



## Version 4 - Supplement

Issue B, August 2007 for Version 4.0+ Software



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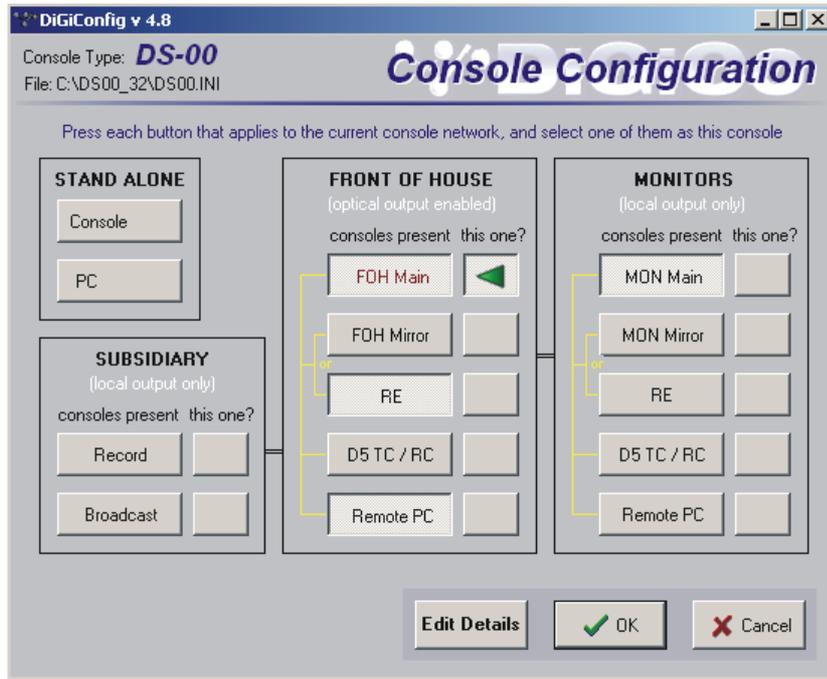
## 1.0 Introduction .....

This supplement relates to DS00 Version 4 software and is intended for users who are already familiar with DS00 Versions up to 1.96. It highlights additions and improvements but if you require further details on operation please refer to the forthcoming Version 4 manual.

### IMPORTANT NOTES:

- 1) Version 4 sessions cannot be loaded into a Version 3 console, so if you still require Version 3 compatibility then please retain your Version 3 sessions.
- 2) When loading a Version 3 session into a Version 4 console, any internal Effects parameters that have been saved in Version 3 will not be retained. Version 4 has an improved structure for Effects settings that uses Effects Presets and therefore new Effects presets will need to be created and saved in your Version 4 session.

## 1.1 Hardware Configuration Options .....



Up to 4 consoles or Redundant Engines can be connected on the Optocore loop and easily configured in the Hardware Configuration panel accessed from the System/Service/Configure Hardware button. There are new options for **Recording and Broadcast** consoles.

If either of these options is selected, the console will be able to share stage rack inputs on the Optocore loop and use its own local rack inputs and outputs.

**Note:** Consoles defined as Broadcast, Record or Monitors cannot access stage rack outputs - only the FOH Main console can use the stage rack outputs.

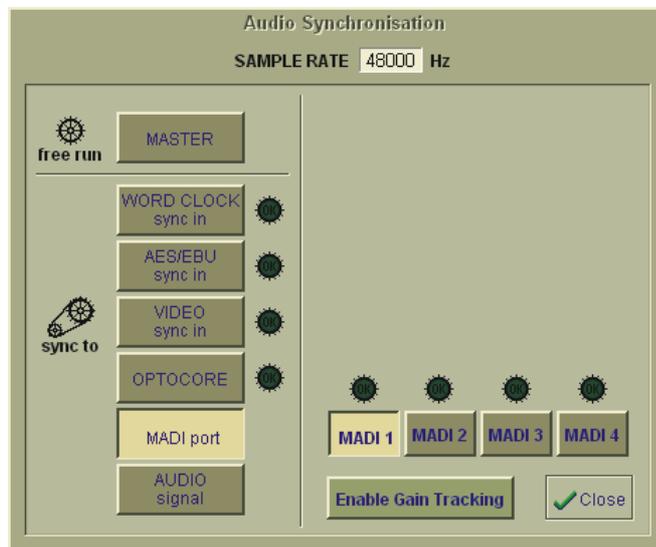
For further information on Multiple console setups please refer to the Version 4 Multiple Consoles document.

## 1.2 Audio Sync Options .....

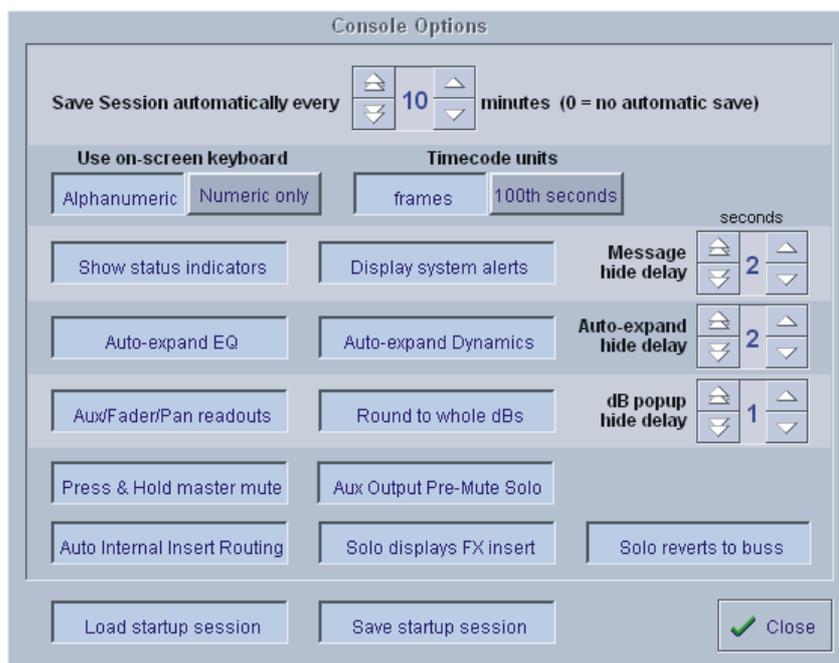
A **Sync to Madi Port** option is now available on the Setup/Audio Sync panel.

This means that a console which is being fed by a MADI signal from the Auxiliary MADI output on a DiGiRack will be able to derive its sync from that signal and not require an additional Word Clock sync. This is particularly relevant to a system of FOH and Monitor consoles which are only connected with MADI and not optical fibre.

The Audio Sync setting is now saved in the console setup file and no longer in the session.



## 1.3 System Options .....



**Screen popup delay** provides user definable settings for how long each type of popup window remains on the console screen. There are settings for dB popups, system messages and the auto expanding popups on EQ and Dynamics. The available range is from 1 to 9 seconds.

**Auto Expand Dynamics** can be set to popup when their controls are adjusted in a similar way to the EQ.

The **Master Mute** switch can be set to function only when pressed and held down.

If **Aux Output Pre-Mute Solo** is activated, the Solo signal derived from an Aux Master becomes Pre Aux Master mute. This means that the signal can be monitored at the console before it is sent to the rack output(s).

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Inserts for internal FX and processors can be set to **Automatic Insert Routing** so that routing the send will automatically route the appropriate return.

If **Solo Displays FX Insert** is selected and internal effects are used on console insert points then soloing the relevant channel or output will automatically display the inserted Effects or Graphics controls for quick adjustment.

If the Setup/Solo options are set to Single mode and **Solo Reverts to Buss** is selected, when an output is in solo mode and then an input channel is soloed and released, the output solo will be switched on again.

There is an option to **Load and/or Save Startup session**. This is the session that the console can save and/or load when it is shut down or started up. In normal operation both of these functions will be active and the console's current state will be saved and loaded automatically.

With Save Startup Off, the console will not save its state when shut down and will load the last saved Startup.ses on restart.

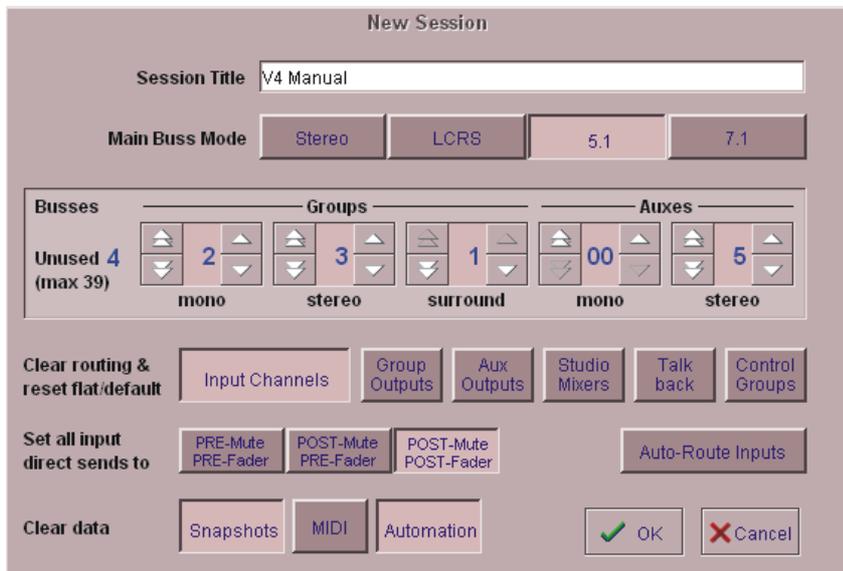
With Load Startup Off, no session is loaded and the console starts with a default blank session.

**Timecode units** can be measured in frames or 100<sup>th</sup> seconds

A **GLITS test signal** can now be selected in any stereo input channel by pressing Misc/Tone from the input routing section and Identify/GLITS in the System/Oscillator Control panel.

## 1.5 Sessions & File Management.....

### New Session



A stereo session can now contain **up to 36 different auxiliary sends**.

The New Session panel has an option to **Auto-Route Inputs** which will create a session with the first DiGiRack's inputs already selected in input channels from number one onwards.

**NOTE:** Auto Route Inputs can only be used if you opt to Clear and Reset the Input Channels (see the diagram above).

## Load & Save Sessions



The new Load and Save As New File windows enable immediate viewing of the main and spare drives' Project directories, their sub folders and the contents of the removable drive. All other folders are hidden. To view the hidden folders you must use the **System/Service/Quit To Windows** button and then press the **Files** button. Version 3 sessions can be loaded into a version 4 console.

### Partial Session Loading

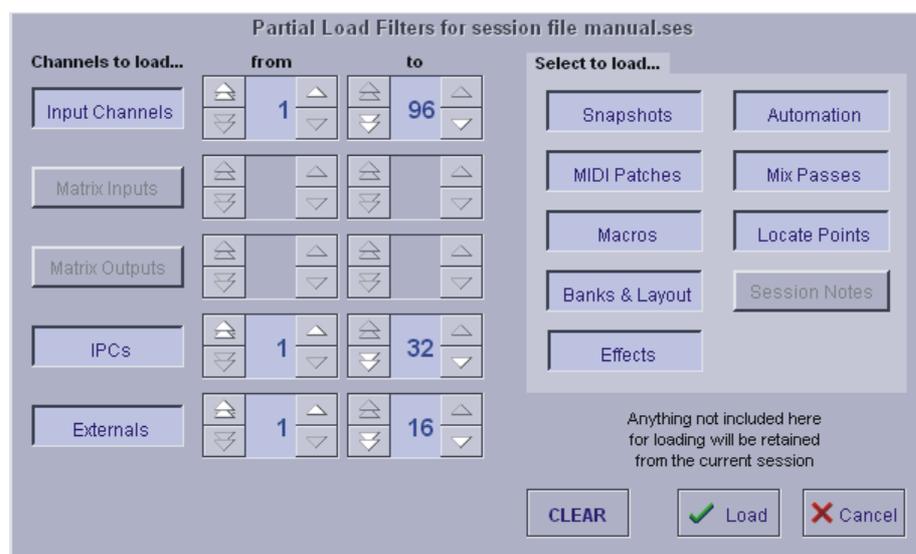
This allows certain parts of a session to be loaded without changing other settings. These include specific sets of input channels, IPCs, snapshots, layouts, automation, mix passes, locate points and external MIDI control channels.

Only version 4 sessions can be partially loaded so if you wish to partial load from a version 3 session then load it into version 4 and then resave it as version 4.

When a version 4 session is selected from the file list then the Partial Load button becomes available:

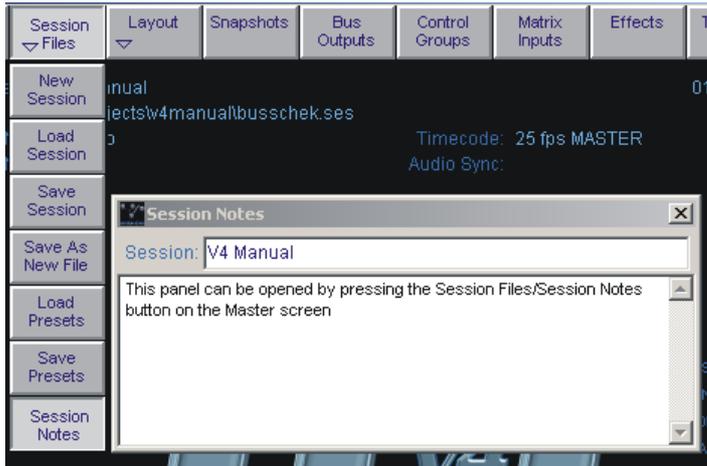


Pressing the Partial Load button will open the following window. Select the elements that you wish to load and then press the OK button.



When a session is loaded, there is now a **Session File Mismatch indication** if the session file does not match the console configuration in terms of the number of channels available and the status of IPC's and Effects.

A **Session Notes** panel has been added to the Session Files menu



**Auxiliary scroll positions** on each bank are now saved with the session.

**1.6 Channel Functions** .....

**Input and output routing lists** now show the type of Effect selected in the Effects slots. The **Input Phase** switch can now have one of 4 different settings for Stereo channels. These are + + / + - / - + / - - and can be selected by subsequent presses of the worksurface phase button.

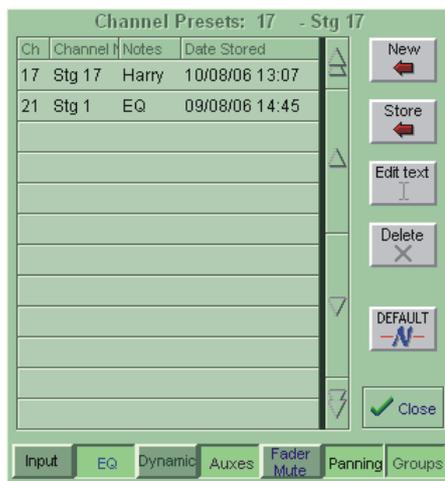


In a Stereo channel there are **Left to Both** and **Right to Both** buttons which can be found at the bottom of the buss routing panel accessed by touching the bottom of the on screen input strip.  
**NOTE:** If dynamic automation is switched off, the automation record and play buttons for the input channel may also be used to activate the Left to Both and Right to both functions.



The **Input Meter Bridge** has an additional meter type showing digital trim meters as well as analogue rack meters. This is automatically assigned when the digital trim controls are selected with the ALL button. The **ALL button** now works with Insert IN/OUT, EQ IN/OUT, Dynamics IN/OUT, Filter IN/OUT and Gain Tracking ON/OFF switches. Hold the ALL button down and touch the relevant control in any input strip.

The **Channel Presets** now have a “Recall Scope” and can include input routing if **Input** scope is selected. All parameters are saved in the preset but pressing the scope buttons at the bottom of the panel will determine which elements are recalled when the preset is pressed in the list.



**Channel Pans** can now be included in gangs as an option. First create a gang in the normal way by holding the worksurface ALL button and touching the relevant faders. Then, release and hold the ALL button again and touch any one of the channel pans on the screen. All gang members pans will be highlighted with the gang colour and then they will be included in the gang. To remove the pans from the gang, hold the ALL button down and touch any one of the ganged pans again.



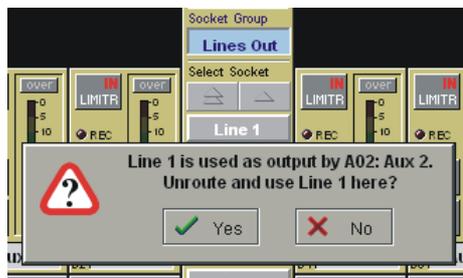
The Dynamics panel can now be set to open automatically when thresholds are changed by selecting **Auto-expand Dynamics** in the System Options..

**The Pan position** now has a percentage popup readout.

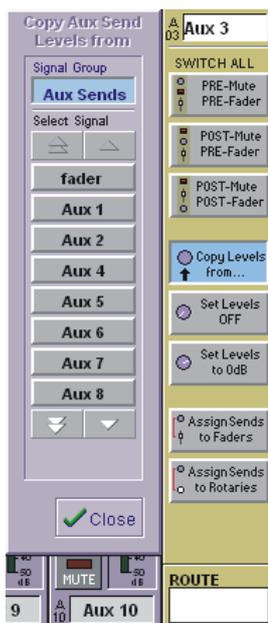
**Channel Fader Touch to Assign** function now retains the current screen view (eg EQ expanded view) when set in the Setup/Assignment Options panel.

### 1.7 Master Functions .....

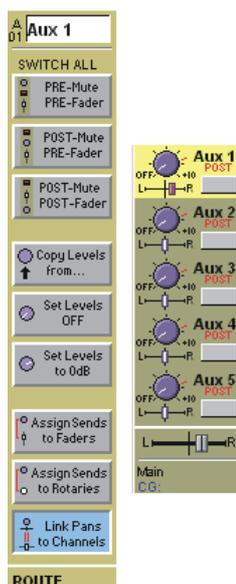
Attempting to route to an **output socket that is already in use** opens a popup offering the option to unroute the socket and re-use it.



The **Copy Level From** function in Aux Buss Control allows auxiliary settings to be copied from the channel fader or any other auxiliary buss. Press the Copy Levels From button and select the source of the copy from the list.



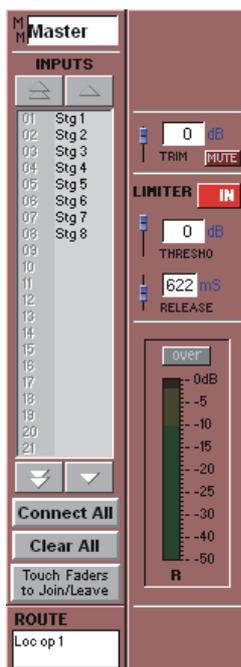
**Link Aux Pans to Channels** in a **Stereo Aux Master's Buss Control** panel allows the stereo aux pan to be automatically updated when the channel pan is adjusted. Expand the relevant Auxiliary master buss on the master screen and then press the Buss Control button. Then press the Link Pans To Channels button.



The **Master Mute** button can be set as a press and hold function in the **System/Options** panel.  
 A **Clear Bus Overs** button has been added to the System menu to clear all buss Over indicators at once.  
**Output Phase +/- buttons** have been added to the Aux, Group and Master busses and also the IPC's.



Channels can now be assigned to Groups by touching faders with the **Touch Faders to Join/Leave Groups** button in the Group Buss Control panel.



Scroll Lock acts as a **Mouse Home Key** to return mouse cursor to centre of master screen  
 Touching **Control Group Master Faders** now highlights the members' channels.



1.9 Effects Functions .....

**NOTE:** When loading a Version 3 session into a Version 4 console, any internal Effects parameters that have been saved in Version 3 will not be retained.

Version 4 has an improved structure for Effects settings that uses Effects Presets and therefore new Effects presets will need to be created and saved in your Version 4 session. All Presets are automatically saved with the session.

Effects presets can be created and recalled in the Effects panel enabling the copying of Effects and Graphics settings and the recall of these presets with Snapshots.

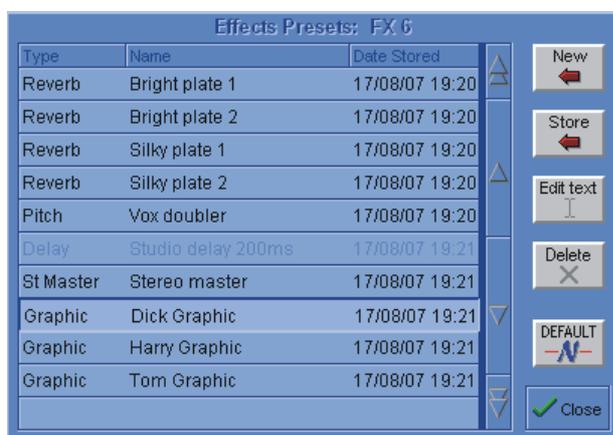
To create a Preset, adjust the effect's settings and then press the **Store** button for that effect. If you press the **Presets** button, the standard style Presets panel will open allowing you to name, delete, store (overwrite existing preset) and also create new presets.

If you subsequently change the effect's parameters, the Store button will turn red to indicate that this change has not yet been stored. pressing Store at this point will update the existing preset for that effects slot.

To select a different preset for that effects slot, open the presets panel and select one from the list.

To create a new preset for that slot but keep the existing preset in the library, open the presets panel and press the **New** button.

If a preset on the list appears "greyed out", this indicates that it cannot be selected for the selected effects slot. For example, Graphic EQ can only be used in FX slots 5 and 6.



If you wish to change effects presets with Snapshots the **Effects Scope** button must be selected in the Snapshots Scope panel.

**Note:** If any of the effects have been edited but not stored, attempting to Replace the current Snapshot will result in a message warning you of this.

Storing new parameters in an effects preset will automatically update all Snapshots that use that preset - the Snapshot recalls the preset itself, not the individual effects parameters.

The **Effects panel** can now display up to 6 stereo effects or 6 graphic EQ's at the same time and graphic EQ's can be selected by touching the screen. Press the arrow up button on the top left of the Effects panel to expand the view.

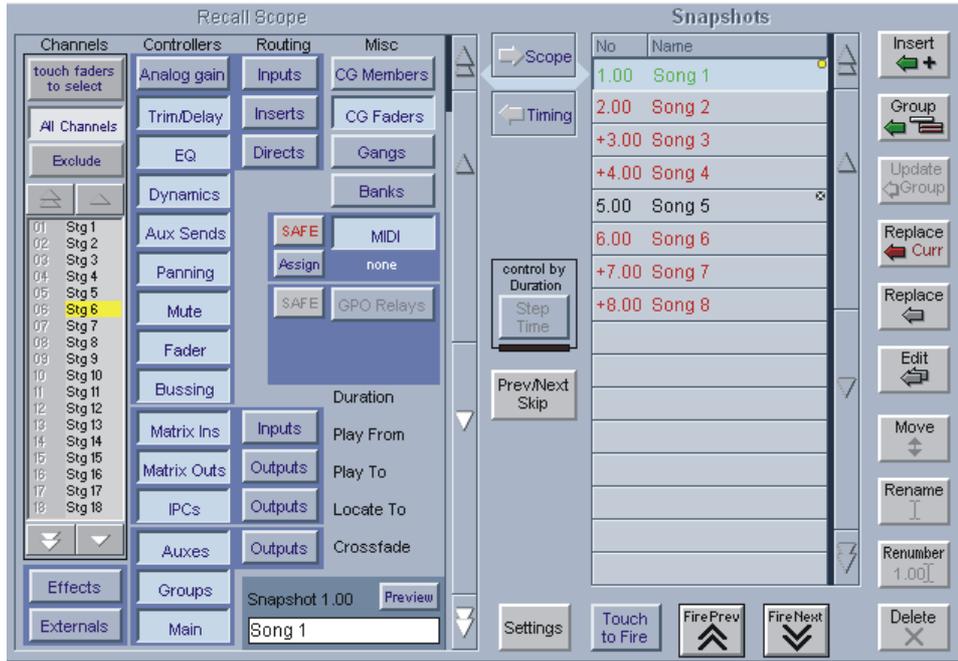


Graphics EQ's can be ganged with relative offsets by pressing the relevant on screen **Gang** buttons and individual faders can be reset using the worksurface master solo buttons.

If **Solo Displays FX Insert** is selected in **System Options** and internal effects are used on console insert points then soloing the relevant channel or output will automatically display the Effects controls for quick adjustment.

Effects decay times are now displayed in seconds.

1.10 Snapshot Functions .....



**Snapshot button symbols** now show whether the snapshot contains midi, relay and auto-sequence settings. These symbols are shown in the Snapshot list.

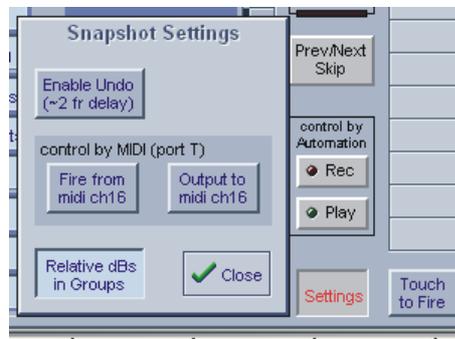
**FX presets** can be changed with snapshots - see Effects section.

**Snapshot Scope** has been expanded to separate out **analogue gains**.

**Channel Bank Labels** can be stored and recalled using the **Banks** scope button.

**Snapshot Groups** can be created in relative or non-relative mode to enable quick updating of specific sets of Snapshots.

To set relative or non-relative mode press the settings button at the bottom of the Snapshots panel and use the **Relative dBs in Groups** button.



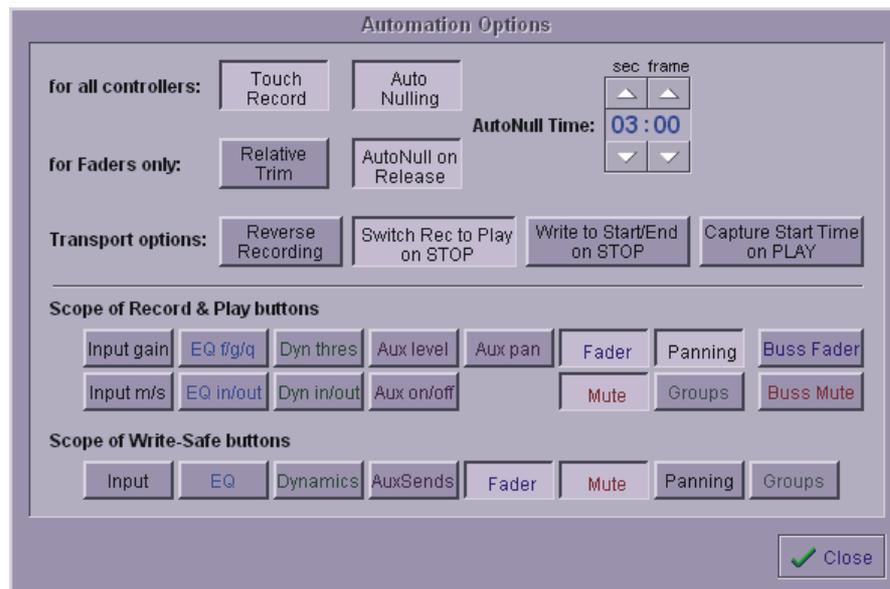
The **Prev/Next Skip** button enables Snapshots to be marked as not included in the Previous/Next sequence. Select the relevant Snapshot and press the Pre/Next Skip button.

1.11 Dynamic Automation .....

-A “floating window” **Transport Control panel** is now available in the Automation menu and includes locator buttons and an All Offline button.



The **Automation Options** panel has been redesigned and now includes access to the **Scope of the Automation Write Safe** buttons in the Automation Editor.

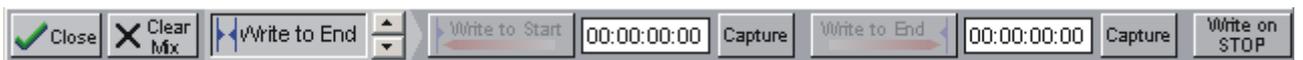


The **Automation Mix Editor Toolbar** has been redesigned for easier access to many functions. Pressing the up/down arrows in the toolbar will scroll through the following options.

Editing tools:



Write to Start/End functions:



Safe scope:



Transport controls:



Record/Play scope:



The name of the **last loaded Mix file** is now indicated on the Master screen.

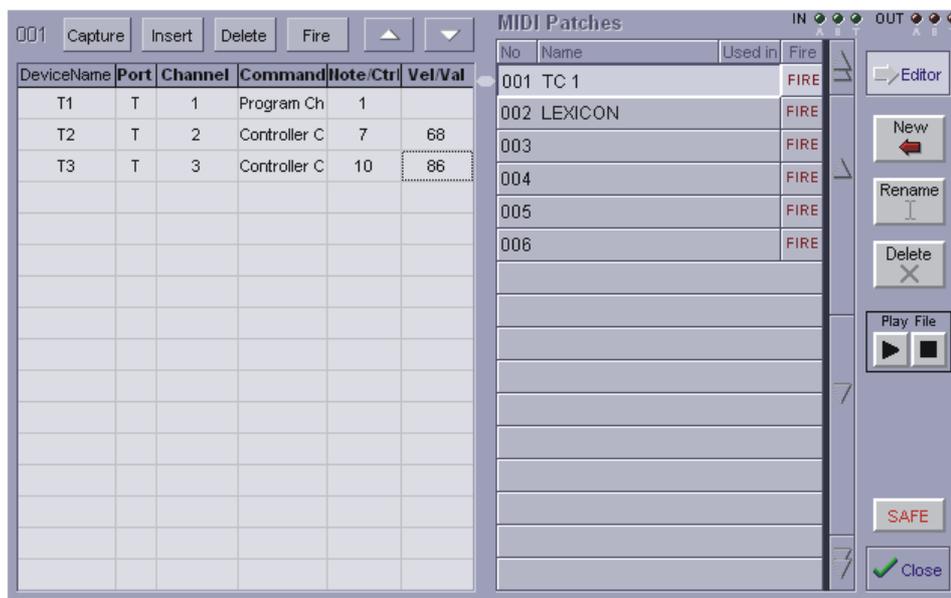
1.12 Networking.....

The new **Ethernet Network Panel** is accessed with the **System/Console Network** button. Please refer to the **Multiple Consoles** document for details.



1.13 MIDI.....

The **MIDI Patches panel** has been extended for easier menu driven programming. Select port, channel, command type and value from the relevant columns in the **Editor** section of the panel.

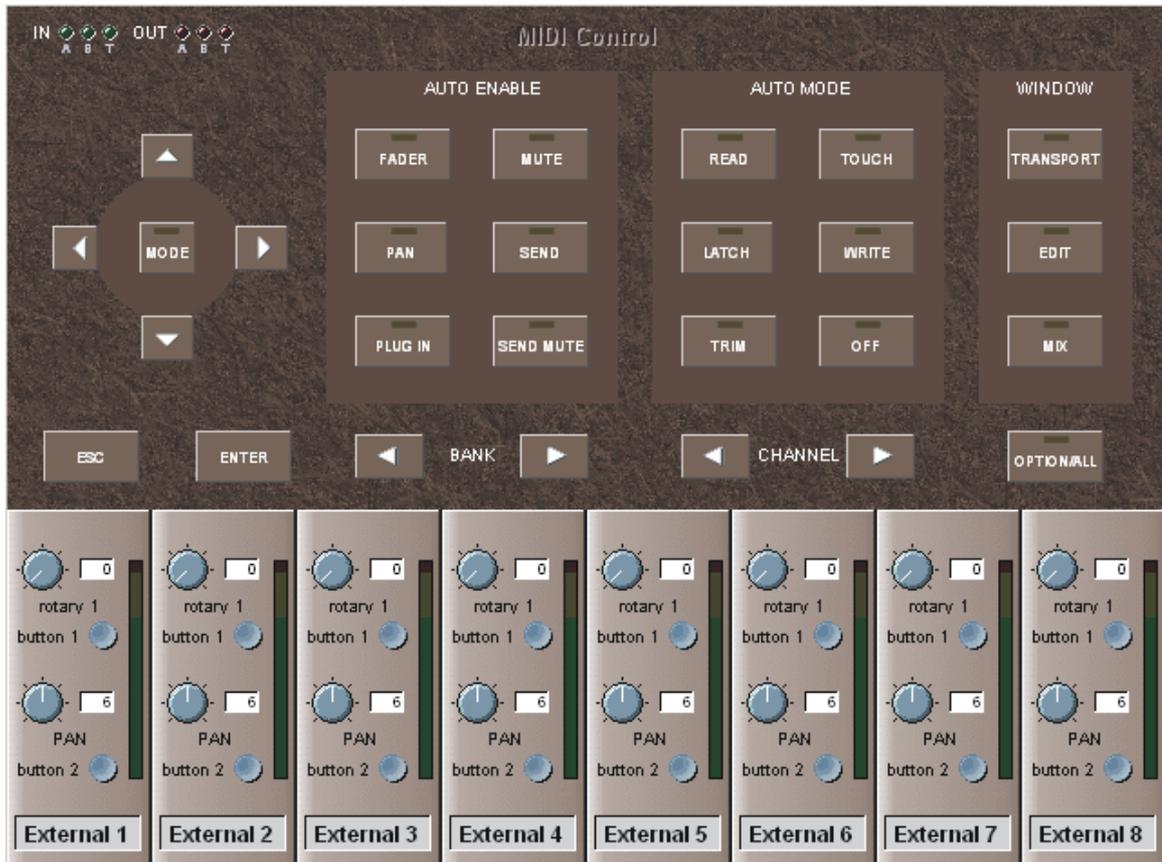


## External MIDI Control

This consists of 16 assignable channel strips, known as “Externals”, which provide MIDI control for compatible MIDI devices such as hard disk recording systems and external effects units etc. MIDI communication is via 2 GPI/GPO/MIDI Combi cards.

The first block of 8 channel strips is designed to work as a Pro Tools controller and includes:

1. Mode control:
  - Navigation (Not lit) - The arrows act as region/edit/track location selectors
  - Zoom (Lit) – The arrows act as vertical and horizontal zoom controls.
  - Selection (Lit & Flashing) – Allows selection and manipulation of audio clips.
2. Auto Enable, Auto Mode and Window selection buttons.
3. Bank and channel scrolling.
4. 2 user definable rotaries and 2 switches per channel for control of selected parameters.
5. Fader control on each channel



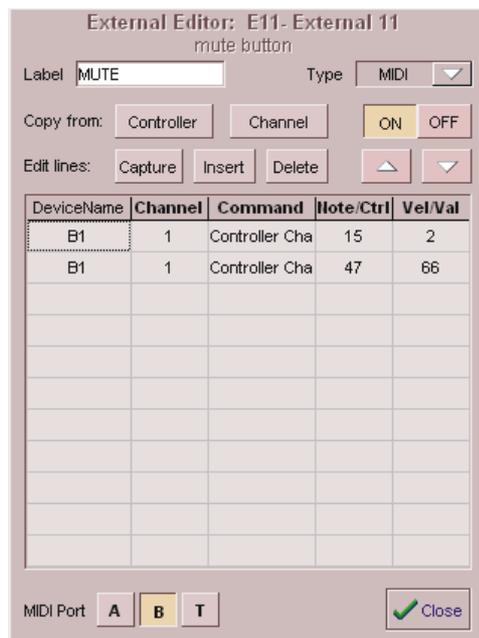
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The second block of 8 channel strips can be configured to control any compatible MIDI equipped device. These provide up to 4 rotaries and 4 switches (according to console model) plus a solo, mute and fader per channel. Each of these controls can be user defined to send MIDI messages to an external MIDI device. All controls can be labelled on screen and their settings can be stored and recalled with the console's Snapshot system. To change these channels with Snapshots the **Externals** button should be pressed in the **Snapshot Scope** panel.



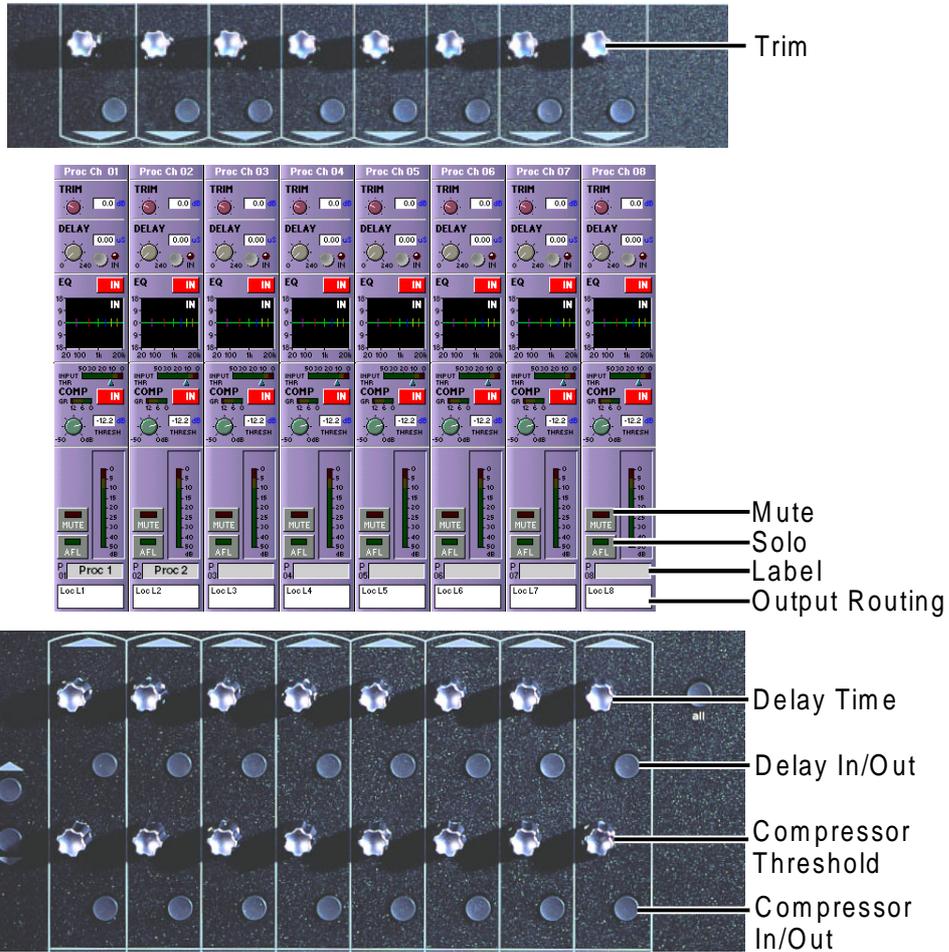
MIDI Messages are defined by touching the relevant on screen control and entering a MIDI channel, a command type and values for the parameters. At the bottom of the panel a MIDI port can be selected - Port A represents the first COMBI card, B is the second COMBI card and T is the standard built in MIDI port on the console.

Messages can also be copied from other controls or channels and captured from the console's MIDI In port.



### 1.14 Processing Channels (IPCs) .....

If you have activated the Processing Channels in the DiGiConfig program (Setup Menu / Service / Configure Hardware), some of the console's Channel Fader Banks will contain panels like the one pictured below. They will initially be labelled Pr in blocks of eight.



These channels provide Trim, Delay up to 510ms, Compression and 6 Band Parametric EQ and may be inserted into the signal path via Channel Direct Outs and Insert Points, Group and Auxiliary Outputs or Insert Points

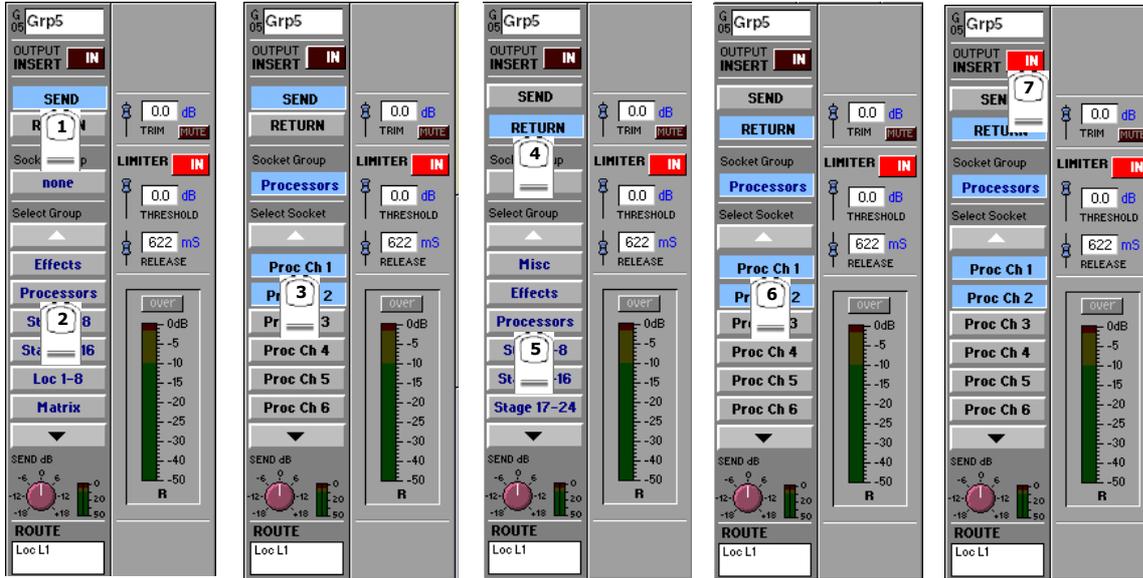
A Socket Group called **Processors** will be available in all of the routing panels which contains the inputs and outputs of these channels.

### Inserting Processing Channels

To insert a Processing Channel on an output using an insert point.

Open the relevant Group, Auxiliary or Master routing panel then:

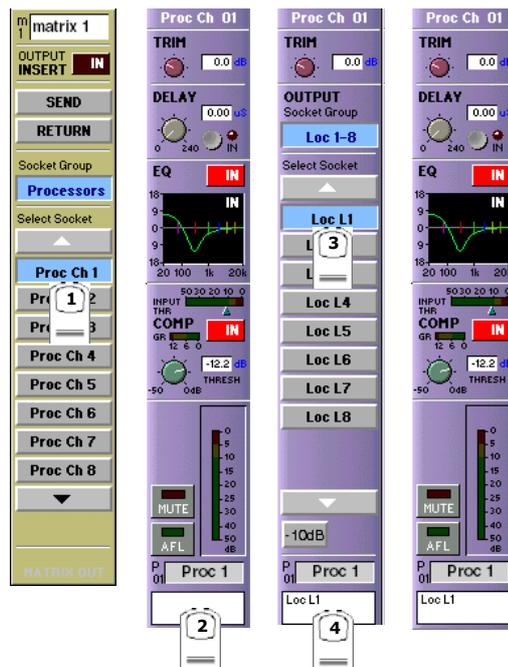
- 1) Touch the **Insert Send** button to view the list of output socket groups.
- 2) Touch the **Processors** socket group button to view the list of sockets.
- 3) Touch the button relating to the **Processing Channel** that you want to use (Proc Ch 01/02 in the example below).
- 4) Touch the **Insert Return** button to view the list of input socket groups.
- 5) Touch the **Processors** socket group button to view the list of sockets.
- 6) Touch the button relating to the **Processing Channel** that you want to use (Proc Ch 01/02 in the example below).
- 7) Touch the **Output Insert In** button to turn it on.



Alternatively, the signal may be sent to the Processing Channel via normal output routing and the Processing Channel can be routed to an output.

- 1) Open the output routing panel for the Buss, open the Processors Socket Group and touch the relevant Processing Channel button.
- 2) Touch the bottom of the Processing Channel's on screen strip to open the output routing window.
- 3) Touch the relevant output routing socket (Loc L1 in the example below).
- 4) Touch the bottom of the Processing Channel's on screen strip to return to the standard view.

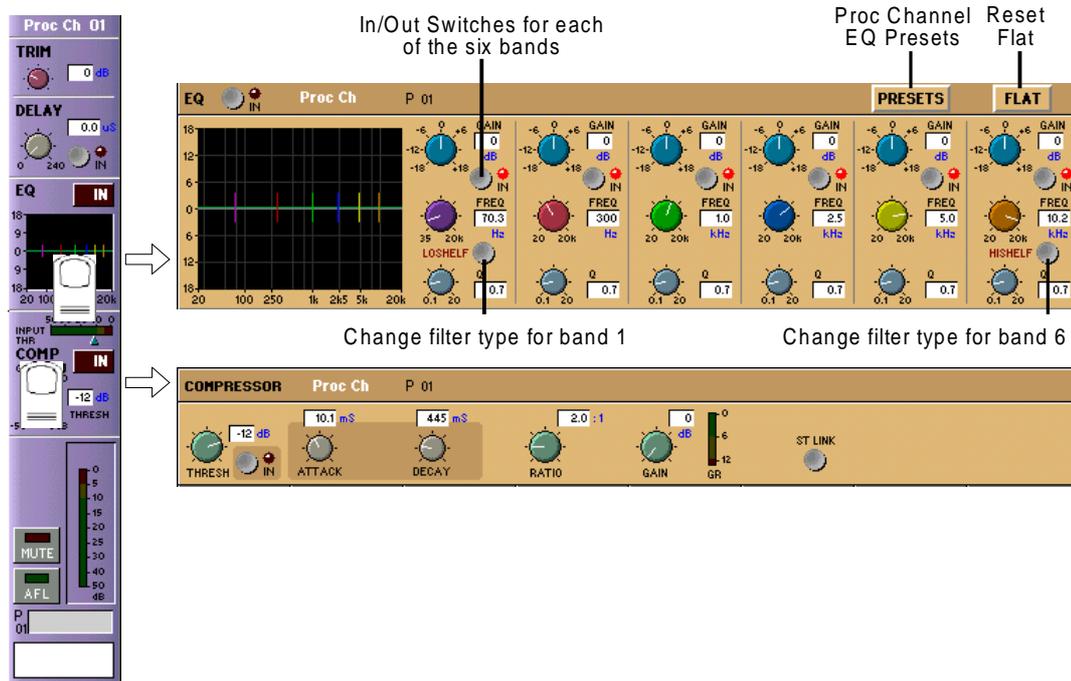
**Note:** With this method, the Group or Auxiliary output can be routed to multiple Processing Channels and these channels can in turn be routed to multiple outputs as required.



Processing Channel controls can be accessed from the worksurface but by touching either the EQ graph or the word "Comp" on the screen, further parameters become available.

When the EQ panel is expanded, the 3 rows of rotaries and switches below the channel screen are assigned to the 3 rows of controls in the EQ panel.

When the compressor panel is expanded the first row of rotaries and switches below the channel screen is assigned to the row of controls in the compressor panel.



Touching the EQ panel **Presets** button opens the Processing Channel EQ library and this functions in the same way as standard Channel, EQ and Dynamics Presets.

