NEVE

GENESYS

User Manual
Issue 1

527 - 384

Health & Safety Notice

**FOR YOUR OWN SAFETY AND THE PROTECTION OF OTHERS,
PLEASE OBSERVE THE FOLLOWING SAFETY HEALTH AND SAFETY INSTRUCTIONS**

- ✓ READ THESE INSTRUCTIONS AND KEEP THEM HANDY
- ✓ HEED ALL SAFETY WARNINGS
- ✓ DO NOT USE NEAR WATER
- ✓ CLEAN ONLY WITH A DRY CLOTH
- ✓ DO NOT INSTALL NEAR HEAT SOURCES
- ✓ DO NOT BLOCK VENTILATION OPENINGS
- ✓ PROTECT THE POWER CORD
- ✓ USE ONLY ACCESSORIES SPECIFIED BY THE MANUFACTURER
- ✓ UNPLUG WHEN UNUSED FOR LONG PERIODS OF TIME
- ✓ MODULES AND CARDS SHOULD NOT BE INSERTED OR REMOVED WITH THE POWER ON
- ✓ REFER ALL SERVICING TO QUALIFIED PERSONNEL ONLY
- ✓ NO USER SERVICEABLE PARTS INSIDE

**FAILURE TO FOLLOW THESE PROCEDURES AND RECOMMENDATIONS
COULD INVALIDATE THE MANUFACTURER'S WARRANTY**

Console Overview
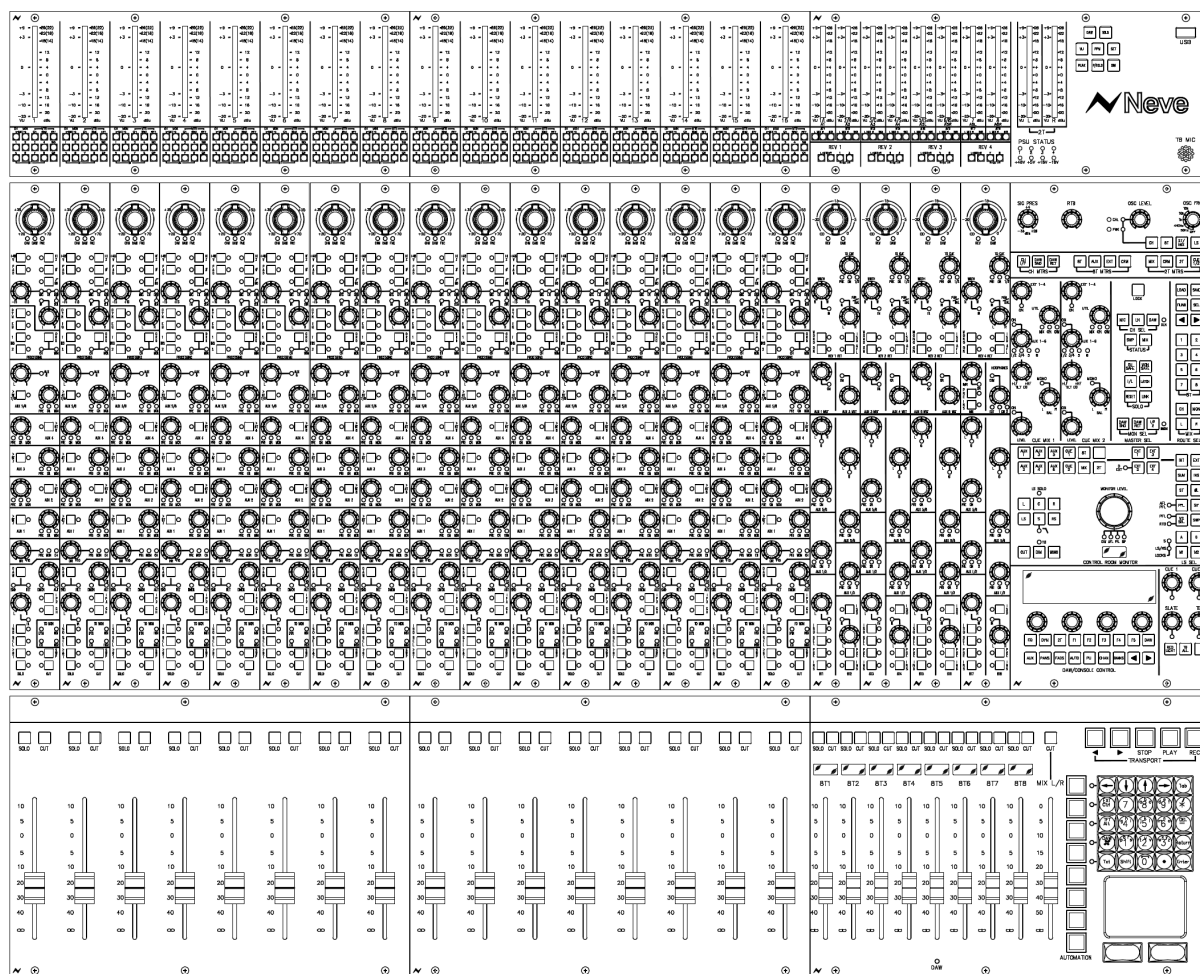
- Six Auxes 4 Mono and two stereo
- stereo mix buss
- Two stereo monitoring speaker sets
- Two 5.1 monitoring speaker sets
- 16 channels of Neve mic/line amplifiers
- 16 channels of DAW monitoring
- 8 Groups
- 1 Main output
- 4 stereo effects returns
- 16 Channel, 8 Track or 2 Track metering
- 2 Cue mixes
- Full talkback capability
- Internal power supply units
- Expandable to 64 channels, either in straight or wedge formation
- USB flash drive for Store, Load & Reset functionality
- Hands-on DAW control for Pro Tools, Logic, Nuendo & more
- Full console instant Reset
- Digitally controlled EQ and Dynamics (1084 EQ circuitry and 88R style Dynamics)
- Motorised 8T and Main Output faders with DAW control
- Optional Recall module so all rotary control positions can be stored and reset
- Optional EQ / Dynamics cassettes (8 per card)
- Optional AD/DA cassette to provide digital Ins/Outs (8 per card)
- Optional Digital Monitoring cassette providing I/O for Aux, 8T, Main Mix and monitoring

Introduction to GENESYS

For more than 40 years, the designers and engineers at Neve have worked uncompromisingly to produce the world's premier audio recording and mixing equipment. As a result, Neve products have long exceeded the most stringent requirements for sound quality and musicality – from countless classic albums to the vast majority of each year's blockbuster films. Traditionally, such perfection has come at a price, meaning that only the largest and most prestigious studios could own a Neve recording console. Until now.

Introducing **GENESYS**.

A hand-built expandable analogue recording console with digital workstation control. A console that builds upon Neve's forty years of technical heritage, including legendary mic pre-amplifiers and highly revered analogue circuit design.

GENESYS also accommodates for the seismic changes in methods of music recording, with extensive digital control and connectivity.

In any configuration, GENESYS offers an excellent studio control surface with comprehensive monitoring and signal routing compatibilities. This eliminates the typical collection of awkwardly interfaced devices, and puts a proper console back in the heart of the studio.

As with all Neve products, **GENESYS** offers sound and build quality beyond reproach. Even the console stand was developed in conjunction with internationally renowned studio designer Roger D'Arcy of Recording Architecture in London.

With **GENESYS**, the widest possible range of studios can legitimately claim to be a Neve facility.

The future begins here.

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Table of Contents

TRANSPORT Keys

MASTER AUTOMATION buttons

KEYPAD

Meterbridge

CHANNEL Meters

REV RETURN Meters

MASTER METER Section

Master Screen

EQ

DYN

2 TRK

DAW

Settings

FILING

RTE

ENCORE

SYSTEM

Audio Monitoring Boards

GENESYS Physical Information

Console Connector pin-outs

Computer Cassette

Monitor Section Connectors

Channel Section Connectors

About this manual

This manual consists of:
- A section-by-section operational overview of all parts of the console surface
- Technical & physical specifications including power consumption, dimensions, weight and other relevant information
- Section on the optional Automation system
- Section on the optional Recall software
- Schematics and reference drawings of D-Type pin-outs etc.

There is a Heading Index at the start of this manual, plus an Alphabetical Index, an Illustration Index and an Index of Tables at the end.

There is also a table explaining the Acronyms and Abbreviations of the most commonly used buttons and functions in this document.
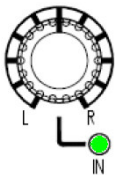
Some controls on the console have two functions (for example a rotary Pot provides a rotary control, plus an On/Off push-switch to either enable the feature or provide a second function).

Where relevant, the On/Off state (or second function) of the control is displayed by an adjacent led.

Conventions used

All button names / rotary controls are shown in **BOLD CAPITALS**.

Any text regarding the interlocking of buttons is shown in plain Italics.

> All text regarding the optional audio processing cassettes is framed.

➤ An arrow-shaped bullet-point indicates you should do this action.
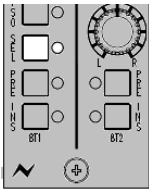
All text regarding SEL Mode is shown with a blue background.
All diagrams illustrating SEL Mode functionality, will have unavailable functions and leds greyed out (left).

Console surface colour coding

The knobs and buttons on the Channel Strip and 8T sections of the console are colour-coded for ease of operation.

Type	Control	Colour
Button	Channel Input	Light Grey
	Monitor Input	Dark Grey
	Auxiliary	Light Blue
	SEL	Yellow
Rotary	Level Control	Dark Grey
	Pan	Dark Blue
	Gain	Dark Red

Abbreviations & Acronyms

8T	8 Track		**PSU**	Power Supply Unit
AFL	After Fader Listen		**RET**	Return
CAL	Calibrate		**REV**	Reverb
CH	Channel		**RTB**	Return Talkback
CHM	Channel Mic		**S**	Sub
CRM	Control Room Monitor		**SEL**	Select
DAW	Digital Audio Workstation		**SIF**	Solo In Front
D-EXT	Digital External(s)		**SIG**	Signal
DLN	Digital Line(s)		**SND**	Send
DYN	Dynamics		**SWP**	Swap
D-MON	Digital Monitor		**TB**	Talkback
EXT	External(s)		**UTIL**	Utility
FNC	Function			
GR	Gain Reduction			
HI Z	High Impedance			
I/L	Interlock			
IMR	Insert Mix Return			
INS	Insert			
INT	Internal			
ISO	Isolate			
LN	Line			
LS	Loudspeaker			
LS/RS	Left Surround / Right Surround			
M1 / M2	Stereo Monitor Loudspeakers 1 & 2			
MON	Monitor			
MST	Master			
MTR	Multitrack Recorder			
ORD	Order			
PFL	Pre Fade Listen			
PLI	Plug Ins			

The Computer Cassette

The console does not need an external PC to run, but comes fitted with a single on-board PC cassette that provides these connectors and functions:

There are two types of computer cassette which can be fitted, referred to as the **Old** style or **New** style.

OLD style (inc Automation option)
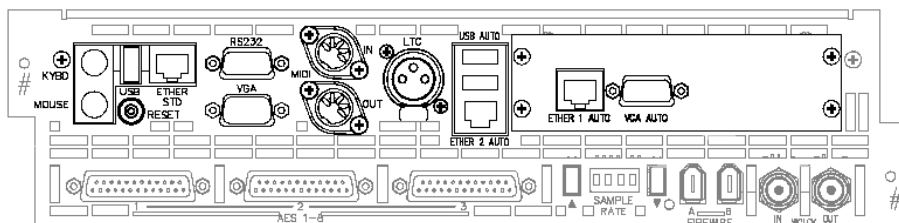
Ethernet STD
Standard Ethernet port.

RS 232
Typically used for controlling external mic modules, for example the Neve 1081s.

USB
For backing up and recalling Automation files, Recall files, Desk Setups etc to a USB device. There is another USB port on the meter bridge for ease of access.

MIDI In/Out
Provides 8 Channels of Midi communication.

External Keyboard
If more functionality is required than the fitted keyboard provides, an external keyboard can be used instead.

Mouse
An external mouse or trackball can be used instead of the console Glide Pad/Buttons.

Timecode In
If the console does not have the Automation option fitted, this ensures the screen can display an external timecode source as it runs.
If the Automation option is fitted, it is this timeline that automation events are written against.
With regard to timecode, the console only ever acts as a slave.

With the exception of the USB port, all of these connectors are accessed from the rear of the console.

With the Automation option fitted, additional connectors become available.
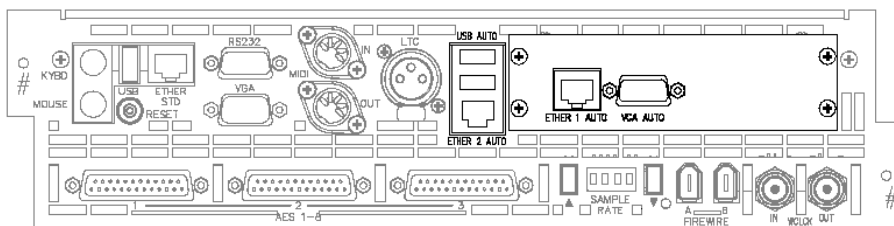
Ethernet 1 Auto & Ethernet 2 Auto
Used for HUI control & communication.
Ether 1 Auto is used to connect to a DAW and provide Midi over Ethernet communication so HUI control is possible.

VGA Auto
An external VGA monitor can be attached so the console controls and Encore Plus Automation screen can be accessed.

NEW Style
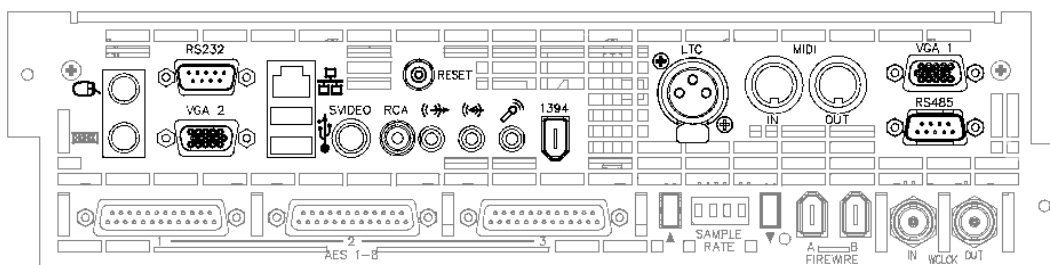
All these connectors have the same function as described above, except for:

VGA 1
Provides the graphics output from this card (**VGA 2** is not used).

Optional Console Hardware

EQ Cassette
(Part number SMN 812-411)
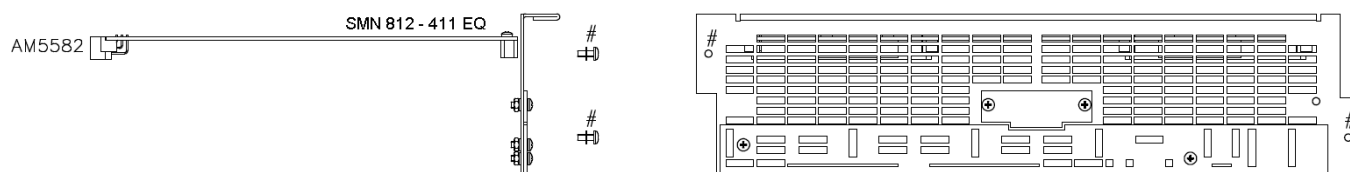
This cassette provides 8 Channels with classic Neve 1084 EQ (3 bands per channel).

Without this card, the **EQ** button (and led) on each channel strip will not function.
The **EQ** button underneath the DAW screen will also be locked out.

When the EQ cassette is present, the parameters are set using the four encoders under the small DAW screen.
The card itself has no external connectors / pin-outs.

> **Installation Instructions**
> ➤ Remove the power to the console.
> ➤ Ensure the switch settings have been set correctly for this card 's position.
>   See Appendix A on Switch Settings at the end of this document.
> ➤ Remove the entire ventilation facing plate on the rear of the console by removing the two screws shown above.
> ➤ Slide the EQ cassette into the top-most available slot and push it to the rear until the connectors mate securely onto the backplane.
> ➤ Screw the faceplate back into place.

Dynamics Cassette
(Part number SMN 812 – 412)
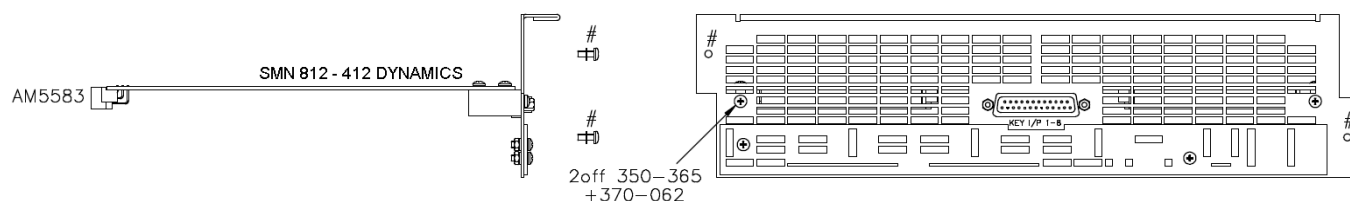
The Dynamics cassette provides 8 channels with Dynamics processing (Compressor and Gate, including the provision of an external Key Input).

This external Key Input is available on both the Gate and Compressor.

Without this card, the **DYN** button (and led) on each channel strip will not function.
The **DYN** button under the DAW screen will also be locked out.

When the Dynamics cassette is present, the parameters are set using the four encoders under the small DAW screen.

> **Installation Instructions**
> ➤ Remove the power to the console
> ➤ Ensure the switch settings have been set correctly for this card 's position.
>   See Appendix A on Switch Settings at the end of this document.
> ➤ Remove the ventilation facing plate on the rear of the console, and remove the Key Input blanking plate in the centre.
> ➤ Slide the Dynamics cassette into the middle slot and push the card firmly to the rear until the connectors mate securely onto the backplane.
> ➤ Screw the faceplate back into place, ensuring the Key Input D-type connector and two adjacent pillars comfortably clear the faceplate surface.
> ➤ Secure the Key Input D-type connector in place through the faceplate using the adjacent pillars and two screws.

Channels AD/DA Cassette
(Part number SMN 812 – 410)
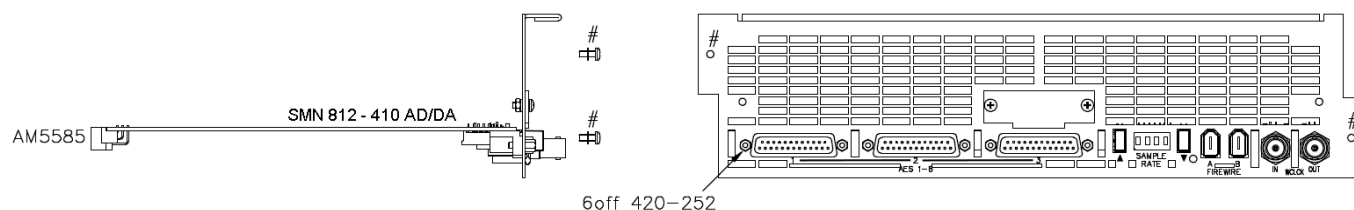
This cassette provides 8 channels with AD/DA converters.

Without this card, the **DLN** and **D-MON** functionality (and leds) will not be available on the console.

The AD/DA cassette provides facility for digital Lines and digital externals into the desk plus enabling the Direct Outputs on each channel to be sent digitally.

Installation Instructions
- ► Remove the power to the console.
- ► Remove the ventilation facing plate on the rear of the console (shown above) and remove the connector blanking plates.
- ► Slide the cassette into the lowest available slot and push it to the rear until the connectors mate securely onto the backplane.
- ► Screw the faceplate back into place, ensuring the 3 D-type connectors, support pillars and cassette connectors comfortably clear the faceplate.
- ► Secure the 3 D-type connectors in place through the faceplate using the adjacent pillars and six screws.

On larger consoles, it is possible to have one of each of the above cards for each block of 8 faders providing EQ, Dynamics and digital lines/externals for the entire console.
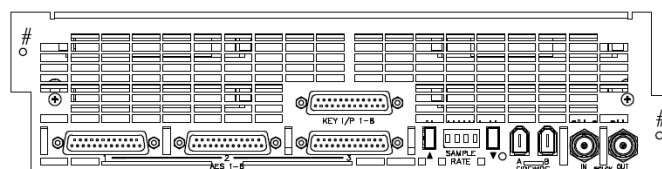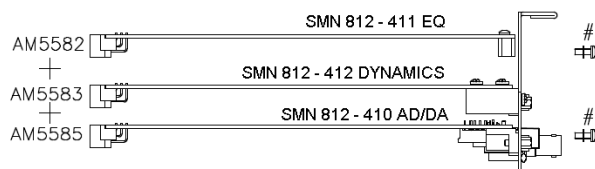
For cards not initially present, the connector plates on the console rear will be fitted with blank panels instead.
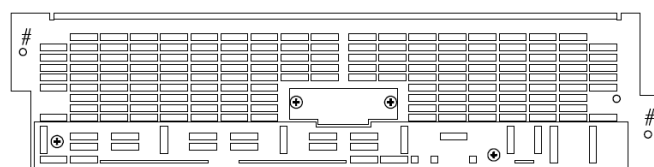
Operational Considerations

If you have an EQ processing cassette installed, it will only be possible to place the EQ on the Channel path **or** the Monitor path on a channel, not across both.

Likewise, the Compressor and Gate can only exist on the Channel **or** Monitor path.
It is not possible to have the Compressor on the Input and the Gate on the Monitor path (or vice versa).

Digital Monitoring Cassette
(Part number SMN 812 – 410)
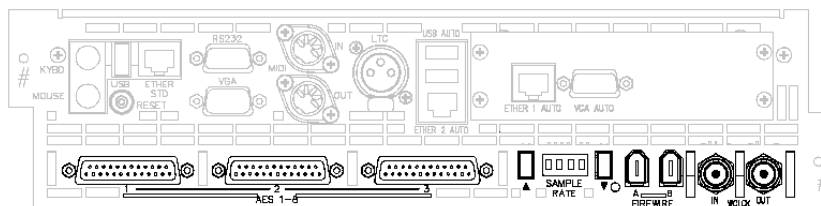
This single card (regardless of console size), enables all of the **Main Mix**, **2T, 8T, 5.1** and **Auxiliary Sends** to be sent from the desk digitally.

It also allows for a 5.1 Surround digital external input to the loudspeakers.
It is sub-fitted beneath the computer card and consists of 3 x 25-way D-type connectors, plus Firewire and BNC Sync connectors.

The sample rate that the card is locked to is shown in the four-character alpha display.

Installation Instructions
- ➤ Remove the power to the console.
- ➤ Remove the ventilation facing plate on the rear of the console (marked # above) and remove the blanking plate for the cassette connectors.
- ➤ Slide the cassette into the slot and push it to the rear until the connectors securely mate onto the backplane.
- ➤ Screw the faceplate back in place, ensuring the 3 D-type connectors (plus support pillars) and other connectors comfortably clear the faceplate.
- ➤ Secure the D-types connectors in place through the faceplate suing the support pillars and two screws per connector.

> *These optional processing cassettes are 'plug & play' and do not require any*
> *jumpers or switches to be set to integrate them into the console.*
> *They are automatically detected by the console when it powers up.*

For the purposes of this manual, it is presumed the console is fully fitted
with all the available optional hardware & software.

Optional Console Software

Automation
(Requires Part number SMN 812 – 400)

When a console has the optional automation package fitted, it comes with the following additions to a standard console:
- The Encore Plus™ automation software to record, edit and play back automation of Faders, Cuts and Channel Events (Aux On/Off, Insert On/Off etc) (not available in this version of software).
- Motorised channel faders, enabling playback of automated moves
- A row of Master Automation buttons next to the Main Output faders for setting the automation modes (not available in this version of software).
- Shown below, the computer cassette will utillise the additional hardware that contains:
  - ▶ A VGA output
  - ▶ 2 USB ports
  - ▶ Hard drive for storing automation files
  - ▶ Ethernet connectors used for HUI control and communication
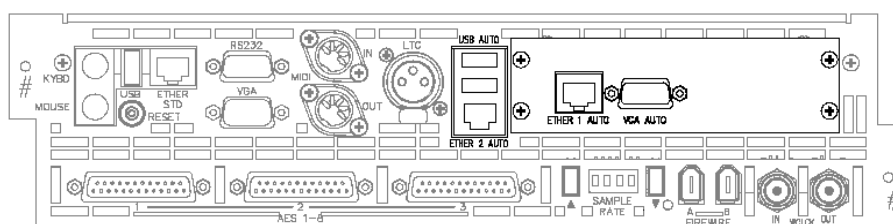
For the purposes of this manual, it is presumed the Automation hardware has been installed.

Recall

The Recall package means that as well as taking snapshots of the console surface as you would on a standard console (including any internal routing), the Recall software allows you to record the positions of all rotary controls and switch states so they can be manually matched at a later date providing full console reset ability.
It does not need any specific hardware to run other than that supplied with a standard console.

 As each control is matched by hand, an on-screen graphic will display the position of the control as you set it, plus an indication of where the control should actually be (indicated by a purple mark). Once it has been matched, the next control will be displayed and so on, until all of the surface has been reset.

- If Recall has been fitted, the letter **R** will be displayed in red in the top right corner of the main screen just by the timecode display.
- If Recall is not present, the letter **R** will be displayed in grey instead.

Recall Stores are stored by default in the same location as any Automation files (for ease of use) but they can be stored in any user-defined location on the system (or network if present).

For the purposes of this manual, it has been presumed that the Recall package has been installed.
See chapter on **Recall.**

**For more information on the optional Automation and Recall packages,
please contact your local Neve distributor.**

Wiring connections / Setup for HUI control

The type of connections depend on the type of computer cassette installed in the console.

OLD type computer
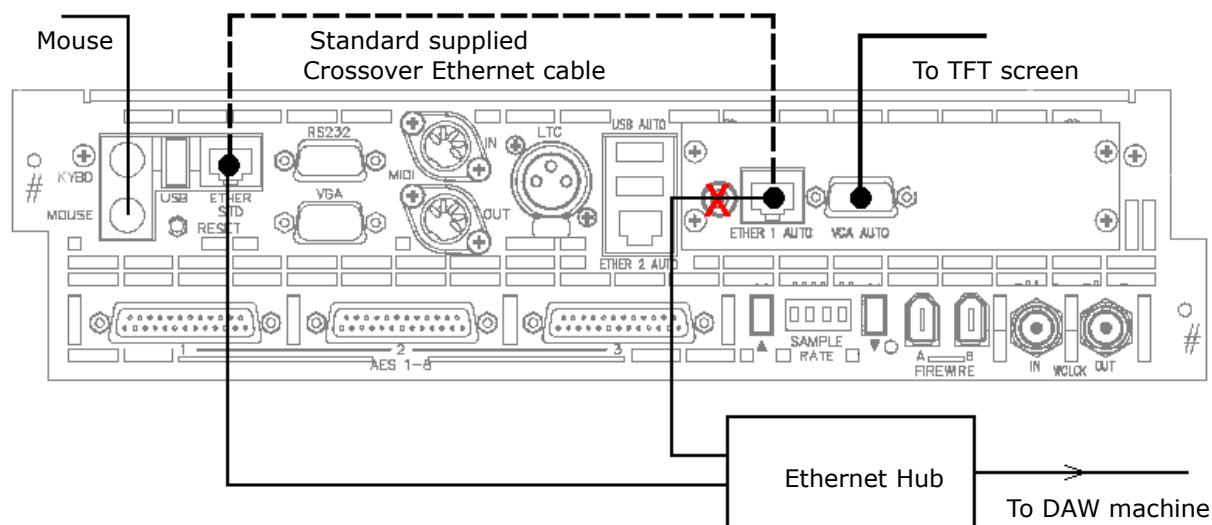
The dotted lines show the two Ethernet ports connected when the unit is not connected to Pro Tools or an external DAW (this will mean that the console cannot control HUI paths).
This cable should always be fitted if not controlling a DAW.

If you wish to control HUI paths, remove this cable and connect both console Ethernet ports to an Ethernet hub, which in turn should then be connected to your DAW.

In either of the above scenarios, the VGA output should be connected to a display screen for Encore Automation display.

NEW type computer
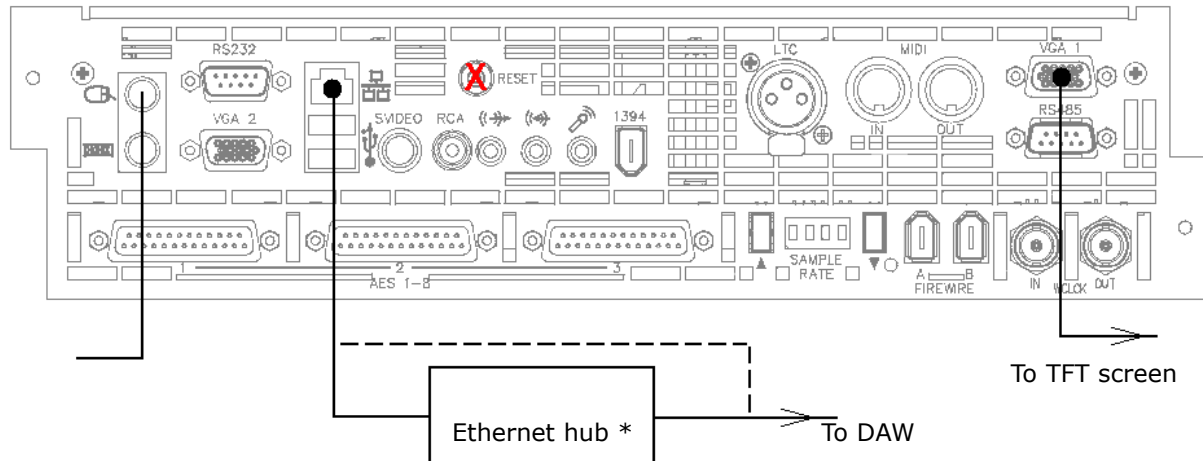
* The Ethernet hub is optional if the computers are not to be networked.

NB:
If you do not wish to run HUI over LAN (Local Area Network) then retain the blue Ethernet cable as supplied and connect as shown in the upper diagram.

If you wish to run HUI over LAN, connect the Genesys computer as shown, discarding the Ethernet link cable on old style computer cassettes.

In order to run the HUI control over LAN, you will need to download and install IPMIDI from www.nerds.de (this is a 3rd-party driver that allows HUI communication across a network) and choose the one applicable to your DAW system.

Please see your DAW documentation on how to configure the DAW for HUI control.

Powering Procedure

Switch On Procedure

➤ Switch on the Ethernet hub (if used)

➤ Switch on the console. The computer should boot Windows XP.

(If not, press the Reset switch on the computer cassette (marked in the above diagrams with a red X)

➤ Once into the Windows Desktop, double click the **Genesys App** application (left). This will then boot the console.

After about 20 – 30 seconds you will see the Genesys front screen open, at which point the console will be ready to be used.

Power-down Procedure

➤ Ensure your work is saved to the relevant medium.

➤ Shut the XP computer down in the usual way, by selecting **Shut Down** from the **Start** menu.

➤ Turn the Control Room Monitoring knob down as far as it will go **OR** press the master **CUT** button for the speakers.

➤ Turn the output level on the speaker's amplifier down to **CUT**, then turn the power off (if using active speakers, turn each speaker down before removing the power).

➤ Remove the power to Genesys.

SEL Mode

Channel Sel Mode
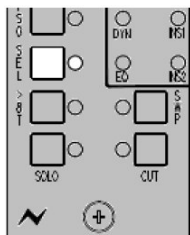
➤ When **SEL** is selected by holding down and then releasing on a channel strip, most of that strips functionality plus the ability to change any of the audio is suspended.

The **SEL** led will flash to indicate you are in SEL Mode.

It will then be possible to set up Auxiliary Pre-/Post- states, the order of processing in the Monitor and Channel paths etc.
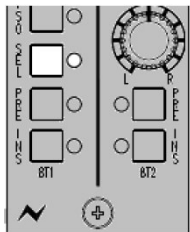
➤ When **SEL** is selected on the 8T faders section , you can set how the Rev Return signals are fed into the Auxes (either **Pre-** or **Post-**).

Monitor SEL Mode

SEL Mode is a setup mode on the Monitor panel where signal path routing, Cue feeds, loudspeaker trims, output trims, Pre/Post states and other monitoring setups can be configured.
The majority of these functions can also be configured on the **Settings** Screen, see separate chapter).
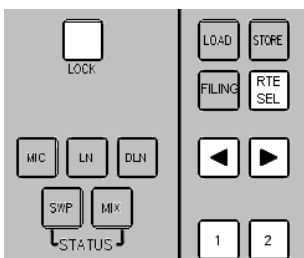
When **LOCK** and **SEL** are pressed together on the **ROUTE SEL** section of the Master Panel, most of the Control Room Monitor panel's button display and functionality – plus the ability to change the audio selection – is suspended.
(If lit, the **D-EXT**, **AFL/PFL** and and **RTB** leds on this panel will not extinguish).

When launched from this panel, SEL Mode provides purely a routing function, and is used for sending Channel and/or Monitor paths to either the 8T and/or Main Mix.

NB.
*The **SEL** buttons on the channel strips and 8T fader strips are all interlocked, so that selecting one **SEL** button will deselect any other **SEL** button already pressed.*

*There is no such interlock between these **SEL** buttons on the channels and the **SEL** button on the **ROUTE SEL** panel, apart from when the **Sel Route** option is ticked on the **Setup** screen.*
*With this option ticked, the first single quick press of the **SEL** button will bring up the **EQ** and a double quick press will bring up the **DYN** display on the DAW screen; Holding down sel and selecting >8T will also force the Route Sel panel into SEL Mode by forcing on it's **SEL** button (as well as turning over the DAW screen to be the Routing display).*

Coming out of SEL Mode returns all audio, leds & buttons to their last selected display and state.

In this manual, all text relating to SEL Mode is shown with a shaded blue background.

GENESYS Application Scenarios

*In all of the following examples, only the **M1** and **M2** stereo speaker sets are shown due to limitations of space. The four speaker sets - **A**, **B**, **M1** and **M2** – are all available.*
*Please note that only speaker set **M1** appears as XLRs on the rear of the console.*
All other speaker outputs signals are only available on the 25-way D-type connectors.

Recording
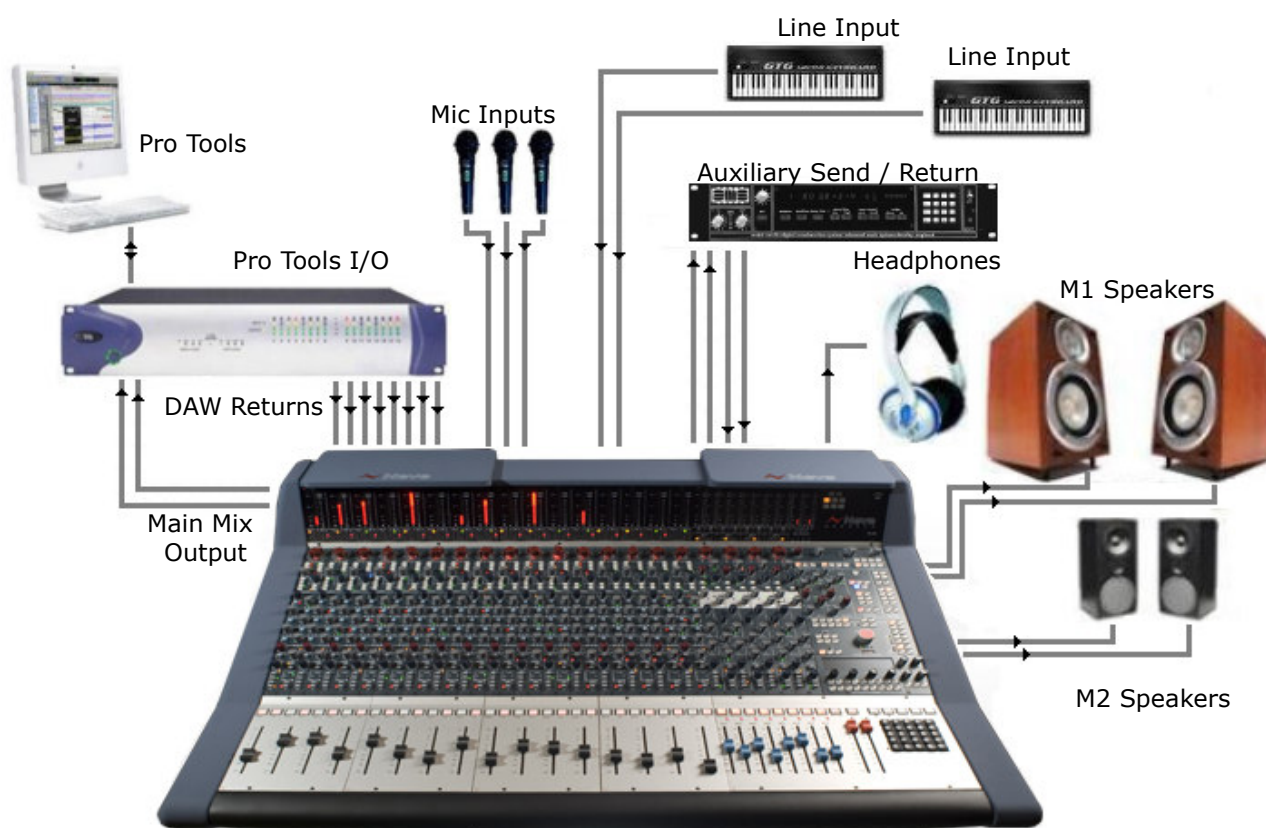
Genesys can be used to monitor from the workstation while recording directly from Mic or Line inputs.

(The Direct Outs can be used from Genesys to the DAW enabling it to be used like a conventional in line desk with both recording and monitoring signals passing through the unit, connections not shown here).

A collection of signals are input to the desk at once, either using Mic inputs, Line Inputs for keyboards or other sound modules, and the DAW Returns inputs for signals from the DAW.

Effects units can be connected to the Auxiliary Send & Returns so that a rough working mix can be achieved.

The Main Mix Output of Genesys is sent to the DAW so that a rough mix can be recorded onto your workstation.
This can be analogue or digital depending on if you have the optional digital card fitted.

The mix can be monitored on headphones by sending the Main Mix to a Cue and then sending the Cue to the headphones.

Mixing

Pro Tools Mac / PC

Neve 33609 Compressor

M1 speakers

Pro Tools I/O

Main Mix Insert Send

Return

Stereo Main Mix Out

M2 speakers

Engineers Headphones

DAW RTN 1 - 16
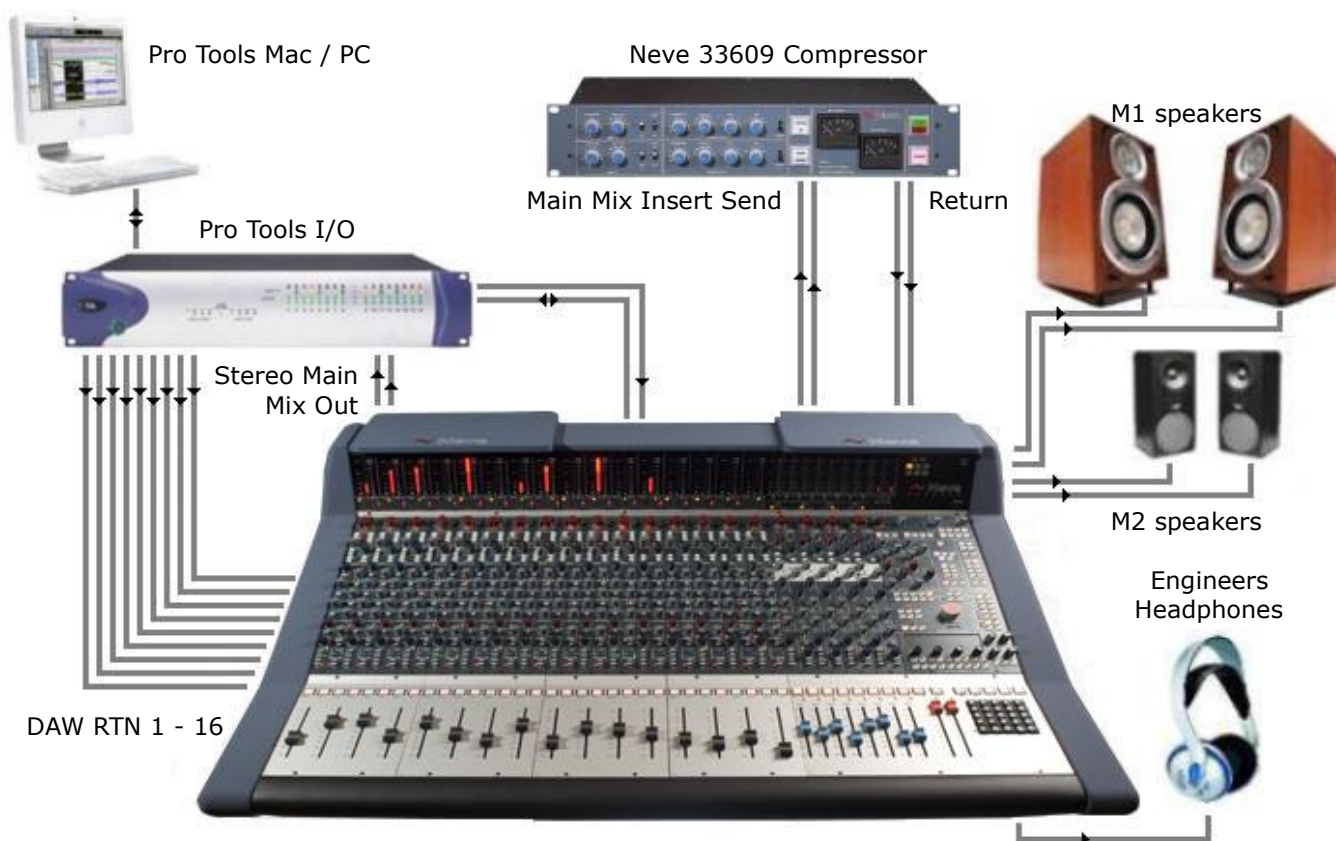
Connect the outputs of the workstation to the inputs of Genesys.

Key elements such as lead vocals and lead instruments should be kept separate within the workstation and connected to individual inputs on Genesys. Other elements such as backing vocals, effects, etc can be routed to stereo groups within the workstation and these groups connected to the Genesys inputs.

Optimum sound quality within the workstation is generally achieved by setting the virtual faders to 0dB. Final mix levels can be set on Genesys.

The mix is now being created on the mix bus of Genesys. This uses the same mix topology as the classic 88 series Neve consoles and recreates their legendary sound.
Recording back to the DAW or onto another device such as a CDR may be analogue or, if the digital cassette option is fitted, can be from the Neve Analogue to Digital Converters ensuring the best possible sound quality.

A Neve 33609 Compressor (or a Neve 8803 EQ unit) can be patched across the Main Mix Insert allowing the whole mix to be compressed or EQ'd.

Sometimes it is necessary to mix between a clean mix and a processed mix, for example when using a Filter Bank to create a special effect across the whole mix for one section of a song.

This can be done by patching the filter bank across the Main Mix of Genesys using the Insert Send/Rtn and then switching it in circuit at the desired time.

The balance between the clean mix and the processed mix is now controlled by the Insert Mix level control and the engineer can switch between clean and processed mix or balance the two as required.

Live Recording

Front of House console

DAT

Group / matrix outputs into Genesys

Main Mix Output

External 3 inputs

Engineers Headphones
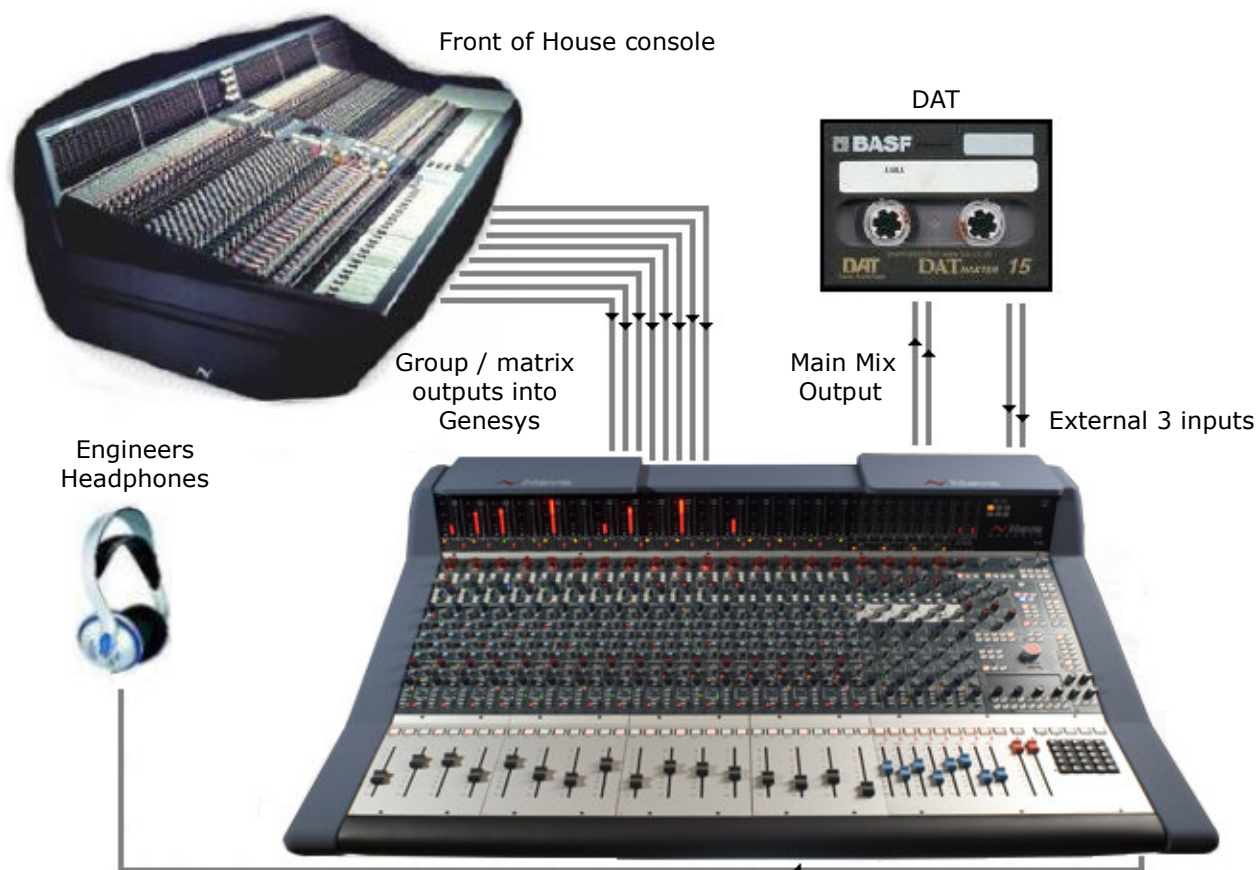
While the output for the main Front Of House console may be of a high standard, the mix created for the venue does not have the correct balance for a live recording.
Genesys solves this problem.

The main mix outputs of Genesys should be connected to a recording device such as a DAT or DAW running on a laptop Mac or PC.
The output of the recording device should be connected to the **Ext 3** input on Genesys (Externals 1 and 2 are Surround inputs).

Key elements such as the lead vocal can be connected directly to an input on Genesys from a Direct Out on the FOH console. Other elements such as drums, keyboards, etc can be connected to the Genesys inputs either from the Group Outputs or from the Matrix Outputs of the FOH console depending on the type of FOH console being used.

A correct balance between the individual and pre-mixed sounds can be set up on Genesys using Channel faders. The mix is now passing through the Genesys mix bus.

The engineer can monitor the live recording on headphones and switch between monitoring the Genesys **Main Output** and the **Ext 3** return path from the recorder (for a confidence check on the recorded sound).

Hui Control of DAW (inc Sub-mixing)
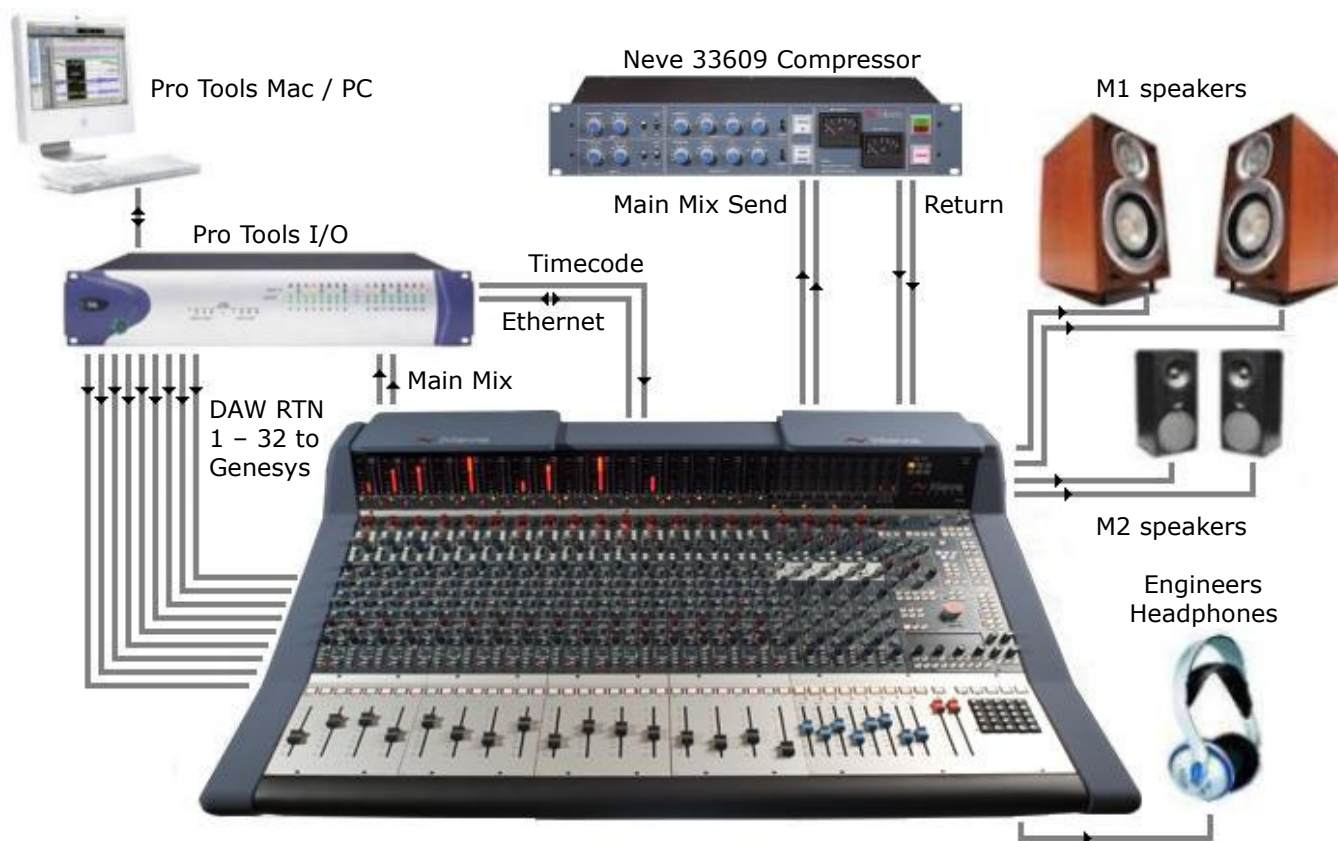
In this scenario, the first 16 channels from Pro Tools are fed into the desk at Line level.
This may, for example, be a percussion group that you want to mix on Genesys.

This is sent through a 33609 using the **Main Mix Insert** and then returned to Pro Tools as a mixed and finished section.

Pro Tools channels 17 and onwards are controlled via HUI, so even though the audio for these paths does

not pass through the console, it is still balanced and mixed on Genesys using the 8T faders and the encoders underneath the **DAW/Console Control** screen.

These faders can be assigned to blocks of 8 Pro Tools paths at a time, so by reassigning this block of faders, it is possible to manipulate all of the Pro Tools paths.
Any automation data you record for these paths will be stored on Pro Tools.

To enable both the HUI control and the automation, the timecode from Pro Tools needs to be referenced to Genesys, plus an Ethernet cable for the HUI data needs to be plugged from Pro Tools into **Ether 1 Auto** on the rear of the console.

Please see the section on **HUI Setup** to configure communication between Genesys and your DAW.

CHANNEL Section
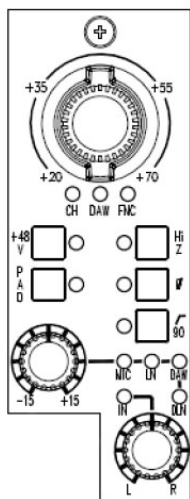
The free-running Input Level knob attenuates the Input Gain in 11 discreet steps and has a range of +20dB to +70dB, the level being displayed using the internal leds.

It is also a 3-state toggle control, and pushing the knob will cycle through:
- ➤ **CHM:** Selects the Channel / Mic input
- ➤ **DAW**: Selects CH DAW control (when automation is fitted).
- ➤ **FNC**: Selects from a range of 'soft' inputs which are set on screen.

The selected function will be displayed on the adjacent leds.

It is possible to select a different function for each Channel Strip.

+48v
Supplies 48 volts of phantom power to the Mic input.
NB. Operation of 48v takes 20 seconds to enable and disenable to protect monitoring loudspeakers. This is indicated by the led flashing.

HI Z
Impedance.
To make allowance for the characteristics of differing microphones.
- • The **High** Impedance electrically balanced input is 3.2K (the transformer balanced input is 3.1K).
- • The **Low** Impedance electrically balanced input is 1.4K (the transformer balanced input is 1.3K).

PAD
Reduces the input by -20dB.

Ø
Switches the phase of the incoming signal.

90Hz filter
Switches a hi pass filter in circuit with a 90Hz threshold.

INPUT TRIM
This supplies +/- 15dB of trim to the incoming signal.

➤ Press the control to cycle the input selection through **MIC** / **LN** / **DAW** / **DLN**, shown on the adjacent leds.

L/R
Pan control. This control is a classic 3 db center with S law panning.

➤ Press to enable.

PROCESSING Section

If the optional processing cassettes are present, it is possible to place the EQ – and/or the Dynamics - on either the Channel or Monitor path (it is not possible to split the Dynamics elements so the Compressor and Gate are split between the two paths).

➤ In normal operation, the buttons work as On/Off for the relevant process, regardless of whether that element is on the Channel or Monitor path.

If an element has been placed in the Monitor path, then pressing the process On/Off in this section will not affect the state of the adjacent led. Rather, the on/ off state will be displayed by the **TO MON** leds at the bottom of the strip.

Secondly, the order of the processing elements can be interrogated.

ORD

➤ Press the **ORD** button once and the four leds will light in turn to reflect the order of processing on the Channel path.

➤ Press the **ORD** button again and the four leds will light in turn to reflect the order of processing on the Monitor path.

*If the EQ or Dynamics cassettes are not fitted on the relevant channel strip, the **EQ** and **DYN** leds will not light and these buttons will not function.*

*****INS1** And **INS2** are always available.*

SEL Mode on the PROCESSING section
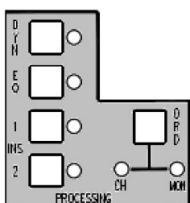
To enter and exit SEL Mode on the Channel Strip

➤ Hold down and then release the **SEL** button to enter SEL Mode. This blocks out the functionality of most
of the strip controls, apart from those indicated in white, left.

➤ Make any changes.

➤ Press **SEL** again to save your changes and exit.

To allocate processing elements across Channel and Monitor paths

➤ Hold down and then release the **SEL** button to enter SEL Mode.

➤ Pressing the **EQ** button will toggle between the lighting the adjacent led to indicate the EQ is in the Channel path, or lighting the **EQ** led in the **TO MON** section, to indicate the EQ is in the Monitor path.

The **DYN**, **INS1** and **INS2** buttons work in the same way.

➤ Press **SEL** again to fix the assignment of processing and return the desk to normal operation.

To set the order of processing on the Channel and Monitor paths

➤ Hold down and then release the **SEL** button to enter SEL Mode.

➤ Press **ORD** (the **CH** led will light).
The process led(s) will flash for any elements that are in the Channel path.

➤ Press the buttons in the order you wish the processing to appear.

➤ Press **ORD** again (the **MON** led will light if processing is in the monitor path already).
The process led(s) will flash for any elements that are in the Monitor path.

➤ Press the buttons in the order you wish the processing to appear.

➤ Press **SEL** to exit SEL Mode and return the console to normal operation.

AUXES Section
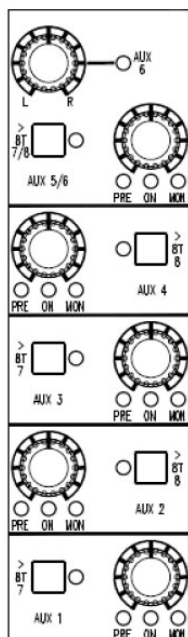
Master Level

Sets the output contribution of the Aux.
It has a range of -∞ to 0dB.

➤ Press to enable, and the adjacent led will light.

>8T buttons

Sets the destination and level control for sending the Auxes to the last two 8T busses.

Different destinations apply depending on whether the Aux is mono or stereo.
• **Aux 1** and **Aux 3** will be sent to **8T 7**
• **Aux 2** and **Aux 4** will be sent to **8T 8**

➤ Press the **>8T** button next to the Aux to send it to it's associated 8T bus (the led will light).

NB:
• **Aux 5** and **Aux 6** will be sent to **both 8T 7** & **8T 8**

In it's default state, the **PAN** and **8T 7/8** buttons apply to **Aux 5**.

➤ To set this to be **Aux 6**, press the **PAN** control.
The adjacent led will light.

It is not possible to send the same channel to **Aux 5** and **Aux 6** at the same time on the same channel.

When an Aux is sent to an 8T bus, then the contribution to the Aux bus is disconnected but the **ON** led will still work as normal.

SEL Mode on the AUXES Section
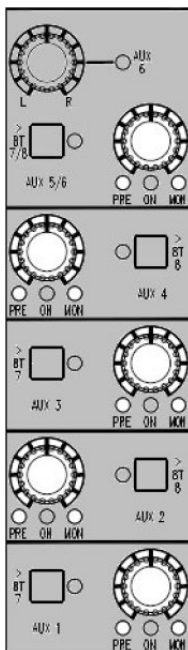
To Set How the Channel and Monitor paths feed the Auxes

Either the Channel or Monitor path can be set to feed the Aux, either Pre- or Post- fader.

➤ Hold down and then release the **SEL** button to enter SEL Mode.

Pressing the level control will cycle the Aux through the following options:
➤ **Channel** path, **Post**- fade (no leds lit)
➤ **Channel** path, **Pre**- fade
➤ **Monitor** path, **Post**- fade
➤ **Monitor** path, **Pre**- fade

At any point in this cycle, press **SEL** to exit Sel mode, to save your changes and return to normal operation.

The selection will be displayed on the adjacent leds.

After exiting SEL Mode, pressing the level control will turn the contribution to that Aux On/Off.

DIRECT OUTPUT Section
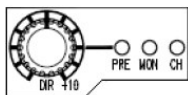
Master Level

Sets the level of the Direct Output, and has a range of -∞ to +10dB.

This control is always in circuit.

In it's default state, the Direct Output is fed from the **Channel** input:
- **Pre-** processing
- **Pre-** fader
- **Pre-** CUT.

(In it's default state, all leds will be off)

The control is a 5-state toggle, and pressing it will cycle the Direct Output to be fed from:
- ➤ **Channel** input, **Pre** fader, **Pre** CUT
- ➤ **Channel** input **Post** fader, **Post** CUT
- ➤ **Monitor** input, **Pre** fader, **Pre** CUT
- ➤ **Monitor** input, **Post** fader, **Post** CUT

These four options are all **Post-** processing.

NB. When in Mix mode the channel input selection is switch off to prevent feed back via the DAW.

MONITOR Section
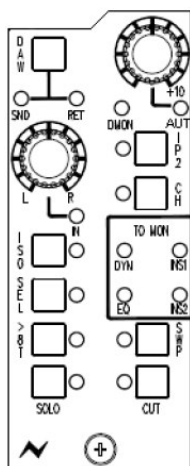
L / R Pan

Pan control.
Classic 3dB centre-line pan with S-law shaping.

► Press to enable.

Mon Level Control

Sets the monitor input level, and has a range of -∞ to +10dB.

► Press to select Auto. This will allow the channel encoder to write and playback monitor levels when automation is being used.

AUT led

Lights red when there is automation data on the Monitor path.
To be functional in V2.0 software.

DAW

► Press to swap the Monitor between the **SND** and **RET**.

I/P 2

The second Inputs and the DAW Inputs are merged on this button.
  • The led will be **On** when the second inputs are selected.
  • The led will be **Off** when **DMON** is On.

CH

Allows you to send the Channel input to monitor, and is a 3-state toggle switch.
  ► Press to listen to the **Channel** input **Post**-fader (led lights red)
  ► Press to listen to the **Channel** input **Pre**-fader (led lights green)
  ► Press to return to the **Monitor** path (led off)

ISO

Isolates the Channel path, Monitor path (or both) from the Solo system.

When other Solos are detected on the console, a **CUT** will not be applied to any path that has been isolated.

  • For any path **not** in **ISO,** the **CUT** will be destructive (and therefore affect the Mix output)
  • For any path **in** ISO, the **CUT** will be safe (and only affect the monitoring by using the **AFL** bus).

It has a 4-state toggle, each state indicated by the adjacent led:
  ► **Off**: Both the Channel and Monitor path are part of their Solo system.
  ► **Green**: The Monitor path is isolated from the Solo system
  ► **Red**: The Channel path is isolated from the Solo system.
  ► **Yellow**: Both the Channel and Monitor paths are isolated from their Solo systems.

D-MON led

Indicates the selection of the digital line input to the monitor on each module.

The D-MON led will only light if **DAW**, **I/P 2** and **CH** are all deselected and an AD/DA cassette has been detected in the console.
If there is no cassette fitted, it will not be possible to deselect all the other Input options.

*A channel strip **SEL** button is interlocked with all other **SEL** buttons on the channel strips and 8T section, so pressing one **SEL** button will cancel any other **SEL** button that may be selected elsewhere on the console.*

*It has no interlock with the **SEL** button on the Route Sel panel.*

SEL

Has no intrinsic function in itself, but is used in conjunction with other buttons on the channel strip for:
- Allocation of processing elements to the Channel and/or Monitor path
- Ordering the processing elements
- Calling EQ and Dynamics controls (single fast-press for **EQ**, double fast press for **DYN)**
- Setting local 8T & Mix routing in conjunction with 8T by holding down **SEL** and pressing **8T**
- Setting channel strip and fader automation modes
- Setting the Auxiliary **PRE** and **MON** states

Putting a channel strip in SEL Mode, only affects that particular strip.
All the other channel strips will continue to operate as normal.

In this manual, all text regarding console setup using SEL Mode is shown with a blue background.

>8T

This has a 3-state cycle, indicated by the adjacent led:
- ► **Off**: The Channel path can be routed to all the 8Ts.
- ► **Red**: The Monitor path can be routed to all the 8Ts.
- ► **Green**: The Monitor path can be routed to **8T 5** & **6** only *(*on later versions it can also be routed to **8T 7** & **8** as well), and the Channel path can be routed to **8T**s **1**, **2**, **3**, **4** (on earlier versions it can also be routed to **8T 7** & **8** as well).
(This is a hybrid state designed to work when the console is working in Surround and group modes.

It can also be used to set up local routing in conjunction with the **SEL** button.

SWP

Swaps the large Fader & Cut with the Small monitor knob & Cut within the Channel and Monitor paths.

SOLO

Solos the path, in either **Momentary**, **Latching** or **Interlock** mode.

CUT

Cuts the path's audio. And also cuts the prefade auxes in mixdown mode.

The **CUT** can be temporarily over-written by the adjacent **SOLO** button and Automation (when fitted).

TO MON leds

Indicates the status of processing.

If any of the **INS1**, **INS2**, **DYN** or **EQ** leds are lit, this indicates a process present and switched in circuit on the Monitor path.

The order of the channel processing can be set in SEL Mode.

See previous Channel Section.

Preventing feedback loops

There are circumstances under which it is possible to create a feedback loop on the console.

- If the Direct Output is fed from the **Monitor** (either **Pre**- or **Post**-) and you set the Monitor Input to **DAW SND**, or
- The Monitor path is set to **DAW SND** and you set the Direct Output to **Monitor** (**Pre-** or **Post-**).

To combat this, the console will take steps to prevent this from happening.

- When you toggle through the inputs of the Monitor path, the DAW Send will not be available, and the **DAW SND** led will flash twice without changing from **DAW RET**.
- If you have **DAW SND** set, and you toggle through the Direct Outputs, when you reach **Monitor** (either **Pre-** or **Post-**), the DAW selection will be forced to **RET.**

REV Return Section
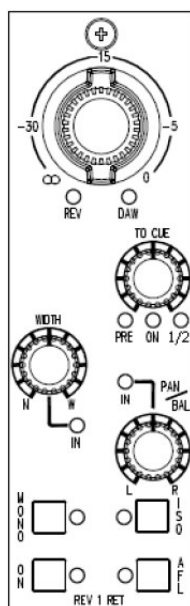
The free-running large knob at the top of the strip sets the input level of the Rev Returns. It has a range of -∞ to 0dB.

► Press the knob to toggle it between **REV** and **DAW**.

TO CUE

Sets the amount of Reverb Return signal sent to the Cue mixes (it can be sent to one, both or neither Cue).

► Press to enable.

See the section below on SEL Mode on how to set how the Rev Returns feed the Cue.

WIDTH

Sets the width of the stereo image from narrow (hard left) to Wide (hard Right).

► Press to enable.

PAN / BAL

Works in conjunction with the **MONO** button to the left.

► Press to enable.
  · When the **MONO** is pressed, this control acts as a **Pan**.
  · When the **MONO** button is **not** pressed, this control acts as a **Balance**.

MONO

Turns the stereo signal into mono, where each of the Reverb L and R are sent to the Mix Outputs L and R equally.

ON

Switches the Reverb Returns On/Off.

ISO

Isolates the Rev Return from the Solo System so that when any other Solo is detected on the console, the Reverb Return is not Cut.

► Press to enable.

AFL

Switches the AFL for the Reverb Return into the Main monitoring.

SEL Mode on the REV RETURN Section
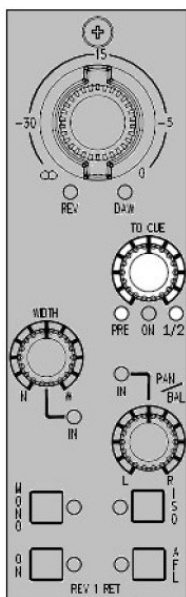
To set how the Rev Returns feed the Cues

The Rev Return can be sent to either Cue or both of them.

► Put the 8T/REV Channel into SEL Mode by pressing and holding down the **SEL** button.

The **1/2** led is tri-state in colour and uses these colours to indicate which Cue(s) the Rev Return is routed to.
- Cue **1** – Red
- Cue **2** – Green
- **Both** cues – Yellow

For each press of the **TO CUE** level control, you will cycle round the following feeds (the **PRE** led will light when you are sending these Cues Pre-fader):
➢ Cue **1**, **Post** fader (Red)
➢ Cue **1**, **Pre** fader (Red)
➢ Cue **2**, **Pre** fader (Green)
➢ Cue **2**, **Post** fader (Green)
➢ Both **Cues**, **Post** fader (Yellow)
➢ Both **Cues**, **Pre** fader (Yellow)

► At any point in the cycle, press **SEL** to exit SEL Mode and apply these changes.

AUX MASTERS Section
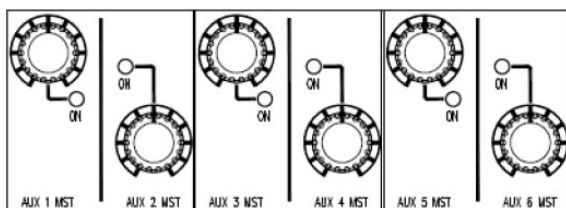
Master Send

Sets the Master Send level for each Aux.
This control runs from −∞ to 0dB.

► Press to enable the Master Send.

MIX Section
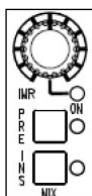
IMR

Sets and controls the Insert Mix Return level.

► Press to enable (the led will light).

When using the IMR Insert across the Main Mix Output, it is possible to listen to a mix of the main Insert return and the IMR Insert Return.

This control has a range of 0% Return (hard Left) to 100% Return (hard Right).
If this control is not enabled, you will hear 100% of the main insert Return signal.

PRE

Sets whether the Insert is patched Pre- or Post- the Main Mix faders.

INS

Switches the Insert In/Out of circuit.

HEADPHONES Section
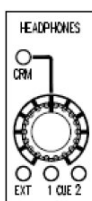
Master Send

Sets the level and source of the feed to the headphone jack-socket, situated on the underside of the front right of the console.

The push switch is a 4-state toggle:

➤ **Defaults to CRM** (where the headphone feed follows whichever source is selected to the Left and Right Control Room Monitors)
➤ **EXT** (where whichever External is selected on the Control Room Monitor panel is sent to the headphones. If a Surround External is selected, then just the Left and Right will be sent)
➤ **CUE 1**
➤ **CUE 2**

8T AUXES Section
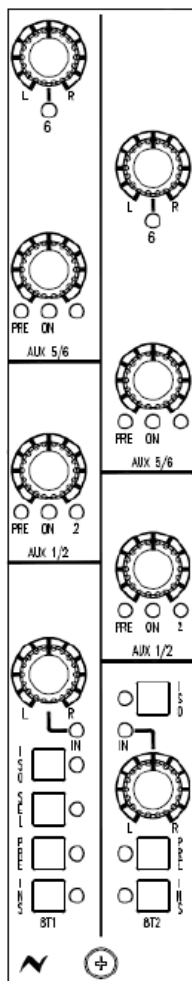
ISO

Isolates the **8T** from the Solo system, so that when any other 8T **SOLO** is detected on the console, that channels 8T is not cut.

SEL

Puts a pair of strips into SEL Mode enabling you to set Pre/Post states of the 8T Auxes.

There is a single **SEL** button for each pair of 8T faders.

➤ Press **SEL**, hold and then release.

SEL is interlocked with all other SEL buttons on the Channels and 8T strips, so that pressing a SEL button will cancel a SEL button that may be selected elsewhere.

INS

Switches the 8T Insert On/Off.

PRE

Sets whether the 8T Insert is **Pre-** or **Post-** the 8T fader.
The led will light when set to **PRE**, and go off when set to **POST**.

SEL Mode on the 8T AUXES Section
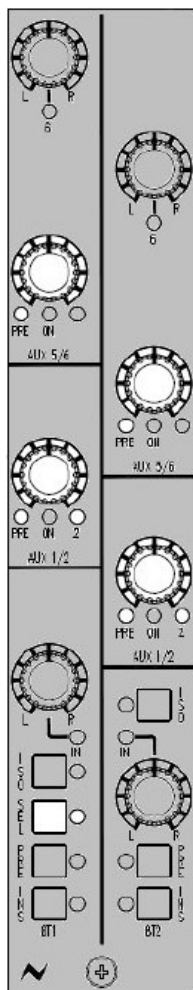
There is one **SEL** button for each pair of 8T faders, so pressing, holding and then releasing it will put a pair of fader strips into SEL Mode.

To set which Auxes are fed by the 8Ts

Aux 1 / Aux 2

► Press the **SEL** button to go into SEL Mode.

Each press of the AUX 1/2 level control will cycle the feeds through:
➤ Aux 1, **Post** fader
➤ Aux 1, **Pre** fader
➤ Aux 2, **Post** fader
➤ Aux 2, **Pre** fader

After exiting SEL Mode, pressing the level control will turn the contribution to that Aux On/Off.

Aux 5 / Aux 6

For Auxes 5 and 6, the only settable control in SEL Mode is the Pre/Post state.

► Press to switch between **Pre**- and **Post**-.

Selecting between Aux 5 and Aux 6 is achieved by toggling the **L/R PAN** control.
In it's default state, it contributes to Aux 5 (led off).

► Press the **PAN** control to send it to Aux 6 instead (led will light).

It is not necessary to go into SEL Mode to make this selection.

TONE / RTB Section
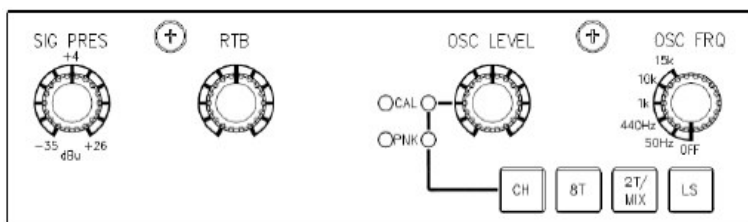
SIG PRES

Sets the level at which the Meterbridge Signal Present leds come on for channels and 8T's, it has a range of -35dBu (signal present) to +26dBu (overload).

It has a centre detent which is calibrated to +4dB via a Trim Pot.

RTB

Sets the level for Return Talkback to the **M2** speakers.

OSC LEVEL

This has a 3-state operation which can be cycled by pressing the control. The function is indicated by leds to the left of the knob.

In it's default state (both leds off), it sets the level of **TONE**, with a range of -∞ to +20dB.
+4dBu is set roughly at the 11.30 mark.

The buttons underneath select the destination (**CH, 8T, 2T/MIX** and **LS).**

➤ On the 1st press, the **CAL** led will light. Instead of the tone level being set by the knob, it is now set via the Trim Pot on the left of the **CAL** led. The trim pot has the same range as the knob.

➤ On the 2nd press, the **PNK** led will light and pink noise will be generated instead of sine-wave tone. The level of the pink noise is set via the Trim Pot to the left of the led.

➤ The 3rd press turns both of these functions off (both leds off) and the tone generator returns to it's default state.

NB:
In it's default state, the **2T/MIX** button will only send tone to **MIX.**
If you wish to send tone to the **2T** as well, this must be configured in the **Settings** screen, by ticking the **Osc to 2T** option.

CH

Sends tone to the Direct Outputs of all channels.

8T

Sends tone to the 8T Outputs.

2T/MIX

Sends tone to the 2T and Mix Outputs, as set on the Setup page.

The OSC routing buttons have no interlock, so is is possible to route the oscillator to multiple destinations at once.

LS
Sends pink noise only to the loudspeaker outputs.

Any audio feeding the loudspeakers will be cut before the pink noise is sent, and then reinstated once pink noise is switched off.

OSC FRQ
Sets the frequency of the **TONE** oscillator.

The stepped values are:
- OFF
- 50 Hz
- 440 Hz
- 1 KHz
- 10 KHz
- 15 KHz

METERS Section
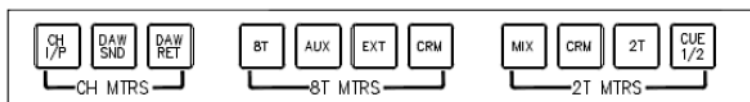
CH MTRS
Lights yellow and selects the feeds to the Channel Meters
(these buttons are latching and interlocked)

CH I/P
Lights yellow and meters the Channel Inputs, which is Pre- any processing that may be on the path.

DAW SND
Lights red and meters the DAW Sends.

DAW RET
Lights green and meters the DAW Returns.

8T MTRS
Lights yellow and selects the feeds to the 8T meters.
(these buttons are latching and interlocked)

8T
Selects the 8T Outputs to the 8T meters.

AUX
Selects the Aux Outputs to the 8T meters.

EXT
Selects the 6-wide External inputs to the 8T meters.

CRM
Selects the 6-wide Control Room Monitor feed, pre- the loudspeaker level

control.

The screen-printing on this section of the meterbridge refers to the different path types that can be displayed:

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
8T	8T 1	8T 2	8T 3	8T 4	8T 5	8T 6	8T 7	8T 8
EXT & **CRM**	1/L	2/R	3/C	4/S	5/LS	6/RS	-	-
AUXES	4 x Mono				2 x Stereo			
	A 1	A 2	A 3	A 4	A 5L	A 5R	A 6L	A 6R

2T MTRS

lights yellow and selects the feeds to the 2t Meters.

MIX

Selects the L & R Mix Output to the 2T meters.

CRM

Selects the L&R Control Room Source to the 2T meters.
As you change the control room monitoring, so the meters will follow this selection.

2T

Selects the 2T Output to the 2T meters.

CUE 1 / 2

Selects either CUE 1 or CUE 2 to the 2T meters.
 ➤ First press lights **red** and indicates **Cue 1** is selected.
 ➤ Second press lights **green** and indicates **Cue 2** is selected.

MASTER SEL Section
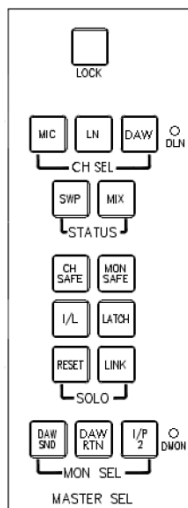
LOCK

Lights red and locks the **MIC**, **LN**, **DAW**, **SWP** & **MIX** buttons (plus the DLN led) to their current state, preventing them from accidental operation.

- **LOCK** needs to be held for 3 seconds before locking or unlocking.
- Pressing **LOCK** and then **RTE SEL** together will put the panel into SEL mode.

MIC

Lights red and cancels other selections.

It will change the audio feed to the Channel path by switching all the modules to Mic input, and this will be displayed by a red led on each module.

NB. **MIC** is interlocked with **MIX** to clearly define two different states the console can be in, either Record (**MIC**) or Mixdown (**MIX**).

LN

Lights green and cancels all other selections.

It will change the audio feed to the Channel path by switching all the modules to Line input, and this will be displayed by a green led on each module.

DAW

Lights green and cancels other selections.

It will change the audio feed to the Channel path by switching all the modules to the workstation, and the green DAW led will be lit on each module.

DLN led

The **D-LINE** Inputs (and it's led) are turned on when the three interlocked options above are all turned off.

> The **DLN** led will only light if a AD/DA cassette has been detected.
> If there is no cassette, it will not be possible to turn the other **CH DLN** selection on either.

SWP

Lights blue and swaps the Channel and Monitor paths (the red **SWP** led will light on each channel).

This globally swaps the Large Fader & Cut with the Small Fader and Cut within the Channel and Monitor paths.

MIX

Puts the console into Mix-down mode and cancels the Mic Inputs to clearly indicate Mix Mode.

It will change the audio feeds to the channel and monitor auxes from Pre-cut (pre-fade), to Post-cut (pre-fade) within the channel.

This will allow the Auxes to be Pre-Cut for recording, but Post-Cut for mixing.

It will also set **CH DAW**, **I/P 2** and **DAW RET** to be On and will also turn off CH i/p to direct o/p to stop any DAW feedback.

CH SAFE

Lights yellow and stops the channel **SOLO** buttons from affecting the Solo Cuts and 8T Solo Cuts (if linked) when selected.

It also causes the **AFL / PFL** led to flash and the AFL to switch into the LS monitor path if a Channel **SOLO** or 8T Solo is selected.

It will also allow **SIF** and **PFL** in the Monitor Section to be selected.

It will also turn **SOLO LINK** off if selected.
(If **CH SAFE** is not selected, then the Solo system will be destructive).

In this mode, all channel **CUTS** will be activated if a channel Solo is selected apart from the **CUT** on that particular channel. If a second channel is Soloed, then the **CUT** on that channel will be turned off etc.

MON SAFE

Lights yellow and stops the Monitor **SOLO** buttons from affecting the Monitor Cuts and 8T Solo/Cuts.

It will enable the **AFL / PFL** led on the Monitor Panel to flash and the AFL to be switched into the LS Monitor path if Mon Solo or 8T Solo is accessed .

It will also allow **SIF** and **PFL** in the monitor section to be selected.

Lastly, it will turn **SOLO LINK** off if selected.

I/L

Makes the Monitor, Channel & 8T **SOLO** buttons interlock within their systems.

LATCH

Lights yellow and makes the Monitor, Channel & 8T **SOLO** buttons latch within their systems.

NB:
*If **LATCH** is selected while **I/L** is selected, then **I/L** will be cancelled.*
*If **LINK** is also selected, then **LATCH** and **I/L** will operate across Channel & Monitor Solos, but not **8T SOLO** (unless 8T solo has been tied in the Setup page).*

RESET

Cancels any active Solos across the console and returns the audio to it's Pre- Solo'd state.

This includes any combination of **PFL** & **AFL** buttons.

LINK

Lights yellow and makes the Channel and Monitor systems be linked for **Momentary**, **Interlock** and **Latch** modes in destructive solo, so that any solo pressed will operate all of the Monitor or Channel Cuts within the two systems (apart, obviously, for the Cut selected on that Channel or Monitor).

LINK can only be selected when **CH SAFE** or **MON SAFE** are off, and will be cancelled if either of these two SAFE modes are selected.

> ***Momentary*** *Solo mode is also available.*
> *This is selected by turning both **LATCH** and **I/L** Off.*
>
> *In this mode, a Solo will only be heard for the length of time a **SOLO** button is held.*

DAW SND
_____

Lights red when selected, and is interlocked with **DAW RET**.

DAW RET
_____

Lights red when selected, and is interlocked with **DAW SND**.

I/P 2 & **D-MON** led

I/P 2 lights yellow when selected, and toggles **I/P 2** and the **D-MON** led through the following three states:

	I/P 2	**D-MON**	**DAW SND** / **DAW RTN** Availability
1st press	Off	Off	The interlock between **SND** and **RTN** is still available, so you can freely swap between the two.
2nd press	On	Off	
3rd press	Off	On	The interlock is suspended, and **DAW SND** will be forced into **RTN** and locked.

The **I/P 2** and/or **D-MON** leds on each module will also light when these selections are changed.

The **D-MON** led will only light if an AD/DA cassette has been detected.

If there is no cassette, the **I/P 2** *button will only be a two-state On/Off toggle, but is not interlocked with* **DAW SND** *and* **DAW RET**.

ROUTE SEL Section
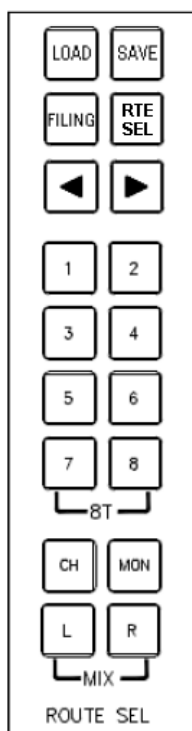
This section enables the setup routing to the 8T and Main Mix Outputs, plus simple storing and loading of console snapshot stores.

FILING
Lights yellow, and acts as the On/Off for this panel allowing Stores to be saved or loaded via the stores screen.

LOAD
Only has a function if **FILING** is selected.
On the first press, it will light yellow and turn the TFT screen over to the **Snapshot/ Recall Stores** page where a file can be selected.

Once a selection has been made on screen, then pressing the button again will load that particular Store to the console (the button will flash for 3 seconds as the switch & routing data is sent to the console).

If the optional Recall software is fitted, then the button will continue to flash until the last control has been reset on the surface (at which point the screen will revert to it's previous display).

SAVE
Only has a function if **FILING** is selected.

On the first press, it will light yellow and turn the TFT screen over to the Store Recall screen.
It will then be possible to create a Store (or overwrite an existing one).

Once the file has been named, then pressing the button again will write the data to file.
The button will flash for about 3 seconds to show the progress of the data being written.

*Once **FILING** has been enabled, **LOAD** and **SAVE** are interlocked.*

ROUTE SEL Section
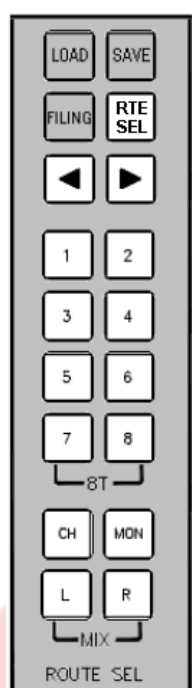
RTE SEL
Works as an On/Off button for this section of the panel, and lights yellow when engaged.

It switches the screen over to the Routing Screen display (shown below)

This also allows the
- **CH** and **MON**
- **L** and **R**
- **1** to **8**
- ◄ & ►
buttons to be used to route Channels and Revs to the 8T and Mix busses.

1 – 8
Lights yellow and acts as On/Off buttons.
These buttons allow the routing of 8Ts within the Channel and Rev modules.

L & R
Lights yellow and acts as On/Off buttons.
They route the path to the Main Mix bus within the Channel or Rev modules.

As with the 8Ts (above), scrolling up or down the channel or Rev numbers will allow you to route to Mix L and Mix R.

CH
This On/Off button lights yellow when pressed, and allows the Channel path to be routed to Mix L and Mix R in the channel module.

MON
This On/Off button lights yellow when pressed, and allows the Monitor path to be routed to Mix L and Mix R in the channel module.

CH and *MON* are interlocked.

◀ & ▶ keys
When pressed, they are used to scroll up/down the Channels and Revs so you are able to route them to the 8T and Mix Outputs.

This routing information will be displayed on the TFT screen.
- The Routing system does not form part of the Store system. Only a route present (or absent) when the store is created will be recalled.
- If routes have already been made, then scrolling through the paths will display those routes where appropriate.

If selecting Rev Returns to be routed to the 8Ts:
- **Rev 1** can only be routed to **8T 1** & **2**
- **Rev 2** can only be routed to **8T 3** & **4**
- **Rev 3** can only be routed to **8T 5** & **6**
- **Rev 4** can only be routed to **8T 7** & **8**

--- + ---

Routes can also be created (or destroyed) by clicking on the relevant junctions on the Routing Screen display, as shown left.

A yellow block indicates the presence of a route, while the large digit to the right of the screen indicates which path the routing refers to.

--- + ---
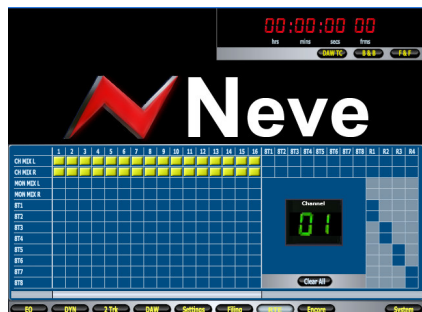
By pressing **LOCK** and **RTE SEL** together, you will put the Monitor Panel into **SEL** mode (the **RTE SEL** button will start to flash). It will then be possible to set up the Monitor, Cue and 2T mix functions in SEL mode.

When you enter SEL Mode, any selection already made on this panel will start to flash (along with the **RTE SEL** button) to indicate you are in SEL Mode, and the DAW screen display will swap over to showing the currently selected Edit.

When you exit SEL Mode, any changes made will be saved, and the buttons, audio and display screen will revert to their last selection.

CUE MIX Section
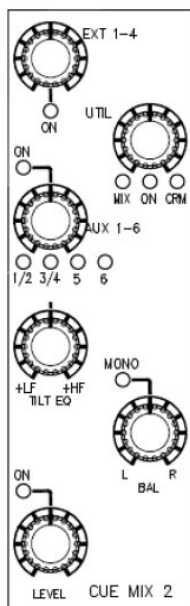
Each of the Cue mixes can be sourced from:
- A stereo External
- Either the Main Mix **or** the current Control Room Monitor selection (set by **UTIL** knob)
- Four mono Auxes or two stereo Aux.

EXT 1-4

This level pot and switch controls the currently selected External level into the Cue.
If you have either of the Surround Externals selected, it will only send the Left and Right to the Cue.

➤ It has a range of −∞ to 0db. Press to enable.

UTIL

This level pot and switch controls the Main Mix or the current Control Room Monitoring level into the Cue, the selection being indicated by the adjacent leds.
It has a range of −∞ to 0dB.

➤ Press to enable.

NB. The selection of main mix or CRM is set in SEL mode.

AUX 1-6

This level control and switch controls the Aux contribution to the Cue mix.

➤ Press to enable.

When Aux 1 / 2 is selected, this will feed 1 to L and 2 to R;
When Aux 3 / 4 is selected, this will feed 3 to L and 4 to R;
When Aux 5 / 6 is selected, this will feed to L and & respectively.

NB. The selection of Auxes is set in sel mode.

TILT EQ

Has no On/Off switch associated, but the rotary control has a centre detent to indicate a flat response.

It is used to brighten or dull the Cue mix being fed to the headphones, by boosting either the higher or lower frequencies.
The **TILT EQ** control is stereo and has a range of +/-4dB @ 1.2 kHz.

BAL

This balances the Left and the Right of the Cue, and is in circuit all of the time.
It has a range of +/-6dB.

➤ Press the control to make the path mono (the **MONO** led will light).
The **BAL** control will still affect the feeds sent into the Cue L & R as it did in stereo.

Tip:
It is possible to use a single Cue in stereo, or as two mono by hard-panning the sources sent to it.

LEVEL

This controls the Cue output level and has a range of -∞ to 0dB.

➤ Press to enable.
- The level for the Cue send is Pre the talkback injection point;
- The on/off for the Cue is Post the talkback injection point.

When Talkback is applied to the Cues, the programme level is

automatically dimmed by 25dB.

SEL Mode on the CUE MIX Section

To select the Aux feeding the Cue

► Put the Monitor panel into SEL Mode.

Pressing the **Aux 1-6** knob will cycle the Auxes that feed into the Cue:
➤ Aux 1 / 2
➤ Aux 3 / 4
➤ Aux 5
➤ Aux 6

► Exit SEL Mode to keep this assignment.

To set the Utility path feeding into the Cue

► Put the Monitor panel into SEL Mode.

Pressing the **UTIL** control will cycle the feed into the Utility path between:
➤ **MIX** (main stereo mix)
➤ **CRM** (whatever source is selected to the Control Room Monitors)

Exit SEL Mode to keep this assignment.

A mono Aux can be sent to both the **L** and **R** of the stereo Cue by using a combination of the **MONO** switch and hard panning the Aux when in non-Sel mode.

CONTROL ROOM MONITOR Section
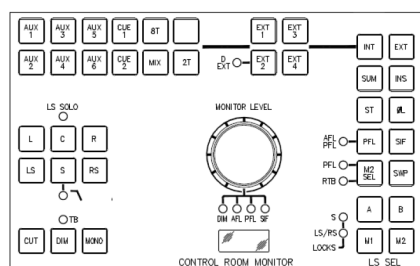
Sets the monitoring and controls the various sources sent to the loudspeakers.

AUX 1 – 6
Lights yellow when selected and will send that Aux to the speakers.

CUE 1 & CUE 2
When selected will light yellow and send that Cue to the loudspeakers.

MIX
When selected will light yellow and send the Main bus output to the speakers.

8T
Lights yellow when selected, and sends the 8T mix to the loudspeakers.

The setup for this is done by either putting the Monitor Panel into SEL Mode or from the on-screen setup page.

In non-SUM mode, all the above buttons above will be interlocked.
In SUM mode, any combination of the above can be heard.

NB:
The **AUX**, **CUE, MIX, 2T** and **8T** buttons form the internal monitor, and will only be heard if **INT** is selected.

2T
Lights yellow and selects the **2T** to the main monitoring.

Will only work if **INT** is also selected, and is always interlocked with 8T even when in Surround mode.

The screen on the left shows the page that will open when working in **Group Mode**.

It is possible to turn each 2T On and Off via this page by clicking underneath the relevant 2T, plus a global On/Off that will turn all of the 2T feeds On/Off.

Each 2T also has +/-10 dB of trim available, which is set using the scroll arrows next to each Trim field.

It is also possible to set the overall global level of the 2T.
This ranges from −∞ to 0dB.

This screen will also show whether you are working in **Group** or **5.1** Mode (displayed mid left) and whether the 2Ts are fed **Pre**- or **Post**- fader (displayed mid right).

EXT 1 & EXT 2
When selected, will light yellow and selects either of the 6-wide External inputs to the monitor system.

For **EXT 2**, pressing the button again will light the **D-EXT** led as well, so the 2nd set of 6-wide External paths will be taken from the AD/DA cassette (if present) instead.

All the Externals buttons will interlock unless SUM is selected.

EXT 3 & EXT 4

When selected, will light yellow and select either of the Stereo External inputs to the monitor system.

D-EXT led

The **D-EXT** led will light on the second press of **EXT 2**.

It is possible to have two sets of six-wide Externals on **EXT 2**.
The second set can be selected by pressing the **EXT 2** button again.

➤ 1st press takes the 1st set of External feeds from the Analogue inputs (**EXT 2** will light)

➤ 2nd press takes the 2nd set of External feeds from the Digital Inputs (if present, **EXT 2** and the **D-EXT** led will light)

The **D-EXT** led will only light if an AD/DA cassette has been detected. If there is no cassette, it will not be possible to select **D-EXT**.

INT

Lights yellow when selected and makes possible the selection of the internal monitors (Auxes, Cues etc) to the control room loudspeakers.

EXT

Will light yellow when selected, and makes possible the selection of the External monitors (**EXT 1** etc) to the control room loudspeakers.

INT and *EXT* are interlocked.
If SUM is selected, the interlock between INT and EXT is cancelled.

SUM

Lights yellow when selected and affects the **INT** and **EXT** as described above, so a collection of Internal and External sources can be heard at once.

It will also enable all of the internal and external **LS** buttons (including **INT** and **EXT** monitor selections) to be turned on and off individually.

In this mode, 8T and 2T will still be interlocked.

INS

Lights yellow and activates the Monitor inserts.

ST (or **Downmix)**

Collapses the 5.1 monitor mix into a stereo by sending L to L, R to R, C to L & R, S to L & R (this can also be turned on or off), LS to L and RS to R.

It is possible to tie monitoring the stereo downmix to a particular set of loudspeakers. See section below on SEL Mode.

ØL

Inverts the phase of the Left side of the monitoring.

AFL/PFL led

This yellow led flashes if a Channel SOLO (with **CH SAFE** selected), or a Monitor **SOLO** (with **MON SAFE** selected) is pressed.

It will also light if an 8T **SOLO** (tied to the Channel or Monitor Safe buttons via the setup screen) is pressed, or if any of the **AFL** buttons on the Rev returns are selected.

PFL

Lights yellow and allows the PFL bus to be switched to the monitors whenever a **SOLO** is pressed on a Channel, Monitor or 8T (depending on 8T Linking).

It is enabled to be selected by either **CH SAFE** or **MON SAFE** and is interlocked with **SIF.**

It will be temporarily cancelled if any Rev Return **AFL** is selected.

SIF

Lights yellow and allows the Solo In Front to be switched into the monitor when Channel, Monitor, Rev **AFL** or 8T **SOLO** buttons are pressed (dependent on 8T linking).

It is enabled by either **CH SAFE** or **MON SAFE** and is interlocked with **PFL**.

M2 SEL

Lights yellow when selected and allows **PFL** or the **RTB** to be sent to the M2 speakers if they are not being used for other monitoring purposes.
  ➤ The 1st press will send the **PFL** bus to **M2** anytime a Solo button is pressed on the console.
  ➤ The 2nd press will set **RTB** to be sent to M2.
  ➤ The 3rd press will return the **M2** speakers to their default state.

The function of **M2 SEL** will be shown on the associated leds.

M2 SEL will be temporarily suspended if M2 is selected, and will return to it's original state if **M2** is deselected.

SWP

Lights yellow and sends the rear Left and Right speakers to the front Left and Right, cutting all other speakers.
This enables the rear Surround image to be heard on the front speakers.

A, B, M1 & M2

Lights yellow when pressed and selects sets of loudspeakers.
  • **A** and **B** are both Surround sets of speakers.
  • **M1** and **M2** are both Stereo sets of speakers.
The **M1** speaker outputs appear on XLRs on the rear of the console for convenience.

It is possible to tie a set of loudspeakers to the Stereo fold-down as described in **ST**, and also which speaker set is locked to the Sub and Left Surround / Right Surround.
See section below on SEL Mode.

S & LS/RS leds

Lights red whenever **B, M1** or **M2** loudspeaker sets are selected with ties set, either on the **LS Settings Screen** or using SEL Mode and the LS selector buttons.

LS SOLO led

This red led will light to show that the 6 LS buttons are now in destructive mode and non-latching.

This mode allows for any of the buttons to be lit by selection of any of the **CUT** buttons ie if you were to select **L CUT**, then all the rest would light (apart from **L CUT**).

If a Master Cut is selected, it will suspend LS Solos until deselected.

The setting of this mode using Master Cut can be made on the LS Settings screen, or via SEL Mode on the panel.

L / C / R / LS / S / RS

Will light red when individually selected and cut the appropriate speaker.

All of these buttons will light if Master **CUT** is selected.
If individual cuts are in place when the Master CUT is selected, these individual cuts will be reinstated when the Master **CUT** is turned off.

Also, if some Cuts are selected or not selected when Master Cut is selected then they will remain cut or not cut even when Master Cut is deselected, allowing cuts groups to be formed.

Master CUT

Lights red and cuts all of the speakers.
All of the individual speaker buttons will also light red.

DIM

Lights yellow, and dims the speakers by a predetermined amount, set by the Control Room Monitoring level knob (see below).

The **DIM** will also be forced onto the monitoring whenever the console Talkback , production Talkback or Slate are in use or remote dim is applied.

MONO

Lights yellow and collapses a Stereo or Surround mix into mono.

Collapsing a 5.1 mix is done in conjunction with the **ST** button.

Main Monitor Pot

In it's default state, this controls the monitoring level to the speakers, the level being displayed underneath in the alpha display window.
The control ranges from **OFF**, through -56dB to 0dB.

However, between -14db and -18dB, the display of -**15*** refers to a fixed operating level of 85dB.
It is at this level that the control should be set when calibrating external speakers and amplifiers.

By pressing the knob, it is possible to set up the **DIM**, **AFL**, **PFL** and **SIF** levels.

► Press the knob to set the **DIM** level (the **DIM** led will light).
The dim level will be shown on the alpha display and has a range of 0dB to -36dB.

► Rotate the knob to set the value.
Whenever **DIM** is pressed on the Control Room Monitor panel, it will dim by this amount.

➤ Press the knob again to set the **AFL** level (the **AFL** led will light).
The **AFL** level will be shown on the alpha display and has a range of 0dB to -36dB.

➤ Rotate the knob to set the value.
In Safe mode, whenever **AFL** is pressed anywhere on the console, it will dim by this amount.

➤ Press the knob again to set the **PFL** level (the **PFL** led will light).
The **PFL** level will be shown on the alpha display and has a range of 0dB to -36dB.
In Safe mode, whenever a **PFL** is pressed anywhere on the console, the **PFL** signal will be at this amount relative to 0dB.

➤ Rotate the knob to set the value.

➤ Press the knob again to set the **SIF** (Solo In Front) level (the **SIF** led will light).
The SIF percentage will be shown on the alpha display, and ranges from 30% to 100%.
  • **100%** indicates you are listening to 100% of the AFL signal and nothing else.
  • **30**% indicates you are listening to 30% AFL signal and 70% of the current monitoring selection.
  • **50**% indicates equal amounts of AFL and Monitor selection.

➤ Rotate the knob to set the value.

Press the knob again to return to it's default state of setting the Control Room Monitoring Level.

Any changes you have made will be automatically saved.

SEL Mode on the CONTROL ROOM MONITOR Section
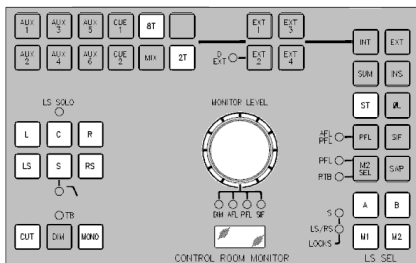
To enter and exit SEL Mode
Press **LOCK** and **RTE SEL** to enter SEL Mode, and any selection already made on the ROUTE SEL panel will start to flash (along with the **RTE SEL** button).

Once SEL Mode has been switched on, it switches the DAW screen over to the Routing Screen display and suspends the operation of all the buttons on the Control Room Monitor panel, apart from (shown in white, left):
  • **8T**
  • **2T**
  • **ST**
  • **MONO**
  • **CUT**
  • Individual Loudspeaker Cuts
  • The Monitor Pot push-switch
  • **A**, **B**, **M1** & **M2**

The rest of the Control Room Monitoring panel's button display and functionality - plus the ability to swap the control room monitoring - is suspended.
(If lit, the **D-EXT**, **AFL/PFL** & **RTB** leds will also be suspended).

➤ Make any desired changes.

➤ Press **RTE SEL** again to exit SEL Mode.

Any changes you have made will be saved, and the buttons, display screen and audio will revert to their last selection.

To tie a set of speakers to the Stereo Downmix
It is possible to tie a set of loudspeakers to monitoring the Stereo Downmix, so that selecting the speaker set, automatically monitors the Stereo Downmix.

➤ Press the **RTE SEL** button on the Route Sel panel and then press **ST** (both buttons will flash).

➤ Turn the Monitor Knob. The display will show **SUB.**

➤ Press the Monitor Knob, and a ✓ (or a **X**) will be displayed in the last position of the alpha display, indicating that Sub is (or is not) fed to the Stereo Mix.

➤ Subsequent turns of the knob will display **A**, **B**, **M1** and **M2**.
For each of these displays, pushing the knob will display either a ✓ or a **X** to indicate that the stereo downmix is tied / not tied to that speaker set.

For those speaker sets you have tied to the stereo downmix, pressing those speaker set buttons will automatically swap the monitoring to the Stereo Downmix.

➤ Press SEL to exit SEL Mode.

To lock relative levels within a loudspeaker set

It is possible to apply +/-10dB of trim to each loudspeaker feed within each speaker set.

➤ Press the **RTE SEL** button on the Route Sel panel and then select the loudspeaker set, either **A**, **B**, **M1** or **M2** (the button will flash).

➤ Using the loudspeaker **CUT** buttons, select the element you wish to alter, either **L**, **C**, **R**, **LS**, S or **RS** (the button will flash when pressed). That path's Trim value will now be shown in the Control Room alpha display with a range of +/- 10dB.

➤ Turn the monitoring knob to set this value.

➤ Either select another loudspeaker, or exit SEL Mode to lock these Trims in place.

To lock the S and LS/RS to sets of loudspeakers
It is possible to lock both the Left Surround and Right Surround speakers, and/or the Sub to a specific set of Surround speakers.

➤ Press the **RTE SEL** button on the Route Sel panel and select either **B**, **M1** or **M2** (the button will flash).

It will now be possible to lock the **S** and/or the **LS/RS** to the selected set of loudspeakers.

For each press of the Monitor pot as the route is made, the alpha display will show:
➤ **S**: Sub
➤ **LSRS**: Left Surround and Right Surround
➤ **LRSS**: Left Surround, Right Surround and Sub
➤ **OFF**: No speaker locks in place

➤ Once set, press **SEL** to exit SEL Mode to lock these assignments into place.

To Route 8T Outputs to specific loudspeakers

It is possible to route the 8T Outputs directly to individual loudspeakers.

► Press the **RTE SEL** button on the Route Sel panel and press 8T.

► It is now possible to scroll through all of the 8T Outputs using the Monitor Knob, the selected 8T appearing on the alpha display (if there are routes already in place, as you scroll through the 8T paths using the Monitor Knob these will be displayed via the Loudspeaker **CUT** buttons).

► When you have selected the 8T you wish to configure, select the loudspeaker you wish to send this path to using the individual LS **CUT** buttons. The speaker button will light when selected.

It is possible to send any of the 8T Outputs to more than one speaker destination at a time.

► Exit SEL Mode to lock these routes into place.

On exiting **RTE SEL** Mode, the 2T and SEL buttons will cease flashing and the screen will revert to showing it's previous display, or if 2T control was selected will show the 2T Mixer screen.

2T

Lights yellow when selected and allows control of the **2T** mixer.

It will open the 2T Setup screen as shown left.

It is possible to set up the 2T mixer using the 2T Mon Sel or 2T screen to configure the following:

5.1 or Group Mode:
Group mode is useful for folding down stereo groups. The 5.1 mode will set up your Down Mix of the 5.1 mix being made by the 8T system.

Pre / Post:
This screen allows the source to the 2T mixer to be Pre- the 8T faders or Post- the 8T faders.

Tone to 2T
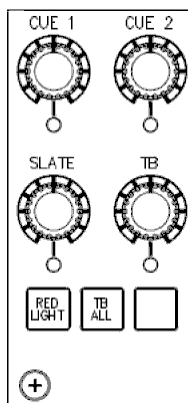Sends tone to all the 2T Outputs.

2T Output / 2T Level
Allows you to globally turn all of the 2T Outputs On/Off, and trim them by +/-10dB.

NB
In Pre-mode, the 8T Inserts should be selected to be **Pre**- to pickup the pre-processing pre-fade 8T signal.

TALKBACK Section

All of the Talkback functions can be accessed remotely via relays and the 5VCTL from the back of the console on a 15-pin D-type connector.

These relays & 5VCTL also allow the remote operation of the Loudspeaker **CUTS**, **DIM, TALKBACK** to **CUE 1** / **CUE 2**, **RED LIGHT**, **RTB ON** and **SLATE**.

CUE 1 & CUE 2

Each of these level controls and momentary switches can be used to set the talkback level to each Cue.
It has a range of -∞ to 0dB.

► Press to enable, the adjacent led will light and send Talkback to the Cue. It will also turn on the **DIM** lamp, and the display will temporarily display the amount of dim, set by the DIM TB preset located above the Monitor **DIM** button.

If **RTB** is on **M2 SEL**, then the action of talking to CUE 1 or CUE 2 will temporarily suspend **RTB,** whether it is selected locally or externally.

As stated it is possible to talk to the Cues externally, in which case each Cue light will flash to show remote control.

SLATE

This level control and momentary push switch can be used to set the Slate level to **Grp**, **8T 2T** and **Main Mix** Outputs.

It has a range of -∞ to 0dB.
It will also turn on the **DIM** lamp and the monitoring will be dimmed.

SLATE can also be set to include tone from the oscillator so to provide a tape oscillator slate (this is done via the setup screen).
It is now possible to toggle this function on or off.
- If the function has been set to **ON** from the setup screen, then the led below the pot will flash when selected.
- If there is no selection, the led will show solid for when Slate is selected.

If **RTB** is on **M2**, then Slating will also temporarily suspend the RTB Talkback.

TB

This level control and momentary push switch can be used to set Talkback level and to talk to the TB Output jack on the rear of the console.
The level has a range of -∞ to 0dB.

► Press to Operate, the yellow led underneath will light and talkback will be sent to TB Output.

This will also dim the monitoring (and light the DIM lamp).

If **RTB** is on **M2**, then Applying TB will temporarily suspend the Return Talkback.

TB ALL

This momentary push switch can be used to send Talkback to all available talkback destinations.

The led lights yellow for the length of the press, and the talkback will be sent to all available destinations.

This action will also light the **DIM** lamp, and dim the monitoring.

If **RTB** is on **M2**, then Operating all will temporarily suspend the Return Talkback.

RED LIGHT

Lights red allows for a studio external red light to be switched on and off from the console surface, also red light can be switched on and off remotely.

DAW / CONSOLE CONTROL Screen
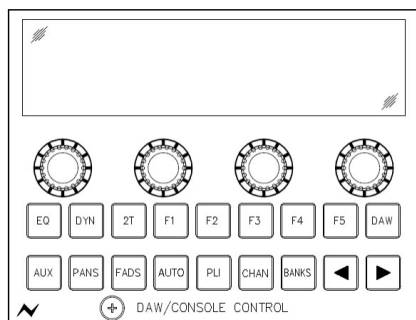
The DAW screen has underneath it 18 dedicated buttons with fixed functions, plus 4 'soft' rotary encoders whose function changes depending on what is displayed on the screen just above them.

Each of these 4 free-running encoders has a push On/Off switch used to set various states.

For the purposes of this manual, they are numbered (from left to right) 1 to 4.

None of the bottom row of buttons will have a function unless you are in DAW mode, and control has been established between the DAW and Genesys.

EQ

Only functions if the optional EQ processing cassette is fitted.

When the **EQ** button is selected, it will bring up the last EQ used on screen.
Using the ◀ & ▶ buttons, select the channel you want to control.

NB:
You can select EQ a different way by quickly stabbing the channel **SEL** button which will bring up the EQ for that channel.

The first three encoders can be used to control the EQ **Cut** and **Boosts** by scrolling; when pressing and scrolling they can select the **Frequency**. Pressing the last encoder will select the **Hi Q**.

DYN

Only functions if the optional Dynamics processing cassette is fitted.

When the **DYN** button is selected, it will bring up the last Dynamics display used on screen.

▶ Using the ◀ & ▶ buttons, select the channel you want to control.

NB:
You can select to control DYN a different way by quickly double stabbing the channel **SEL** button which will bring up the Dyn screen for that channel.

The encoders can be used to control the **Ratio**, **Threshold** and **Release** when controlling the Compressor; and also the **Range**, **Threshold** and **Release** when controlling the Gate.

NB. Pressing the first encoder to the left will toggle the control screen between Compressor and Gate functions.

2T Operation

5.1 Mixing Mode

On-screen icons will display:
*   **5.1** (as opposed to **Group**)
*   Whether the feeds are sourced **Pre**- or **Post-** the 8T
*   Trim values for the **C**, **S** and **LS/RS**.

The **8T Outputs** are fed to the **2T Outputs** in the following way:

8T Output	2T Destination
1 (Left)	Left
2 (Right)	Right
3 (n/a)	(n/a)
4 (n/a)	(n/a)
5 (Left Surround)	Left
6 (Right Surround)	Right
7 (Centre)	Left and Right
8 (Sub)	

The four encoders have the following function in **5.1 Mode**.

Encoder	Push-switch function	Rotary function
1	**On** / **Off** contribution to **C**	+/- 10dB **Trim**
2	**On** / **Off** contribution to **S**	+/- 10dB **Trim**
3	**On** / **Off** contribution to **LS** / **RS**	+/- 10dB **Trim**
4	2T Output **On** / **Off**	**Level control**, -∞ to 0dB

The Trim values will be displayed on-screen as you set them.

Group Mixing Mode

On-screen icons will display:
*   **Group** (as opposed to **5.1**)
*   Whether the feeds are sourced **Pre**- or **Post**- the 8T faders
*   2T **Output** level
*   2T **On / Off** state

In **Group Mode**, the 8T Outputs are fed to the 2T in the following way:

8T Output	2T Destination
1	Left
2	Right
3	Left
4	Right
5	Left
6	Right
7	Left
8	Right

In **Group Mode**, the four encoders have the following functions:

Encoder	Push-switch function	Rotary function
1	**On / Off** contribution from **8T 1** & **2**	**Level control**, -∞ to 0dB
2	**On / Off** contribution from **8T 3** & **4**	**Level control**, -∞ to 0dB
3	**On / Off** contribution from **8T 5** & **6**	**Level control**, -∞ to 0dB
4	**On / Off** contribution from **8T 7** & **8**	**Level control**, -∞ to 0dB

F1 – F5
The function of these buttons is displayed on the screen above, and will change depending on which operation is in progress.

DAW
Establishes communication between Genesys and the DAW, and turns that control On / Off.

The red **DAW** led will light under the 8T faders when control is established.

Once in **DAW** mode, the lower row of DAW buttons become active.

NB:
It is possible to select **EQ**, **DYN** or **2T** when **DAW** is selected.
When this happens the console and screen will be swapped over to control the selected function but the DAW light will still be lit and faders and mutes will still controlled.

AUX
This button has no function unless you are in **DAW** mode.

► Press the **DAW** button.

► Press **AUX** (the button will light).
One of the **F1** – **F5** buttons will light indicating which Aux (1 – 5) you are controlling.

► Pressing the relevant logicator (1 – 4) will turn that Aux On/Off for that path.

► Use the ◄ & ► buttons to select which HUI paths to control.
   •   If ◄ is lit, the logicators are controlling paths 1 – 4
   •   If ► is lit, the logicators are controlling paths 5 – 8

*If you hold down the appropriate **F1** – **F5** button while pressing the logicator, it will toggle the selected Aux between **Pre**- and **Post**- fader.*

The Pre/Post state will be displayed on the screen.

PANS
This button has no function unless you are in DAW mode.

► Press the **DAW** button.

► Press **PANS** (the button will light).
The logicators now control the Pans for 4 HUI paths.

Use the ◄ & ► buttons to select which HUI paths to control.
   •   If ◄ is lit, the logicators are controlling paths 1 – 4
   •   If ► is lit, the logicators are controlling paths 5 – 8

As a ProTools track can be stereo, you can swap the Pan into **PANR** mode.

► Press the logicator to swap the Pan mode between conventional L/R pan and **PANR** for that path.

The change in the Pan state will be displayed on screen.

PLI

This button has no function unless you are in DAW mode.

► Press the **DAW** button.

► Press **PLI** (the button will light).

Use the ◄ & ► buttons to select which HUI paths to control.

The 4 logicators now control the Plug-Ins parameters for the selected paths:

- • **F1** opens/closes the PlugIns window in ProTools
- • **F2** scrolls through the allocated plug-ins for the selected channel.
- • **F3** / **F4** will step you backwards / forwards through the parameters for the selected channel.

FADS

This button has no function unless you are in DAW mode.
Swaps the faders between controlling the 8T Outputs or the selected DAW faders.

*The faders may move to different levels when the **FADS** button is pressed and control is transferred between Genesys and the DAW.*

► Press the **DAW** button.

► Press **FADS** (the button will light).

► Use the ◄ & ► buttons to move the block of HUI paths up / down a single path.

► If the **BANK** button is lit, using the ◄ & ► buttons will move the block of HUI paths up / down by 8 paths.
The block of HUI paths currently under control will be displayed on screen.

AUTO

Automation.
Not available in this release of software.

CHAN

This button has no function unless you are in DAW mode and is only available if the Automation hardware is fitted.

When selected will switch the console channel faders to control the DAW and switch off the 8T faders that were controlling the DAW.

BANKS

This button has no function unless you are in DAW mode.

See **FADS** above.

◄ & ► keys

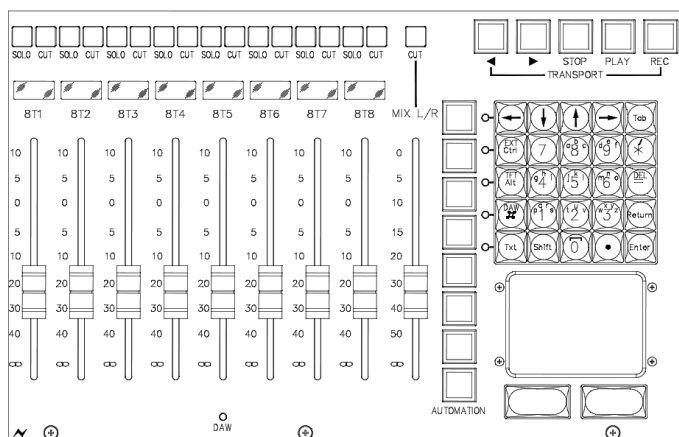These buttons have no function unless you are in DAW mode.
They are used to scroll through the available HUI paths & parameters.

Master Faders

The 8T faders can either control the 8T levels or a block of 8 DAW faders (the red led underneath the faders will light when DAW control has been established).

The main output fader always controls the Main Mix Output.

Channel Faders

Each fader has a range of -∞ to +10dB, with it's own **CUT** and **SOLO** button.

CUT
Cuts the paths audio.

In Mix Mode, Pre-fade contributions to auxes will be affected by the cut.

SOLO
A Channel **SOLO** will override any **CUT** that is already in place.

Alpha Display
The four-character alpha display above each fader is used to display:
- The automation modes (Automation consoles)
- DAW track information (Automation consoles)
- User path-names (Standard consoles).

8T Faders

The 8T faders can either control the 8T levels, or a block of 8 DAW tracks (the red **DAW** led underneath the faders will light when DAW control has been established).

Each fader has a range of -∞ to +10dB.

CUT / SOLO
Each fader has a **CUT / SOLO** button whose function is switched with the adjacent **CUT** buttons to solo an 8T group.
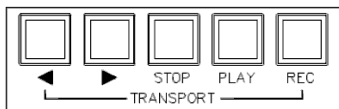
Alpha Display
The four-character alpha display above each fader is used for displaying 8T 1 – 8 or DAW track information.

MAIN MIX Fader

An independent fader controls the Left & Right of the main mix with a range of to 0dB.

The **CUT** button acts on both the L & R of the Main Mix.

TRANSPORT Keys

WIND, **REWIND**, **STOP**, **PLAY** and **RECORD** buttons control the DAW.

Each button lights yellow to confirm the function has been selected, apart from **PLAY** (lights green) and **REC** (lights red).

MASTER AUTOMATION buttons
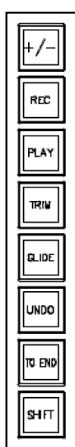
The Master Automation keys are only present on consoles that have the optional Encore Plus™ Automation package fitted (automation software not available in this version of software).

Each button lights yellow to confirm the function has been selected, apart from **PLAY** (which lights green) and **REC** (which lights red).

KEYPAD
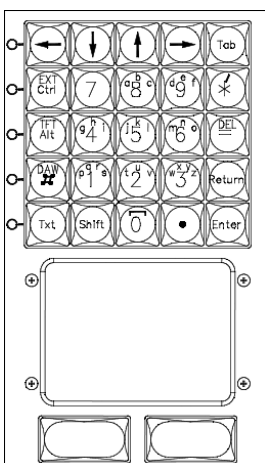
In Text mode , it is used for entering filenames on screen and navigating around on-screen applications (Text button selected).

In Non-text mode, it is also used for setting up Cue cycles and Copy / Paste / Edit functions within the DAW (text button not selected).

A full sized keyboard can be plugged into the rear of the console if more functionality is required.

The glide pad and two buttons act as mouse, or an external mouse (or trackball) can be plugged into the rear of the console.

CHANNEL Meters
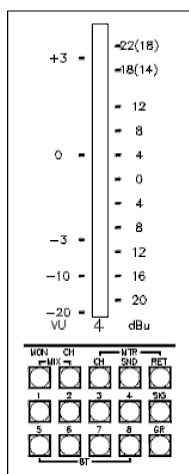
Each fader strip meter has 2 scales:
- **VU** scale, displayed to the right
- **dBu** scale, displayed to the left

Beneath this, a bank of 15 leds displays the following information:

MIX

Indicates whether the Monitor path or Channel path is contributing to the L and R of the Main Mix.

MTR

The MTR led indicates whether the meter is sourced from the **CH I/P**, **DAW Send** or **DAW Return**.

8T 1 to 8T 8 leds

Indicates whether the Channel or Monitor path is being sent to each of the 8T Busses.

SIG

The **SIG** (Signal Presence) led lights depending on the threshold of the **SIG PRES** rotary control on the Master Select panel.

GR

The **GR** (Gain Reduction) led lights to show any compression that may be applied to the path.

It is a tri-state led and will light either:
- Green (light compression)
- Orange (medium), or
- Red (heavy)

REV RETURN Meters
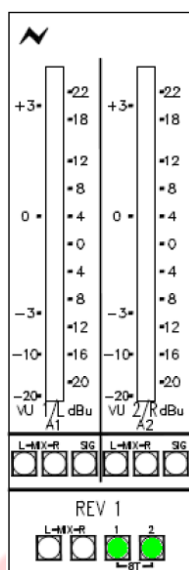
Each of the Rev Return meters has 2 scales:
- VU scale, displayed to the right
- dBu scale, displayed to the left

MIX L/R

Indicates whether the 8T is feeding the L and R of the Main mix.

8T SIG

Lights depending on the threshold of the **SIG PRES** rotary control on the Master Select panel.

The bottom four leds across the pair of meters indicates how the Rev Return is feeding the L & R Main Mix or 8T Mix.

NB. There are two 8T leds that indicate whether the Rev Return is contributing to the 8T busses.
- **Rev 1** can only contribute to **8T 1** & **2** (as shown left)
- **Rev 2** can only contribute to **8T 3** & **4**
- **Rev 3** can only contribute to **8T 5** & **6**
- **Rev 4** can only contribute to **8T 7** & **8**

MASTER METER Section
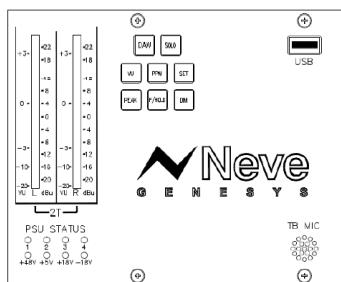
DAW
Lights when the 8T meters are being fed from the DAW metering.

The button itself has no intrinsic function and is for display only.

SOLO
Flashes whenever a Solo (either **AFL** or **PFL**) is detected anywhere on the console.

USB
USB port for a flash drive so data can be quickly backed up or restored.

Talkback Mic
The Talkback Mic is situated on the meterbridge for optimum acoustic isolation.

The Metering Options buttons apply their functions globally across all metering on the console:

VU
Sets all meter information to display in VU, and uses the scale to the left of each meter.

PPM
Sets all meter information to display in PPM, and uses the scale to the right of each meter.

VU and PPM are interlocked.

SET
It is possible to alter the meter scaling in PPM mode.

➤ Press **SET**.
The right-side of the 2T meter will now display a solid block of leds.
For each press of the PPM button, the scaling indicated by bright-up will be:
- ➤ +14dB
- ➤ +18dB
- ➤ +20dB

This will set the PPM bright-up to be one bar below +14, +18, +20 to indicate near converter clipping.

Press **SET** again to exit this setup mode.

PEAK
With this selected, whenever a meter peaks the topmost led will remain lit for two seconds or until it is overwritten by a louder signal.

P/HOLD
With this selected, the metering will permanently display a single led to show it's loudest peak until it is overwritten by a louder signal.
This can be reset by pressing the **P/HOLD** button again.

In this way, it is possible to play a section of music and then determine the loudest point on each path.

DAW

Lights red whenever the **DAW** button is pressed on the Control Room Panel and indicates that the 8T meters are being feed from the DAW metering and not the console metering.

PSU STATUS

Indicates the state of the internal console power supplies.

If all power supplies to all sections of the console are healthy, then all leds will be **OFF.**

The **1**, **2**, **3** & **4** leds refer to a particular 16 channel section of the console.
As the console is scaleable up to 64 faders, each of the 1 – 4 leds refer to a block of 16 channels:

Led	Console Fader Section
1	1 - 16
2	17 - 32
3	33 - 48
4	49 - 64

If a power supply should fail, 2 leds will light:
- One of the **1**, **2**, **3** or **4** leds will indicate the section of the console;
- One of the **+48v**, **+5v**, **+18v** or **-18v** leds will indicate which supply within that section.
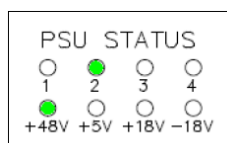
For example, if **2** and **+48v** were lit (as shown left), this would indicate there is no +48v (phantom power) supply on fader section 17-32.

As SEL Mode on the monitor panel allows you to make individual changes mid-way through a session on the console surface, so the SETUP screen allows you to make the same console-wide changes all in one action.

Any changes made on the console surface in SEL Mode are reflected when you open the Setup screen, and any changes made on the Setup screen will be reflected on the console once you Exit.

Common to all the screens, is a large timecode display in the top right. This can be set to either display:
- Bars & Beats: (Click **B&B**)
- Foot / Frames (Click **F&F**)
- Standard Timecode display: (Click **DAW TC**)

To access all the various options within this application, click the function buttons at the bottom of the screen.

- If Recall has been fitted, a letter **R** will be displayed in red in the top right corner of the main screen just by the timecode display.

- If Recall is not present, the letter **R** will be displayed in grey instead.

EQ

> ➤ *If you press f1 just above the DAW screen, the on-screen process will be bypassed, in effect allowing you to audition a signal with and without the process in place.*
>
> *Whenever **f1** is pressed, it will show on screen that the process is currently being bypassed.*

The EQ screen is only available if you have at least one of the optional EQ cassettes fitted.

The display to the right of the screen displays the current channel.

How and when the EQ screen is displayed is set by **CH SEL** or **EQ** on the Monitor panel.

There are 3 rotary controls which relate to the first three encoders from the left below the Monitor Panel TFT, all of which have fixed stepped values.

Frequencies are selected by pushing and scrolling the encoders and Cut/Boost is actioned by rotating the associated encoders.

The last encoder to the right can be pressed to select **Hi Q** on the Mid band frequencies.

From left to right these are:

Lo Shelf	OFF		35 Hz		60 Hz		110 Hz		220 Hz
Mid Band	OFF	0.36	0.7	1.6	3.2	4.8	7.2		
Hi Shelf	OFF		16 kHz		12 kHz		10 kHz		

DYN

> **The Dynamics screen is only available if you have at least one of the optional Dynamics cassettes fitted.**

Allows setup and control of Dynamics on the DAW screen.

Compressor

The three controls shown on screen are operated by the first three encoders below the DAW screen.

➤ The 1st encoder sets the **Ratio,** and runs from 1:1 (off) to ∞:1 (Limiting).
Pressing this encoder also swaps between the Compressor and the Gate/Expander screen (see below).

➤ The 2nd encoder sets the **Threshold**, and runs from 10 to -20.
By pressing this encoder, you can also set the source of the Sidechain Input, either sourced from the Channel itself, the EQ on that Channel, or from the Key Input via the 25-way D-type connector on the Dynamics cassette.
- Both leds **OFF** means the signal is coming from the associated Channel.
- The **EQ** led lit means the signal is coming from the associated EQ output.
- The **KEY** led lit means the signal is being taken from an external trigger.

If an EQ is being used to be the Sidechain EQ signal, it will no longer be available in the Channel (or Monitor) path.

The EQ pick-off point when used in this mode will always be Pre- the Dynamics processing (but can be Post Insert if the Inserts are set Pre- Dynamics).

➤ The 3rd encoder sets the **Release** time (in seconds) and runs from 0.1 of a second to 4 seconds.
By pressing this encoder, you can also set the Attack time from Slow (3ms to 30ms, programme controlled) to Fast (3ms for 20dB of gain reduction).

➤ The 4th encoder is not used to set a variable value, but instead, pressing it will toggle the compressor between working in **Local** or **Global** mode.

Local Mode
- In this mode (with the ➔ button pressed), the compressors within an 8 fader section can linked together to form any size links in any combination, so that all the link members being compressed are treated as one and compressed identically. It is always the loudest signal within this link-group that causes the compressor to action once the threshold has been reached, regardless of which signal this actually is.
- Creating links will always link that path with the path to it's right.
- Links can be any size (from 2 to 8-wide) in any combination.
- It is possible to set up a single 8-wide link.
- It is not possible to link across different 8-fader sections of the console.
A typical example of linking would be channels 1 & 2 linked together, and channels 4 & 5 linked together to form two link groups. It would then be possible to include channel 3 to join these links together to form one complete link, but noting that channel 3 would be included in the link group if selected. To isolate channel 3 it would be necessary to remove the compressor from the channel or the monitor path by using the **DYN** button (turned off) on the channel strip to isolate it.

*➤ If you press **f1** just above the DAW screen, the on-screen process will be bypassed, in effect allowing you to audition a signal with and without the process in place.*

*Whenever **f1** is pressed, it will show on screen that the process is currently being bypassed.*

Global Mode
- In Global Mode (with the ↔ button pressed) all of the compressors across the entire width of the console will act as a single compressor across all of the signals fed into it.

Gate/Expander

> **The Dynamics screen is only available if you have at least one of the optional Dynamics cassettes fitted.**

The Gate/Expander controls are accessed by pressing the **DYN** button, and then pressing the 1st encoder to swap the processing screen over to the Gate/Expander view.

- If the **EXP** button (to the left of the Channel number) is pressed, it is operating as an **Expander**.
- If the **EXP** button is not pressed (as shown left), it is acting as a **Gate**.

Both processes operate identically on-screen using the same parameters. The rotary controls on screen map directly to the first three encoders below the DAW screen.

If an EQ is being used to be the Sidechain into the Gate (or Exp), it will no longer be available in the Channel (or Monitor) path.

The EQ pick-off point when used in this mode will always be Pre- the Dynamics processing (but can be Post Insert if the Inserts are set Pre- Dynamics).

► The 1st encoder sets the Range of the **Gate** (or **Exp**) and runs from 0db to 50dB.

► The 2nd encoder sets the Threshold at which the **Gate** (or **Exp**) should operate and runs from -30dB to 10dB.
Pressing the 2nd encoder selects where the Sidechain Input is sourced from.

► By pressing this encoder, you can also set the source of the Sidechain Input, either sourced from the Channel itself, the EQ output on that Channel, or from the Key Input via the 25-way D-type connector on the Dynamics cassette.
- Both leds **OFF** means the signal is coming from the associated Channel.
- **EQ** led lit means the signal is coming from the associated EQ output.
- **KEY** led lit means the signal is being taken from an external trigger.

► The 3rd encoder sets the Release time, and operates within a range of 0.1 second to 4 seconds.

*► If you press **f1** just above the DAW screen, the on-screen process will be bypassed, in effect allowing you to audition a signal with and without the process in place.*

*Whenever **f1** is pressed, it will show on screen that the process is currently being bypassed.*

► By pressing this encoder you can set the Attack time from being 1.5ms for 40dB of range (Slow) to 100micro seconds for 40dB range (Fast).

► The 4th encoder only swaps the process between acting as a **Gate** or an **Expander**, and this is shown on screen with the **EXP** button (is lit when acting as an **Expander**, is unlit when acting as a **Gate**).

> **NB:**
> **Whichever Sidechain Input you have will be common to all the other available processes.**
>
> **For example, if you have the Compressor set to take it's sidechain from the External Key Input, then the Gate (and Exp) will also automatically be set to the External Key Input.**
>
> **If you change this selection on one process, it will impact the same selection on other available processes on the same Channel or Monitor path.**

2 TRK

Allows setup and control of the 2T paths from the 8T Groups.

The screen that opens depends on how the 2T has been set up to operate, either in **Group Mode** (shown left) or **5.1 Mode**.

Group Mode

You have individual On/Off control and +/-10dB of Trim for each 8T Group contribution, plus a global On/Off and level control ranging from 0dB to ∞ for the 2T Output.
In this mode, the allocation of the group contributions to the 2T mix will be:

8T	Output to:
8T 1	Left 2T Mix
8T 2	Right 2T Mix
8T 3	Left 2T Mix
8T 4	Right 2T Mix
8T 5	Left 2T Mix
8T 6	Right 2T Mix
8T 7	Left 2T Mix
8T 8	Right 2T Mix

5.1 Mode

You have individual On/Off control and +/-10dB of Trim for each of the **C**, **S** and **LS/RS** contributions to the 2T Output, plus a global On/Off and level control ranging from 0dB to ∞ for the 2T Output.

In this mode, the allocation of the group contributions to the 2T mix will be:

| 8T	Speaker Destination	Output to:
8T 1	Left	Left 2T Mix
8T 2	Right	Right 2T Mix
8T 3	- not used -	- not used -
8T 4	- not used -	- not used -
8T 5	Left Surround	Left 2T Mix
8T 6	Right Surround	Right 2T Mix
8T 7	Centre	Left & Right 2T Mix
8T 8	Sub	Left & Right 2T Mix

For details on how to swap between **Group Mode** and **5.1 Mod**e, see chapter on **Control Room Monitor** panel.

DAW

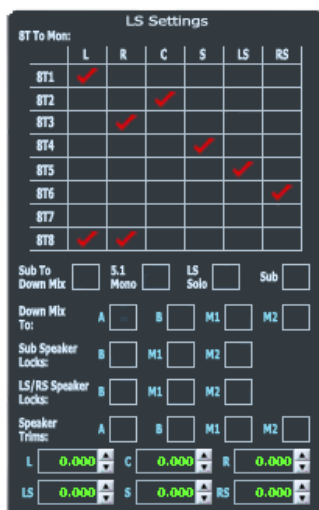Sets up and controls the Digital Audio Workstation.

Settings
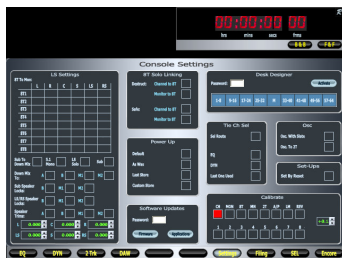
Contains system-wide parameters regarding:
- Console layout
- 8T to Loudspeaker routing
- Solo linking
- Path calibration
- Loudspeaker settings
- Access to Software Updates

LS Settings

8T To Mon

This matrix allows any of the 8T to be fed to any of the speakers.
There are no limits as to which 8Ts feed which speakers.

➤ Click in the junction of the speaker and the 8T to make or break the route.
A red ✓ will be placed on screen when a route has been made.

NB. This set up can also be accomplished by using Sel Mon mode if you do not wish to use the setting screen.

Sub To Down-mix

The Down-mix is when a Surround Mix is collapsed down to either Stereo or Mono.
Ticking this option includes the Sub when the mix is collapsed to stereo, otherwise it will be not be included.

NB. This set up can also be accomplished by using Sel Mon mode if you do not wish to use the setting screen.

5.1 Mono

Allows the collapse of a 5.1 Surround mix down to Mono.

NB. This set up can also be accomplished by using Sel Mon mode if you do not wish to use the setting screen.

LS SOLO

Sets the **L**, **C**, **R**, **LS**, **S** and **RS** speaker buttons to act as SOLO, rather than CUT.
The **LS SOLO** led above the speaker buttons will light when selected.

NB. This set up can also be accomplished by using Sel Mon mode if you do not wish to use the setting screen.

SUB

Applies a fixed Lo-pass filter (at 82Hz) to the **Sub** speaker for checking purposes.

NB. This set up can also be accomplished by using Sel Mon mode if you do not wish to use the setting screen.

Down-Mix To

When a Surround mix is collapsed down to Stereo, this down-mix can also be tied to a set of loudspeakers.

If for example **M1** is selected (a Stereo set of speakers), then when the surround mix is collapsed down to stereo from a 5.1 set, it will force it to

use the **M1** set of speakers, and swap the monitoring accordingly.
NB. This set up can also be accomplished by using Sel Mon mode if you do
not wish to use the setting screen.

Sub Speaker Locks
Click the speaker set buttons that you wish to lock to the **S** to.

*These buttons are not interlocked so it is possible to create more than one
lock to the S.*

*NB. This set up can also be accomplished by using Sel Mon mode if you do
not wish to use the setting screen.*

LS/RS Speaker Locks
Click the speaker set buttons that you wish to lock to the **LS/RS** to.

*These buttons are not interlocked so it is possible to create more than one
lock to the **LS/RS**.*

*NB. This set up can also be accomplished by using Sel Mon mode if you do
not wish to use the setting screen.*
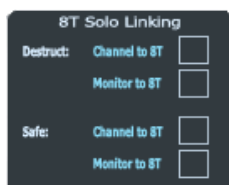
Speaker Trims

➤ Click the speaker set button you wish to set the Trims for (**A**, **B**, **M1** or
M2).

For each of the six speakers, you now have +/-10dB of Trim to apply in
0.1dB steps.

➤ Use the up/down arrows to scroll the value for each speaker.

NB. This set up can also be accomplished by using Sel Mon mode if you do
not wish to use the setting screen.

8T Solo Linking

Destruct
Links the Channel or Monitor SOLOs to the 8T, so that pressing any
Channel or Monitor SOLO will cut the 8Ts.

Safe
Links the Monitor or Channel SOLOs to the 8T, so that pressing any
Monitor or Channel **SOLO** will **not** cut the 8Ts and the 8T solo's will be
safe within their system as well.

Power Up

On power-up, the console can be set to default to one of four states:

Default
This is the AMS-Neve default Read-Only setup.

As Was
The console will be loaded with all the same settings as they were when
the power was removed.

Last Store Made
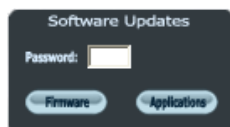Loads the last store that was created.

NB: this is the last store Saved, not the last one Loaded.

Custom Store

The user can set up a default store and have this loaded every time the console powers-up as a custom starting template.
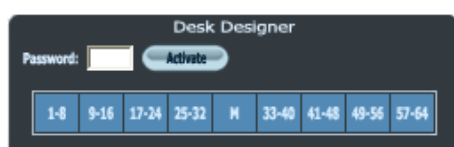
These four options are interlocked.

Software Updates

This is a password-protected programme that allows you or an AMS Neve Representative to check for Firmware and Application software updates once the computer is connected to the Internet.

► Select either Firmware or Applications before updating.

Desk Designer

In it's default state, it is presumed that the left-most channel on the console is number 1, and the rest of the channels are numbered sequentially from there including the Rev Returns.

The Desk Designer allows you to set the order in which the Channels and the Rev Returns appear on the console surface, should you wish to alter their default positions.

► Enter the password for using Desk Designer.

► Click the **ACTIVATE** button (the button will then say **DEACTIVATE**).

THIS WILL SUSPEND ALL OF THE CONSOLE OPERATION AND MUTE THE AUDIO.

► It will now be possible to click and drag each block of 8 faders on this screen to wherever you want them to be, with respect to the other fader blocks.
(The block labelled **M** is the centre section of the desk and can be moved like any other block).

► Once complete, YOU MUST UNTICK THE 'ACTIVATE' BUTTON.

THE DESK WILL BE HELD IN 'ACTIVATE' MODE UNTIL YOU UNTICK THIS BUTTON

In the example shown left, the first 16 faders have been reassigned to act as the last 16 faders.

Tie Ch Sel

Sel Route
If ticked, whenever a Channel + >8T or Rev return SEL button is pressed, the ROUTE SEL panel will also go into SEL Mode, allowing that path's routing to be set.

DYN
If ticked, whenever a Channel SEL button is double pressed, then the DAW Control screen will swap to showing the Dynamics parameters for that path.

EQ
If ticked, whenever a Channel SEL button is single pressed, then the DAW Control screen will swap to showing the EQ parameters for that path.

Last One Used
This will bring up either the EQ or the DYN screen, depending on the last screen displayed associated with that particular path irrespective of a single or double press.

DYN, EQ and *Last Once Used* can all be selected if desired .
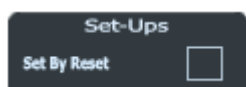
OSC
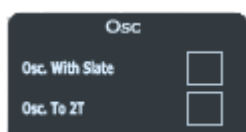
Osc with Slate
Sends a low-level 30Hz tone with the Talkback when Slate is selected.

Osc to 2T
Without this option ticked, enabling the Tone and pressing the **2T/MIX** button will only send tone to **MIX.**

With this option ticked, Tone will be sent to both the **MIX** and **2T** busses.
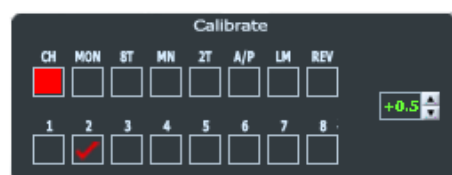
Setups

Set by Reset
If this is ticked, then when the console is re-powered or reset, then the settings for LS Settings, 8T Solo Linking, Osc and Tie Ch Sel will be loaded as well depending on which Power Up option has been set (see above).

If this option is unticked, then these settings will remain unchanged on Reset.

Calibrate

Allows you to calibrate all of the Input and Output paths on the console.

Click any of the top row of buttons to select the path type *(these buttons are interlocked).*

CH selects the channel paths within each channel to be trimed.

▶ Where there are path numbers greater than eight on any type, click the top button again so the lower row of buttons display 9 – 16, 17 – 24 etc.

MON selects the monitor paths within each channel to be trimed.

➤ Where there are path numbers greater than eight on any type, click the top button again so the lower row of buttons display 9 – 16, 17 – 24 etc.

8T selects the 8T paths (pre and post) within each 8T module to be trimed.

➤ When selecting Pre or Post, click the top button again so the lower row of buttons display PR 1-8 (Pre) or PO 1-8 (Post).

Mix selects the Left and Right mix o/p's to be trimed.

2T selects the Left and Right 2T o/p's to be trimed.

A/P Selects the AFL and PFL o/p's to monitor to be trimed.

LS selects the Loudspeaker o/p's to be trimed.

REV selects the Reverb return paths within each 8T module to be trimed.

➤ Click the 1-8 boxes as appropriate and a ✓ will be placed in the selected box (*these buttons are interlocked*).

There is now +/- 1dB of calibration available for each path.

➤ Use the **+/-** arrows to set a value for each path.

FILING

Provides facility to **Save** and **Load** Automation and Recall files, either to/from the local hard-drive, local USB port or from any location on a network that the console may be attached to.

- The upper half of the screen is the **Destination** drive, and can be set to different locations.
- The lower half of the screen is the **Genesys** drive, and allows you to name/select files. This is the Source drive where all Genesys Automation and Recall files are saved to by default.

If you are logged on to Automation and you create a Recall file, it will use the same Client / Project / Title / Mix filing hierarchy, so that Recall Store files are always kept with the Automation files in the same folder.

This is for ease of use, especially when backing up files.
For more information on the Filing Structure, please see the chapter on the Automation System.

NB. Filing can also be selected from the monitor panel.

Load

► To Load an automation file, under the Client heading, double-click a Client and a list of Projects within that Client will be displayed in the next column.

► Double-click the Project and a list of Titles in that Project will be displayed in the next column.

► Continue to select the Title and Mix in the same way.

► Click LOAD. The selected file will load.

NB. Load can also be selected from the monitor panel.

Save

► On the Genesys drive, navigate down to the desired level in which you wish to save the Automation (or Recall Store) files, either by selecting existing Client / Project / Title / Mix etc or by creating new folders as you go.

► Click SAVE. The current Automation will be saved to that location.

NB. Save can also be selected from the monitor panel.

Copy

It is vitally important that safety copies of all Automation and Recall files are made on a regular basis.

The first thing to set when copying files from the Genesys drive is the Destination location.
- Pressing the **NETWORK** button opens another screen that allows you to navigate to any location on an attached network.
- Pressing the **USB** button opens another screen that allows you to navigate to any location on whatever is plugged into the USB port.

To move files between locations, use the **NETWORK** and **USB** buttons to set the upper window to the desired destination location.

► In the lower window, navigate to the desired file & location.

► Drag and drop the relevant file between the two windows.

It is the same operation regardless of whether you are backing up from, or restoring to the Genesys drive.

► Alternatively, right-click on the folder/file(s) to be copied and from the fly-out menu select the **Copy** option.

► Right-click on the destination location in the upper window and select the **Paste** option.

A copy of the file will be placed in the destination location, providing a file or folder of the same name does not already exist in that location.

If a file/folder of the same name already exists in the location you are copying to, you will asked to either **Overwrite** the file or **Cancel** the operation.

Delete

► Select the file by clicking on it.
This could either be an individual Mix, Recall store or a higher level folder.

► Press Delete. You will be asked to confirm your actions.

► Click Yes, and the selected file will be removed.

RTE

This screen is a graphic representation of the internal routing of the console and is shown whenever the **RTE SEL** button is pressed (depending on how this Preference is set up in the **Settings** screen).

If this screen is open when routes are made on the console, the screen will reflect this.
Likewise, it is possible to click on-screen in the relevant junctions to put these routes in place if this is preferred.

Unavailable routes are greyed out.

ENCORE

Encore Automation setup.

Not yet available for this release of software.

SYSTEM

Reboot

Reboots the console.

The progress screen will show how the boot is progressing and which panels are detected etc.

Restart PC

Shuts down and restarts the PC in the correct manner, and takes you back to the desktop so you are able to start the Genesys application again.

Shutdown PC

Shuts down the PC in the correct manner.

Whenever turning the system off and removing power, it is vital that the computer is switched off in the correct manner.
NEVER simply remove the power from the computer!!!

If you have the **Show On Reboot** option ticked, then this screen will

The system is not designed to run without the computer powered-up and in communication with the console surface.

Audio Monitoring Boards

Accessible from the rear of the console, the Monitor Boards handle the Cue mixes, Inserts, Outputs and have various trims and system connectors in place.

The majority of the signals that appear on the connectors on these boards do not appear on the 25-way D-type connectors.

Regardless of the console size, all of the following four Monitor boards and four rev returns will always be present in the same configuration.

Viewed from the rear, from Left to Right, these boards are:

Monitor Board 1 (Cue mix)
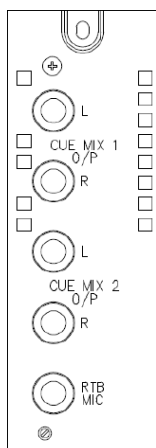
Two jack sockets each handle the Left and Right of each Cue Mix.

There is also a jack socket for the Return Talkback mic, the adjacent trim pot providing 0dB to +40dB of trim.

Monitor Board 2 (M1 L/S)
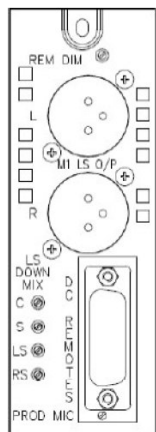
The 15-way D-type female socket fitted to Monitor Board on the extreme right hand rear of the console provides access to the DC Remote Control functions of the console as well as the producers microphone level input.

The Red Light connections on pins 1 & 2 of the connector provide a relay contact closure when the Red Light switch is operated.
The relay contacts have a maximum switching current rating of 2 amps and should be used to drive an external relay of suitable contact rating.

Pin 14 provides a current limited (~100mA) 4.7v source.

Pin 15 (digital ground) is for use with external switch contact closures to provide the following remote DC functions:

Pin	Signal	Notes
1	Red Light relay contact	Makes contact with (2) when **Red Light** switch is On.
2	Red Light relay wiper	Normally open contact.
3	Remote red light external input	These pins all require closure to pin 15 to operate.
4	Remote Cue 1 external input	
5	Remote Cue 2 external input	
6	Remote Return Talkback On	
7	Remote Slate Control Input	
8	Remote Loudspeaker Cut Control Input	
9	Remote Loudspeaker Dim Control Input	
10	Producers Talkback Microphone Input	Hi
11	Producers Talkback Microphone Input	Lo
12	Ground	Screen
13	Spare I/O	
14	Current limited (100 mA) 4.7v source	
15	Ground (digital)	

All inputs are pulled up to +5volts via a 3k9 resistor and have clamp diodes to protect internal circuitry.
Spare I/O (Pin 13) is a customising pin used to allow external control of function(s).

It can also be configured as an Output to control external equipment.

Use of Pin 13 will need further consultation with Neve Service Dept.

Monitor Board 2 also allows the loudspeakers for the **Down-Mix** to be trimmed (with +3dB to -12dB of trim for each of the **C**, **S**, **LS** and **RS** paths).

The trim pot for the **PROD MIC** offers 0dB to +40dB of trim on the Producers Mic.

The **REM DIM** trim pot offers 0dB to -40dB of trim whenever the Dim is triggered externally.
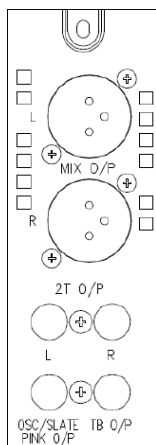
Monitor Board 3 (Mix Insert)
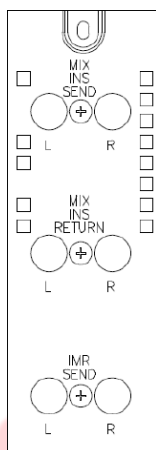
This board contains the Left and Right sends and returns for the Main Mix Insert.

It also contains the Insert Mix Return Left & Right Sends.
This is where the Insert can be patched across the Main Mix signal and between 30% and 100% of the Return can be applied.
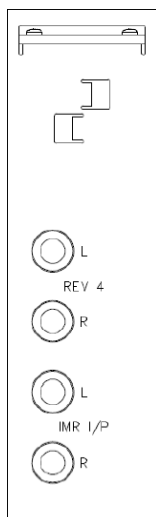
Monitor Board 4 (Mix Output)

This board has 2 XLRs for the Main Mix outputs.

It also contains 2 jack sockets that carry the Left and Right o/p of the **2T** mix.

At the bottom of the board, there are 2 jack sockets, one of which carries the Oscillator / Slate / Pink noise output; another which carries the console Talkback signal.

Monitor Board 5 (Rev Return 4)

The Rev Return 4 board contains the Rev Returns for Auxiliary 4, but also the Insert Mix Return Left and Right jack sockets (the Sends are on Mon Board 3 above).

Monitor Boards 6, 7 & 8 (Rev Returns 3, 2 & 1)
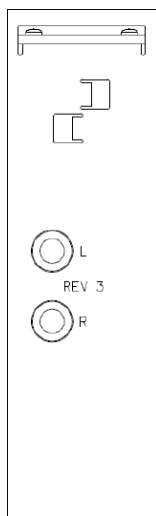
These three boards are the same as Monitor Board 5 (above) but only contain the Left and Right input for the relevant Rev Return.

GENESYS Physical Information

Dimensions

Height	To top of loudspeaker shelf	977mm / 38.46"
Width	16 Channel console	1090mm / 42.91"
	32 Channel console	1760.5mm / 69.31"
	48 Channel console	2430.5mm / 95.68"
	64 Channel console	3100.5mm / 122.06"
Depth	Includes loudspeaker shelf	905.5mm / 35.65"
Weight	16 Channel console	75kg / 165.36lbs
	32 Channel console	
	48 Channel console	
Head Dissipation	16 Channel console	450 watts
	32 Channel console	
	48 Channel console	
Power Factor	>0.65	
Voltage	Input Voltage Range	100 – 240 volts AC only
Current	2.2 to 1.1	Amps RMS
	Switch-on surge	10 amps for 7ms (average)

Connector Types

Console AC Mains, fused @ 6.3 amps	IEC males
Console AC Mains distribution input fused @ 10amps	IEC male
Nearfield loudspeaker Mains outlet	IEC Female
Mic inputs	XLR 3-pin sockets
Line inputs	¼" TRS Jack sockets
Stereo 2T Mix Output	XLR 3-pin plug
	¼" TRS Jack sockets
Oscillator / Talkback Outputs	¼" TRS Jack sockets
Cue Mix Outputs	¼" TRS Jack sockets
Mini 1, L & R Monitor L/S Outputs	XLR 3-pin plug
Master Mix Insert Sends / Returns	¼" TRS Jack sockets
Insert Mix Return L & R Sends	¼" TRS Jack sockets
Return Talkback Mic Input	15-way D-type
DC Remotes	15-way D-type
Reverb Returns / IMR L & R Inputs	¼" TRS Jack sockets
All other line level Inputs / Outputs	25-way D-type, DA 88 convention

Console Connector pin-outs

Computer Cassette

USB

1	+5v	Red
2	- Data	White
3	+ Data	Green
4	GND	Black

Mouse
(PS2)

1	- Data
2	N/C
3	GND
4	+5v
5	+ Data / Clock
6	N/C
Shell	Shield

Keyboard
(PS2)

1	Keyboard data (+5v signal level)
2	Keyboard reset (not used)
3	Ground (0v)
4	+5v
5	Keyboard clock (+5v signal)
6	N/C
Shell	Shield

RJ 45
(Twisted pair networking)

1	TX +
2	TX -
3	RX +
4	BD3 +
5	BD3 -
6	RX -
7	BD4 +
8	BD4 -

Timecode
(XLR)

1	Screen
2	Hi
3	Lo

RS 232
(9-way D-type)

1	Ext RS 485 (depending on jumper configuration)
2	RS 232 Receive
3	RS 232 Transmit
4	Relay 1
5	Signal Ground
6	Ext RS 485+ (depending on jumper configuration)
7	RTS or GND (depending on jumper configuration)
8	Clear to Send
9	Relay 2

Relays 1 & 2 are a closing set of contacts operated by the **EXT** button (by the DAW Screen).

This facility is used for switching the VGA feeds (one each from Genesys and the DAW) to enable the system to operate on one TFT screen for both machines.

VGA
(Hi-density 15-way D-type)

1	Red	0 – 0.7v
2	Green	0 – 0.7v
3	Blue	0 – 0.7v
4	N/C	
5	Digital ground	
6	Red Return	Analogue ground
7	Green Return	Analogue ground
8	Blue Return	Analogue ground
9	N/C	
10	Digital ground	
11	N/C	
12	N/C	
13	Horizontal sync	TTL
14	Vertical sync	TTL
15	N/C	

Monitor Section Connectors

The five pairs of D-type connectors shown here will be present on every console, regardless of console size.
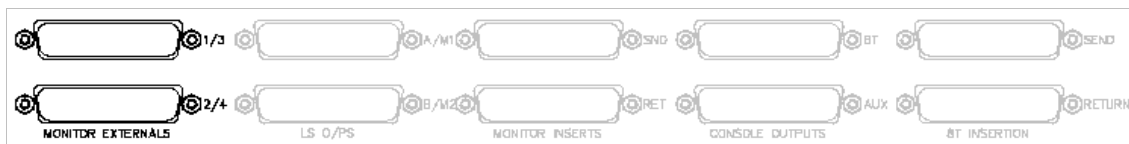
Monitor External Inputs 1 & 3
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	External 1 Input Left	24	12	25
2	External 1 Input Right	10	23	11
3	External 1 Input Centre	21	9	22
4	External 1 Input Sub	7	20	8
5	External 1 Input Left Surround	18	6	19
6	External 1 Input Right Surround	4	17	5
7	External 3 Input Left	15	3	16
8	External 3 Input Right	1	14	2

Monitor External Inputs 2 & 4
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	External 2 Input Left	24	12	25
2	External 2 Input Right	10	23	11
3	External 2 Input Centre	21	9	22
4	External 2 Input Sub	7	20	8
5	External 2 Input Left Surround	18	6	19
6	External 2 Input Right Surround	4	17	5
7	External 4 Input Left	15	3	16
8	External 4 Input Right	1	14	2
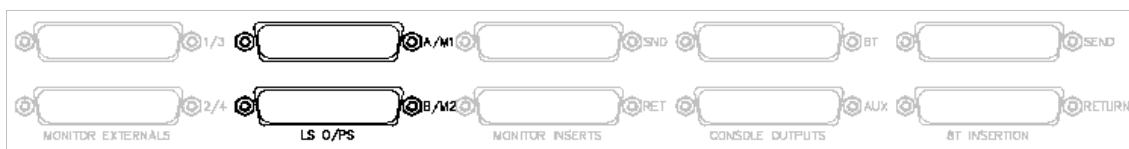
Loudspeaker Outputs A & M1

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Loudspeaker A, Left Output	24	12	25
2	Loudspeaker A, Right Output	10	23	11
3	Loudspeaker A, Centre Output	21	9	22
4	Loudspeaker A, Sub Output	7	20	8
5	Loudspeaker A, Left Surround Output	18	6	19
6	Loudspeaker A, Right Surround Output	4	17	5
7	Loudspeaker M1, Left Output	15	3	16
8	Loudspeaker M1, Right Output	1	14	2

Loudspeaker Outputs B & M2

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Loudspeaker B, Left Output	24	12	25
2	Loudspeaker B, Right Output	10	23	11
3	Loudspeaker B, Centre Output	21	9	22
4	Loudspeaker B, Sub Output	7	20	8
5	Loudspeaker B, Left Surround Output	18	6	19
6	Loudspeaker B, Right Surround Output	4	17	5
7	Loudspeaker M2, Left Output	15	3	16
8	Loudspeaker M2, Right Output	1	14	2
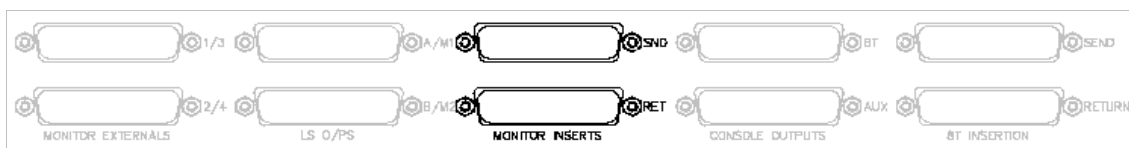
Monitor Insert Send

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Monitor Left Insert Send	24	12	25
2	Monitor Right Insert Send	10	23	11
3	Monitor Centre Insert Send	21	9	22
4	Monitor Sub Insert Send	7	20	8
5	Monitor Left Surround Insert Send	18	6	19
6	Monitor Right Surround Insert Send	4	17	5
7	Mix Left Output *	15	3	16
8	Mix Right Output *	1	14	2

* Mix Left and Right are wired here so that the Mix can be presented on a customer patch as well.

Monitor Insert Return

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Monitor Left Insert Return	24	12	25
2	Monitor Right Insert Return	10	23	11
3	Monitor Centre Insert Return	21	9	22
4	Monitor Sub Insert Return	7	20	8
5	Monitor Left Surround Insert Return	18	6	19
6	Monitor Right Surround Insert Return	4	17	5
7	--- not used ---	15	3	16
8	--- not used ---	1	14	2
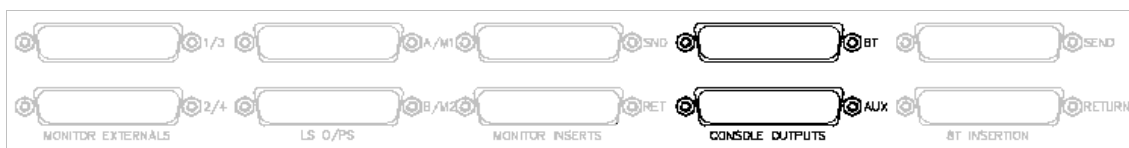
Console Outputs – 8Ts

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	8T Output 1	24	12	25
2	8T Output 2	10	23	11
3	8T Output 3	21	9	22
4	8T Output 4	7	20	8
5	8T Output 5	18	6	19
6	8T Output 6	4	17	5
7	8T Output 7	15	3	16
8	8T Output 8	1	14	2

Console Outputs - Auxiliaries

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Auxiliary Output 1	24	12	25
2	Auxiliary Output 2	10	23	11
3	Auxiliary Output 3	21	9	22
4	Auxiliary Output 4	7	20	8
5	Auxiliary Output 5 Left	18	6	19
6	Auxiliary Output 5 Right	4	17	5
7	Auxiliary Output 6 Left	15	3	16
8	Auxiliary Output 6 Right	1	14	2
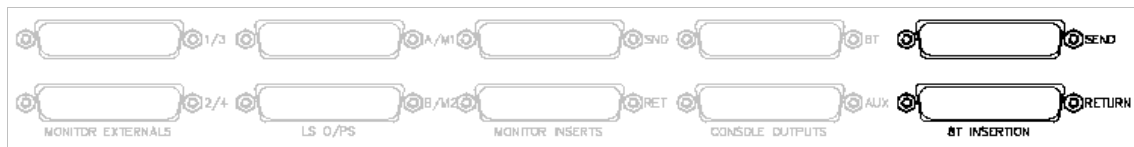
8T Insert Send
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	8T 1 Insert Send	24	12	25
2	8T 2 Insert Send	10	23	11
3	8T 3 Insert Send	21	9	22
4	8T 4 Insert Send	7	20	8
5	8T 5 Insert Send	18	6	19
6	8T 6 Insert Send	4	17	5
7	8T 7 Insert Send	15	3	16
8	8T 8 Insert Send	1	14	2

8T Insert Return
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	8T 1 Insert Return	24	12	25
2	8T 2 Insert Return	10	23	11
3	8T 3 Insert Return	21	9	22
4	8T 4 Insert Return	7	20	8
5	8T 5 Insert Return	18	6	19
6	8T 6 Insert Return	4	17	5
7	8T 7 Insert Return	15	3	16
8	8T 8 Insert Return	1	14	2

Channel Section Connectors

As shown here, these 4 pairs of 25-way D-type connectors will be present for every 8-fader section.

The block of faders served by these D-types is indicated by the **Block** plate in the centre (this will say either **1-8**, **9-16** etc).

The pin-outs are identical for the same function within different blocks of faders.
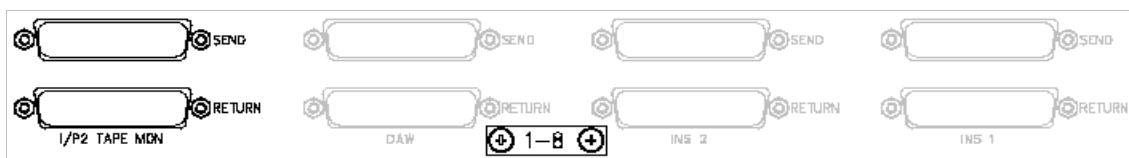
I/P2 Tape Monitor Send
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	I/P 2 Tape Monitor Send 1	24	12	25
2	I/P 2 Tape Monitor Send 2	10	23	11
3	I/P 2 Tape Monitor Send 3	21	9	22
4	I/P 2 Tape Monitor Send 4	7	20	8
5	I/P 2 Tape Monitor Send 5	18	6	19
6	I/P 2 Tape Monitor Send 6	4	17	5
7	I/P 2 Tape Monitor Send 7	15	3	16
8	I/P 2 Tape Monitor Send 8	1	14	2

I/P2 Tape Monitor Return
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	I/P 2 Tape Monitor Return 1	24	12	25
2	I/P 2 Tape Monitor Return 2	10	23	11
3	I/P 2 Tape Monitor Return 3	21	9	22
4	I/P 2 Tape Monitor Return 4	7	20	8
5	I/P 2 Tape Monitor Return 5	18	6	19
6	I/P 2 Tape Monitor Return 6	4	17	5
7	I/P 2 Tape Monitor Return 7	15	3	16
8	I/P 2 Tape Monitor Return 8	1	14	2
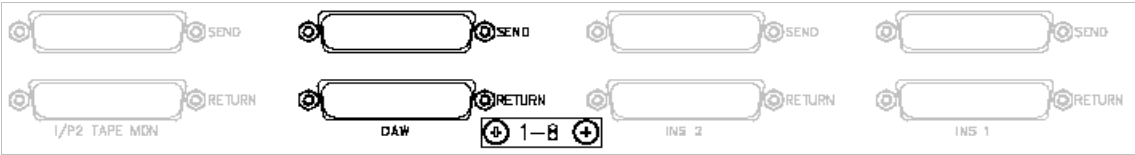
DAW Send
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	DAW Send 1	24	12	25
2	DAW Send 2	10	23	11
3	DAW Send 3	21	9	22
4	DAW Send 4	7	20	8
5	DAW Send 5	18	6	19
6	DAW Send 6	4	17	5
7	DAW Send 7	15	3	16
8	DAW Send 8	1	14	2

DAW Return
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	DAW Return 1	24	12	25
2	DAW Return 2	10	23	11
3	DAW Return 3	21	9	22
4	DAW Return 4	7	20	8
5	DAW Return 5	18	6	19
6	DAW Return 6	4	17	5
7	DAW Return 7	15	3	16
8	DAW Return 8	1	14	2
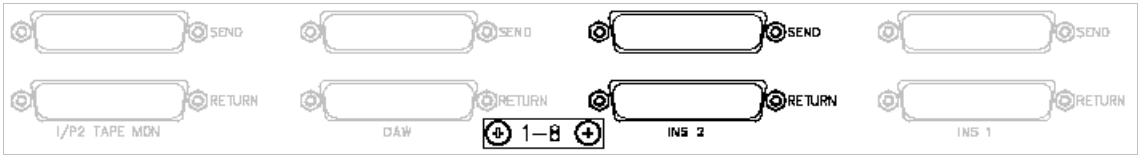
Channel Insert 2 Send
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Channel Insert 2 Send 1	24	12	25
2	Channel Insert 2 Send 2	10	23	11
3	Channel Insert 2 Send 3	21	9	22
4	Channel Insert 2 Send 4	7	20	8
5	Channel Insert 2 Send 5	18	6	19
6	Channel Insert 2 Send 6	4	17	5
7	Channel Insert 2 Send 7	15	3	16
8	Channel Insert 2 Send 8	1	14	2

Channel Insert 2 Return
(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Channel Insert 2 Return 1	24	12	25
2	Channel Insert 2 Return 2	10	23	11
3	Channel Insert 2 Return 3	21	9	22
4	Channel Insert 2 Return 4	7	20	8
5	Channel Insert 2 Return 5	18	6	19
6	Channel Insert 2 Return 6	4	17	5
7	Channel Insert 2 Return 7	15	3	16
8	Channel Insert 2 Return 8	1	14	2
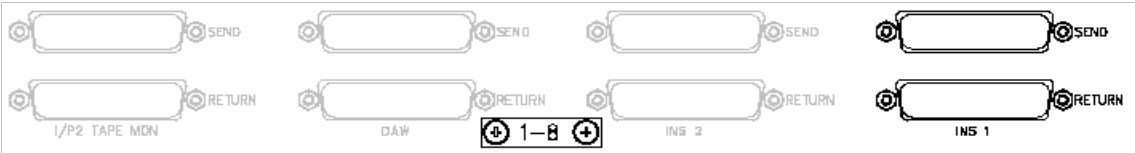
Channel Insert 1 Send

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Channel Insert 1 Send 1	24	12	25
2	Channel Insert 1 Send 2	10	23	11
3	Channel Insert 1 Send 3	21	9	22
4	Channel Insert 1 Send 4	7	20	8
5	Channel Insert 1 Send 5	18	6	19
6	Channel Insert 1 Send 6	4	17	5
7	Channel Insert 1 Send 7	15	3	16
8	Channel Insert 1 Send 8	1	14	2

Channel Insert 1 Return

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Screen**
1	Channel Insert 1 Return 1	24	12	25
2	Channel Insert 1 Return 2	10	23	11
3	Channel Insert 1 Return 3	21	9	22
4	Channel Insert 1 Return 4	7	20	8
5	Channel Insert 1 Return 5	18	6	19
6	Channel Insert 1 Return 6	4	17	5
7	Channel Insert 1 Return 7	15	3	16
8	Channel Insert 1 Return 8	1	14	2

Optional AES Monitoring cassette, SMN 812 – 410

This single card (regardless of console size) is sub-fitted beneath the Computer cassette.
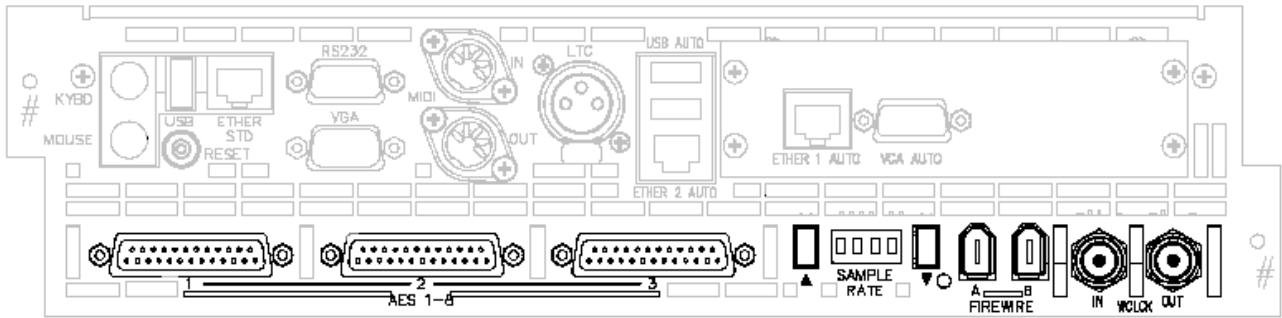
Firewire A

(J 14)

1	Power Voltage	VP
2	Power Ground	VG
3	TPB 0	-
4	TPB 0	+
5	TPA 0	-
6	TPA 0	+
7	Shield 1	
8	Shield 2	

Firewire B

(J 15)

1	Power Voltage	VP
2	Power Ground	VG
3	TPB 1	-
4	TPB 1	+
5	TPA 1	-
6	TPA 1	+
7	Shield 1	
8	Shield 2	

Socket 1

(25-way D-type)

Signal	Name	Pin	
		+ve	-ve
RX 0	AES Channel Inputs 1 & 2	1	14
RX 1	AES Channel Inputs 3 & 4	2	15
RX 2	AES Channel Inputs 5 & 6	3	16
TX 0	AES Channel Outputs 1 & 2	5	18
TX 1	AES Channel Outputs 3 & 4	6	19
TX 2	AES Channel Outputs 5 & 6	7	20
TX 3	AES Channel Outputs 7 & 8	8	21
Pins to chassis	9, 10, 11, 12, 13, 22, 23, 24 & 25		

Socket 2

(25-way D-type)

Signal	Name	Pin	
		+ve	**-ve**
TX 4	AES Channel Outputs 9 & 10	5	18
TX 5	AES Channel Outputs 11 & 12	6	19
TX 6	AES Channel Outputs 13 & 14	7	20
TX 7	AES Channel Outputs 15 & 16	8	21
Pins to chassis	9, 10, 11, 12, 13, 22, 23, 24 & 25		

Socket 3

(25-way D-type)

Signal	Name	Pin	
		+ve	**-ve**
TX 8	AES Channel Outputs 17 & 18	5	18
Pins to chassis	9, 10, 11, 12, 13, 22, 23, 24 & 25		

Optional AES Channels cassette, SMN 812 – 409
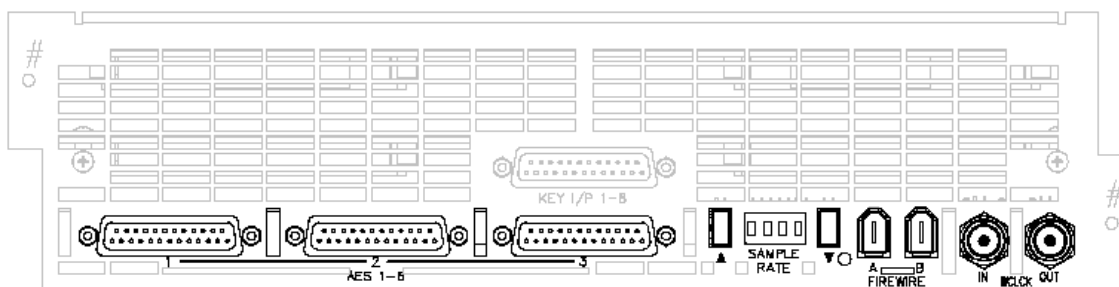
Socket 1
(25-way D-type)

Signal	Name	Pin	
		+ve	**-ve**
RX 0	AES Channel Inputs 1 & 2	1	14
RX 1	AES Channel Inputs 3 & 4	2	15
RX 2	AES Channel Inputs 5 & 6	3	16
RX 3	AES Channel Inputs 7 & 8	4	17
TX 0	AES Channel Outputs 1 & 2	5	18
TX 1	AES Channel Outputs 3 & 4	6	19
TX 2	AES Channel Outputs 4 & 6	7	20
TX 3	AES Channel Outputs 7 & 8	8	21
Pins to chassis	9, 10, 11, 12, 13, 22, 23, 24 & 25		

Socket 2
(25-way D-type)

Signal	Name	Pin	
		+ve	**-ve**
RX 4	AES Channel Inputs 9 & 10	1	14
RX 5	AES Channel Inputs 11 & 12	2	15
RX 6	AES Channel Inputs 13 & 14	3	16
RX 7	AES Channel Inputs 15 & 16	4	17
Pins to chassis	9, 10, 11, 12, 13, 22, 23, 24 & 25		

Socket 3
(25-way D-type)

Not currently used.

Optional Dynamics Cassette, SMN 812 – 412
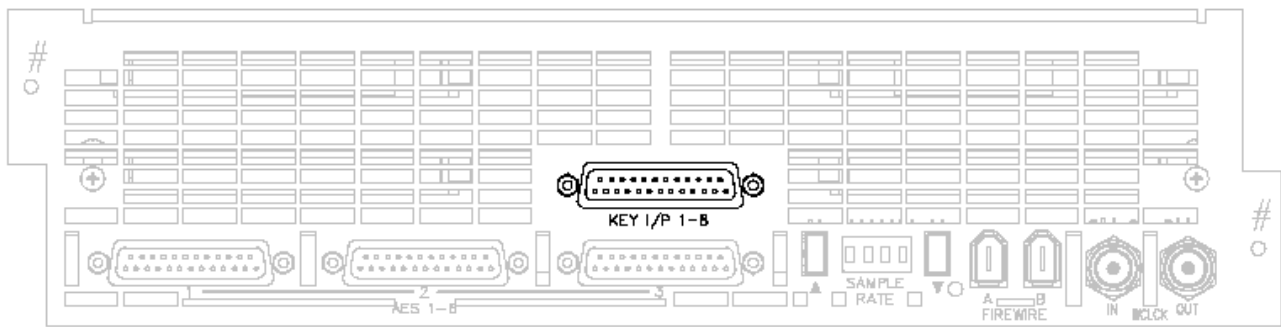
Key Input

(25-way D-type)

Signal	Name	Pin		
		Hi	**Lo**	**Scrn**
1	Key Input 1	24	12	25
2	Key Input 2	10	23	11
3	Key Input 3	21	9	22
4	Key Input 4	7	20	8
5	Key Input 5	18	6	19
6	Key Input 6	4	17	5
7	Key Input 7	15	3	16
8	Key Input 8	1	14	2

General Fuses – Ratings & Location

Genesys general fuse locations and ratings

Ratings.

AC Fuses.
Main IEC i/p fuse 6.3AT
Distribution fuse 10AT

DC Fuses.
+/- 18V   10AT
+5V Meters   5AT
+5V Channels 10AT
+5V Monitor   10 AT
+48V   2 AT
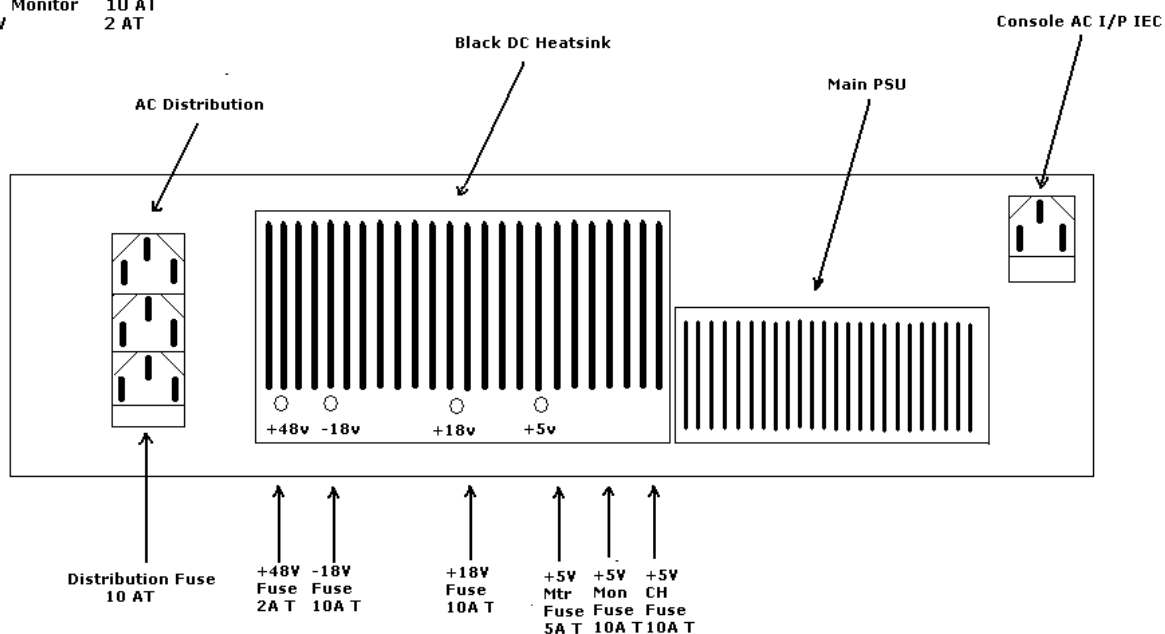
The AC Distribution block on the left (comprising of 3 x IEC connectors) is not fitted to the 16-channel add-on modules.

Appendix A – Processing Cassettes Switch Settings

On each of the EQ and Dyn cassettes, there is a block of eight dip-switches, the first three of which need to be set so that each card is addressed correctly.

The switch settings below are the same for both EQ and DYN cassettes.

Board ID

Board ID				
Position	**ID**	**SW 1**	**SW 2**	**SW 3**
1 - 8	0	Off	Off	Off
9 - 16	1	**ON**	Off	Off
17 - 24	2	Off	**ON**	Off
25 - 32	3	**ON**	**ON**	Off
33 - 40	4	Off	Off	**ON**
41 - 48	5	**ON**	Off	ON
49 - 56	6	Off	**ON**	**ON**
57 - 64	7	**ON**	**ON**	**ON**

NB:
The presence of these switches mean that cassettes cannot just be removed from one section of the console and then reinserted into another at will.

Cassettes may still be moved, but they will not function correctly unless these three switches are set to reflect their new position in the console.

On later versions of the EQ and Dyn cassettes, there will be no need to set the dip switches as the communication protocol has changed.

Alphabetical Index

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- If your printer has a combination of A3 and A4 paper sizes, make sure the **Chose Paper Source By PDF Page Size** option is ticked instead.

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