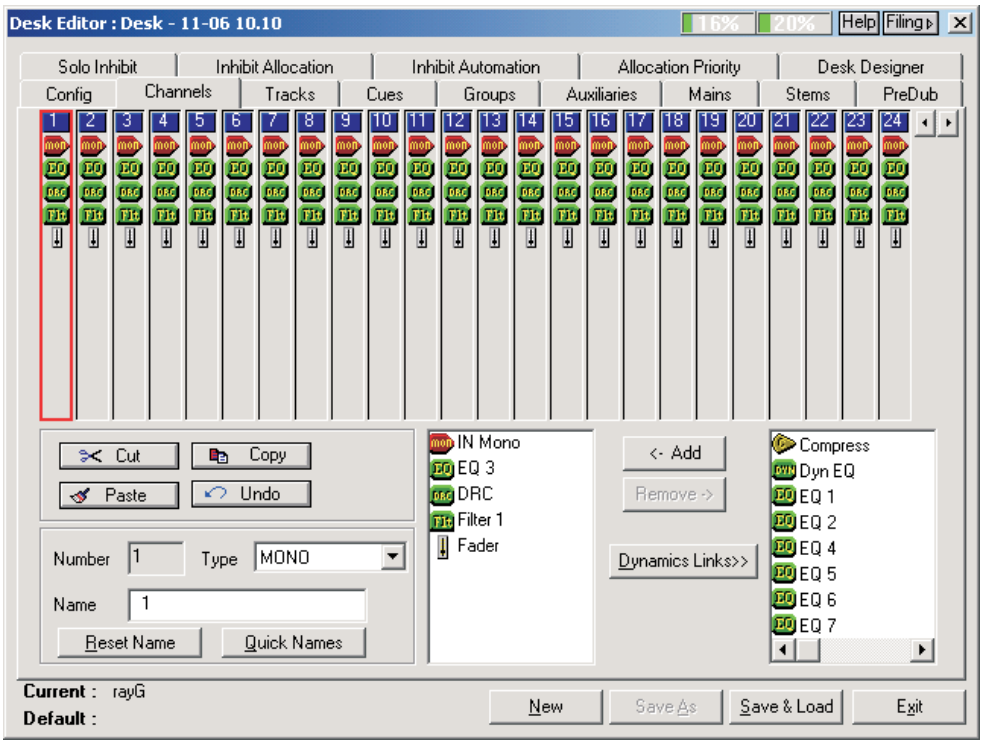
Changing Path Processing

The pages in Desk Edit for each of the path types allow rapid configuration of the processing.

To select the path

➤ Click the required tab for Channels, Tracks (busses), Cues, Groups, Auxiliaries or Mains.

The first path on the page will be outlined in red.



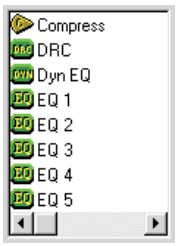
➤ Click on the required path.

The path will be outlined in red and the path name, number and type will be shown and the processing in the path will be shown in the path processing box.

If there are more than 24 paths of one type then they are displayed and scrolled 24 at a time (i.e. paths 1-24, then 25-48, etc.).

To allocate processing

➤ Click on the required processing element in the processing pool.



➤ Click on Add.

or

➤ Double click on the required processing element in the processing pool.

In both cases, the processing will be placed in the selected path.

✍ *The number of bands of EQ can be changed by selecting an EQ with the required number of bands in the processing pool. For instance, if EQ 2 is already in the path for 2 bands of EQ, EQ 4 can be allocated simply by adding it to the path, and EQ 2 will automatically return to the pool. The number of filters and compressor/limiters can be changed in the same way.*

✍ *If a DRC is in the path then this will prevent other dynamics modules being added and vice versa.*

To de-allocate processing in the currently selected path

➤ Click on the required processing element in the current path processing box.

➤ Click on Remove.

or

➤ Double click on the required processing element in the current path processing box.

In both cases, the processing will be removed from the path and returned to the processing pool.

✍ *Allocating processes is identical for all path types.*

To change the order of processing

➤ Click and hold on an item in the current path processing box.

➤ Drag the item to a different location in the signal path and release the trackball button.

The signal processing chain will change accordingly.

If an element is moved to an 'illegal' position then a dialogue will be displayed that explains why the move may not be made.

To view additional paths when there are more than 24

➤ Click on the path scrolling arrows to jump 24 paths at a time.

or

➤ Press the PgUp and PgDn keys on the Encore keyboard to jump 24 paths at a time.

or

➤ Press the arrow keys on the Encore keyboard to scroll the red outline across the paths.

If the red outline crosses a page boundary then the next (or previous) set of 24 paths will be displayed.

or

➤ Press the Home and End keys on the Encore keyboard to jump to the first and last paths.

or

➤ Type the required path number on the Encore keyboard.

There is a small timeout when this is done, so to jump to path 15 press the 1 and 5 keys in quick succession. The display will go to path 1 then path 5 if a long gap is left between pressing the keys.

Cut and Paste Processing Elements

To Copy and Paste

➤ Click on the source path (i.e. the path selected to copy from).

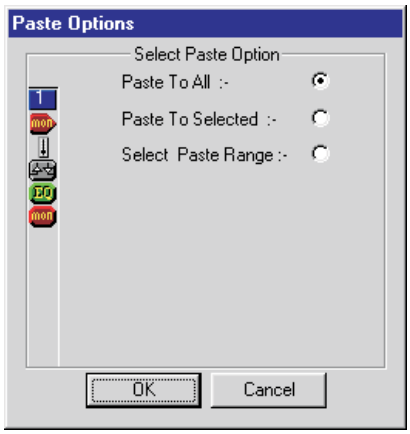
The path will be highlighted with a red line.

➤ Click on the Copy button.

The path contents will be copied into a buffer (i.e. a temporary location not visible to the user).

➤ Click on the Paste button.

The Paste Options dialogue box will appear providing the user with three options.



To paste into all paths

➤ Check the Paste To All radio button and click on OK.

The copied processing will be pasted into all paths.

To paste into a single path

➤ Click on the destination path before accessing the paste facility.

➤ Check the Paste To Selected radio button in the Paste Options dialogue box.

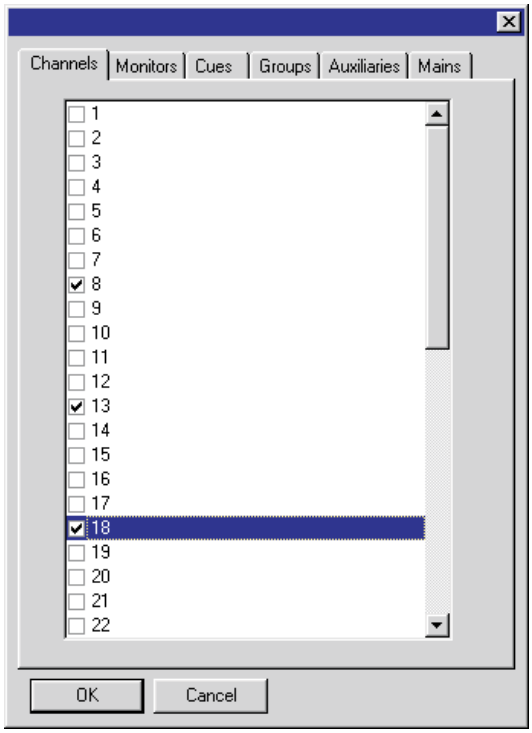
➤ Click on OK.

The copied processing will copied into the single destination path.

To paste to more than one but not all paths

➤ Check the Select To Paste To radio button and click on OK.

The relevant tabbed Paste To dialogue box will appear.



➤ Click in the boxes adjacent to the required paths

or

➤ Hold down the trackball button and drag down the list.

In both instances the box next to the selected paths will be ticked.

To deselect

➤ Either click in each box.

or

➤ Hold down the trackball button and drag up the list.

In both instances the tick will disappear.

➤ Click OK to confirm the selection.

The dialogue box will close and the copied processing will be pasted into the ticked paths.

To cut (i.e. remove processing from a path)

➤ Place the cursor in the desired path.

➤ Click on the Cut button.

The processing in the path will be replaced with the default processing. The processing that was cut can be pasted into other paths.

To undo the last cut and paste action

➤ Click on the Undo button.

To copy processing using drag and drop

➤ Click on the source path and hold down the trackball button.

The pointer will change to show a floating fader next to the arrow.

➤ Move the pointer to the target path.

➤ Release the trackball button.

The processing will be copied to the target path.

✍ *This method can only be used on one screenful of paths which are displayed together. If there are more than 24 paths then another method must be used to copy from path 1 to path 25 (for instance) because they are not displayed together.*

To copy processing without using the Paste button

➤ Click on the source path.

➤ Click the Copy button.

➤ Move the pointer to the target path.

➤ Hold down the Alt key on the keyboard.

➤ Click the trackball button.

The processing will be pasted into the target path.

Changing Path Names

To rename a path

➤ Select a path.

➤ Click in the Name box and highlight the existing name.

➤ Enter the new name using the keyboard.

To set the path name to system default

➤ Select a path.

➤ Click the Reset Name button.

To change the names of several paths

➤ Click the Quick Names button.

➤ The Path Names dialogue box will be displayed.

See Path Names in the Lists Menu chapter.

Changing Paths to Mono or Stereo

To select mono/stereo as the path type

➤ Click on the drop down arrow next to the Type box.

➤ Click on mono or stereo as desired.

The selection will then be displayed.

Dynamics Linking

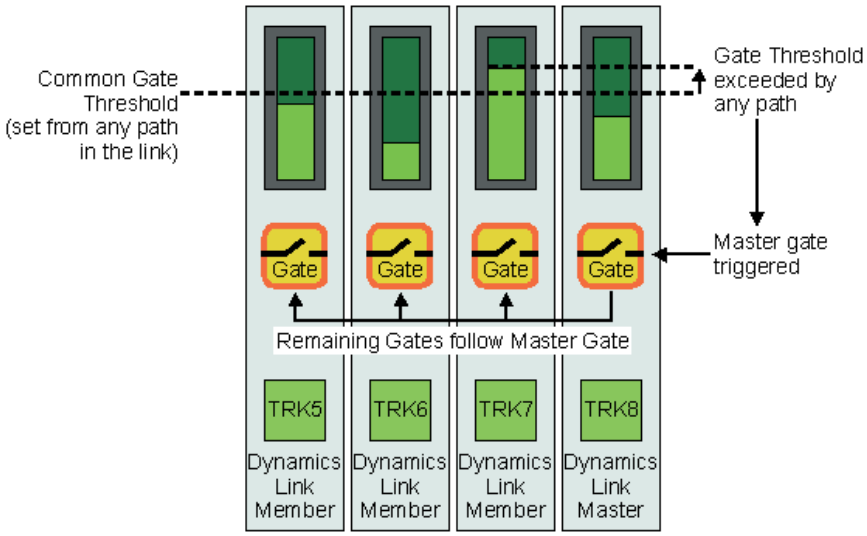
Dynamics linking is used to link a set of adjacent paths together so that the dynamics functions in the linked paths operate simultaneously.

✍ *Dynamics linking is only available on ESP and XSP systems.*

Paths in a dynamics link must be logically adjacent to each other (e.g. Track 7 to Track 10) and they must each have the same dynamics processors allocated.

The last path in a dynamics link acts as a master for triggering the dynamics. However, as in normal control links, the controls on any path can be used to adjust dynamics parameters. Unlike a normal control link, all parameter values are identical across a dynamics link (i.e. there can be no offsets).

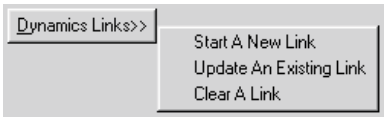
The linked gate example illustrates how a dynamics link is triggered:



To create a new dynamics link

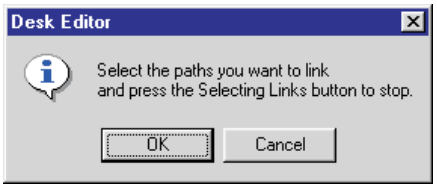
➤ Click the Dynamics Links>> button.

A small flyout menu will be displayed.



➤ Click Start A New Link.

A confirmation dialogue box will be displayed, indicating how to proceed.



➤ Click OK.

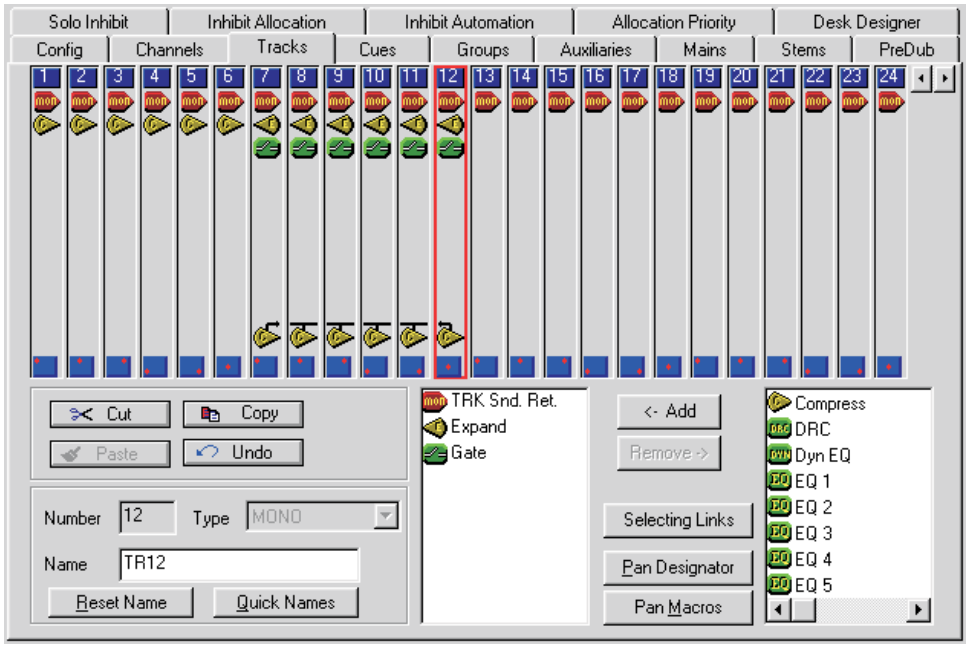
The legend on the Dynamics Links>> button will change to Selecting Links. The words Selecting Links will flash. Desk Edit is now dedicated to setting up the link.

➤ Click the first path to be in the link.

A linking symbol will appear on the path graphic.

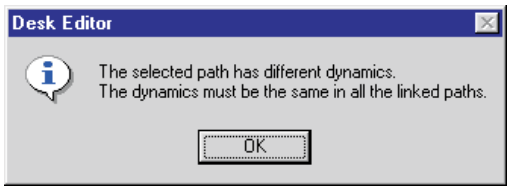
➤ Click other paths to either side of the first path.

The paths will be joined by the linking symbols. The first and last paths point in towards the other paths.



Warning prompts will be displayed if you:

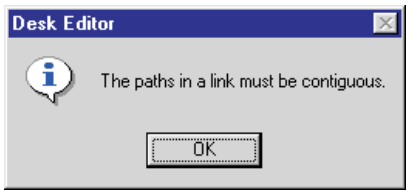
Attempt to add a path that has different dynamics.



Attempt to add a path that has no dynamics.



Or attempt to add a path that is not adjacent to either of the paths at the ends of the link.



➤ Click OK to clear a warning prompt.

When all paths have been selected for the link

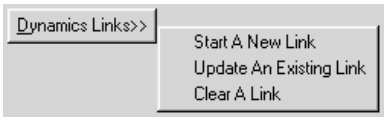
➤ Click the Selecting Links button.

The operation of Desk Edit will return to normal.

To modify a dynamics link

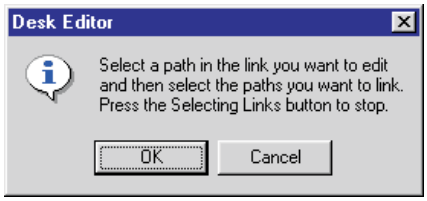
➤ Click the Dynamics Links>> button.

A small flyout menu will be displayed.



➤ Click Update An Existing Link.

A confirmation dialogue box will be displayed, indicating how to proceed.



➤ Click OK.

The legend on the Dynamics Links>> button will change to Selecting Links. The words Selecting Links will flash. Desk Edit is now dedicated to editing a link.

➤ Click any path in a link you wish to modify.

All further operations will apply to the selected link.

➤ Click the path at either end of the link to remove it.

The linking symbol on the selected path will be removed.

➤ Add paths to the link in the same way as for creating a new link.

When you have made all changes to the link

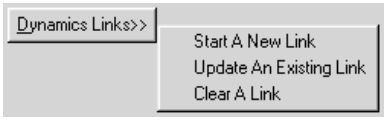
➤ Click the Selecting Links button.

The operation of Desk Edit will return to normal.

To remove a dynamics link

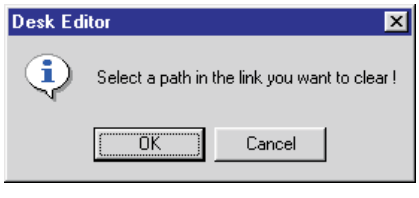
➤ Click the Dynamics Links>> button.

A small flyout menu will be displayed.



➤ Click Clear A Link.

A confirmation dialogue box will be displayed, indicating how to proceed.



➤ Click OK.

➤ Click any path in the link you wish to clear.

The linking symbols will be removed from all paths in the selected link. The selected link no longer exists.

This is a 'once only' operation. If you wish to clear other links, you must select Clear A Link again.

Film Stem Configuration

There are six Film Stems that are labelled A to F. They are constructed by assigning Tracks (busses) in groups to each Stem letter.

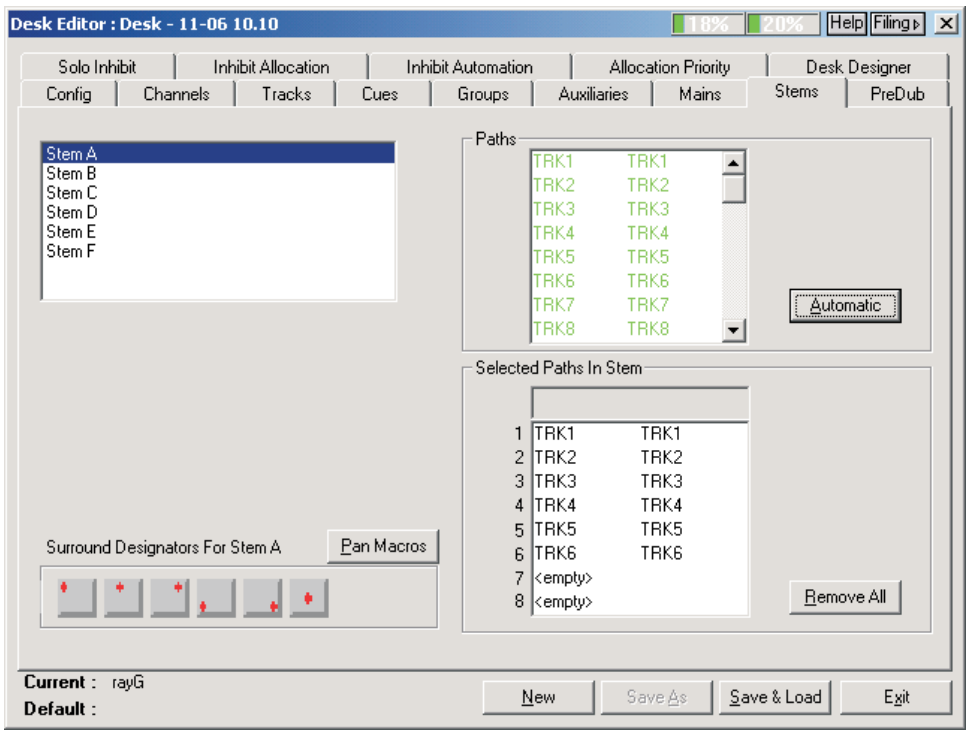
The Stems page of Desk Edit can be used to configure the Film Stems automatically or customise the Film Stems manually.

Configure Film Stems Automatically

To configure the Film Stems automatically

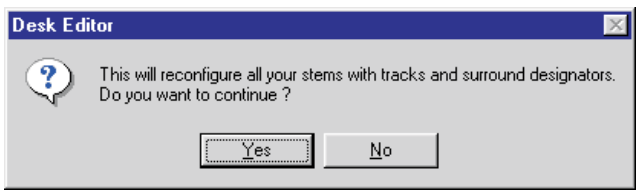
➤ Click the Stems tab.

The Stems page will be displayed.



➤ Click the Automatic button.

A warning dialogue box will be displayed, indicating that all Stems will be reconfigured.



➤ Click the Yes button.

The Tracks will be re-organised in the Film Stems in Track order according to the currently selected Film format (on the Config page).

Tracks will be assigned to Film Stems until either there are no more Tracks available or the Film Stems are fully assigned.

Each Track used in a Film Stem will have its Pan Designator set as appropriate. Each Track will also be routed to the relevant Film path (which should, in turn, be routed to the corresponding speaker).

For instance, if the Film format is 5.1, then Tracks 1 to 6 will be assigned to Stem A, Tracks 7 to 12 will be assigned to Stem B and so on. Track 2 will have the Front Centre pan designator, and will be routed to Film 2 (corresponding to the C speaker selection key on the Surround Monitoring panel).

Notice that the Track names in the Paths list are shown in green when they are allocated to a Stem.

✍ *The changes in the Film Stems and routing (Tracks to Films) are applied to the console surface when the Desk Setup is saved and loaded.*

Configure Film Stems Manually

To manually configure Film Stems

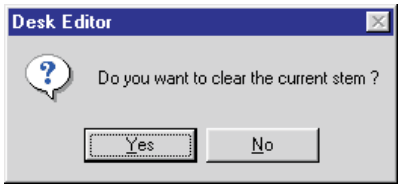
➤ Click the required Stem in the Stem list.

The current configuration of the selected Stem will be shown by the pan designators and the Tracks in the Stem.

To clear the Stem of Tracks (if required)

➤ Click the Remove All button.

A confirmation dialogue box will be displayed.



➤ Click Yes or No as required.

To remove an individual Track from a Stem

➤ Click and hold on the required Track in the Stem.

The mouse pointer will change to show a fader next to the arrow.

➤ Drag the fader up to the Track list.

➤ Release the trackball button.

To add an individual Track to a Stem

➤ Click and hold on the required Track in the path list.

The mouse pointer will change to show a fader next to the arrow.

➤ Drag the fader down to the required position (1 to 8) in the Selected Paths in Stem box.

➤ Release the trackball button.

If the selected Track was part of a Stem then it will be reassigned.

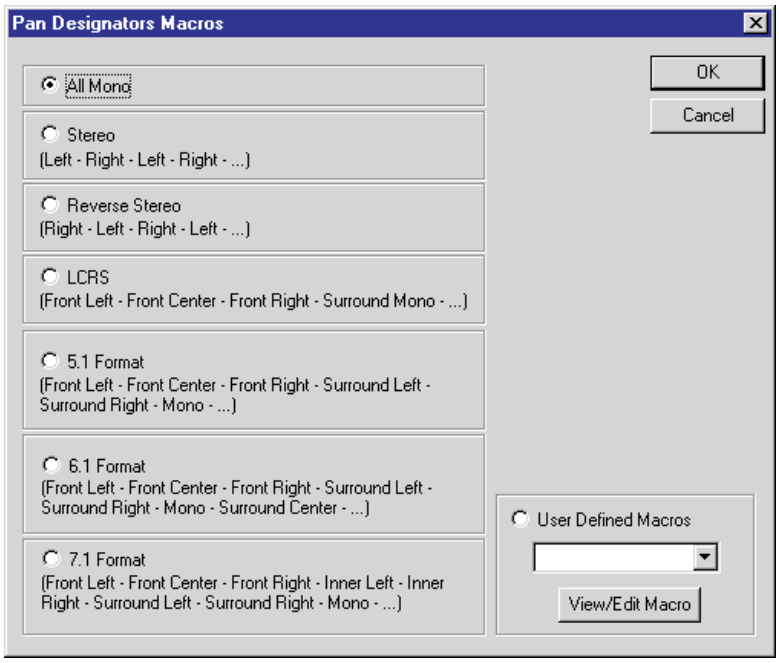
The pan designator will appear in the Surround Designators box and the Track will be routed to the appropriate Film path.

✍ *Multiple Tracks can be selected using the standard Windows multiple list item selection methods (e.g. click one item and shift-click another item to select a range, or click one item and ctrl-click other items to make a custom selection).*

To apply a Surround Macro to a Stem

➤ Click the Pan Macros button.

The Pan Designators Macros dialogue box will be displayed.



➤ Click on the format required.

✍ *A Custom Macro can be selected, if required.*

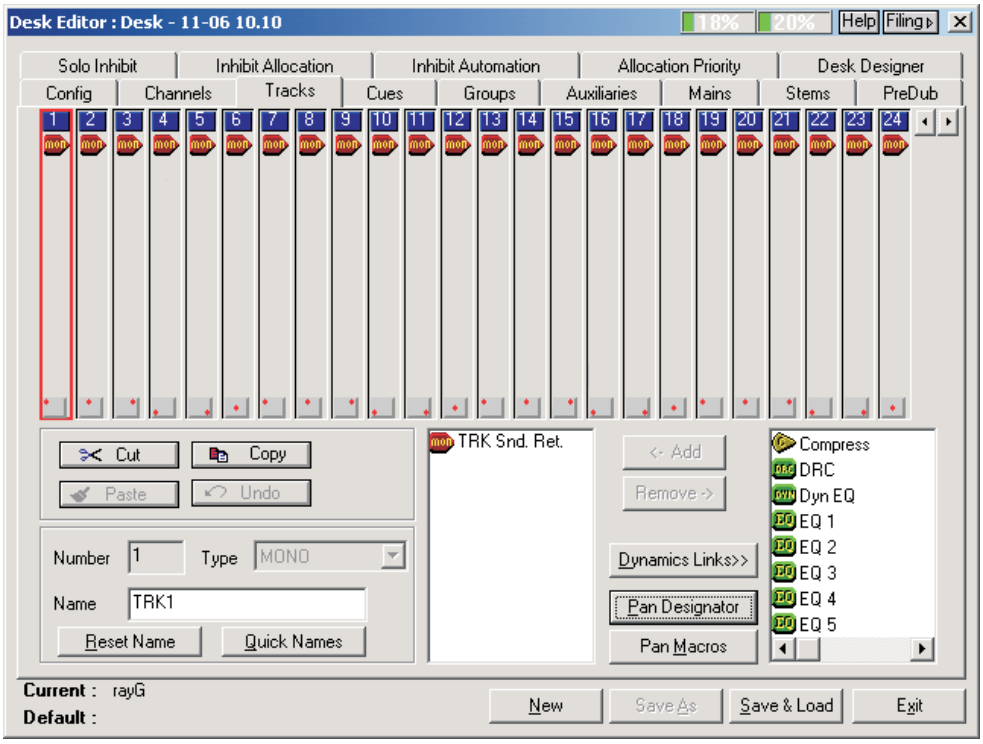
➤ Click OK.

The pan designators will be changed as appropriated. Only the currently selected Stem is affected.

✍ *The changes in the Film Stems and routing (Tracks to Films) are applied to the console surface when the Desk Setup is saved and loaded.*

Pan Designators on Tracks (busses) and Groups

The Tracks (busses) and Groups pages have two extra buttons labelled Pan Designators and Pan Macros.



Each path on these pages also has a box at the bottom which shows the pan designation of the path. This shows which portion of a signal will be fed to the path from a panned routing source.

The pan designator normally matches the speaker that a Track is routed to in the Surround Monitoring system.

Tracks are intrinsically mono and the default pan designator for Tracks is Mono.

The Groups are stereo by default and a Group must be set to mono before a pan designator can be selected for it.

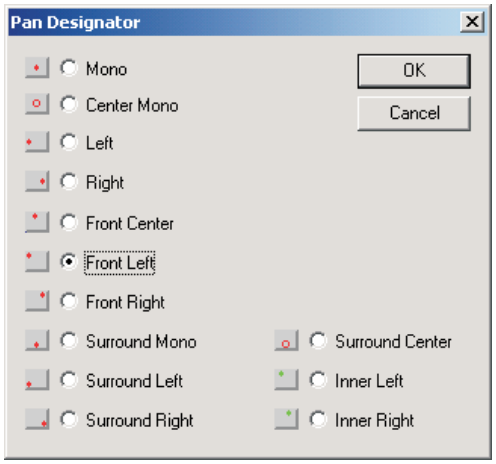
✍ *Groups are not used in Film Stems.*

To select a pan designator individually

➤ Click on the required path.

➤ Click on the Pan Designators button.

The Pan Designators dialogue box will appear.



➤ Click the radio button for the required pan position.

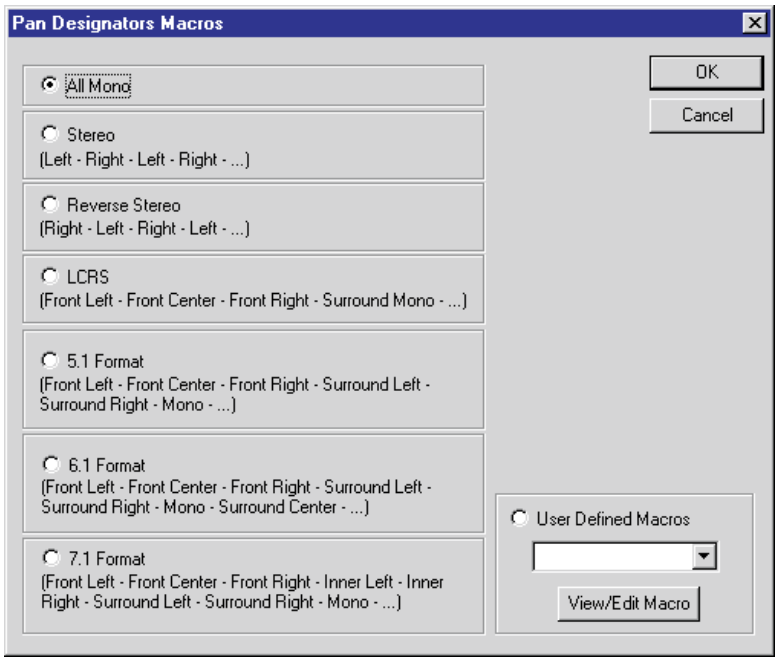
➤ Click OK.

The box at the bottom of the path will indicate the selected designator.

To assign pan designators to all paths

➤ Click on the Pan Macros button.

The Pan Designators Macros dialogue box will appear.



➤ Click on the format required.

✍ *This would normally be matched with the number of Film paths (i.e. 5.1 would be selected if 5.1 was selected in the Config page).*

➤ Click OK.

The paths will automatically be assigned to the speaker positions in sequence starting from the first path (i.e. if 5.1 is selected, the first path will be assigned to Front Left, the second to Front Centre, etc.).

The designator assignment will cycle round until all paths have pan designators according to the selected format (i.e. if 5.1 is selected, the speaker assignments will start again with Front Left for the seventh path and so on).

To use a custom surround macro

➤ Click the Pan Macros button.

The Pan Designators Macros dialogue box will appear.

➤ Click the User Defined Macros radio button.

➤ Click on the drop down arrow for the user defined macro list.

➤ Click the required macro name.

➤ Click OK.

See Surround Manager for information on how to setup custom surround macros.

Desk Designer

Desk Designer is used to assign paths and predubs to the console surface. Paths may be assigned manually using drag-and-drop, or automatically with the Automatic Assignment feature.

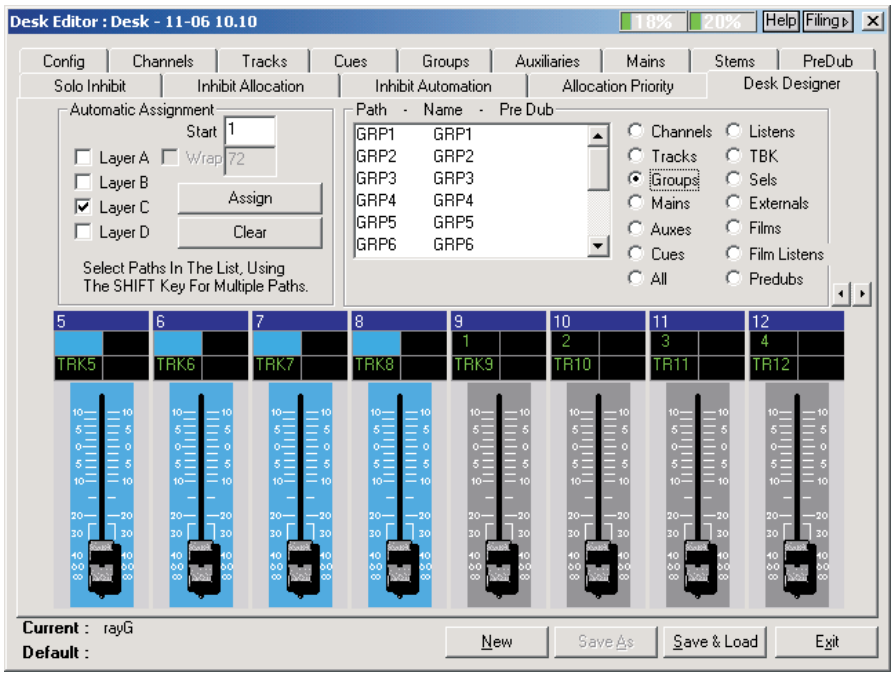
To access Desk Designer

➤ Click on Desk Edit in the drop down Tools Menu.

Desk Edit will appear with the Config page on top.

➤ Click the Desk Designer tab.

The Desk Designer will be displayed.



✍ *The path assignments made in Desk Designer are stored as part of the Desk Setup.*

To assign paths to the console manually

To display the required fader

➤ Scroll the faders to the desired strip using the fader scrolling arrow buttons.

or

➤ Press the PgUp and PgDn keys on the Encore keyboard to jump eight faders at a time.

or

➤ Press the arrow keys on the Encore keyboard to scroll the faders.

or

➤ Press the Home and End keys on the Encore keyboard to jump to the first and last faders.

or

➤ Type the required fader number on the Encore keyboard.

There is a small timeout when this is done, so to jump to fader 15 press the 1 and 5 keys in quick succession. The display will go to fader 1 then fader 5 if a long gap is left between pressing the keys.

✍ *Faders are numbered sequentially from left to right across the whole console.*

In the Paths area

➤ Click on the radio button for the required path type.

or

➤ Click on the All radio button.

If the path list does not show the required path

➤ Use the scroll bar to move the list to the required path.

✍ *Paths shown in green in the path list have already be assigned to the console surface.*

➤ Click and hold on the required path.

A floating fader will be shown next to the trackball pointer to indicate drag-and-drop mode.

➤ Move the pointer to the box which represents the alpha display associated with the required PATH key on the console surface.

➤ Release the trackball button.

The path name will be dropped into the box which represents the alpha display associated with the PATH key on the console surface.

The path name in the path list will turn green.

If a path was already in the target location then it will be de-assigned automatically.

✍ *A layer on a strip can be cleared by dragging and dropping the path name from the alpha display representation to the path list.*

To automatically assign paths to the console surface

To select the starting strip on the console

➤ Scroll the faders using the fader scrolling arrow buttons.

➤ Click on the required fader.

A red line will appear around the selected fader.

or

➤ Click in the Start box and enter the strip number.

To select the Layer

➤ Click the required Layer check box.

✍ *Make sure there are no previous Layers checked as the paths are assigned in Layer order.*

To select the paths to assign

➤ Click on the radio button for the required path type.

or

➤ Click on the All radio button.

or

➤ Click on the Predubs radio button.

✍ *All does not include predubs because predubs are not a type of path.*

✍ *Paths shown in green in the path list have already be assigned to the console surface.*

➤ Click on the first path to assign.

➤ Hold down SHIFT on the keyboard and click on the last path to assign.

✍ *If the last path is not shown in the list, scroll down the list and then SHIFT and click. The first path clicked will not be 'lost' even though it may not be visible on the list.*

The selected paths will be highlighted.

➤ Click the Assign button.

The path names will be displayed in the corresponding alpha representations.

Wrapping To Multiple Layers

Wrapping allows the selected paths to be assigned to multiple layers on a specified section of the console from the Start strip to the Wrap strip.

To wrap onto multiple Layers

➤ Click the Layer(s) to wrap across.

✍ *The paths will always be assigned starting from the first Layer checked.*

The Wrap check box will be available when multiple Layers are checked.

➤ Click the Wrap check box.

➤ Click in the Wrap strip number box.

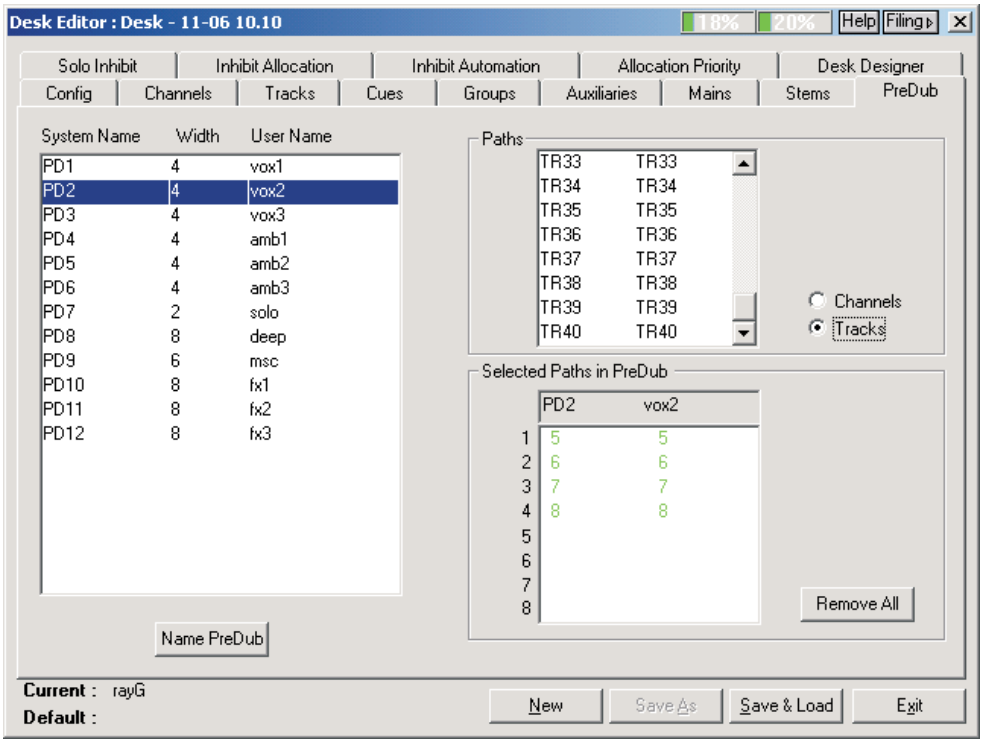
➤ Enter a strip number to wrap at.

✍ *The strip number must be greater than the Start.*

The remainder of the procedure is the same as above.

PreDub Setup

The PreDub page is used to assign up to eight Channels or Tracks to a predub master.



Up to 48 predubs may be defined. PreDub Master paths are created with the default system names of PM1 to PM48.

PreDub Masters use no processing resources.

To assign paths to a predub

➤ Click a predub in the predubs list.

➤ Click the Channels or Tracks radio button.

➤ Drag and drop each required path from the Paths list to the Selected Paths in PreDub list.

The names of paths used in predubs will turn green.

If a path which is already assigned to a predub is dragged and dropped, a dialogue box will appear to confirm whether or not the path should be moved from one predub to the other.

The Width column in the predubs list will show the number of paths in the predub.

If the paths were already assigned to the console in Desk Designer, they will be de-assigned automatically and the first path in the predub will be replaced by the PreDub Master on the console surface.

To remove paths from a predub

➤ Drag and drop the path from the Selected Paths in PreDub list to the Paths list.

To remove all paths from a predub

➤ Click the Remove All button.

A dialogue box will be displayed asking for confirmation.

➤ Click OK to confirm.

To rename a predub

➤ Click on the required predub.

➤ Click the Name PreDub button.

or

➤ Double click on the User Name for the required predub.

A box will appear over the top of the existing User Name to allow the name to be edited.

➤ Enter a name of up to four characters with the keyboard and press RETURN.

✍ *More than four characters may be entered in the box but the name will be truncated to the first four on pressing RETURN.*

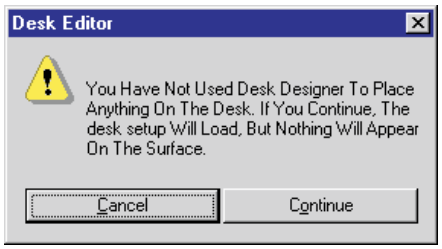
✍ *Check Desk Designer to make sure that all PreDub Masters are assigned to the console surface.*

Saving Desk Setups

To save the Desk Setup

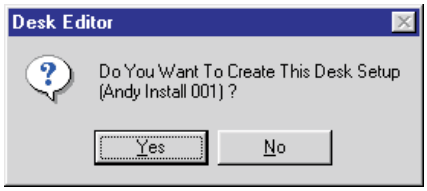
➤ Click on the Save & Load button.

If a Desk Design has not been created, a warning dialogue box will be displayed. This allows the save to be cancelled so that the Desk Design can be created before the Desk Setup is saved.



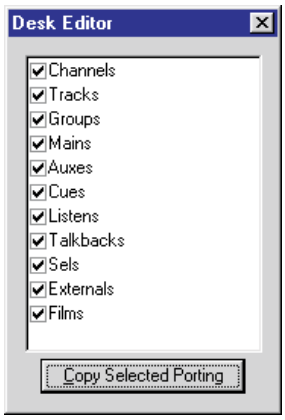
If it is a new Desk Setup

A confirm Create Desk Setup dialogue box will be displayed.



➤ Click on Yes.

The copy porting dialogue box will now be displayed (before the Desk Setup is saved or allocated).



This is displayed because it is the first time that the new Desk Setup has been saved. It allows the port routing to be re-used from the Desk Setup that is currently allocated on the console before it is replaced by the new Desk Setup.

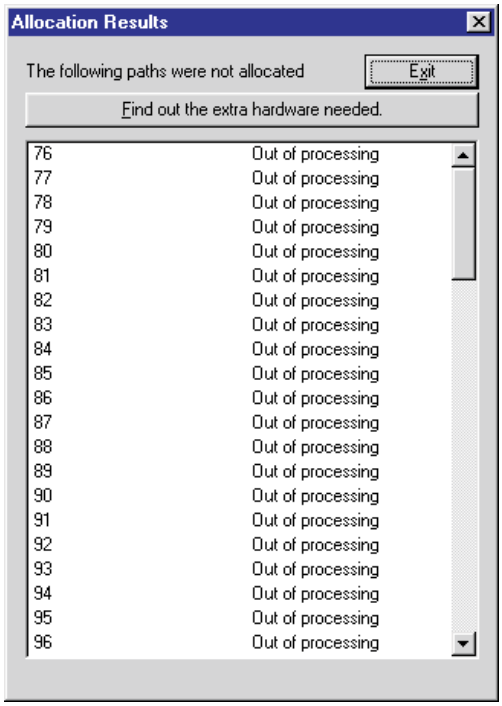
➤ Click the check boxes for the required path types and then click the Copy Selected Porting button.

✍ *It is recommended that the porting for Films is copied. This will retain the output patching for the surround monitoring system.*

A timer will be displayed while the Desk Setup is being saved and then allocated on the console.

When this is complete, a dialogue box will be displayed confirming that the allocation process has finished.

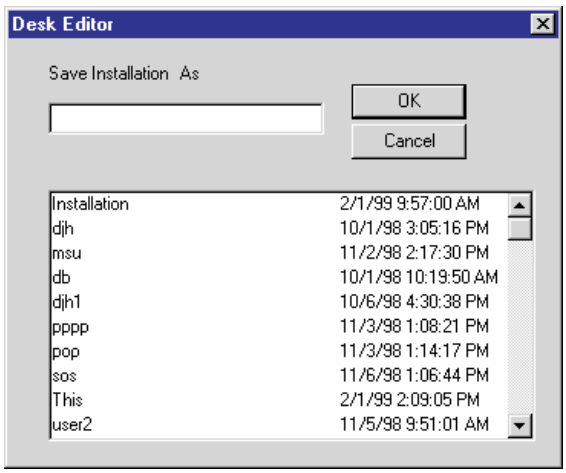
If the Desk Setup is not allocated successfully, the Allocation Results dialogue box will be displayed. This shows which paths have not been allocated because too much processing has been used. Remove some processing from those paths and try again.



To save the Desk Setup with a different name

➤ Click the Save As button.

A Save As dialogue box will be displayed for entering a different Desk Setup name.



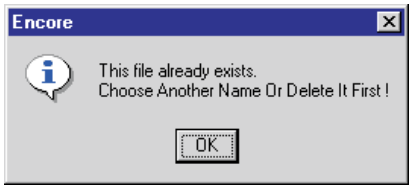
➤ Enter the new name in the box.

or

➤ Click on a name in the list and modify it in the box.

➤ When the name is correct, click the OK button.

If the name already exists then a warning dialogue box will be displayed.



➤ Click OK to clear the dialogue box, then modify the name appropriately and click OK again.

If the name does not exist then the Desk Setup will be saved and loaded as described above.

Solo Inhibit

Solo Inhibit applies to any AFL Solo mode.

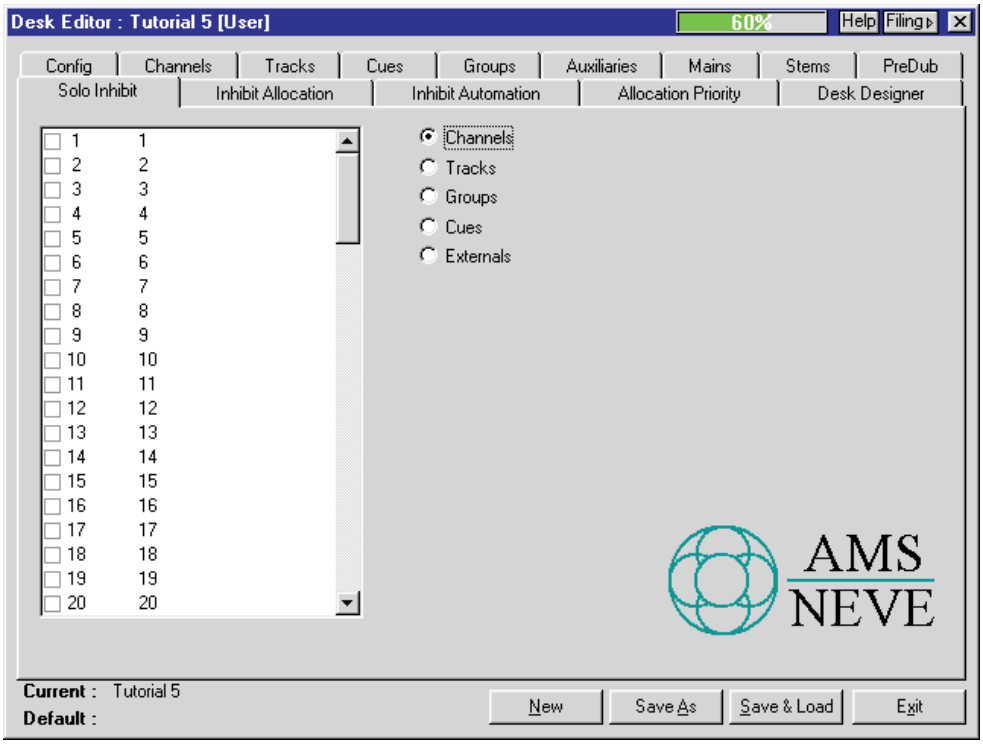
If Solo Inhibit is active on a path then the path will NOT be cut when the SOLO key is pressed for another path.

The current status of Solo Inhibits is saved as part of the Desk Setup.

To setup Solo Inhibit

➤ Click on the Solo Inhibit tab in Desk Edit.

The Solo Inhibit page will be displayed.



➤ Click on the radio button for the required path type.

➤ Click the check boxes for the required paths.

or

➤ Click and hold on the first path required and drag the pointer down the list.

Each time a path is selected, the check box will be toggled between checked and unchecked.

A path is Solo Inhibited when its check box is checked.

To set Solo Inhibit from the desk

➤ Hold Isolate and press the SOLO button.

This will only operate if the solo is not active.

Partitioned Surround AFL Solo inhibit

Solo inhibited paths will only be routed to the film listens if at least one other path in the same partition is soloed. If solo inhibited paths are soloed directly (or taken out of solo) they will behave as though they are not inhibited until the whole partition is taken out of solo.

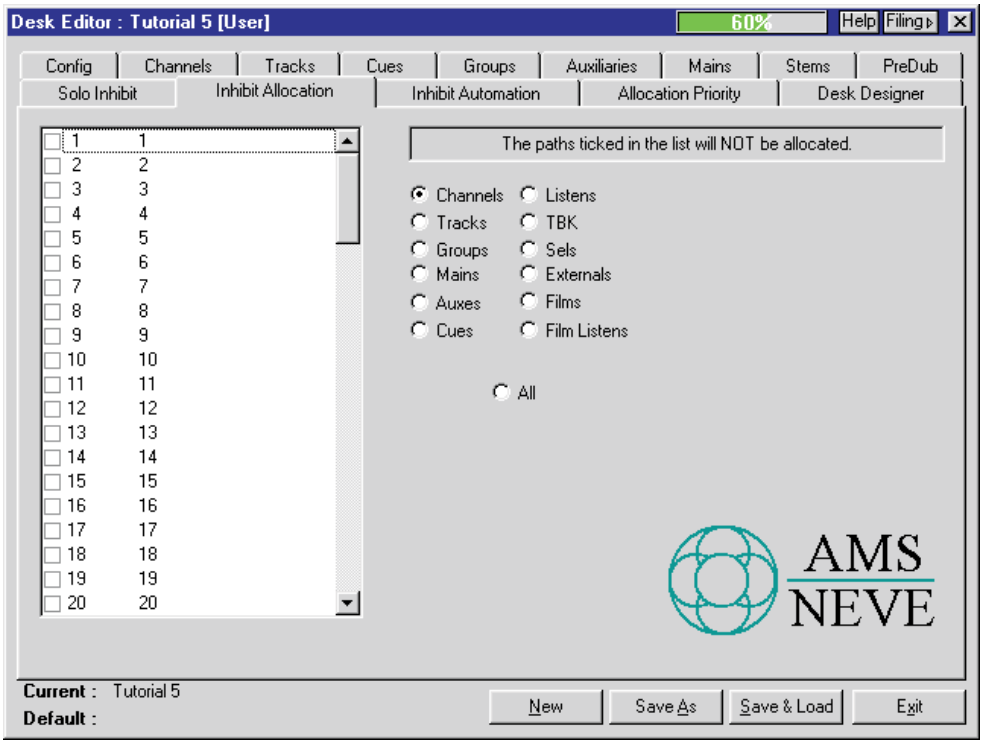
Inhibit Allocation

This is used to prevent paths from being allocated on the console. This can be useful for isolating routing problems, or temporarily preventing some inputs from being fed into the console so that some audio can be listened to independently or to sort out 'bad' signals.

To select the inhibited paths

➤ Click the Inhibit Allocation tab.

The Inhibit Allocation page will be displayed.



➤ Click on the radio button for the required path type.

➤ Click the check boxes in the list for the individual paths to be inhibited.

Paths selected will have their check boxes checked.

Clicking a path a second time will un-inhibit the path.

When the Desk Setup is loaded, the selected paths will not use any processing resources and will not appear on the console surface. The Desk Setup will not be affected in any other way.

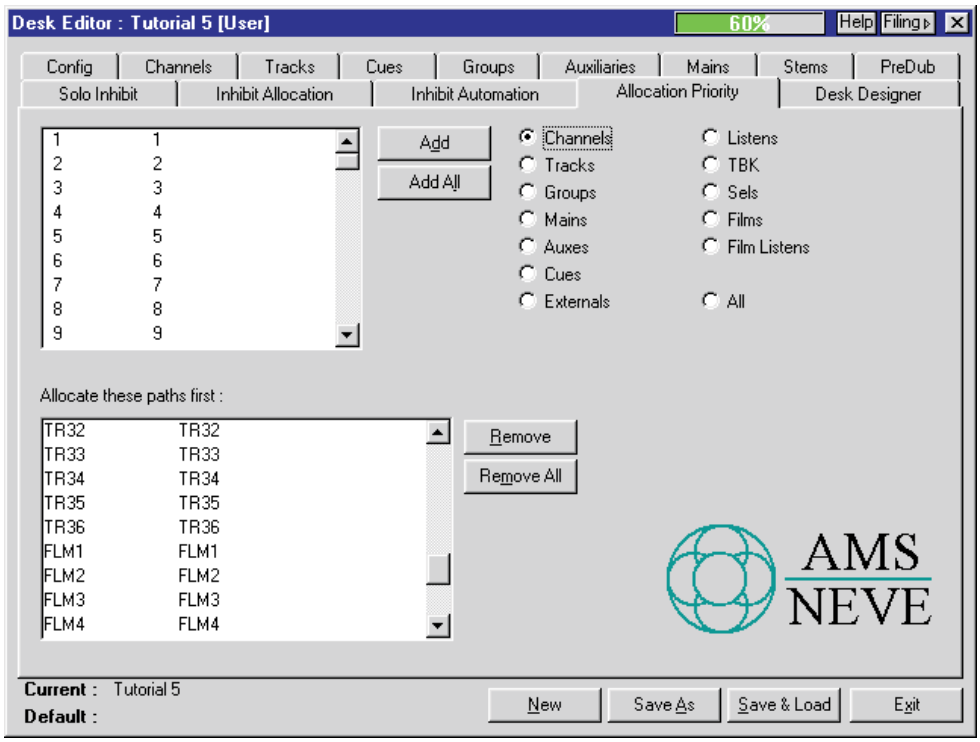
Allocation Priority

Allocation priority is used to determine which paths will have processing assigned first during the allocation process.

To set allocation priority

➤ Click the Allocation Priority tab.

The Allocation Priority page will be displayed.



➤ Click the radio button for the required path type.

The path list will show the paths of the selected type.

Select paths to be prioritised

➤ Click the required path in the list.

Multiple paths can be selected by using shift-click to select a range of paths and/or ctrl-click to pick individual paths.

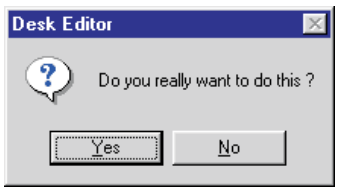
➤ Click the Add button.

The selected paths will be added to the lower path list.

or

➤ Click the Add All button.

A confirmation dialogue box will be displayed.



➤ Click Yes.

All paths of the selected type will be added to the lower path list.

Remove paths from the priority list

➤ Click the required path in the lower list.

Multiple paths can be selected by using shift-click to select a range of paths and/or ctrl-click to pick individual paths.

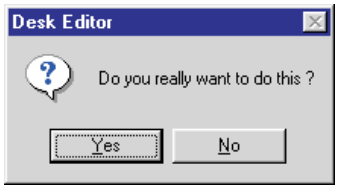
➤ Click the Remove button.

The selected paths will be removed from the lower path list.

or

➤ Click the Remove All button.

A confirmation dialogue box will be displayed.



➤ Click Yes.

All paths in the lower path list will be removed.

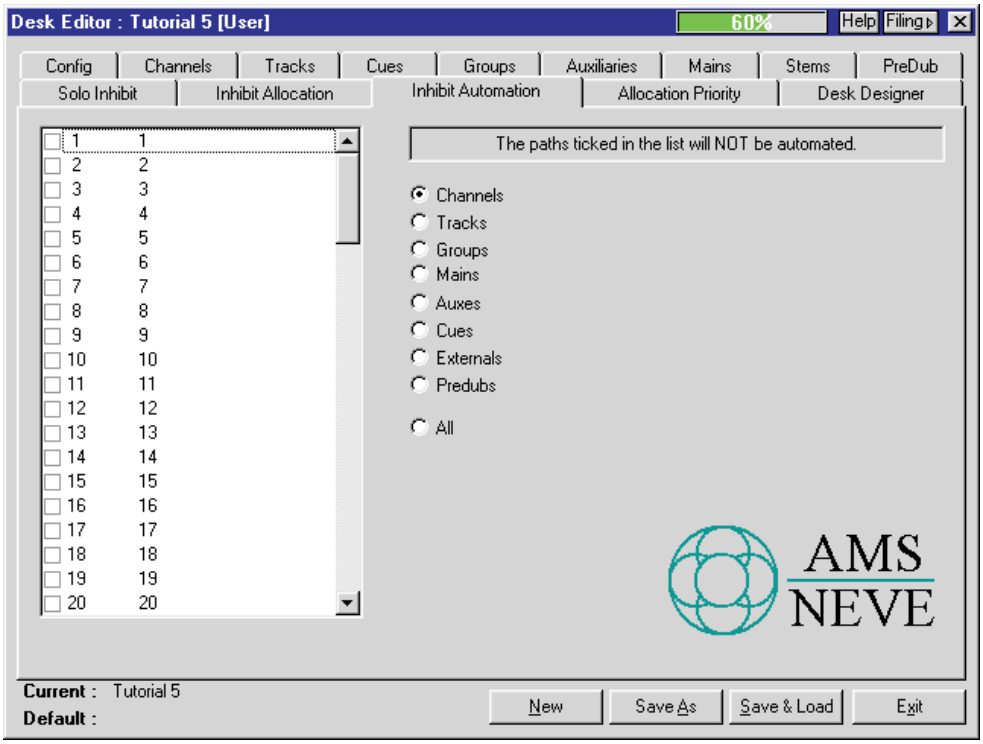
Inhibit Automation

This is used to force the automation system to ignore the paths that have been inhibited. No automation data is generated by the selected paths. This can be used, for instance, to cut down the amount of automation data that is generated when practising moves for part of a mix.

To select the inhibited paths

➤ Click the Inhibit Automation tab.

The Inhibit Automation page will be displayed.



➤ Click on the radio button for the required path type.

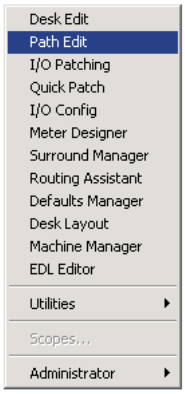
➤ Click the check boxes in the list for the individual paths to be inhibited.

Paths selected will have their check boxes checked.

Clicking a path a second time will un-inhibit the path.

The automation modes of the selected paths can not be changed. This will not affect the contents of an existing Mix/Pass, but inhibited paths will not re-play moves as they can not be put into Play.

Path Edit



Path Edit is used to alter the signal processing configuration of individual paths. It can also be used for Port Routing on individual paths.

The top part of the Path Edit screen shows the current path being worked on, with the signal processing it has assigned to it. Below the path is a tabbed bar containing the available (unused) processing on one tab and available I/O on the other tab.

Note that the processing in a path can be in any order, within certain limitations (e.g. all dynamics elements must be together). This is because the DFC Gemini is a digital system that does not have a physical strip with a fixed order of processing. Processing is assigned as needed and in the order in which it is required.

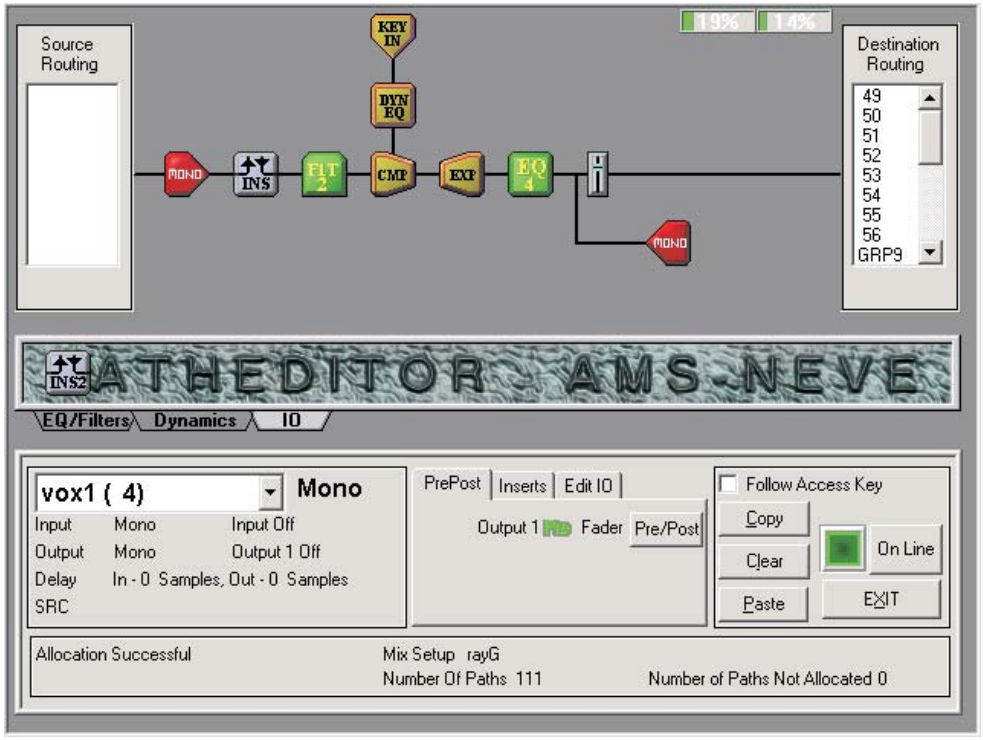
To access Path Edit

➤ Click Path Edit in the drop down Tools Menu.

or

➤ Click the Path Edit icon.

The Path Edit screen will be displayed.



On-Line and Off-Line operation

When Path Edit is On-Line, all changes are updated in the signal processing system as they are made on the screen. There is a small time-lag between the change on the screen and the change showing on the console surface. Further changes can be made while the console is allocating. A timer on the screen shows when all changes have been completed.

When Path Edit is Off-Line, any number of changes are made in Path Edit. When the required changes have been completed the console is updated by putting Path Edit back On-Line.

To switch between On-Line and Off-Line

➤ Click the On-Line/Off-Line check box.

When On-Line, the button is up and the indicator is “off”.

When Off-Line, the check box is checked and the indicator “pulses”.

Path Selection

There are two methods of selecting paths, using either the PATH access keys on the surface or a drop-down list on the screen. This is controlled with the Follow Access Key check box.

To select paths with PATH access keys

➤ Click the Follow Access Key check box so it is checked.

➤ Press the PATH access key for the required path.

The current processing in the path will be shown in the top part of the screen.

To select paths from the screen

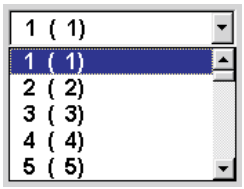
➤ Click the Follow Access Key check box so it is unchecked.

The screen will show the currently selected path name in box with a drop down arrow next to it.



➤ Click the drop down arrow.

A list of all paths in the current configuration (Desk Setup) will be shown.



➤ Scroll through the list to the required path and click its name in the list.

The current processing in the path will be shown in the top part of the screen.

Changing Signal Processing

The signal processing elements are shown as icons. These are dragged from the processing pool onto the path and placed in the required order. The icons can also be dragged left or right on the path to change the processing order of existing processing.

To add a processing element

➤ Click on the required tab of the pool selector as required.





I/O Pool for mono paths:



I/O Pool for stereo paths:



➤ Click and hold on the required element in the pool.

➤ Drag the icon to the required location.

➤ Release the trackball button.

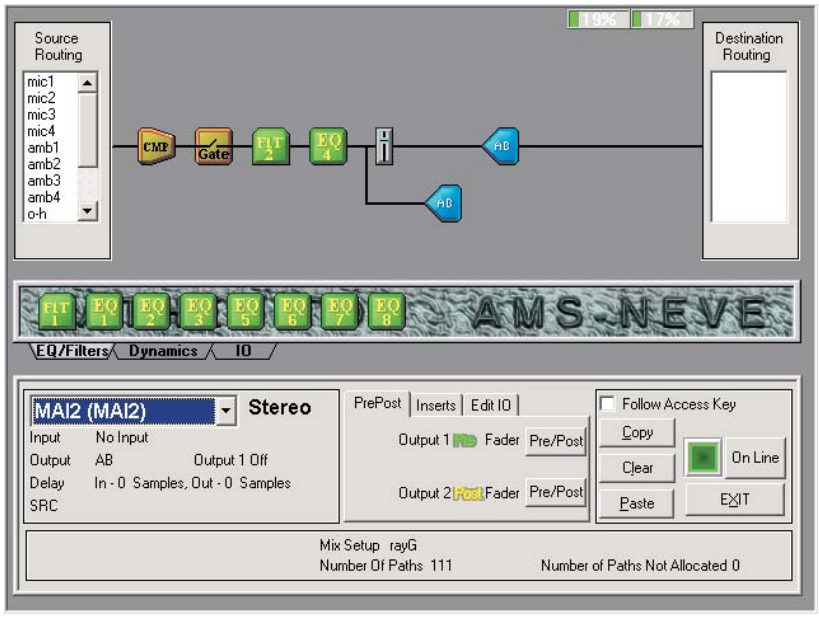
The processing element will be placed on the path. If an item was dragged to the incorrect location, it will jump to the correct position.

To move an output pre or post fader

➤ Drag the output icon to the required location.

or

➤ Click the PrePost tab of the extra function panel.

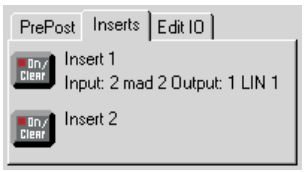


The current output ports assigned to the path will be shown. The Pre/Post status is shown.

➤ Click the Pre/Post button.

To show the Insert status

➤ Click the Inserts tab of the extra function panel.



Inserts in the path will have their port routing status shown. If a port is shown as OFF (e.g. Input: OFF) then this means that the Insert is allocated but the port routing is off.

To remove all processing

➤ Click the Clear button.

Notes

Dynamics elements cannot be split and Path Edit will not allow this to happen.

A dynamics element must be present to add Key Input and/or Sidechain EQ. When the Key Input or Sidechain EQ is added it will attach to the first dynamics element. If the dynamics order is changed then the sidechain will stay attached to the first dynamics element. If all dynamics are removed then the Key Input and Sidechain EQ will be removed with the last dynamics element.

If a DRC (Dynamic Range Controller) is added then all existing dynamics will be removed automatically, and vice-versa.

Copy and Paste

The Copy and Paste functions allow the configuration of a path to be copied to other paths of the same type (e.g. Channel to Channel).

To copy the configuration of a path

➤ Click the Copy button.

To paste the configuration to a single path

➤ Select the required path of the same type.

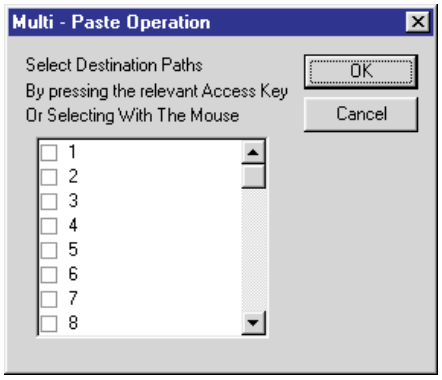
➤ Click the Paste button.

The signal processing shown will change to the be the same as the source path.

To paste the configuration to multiple paths of the same type

➤ Click the Paste button before another path is selected.

A list of paths will be displayed in the Multi-Paste Operation dialogue box with a check box next to each path name.



➤ Click the check boxes for the paths to paste the processing to.

or

➤ Press the PATH access keys for the required paths.

➤ Click OK.

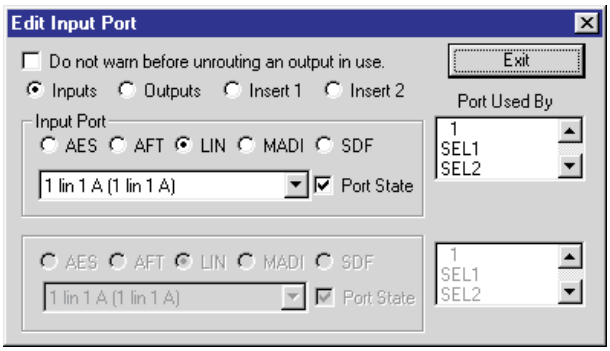
Port Routing in Path Edit

The Port Routing on the current path can be changed from within Path Edit. This saves having to close Path Edit to run I/O Manager or use the console surface for I/O patching.

To change the Port Routing

➤ Click the Edit IO Porting button.

The Edit Ports dialogue box will be displayed.



➤ Click the Inputs, Outputs, Insert 1 or Insert 2 radio button as required.

The current porting (if any) will be shown and the Input Port and Output Port selection boxes will become available as applicable.

Note that the title bar changes according to the radio button selected.

The Port Used By boxes show which paths are already using the selected port.

To change an I/O Port

➤ Click the Port State check box so that it is unchecked.

This breaks the routing connection to the selected port.

➤ Click the AES, AFT, LIN, MADI or SDF radio button as required.

➤ Click the drop down arrow next to the port name.

A list of available ports of the selected type will be shown.

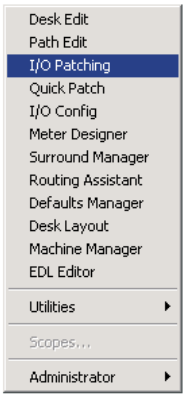
➤ Scroll through the port list and click on the required port name.

➤ Click the Port State check box so that it is checked.

If an output is selected that is already in use by another path then a confirmation dialogue box will be displayed to re-assign the port.

If the Disable Output Route Overwrite Warning check box is checked then the confirmation dialogue box will not be displayed and the path that was originally ported to the output will be de-routed transparently.

I/O Patching



I/O Patching is used to rapidly configure input and output routing.

The number and availability of different path types will depend on the Desk Setup (which can be modified with Desk Edit).

The number and availability of input and output ports will depend on the hardware setup.

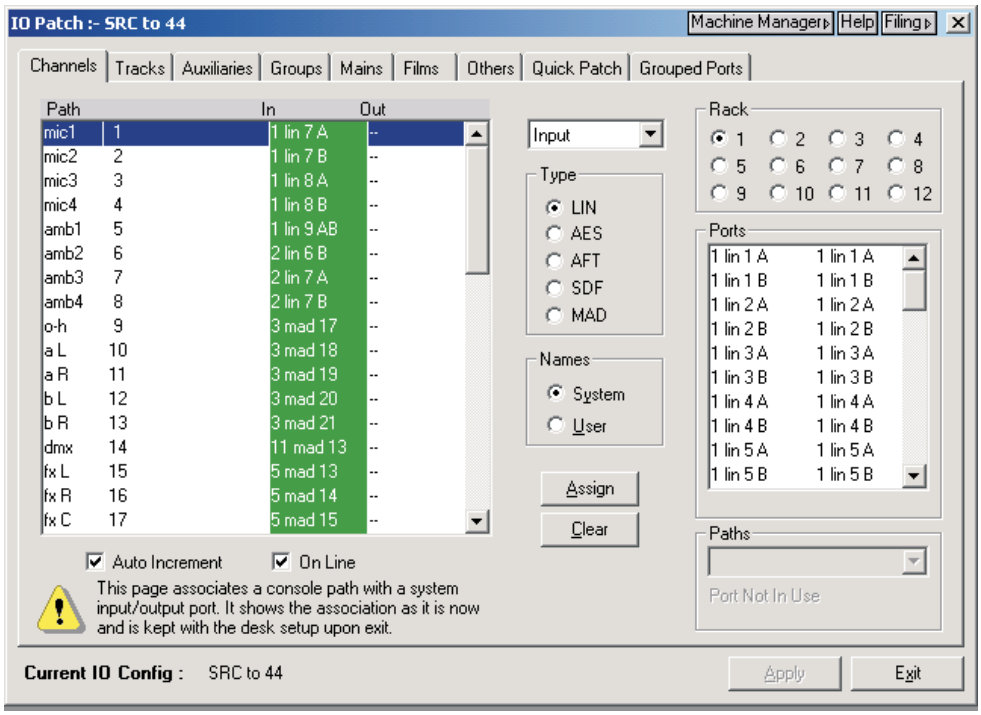
To access I/O Patching

➤ Click on I/O Patching in the drop down Tools menu.

or

➤ Click on the I/O Patching icon.

I/O Patching will be displayed. The tabbed Channels page will be on top.



To Exit from I/O Patching

➤ Click on the Exit button in the bottom right hand corner of the I/O Patching window.

Saving changes to Routing on Exit

I/O Patch automatically saves the current Desk Setup on exit to save changes to I/O Routing.

Patching Ports to Paths (I/O Routing)

➤ Click on the tab for the Path Type you wish to route.

The selected I/O routing page will appear.

✍ *Input and Output ports can only be patched to Paths if the Path type is appropriate. E.g. Input ports cannot be patched to Main Paths and Outputs cannot be patched to Channels (unless an Output has been added to the Channel in Path Edit or Desk Edit).*

Patching Paths to Inputs

To route an Input Port to a Path

➤ Click on the In column for the required Path.

or

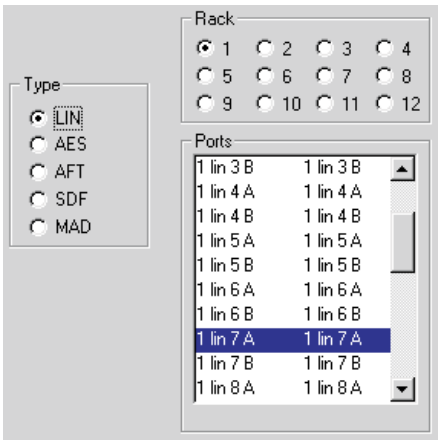
➤ Select Input from the drop down list.

The In column will be highlighted in green.

➤ Click on the required Port in the Ports list.

If the required Port is not in the list

➤ Click on the Rack and Type radio buttons to select the correct location of the port.



➤ Use the scroll bar on the Ports list to view more ports in the list.

➤ Click the Assign button.

The Port name will be displayed against the Path in the In column.

If Auto Increment is enabled

The next Path and Port in each list will be selected.

➤ Click Assign repeatedly to assign sequential Ports and Paths.

Patching Paths to Outputs

To route a Path to an Output Port

➤ Click on the Out column for the required Path.

or

➤ Select Output 1 from the drop down list.

Output 2 may be selected for Main paths.

The Out column will be highlighted in red.

➤ Click on the required Port in the Ports list.

If the required Port is not in the list

➤ Click on the Rack and Type radio buttons to select the correct location of the port.

➤ Use the scroll bar on the Ports list to view more ports in the list.

➤ Click the Assign button.

The Port name will be displayed against the Path in the Out column.

If the Port was in use by another path then it will be de-assigned and then assigned to the new path. This is because only one path can be routed to an Output Port.

If Auto Increment is enabled

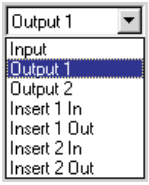
The next Path and Port in each list will be selected.

➤ Click Assign repeatedly to assign sequential Ports and Paths

Patching Inserts

To assign Ports to Inserts in a Path

➤ Select Insert In 1 from the drop down list.



The In and Out columns will show Insert In 1 and Insert Out 1.

The Insert In 1 column will be highlighted in green.

➤ Click in the Insert In 1 column for the path with the Insert.

➤ Click on the required Port in the Ports list.

If the required Port is not in the list

➤ Click on the Rack and Type radio buttons to select the correct location of the port.

➤ Use the scroll bar on the Ports list to view more ports in the list.

➤ Click the Assign button.

The Port name will be displayed against the Path in the appropriate column.

If the Port was in use by another path then it will be de-assigned and then assigned to the insert. This is because only one path or insert can be routed to an Output Port.

➤ Click in the Insert Out 1 column for the path and repeat the Port selection and assignment as above.

If the Path has a second Insert

➤ Repeat the procedure by selecting Insert In 2 from drop down list.

✍ *Input and Output ports for Inserts can only be patched to a path which has been configured with an Insert in Desk Edit or Path Edit.*

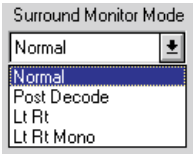
Patching the Film Encoder/Decoder Inserts

The Film paths use dedicated inserts for the outboard surround and Lt-Rt encoders/decoders. The porting for these inserts is selected on the Surround Monitor Mode drop down list on the Films page.

To assign ports to the Post Decode inserts

➤ Click on the Surround Monitor Mode drop down arrow.

A list of Surround Monitoring Modes will be displayed.



➤ Click on Post Decode.

The In and Out columns will show the current ports used by the Post Decode insert, if they have been routed. The insert sends are also used by Lt-Rt, and Lt-Rt also uses the FLM1 and FLM3 (front left and front right) returns.

The outputs (sends) and inputs (returns) are assigned to ports (patched) as normal for outputs and inputs.

To assign an input port to the Lt-Rt Mono return

➤ Click on the Surround Monitor Mode drop down arrow.

➤ Click on Lt Rt Mono.

The In column will show the current port used by FLM2 for the Lt-Rt Mono return. This input is intended for monitoring a mono sum of Lt-Rt on the front centre speaker.

✍ *If Lt-Rt is selected on the list then this will display the ports used by Lt-Rt but they may not be modified.*

On Line and Off Line routing

On Line

On Line routing is enabled when the check box is checked (as shown).

If On Line is enabled

The changes will appear on the console immediately.

If On Line is disabled

The changes will not appear on the console. The Apply button will be available.

To force the console to match off line routing changes

➤ Click the Apply button.

✍ *Changes to Port Routing will be saved in the current Desk Setup on exit from I/O Patching.*

To Clear routing settings

Clearing a setting resets it to the system default and the entry will change back to -- or 0.

To clear a single setting

➤ Click directly on the required entry.

➤ Click the Clear button.

To clear all settings for a single port

➤ Click on the System Name of the required port in the Ports column.

➤ Click the Clear button.

To clear all settings for multiple ports

➤ Click and hold the trackball button on the first name of the paths to be cleared.

➤ Drag down the list until the last port to be cleared is selected.

➤ Release the trackball button.

➤ Click the Clear button.

To clear multiple entries in a single column

➤ Click in the column containing the entries to be cleared.

➤ Click and hold the trackball button on the first entry to be cleared.

➤ Drag down the list until the last port to be cleared is selected.

➤ Release the trackball button.

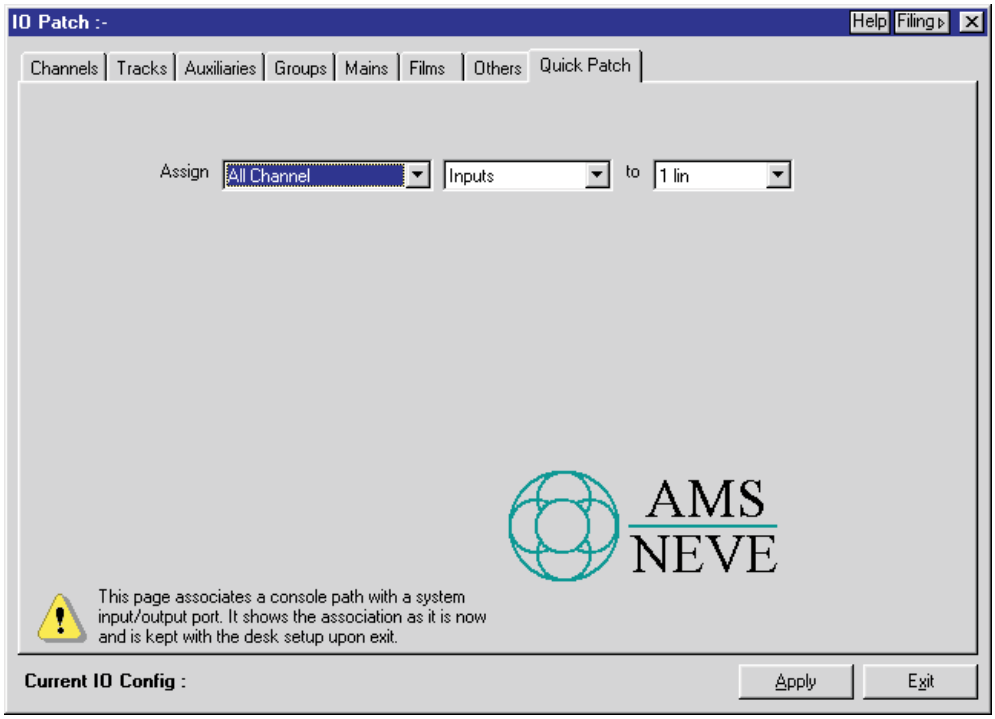
➤ Click the Clear button.

Using Quick Patch for I/O Routing

Quick Patch is used to assign all of the inputs or outputs for one path type to a sequence of ports.

➤ Click on the Quick Patch tab.

The Quick Patch page will appear.



➤ Click on the drop down arrow next to the path type box.

The list of valid path types for use with Quick Patch will appear.

➤ Click on the required path type.

➤ Click on the drop down arrow next to the port type box.

The port type list will appear.

➤ Click on Input or Output as required.

➤ Click on the drop down arrow next to the port names box.

The list of available sets of ports will appear.

➤ Click on the required port name.

➤ Click the Apply button.

The selection will be applied to the current Desk Setup and allocated on the console.

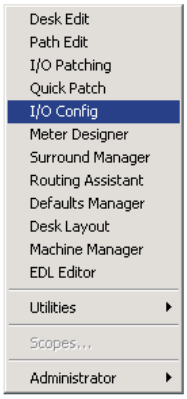
If there are more ports than paths then the remaining ports will be unused.

If there are more paths than ports then the remaining paths will be cleared.

For instance, if the selection is to assign all Channel inputs to 1lin ports and there are 24 mono Channels and 16 ports (1lin1A to 1lin8B) then Channels 17 to 24 will be cleared of inputs.

If I/O Manager is not On Line then any modifications made on the pages not affected by the Quick Patch selection will be applied at the same time as the Quick Patch is applied.

I/O Config



I/O Config is used to configure the input and output port settings such as mono or stereo, dither, delay, etc. I/O Config is also used to configure the Sample Rate Conversion settings on suitable AES/EBU cards.

To access I/O Config

➤ Click on Tools in the Encore menu bar.

The drop down Tools menu will appear.

➤ Click on I/O Config.

or

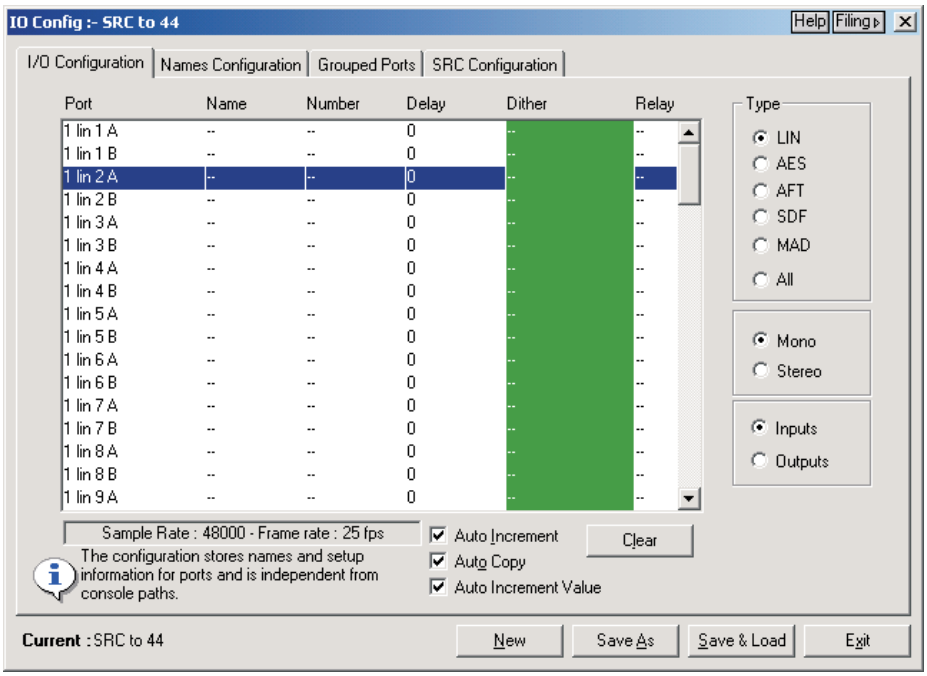
➤ Access the Filing utility.

➤ Select the required I/O Configuration file.

➤ Click the Edit button.

In both cases

I/O Config will be displayed and the tabbed I/O Configuration page will be on top.



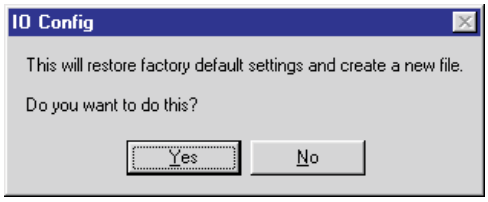
The name of the I/O Configuration being edited is shown in the title bar. The name of the currently loaded I/O Configuration is shown against Current in the bottom left corner of the page.

Start a new I/O Configuration

To start a new I/O Configuration while in I/O Config

➤ Click the New button.

A confirmation dialogue box will be displayed, indicating that the new file will start with factory default settings.



➤ Click the Yes button.

The current settings will be cleared and no name will be shown in the title bar or against the Current: name space.

Save As must be used to save the I/O Configuration before exiting I/O Config.

To start a new I/O Configuration from Filing

➤ Start the Filing utility.

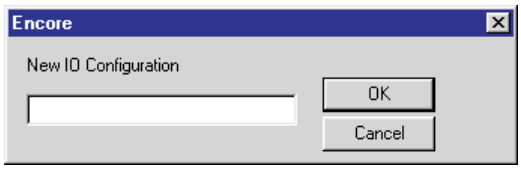
➤ Click the System Files tab.

➤ Click on the I/O Configuration box.

The red highlight will go to the I/O Configuration box.

➤ Click the New button.

A dialogue box will be displayed for the new I/O Configuration file name.



➤ Type the new name as required and click OK.

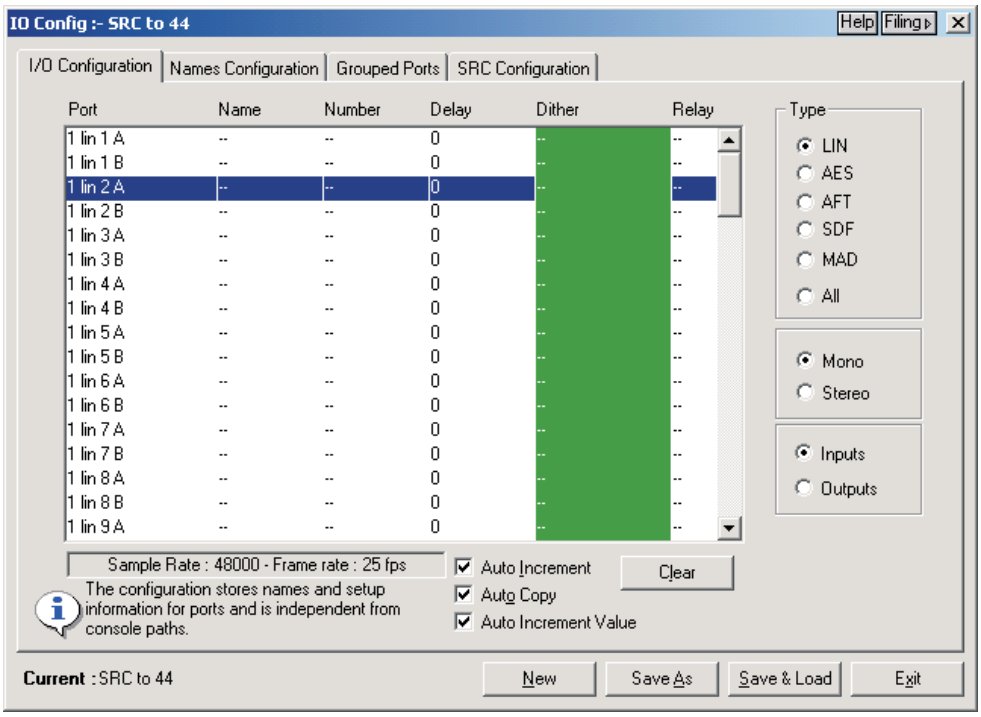
✍ *If the name already exists then a prompt will indicate this. Click OK and an extended naming dialogue box will be displayed showing all the current I/O Configuration file names, and the name of the existing file will be highlighted. Edit the name for the new file so that it does not match anything in the list, then click OK.*

I/O Config will start with all port settings at factory defaults.

Configure Input and Output ports

➤ Click on the I/O Configuration tab.

The I/O Configuration page will be displayed.



The ports shown will depend on the hardware in the system and the selection made by the Type radio buttons. The Inputs and Outputs radio buttons select whether Input or Output ports are being configured. Configuration of Input and Output ports is identical except for Dither. Dither may only be applied to Output ports.

To assign a User Name to a port

➤ Double click on the Name for the required port.

A text entry box will appear with an X next to it.

➤ Enter a four letter name using the Encore keyboard.

➤ Press <ENTER> on the Encore keyboard.

The new name will be shown in the Name column.

If Auto Increment is enabled

The text entry box will move to the next port.

If Auto Copy is enabled

The text entry box will contain the last User Name entered.

To cancel selection or exit from Auto Increment mode

➤ Click on the X at the side of the list.

To assign a number to a port

➤ Double click on the Number for the required port.

A text entry box will appear with an X next to it.

➤ Enter a number using the Encore keyboard.

➤ Press <ENTER> on the Encore keyboard.

The new number will be shown in the Number column.

If Auto Increment is enabled

The text entry box will move to the next port.

If Auto Copy is enabled

The text entry box will contain the last Number entered.

If Auto Increment Value is enabled

The text entry box will contain the last Number entered plus 1.

To cancel selection or exit from Auto Increment mode

➤ Click on the X at the side of the box.

To make a port Mono or Stereo

The ports are assigned in pairs to make a stereo input or output. Adjacent odd and even ports make a stereo pair (e.g. A and B on LIN ports, an odd numbered port and the following even numbered port on MADI ports, etc.).

The ports will follow the paths if they are not specifically set (i.e. a pair of mono ports assigned to a stereo path will be treated as a stereo pair).

To make a port Stereo

➤ Click on a mono port.

The Mono/Stereo radio buttons will indicate Mono.

➤ Click the Stereo radio button.

The second port of the pair will be removed from the list. The first port will be renumbered with a trailing S to indicate stereo (e.g. 1LIN 1A will become 1LIN 1S). The system name in the Ports column will be displayed in red.

To make a port Mono

➤ Click on a Stereo port.

➤ Click on the Mono radio button.

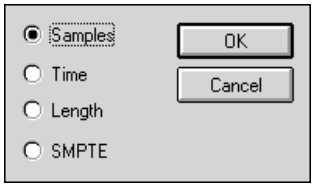
✍ *The Auto Increment and Auto Copy functions are not applicable to toggling ports between Mono and Stereo.*

Delay

To set Delay Units

➤ Click on the Delay Units button.

A dialogue box will appear containing the options for Delay Units.



➤ Click the radio button for the required Units.

➤ Click OK.

or

➤ Click Cancel to leave the Units unchanged.

The legend on the Delay Units button will change to indicate the selected Units. The Remaining amount will display the amount of Delay left to assign in the new Units.

Any Delay configured will change to show the setting in the new Units

To configure Delay on single ports

➤ Double click in the Delay column for the required port.

A box will appear with an X next to it.

➤ Enter the amount of Delay from the Encore keyboard.

➤ Press <ENTER> on the Encore keyboard.

If Auto Increment is enabled

The entry box will move to the next port.

If Auto Copy is enabled

The entry box will contain the last Delay amount entered.

To cancel selection or exit from Auto Increment mode

➤ Click on the X at the side of the list.

To automatically configure Delay on multiple ports

➤ Click in the Delay column.

The Auto Configure Delay button will become available.

➤ Click and hold on the Delay entry for the first required port.

➤ Drag down the range of ports to configure.

➤ Release the trackball button.

The selected range of ports will be highlighted.

Multiple ports can also be selected by using shift-click to select a range of ports, or ctrl-click to pick individual ports.

➤ Click the Auto Configure Delay button.

The delay Remaining will be divided equally between the highlighted ports. This may leave a remainder which will be the new Remaining amount.

✍ *Any Delay already assigned to the selected ports will be added to the Remaining amount before it is divided up.*

Dither

Dither is applied to the Least Significant Bit (LSB) of a digital signal for the purpose of reducing distortion caused by truncation or quantisation. Truncation can cause noise when converting to a lower digital resolution (e.g. 24-bit to 16-bit), such as for output to outboard digital equipment. Quantisation effects can be apparent at low levels of program material and this can produce noise on an analogue output. In both cases, dither introduces low level noise to produce an apparent smoothing effect on the output.

Dithering is 16, 18, 20 or 24-bit with an LSB Rounding, Rectangular or Triangular pattern.

To set Dither on Output ports

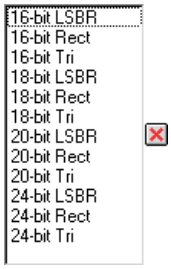
➤ Click on the Outputs radio button.

The list will show Output ports.

➤ Click on the Type radio button as required.

➤ Double click on the Dither entry for the required port.

A drop down list of Dither settings will appear.



➤ Double click on the required setting.

If Auto Increment is enabled

The next port will be selected and the list will remain open.

If Auto Copy is enabled

The last Dither setting used will automatically be highlighted when the list opens.

To cancel selection or exit from Auto Increment mode

➤ Click on the X at the side of the list.

Relays

When a Relay is associated with an Input port, the Relay is closed when the fader is above -60dB.

When a Relay is associated with an Output port, the Relay is closed by Rec Enable.

To associate a Relay with a port

➤ Double click on the in the Relay column for the required port.

An entry box will appear with an X next to it.

➤ Enter a valid Relay Number using the Encore keyboard.

➤ Press Enter on the Encore keyboard.

The number will be shown in the Relay column.

If Auto Increment is enabled

The entry box will move to the next port.

If Auto Copy is enabled

The entry box will contain the last Relay Number entered.

If Auto Increment Value is enabled

The text entry box will contain the last Number entered plus 1.

To cancel selection or exit from Auto Increment mode

➤ Click on the X at the side of the list.

To Clear Settings

Clearing a setting resets it to the system default and the entry will change back to -- or 0.

To clear a single setting

➤ Click directly on the required entry.

➤ Click the Clear button.

To clear all settings for a single port

➤ Click on the System Name of the required port in the Ports column.

➤ Click the Clear button.

To clear all settings for multiple ports

➤ Click and hold the trackball button on the first System Name of the ports to be cleared.

➤ Drag down the list until the last port to be cleared is selected.

➤ Release the trackball button.

➤ Click the Clear button.

To clear multiple entries in a single column

➤ Click in the column containing the entries to be cleared.

➤ Click and hold the trackball button on the first entry to be cleared.

➤ Drag down the list until the last port to be cleared is selected.

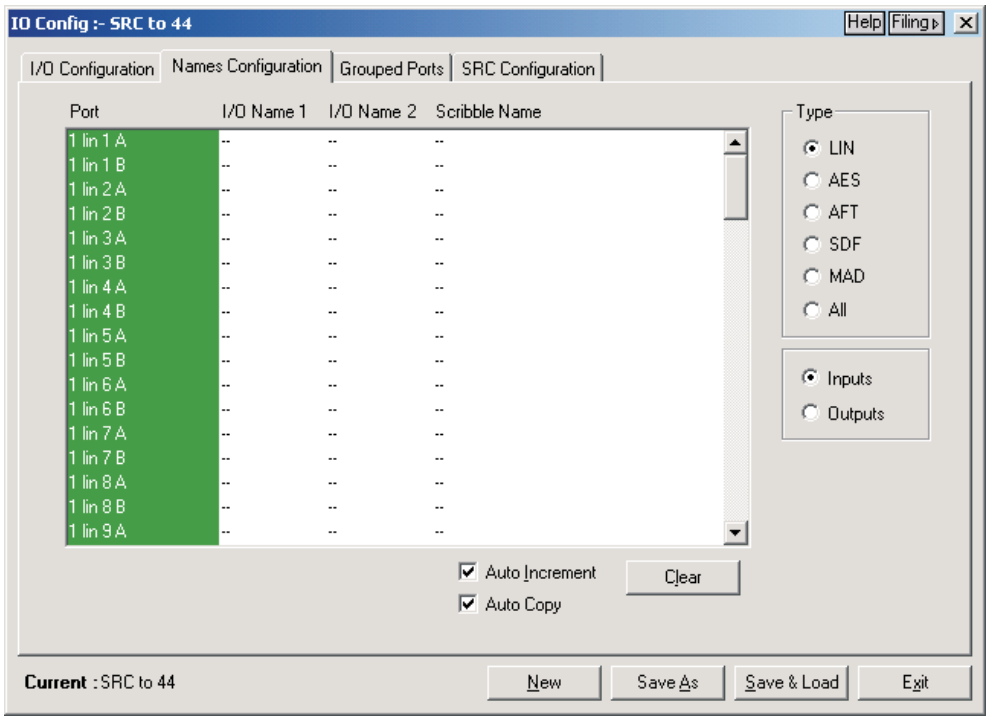
➤ Release the trackball button.

➤ Click the Clear button.

Assign Port Names

➤ Click the Names Configuration tab.

The Names Configuration page will be displayed.



The ports shown will depend on the hardware in the system and the selection made by the Type radio buttons.

The Inputs and Outputs radio buttons select whether Input or Output ports are being configured.

Up to three names can be assigned to each port:

I/O Name 1

This is the same as the Name column on the I/O Configuration page. I/O Name 1 is used as a replacement for the first part of a port name (e.g. LIN1).

I/O Name 2

This is used as a replacement for the second part of port name (e.g. 4AB).

Scribble Name

This is used as override for the path name on the alpha display associated with the PATH access keys. For input ports, all paths patched to the port are affected.

To assign a Name to a port

➤ Double click on the required Name column for the required port.

A text entry box will appear with an X next to it.

➤ Enter a four letter name using the Encore keyboard.

➤ Press <ENTER> on the Encore keyboard.

The new name will be shown in the selected Name column.

If Auto Increment is enabled

The text entry box will move to the next port.

If Auto Copy is enabled

The text entry box will contain the last User Name entered.

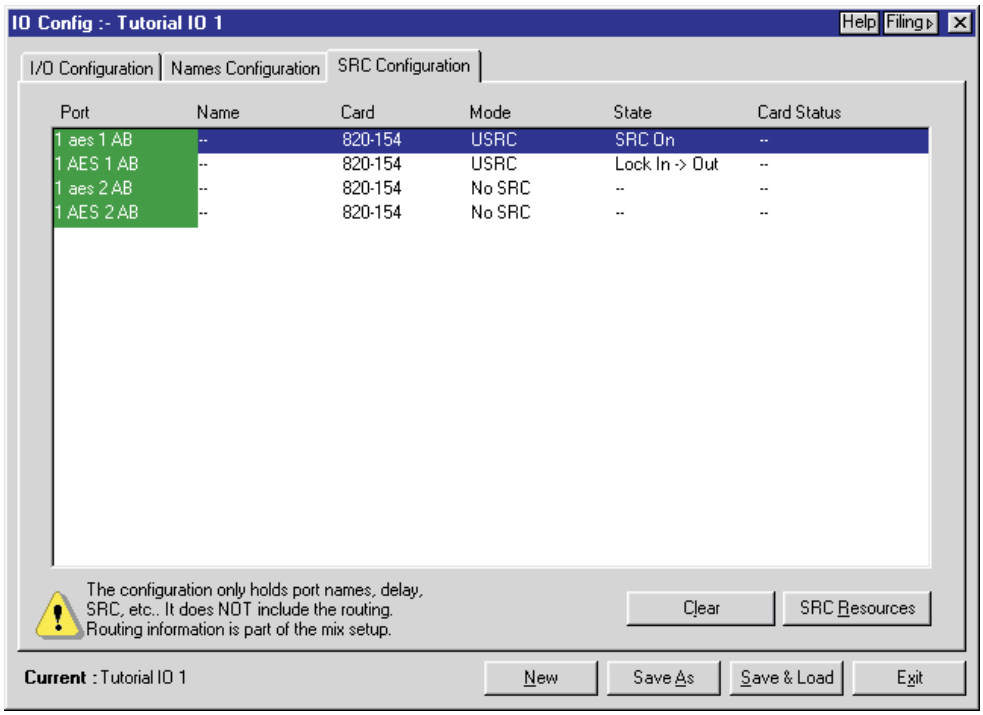
To cancel selection or exit from Auto Increment mode

➤ Click on the X at the side of the list.

Configure Sample Rate Conversion

➤ Click on the SRC Configuration tab.

The SRC Configuration page will appear.



The SRC Configuration page shows the AES cards that are installed in the system and allows the SRC Mode and State to be modified. The SRC State can only be modified for a port when SRC is enabled by selecting a suitable Mode.

The Port column shows System Names for input ports in lower case and output ports in capitals.

Card Types

820A154	No SRC.
820-154	Issue 4 cards with Universal SRC (USRC) on up to two ports.
820-154 Iss 2	Issue 2 cards with Universal SRC (USRC) on up to two ports. (NB Issue 2 is shown explicitly if these are installed to indicate the reduced functionality of these cards.)
820-091	Synchronous SRC (SSRC). The number of ports on which this may be applied depends on the limit on SRC ports configured in Desk Designer

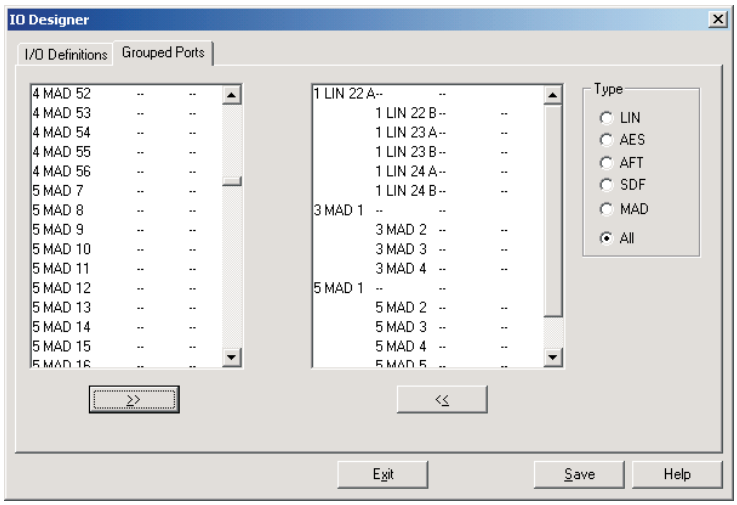
Multiple Outputs through Grouped Ports

Initially, the Grouped Ports page is a display page only.

To edit the porting assignments

➤ click on Edit I/O Designer, and enter the Administrators password.

This will open an almost identical screen on which changes can be made.



The Grouped Ports page shows the available ports in the left hand window and the grouped ports in the right window.

Ports can be grouped by selecting the ports to form the group in the left hand window and then transfering them into the right hand window using the button.

The Master port is taken to be the first port of the selection and up to 5 grouped ports can be associated with it. The first column shows the Master port and the second column shows the grouped ports. A path which is ported to the Master port will automatically be sent to the grouped ports as well.

The grouped ports will not appear in the list of available ports in IO Patch and cannot be selected as Outputs on the console.

Once you have set the I/O, click Save, and you will be prompted to reload a desk setup so Encore can apply these changes.

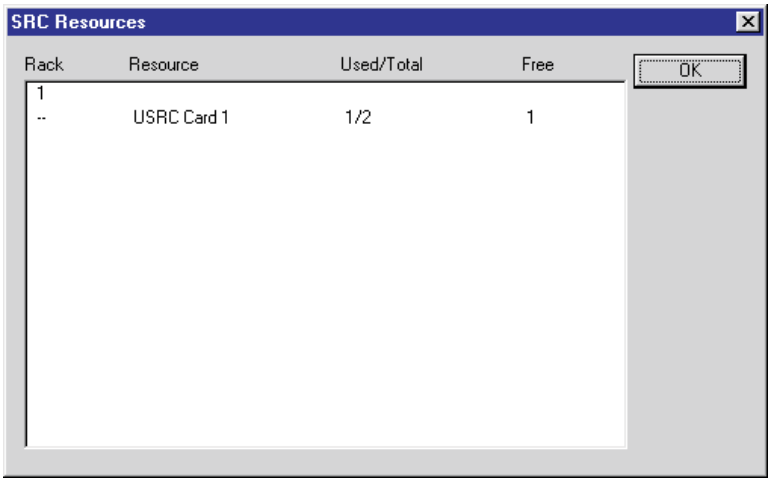
➤ Click Exit.

✍ *Grouping Ports is a console wide function which will affect the I/O for all Mix Setups.*

To check SRC Resources

➤ Click on the SRC Resources button.

The SRC Resources dialogue box will be displayed.



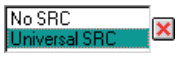
➤ Click the OK button to close the dialogue box

To set SRC Mode

Allows SRC to be enabled and disabled.

➤ Double click in the Mode column for the required AES port.

A small drop down list will appear with an X next to it.



The modes available depends on the card type:

820A154	No SRC
820-154	No SRC or USRC (Universal SRC)
820-091	No SRC or SSRC (Synchronous SRC)

➤ Double click on the required Mode.

or

➤ Click on the X to cancel the operation.

The new Mode will be displayed in the column.

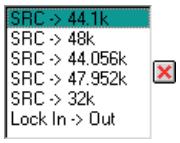
✍ *If the resources on a particular card have been used up then the system will prevent attempts to enable SRC on more ports.*

To set SRC State

Allows the type of SRC on a port to be selected.

➤ Double click in the State column for the required AES port which has been enabled.

A drop down list will appear with an X next to it with options according to the card and port type.



The options available depend on the card type:

820-154 Cards

These are Issue 4 cards. Input ports will have SRC On or Off according to the SRC Mode selected (i.e. the State is set automatically by Mode).

Input ports with SRC On will convert the incoming signal to match the console sample rate.

Output may be at sample rates of 44.1k, 48k, 44.056k, 47.952k, 32k or Lock In -> Out.

When Lock In -> Out is selected, the output rate is matched to the input rate on the matching input port (e.g. output port 1 AES 2 AB would lock to 1 aes 2 AB).

820-154 Issue 2 Cards

The functionality of the Issue 2 cards is the same as the Issue 4 cards except for the following limitations:

If the desk sample rate is set to 44.1 then no SRC conversion to 47.952.

If the desk sample rate is set to 44.056 then no SRC conversion to 32.

If the desk sample rate is set to 47.952 then no SRC conversion to 44.1 or 32.

820-091 Cards

Options for both Input and Output ports are:

Synchronous	The port is locked to the system sample rate.
Always 44100	Port locked to 44.1kHz regardless of system sample rate.
Always 48000	Port locked to 48kHz regardless of system sample rate.

Additional Input port options are:

Asynchronous	The incoming signal is buffered and truncated or interpolated with crossfade to compensate for sample rate discrepancies.
NTSC Pullup	Port locked to 44.056kHz if the system sample rate is 44.1kHz, or locked to 47.957kHz if the system sample rate is 48kHz.

➤ Double click on the required State.

or

➤ Click on the X to cancel the operation.

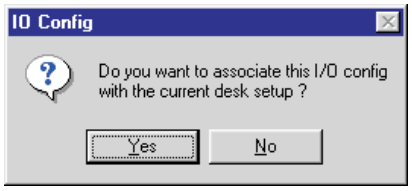
The new State will be displayed in the column.

Save changes to the I/O Configuration

To save the I/O Configuration and load it into the desk

➤ Click the Save & Load button.

If the I/O Configuration is not linked to the current Desk Setup then a prompt will be displayed asking if it should be associated with the current Desk Setup.



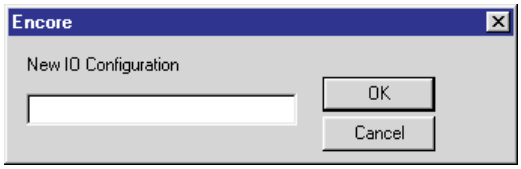
➤ Click Yes or No as required.

A timer will be displayed while the file is saved and the configuration is loaded into the desk.

To save the I/O Configuration to a new file

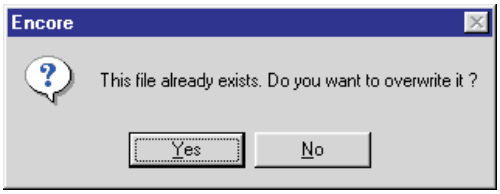
➤ Click the Save As button.

The Enter A Configuration Name dialogue box will be displayed. The names of existing I/O Configurations are shown in the list below the text box.



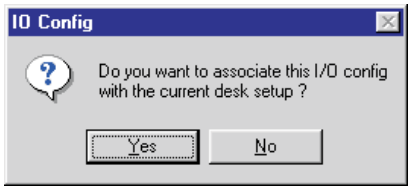
➤ Type a name in the text box and click OK.

If the file name is already used then an overwrite prompt will be displayed.



➤ Click Yes or No as required.

A prompt will be displayed asking if the I/O Configuration should be associated with the current Desk Setup.



➤ Click Yes or No as required.

A timer will be displayed while the file is saved and the configuration is loaded into the desk.

Exit from I/O Config

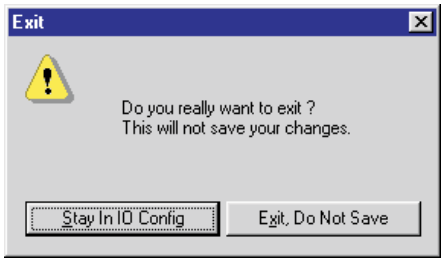
➤ Click the Exit button.

If all changes have been saved

I/O Config will close.

If there are un-saved changes

A warning dialogue box will be displayed.



➤ Click the Stay In IO Config or Exit, Do Not Save button as required.

If Exit, Do Not Save is selected then I/O Config will close. Any changes made since the last save will be lost.

This is useful if erroneous changes have been made that would be time consuming to undo (e.g. accidentally clearing delay on all inputs).

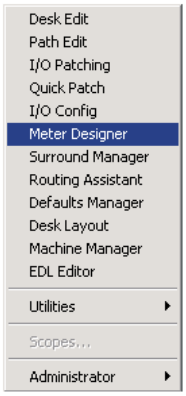
AES Config

The AES Config is only available on systems that contain AES 960 hardware.

AES configurations can be saved and linked to a desk setup so that they are loaded automatically when the desk setup is loaded, and allow the ability to change SRC and various other settings.

See separate documentation on AES960.

Meter Designer



The DFC Gemini has a fully assignable meter bridge which is configured from Meter Designer.

Meter Designer allows up to eight metering configurations (designs) to be available at any time.

Each set of designs is saved in a configuration file. The current meter design file is associated with the current Desk Setup when the Desk Setup is saved.

The Meter Designer Defaults for each path type are stored according to the current Encore user so that each user can have individual metering preferences.

To access Meter Designer

➤ Click on Tools in the Encore Menu Bar.

The drop down Tools Menu will appear.

➤ Click on Meter Designer.

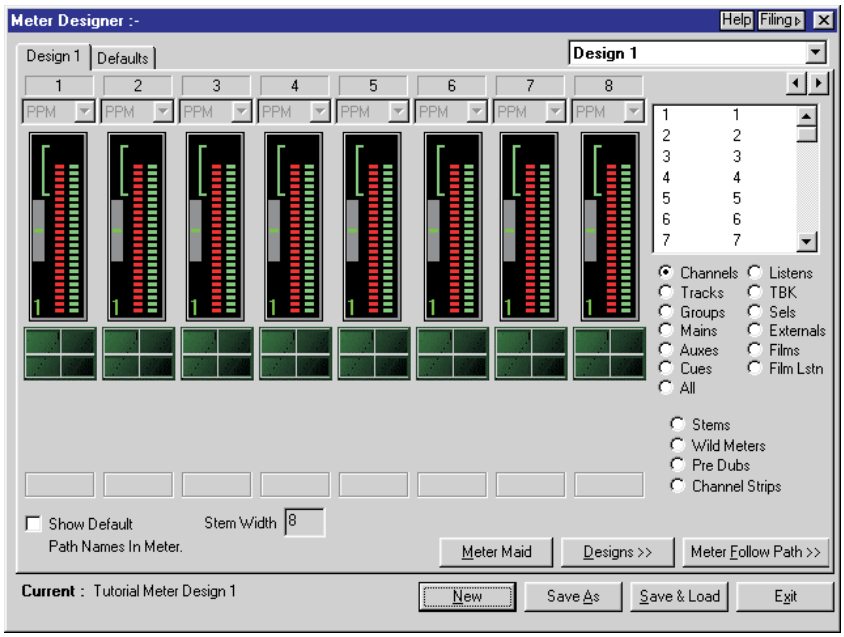
or

➤ Click on the Meter Designer icon.

or

➤ Edit or start a New Meter Design file in the Filing utility.

Meter Designer will start and display Design 1 from the selected Meter Design file.



To start a new design file

To start a new design file from scratch

➤ Click on Filing in the System Menu.

The Filing screen will be displayed.

➤ Click the System Filing tab.

The System Filing page will be displayed.

➤ Click on the Meter Design selection box.

The red highlight will move to the Meter Design selection box.

➤ Click the New button.

A dialogue box will appear for the new design file name.

➤ Type in an appropriate name and press Enter on the Encore keyboard.

The Meter Designer will run with a blank set of designs.

To make a new design file from an existing design

➤ Click on Filing in the System Menu.

The Filing screen will be displayed.

➤ Click the System Filing tab.

The System Filing page will be displayed.

➤ Click on the Meter Design selection box.

The red highlight will move to the Meter Design selection box.

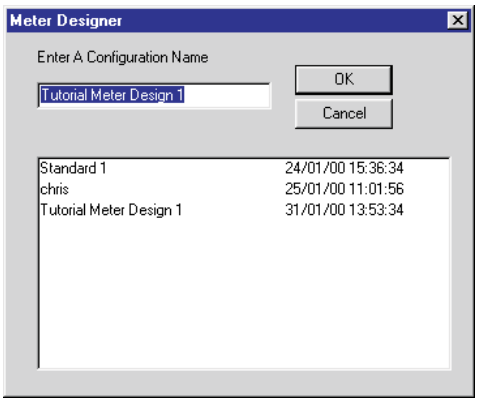
➤ Click the drop down arrow and select the Meter Design file to use as a starting point.

➤ Click the Edit button.

The Meter Designer will run and load the selected design.

➤ Click the Save As button.

A dialogue box will be displayed for entering the new design file name.



➤ Type a new name and click OK.

Modify the meter designs as required.

✍ *Alternatively, Copy the file in the Filing utility and then Edit the new file.*

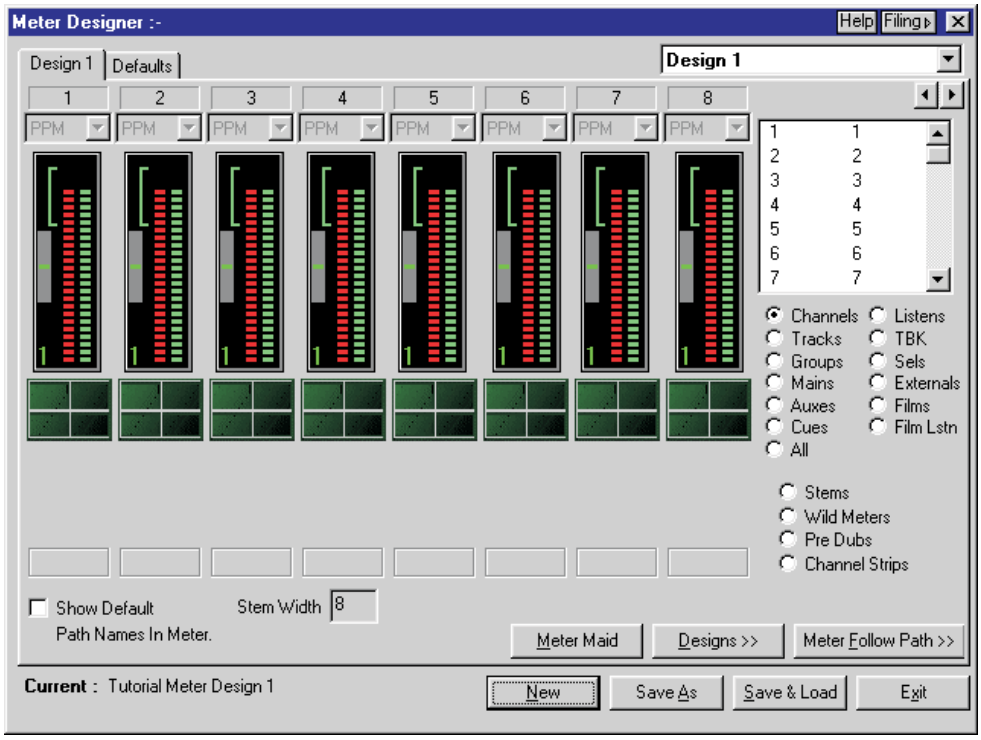
To setup a meter design

➤ Click on the drop down arrow at the end of the Design number box.

A list will drop down, showing the eight Meter Designs.

➤ Click the required Meter Design number.

The design page will display the selected design number.



To display the required meter number

➤ Click on the meter scrolling arrows.



or

➤ Press the Access key on the console surface

or

➤ Press the PgUp and PgDn keys on the Encore keyboard to jump eight meters at a time.

or

➤ Press the arrow keys on the Encore keyboard to scroll the meters.

or

➤ Press the Home and End keys on the Encore keyboard to jump to the first and last meters.

or

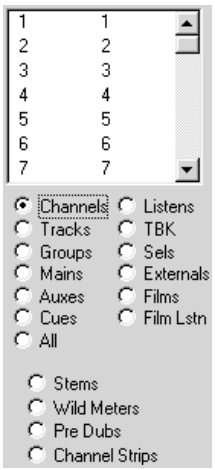
➤ Type the required meter number on the Encore keyboard.

There is a small timeout when this is done, so to jump to meter 15 press the 1 and 5 keys in quick succession. The display will go to meter 1 then meter 5 if a long gap is left between pressing the keys.

✍ *Meters are numbered sequentially from left to right across the whole console. Gaps in the meters (i.e. quadstrips with no meters) are ignored by Meter Designer.*

To select the path type or meter group to place

➤ Click on the radio button for the required path type or meter group.



The list box will show the selected paths or meter groups.

If split console mode is in operation then there will be one set of Wild Meters and PreDubs available for each console partition. The names reflect the console partition the meters are applicable to (i.e. Wild 1 represents the Wild Meters in partition 1, etc.).

If Stems is selected then Stems A to F will be listed, plus an option for Film which represents the Film monitor outputs.

➤ Use the scroll bar to view additional paths in the list.

To place a path or meter group

➤ Click and hold on the required item in the list.

The pointer will change to indicate drag and drop mode.

➤ Move the pointer onto the required meter.

➤ Release the trackball button.

The path or meter group name will appear in the box underneath the meter. The default meter type for the item will appear at the top of the meter. Other options will appear below the meter.

If a group item was selected then the requisite number of meters will be allocated (4 for Wild Meters, 8 for Stems or PreDubs).

✍ *Wild Meters will automatically snap to use the whole of the quadstrip they are dropped onto.*

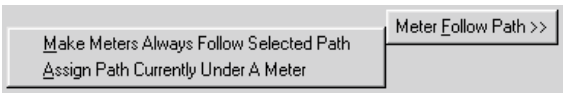
✍ *Stem and PreDub meter groups will automatically snap to the set of eight meters they are dropped onto (i.e. they will snap to meters 9 to 16 when dropped onto meter 15).*

If a meter was already allocated then a dialogue box will appear to confirm re-assignment of the meter.

To automatically assign paths on a layer

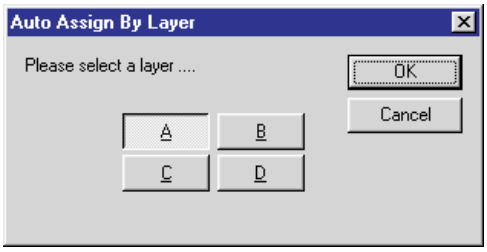
➤ Click the Meter Follow Path button.

A flyout menu with follow options will appear.



➤ Click the Assign Paths Currently Under A Meter option.

The Auto Assign By Layer dialogue box will be displayed.



➤ Click A, B, C or D for the required layer.

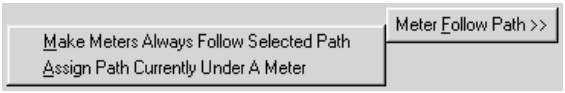
➤ Click OK.

The paths assigned to the selected layer will be assigned to the corresponding meters.

To automatically set meters to follow layer selection

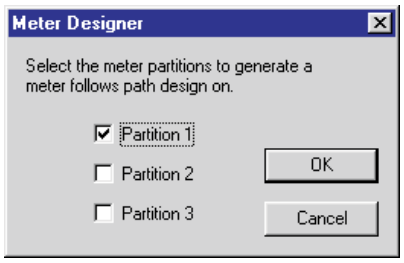
➤ Click the Meter Follow Path button.

A flyout menu with follow options will appear.



➤ Click the Make Meters Always Follow Selected Path option.

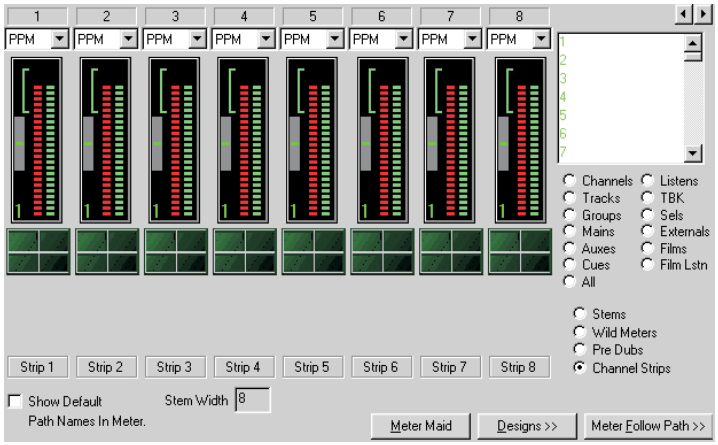
A dialogue box will be displayed for selecting which partition of meters should be set to follow layer selection.



➤ Click the required radio button.

➤ Click OK.

The selected meters will be set to Strip.



To copy a design

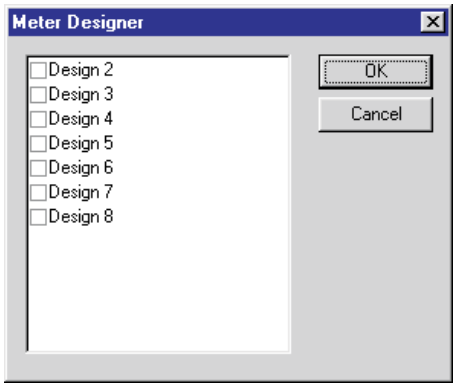
➤ Click the Designs button.

A flyout menu with design options will appear.



➤ Click the Copy Current Design To Another option.

A dialogue box will be displayed for selecting which designs to copy to.



➤ Click the check boxes for the required designs.

➤ Click OK.

When the design is complete

➤ Click the Save+Load button.

A dialogue box will appear to confirm saving the design with the current file name.

➤ Click OK.

or

➤ Enter a new file name and then click OK.

The meter designs will be loaded into the console and the current design page will be assigned to the meters.

✍ *This is a way of doing a 'save as' for a meter design based on an existing design.*

When the meter design has been saved, selecting a design page will also assign the design on that page to the meters on the bridge. If further changes are made to the design then the changes will not be made live until another Save+Load is executed.

To change individual meter options

To display the required meter number

➤ Click on the meter scrolling arrows.

or

➤ Press the PgUp and PgDn keys on the Encore keyboard to jump eight meters at a time.

or

➤ Press the arrow keys on the Encore keyboard to scroll the meters.

or

➤ Press the Home and End keys on the Encore keyboard to jump to the first and last meters.

or

➤ Type the required meter number on the Encore keyboard.

There is a small timeout when this is done, so to jump to meter 15 press the 1 and 5 keys in quick succession. The display will go to meter 1 then meter 5 if a long gap is left between pressing the keys.

✍ *Meters are numbered sequentially from left to right across the whole console. Gaps in the meters (i.e. quadstrips with no meters) are ignored by Meter Designer.*

To change the meter type

➤ Click on the drop down arrow next to the meter type box above the required meter.

The list of meter types will appear.

➤ Click on the required meter type.

✍ *If the meter type for a meter in a group (Wild Meters, Stem, PreDub) is changed then all the meters in that group will change simultaneously.*

There are no other options for Wild or PreDub meters.

To change the meter point for path meters

➤ Click on the drop down arrow next to the box below the meter.

The list of meter points will appear.

➤ Click on the required meter point.

Stem Meters

Stem meters have additional options to select which controls to follow, which partition the controls are on that are followed and which Stem is metered by default. All eight meters will change together.

To select which controls are followed by Stem meters

➤ Click on the drop down arrow next to the Follow box.

The Follow list will appear.

The options are PEC and PEC2 to follow the Stem selection keys A to F on the first or second PEC/Direct Panel in the partition, Surround to follow the selections on the Meter section of the Surround Monitoring Panel and Fixed to always monitor a selected Stem or the Film outputs.

➤ Click on the required Follow option.

To select which partition the meters follow

➤ Click on the drop down arrow next to the partition number box.

The partition list will appear.

➤ Click on the required partition.

✍ *This is not selectable if the Follow option is Fixed.*

The meters will now follow the metering on the selected partition. (E.g. If Follow PEC and Part.2 are selected then the meters will follow the Stem selection keys A to F on the PEC/Direct Panel on the second partition.)

To select which Stem to meter

➤ Click on the drop down arrow next to the Stem box.

The Stem list will appear.

➤ Click on the required Stem (A to F) or Film (for Film monitor outputs).

✍ *This is only selectable if the Follow option is Fixed.*

To clear (de-assign) meters

To clear one meter

➤ Right click on the required meter.

A flyout menu will appear with Clear Meter and Clear Path options.

➤ Click on Clear Meter.

The item assigned to the meter will be removed. If a group item is clicked (Wild Meters, Stems or PreDubs) then all meters used for the group will be cleared.

To clear a path from the meters it appears on

➤ Right click on the meter containing the required path.

A flyout menu will appear with Clear Meter and Clear Path options.

➤ Click on Clear Path.

The path will be removed from any meters it is assigned to in the current design.

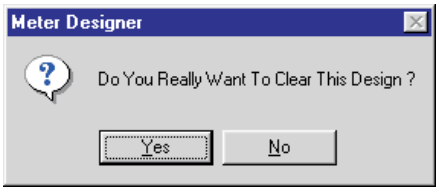
To clear the current design page

➤ Click the Designs button.

A flyout menu with design options will appear.



➤ Click the Clear Current Design option.



➤ Click Yes.

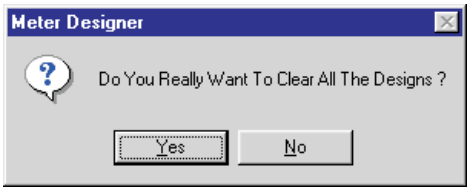
To clear the designs from all pages

➤ Click the Designs button.

A flyout menu with design options will appear.

➤ Click the Clear All Designs option.

A confirmation dialogue box will appear.



➤ Click Yes.

All eight meter designs in the current file will be cleared.

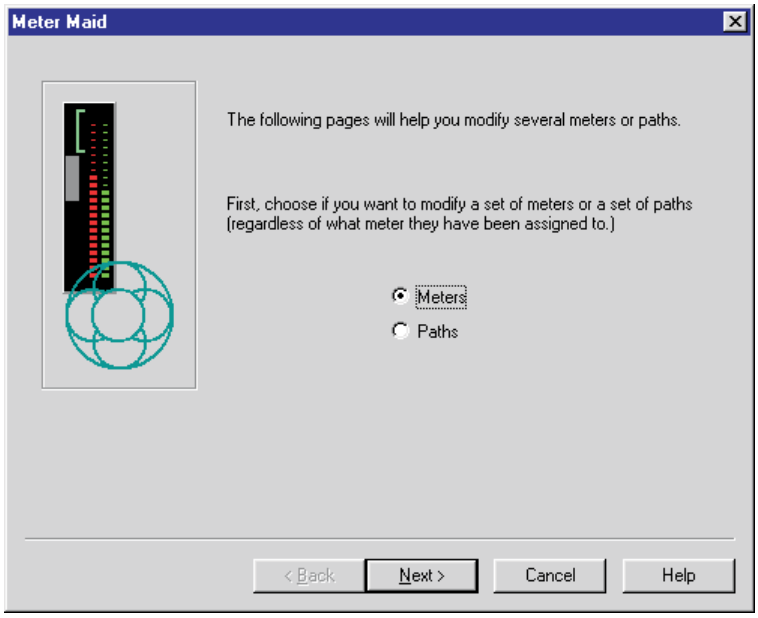
Meter Maid

Meter Maid is used for rapid modification of existing meter designs. It allows the meter type and metering pick-off point to be changed for selected meters or paths. It also provides an alternative method of clearing a selection meters or paths from the meters they appear on.

To use Meter Maid

➤ Click on the Meter Maid button on any meter design page.

The first page of Meter Maid will appear.



➤ Click the Path or Meter radio button.

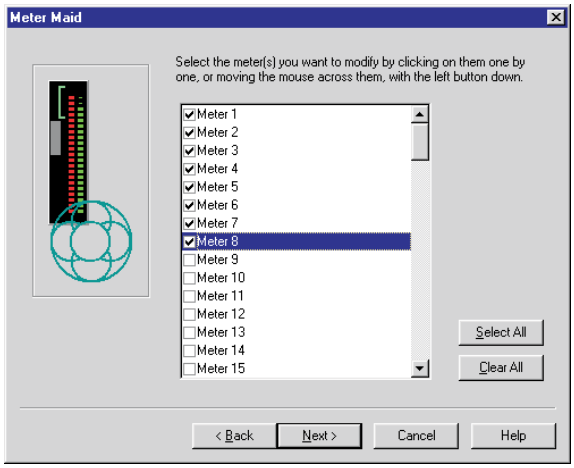
Path means the modifications will be made according to selected paths.

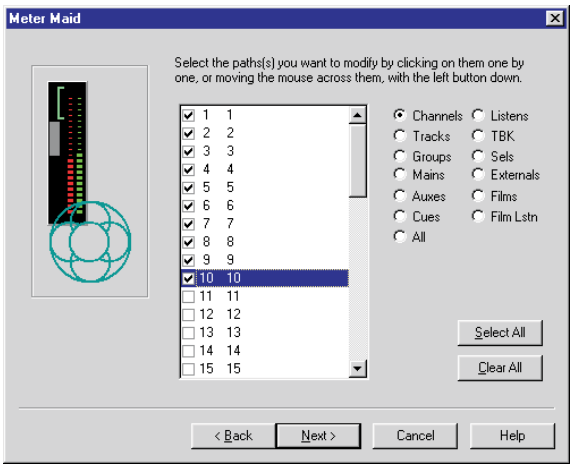
Meter means the modifications will be made according to selected meter numbers.

✍ *Meters are numbered sequentially from left to right across the whole console. Gaps in the meters (i.e. quadstrips with no meters) are ignored by Meter Designer.*

➤ Click the Next > button.

The second page of Meter Maid will appear with a list of Paths or Meters displayed according to the selection on the first page.





➤ Click on the items which require changing.

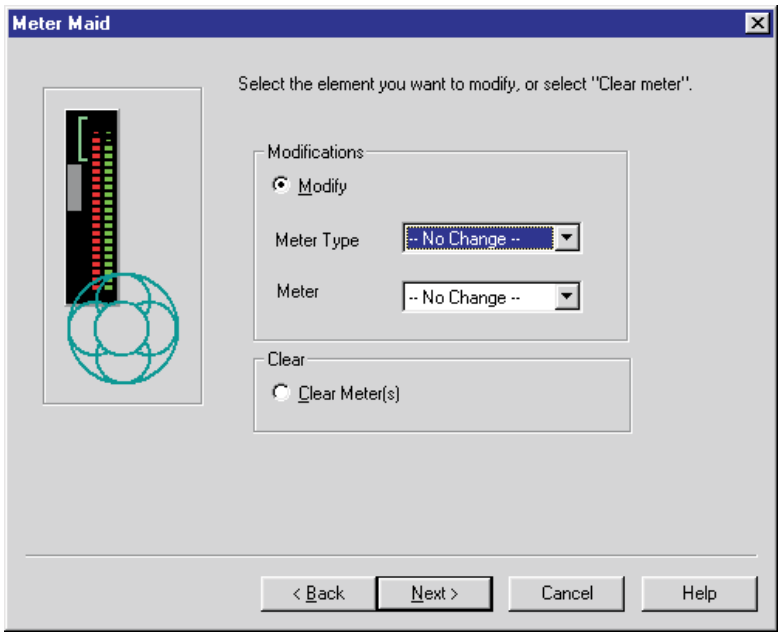
or

➤ Click and hold on the first required item and drag down the list.

Each time an item is selected its check box will be toggled between checked and unchecked.

➤ Click the Next > button.

The third page of Meter Maid will appear for selection of the change to take place. The Meter Type and Meter pick-off point can be changed or meters can be cleared.



➤ Click on the Modify or Clear Meter(s) radio button.

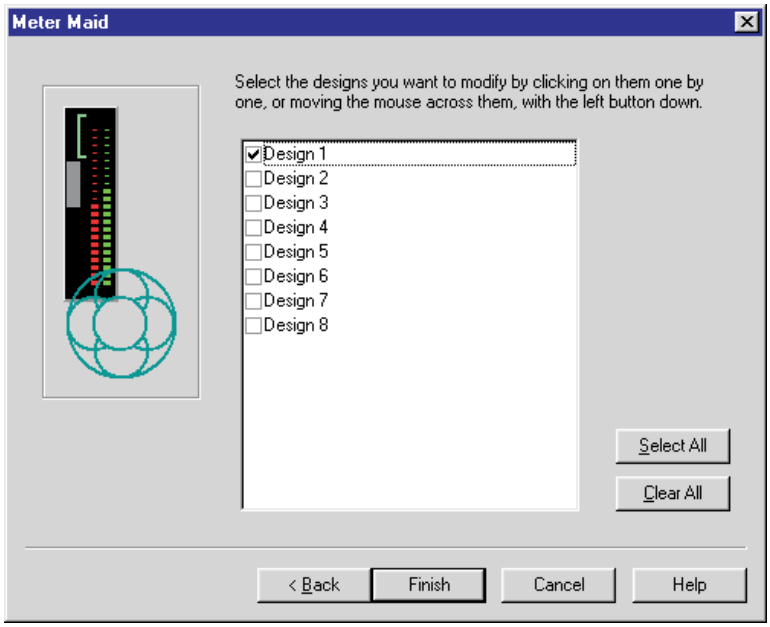
If Modify is selected

➤ Change the Meter Type and/or Meter point by clicking on the respective drop-down arrow and selecting the required option from the drop down lists.

At least one of the options must be changed.

➤ Click the Next > button.

The last page of Meter Maid will appear for selection of the designs to modify.



The design that Meter Maid was launched from will be ticked by default.

➤ Click on the designs which require modification.

➤ Click the Finish button.

Meter Maid will close and the modifications will be made.

✍ *If the Next > or Finish buttons are clicked with nothing selected then a dialogue box will appear to inform the user that something must be selected. Meter Maid will stay on the same page when the dialogue box is closed.*

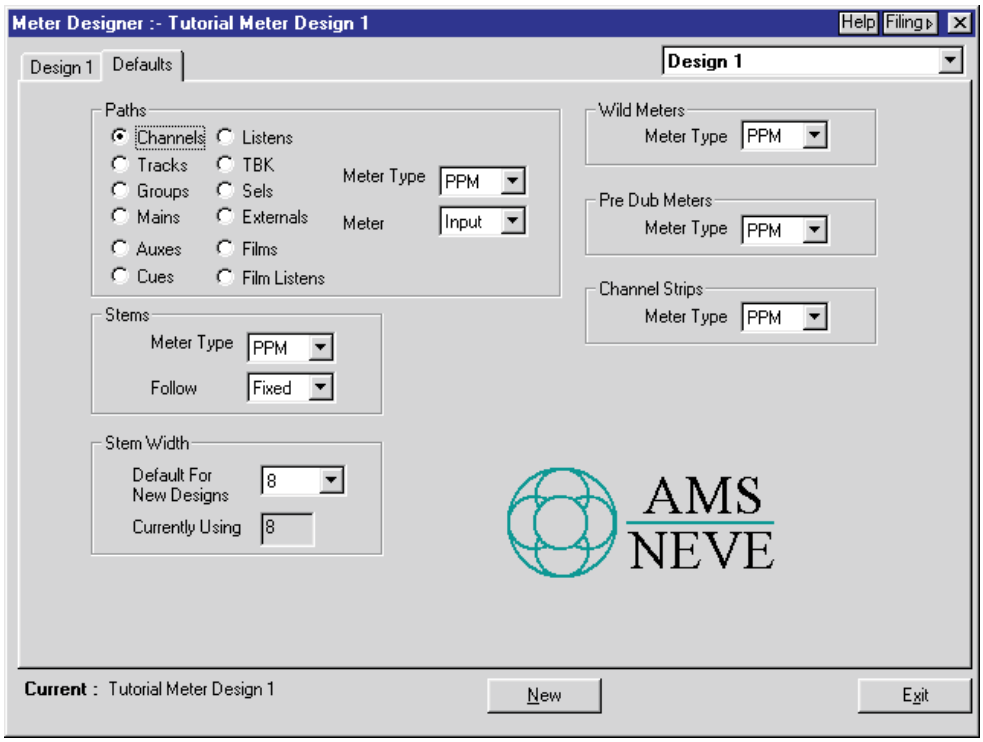
To abandon the operation at any time

➤ Click the Cancel button on any Meter Maid page.

To set Meter Designer Defaults

➤ Click on the Defaults tab.

The Defaults page will appear.



The Defaults page allows the default metering type to be set for all path types and meter groups.

It also allows the default metering pick off point to be selected for each path type and the default following mode for stem metering groups.

The Meter Designer Defaults are stored according to the current Encore user so that each user can have their own metering preferences.

To set metering defaults for a path type

➤ Click on the radio button for the required path type.

➤ Click on the drop down arrow next to the Meter Type box.

The Meter Type list will appear.

➤ Click on the required meter type.

➤ Click on the drop down arrow next to the Meter box.

The Meter pick off point list will appear.

➤ Click on the required pick off point.

To set metering defaults for Stems

➤ Click on the drop down arrow next to the Meter Type box.

The Meter Type list will appear.

➤ Click on the required meter type.

➤ Click on the drop down arrow next to the Follow box.

The Follow list will appear.

The options are PEC and PEC2 to follow the Stem selection keys A to F on the first or second PEC/Direct Panel in the partition, Surround to follow the selections on the Meter section of the Surround Monitoring Panel and Fixed to always monitor a selected stem or the film outputs.

➤ Click on the required Follow option.

➤ Click the drop down arrow for Stem Width.

The options are 2, 4, 6, 7 or 8, corresponding to the number of Film paths that can be selected in Desk Edit (2 for Stereo, 4 for LCRS, 6 for 5.1, 7 for 6.1 and 8 for 7.1).

➤ Click the required number of meters.

To set the default meter type for Wild Meters and PreDubs

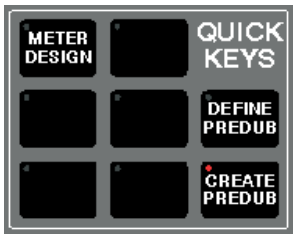
➤ Click on the drop down arrow next to the respective Meter Type box.

The Meter Type list will appear.

➤ Click on the required meter type.

To use meter designs from the console surface

➤ Press and hold the METER DESIGN key in the Quick Keys section.



The 1 to 8 keys on the Lower Routing Panel can now be used to select the required design number.

The long alpha will display Select Meter Design.

The LED in the number key corresponding to the current design on the meters will illuminate red and the remaining LEDS in the 1 to 8 keys will illuminate green.

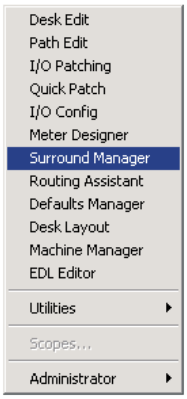
➤ Press the required number key.

The selected design number will be displayed on the meters.

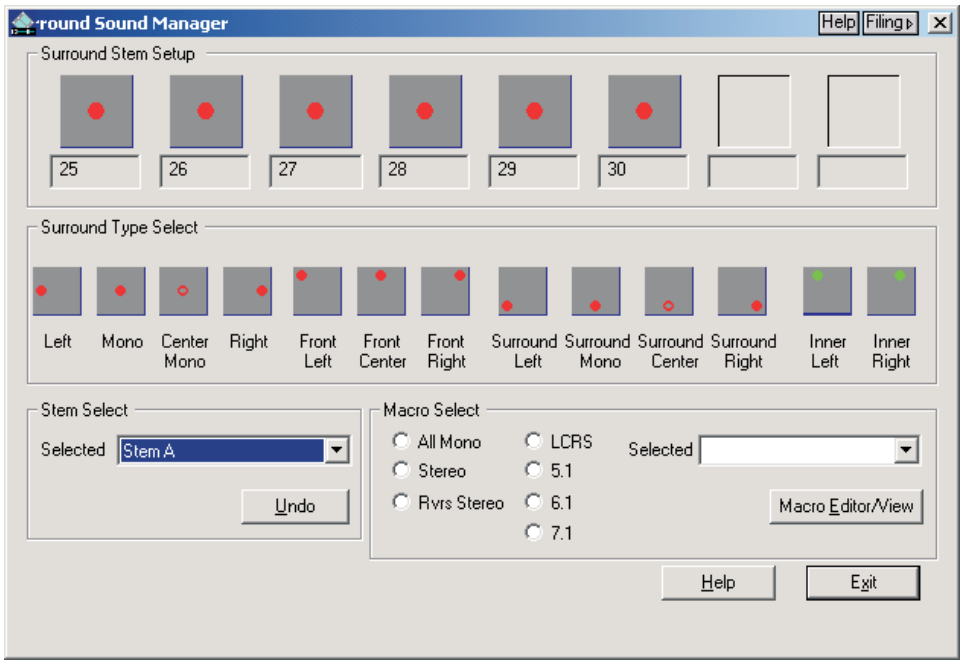
➤ Release the METER DESIGN key.

✍ *Meter Designs cannot be selected while automation is running (i.e. timecode is running).*

Surround Manager



The Surround Macros option displays the Surround Sound Manager screen. It is used to apply surround stem setups live on the console surface.



User defined macros can also be changed and edited.

To select the stem to work with

➤ Click on the drop down arrow next to the Selected stem in the Stem Select Box.

A list of stems A to F will be shown.

➤ Click on the required stem.

The paths (Tracks or Groups) that the stem is composed of will be shown in the Surround Stem Setup box. The current pan designator for each path is shown above it.

To use a predefined Macro

➤ Click on the All Mono, Stereo, Rvrs Stereo, LCRS, 5.1 or 7.1 radio button in the Macro Select box.

The speaker indicators above the path names will change to show the new designations. The change to speaker routing on the console is immediate.

To use a custom Macro

➤ Click on the drop down arrow next to the Selected box in the Macro Select box.

A list of currently defined custom macros will be shown.

➤ Click on the required item in the list.

The name of the macro will be shown in the Selected box. The speaker indicators above the path names will change to show the new designations. The change to speaker routing on the console is immediate.

To define a custom Macro

➤ Click the Macro Editor/View button.

This is described in the following pages.

To change speaker designations on-the-fly

➤ Click and hold on a speaker position icon in the Surround Type Select box.

The pointer will "pick up" a copy of the speaker icon.

➤ Drag the icon to the existing speaker designation icon above the required path in the Surround Stem Setup box.

➤ Release the trackball button.

The new speaker designation icon will be shown above the path name. The change to speaker routing on the console is immediate.

✍ *Certain speaker designations can only be used once in an individual stem (e.g. inner front right). If the speaker designation is already used, then assigning it to a different path will automatically cause the path that was previously using it to be designated as Mono.*

To reverse changes to a stem

➤ Click the Undo button in the Stem Select Box.

The stem will revert to the speaker designations it had when Surround Sound Manager was started.

To close Surround Sound Manager

➤ Click the Exit button.

Edit and View Surround Macros

Surround Sound Manager can be used to define custom surround monitoring formats.

To access the Surround Macro Editor/Viewer from Desk Edit

➤ Click the Pan Macros button on the Tracks or Groups page.

The Pan Designators Macros dialogue box will appear.

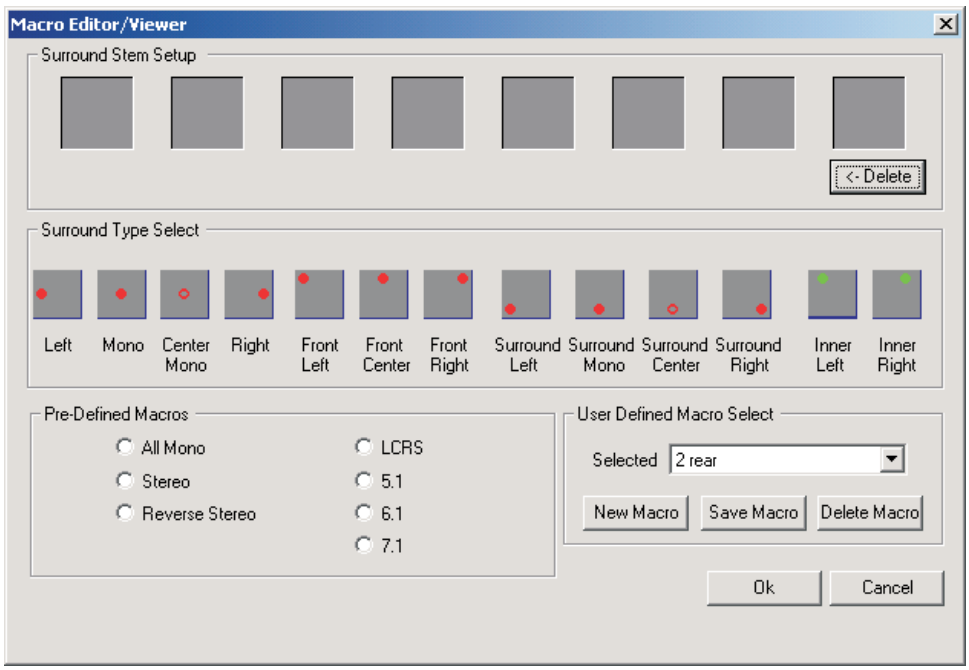
➤ Click the View/Edit Macro button.

The Macro Editor/Viewer will be displayed.

To access the Surround Macro Editor/Viewer from Surround Sound Manager

➤ Click the Macro Editor/View button.

The Macro Editor/Viewer will be displayed.



To create a new macro

➤ Click the New Macro button.

The name in the Selected box will be cleared and the Surround Stem Setup boxes will be blanked.

➤ Click and hold on a speaker position icon in the Surround Type Select area.

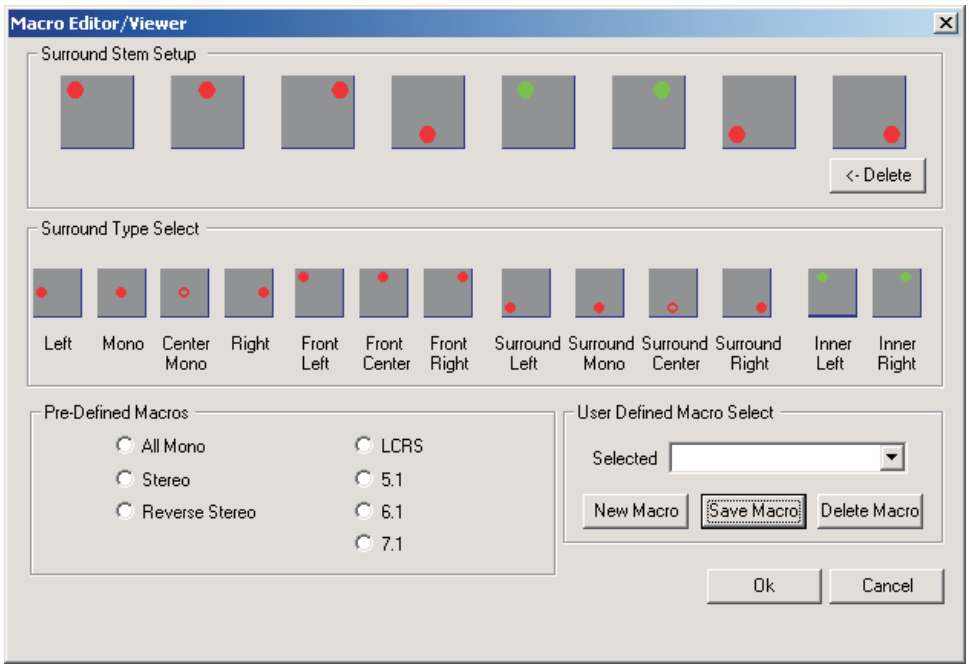
The pointer will "pick up" a copy of the speaker icon.

➤ Drag the symbol to the first empty Stem Setup box and release the trackball button.

The icon will be dropped in the box.

➤ Continue to place the required speaker types in the Stem Setup boxes, working from left to right.

The icons will be shown in the sequence they are placed, as in the example user macro shown here.

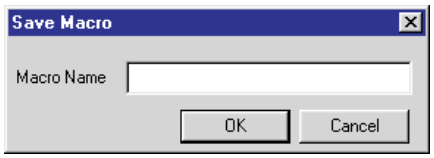


If an icon is dropped in an empty box when there are still empty spaces to the left, then a warning dialogue will appear to indicate that the macro items must be consecutive.

➤ Click the <-Delete button in the Stem Setup area to remove the most recently placed icon if an error is made.

➤ Click the Save Macro button when the custom macro is complete.

The Save Macro dialogue box will appear.



➤ Type a name for the macro and press Enter or click OK.

The macro will be saved and the name will be displayed in the Selected box.

➤ Click OK.

The Macro will be selected automatically in the Pan Designators Macros dialogue box.

To edit an existing macro

➤ Click the drop down arrow next to the Selected macro box.

A list of available macros will be shown.

➤ Click the required macro name.

The name will be shown in the Selected box and the speaker icons that form the macro will be shown in the Surround Stem Setup.

➤ Click the <-Delete button to remove icons from the Stem Setup.

➤ Drag and drop the replacement speaker position icons as required.

➤ Click the Save Macro button.

The Save Macro dialogue box will appear with the name of the macro in the Macro Name box.

➤ Click OK to save changes to that macro.

or

➤ Change the name and press Enter or click OK to save the changed macro with a new name.

To delete a macro

➤ Click the drop down arrow next to the Selected macro box.

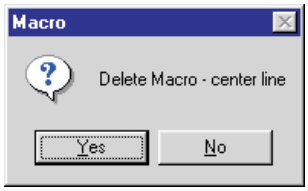
A list of available macros will be shown.

➤ Click the required macro name.

The name will be shown in the Selected box and the speaker icons that form the macro will be shown in the Surround Stem Setup.

➤ Click the Delete Macro button.

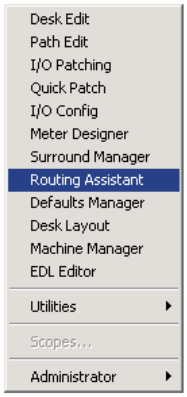
A confirmation dialogue box will be displayed.



➤ Click OK.

The Macro Name and the Stem Setup will be cleared.

Routing Assistant



Routing Assistant displays an overview of selected routing in a matrix style. Any changes made to routing are shown immediately in Routing Assistant.

If Routing Assistant is used Offline, then routing changes are saved in the Desk Setup and will be effected on the console when the Desk Setup is restored to Online Encore and then Loaded.

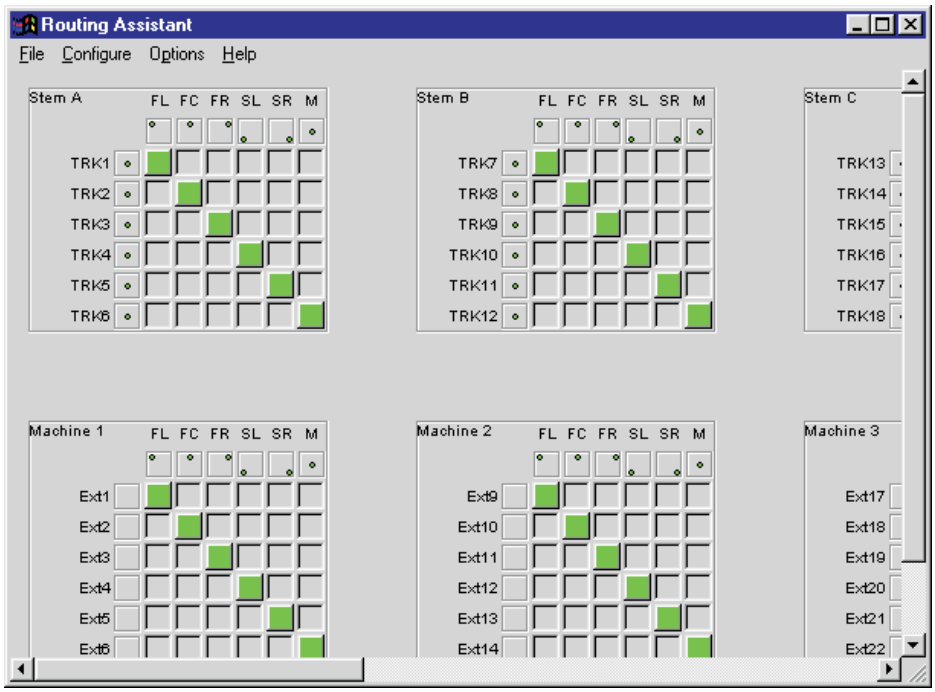
To start Routing Assistant

➤ Click on Routing Assistant in the drop down Tools menu.

The Routing Assistant screen will be displayed. The first time Routing Assistant is used, the screen will be blank.



After this, Routing Assistant displays the same routing blocks that were displayed last time it was closed.



To close Routing Assistant

➤ Click File in the Menu bar.

The drop down File Menu will be displayed.



➤ Click Exit.

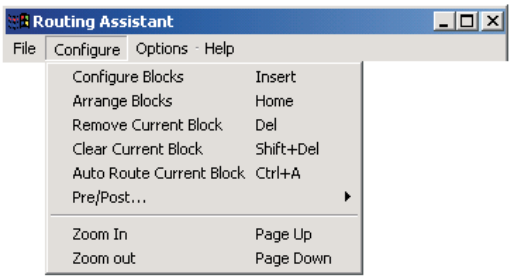
Routing Assistant will close.

Configure the Routing Shown

To display the Configure Routing Matrices dialogue box

➤ Click Configure in the Menu bar.

The drop down Configure menu will be displayed.

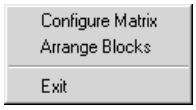


➤ Click Configure Blocks.

or

➤ Right click anywhere in the routing display area.

A popup menu will be displayed.



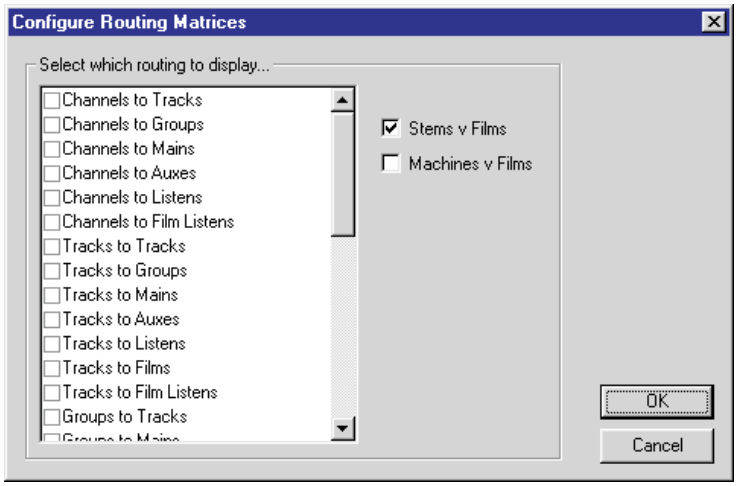
A larger popup menu will be displayed if a routing block is right clicked.



➤ Click Configure Matrix.

In both cases

The Configure Routing Matrices dialogue box will be displayed.



The dialogue box has two fixed check boxes for Stem to Film and Machine to Film routing. The remaining selections are in a 'soft list', the contents of which will change according to the path types available in the current Desk Setup.

To select which routing blocks are displayed

➤ Click in the check boxes for the required path combinations.

Items that are ticked (checked) will have routing displayed.

When the selection is complete

➤ Click OK.

The Configure Routing Matrices dialogue box will close and the contents of the Routing Assistant window will be re-displayed according to the new selection.

This may not be immediately apparent, as new additions are added to the bottom of items displayed. Use the scroll bars to view items that are off the edge of the display area.

Change the View of Routing

Arranging Routing Blocks

To move a block

➤ Move the pointer over the required block until the pointer changes to a move pointer.



➤ Click and hold.

➤ Move the pointer.

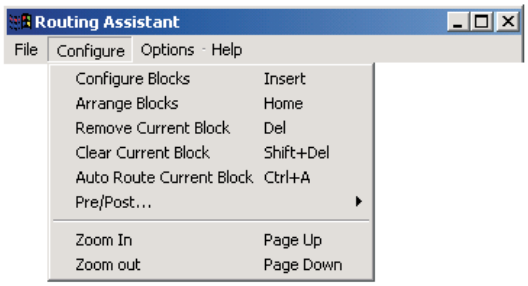
The block will move with the pointer.

➤ When the block is in the required position, release the trackball button.

To automatically arrange all blocks

➤ Click Configure in the Menu bar.

The drop down Configure menu will be displayed.

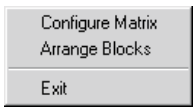


➤ Click Arrange Blocks.

or

➤ Right click anywhere in the routing display area.

A popup menu will be displayed.



A larger popup menu will be displayed if a routing block is right clicked.



➤ Click Arrange Blocks.

In both cases

The routing blocks will be arranged in an orderly sequence.

Pre/Post Routing

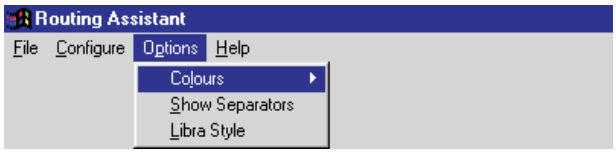
All the routes in a block can be made globally Pre-fade or Post-fade with this option.

The Toggle option will switch the state of every route to be the opposite of it's current state.

To use the separators

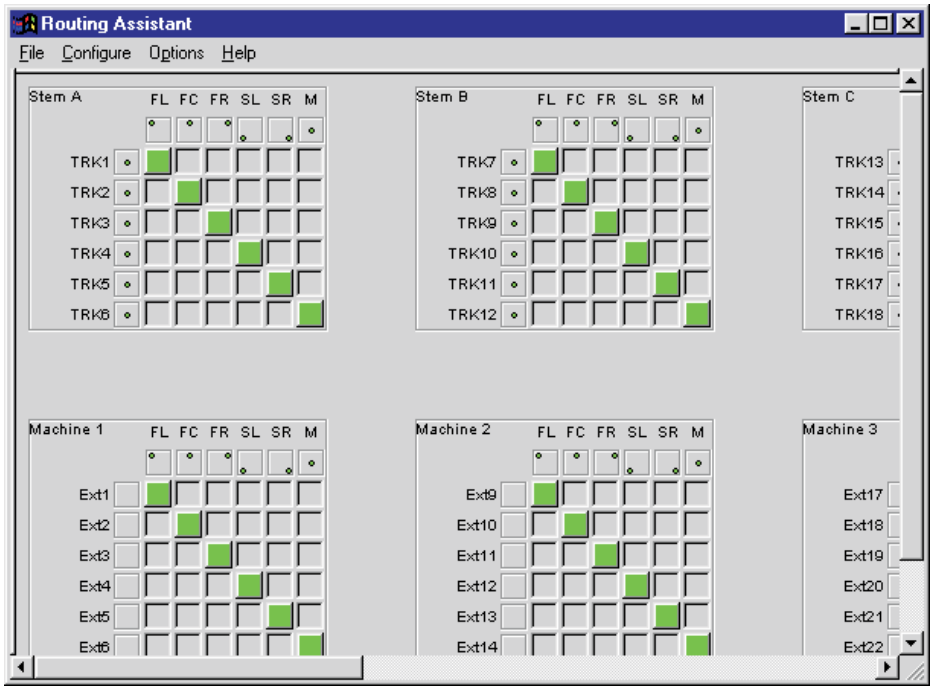
➤ Click Options in the menu bar

The drop down Options menu will be displayed.



➤ Click Show Separators.

Two separator bars will be displayed at the top and left hand sides of the routing display area. These are the separators.



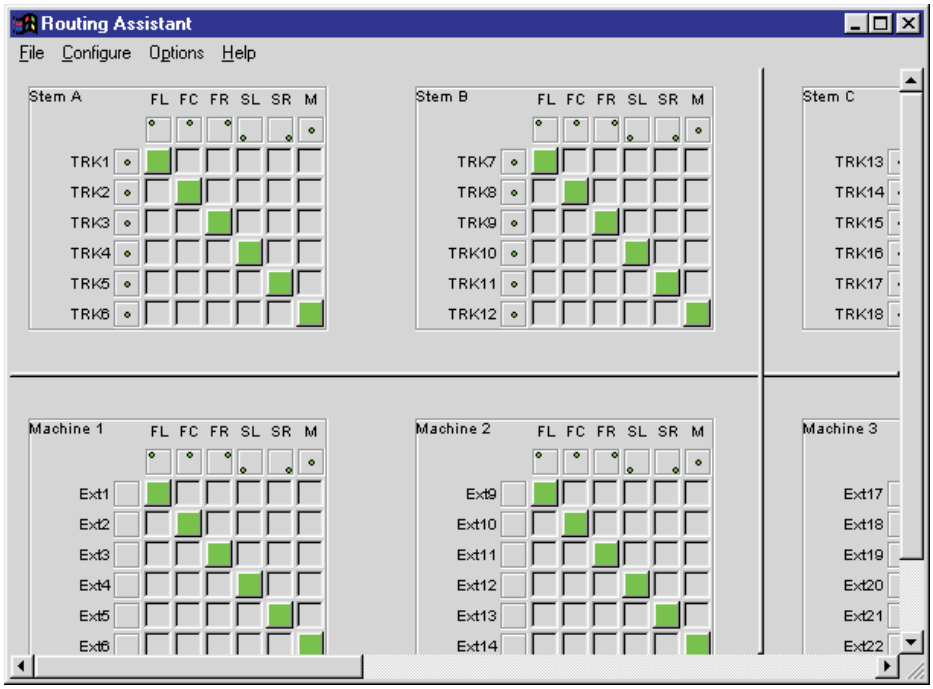
They are useful as guidelines or for visually dividing up the screen. The separators have no functional properties.

➤ Move the pointer over one of the bars.

The pointer will change to a left-right arrow for the vertical separator or an up-down arrow for the horizontal separator.

➤ Click and hold on the separator.

➤ Drag the separator to the required position.



➤ Release the trackball button.

If the separators are turned off, their positions will be retained for the next time they are turned on.

To remove a block

➤ Right click on the required block.

A popup menu will be displayed.



➤ Click Remove Block.

or

➤ Click on the required block.

➤ Click Configure in the menu bar.

The drop down Configure menu will be displayed.

➤ Click Remove Current Block.

In both cases

The selected block will be removed from the screen. This is useful for removing individual Stem to Film or Machine to Film blocks (they are added or removed as a group by the Configure Routing Matrices dialogue box).

Routing Assistant Zoom Level

To zoom in and out

➤ Press the + or - key or the Page Up & Page Down key on the keyboard.

The + key or Page Up key zooms in (makes the blocks bigger).

The - key or Page Down key zooms out (makes the blocks smaller).

The + or - key can be held down to zoom rapidly.

Alternatively, there are Zoom In and Zoom Out options on the Configure menu.

Routing Assistant Colours

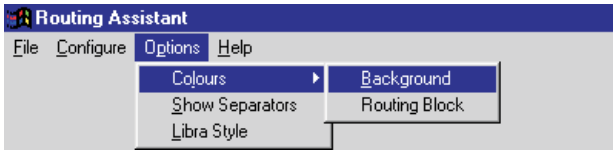
To change the colour of the blocks

➤ Click Options in the menu bar

The drop down Options menu will be displayed.

➤ Click Colours.

The Colours sub-menu will be displayed.



➤ Click Routing Blocks.

A colour dialogue box will be displayed.



➤ Select the required colour.

Additional colours from the full palette are available via the Define Custom Colours>> button.

➤ Click OK.

The blocks will change to the selected colour.

To change the background colour

➤ Click Options in the menu bar

The drop down Options menu will be displayed.

➤ Click Colours.

The Colours sub-menu will be displayed.

➤ Click Background.

A colour dialogue box will be displayed.

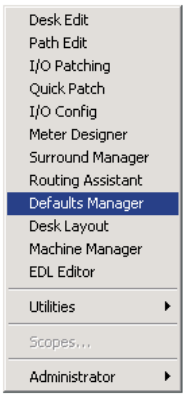
➤ Select the required colour.

Additional colours from the full palette are available via the Define Custom Colours>> button.

➤ Click OK.

The background will change to the selected colour.

Defaults Manager



Defaults Manager is used to set the default values for all controls that can be automated (e.g. the default frequency for the first band of EQ). Different sets of defaults can be created, saved and loaded as required. The current set of defaults is associated with the current desk setup (console configuration).

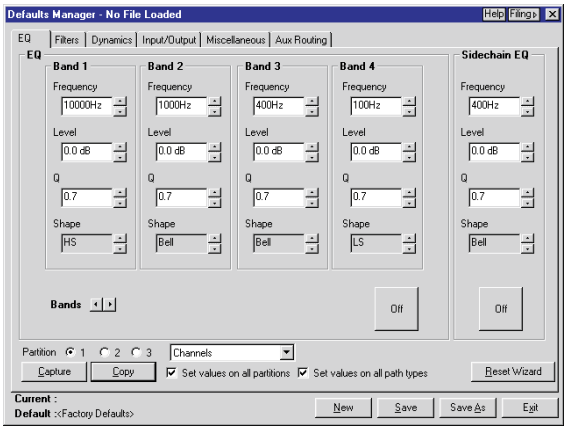
Defaults are set independently for each console partition.

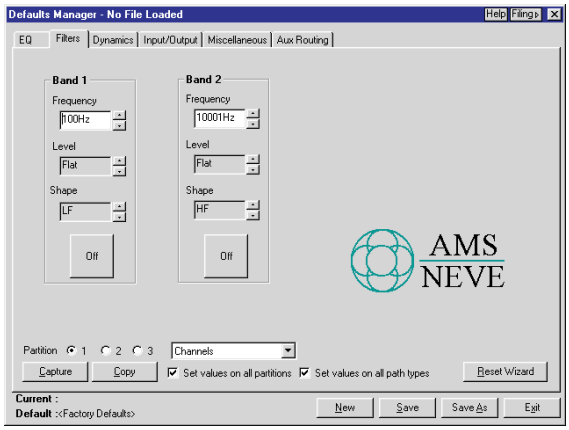
Defaults Manager is accessed from the Tools Menu, by clicking on the Defaults Manager icon or from the Filing screen.

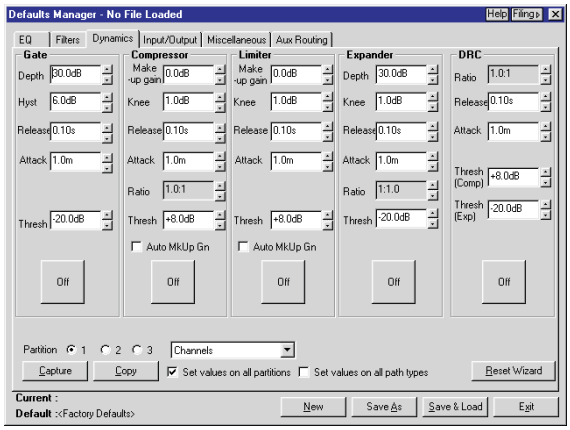
Setting Values in Defaults Manager

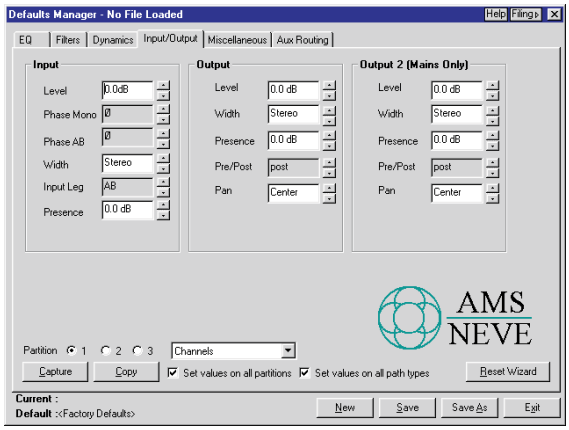
To set default values

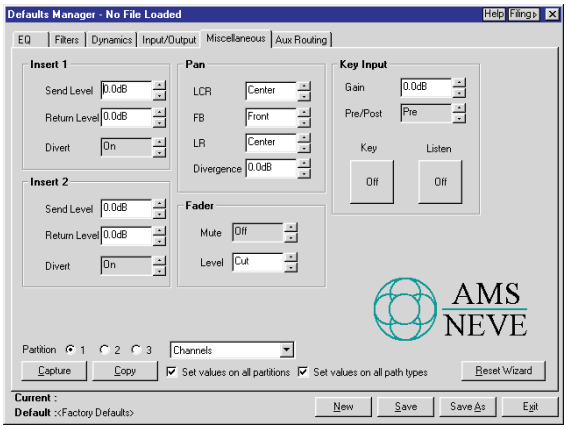
Click on the EQ, Filter, Dynamics, Input/Output, Miscellaneous or Aux Routing tab. The selected page will be displayed.

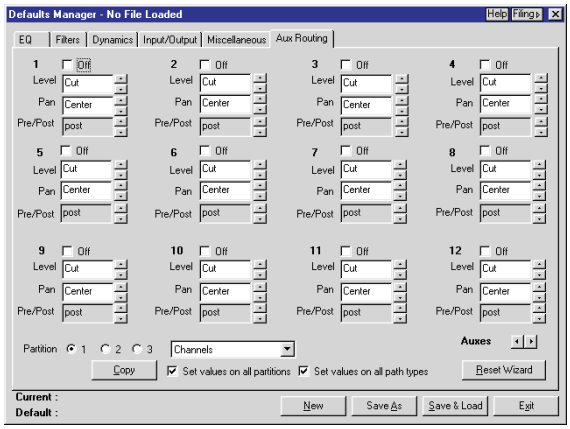












➤ Click the up/down buttons at the end of a box containing a required parameter.

or

➤ Click in the box showing the value and edit it using the Encore keyboard.

To set a processing element to be switched on as soon as it is allocated

➤ Click OFF button for the required element.

The legend on the button will change from OFF to ON.

To select which bands of EQ are visible

➤ Click the left/right Bands buttons on the EQ page.

The bands of EQ shown will change accordingly.

✍ *The system default values for bands 5 to 8 are the same as for bands 1 to 4 (i.e. band 5 defaults are the same as band 1 defaults).*

To view additional Auxes

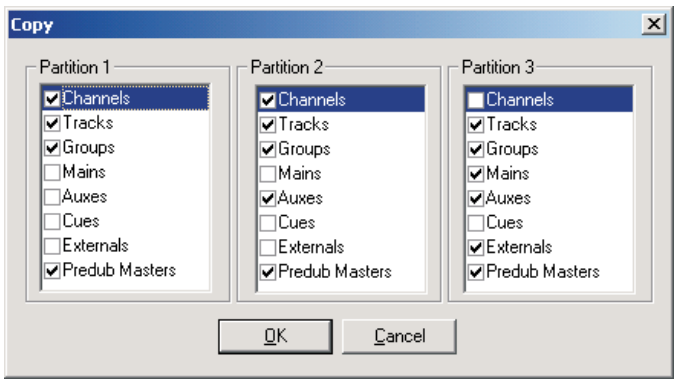
➤ Click the left/right Auxes arrow buttons on the Aux Routing page.

The Auxes are shown in groups of 12. Defaults can be set separately for all 36 auxes.

To copy the current page of default settings to other path types

➤ Click the Copy button.

The Copy dialogue box will appear.



➤ Click the check boxes for the path types within each partition to copy the settings to.

➤ Click OK.

Capture Settings from the Console Surface

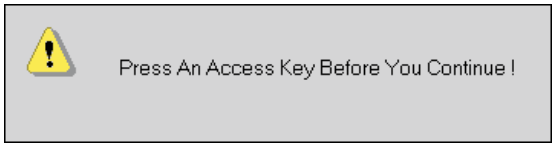
This can be used to set default values quickly. Simply set the desired control settings on a path and then capture the values as

described below.

To set values from existing control settings

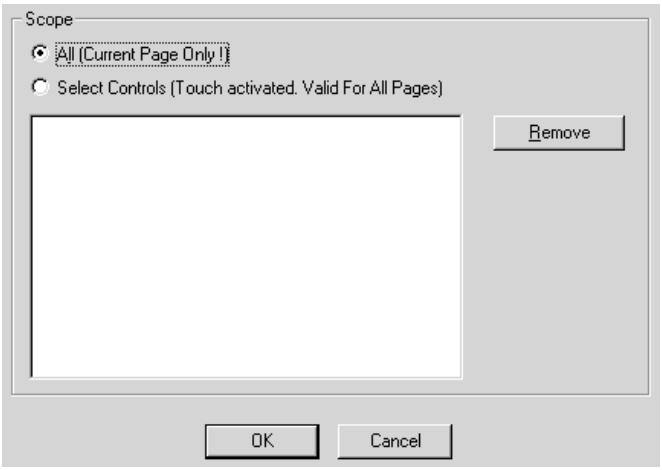
➤ Click the Capture button.

A dialogue box will appear requesting an ACCESS key to be pressed.



➤ Press the ACCESS key for the path containing the required control settings.

The dialogue box will be replaced by the capture Scope dialogue box with the All (Current Page Only!) radio button selected.



This means that the values for controls on the current Defaults Manager page will be capture (e.g. all the EQ settings).

To capture the settings for the current page

➤ Click on OK.

The dialogue box will close and the control values from the path will be entered into the current page.

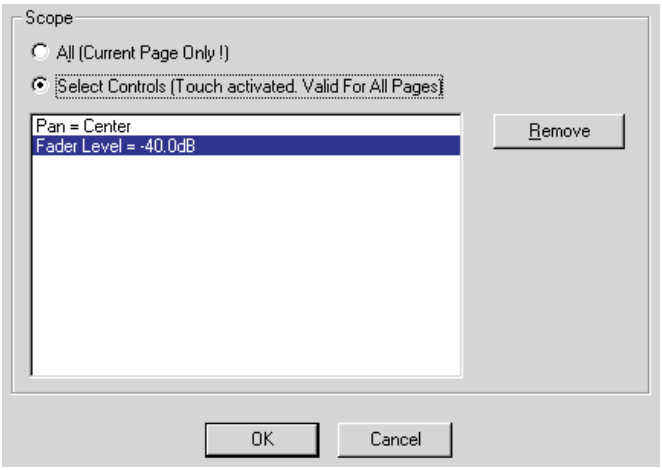
To capture a selected range of controls

➤ Click the Select Controls (Touch Activated. Valid for all pages) radio button.

➤ Touch the required controls on the path that the ACCESS key was pressed for above.

Any controls for which there are settings in Defaults Manager can be selected. If the path is spread out by the AFU function then all controls will be immediately accessible.

The list box in the capture Scope dialogue box will show the selected controls.



➤ Click an item in the list and click the Remove button if a control is incorrectly selected.

➤ Click on OK to execute the capture.

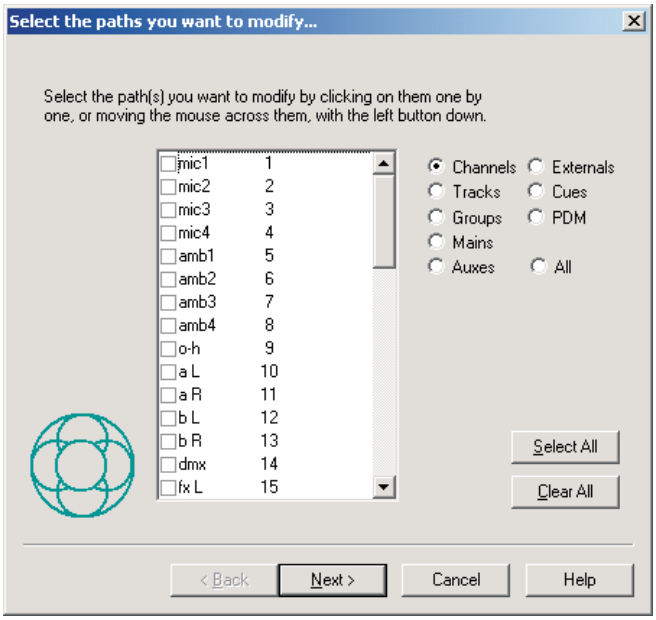
The dialogue box will close and the values of controls that were selected will be entered into the relevant pages.

Reset the Console with Reset Wizard

To reset controls on the console surface to the settings in Defaults Manager

➤ Click the Reset Wizard button.

The paths page of the Reset Wizard will appear.



➤ Click the radio buttons next to the path types to show the required paths.

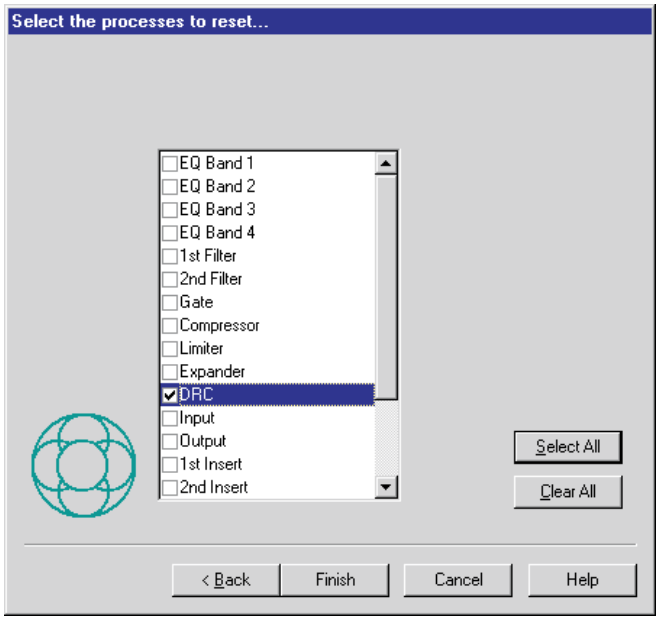
➤ Click the check boxes next to the path names to select the required paths.

➤ Click the Select All button to select all the currently listed paths.

➤ Click the Clear All button to de-select all the currently listed paths.

➤ Click the Next> button.

The controls page of the Reset Wizard will appear.



✍ *At least one path must have been selected.*

➤ Click the boxes for the required controls.

➤ Click the Select All button to select all the controls.

➤ Click the Clear All button to de-select all the controls.

➤ Click the Finish button.

✍ *At least one control must have been selected.*

The selected paths will have the selected controls reset to the current default values.

Defaults Manager Filing Operations

Defaults Manager allows for any number of sets of default values to be created and saved. Each set of defaults is saved in a file which can be recalled at a later time. The only practical limitation to the number of sets of defaults is the amount of hard disk space available to Encore.

To start a new set of defaults

➤ Click the New button on any page.

A confirmation dialogue box will be displayed.

➤ Click Yes.

The default values will be reset to use the system defaults as a starting point.

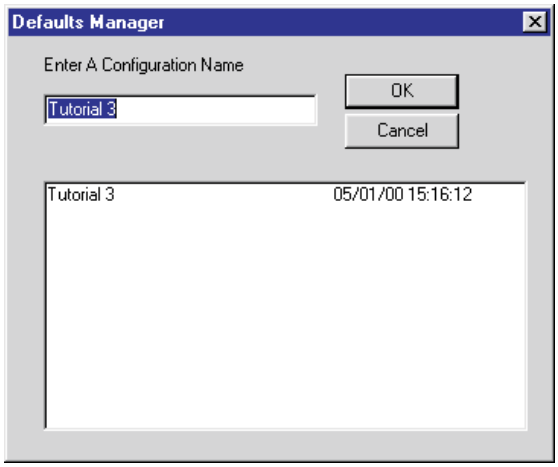
To save the current set of defaults

➤ Click the Save button on any page.

To save the current set of defaults in a new file

➤ Click the Save As button on any page.

The save file dialogue box will appear.



➤ Enter a new file name and click OK.

To run the Filing utility

➤ Click the Filing> button at the top of the dialogue box.

Defaults Manager will be closed and the Filing utility will run.

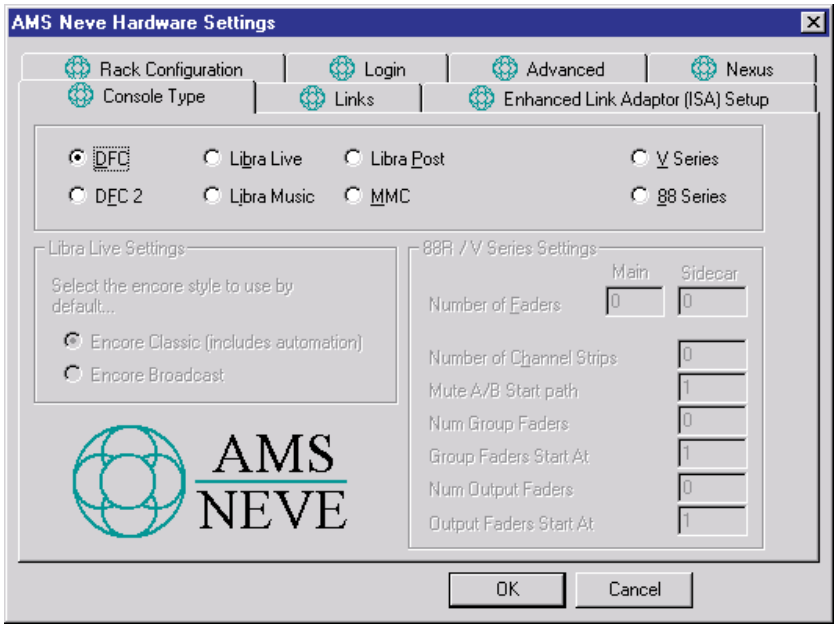
✍ *See Filing in the System Menu chapter (page 22:4).*

Nexus Mapping



For a Nexus router to be used, it must first be integrated into Encore.

This is done in Control Panel/AMS Hardware Settings/Nexus.



When the page is first opened, all of the options will be greyed out.

➤ Click Enable Nexus Monitoring for these to become active.

➤ In the Serial Port setup, select the port for communications and set the baud rate. For the Communication setup, select the options appropriate to your system. Click OK.

Once it has been integrated with Encore, the mapping page will take effect.

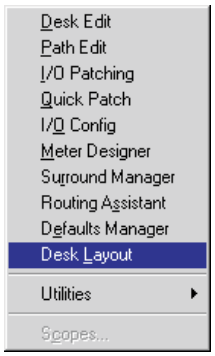
➤ To map Nexus inputs to Madi, click the range of inputs in the first column, then select which madi stream in the second window.

➤ Click Map Port and the mapped results will be shown in the third column.

➤ To unmap, highlight the selection in the third column, and click Unmap Port.

The details will be removed from the window and the madi ports cleared.

Desk Layout



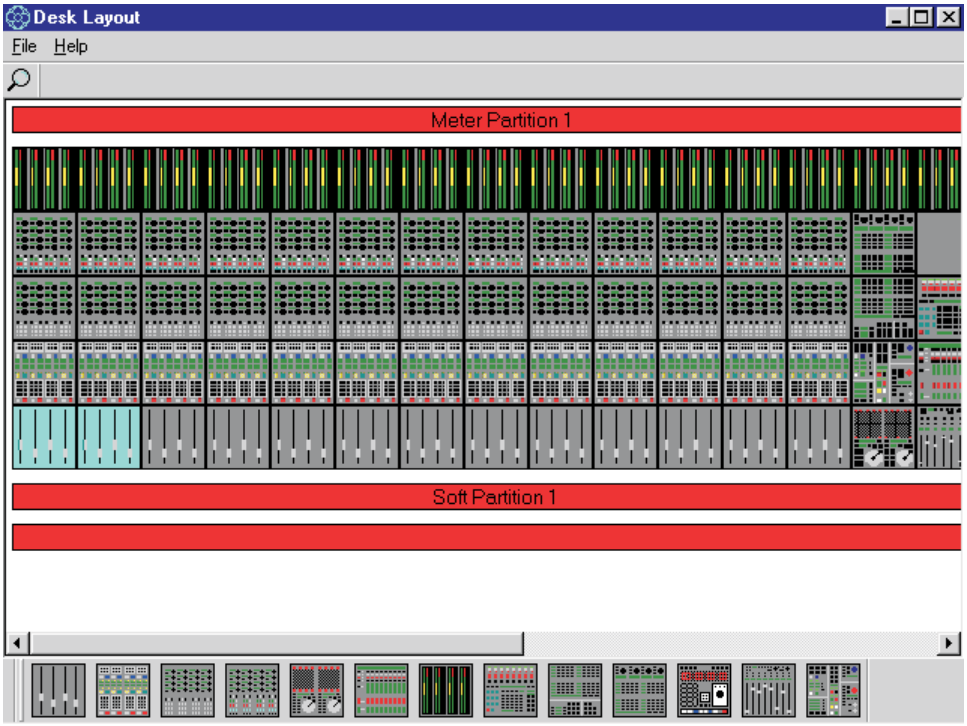
Desk Layout is used to graphically reproduce the placement of modules on the console surface. The Desk Layout is used by Meter Designer so that it can show where the meters are above Master Quadstrips, and so on.

All DFC Gemini consoles will be provided with a matching Desk Layout at installation time. This only needs to be altered if the arrangement of modules is changed on the console surface (e.g. by adding new modules or moving existing modules).

To start Desk Layout

➤ Click on Desk Layout in the drop down Tools menu.

The Desk Layout screen will be displayed.



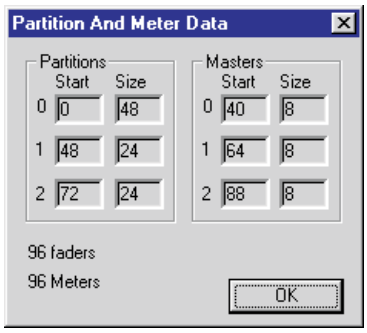
To view information about the console partitions

➤ Click File in the menu bar.

The drop down File menu will be displayed.

➤ Click Partition and Meters Data.

The Partition and Meter Data dialogue box will be displayed.



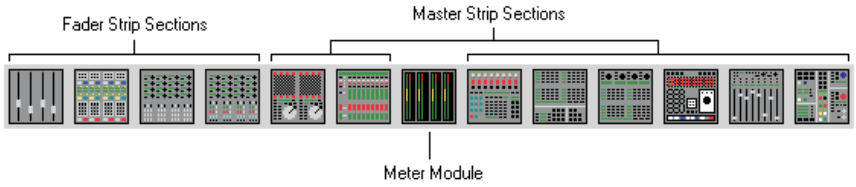
This shows the size of each partition, the size and position of each Master section, the size of the desk and the number of meters.

➤ Click OK to close the dialogue box.

Module Placement in Desk Layout

To determine the type of a module

➤ Rest the pointer on the required module icon in the module bar.



The type of the selected module will be briefly displayed.

To place a module

➤ Click and hold on the required module icon.

The pointer will pick up a copy of the selected module.

➤ Drag the module to the required position.

➤ Release the trackball button.

or

➤ Click on the required module.

➤ Move the pointer to the required position.

➤ Click in the required position.

In both cases

The module will be dropped into place. Existing modules will be removed as necessary.

If the module is dropped in an incorrect location, it will be placed in the strip in the nearest position that it can take (e.g. if a meter module is dropped at the bottom of a quadstrip then it will be placed in the meter bridge).

Placing any fader strip module will place a complete fader quadstrip.

Placing either of the matrix modules will place both.

Modules can also be drag and dropped from one location to another on the desk graphic.

To place the same module again

➤ Click in the other places where the module is required.

To remove a module

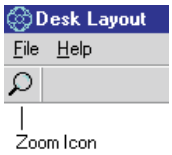
➤ Click and hold on the required module on the desk graphic.

➤ Drag the module into blank space or down to the module bar.

➤ Release the trackball button.

To make the view larger or smaller

➤ Click the zoom icon.



➤ Click the desk graphic to make it larger.

➤ Right click the desk graphic to make it smaller.

➤ Click the zoom icon again to end zoom mode.

Save and Exit

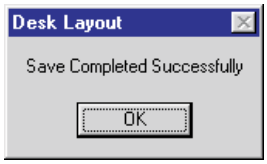
To save changes

➤ Click File in the menu bar.

The drop down File menu will be displayed.

➤ Click Save.

A confirmation dialogue box will be displayed when the save is complete.



➤ Click OK.

To close Desk Layout

➤ Click File in the menu bar.

The drop down File menu will be displayed.

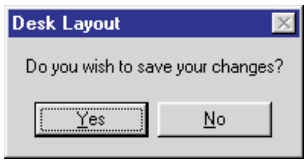
➤ Click Exit.

If there are no changes to save

Desk Layout will close.

If there are changes to be saved

A dialogue box will be displayed asking if you want to save changes.



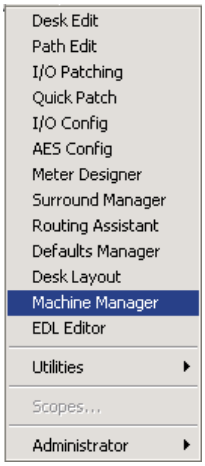
➤ Click Yes or No as required.

If you click Yes, a confirmation dialogue box will be displayed when the save is complete.

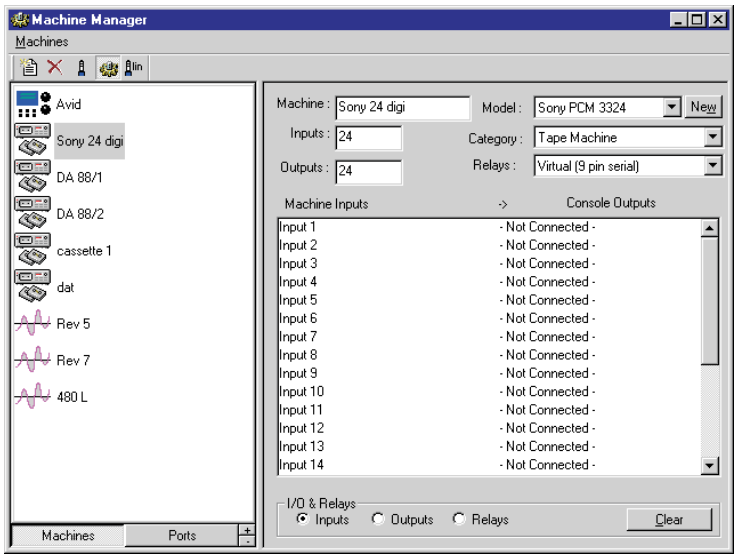
➤ Click OK.

Desk Layout will close.

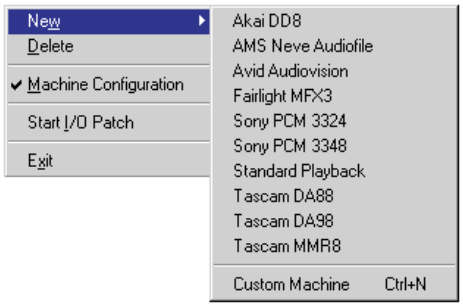
Machine Manager



Machine Manager allows the user to quickly port or unport tape machines, effects units (plus any associated relays) and the like from a reference library of commonly used machines.

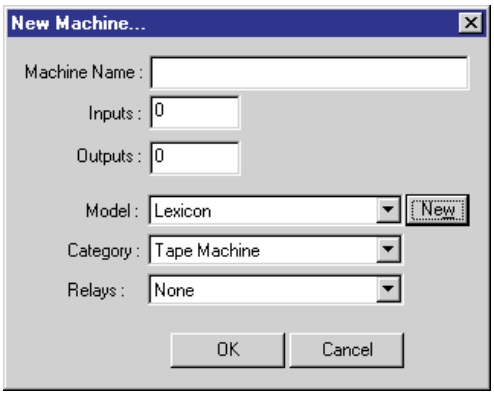


First the user must create a library of all the machines. Click the 'machines' box at the bottom of the screen, then from the Machines menu, choose NEW.



There is a list of the most commonly used machines. Note that selecting the option for Tascam DA88 could be applied to all 8 track digital tape machines, not specifically only those made by Tascam. This applies to all the machines in the preset list. Select the option you require. The parameters for that machine will displayed on the right hand side of the screen.

If the machine does not appear in the preset list, there is also the option for the user to create a Custom machine.



The Machine Name field allows the user to type in a unique name by which that machine will be identified.

Type in the number of mono inputs and outputs that the machine has.

The Model box contains a pulldown list of all the previously used manufacturers names. If the one you require is not in the list, hit New and type in the name. This will be used for the current machine and added to the list for future use.

In the Category field, select the type of machine. The options are Tape Machine, FX Workstation, Audio Workstation, Networked Workstation and Playback Only Machine.

If the machine needs to be armed remotely from the desk, then provision must be made for relays to control this. Select the type of relay required. The options are None, Physical Dubber, Physical Multitrack, Virtual (9 pin serial) and Raw Relay Number.

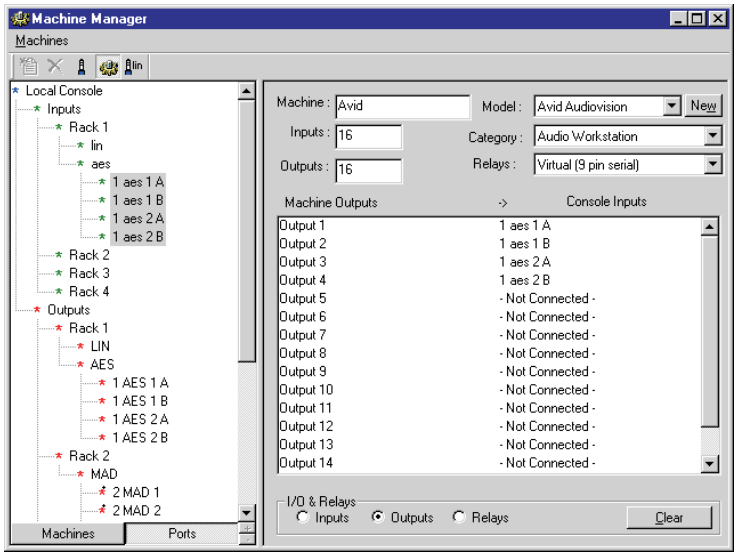
Once all the parameters have been set for the machine, click OK and the machine will be added to the library, with the appropriate icon for it's function.

Once the machine has been added to the library, it is still possible to change the parameters if you wish. Click on the machine on the left, and it's parameters will be shown on the right of the screen. If you change any of the values, the lower half of the screen will display a flashing 'Update' box. Click on this to amend the machines properties.

To delete a machine from the list, highlight the required machine and select Delete from the Machine menu. You will be asked to confirm the removal of the machine.

To change the order of the machines in the list, select the machine to be moved, then use the + & - buttons at the bottom of the screen to move that machine up or down the list.

To port the inputs and outputs of a machine, highlight the machine from the list so it's inputs and outputs are displayed on the right side of the screen. At the bottom of the screen click on Ports. The display will change to show the currently available system ports.



On the ports list, double click each level of the tree to show the available ports on that rack. Before you port the machines, first ensure that if there are inputs displayed on the left as shown above, then the window on the right must be set to display Outputs (outputs from the desk are inputs to a machine, and vice versa) otherwise ports will not be applied.

Highlight the selection to be applied by clicking on the first port, then holding Shift and clicking the last port to highlight a selection. Drag and drop this on the first path where you wish to start your porting from. In the example above, the four AES inputs have been ported to the first four outputs on the Avid.

Be aware that when ports are applied, unlike I/O Manager, Encore does not warn you that an Output port may already be in use.

I/O Patch can also be launched from machine Manager, either by selecting it from the Machine menu, or clicking on the I/O Patch icon on the icon bar at the top of the screen.

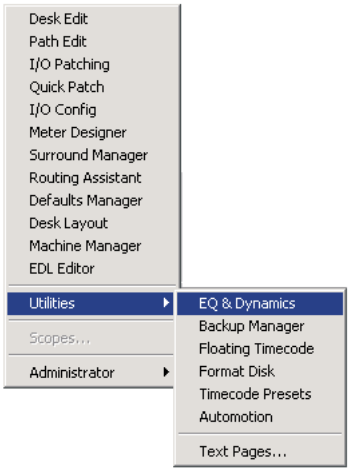
To set the relays for a machine, call the desired machine to the right hand window and click Relays underneath (this option will be unavailable if the Relay field is set to None). From the Relay Type pulldown menu, select the type of relay. Double click on the words Not Connected, and a dialogue box will open. Enter the number of the relay. If you hit Return on the keyboard, the highlight bar will drop to the next path and increment the value by one. The + & - buttons at the end of the field can be used to increase or decrease the relay number. If you try to assign a relay that is already in use, you will be warned of this before any re-assignment takes place.

To clear ports or relays, highlight the selection to be cleared by clicking and dragging, then press Clear. Clearing Outputs will not clear Input porting and vice versa.

EDL Editor

This option is currently unavailable.

EQ & Dynamics



Used to display curves and values for the Equaliser, Filters and Dynamics.

A combined curve is shown for the Equaliser and Filters.

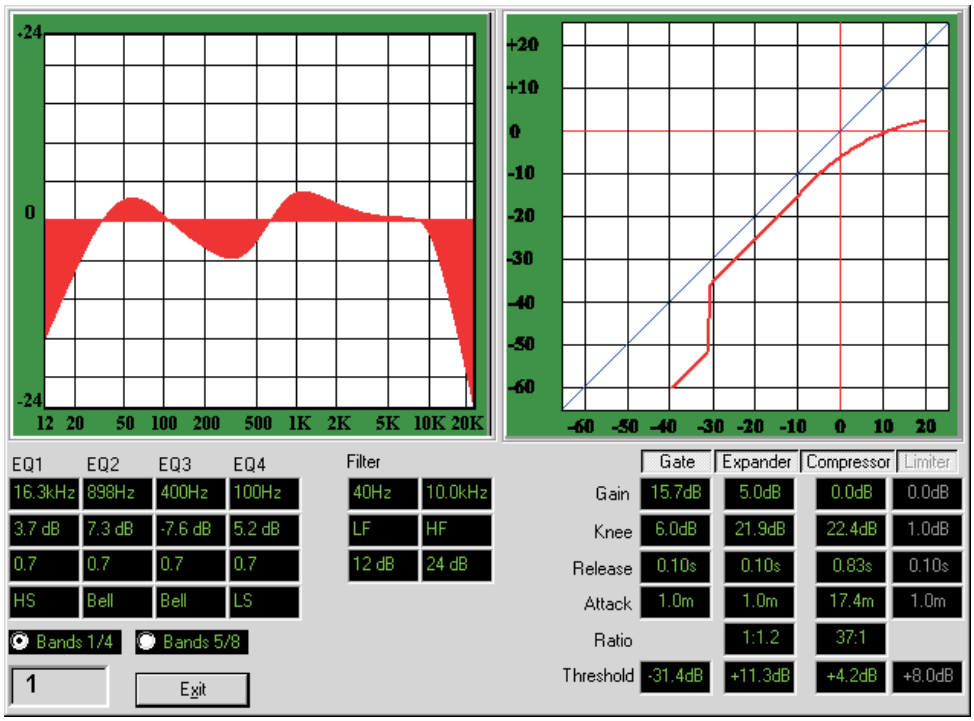
To display the EQ & Dynamics curves and values

➤ Click on EQ & Dynamics in the drop down Tools Menu.

or

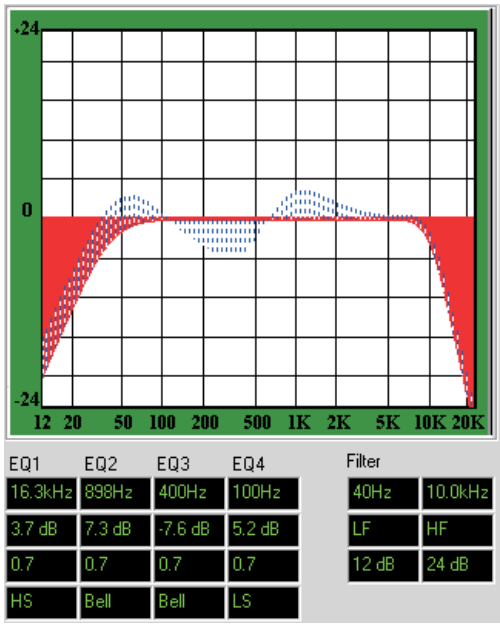
➤ Click on the EQ & Dynamics icon.

The EQ & Dynamics curves and values will be shown for the first available path (usually Channel 1).



The EQ curve is displayed as an area that shows the effect on the signal across the full frequency range. Boost is shown above the centre line and cut is shown below the centre line. When EQ and Filters are on, the curve has a solid red fill. When EQ and Filters are off, the curve has a sparse blue fill.

If EQ is off and Filters are on (or vice versa) a combined curve is displayed that shows the active element in red with a sparse blue overlay that shows the effect of switching on the element that is off.



The Dynamics curve is displayed as a thick red line that varies from the blue 'normal' line across the full signal level range. No curve is shown if all the dynamics are switched off.

Both the curves and values are updated dynamically when changes are made to control settings on the console surface and as individual elements are turned on and off.

To change the set of EQ parameters displayed

➤ Click the Band 1/4 or Band 5/8 radio button as required.

The EQ parameter value display also follows touch (e.g. if band 1 is adjusted, parameters for bands 1 to 4 will be displayed).

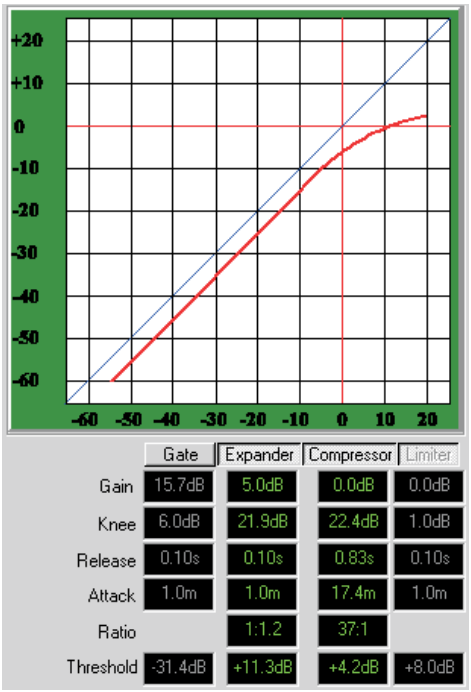
To change the path displayed

➤ Press the PATH Access key for the required path.

To disable the curve display of individual dynamics elements

➤ Click the check box for the required element.

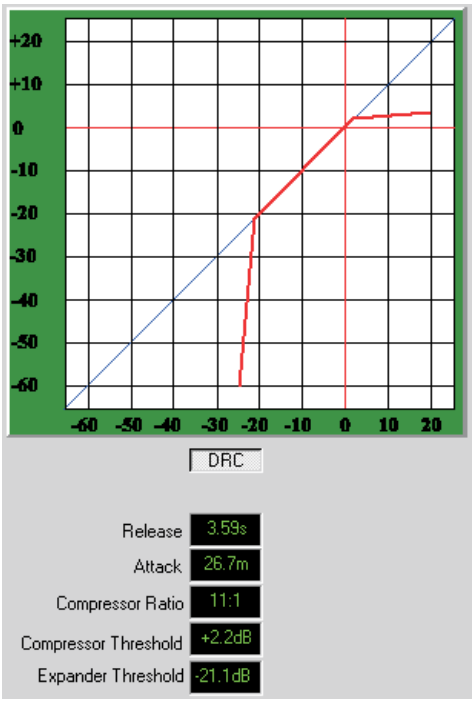
The curve will be updated accordingly, as shown in the following example where the Gate display is disabled.



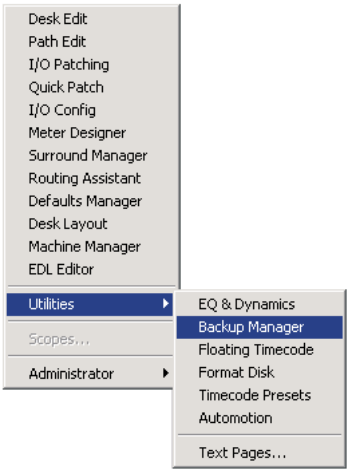
Only those elements that are in the signal path can be disabled.

For instance, this can be used to view the curve for a Gate in isolation from the other dynamics elements.

When a DRC is in the path, only the parameters for the DRC are shown as in the DRC example.

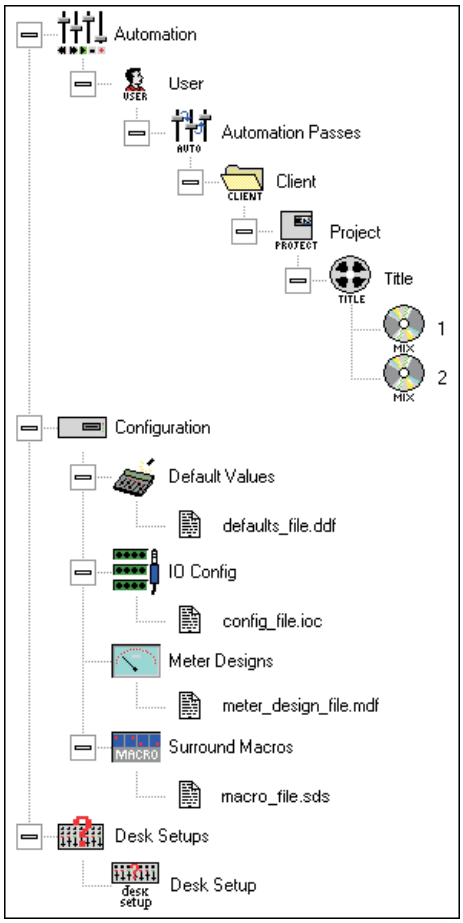


Backup Manager



Backup Manager is used to copy setup information and automation data to and from removable media for safe keeping and data recovery. It is also used to remove information from the live Encore data and/or from previously created archives.

The following diagram shows the data hierarchy:



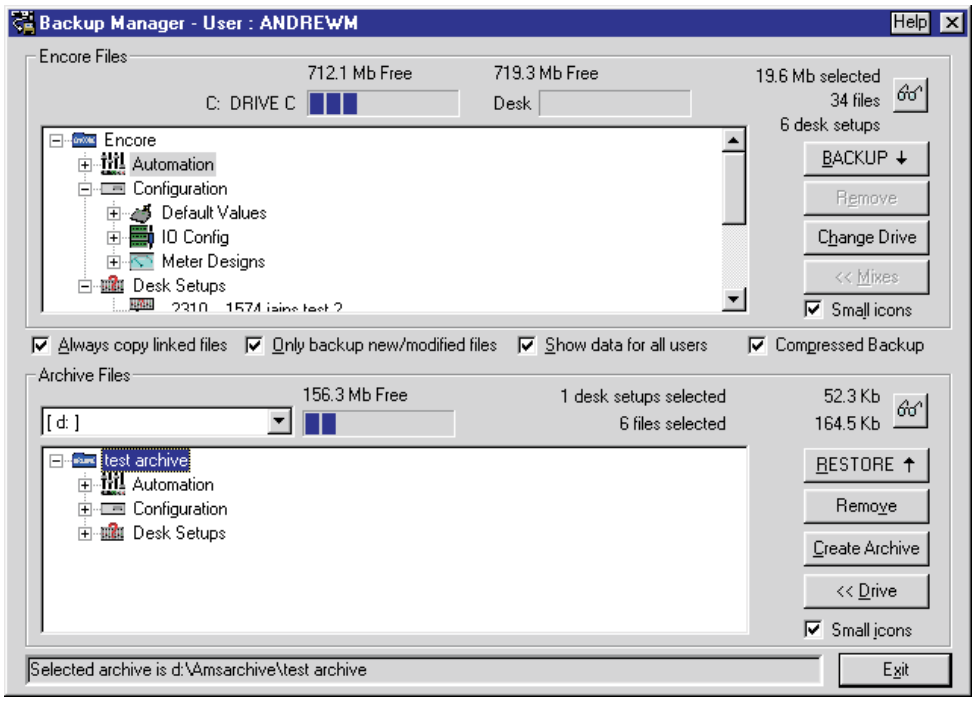
Backup Manager uses named Archives to store backup information. These can be on the local hard disk or removable media (floppy disk or optical Zip disk). Removable media must have sufficient capacity to store the information being backed up.

Floppy disks have a relatively low capacity so it is advisable to save automation data to optical disks.

To use Backup Manager

➤ Click on the Backup Manager option in the Tools Menu.

The Backup Manager dialogue box will be displayed.



Encore data is shown in the top half of the screen. The current archives are shown at the bottom. The data structure within an archive is the same as the data structure for Encore.

Backup Manager View Options

To view more data in a list

➤ Click the Small icons check box for either Encore or the Archive or both.

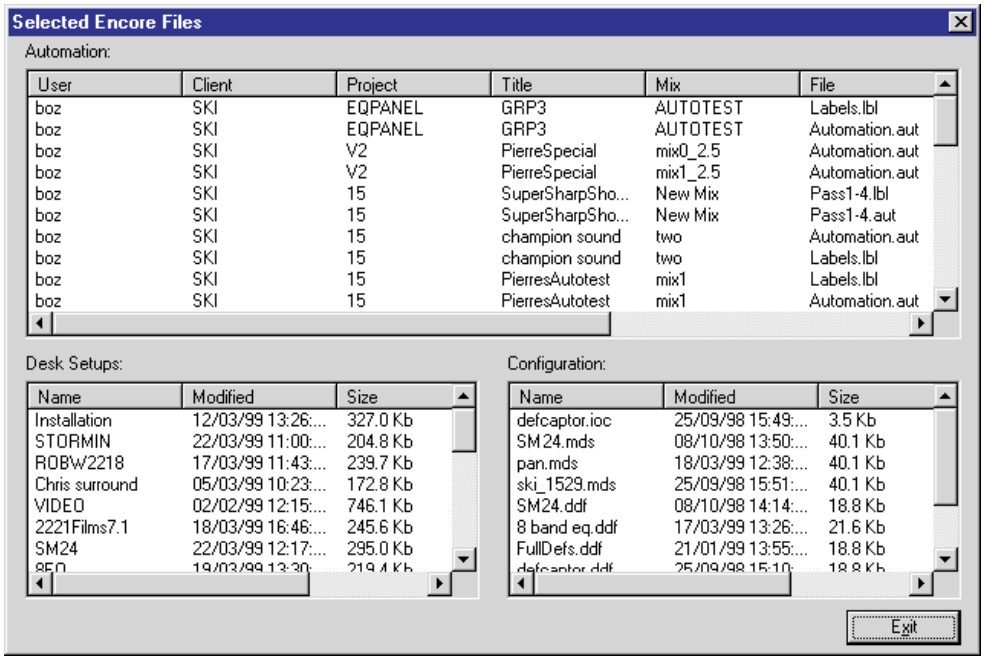
When the Small icons check boxes are checked then more information can be shown in each list window.

To view lists of files for the selected items

➤ Click the View button for either Encore or the archive.



A View dialogue box will be displayed. This shows details of the currently selected items and the file names that are used for them.

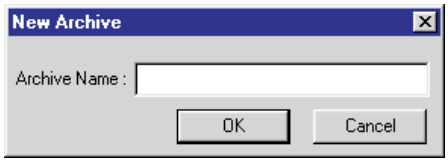


Create Archives

To create a new Archive

➤ Click the Create Archive Folder button.

The New Archive Name dialogue box will be displayed.



➤ Enter a name for the Archive and click OK.

The new archive will be shown in the archive window.

To change the drive used for Archives

➤ Click the drop down arrow for the Archive Directory box.

A list of available drive letters will drop down.

➤ Click the required drive.

✍ *The floppy disk drive is a: and the optical drive will normally be d:. Make sure there is a disk in the relevant removable media drive before it is selected.*

Any existing archives will be shown in the archive window. The amount of free space will be indicated.

Backup Data to Archives

To make sure linked files will be copied

➤ Make sure the **Always copy linked files** check box is checked.

This means that when a Mix is selected (either directly or as part of a Client, Project or Title) then the linked Desk Setup and configuration files linked to that Desk Setup will also be copied. When a Desk Setup is selected then the linked configuration files will also be copied.

To copy only new or modified files

➤ Make sure the **Only backup new/modified files** check box is ticked (checked).

When the backup is executed, files will be compared with the existing files in the archive. Only new files or files that have changed will be backed up.

To select Mix/Passes in a Mix Tree

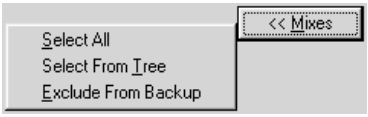
All Mix/Passes are selected by default.

➤ Click the name of the required Mix Tree in the Encore files window.

The <<Mixes button will become available.

➤ Click the <<Mixes button.

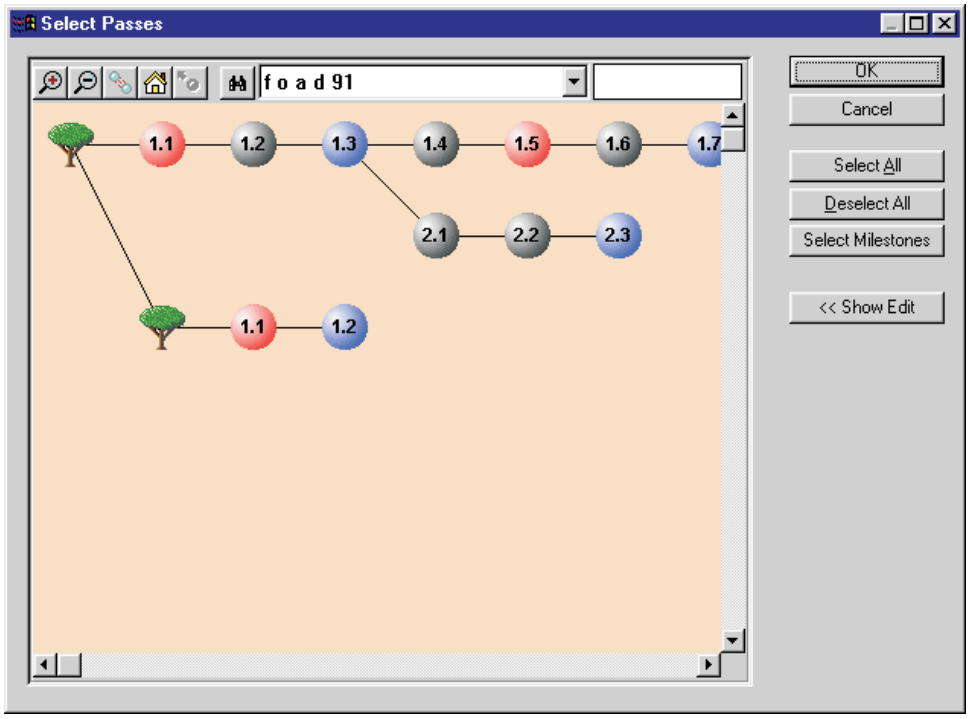
A flyout menu will be displayed.



The Select All option selects the entire Mix Tree for backup. The Exclude From Backup option prevents the Mix Tree from being backed up.

➤ Click the Select From Tree option.

The Select Passes dialogue box will be displayed.



➤ Click the required Mix/Pass in the Tree.

or

➤ Shift-click several Mix/Passes.

✍ *The Mix Tree can be edited by clicking the <<Show Edit button. This will display the editing buttons which work in the same way as in the Prune Tree dialogue box. See Editing the Mix/Pass Tree under Show Mix/Pass Tree in the Automation Menu chapter for details.*

When the selection of Mix/Passes has been made

➤ Click the OK button.

The Mix Tree icon will change to show that only part of the Mix Tree is selected.



To make a compressed backup

➤ Make sure the **Compressed Backup** check box is ticked (checked).

Compressing the backup allows up to 800Mb of data to fit on a single Zip disk. This will vary according to the complexity of the data.

To copy live data to an archive

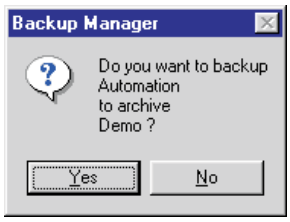
➤ Click on the required item in the Encore data window.

➤ Click the + signs to expand sub-sets of data.

➤ Click on the target archive in the right hand window.

➤ Click the BACKUP button.

A confirmation dialogue box will be displayed.



➤ Click OK.

The data will be copied. If a sub-set of data was selected then the correct hierarchy will be automatically used in the archive.

Restore from Archives

To make sure linked files will be copied

➤ Make sure the **Always copy linked files** check box is checked.

This means that when a Mix is selected (either directly or as part of a Client, Project or Title) then the linked Desk Setup and configuration files linked to that Desk Setup will also be copied. When a Desk Setup is selected then the linked configuration files will also be copied.

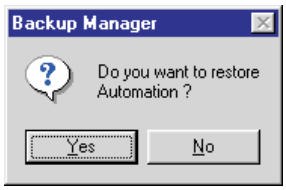
To restore data from an archive

➤ Click on the required item in the Archive data window.

➤ Click the + signs to expand Archives and sub-sets of data.

➤ Click the <<RESTORE button.

A confirmation dialogue box will be displayed.



➤ Click OK.

The data will be restored to Encore.

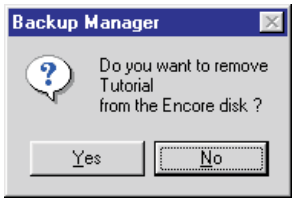
Deleting in Backup Manager

To delete data from Encore

➤ Click on the required Client, Project, Title or Mix Tree name in the Encore Files window.

➤ Click the Remove button.

A confirmation dialogue box will be displayed.



➤ Click OK.

The selected item will be removed. This creates space for additional working files.

✍ *Use Filing to delete other items from the Encore file area.*

To delete data from an Archive

➤ Click the required item in the Archive window.

➤ Click an Archive icon to remove a whole archive.

➤ Click the Remove From Archive window.

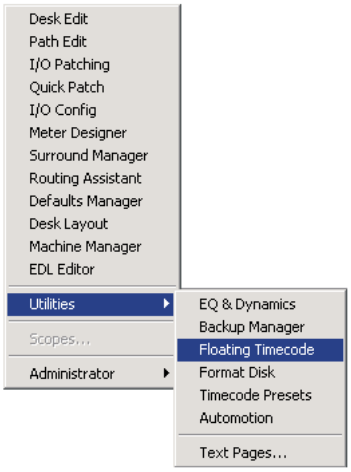
A confirmation dialogue box will be displayed.



➤ Click OK.

The selected item will be removed. This is useful for deleting items that have been superseded.

Floating Timecode



This allows a separate box containing a Timecode display to be placed on the screen.

The Timecode is displayed with larger digits than the Timecode in the corner of the main Encore screen to make reading Timecode easier when operators are some distance from the screen.

The floating Timecode box also shows the frame rate and the desk sample rate.

To display the Floating Timecode box

➤ Click the Floating Timecode option on the drop down Tools menu.

or

➤ Right click on the Timecode display on the Encore screen.

The Floating Timecode box will appear.



To prevent the Floating Timecode box from being hidden by other Encore screens

➤ Right click on the Floating Timecode box.

A small fly-out menu will appear.

➤ Click on Always On Top.

The Floating Timecode box will always be visible, regardless of other items selected on the screen. This may mean that the box will require moving to access items which it hides.

To change the size of the Floating Timecode box

➤ Move the pointer over an edge of the Floating Timecode box (preferably a corner).

The pointer will change to a double-headed arrow.

➤ Click and hold the left-hand trackball button.

➤ Move the pointer.

An outline will be displayed to show the new size of the box.

➤ Release the trackball button.

The Floating Timecode box will be displayed at the new size.



Notice that the height of the box will be adjusted according to how large the timecode is displayed.

The size of the box is saved for the next time that the box is displayed.

To move the Floating Timecode box

➤ Click and hold the left-hand trackball button while the pointer is inside the box.

➤ Move the pointer.

The box will follow the pointer.

➤ Release the trackball button.

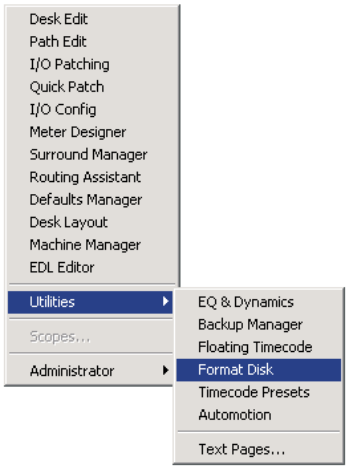
To remove the Floating Timecode box

➤ Right click on the Floating Timecode box.

A small fly-out menu will appear.

➤ Click on Exit.

Format Disk



The Format Disk utility is provided so that users can format floppy and iomega Zip disks.

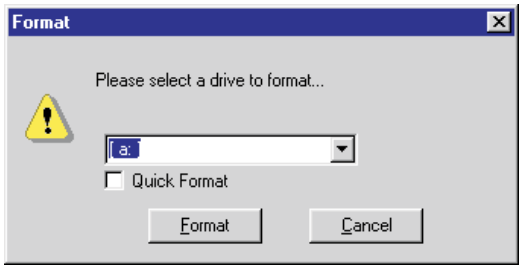
✍ *This utility will not allow fixed disks (i.e. hard disks) to be formatted.*

To format a disk

➤ Insert a floppy or Zip disk into the correct drive as required.

➤ Select the Format Disk option in the drop-down Tools Menu.

The Format dialogue box will be displayed.



Drive [a:] (the floppy disk drive) is selected by default.

To select the Zip disk drive

➤ Click the drop-down arrow adjacent to the box containing the drive letter.

A list of available disk drives will be shown.

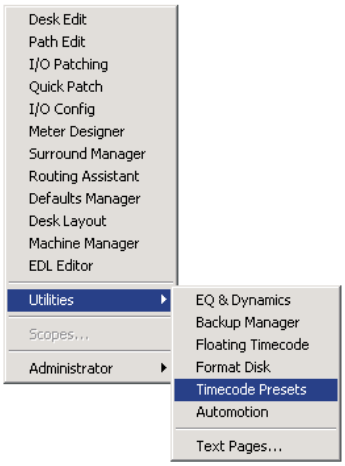
➤ Click the drive letter for the Zip disk (this will usually be [d:]).

➤ Click the Format button.

A progress bar will be displayed to indicate how far the format process has proceeded. This will be removed when the format is complete.

➤ Click the Abort button to close the Format dialogue box.

Timecode Presets



Allows users to create timecode presets (for later recall).

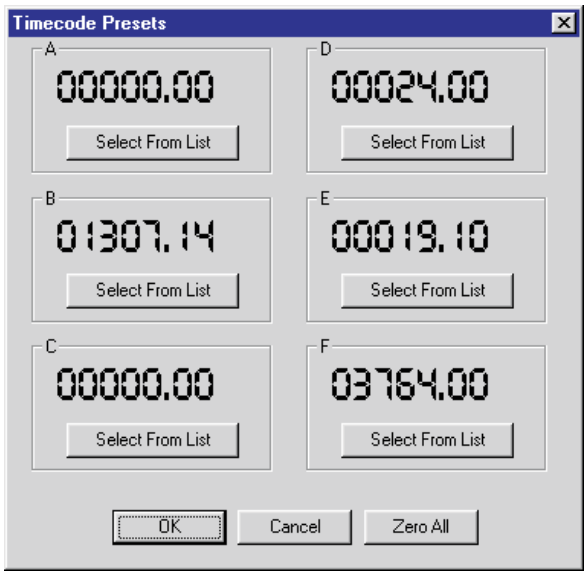
To set timecode presets

➤ Click on the Timecode Presets Icon in the standard icon bar.

or

➤ Click on Timecode Presets in the drop down Tools menu.

The Timecode Presets dialogue box will appear displaying the six preset timecode boxes A to F.



Users can enter up to a maximum of six presets at any one time.

✍ *Resting the cursor on timecode displays a description of how to use presets.*

To enter a preset manually

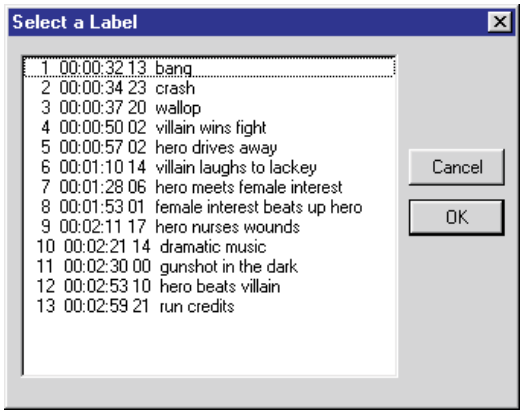
➤ Place the cursor in the selected preset box (A,B,C etc.) and enter a time using the numeric keyboard.

To enter a preset using select from list

➤ Place the cursor in the selected preset box (A,B,C etc.).

➤ Click on the Select from List button.

The Select a Label dialogue box will appear.



➤ Select the label desired and click on the OK button.

To enter/alter a preset using the cursor

➤ Place the cursor in the selected preset box (A,B,C etc.).

It will change to a + sign (when in the upper half) or a - sign (when in the bottom half).

➤ Click the left-hand trackball button to either (according to the cursors location) increment or decrement the displayed timecode.

To zero an individual displayed timecode

➤ Click within the displayed timecode area and press the Z key on the keyboard.

The displayed timecode will be zeroed.

To zero all the displayed timecodes

➤ Click on the Zero All button.

➤ Finally click on the OK button to confirm the selection and quit the dialogue box.

To use a preset

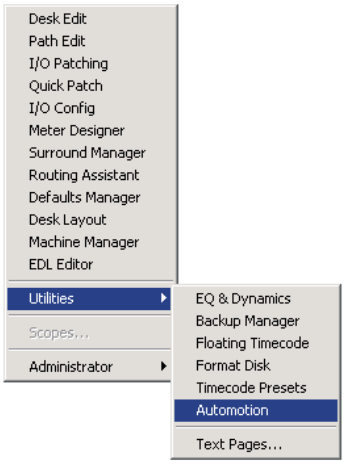
Allows a user to insert preset timecode into the timecode area of a dialogue box (including Start and End Times e.g. Safety Nets).

➤ Click on the required timecode value in a dialogue box.

➤ Press the A,B,C,D,E or F key on the keyboard.

The timecode will be set to the corresponding Preset value.

Automotion



Automotion is an offline utility for converting Desk Setups and automation Mixes between different software versions, and for transferring Studio Configurations to computers that have Offline Encore installed on them.

At present, Automotion can convert Desk Setups and mixes from Version 2 to Version 2.5 DFC Gemini/Encore software, and from Logic series consoles to Version 2.5 DFC Gemini/Encore.

Desk Setups can be converted from Version 2 to Version 2.5 'on the fly' when loading a Desk Setup. However, this does not convert the PreDubs correctly and the old Desk Setup is automatically over-written with the converted version. Automotion should be used if the PreDubs must be preserved or if the Desk Setup is to be saved with a new name.

To exit from Automotion

➤ Click the I Am Finished radio button.

➤ Click the Continue>> button.

The Mix Data Interchange dialogue box will close.

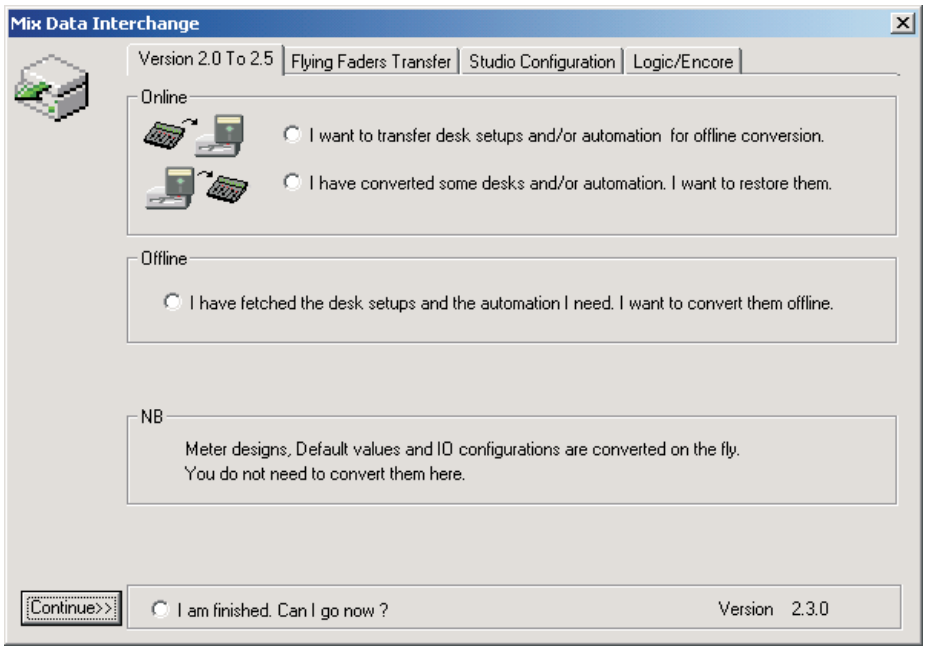
✍ *Converting from Version 2.5 to Version 2 is not currently implemented.*

Converting from Version 2 to Version 2.5

The main difference between Desk Setups created under Version 2 and Version 2.5 is the way in which PreDubs are handled.

Version 2.5 uses proper PreDub Master paths. The only way to convert to PreDub Masters correctly is to use Automotion.

The Version 2 to 2.5 page is used to select an operation to be executed.



Desk Setups and Mixes must be copied out of the live data area before they can be converted. The Online options are for copying data from and to the live (i.e. online) data area. The data can be copied to a different location on the Encore hard disk or to a different drive (e.g. removable hard disk, Zip disk, network drive, etc.).

The Offline conversion option is used to perform the update from Version 2 to 2.5. It can be used on a separate Windows NT workstation so that the Encore computer is free to operate as normal.

To select an operation

➤ Click on the radio button for the required option.

➤ Click the Continue>> button.

A new Mix Data Interchange dialogue box will be displayed according to the operation selected.

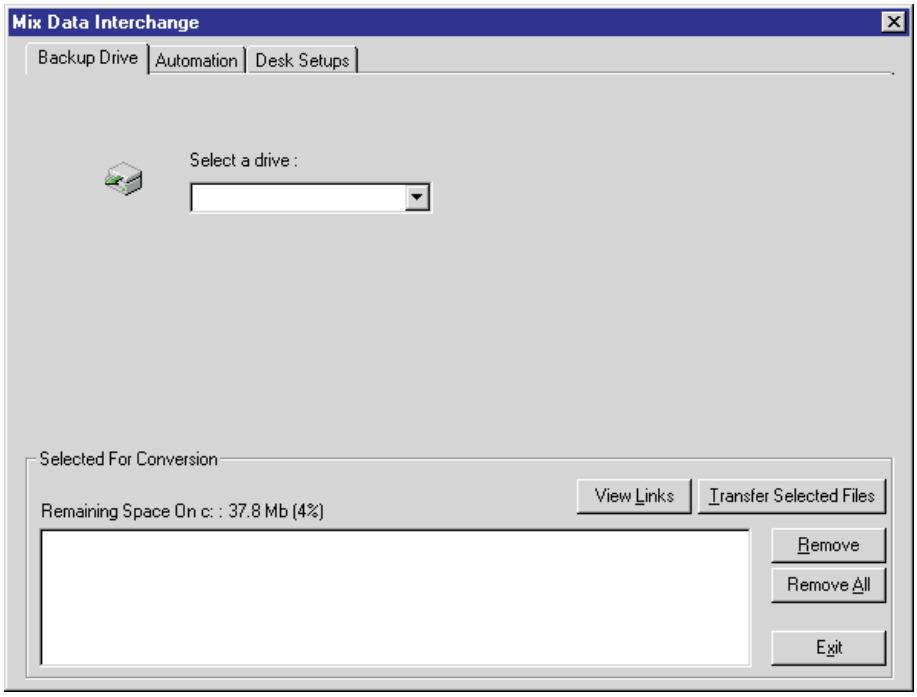
The sequence for converting data is:

- ❑ Copy the Desk Setups and/or Mixes to an offline area
- ❑ Convert the data
- ❑ Restore the converted Desk Setups and/or Mixes to the online data area

Copy the Desk Setups and/or Mixes to an offline area

When this operation is selected, a three page dialogue box is displayed.

Backup Drive Page

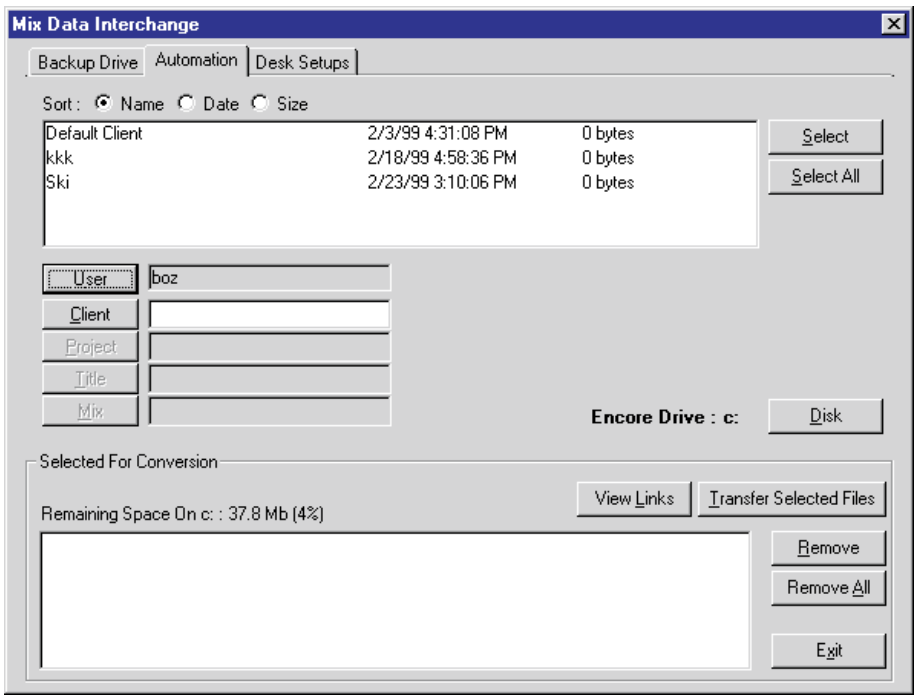


➤ Click the drop down arrow next to the drive dialogue box to select a backup drive.

✍ *A backup drive must be selected.*

✍ *The same drive can be selected as the source data (i.e. drive c:). This will copy the data out of the live data area to an offline data structure, ready for conversion.*

Automation Page



This is used to select which Mixes are to be copied for conversion. The page follows the same User with Clients with Projects with Titles with Mixes structure as the Filing utility. A selection can be made at any level and all dependent data will be selected. All linked Desk Setups will also be included.

➤ Highlight items at the required level (e.g. a Titles within a Project) and click the Select button.

The item will be added to the Selected list.

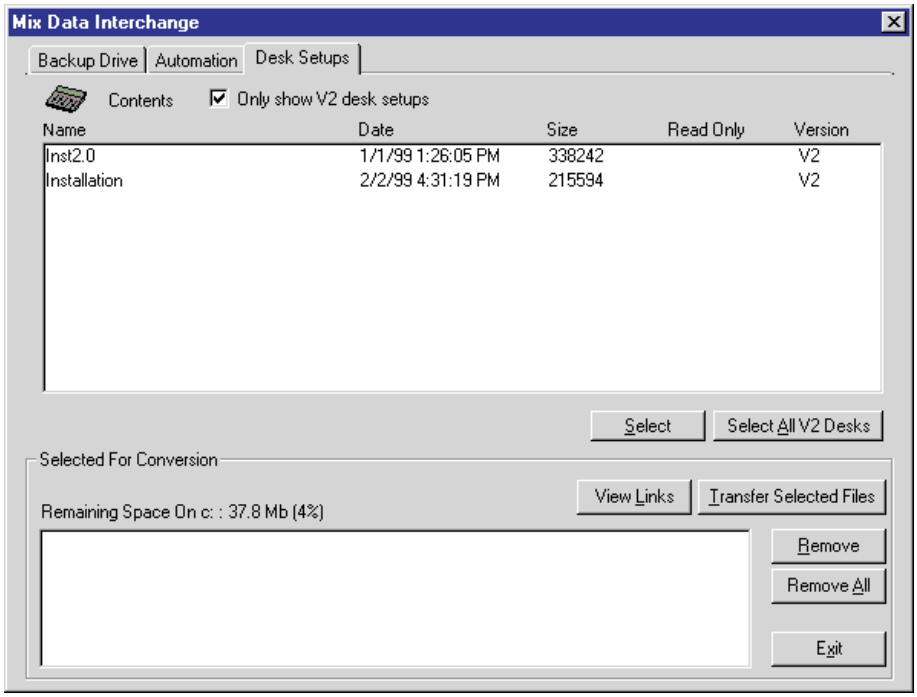
or

➤ Click the Client, Project, Title or Mix button.

➤ Click Select All.

All the data at the selected level will be added to the Selected list.

Desk Setups Page



This page can be used to select individual Desk Setups for conversion. Only Version 2 Desk Setups are shown by default.

➤ Select the required Desk Setups and click the Select button.

The Desk Setups will be shown in the Selected list.

or

➤ Click the Select All V2 Desks button.

All the Desk Setups will be shown in the Selected list.

All Pages

All three pages have a Selected For Conversion box that shows the items that will be copied to the selected backup drive.

If there is not enough space on the backup drive for the selected items

A message will be displayed to indicate this condition.

➤ Click items in the Selected list and click the Remove button.

or

➤ Click the Remove All button and start the selection process from scratch.

When the selection is complete

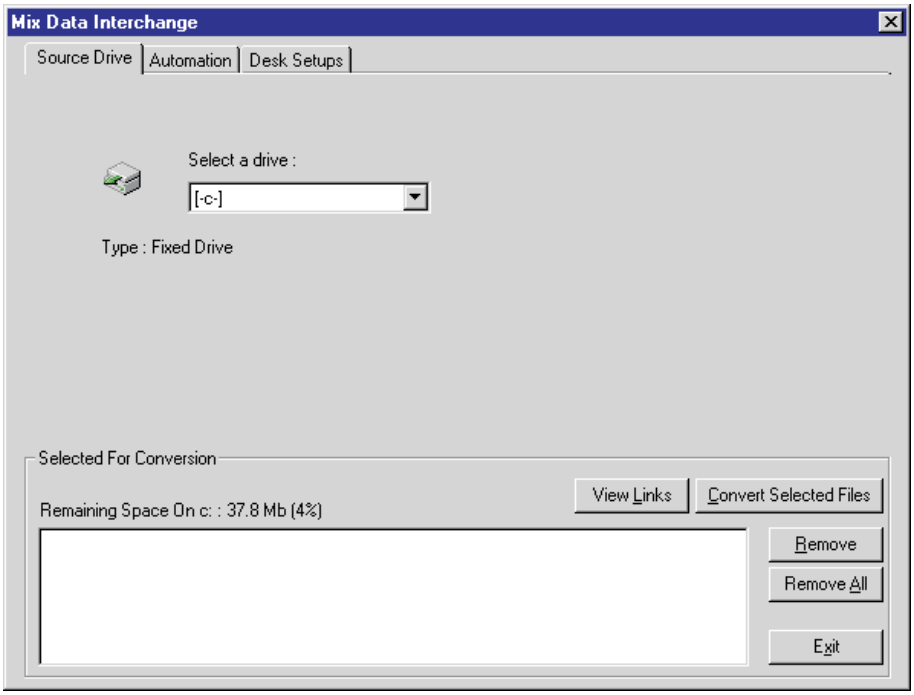
➤ Click the Transfer Selected Files button.

The selected Mixes and Desk Setups will be copied to the backup disk.

Convert the data from Version 2 to Version 2.5

When this operation is selected, a three page dialogue box is displayed.

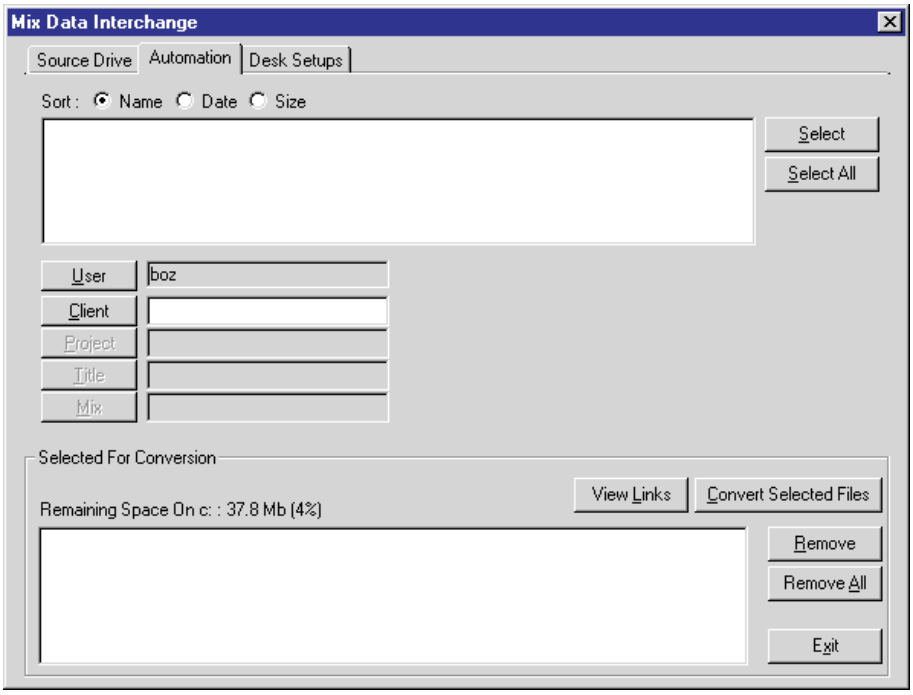
Source Drive Page



➤ Click the drop down arrow next to the drive dialogue box to select a source drive.

✍ *A source drive must be selected.*

Automation Page



This is used to select which Mixes are to be converted. The page follows the same User with Clients with Projects with Titles with Mixes structure as the Filing utility. A selection can be made at any level and all dependent data will be selected. All linked Desk Setups will also be included.

➤ Highlight items at the required level (e.g. a Titles within a Project) and click the Select button.

The item will be added to the Selected list.

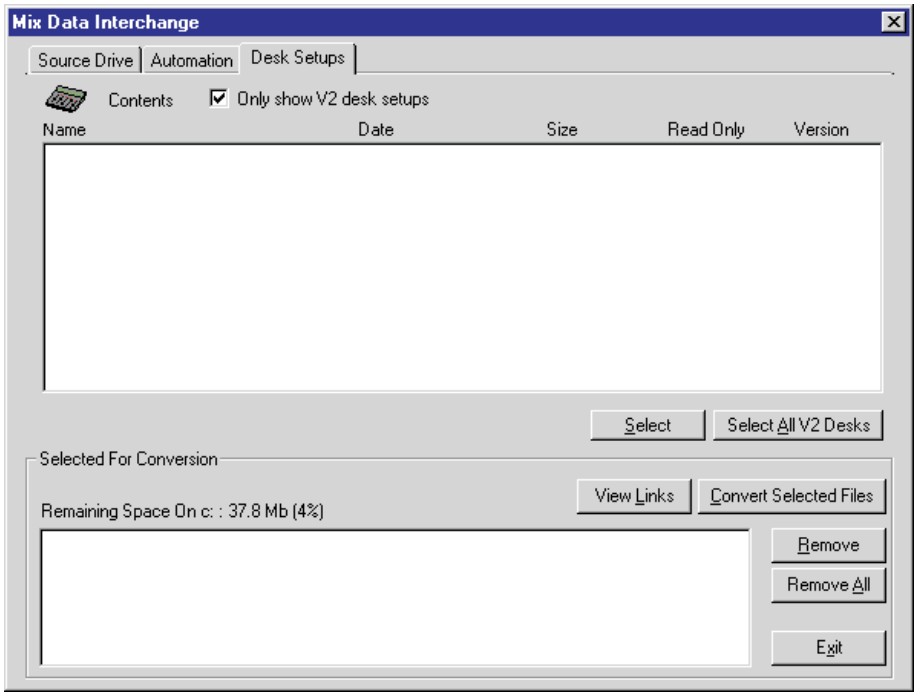
or

➤ Click the Client, Project, Title or Mix button.

➤ Click Select All.

All the data at the selected level will be added to the Selected list.

Desk Setups Page



This page can be used to select individual Desk Setups for conversion. Only Version 2 Desk Setups are shown by default.

➤ Select the required Desk Setups and click the Select button.

The Desk Setups will be shown in the Selected list.

or

➤ Click the Select All V2 Desks button.

All the Desk Setups will be shown in the Selected list.

All Pages

All three pages have a Selected For Conversion box that shows the items that will be converted on the selected source drive.

To deselect unwanted items in the conversion list

➤ Click items in the Selected list and click the Remove button.

or

➤ Click the Remove All button and start the selection process from scratch.

When the selection is complete

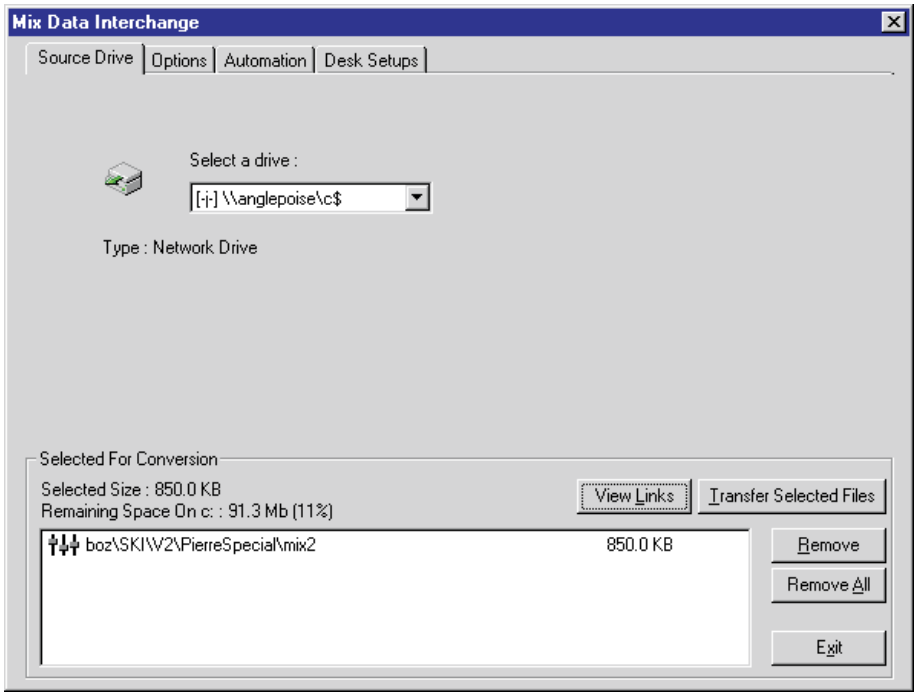
➤ Click the Convert Selected Files button.

The selected Mixes and Desk Setups will be converted on the selected source drive. If there are linked Desk Setups that are already Version 2.5 then they will be skipped.

Restore the converted Desk Setups and/or Mixes to the online data area

When this operation is selected, a four page dialogue box is displayed.

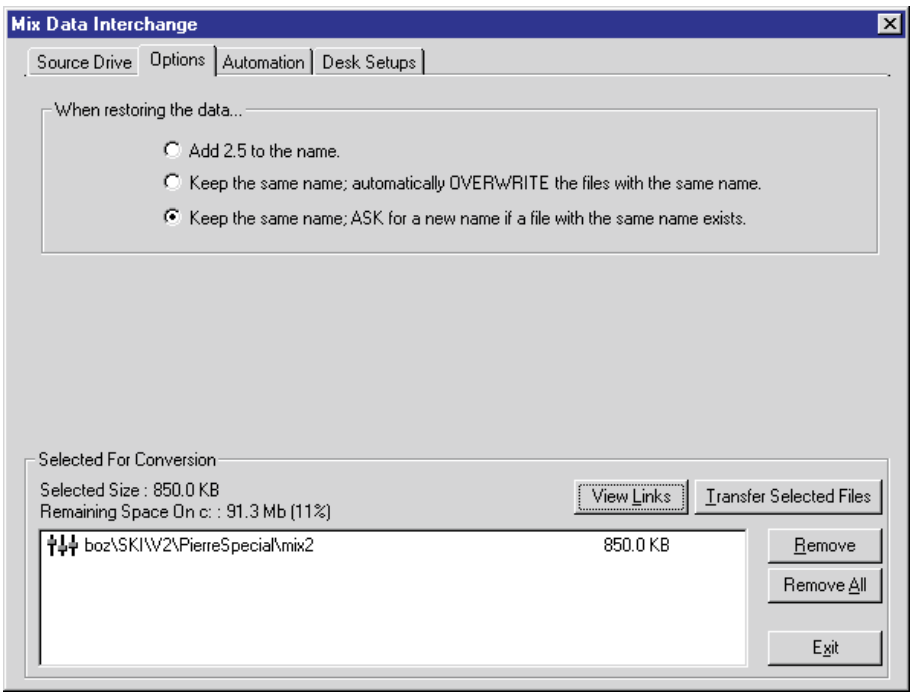
Source Drive Page



➤ Click the drop down arrow next to the drive dialogue box to select a source drive containing converted data.

✍ *A source drive must be selected.*

Options Page



This is used to decide what to do about duplicate Desk Setup names.

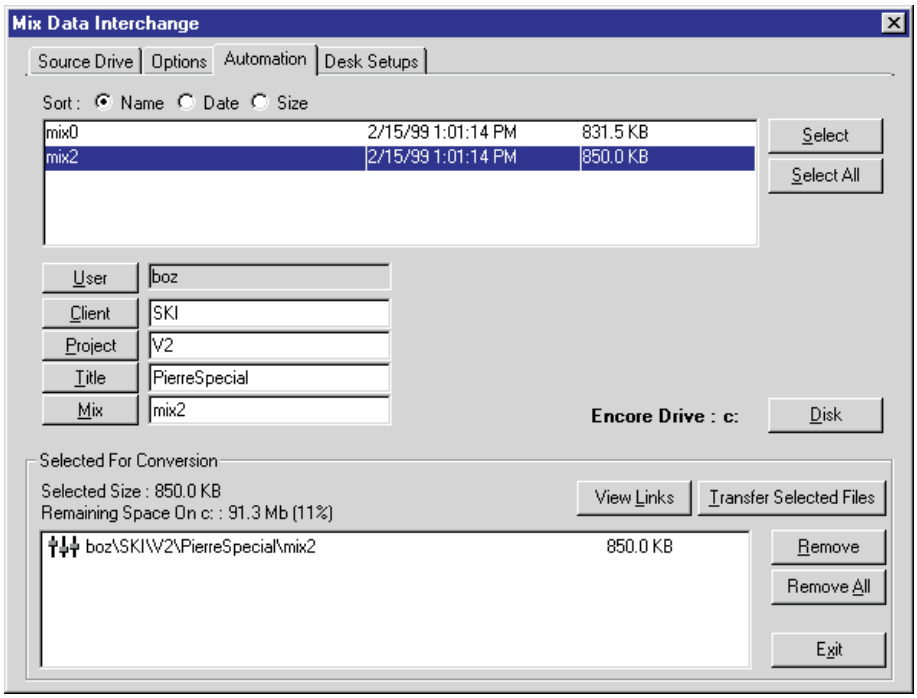
The options are:

- ❑ Add 2.5 to the name
- ❑ Keep the same name; automatically OVERWRITE the files with the same name
- ❑ Keep the same name; ASK for a new name if a file with the same name exists

➤ Click the radio button for the required item.

✍ *Mixes automatically have "_2.5" appended to their file names. If the file already exists then it will be overwritten.*

Automation Page



This is used to select which Mixes are to be restored. The page follows the same User with Clients with Projects with Titles with Mixes structure as the Filing utility. A selection can be made at any level and all dependent data will be selected. All linked Desk Setups will also be included.

➤ Highlight items at the required level (e.g. a Titles within a Project) and click the Select button.

The item will be added to the Selected list.

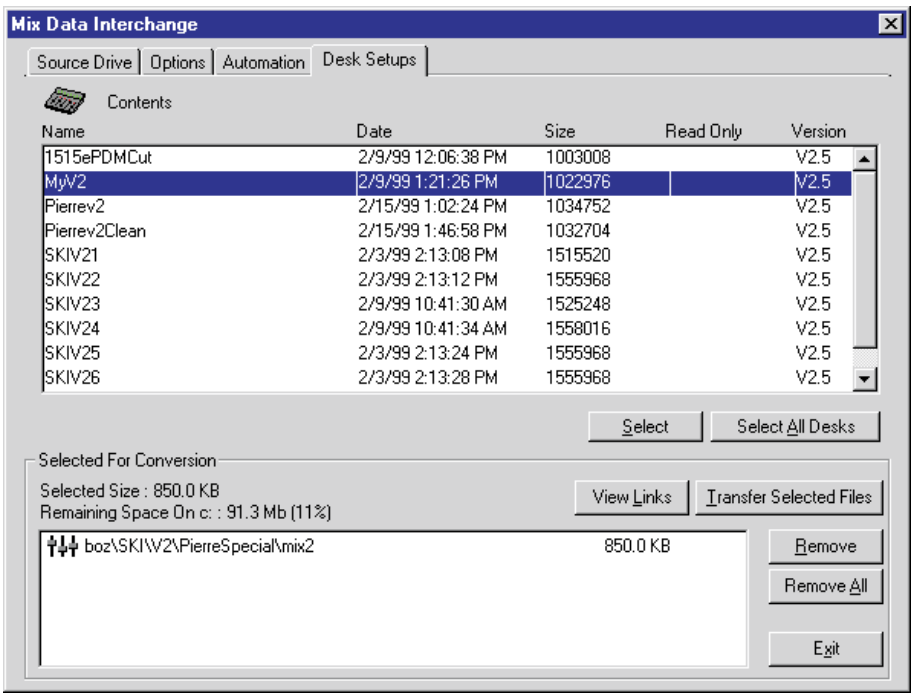
or

➤ Click the Client, Project, Title or Mix button.

➤ Click Select All.

All the data at the selected level will be added to the Selected list.

Desk Setups Page



This page can be used to select individual Desk Setups for restore. Only Version 2.5 Desk Setups on the source drive are shown.

➤ Select the required Desk Setups and click the Select button.

The Desk Setups will be shown in the Selected list.

or

➤ Click the Select All Desks button.

All the Desk Setups will be shown in the Selected list.

All Pages

All three pages have a Selected For Conversion box that shows the items that will be restore from the selected source drive.

If there is not enough space on the live Encore drive for the selected items

➤ Click items in the Selected list and click the Remove button.

or

➤ Click the Remove All button and start the selection process from scratch.

When the selection is complete

➤ Click the Transfer Selected Files button.

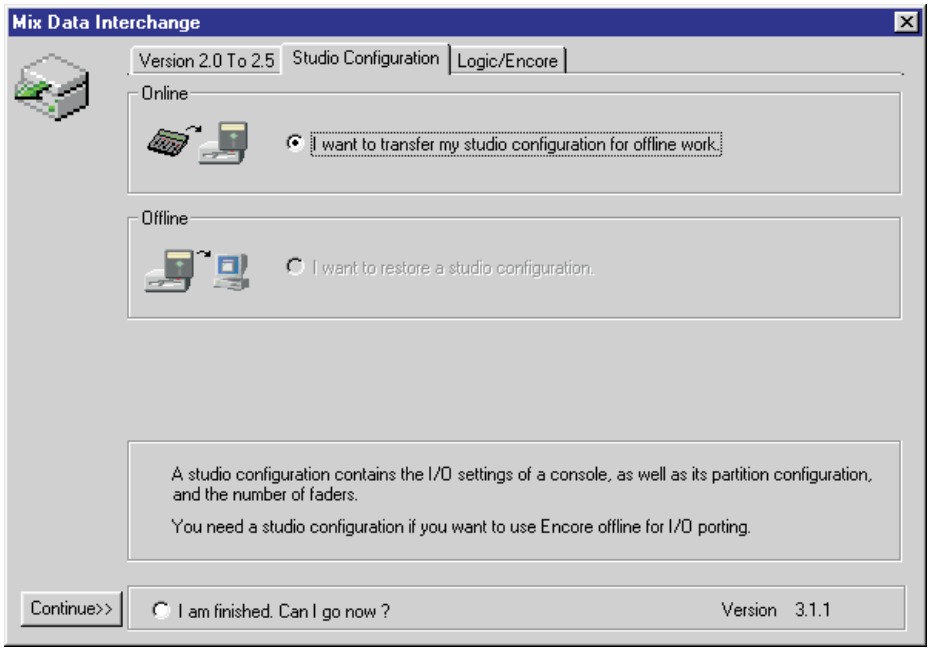
The selected Mixes and Desk Setups will be restored to the Encore disk.

Transferring Studio Configurations

Encore can be used offline on a computer that is not attached to a console. In order for Encore to correctly manipulate Desk Setups, a configuration file must be loaded that holds information about the hardware available on the target console. This configuration file is called a Studio Configuration.

The Studio Configuration is exported from Encore and then imported to offline Encore on the separate computer. Note that a Studio Configuration is fixed by the hardware for a particular console - it is not necessary to restore the Studio Configuration to the console.

When a Studio Configuration has been imported by offline Encore, then Desk Edit and I/O Patching can modify and create Desk Setups which can be transferred back to the console.



The Studio Configuration page of Automotion has two options:

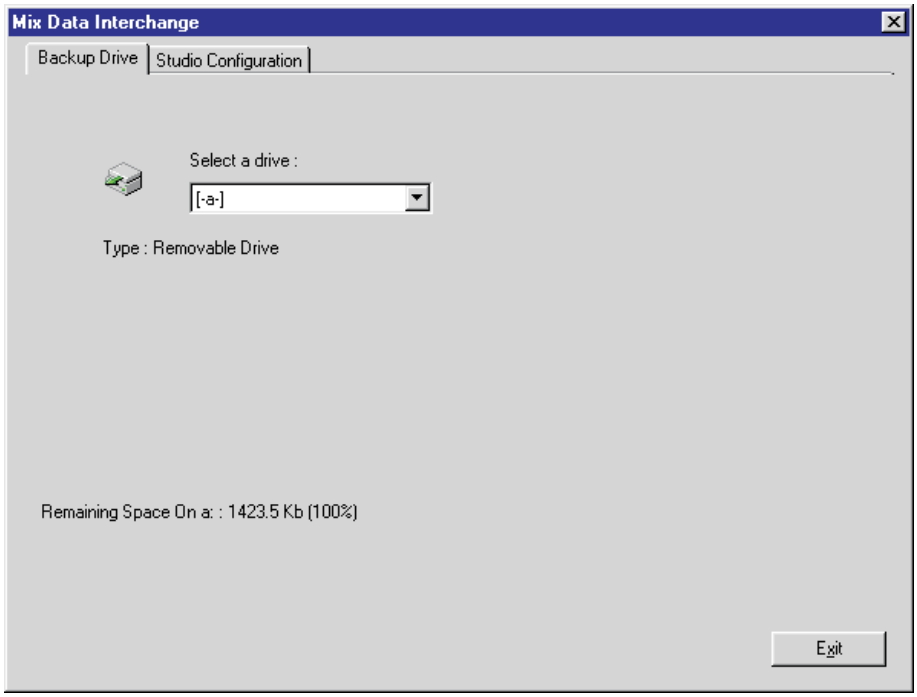
- Export a Studio Configuration
- Import a Studio Configuration to Offline Encore

Only one of these options will be available, according to whether Encore is operating online or offline.

Export a Studio Configuration

When this option is selected, a two page dialogue box is displayed.

Select Drive Page



A target drive must always be selected.

➤ Click the drop down arrow next to the Select a drive box.

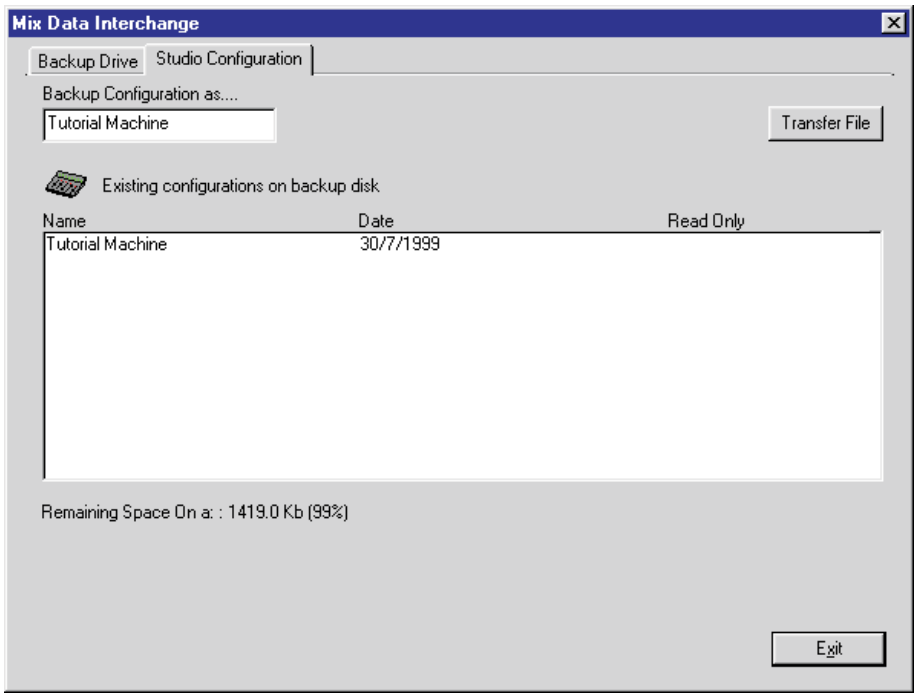
A list of available drives will be displayed.

➤ Click on the required drive letter.

The available free space will be displayed.

✍ *The Studio Configuration only uses a few kilobytes of storage space (typically less than 10kb) so it will fit on any floppy disk that has free space.*

Studio Configuration Page



This will show the current Studio Name in the Backup Configuration as box, and a list of configurations that have already be copied to the selected drive or disk.

➤ If required, click in the Backup Configuration as box and change the name.

➤ Click the Transfer File button.

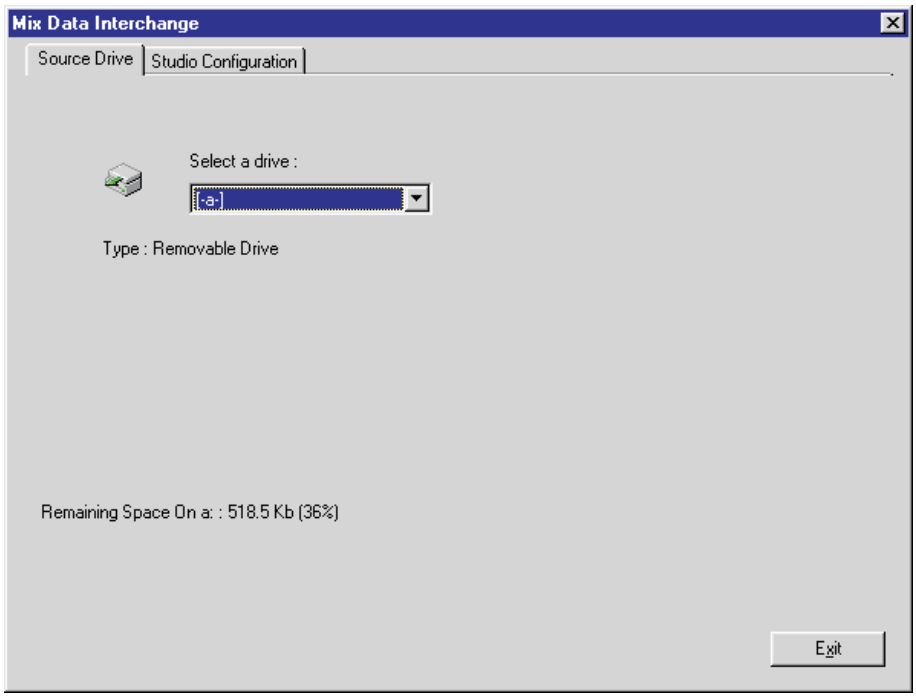
The Studio Configuration will be exported and will be added to the list.

➤ Click the Exit button to return to the Automotion dialogue box.

Import a Studio Configuration to Offline Encore

When this option is selected, a two page dialogue box is displayed.

Select Drive Page



A source drive must always be selected.

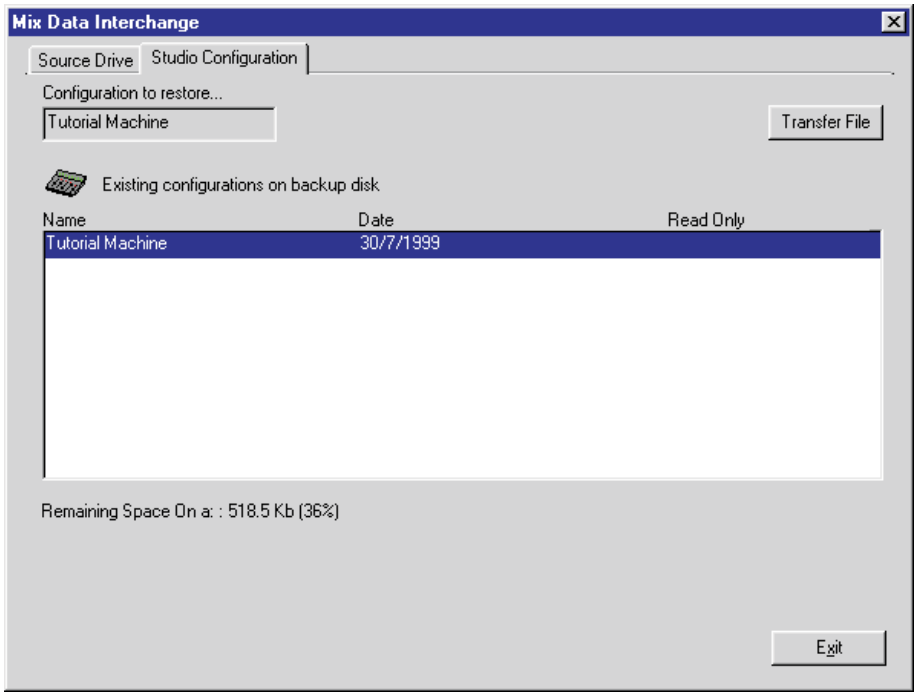
➤ Click the drop down arrow next to the Select a drive box.

A list of available drives will be displayed.

➤ Click on the required drive letter.

The available free space will be displayed.

Studio Configuration Page



This will show a list of configurations that are available on the selected drive or disk.

➤ Click on the required configuration name in the list.

It will be highlighted and the name will be shown in the Configuration to restore box.

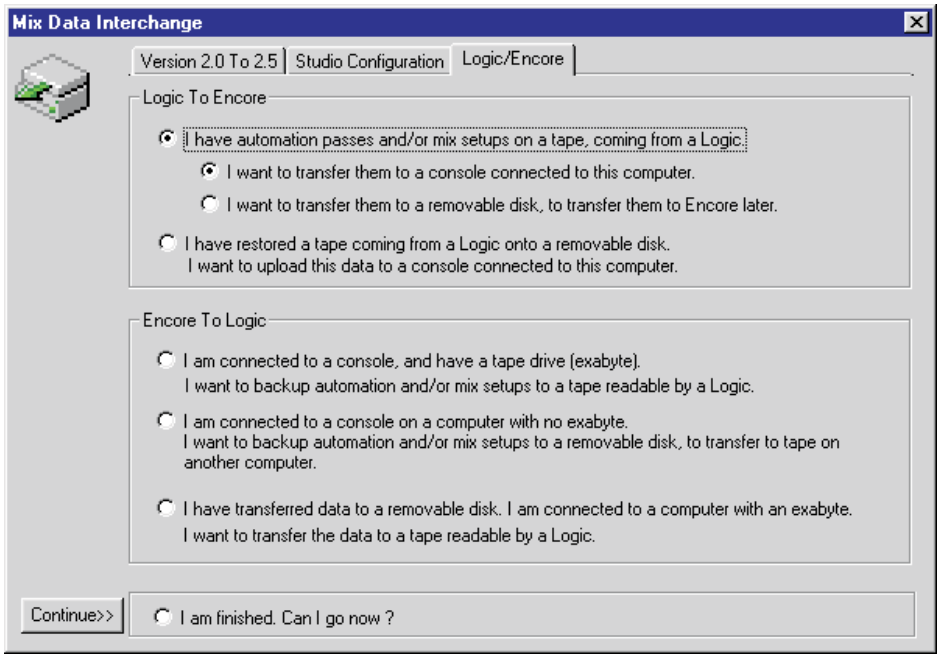
➤ Click the Transfer File button.

The Studio Configuration will be imported and will now be used to define the hardware available to Desk Setups.

➤ Click the Exit button to return to the Automotion dialogue box.

Converting from Logic to DFC Gemini/Encore

The Logic/Encore page allows Mixes and Desk Setups (called Mix Setups on Logic) to be imported from Logic 1, 2 and 3 to DFC Gemini.



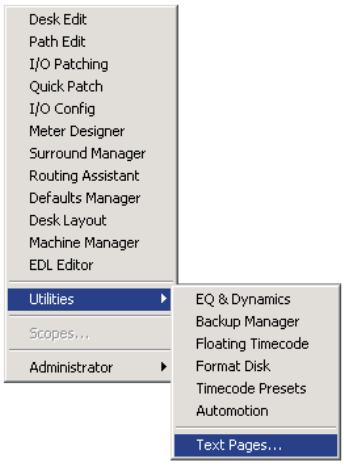
Logic Mixes and Mix Setups are backed up onto Exabyte tapes and must therefore be transferred to other media (or directly to the console) on a computer with an Exabyte tape drive attached.

✍ *The page in Mix Data Interchange shows options for conversion from Encore (i.e. DFC Gemini) to Logic. This is for future operation and is not currently implemented.*

There are three basic options:

- ❑ Transfer Logic data from a Logic backup tape (Exabyte) to a DFC Gemini console.
- ❑ Transfer Logic data from a Logic backup tape to a different form of removable media (e.g. a Zip disk).
- ❑ Transfer Logic data from other removable media (e.g. a Zip disk) to a DFC Gemini console.

Text Pages

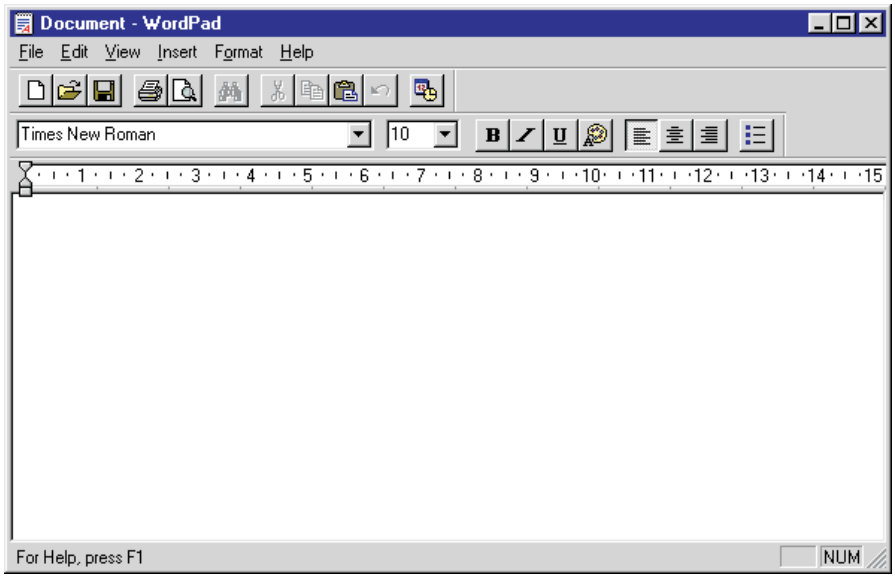


Provides users with a general purpose word processor for making notes, etc.

To create a text page file

➤ Click on Text Pages in the drop down Options Menu.

The Text Pages dialogue box will appear.



➤ Enter the desired text in the text area using the keyboard.

➤ Click on Save As.

The Save As dialogue box will appear.

➤ Enter the file name.

➤ Click on the directory that you wish to save to.

➤ Click on Save.

➤ Click on Exit in the drop down File menu to quit Text Pages.

✍ *If you wish to overwrite an existing file first select it from the list of available files.*

To open a text page file

➤ Click on Text Pages in the drop down Options Menu.

The Text Pages dialogue box will appear.

➤ Click on Open in the drop down File menu.

The Open dialogue box will appear.

➤ Click on the directory holding the file.

➤ Click on the file to be opened or enter the name of the file using the keyboard.

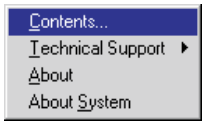
➤ Click on OK to open the file.

➤ Click on Exit in the File menu to quit Text Pages.

HELP MENU


AMS Neve Encore
System
Automation
Options
Transport
Lists
Gangs
Tools
Help
Contents...
Technical Support
About
About System

Contents



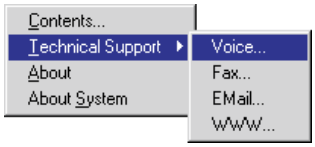
Displays the Contents topic of the Help File.



The Contents topic of a Help File is the first topic displayed when general help is requested. In this case, it is the **Welcome to Help for DFC Gemini** topic.

If a Help button on a dialogue box or screen is clicked, the Contents topic is by-passed and the topic relating to the dialogue box or screen is displayed - this is called Context Sensitive Help.

Technical Support Sub-Menu



The options on the Technical Support sub-menu open the Online Help to display information on contacting AMS Neve's Customer Support Department (CSD). AMS Neve's CSD, based at the Burnley Headquarters, provides comprehensive field service backup.

Technical Support Voice

Telephone calls can be made to CSD at the following UK times:

Monday to Friday

From 09-00 to 17-00 calls will be answered directly.

From 17-00 to Midnight an answering service is in operation and the message will be passed on to an engineer who is on call.

Saturday and Sunday

From 09-00 to 18-00 an answering service is in operation and the message will be passed on to an engineer who is on call.

Telephone Numbers

International :	+ 44 1228 417311
UK FreePhone :	0800 413882

✍ *The UK FreePhone number is only available when calling from within mainland UK.*

Technical Support Fax

This has a next working day response.

Fax :	+44 1282 454804

Technical Support E-Mail

CSD can be e-mailed at:

csd@ams-neve.com

Technical Support WWW

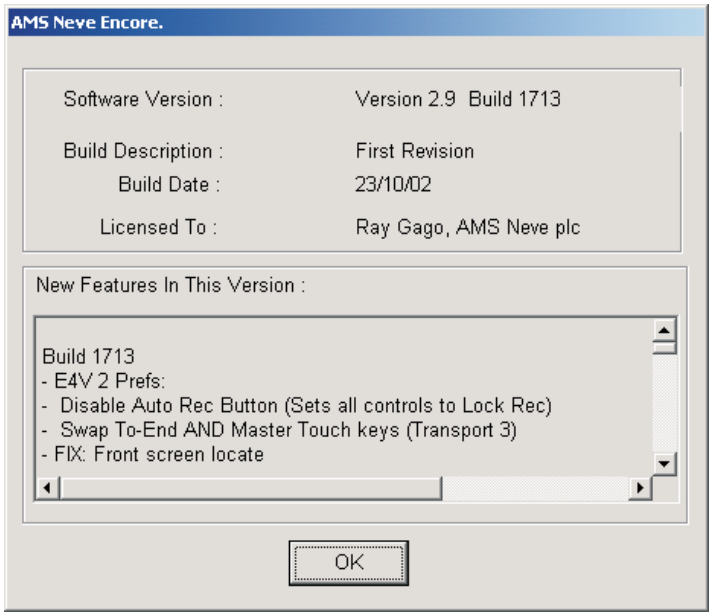
Customer support is not currently available via the WWW (world wide web). However, you are invited to visit AMS Neve's website at the following address:

http://www.ams-neve.com

About



Displays an information dialogue about your copy of AMS Neve Encore, including the version number and the build history.

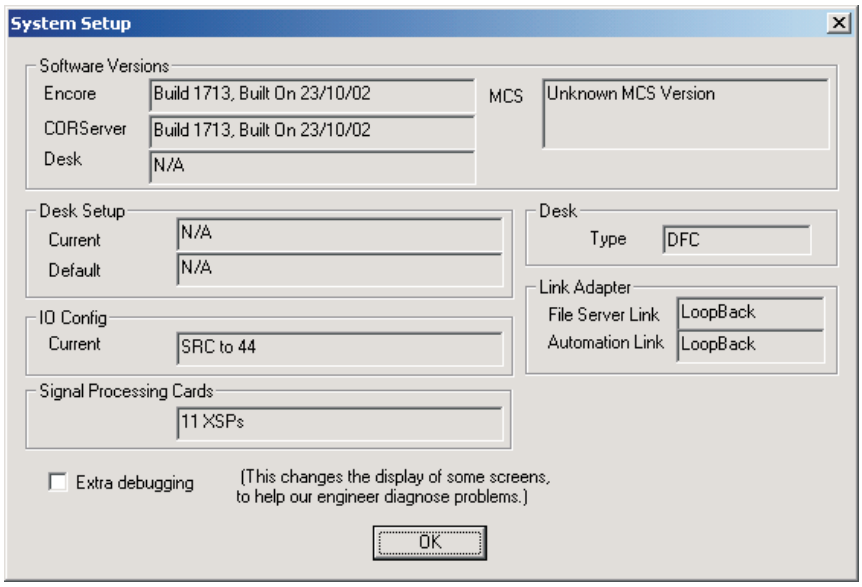


✍ *The example of the version shown may differ substantially from your copy of Encore.*

About System



Displays the System Setup dialogue box which shows information about the software versions of Encore and the desk code, plus other information such as the current link status.



✍ *The example of the version shown may differ substantially from your copy of Encore.*

Getting Help

On-Line Help can be accessed in four ways:

➤ Select an option in the drop down Help menu.

or

➤ Press the F1 key on the Encore keyboard.

or

➤ Click the Help button in a dialogue box.

or

➤ Click the Help icon.

APPENDIX A : ROUTING

Input and Output Patching

The SHOW INPUT PATCH and SHOW OUTPUT PATCH keys in the Main Paths section of the Master Quadstrip are used for fast input and output routing on the console surface.

This is an alternative to using I/O Manager or Path Edit.

Standard Routing

The DFC Gemini supports standard routing (i.e. not specific to film use) with the Upper and Lower Matrix Panels.

The matrix of keys on the Upper Routing Panel is used to select an internal routing destination (mix bus, aux bus, etc.).

The matrix of keys on the Lower Routing Panel is used to select sources to route to the destination.

Paths which have been placed on the surface may also be routed using only the PATH access keys.

✍ *FILM paths can only be routed using the PEC/Direct and Surround Monitoring Panels. See Surround Stem Selection and Routing.*

✍ *Paths can also be routed to Aux busses directly from the channel strips. See Auxiliaries.*

Routing with the Upper and Lower Routing Panels

To select the destination path type

➤ Press the nudge keys on the Upper Routing Panel.

✍ *If there are more than 64 of a path type then pressing the nudge keys will cause the Upper Routing Panel to show extra 'pages' of the same path type.*

The alpha displays next to the number keys will change to show the path types which can be routing destinations.

✍ *Tracks will be shown as REC in the alpha displays on the Upper Routing Panel.*

To select the destination path

➤ Press and hold the number key on the Upper Routing Panel which corresponds to the path number of the routing destination.

The Lower Routing Panel and the PATH access keys will now allow sources to be selected.

The LEDS in the number keys on the Lower Routing Panel will illuminate green to show sources not routed to the current destination or red if they are already routed.

To select the source path type

➤ Press the nudge keys on the Lower Routing Panel.

✍ *If there are more than 64 of a path type then pressing the nudge keys will cause the Lower Routing Panel to show extra 'pages' of the same path type.*

✍ *Tracks (busses) will be shown as MON in the alpha displays on the Lower Routing Panel.*

To select source paths

➤ Press the number keys on the Lower Routing Panel which correspond to the path numbers of the sources.

The integral LEDS in the number keys will illuminate red.

or

➤ Press the PATH access keys on the channel strips.

The triangular access LEDS associated with the PATH access keys will illuminate green.

In both cases, the long alpha on the Lower Routing Panel will indicate the success or failure of the routing operation.

When all sources have been selected

➤ Release the destination key.

✍ *If Film Stems have been set up with Tracks (busses), then the Stem Selection Keys and Routing Displays on the channel strips will indicate changes to the routing to those Tracks (if the paths routed are on the surface).*

Routing Paths with the PATH Access Keys

To select the destination

➤ Press and hold the required PATH access key.

The associated triangular access LED will illuminate.

The triangular access LEDS of paths already routed to this path will also illuminate.

To select the sources

➤ Press the required PATH access keys.

The associated triangular access LEDS will toggle on and off to indicate which paths are and are not routed to the selected destination.

When all sources have been selected

➤ Release the PATH access key.

To enable the output to the port

➤ Press the ON/CLEAR key.

The integral LED will illuminate red.

Logicators 1 and 2 will not change the port selection while it is enabled.

If the port is already used by another path

When the ON/CLEAR key is pressed the output to the port will not be enabled. Alphas 1 to 4 will display PORT USED BY path.

The LED in the ON/CLEAR key will not illuminate.

Nexus Mapping

See Nexus Mapping section of Tools Menu.

APPENDIX B : MONITORING

Standard stereo monitoring facilities are available on the DFC Gemini in addition to the Surround Monitoring capabilities.

See the Surround Sound Facilities chapter for information on the normal surround monitoring operation of the DFC Gemini.

The standard monitor outputs are separate from the Surround Monitor (Film) outputs.

The standard monitoring facilities provide a wide range of sources for the control room and studio loudspeakers.

✍ *This type of monitoring is only applicable when there are no Film paths in the current Desk Setup.*

Path Requirements for Standard Monitoring

For standard monitoring (i.e. stereo monitoring that does not use the surround system) to operate correctly, the appropriate number of Listens and Sels must be provided as part of the Desk Setup.

The System Paths button on the Config page of Desk Edit provides access to the number of stereo paths used for monitoring and talkback.

Listens

Two listens are used. One for PFL (LS2) and one for standard AFL (LS1). LS1 and LS2 are connected to outputs to optional AFL and PFL speakers.

✍ *Standard AFL Solo is only available if there are no Film paths.*

Talkback

One Talkback path is required for Talkback and Tone. See the Tone and Talkback chapter.

SELs

Three SELs are required for standard monitoring to be fully operational.

SEL1 is used for the main control room monitors. SEL1 can also be switched to the first small loudspeaker output (SMALL LS1).

SEL2 is used for the studio loudspeaker output.

SEL3 is used for the second small loudspeaker output (SMALL LS2). SEL3 is normally fed by the PFL bus.

Control Room Monitoring

The LS SEL key on the Routing and Talkback panel is used for selecting monitoring sources for the control room loudspeakers when there are no Film paths in the current Desk Setup.

✍ *These instructions are included to provide complete coverage of the operation of the DFC Gemini. It is not anticipated that 'standard' stereo monitoring of this type will be used on a properly configured DFC Gemini system.*

To select a Control Room Monitor source

➤ Make sure the AFU key on the Lower Routing Matrix is not on.

The integral LED should be off.

➤ Press the LS SEL key.



The integral LED will illuminate red.

The long alpha in the Lower Routing Matrix will indicate the current type of the source path. The number keys will illuminate to how many sources of the selected type are available.

If a source has previously been selected then its LED will be red.

➤ Press the nudge keys to change the path type and/or scroll through path numbers above 64.

➤ Press the required number key.

The integral LED will illuminate red.

The selected source will be sent to the monitor output and the source name will be displayed in the Control Room alpha.

Sources can be de-selected with the same operation, simply press keys that have red LEDS to turn them off. This is useful if stray signals are routed to near-field speakers by accident.

To adjust the control room loudspeaker level

➤ Turn the main level rotary control (red top) to the required setting.



✍ *This also operates as a master level control for the surround monitor outputs.*

To cut the Control Room Loudspeakers

➤ Press the CUT key.

The integral LED will illuminate orange.

✍ *This also cuts the feed to the surround monitoring speakers and Small L/S 2 (SEL3).*

To cut the feed to the left speaker

➤ Press the CUT LEFT key.

The integral LED will illuminate orange.

✍ *If MONO is active then the right hand leg of the stereo pair will be fed to both speakers.*

To cut the feed to the right speaker

➤ Press the CUT RIGHT key.

The integral LED will illuminate orange.

✍ *If MONO is active then the left hand leg of the stereo pair will be fed to both speakers.*

To reduce the level to the dim level set in defaults

➤ Press the DIM key.

The integral LED will illuminate orange.

✍ *This also dims the level of the surround monitoring speakers and Small L/S 2 (SEL3).*

To swap the feeds to the left and right speakers

➤ Press the SWAP L/R key.

The integral LED will illuminate red.

To reverse the phase of the left or right feed

➤ Press the PHASE LEFT or PHASE RIGHT key.

The integral LED(s) will illuminate red.

To change the loudspeaker feed from AB to M/S

➤ Press the M/S key.

The integral LED will illuminate red.

To listen to a mono sum of the left and right feed

➤ Press the MONO key.

The integral LED will illuminate red.

An equal mix of the left and right signals will be fed to both speakers.

To listen to the Control Room Monitor source when there are no speakers for the Monitor output

➤ Press the SWAP SPKRS key on the MON FORMAT SEL section of the Surround Monitoring Panel.

The integral LED will illuminate red.

The LED(s) for the currently selected Stem(s) in the STEM SEL section will flash.

The output routed to SEL 1 will appear on the front left and front right speakers and the remaining surround speakers will be cut.

The output for front left and front right will be sent to SEL 1.

Small Loudspeakers

The Small Loudspeaker outputs provide alternative destinations for the monitoring system.

Small Loudspeaker 1 is a direct alternative to the main control room speaker output (fed by SEL1).

Small Loudspeaker 2 is normally an output for the PFL bus (via SEL3) but can be switched to the current source for the control room.

To switch SEL1 from the main control room speakers to Small Loudspeakers 1

➤ Press the SMALL L/S 1 key.

The integral LED will illuminate red.

The speaker level is controlled by the rotary control adjacent to the SMALL L/S 1 key.

The CUT and DIM keys remain in circuit.

To switch the feed to Small Loudspeakers 2 from the PFL bus to the control room source

➤ Press the SMALL L/S 2 key.

The integral LED will illuminate red.

The feed from the LS SEL source to SEL1 will be switched to SEL3 and the PFL bus will be disconnected from SEL3.

The speaker level is controlled by the rotary control adjacent to the SMALL L/S 1 key.

Studio Loudspeakers

To select a Studio Loudspeaker source

➤ Press and hold the SEL key on the STUDIO LS section.



The integral LED will illuminate red while the key is held.

➤ Make the required selection on the LS SEL section as above.

The selected source will be displayed on the STUDIO LS alpha.

➤ Release the SEL key.

To adjust the Studio Loudspeaker level

➤ Turn the rotary control to the required setting.

To cut the Studio Loudspeakers

➤ Press the CUT key.

The integral LED will illuminate orange.

To reduce the level of the left and right feeds to the setting in defaults

➤ Press the DIM key.

The integral LED will illuminate orange.

To use the same source as selected for the Control Room

➤ Press the FOLL key.

The integral LED will illuminate red.

The STUDIO LS alpha will display FOLLOW.

✍ *When the key is turned off, the source will stay the same until a new one is selected and the alpha will show the same source as the CONTROL ROOM alpha (i.e. it does not revert to the source selected before follow was engaged)*

APPENDIX C : ENCORE ADMINISTRATION

Introduction

The DFC Gemini uses Microsoft Windows NT as an operating platform for the Encore software. Microsoft Windows NT provides a stable working environment with a range of user supportive features such as security and the logging of diagnostic information.

This is a 'secure operating system' and allows individual users to be 'setup' before using the system to prevent unauthorised access to other user's files, system-wide parameters and settings.

This involves giving the user a **Username**, a **Password** and membership of a **Group**.

It is necessary to setup at least one user as there are no default **Usernames** for Encore.

✍ *These instructions assume that users have a knowledge of graphical operating system concepts, such as using the mouse for clicking on buttons and selection of fields for data entry.*
It also assumes a knowledge of basic computer concepts (e.g. files and directories).

The Modem

A modem is provided so that technical staff at AMS Neve can perform remote diagnostic activities by accessing logging data recorded by Encore and Microsoft Windows NT.

Please ensure that an external telephone line is provided for connection to the modem.

Administration Terminology

This section explains some basic terminology used in secure operating systems. It is intended for users who have no prior experience of such systems.

Users

Users are the actual operators who use the system. It is possible for a single user to log in with different **Usernames**, and conversely it is possible to have a single **Username** which is used by several users (this is not advised).

Logging In and Logging Out

'Logging in' is the procedure whereby access to the system is granted by entering a correct combination of **Username** and **Password**. The term login is generally used to describe the action of logging in.

Logging out (or logoff) causes the system to terminate the current session of Microsoft Windows NT usage, and the system will not allow any further activity to take place other than shutting down the system completely or logging in again with a valid **Username** and **Password**.

Username and Password

The **Username** is a means of identifying a particular operator to the Microsoft Windows NT system. Each **Username** has a **Password** associated with it and the correct **Password** for a particular **Username** must be provided by the operator to gain access to the system.

Groups

A **Group** is a means of identifying what class of operator a user belongs to (e.g. Engineer, Technician, etc.). Within Microsoft Windows NT, each **Group** has various **Rights** which allow or restrict the functions which may be performed by members of that **Group**.

Rights

Rights are the restrictions and permissions which are assigned to a **Group** of users on a Microsoft Windows NT system. They apply on a general system-wide basis, as opposed to **Permissions** which apply to individual directories and files in the system.

Each **Username** inherits the rights which apply to the **Groups** that the **Username** belongs to (a **Username** can belong to more than one **Group**). A common practice is to set up a base **Group** which has **Rights** which apply to all users (by default this **Group** is called Everyone on Microsoft Windows NT) and then additional **Rights** are applied to special **Groups** which are defined by the system administrator.

Permissions

Permissions specify the access that particular **Groups** or **Usernames** have to files and directories. This allows **Groups** or **Usernames** to be given access to, or locked out of, parts of the system which are applicable to the work they need to perform.

User Administration

This section explains the steps required to set up and manage Usernames. The special Username 'Administrator' is supplied with Rights to manage user information.

The steps covered in this section are :

- ❑ Logging in with the special Username of Administrator.
- ❑ How to run the User Manager program.
- ❑ How to add a new user which will be recognised by the system.
- ❑ How to delete an existing user.
- ❑ How to log out from the Administrator user.

Encore requires persons using the system to be set up with Usernames. This is because Encore stores information against the Username.

Logging in as user Administrator

This can be done when the system has started up or by first exiting from Encore.

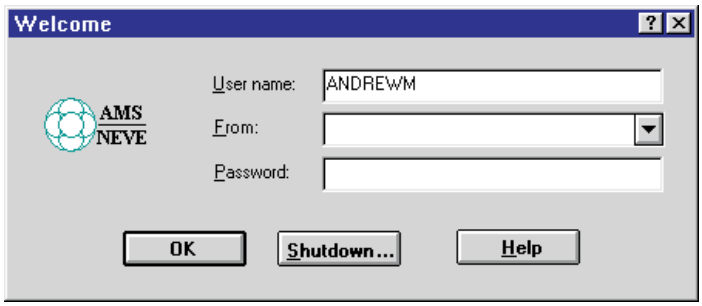
In either case, the first Welcome box will be on the screen.



✍ *If logging in when the system has just started up, then the Service Control Manager (a special part of Microsoft Windows NT) may display a message at this point. Make a note of the message if it is an error. Click on OK to proceed to login.*

➤ Press and hold the Ctrl and Alt keys on the keyboard, then press Del.

This informs the system that a user is present and a second Welcome box will appear for logging in.



➤ Enter the Username as Administrator.

➤ Ignore the From entry.

➤ Enter the Password for Administrator.

The password for Administrator is included in the delivery pack for DFC Gemini.

✍ *The password for Administrator must be kept in a secure place to prevent unauthorised access to your system at this level.*

➤ Click on OK.

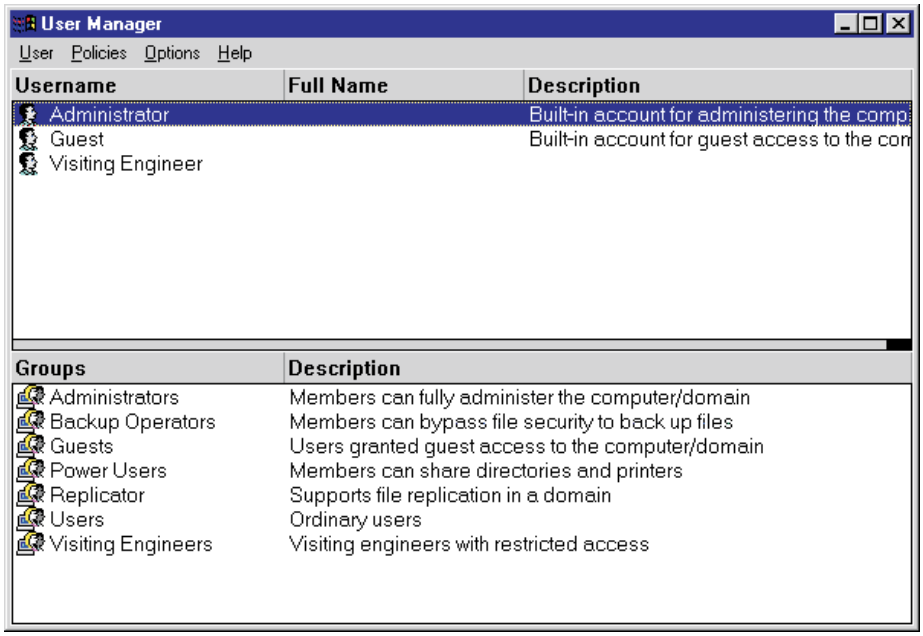
Microsoft Windows NT will now launch its own desktop.

Running User Manager

➤ From the Start Menu, go to Start -> Programs -> Administrative Tools (Common).

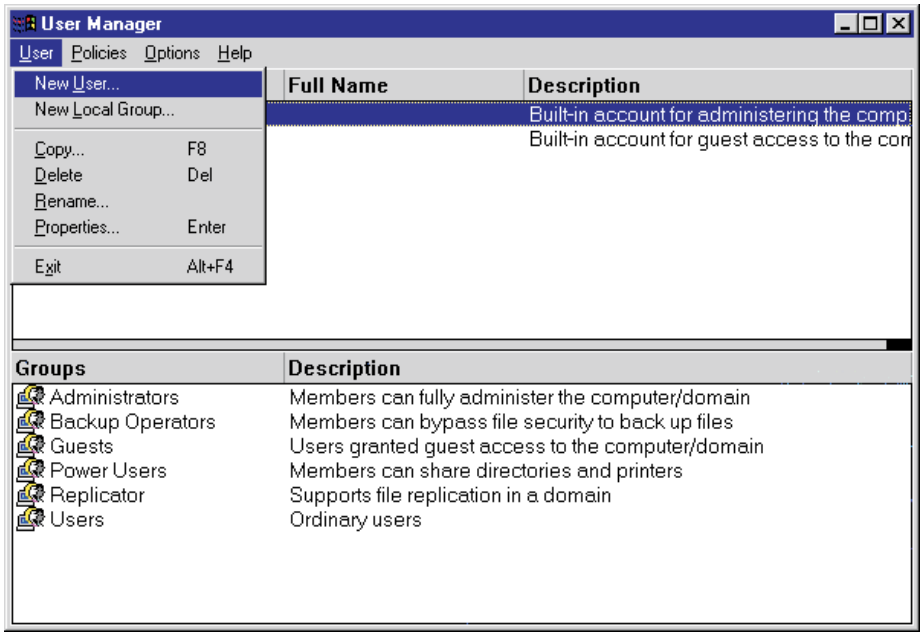
➤ Click User Manager in the Administrative Tools (Common) menu.

The User Manager window will appear.



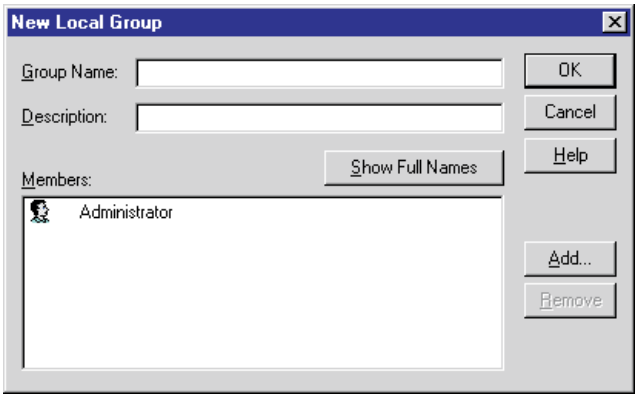
To Add a New Group

➤ Click on User to display the User drop down menu.



➤ Click on New Local Group.

The New Local Group dialogue box will be displayed with the cursor will be in the Group Name box.



➤ Type a name for the new Group.

➤ Press the TAB key.

The cursor will jump to the Group Description box.

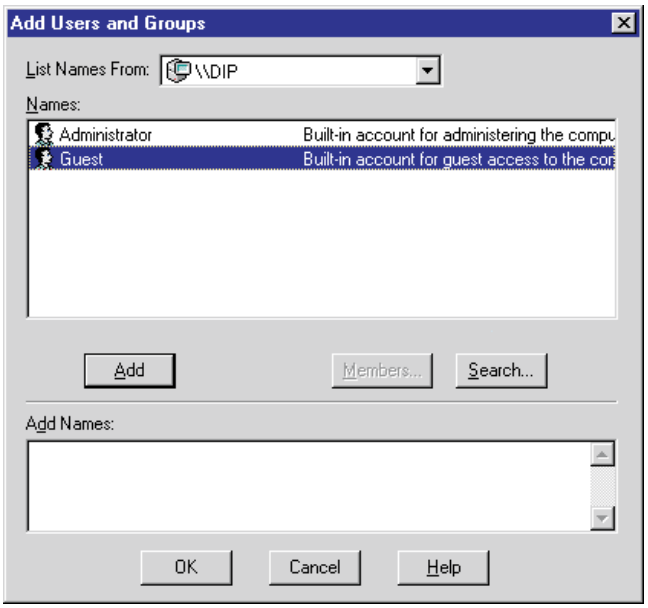
➤ Enter some text that describes the intended type of users that will belong to the group.

The Members box shows the currently selected member of the group (this will depend on the user name that was highlighted when New Local Group was started).

To add existing Users to the Group

➤ Click the Add button.

The Add Users and Groups dialogue box will be displayed.



➤ Click on a required user name in the Names list.

➤ Click the Add button.

The name will be shown in the Add Names list.

➤ Continue to select the required users.

➤ Click OK.

The selected user names will be displayed in the Members list in the New Local Group dialogue box.

To save the new Group

➤ Click OK.

The Group will be listed in the Groups list in the bottom half of the User Manager screen.

User Groups

Two Groups are defined automatically when Microsoft Windows NT is installed. Permissions for these Groups have also been set, and can be changed via File Manager (see Microsoft Windows NT documentation or File Manager Help for more details).

The Groups are Everyone and Power Users:

Everyone

Basic system Rights for all users. All users belong to this Group. This is a special default group which is part of Microsoft Windows NT. It does not appear in the User Manager. The Everyone Group cannot be deleted and users cannot be removed from this Group.

Power Users

The Administrator user is assigned to this Group. The Power User Group allows Administrator to perform user administration, primarily for adding and deleting User Names and changing Permissions on files and directories.

Some additional group names that would be useful are:

Engineers

In-house engineers would be assigned to this Group.

Visiting Engineer

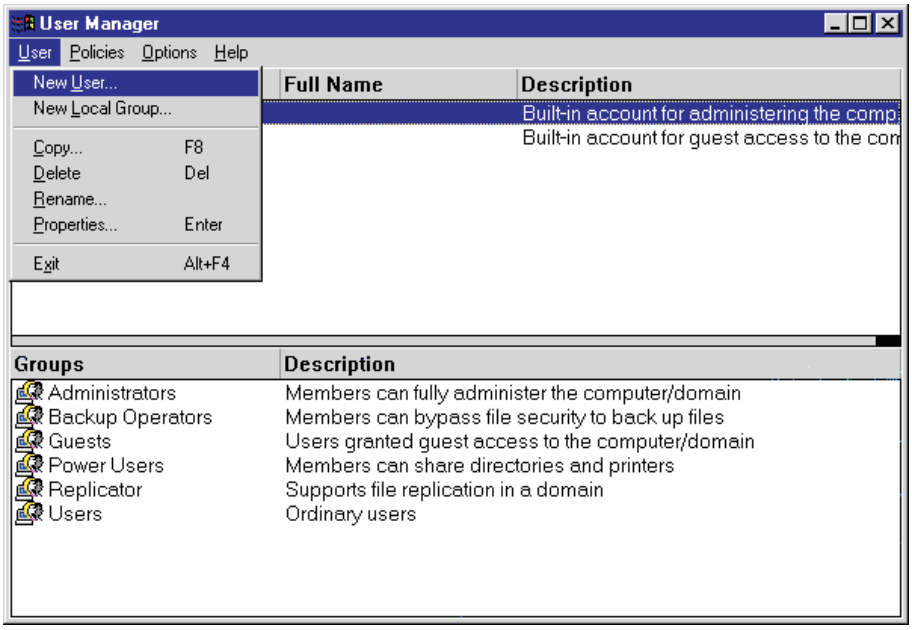
Other engineers who need to use the system would be assigned to this Group. Members of this Group can only access their own files.

Technician

In-house technicians would be assigned to this Group.

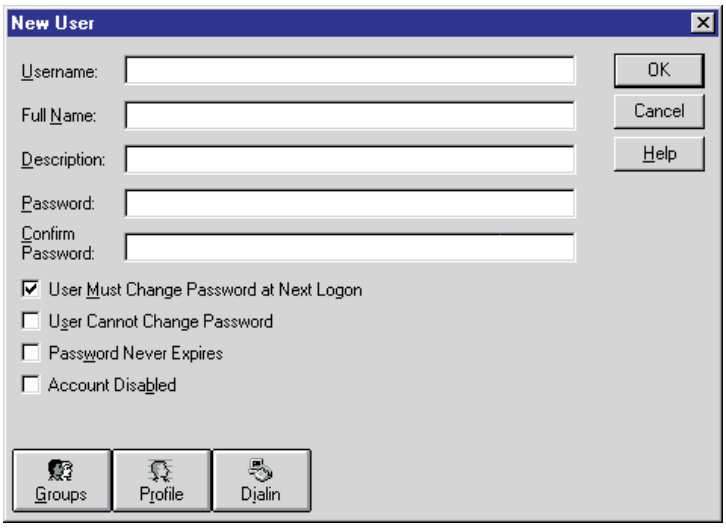
To Add a New User

Click on User to display the User drop down menu.



➤ Click on New User...

The New User dialogue box will appear.



➤ Enter the Username for the user to log in with.

➤ Enter the user's full name.

➤ If required, enter a description to remind you of who the user is, what company he belongs to, etc. (useful for Visiting Engineers).

➤ Enter a Password.

This must be entered twice, the second time in the Confirm Password box. This is because a * is displayed for each character of the Password to hide it, so entering it a second time will ensure it is correct. If any mistakes are made, delete both password entries and start again.

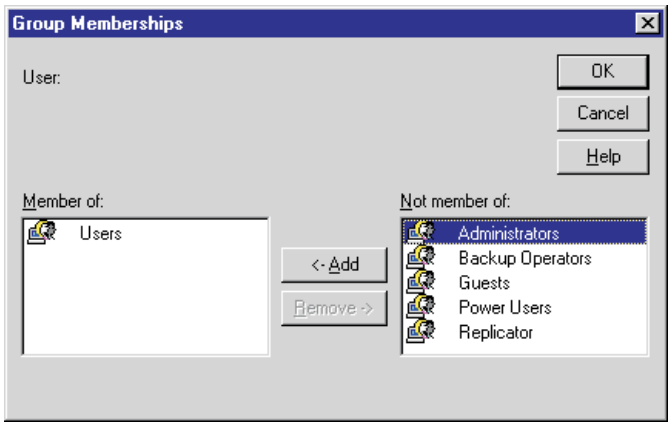
➤ If required, click the User Cannot Change Password check box.

It is advised that the other check boxes are left unchecked.

To assign a user to a Group

➤ Click the Groups button.

The Group Memberships dialogue box will appear.



➤ In the Member of: box, click on the default 'Users' Group.

➤ Click on Remove.

The group name Users will be moved to the Not member of: box.

➤ In the Not member of: box, select one of the new Groups that has been added.

➤ Click on Add.

The selected group will be transferred from the Not member of: box to the Member of: box.

➤ Click on OK to return to the New User dialogue box.

➤ Click on OK to confirm creation of the new user and return to the main User Manager window.

To Delete a User

➤ Click on the required user in the list of Users in the top half of the User Manager window.

➤ Click User in the menu bar to display the User drop down menu.

➤ Click on Delete.

The User Manager will display a warning message about deleting the user.



➤ Click on OK to confirm deletion, or Cancel to abort.

Tip

If it is necessary to change information on a particular user, click the required Username in User Manager and then click Properties in the User drop down menu. This will display the same screen as for a new user, but with all the information already filled in. This is especially useful for changing the Password associated with a particular Username if it has been forgotten.

Logging Out from Administrator

➤ Ensure all applications (including administrative programs) are closed.

There are three methods of logging out.

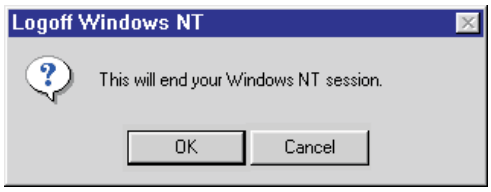
To log out from Program Manager

➤ From the File menu in Program Menu, choose Logoff.

or

➤ With Program Manager as the foreground task, press ALT+F4.

The Logoff Windows NT dialogue box will appear.



➤ Click on OK.

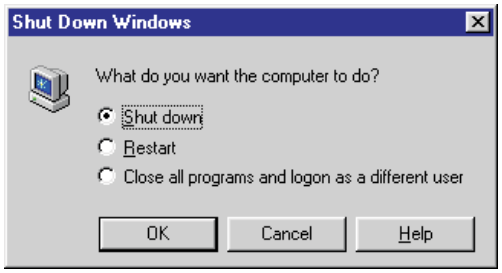
To log out when Program Manager is minimised

➤ Click the Program Manager icon.

A flyout menu will appear, attached at one corner to the Program Manager icon.

➤ Click on Logoff.

A dialogue box will appear with options for logging off or shutting down.



➤ Click the Log off radio button and click on OK.

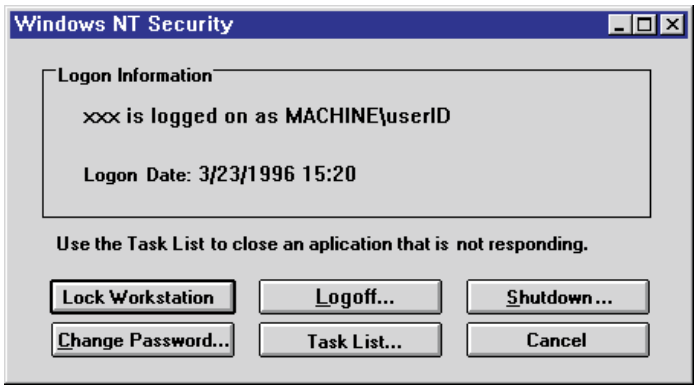
The Logoff Windows NT dialogue box will appear (as above).

➤ Click on OK.

To log out from the Windows NT Security dialogue box

➤ Press CTRL+ALT+DEL on the dockable keyboard.

The Windows NT Security dialogue box.



➤ Click on the Logoff... button.

The system will now close Program Manager and display the Welcome dialogue box for logging in as a different user.

APPENDIX D : MCS TRANSPORT SUPPORT

Introduction

The AMS Neve MCS (Machine Control System) is available across a range of products. The MCS allows you to connect to a large number of different audio and video transports, ranging from the latest instant access media to traditional film transports.

At the time of writing, the MCS supports the Sony P2, AK ESBus, and TimeLine Lynx interfaces, with more planned in the future. (These are referred to as "9-pin", "AK" and "Lynx" respectively in this document.)

9-pin Transport Support

The number of different models of transports, which can be controlled by the 9-pin, are in the hundreds, each with their own particular facilities and idiosyncrasies, which have to be individually crafted into the MCS's memory.

To support all these transports would be a life-times work, as more models are launched every month. So AMS-Neve has implemented the most popular transports, and is working on implementing more transports as customers require.

Of course, most "unsupported" transports will be able to be controlled through a universal interface, which allows the user to alter the characteristics of MCS. However, until the transport is properly implemented within MCS, we cannot guarantee its support or the level of facilities available.

9-pin Tables

The following tables define the categories of support AMS Neve gives for each transport model. If a model is not listed, then it should be considered to be an "unknown" transport, and will be treated as described below.

Category A transports:

These are validated for the MCS, and the facilities supported are checked in the table.

Category B transports:

These are recognised by MCS, but have not been tested and supported yet, but can reasonably be expected to be fully operable by MCS.

They may for example be generically similar to a validated transport, but AMS Neve does not guarantee to support all or any of the facilities available.

Category C transports:

These are recognised by MCS, but have not been tested and supported yet.

Category D transports:

These are transports which are unable to be controlled by MCS.

In many cases, most facilities of these transports can be supported via a synchroniser unit such as the AK or Lynx, using the parallel controls of the transport.

Unknown transports: (No table)

These are transports not recognised by MCS. AMS Neve will consider requests to support these on a case by case basis, but cannot give any guarantee of the outcome of such work.

In many cases, most facilities of these transports can be supported via a synchroniser unit such as the AK or Lynx, using the parallel controls of the transport.

9-pin General Limitations

Video Lock

The basic principle of the 9-pin interface, is to slew the slave transports to within a frame of the target, and then instruct the transport to lock to its external video sync.

Therefore the 9-pin system (and hence the MCS) depends on a good house video sync being available for both the transports and MCS.

If the timecode from the transport is not locked to the video sync, then there may well be up to a 1 frame error if the timecode boundary is crossed during this action.

It is recommended practice to stripe the media with video locked timecode

Status return

Although the 9-pin protocol caters for a wide range of status returns, many transports only report a sub-set of these. Therefore, MCS can only report the status returned by the attached transport.

Machines that lie!

Some transports return incorrect status responses or timecode positions, sometimes randomly. In these cases, despite AMS Neve's best endeavours, the information shown on screen may be incorrect, or they may cause repeated re-lock tries. In such cases AMS Neve can not be held responsible for the actions of the MCS, but will continue to work together with the transport supplier to attempt a solution.

Remote eject

MCS does not support remote eject.

Pal (& SECAM) or NTSC

If one video standard of a transport is supported, it does not follow that the other standard will work reliably.

Colour Frame sequence

AMS Neve products are intended for Audio editing, and as such are not forced to take account of the Colour Frame Sequence of the Video stream for edits.

So in order for the 9-pin controlled transports to lock correctly, they must have their Colour Framing mode disabled.

Otherwise when the transport is released to lock up to the external video sync, it may cause an offset as it locks to the correct Colour Frame Sequence, rather than the current video frame.

Player only

Where the transport model is a Player Only model, the Track Record facilities will not be available, even if checked in the supported list.

9-pin Facilities

Each transport offers a number of facilities, some of which are available for control via the 9-pin port. The following list describes a "group" of facilities which the MCS can control. These will be ticked, if supported by particular transport, in the Category A transport table.

A. Basic Transport controls (<< >> > etc.)

Pause (or Stop if no Pause facility), Play, Fast Forward, Fast Rewind

B. Extended Video Transport controls

Stop (unlace), Wind (unlaced), Rewind (unlaced)

C. Extended Audio Transport controls

Library Wind, Library Rewind, Spool off.

D. Jog/ Shuttle

Single frame Jog in either direction, constant rate sub-Play to multi-Play spooling with picture or audio.

(Note: the min. and max. speeds are dependant on the transport specifications)

E. Searching

Locating (Cueing) to a predetermined timecode target. Cycling (Looping) between two predetermined timecode targets, Rollback (Locating back) a predetermined timecode distance, and Playing on.

F. Synchronisation (lock to common video sync)

MCS slews the transport, by the fastest means possible to follow a running timecode source, with a predetermined offset, and dropping the transport into play when the target offset is reached.

This requires that the controlled transport is synchronised to a common video source, and is able to lock itself to an external video sync on command.

G. Record Punch-In & Out

To command the transport to enter or leave overall Record mode. (This does not include individual arming of the tracks.)

H. Track Arming

The ability to put individual tracks into Record Arm, Record In and Out commands for punching the group of Armed tracks in and out of record simultaneously.

I. Program records

Record In & Out commands automatically issued at predetermined timecode targets. These would control the group of Armed tracks, in and out of record simultaneously.

J. Timecode record enable

The ability to put the Timecode track into Record Arm, to be controlled the same way as Track Arming and Program Records.

Category A Transports (Verified)

Make	Model	A	B	C	D	E	F	G	H	I	J	Notes
Akai	DD8	Y	n/a			Y	Y	Y	Y	Y		
Avid	Audiovision	Y	n/a			Y	Y	Y	Y	Y		
CB	MC-1	Y	Y			Y	Y	Y	Y			
Fairlight	MFX3	Y	n/a			Y	Y	Y	Y	Y		
Nagra	T-Audio	Y	Y			Y	Y	Y				
Sony	BVU800	Y	Y			Y	Y	Y	Y	Y	Y	
Sony	VO9800	Y	Y			Y	Y	Y	Y	Y	Y	
Sony	VO9850	Y	Y			Y	Y	Y	Y	Y	Y	
Sony	BVW75	Y	Y			Y	Y	Y	Y	Y	Y	
Sony	PVW2600	Y	Y			Y	Y					
Sony	PVW2650	Y	Y			Y	Y					
Sony	DVW A500	Y	Y			Y	Y	Y	Y	Y	Y	
Sony	DVW A510	Y	Y			Y	Y	Y	Y	Y	Y	
Sony	DVR 18	Y	Y			Y	Y	Y	Y	Y	Y	
Sony	UVW1600	Y	Y			Y	Y					
Sony	UVW1800	Y	Y			Y	Y	Y	Y	Y	Y	
Sony	PCM7030	Y	Y			Y	Y	Y	Y	Y	Y	6
Sony	PCM7050	Y	Y			Y	Y	Y	Y	Y	Y	6
Sony	PCM3324S	Y	Y			Y	Y	Y	Y	Y	Y	
Panasonic	AJ-D350	Y	Y			Y	Y	Y	Y	Y	Y	
Panasonic	AJ-D580	Y	Y			Y	Y	Y	Y	Y	Y	
Panasonic	M2	Y	Y			Y	Y	Y	Y	Y	Y	
Panasonic	AG7700 S-VHS	Y	Y			Y	Y	Y	Y			
ASC	VR	Y	n/a			Y	Y	Y		Y		4
FED	V-MOD-100	Y				Y	Y	Y		Y		3
DoReMe	V1	Y	Y			Y	Y	Y	Y	Y	Y	5
Fostex	D20B	Y	Y			Y	Y	Y	Y	Y	Y	1
Tascam	DA60	Y	Y			Y	Y	Y	Y	Y	Y	
Tascam	DA88	Y	Y			Y	Y	Y	Y	Y	Y	2

Notes:

1 Fostex D20 must be given video locked LTC (on its timecode input) to work.

2 Tascam DA88 & derivatives: (NOT DA98 - this is in category C - recognised but not reliably functional).
These can only be individually controlled, i.e. one transport to an MCS port, for the full set of MCS functions.
Although it is possible to support a chase group of these transports, the Track Arming will only work on the Master transport connected via the 9-pin to the MCS, and the MCS will only report on the status of the Master transport. The 15-pin interface is not yet supported.
See the end of this appendix for recommended switch settings for DA88's not equipped with V4 SY88 software. These switch settings are overridden by menu selections when V4 software is installed.

3 Rorke Data V-MOD 100 should be fitted with v1.62H software or later.

4 ASC-VR needs its device ID set to A8(NTSC) or A9(PAL) to avoid "mixed code" errors.

5 DoReMi software v1.99w does not operate correctly unless "A-time" is selected in the machine menu.

6 Sony 7030 and related DAT machines should have "confidence play" set OFF.

Category B Transports
(Recognised and likely to have acceptable performance)

Make	Model
Panasonic	AU-62
Panasonic	AU-63
Panasonic	AU-65
Panasonic	AU-66
Panasonic	AU-W32H
Panasonic	AU-W33H
Panasonic	AU-W35H
Panasonic	AG-7600
Panasonic	AG-7650
Panasonic	AG-7700
Panasonic	AG-8600
Panasonic	AG-8700
Panasonic	AGDS-540
Panasonic	AGDS-550
Sony	BVW 10
Sony	BVW 11
Sony	BVW 15
Sony	BVW 35
Sony	BVW 35PM
Sony	BVW 40
Sony	BVW 50
Sony	BVW 60
Sony	BVW 65
Sony	BVW 70
Sony	BVW 70S
Sony	BVW 75S
Sony	BVW 85P
Sony	BVW 90
Sony	BVW 96
Sony	BVW D75
Sony	BVW D265
Sony	BVW 9000
Sony	WBR 700
Sony	PVW 2800
Sony	PCM 800
Sony	DVW 250
Sony	DVW 500
Sony	DVW 510
Sony	DVW CA510
Sony	DVR 10
Sony	DVR C10
Sony	DVR 20
Sony	DVR C20
Sony	DVR 28
Sony	EVO 9800
Sony	EVO 9850
Fostex	D30

Category C Transports
(Recognised but may require further software upgrades)

Make	Model
Sony	BVH-2000
Sony	BVH-2180
Sony	BVH-2500
Sony	BVH-2700
Sony	BVH-2800
Sony	BVH-2830
Sony	BVH-3000
Sony	BVH-3100
Sony	BVU 820
Sony	BVU 850
Sony	BVU 870
Sony	BVU 900
Sony	BVU 920
Sony	BVU 950
	HDV 10
Sony	DVR 1000
Sony	DVR 2000
Sony	DVR 2100
Pioneer	VDR-V1000
Pioneer	VDR-V1100
JVC	BR 622E
JVC	BR 822E
Tascam	DA98
Otari	DTR90
	HDD 1000
BCS	DCR 300 (D1 Digital video)

Category D Transports (Unable to control)

Make	Model	Notes
Fostex	D20	Not servoable. Can only be used as a single machine. Does not resolve.
Fostex	D15	
Sony	3348S	No 9-pin interface

Parallel Machine Support

The following table summarises transports with parallel control interfaces which can be supported via an ES/2 external ESbus synchroniser. See ES/2 manual for further details.

Make	Model
Akai	DR1200
Albrecht	MB 51 PB 51 MB 42 PB 42
Ampex	ATR 100 VPR 80 ATR124
Cinemecanica	Victoria
CTM	Rythmo
Fostex	Model 20 E2 E22
JVC	CR6600 8250E PR900 BR610 BR810 BR6600 BR8600
Lyrec	TR533 Frida
Magnatech	600 2000 10000
Mitsubishi	X86 X850 X880
MCI	JH24 JH110
MTM	Dubber Rythmoband
Nagra	T-Audio
Otari	BTR 5 MTR10 MTR12 MTR15 MTR90 MTR100 MX70 MX80 MX55 MX5050 DTR900

Make	Model
Perfectone	Unitor
Rangertone	R106
Rank	Amigo
Schlumberger	DS16
Sondor	OMA-3 OMA-S A90 MO3 Libra
Sony	BVU 800 BVU 850 5850 5630 3324 3348 APR5000 APR24 3402
Soundcraft	760 MkIII Saturn
Studer	A800 A807 A812 A820 A827 D820 / 827
Tascam	TS52 TS58 ATR60 TSR8 BR20 DA800
Telefunken	M20

TASCAM DA88

Recommended DIP switch settings

S1 Rear panel

1. Video termination - user preference	DOWN	for terminated
2. Serial In	DOWN	for RS422
3. Chase Mode	DOWN	for slave follows master
4. Rechase mode	DOWN	for 1 second
5. TC out	UP	for follow digital outputs
6. MIDI tc	DOWN	for Midi follows tape
7. Sync	UP	for lock to video edge
8. Controller	UP	no chase commands

S2 Internal switch

1. MIDI device number	user preference
2. do.	"
3. do.	"
4. do.	"
5.	
6.	
7.	
8.	0 (ON) for MTC (although not used in MCS)

S3 Internal switch

1. Device ID	1 (OFF)	for Tascam ID
2. do.	1 (OFF)	"
3. do.	1 (OFF)	"
4. Track pairs	0 (ON)	for digital tracks
5. do.	1 (OFF)	"
6. Wind speed	1 (OFF)	for 100x speed
7. 9 pin track arm	0 (ON)	for enabled
8. not used	0 (ON)	

APPENDIX E: GHOST RECOVERY AND MAINTENANCE PROCEDURE

This Appendix describes how to recover software and custom configurations.



WARNING

The installation of the Ghost Recovery Software will overwrite all data on the hard drive therefore any Events Lists (AudioFile SC, Media ToolBox) or Automation Data (DFC Gemini, Libra) that was saved on the hard drive will be lost.

It will take approximately 5 mins (using the Ghost Disk supplied) to install the software and configure the system as it was when it left the factory.

Before Starting

You will need the following items to complete this procedure:

Floppy Disk SFT,ENC,009, Disk 1 - Windows Boot Disk.
Ghost Recovery Zip Disk.

Recovery Procedure

The procedure for recovering software and configurations is as follows:

➤ Insert the floppy disk labelled SFT, ENC, 009 Windows Boot Disk into the floppy disk drive.

➤ Insert the Ghost Recovery Zip Disk (supplied with the system) into the Zip drive.

➤ Restart the computer.
Select Shutdown from the Start Menu, select Shutdown & Restart, then click OK.
Otherwise, press Ctrl-Alt-Del.

The System will boot up from the floppy disk.

You will be asked to confirm the type of Zip drive fitted. On all systems the Zip drive is IDE.

➤ Press I [Enter] to confirm.

You will be asked to confirm or cancel the Lock command.

➤ Press N [Enter] to cancel the Lock command.

✍ *The Lock command will have no effect at present, because either the hard disk is new (and therefore blank) or the hard disk is still formatted with NTFS (the Lock command works with DOS FAT16 partitions).*

The A: prompt will appear.

➤ At the A: prompt type ghost [Enter].

The Norton Ghost initial screen appears.

➤ Click on the OK box.

In the drop down menu

➤ Go to Local, move across to Disk and click on From Image.

➤ Select Drive C: Backup.GHO from the drop down menu drive listing.

➤ Click Open.

The files on the disk will now copy onto the Boot drive.

➤ Remove the disks and reboot.

Recovery procedure is now complete and the system is ready for use again.

Maintenance Procedure

✍ *This procedure is recommended if any software updates or any custom configurations have been put on the system in order to maintain your ghost copy.*

The procedure for copying software and custom configurations is as follows:

➤ Insert the floppy disk labelled SFT,ENC,009 Windows Boot Disk into the floppy disk drive.

➤ Insert the blank formatted Zip Disk into the Zip drive.

➤ Restart the computer.
Select Shutdown from the Start Menu, select Shutdown & Restart, then click OK.
Otherwise, press Ctrl-Alt-Del.

The System will boot up from the floppy disk.

You will be asked to confirm the type of Zip drive fitted. On systems the Zip drive is IDE.

➤ Press I [Enter] to confirm.

You will be asked to confirm or cancel the Lock command.

➤ Press N [Enter] to cancel the Lock command.

✍ *The Lock command will have no effect at present, because either the hard disk is new (and therefore blank) or the hard disk is still formatted with NTFS (the Lock command works with DOS FAT16 partitions).*

The A: prompt will appear.

➤ At the A: prompt type ghost [Enter].

The Norton Ghost initial screen appears.

➤ Click on the OK box.

In the drop down menu

➤ Go to Local, move across to Disk and click on To Image.

A box will appear. Make sure that Drive 1 is highlighted.

➤ Click OK.

➤ Select Drive C: (Zip Drive 100) from the drop down box.

➤ Type in the filename Backup.GHO.

➤ Click Save or press [Enter].

You will be asked if you want to Compress Image File.

➤ Select High.

You will be prompted to Proceed with Image File.

➤ Click Yes.

The Process Indicator screen will appear.

✍ *If the Boot hard disk contains additional data added by the user, more than one Zip disk may be needed to complete the procedure.*

You will be prompted to insert another disk if required.

➤ Click Yes followed by OK.

This will now continue until complete.

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