



# IQDRT SDI Video Routers

## Module Description (IQDRT8 standard version and IQDRT6)

The IQDRT8 is an 8 x 8 SDI video router. The unit takes in eight SDI video inputs and will route each input to any number of the eight outputs.

The IQDRT6 is a 6 x 4 SDI video router. The unit takes in six SDI video inputs and will route each input to any number of the four outputs.

The video inputs are equalised for cable lengths of worst case 150 m, typically 200 m, then are relocked before being sent to the output.

The routers will operate with 143, 177 and 270 Mbit/s SDI signals in accordance with SMPTE 259M levels A, B & C.

Each input channel has loss of input indication displayed through RollCall and on the card edge.

This provides the ability to check the state of an input channel before switching it to an output.

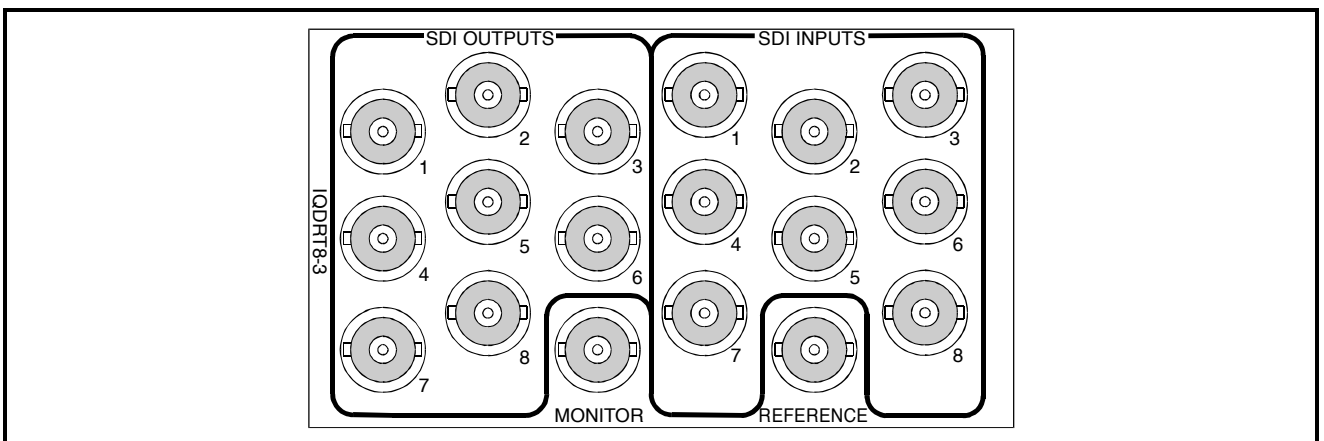
The SDI signal standard selection is made automatically and is displayed through RollCall . All input and output channels can be renamed to provide clear channel identification.

A terminating analog video reference input is provided for correct timing of video switching.

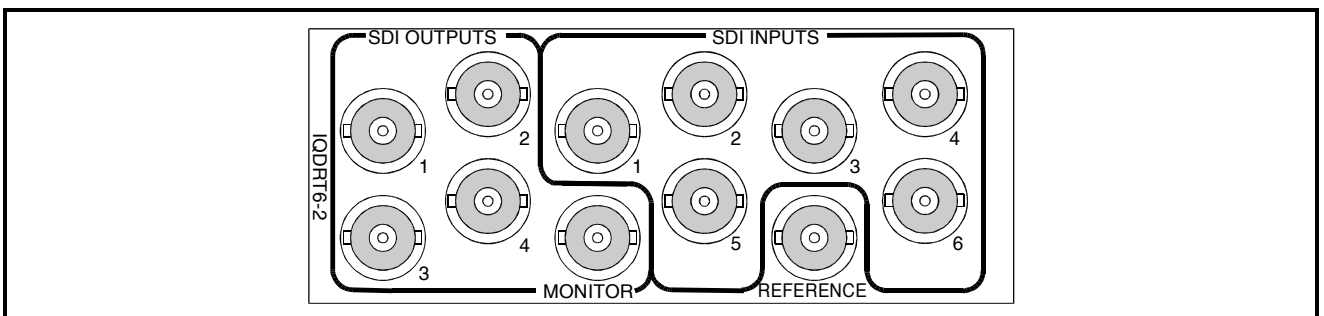
A 270 Mbit/s SDI monitor output is provided on the router, which can display any 270 Mbit/s input

Card edge switching control is provided through two rotary switches and a take push button switch. RollCall provides full remote control and unit identification

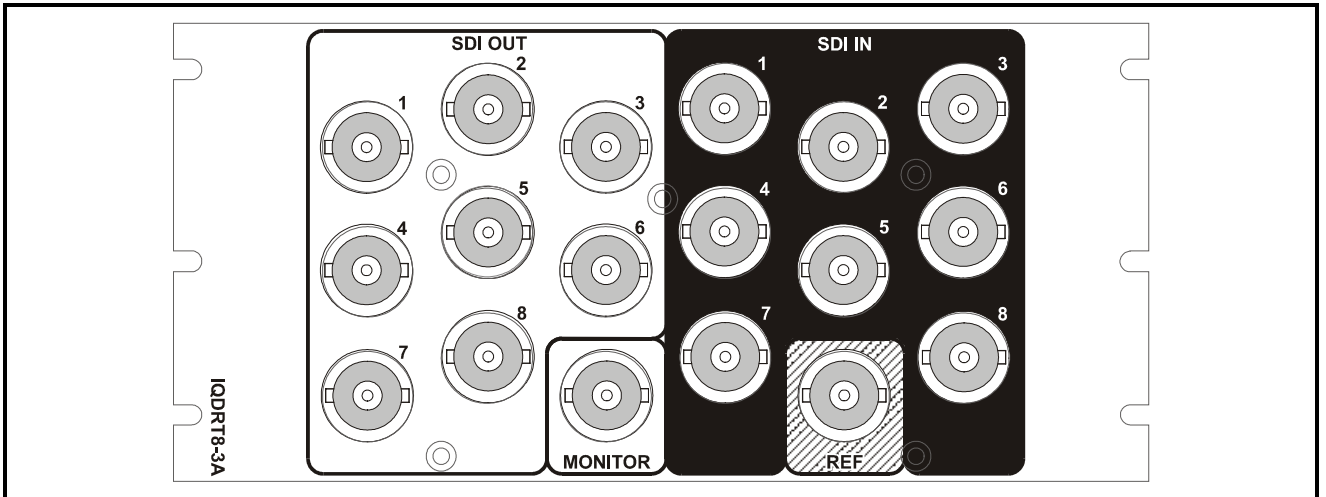
## REAR PANEL VIEWS



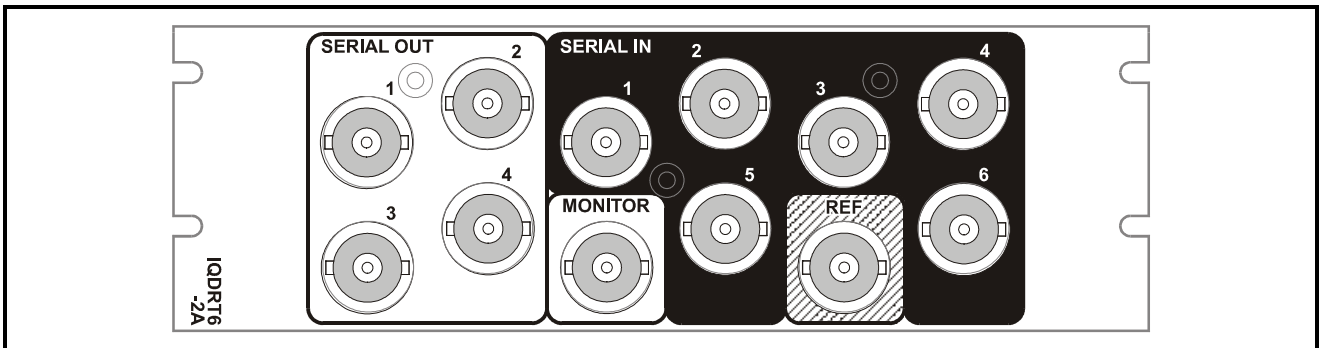
IQDRT8-3-0



IQDRT6-2-0

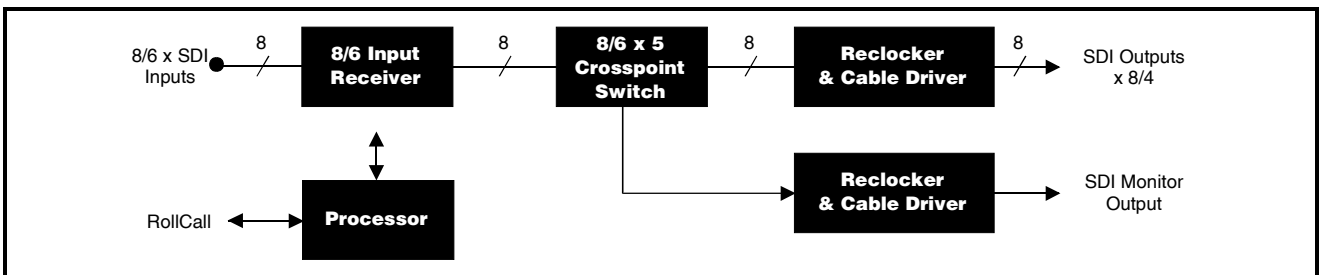


IQDRT8-3A



IQDRT8-2A

BLOCK DIAGRAM



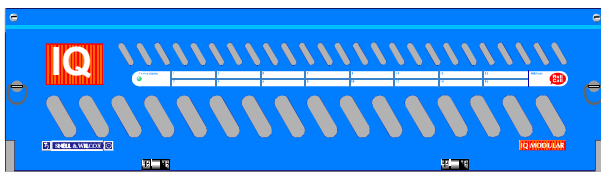
Versions of the module cards available are:

IQDRT8-3-0	IQDRT8...8 x 8 SDI router	Triple width module
IQDRT6-2-0	IQDRT6...6 x 4 SDI/ASI Router	Double Width module
IQDRT8-3A	IQDRT8...8 x 8 SDI router	Triple width module
IQDRT6-2A	IQDRT6...6 x 4 SDI/ASI Router	Double Width module

**Note that there are two styles of rear panels available. They are not interchangeable between the two styles of enclosures. However, the cards may be fitted into any style of enclosure.**

#### 'A' Style Enclosure

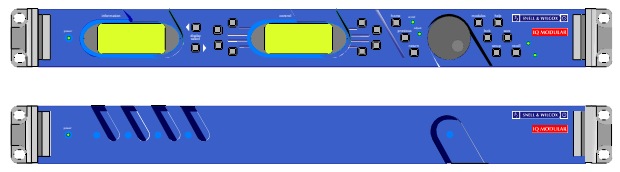
Rear panels **with** the suffix A may only be fitted into the 'A' style enclosure shown below.



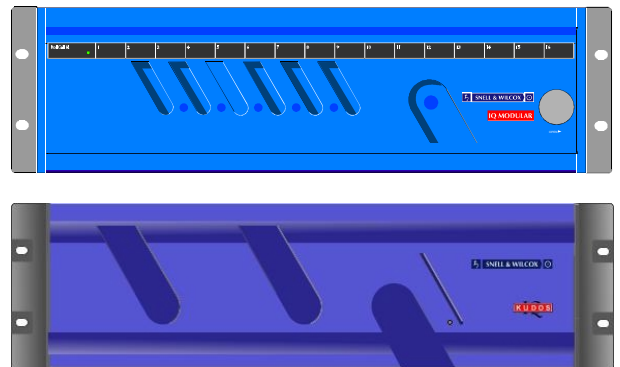
(Enclosure order codes IQH3A-E-O, IQH3A-E-P, IQH3A-N-O, IQH3A-N-P)

#### 'O' Style Enclosures

Rear panels **without** the suffix A may only be fitted into the 'O' style enclosures shown below.



(Enclosure order codes IQH1S-RC-O, IQH1S-RC-AP, IQH1U-RC-O, IQH1U-RC-AP, Kudos Plus Products)



(Enclosure order codes IQH3N-O, IQH3N-P)

## Features (IQDRT8 standard version and IQDRT6)

- 8x8/ 6x4 router for 4:2:2/ 4fsc/ ASI serial digital video signals
- Up to 8 independent 143, 177 or 270 Mbits/s SDI video inputs
- Each input can be routed to any number of the outputs
- Loss of input indication
- Automatic standards selection
- All input and output channels can be renamed
- The video outputs are reclocked and fully restored
- An Analog Reference input is provided for correct timing of video switching
- Remote unit control through RollCall
- Eight memory locations for storage and recall of selectable parameters

# Technical Profile (IQDRT8 standard version and IQDRT6)

## Features

### Signal Inputs

- Serial Input IQDRT8..... 8 SDI
- Serial Input IQDRT6..... 6 SDI
- Standards ..... SMPTE 259M-ABC-1997, DVB\_ASI
- Analog Video Reference .... Black burst 625/525 line terminated by 75 Ohms

### Signal Outputs

- Serial Output IQDRT8..... 8 SDI
- Serial Output IQDRT6..... 4 SDI
- Standards ..... SMPTE 259M-ABC-1997, DVB\_ASI
- Monitor Output (SDI)..... 1 x 270 Mb/s
- Standards ..... SMPTE 259M-C-1997

### Card Edge Controls (also available via RollCall)

- Router Configuration..... Independently configure the 8 outputs to any of the 8 inputs
- Take Button ..... Initiates Routing

### Indicators

- SDI Input Loss ..... Illuminates when the input SDI is lost
- Take LED..... Flashes when routing assignment has changed and requires initiating via the take button
- Power OK ..... +5 V, -5 V and top card +5 V

### Functions Available via RollCall™ Only

- Router Configuration ..... Displays current router configuration
- SDI Input Status ..... Displays SDI Input Status
- Video Reference Status .... Displays Reference standard and Status
- Logging ..... Input Loss, EDH Error and Reference Status
- Channel Renaming ..... Labeling of all sources and destinations
- 8 Memory Stores..... Storage and Recall of Selected Parameters
- Switching Point ..... Frame or Field switching

## Specifications

- Note that these modules perform re-clocking.
- Input Return Loss..... better than 15 dB to 270 MHz
  - Maximum Input Cable Length...Better than 150 m (D1 270 MHz) Typically 200 m

- Output Return Loss ..... better than 15 dB to 270 MHz

### Power Consumption

- Module Power Consumption IQDRT8 17.1W max IQDRT6 12.1W max

**Module Description (IQDRT8-M)**

The IQDRT8-M is an 8 x 8 SDI video router. The unit takes in eight SDI video inputs and will route each input to any number of the eight outputs.

The video inputs are equalised for cable lengths of worst case 150 m, typically 200 m, then are reclocked before being sent to the output.

The router operates with only 270 Mbit/s SDI signals.

Each input channel has loss of input indication displayed through RollCall and on the card edge. This provides the ability to check the state of an input channel before switching it to an output.

All input and output channels can be renamed to provide clear channel identification.

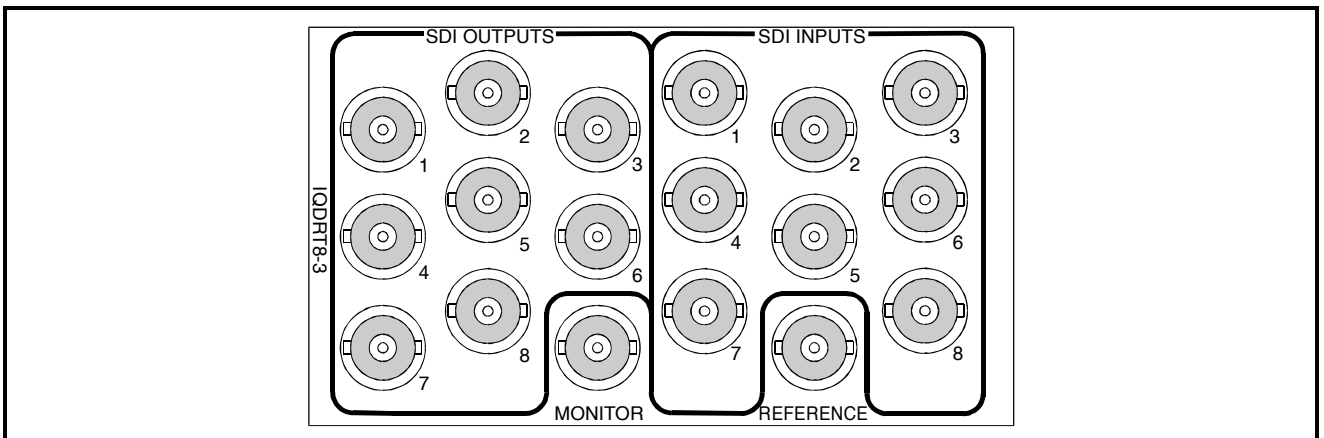
A terminating analog video reference input is provided for correct timing of video switching.

The IQDRT8-M includes EDH error detection and handling on all eight inputs. EDH errors are logged through RollCall and are displayed on the card edge.

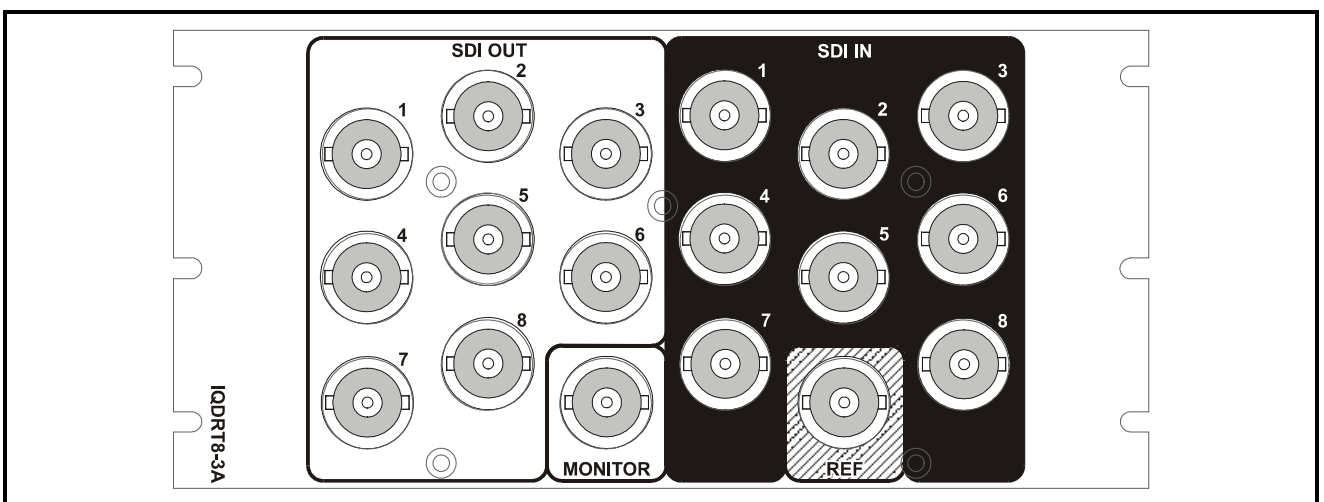
A 270 Mbit/s SDI monitor output is provided, which can display any 270 Mbit/s input. In addition it can display all eight inputs and outputs on a single tiled multi-picture monitor output, which also displays router configuration and indicates input channel status and EDH errors.

Card edge switching control is provided through two rotary switches and a take, push button switch. RollCall provides full remote control and unit identification.

**REAR PANEL VIEW**



IQDRT8-3-M



IQDRT8-3A-M

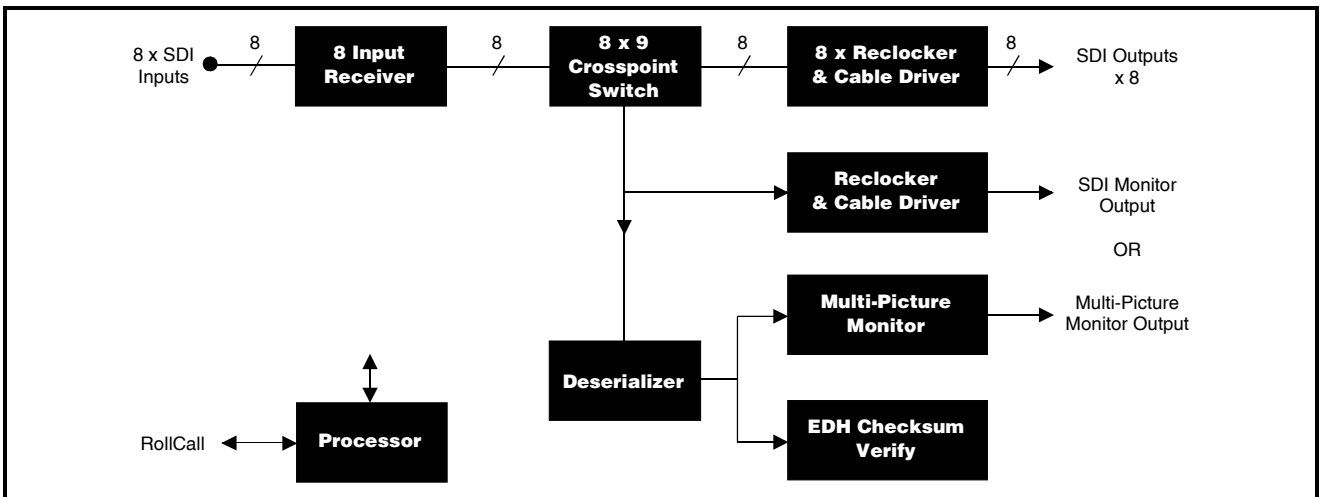
Versions of the module cards available are:

IQDRT8-3-M      IQDRT8M...8 x 8 SDI router with EDH and Multi-picture monitoring Triple width module  
 IQDRT8-3A-M    IQDRT8M...8 x 8 SDI router with EDH and Multi-picture monitoring Triple width module

**Features (IQDRT8-M)**

- 8x8 4:2:2 serial digital video router with Tiled monitor which displays 8 input/ output pictures, crosspoint status, and indicates input channel status and EDH errors.
- 8 independent 270 Mb/s SDI video inputs
- EDH code checking and multi-picture monitor for 270 Mb/s SDI
- Each input can be routed to any number of the eight outputs
- Loss of input indication
- All input and output channels can be renamed
- The video outputs are reclocked and fully restored
- An Analog Reference input is provided for correct timing of video switching
- Remote unit control through RollCall
- Eight memory locations for storage and recall of selectable parameters

**BLOCK DIAGRAM**



# Technical Profile (IQDRT8-M)

## Features

### Signal Inputs

- Serial Input..... 8 SDI (270 Mb/s only)
- Standards ..... SMPTE 259M-C-1997
- Analog Video Reference .... Black burst 625/525 line terminated by 75 Ohms

### Signal Outputs

- Serial Output..... 8 SDI ( 270 Mb/s only)
- Standards ..... SMPTE 259M-C-1997
- Monitor Output (SDI) ..... 1 x 270 Mb/s

### Card Edge Controls (also available via RollCall)

- Router Configuration ..... Independently configure the 8 outputs to any of the 8 inputs
- Take Button ..... Initiates Routing
- EDH Reset..... Resets EDH error flags

### Indicators

- SDI Input Loss ..... Illuminates when the input SDI is lost
- Take LED..... Flashes when routing assignment has changed and requires initiating via the take button

- Power OK ..... +5 V, -5 V and top card +5 V
- EDH Status ..... Illuminates when EDH present on SDI input. Flashes when there is an EDH Error

### Additional Controls via RollCall™ Remote Control System

- Router Configuration ..... Displays current router configuration
- SDI Input Status ..... Displays SDI Input Status
- Video Reference Status ..... Displays Reference standard and Status
- Logging ..... Input Loss, EDH Error and Reference Status
- Channel Renaming ..... Labeling of all sources and destinations
- 8 Memory Stores ..... Storage and Recall of Selected Parameters
- Switching Point ..... Frame or Field switching
- Monitor Output Control ..... Selects between tiled source display, tiled destination display or single output)

## Specifications

- Note that these modules perform re-clocking.
- Input Return Loss..... better than 15 dB to 270 MHz
- Maximum Input Cable Length...Better than 150 m (D1 270 MHz)  
Typically 200 m

- Output Return Loss ..... better than 15 dB to 270 MHz

### Power Consumption

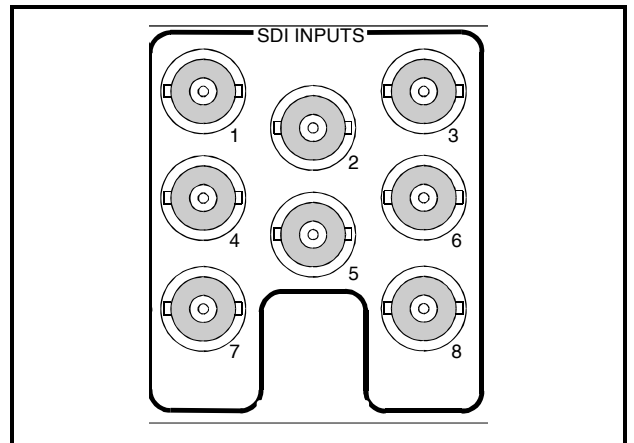
- Module Power Consumption 19.1W max

Monitor showing the multi-picture feature of IQDRT8-M

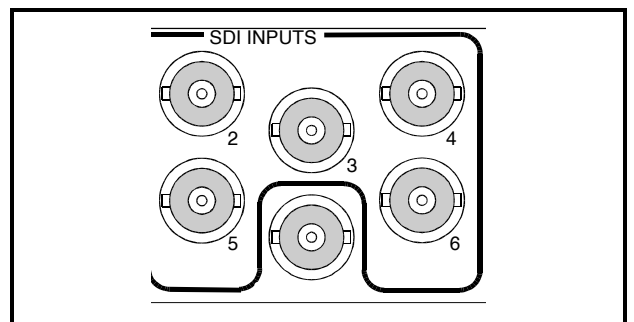


**SDI Video Inputs**

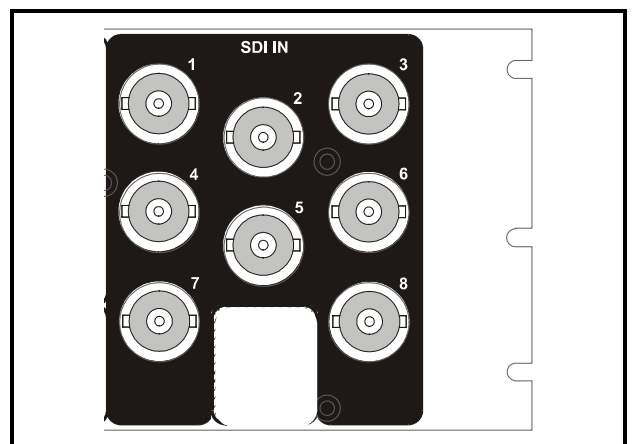
All SDI video input connections are made via BNC connectors.



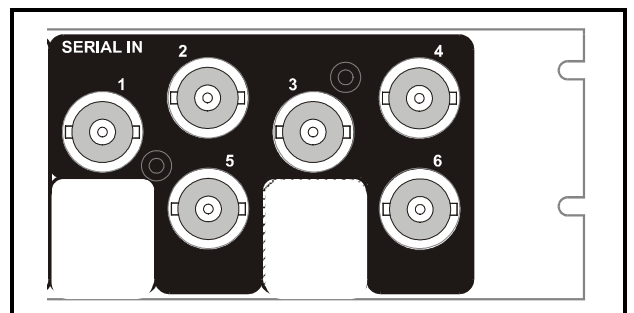
IQDRT8



IQDRT6



IQDRT8-3A



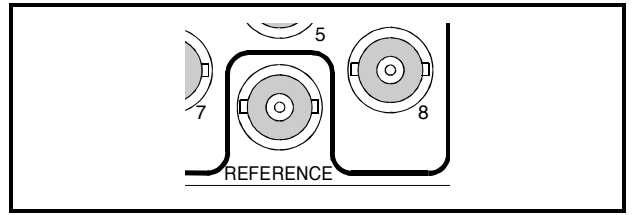
IQDRT8-2A



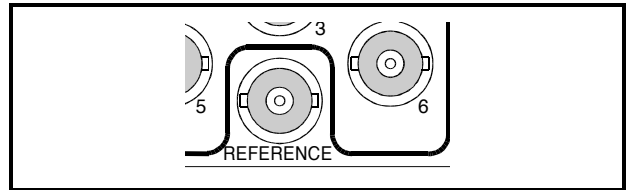
**Video Reference Input**

A black burst signal (525 or 625 line standard) may be connected to this BNC connector. When present this input derives the video switching point and the output standard of the multi-picture output. (-M version)

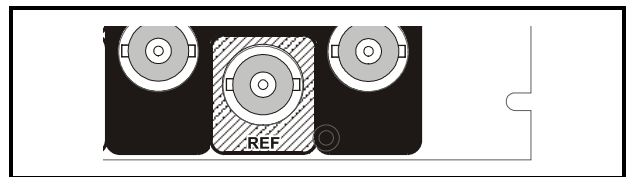
As supplied this input will terminate the signal in 75 Ohms.



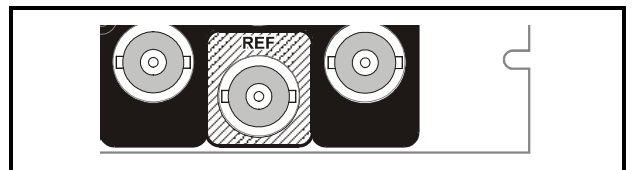
IQDRT8



IQDRT6



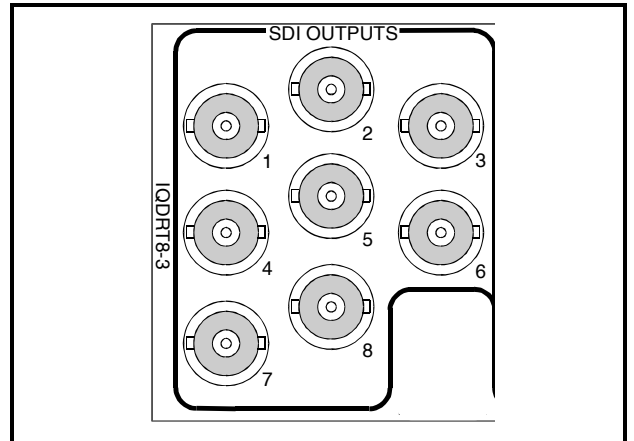
IQDRT6-3A



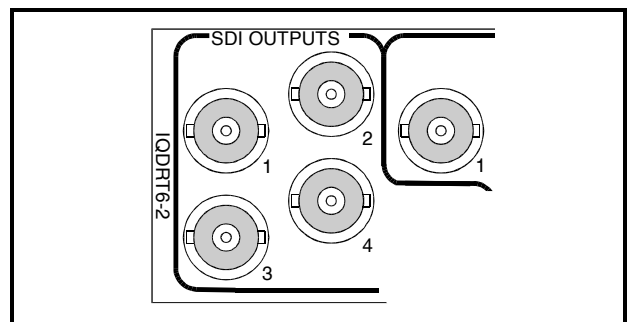
IQDRT6-2A

**SDI Video Outputs**

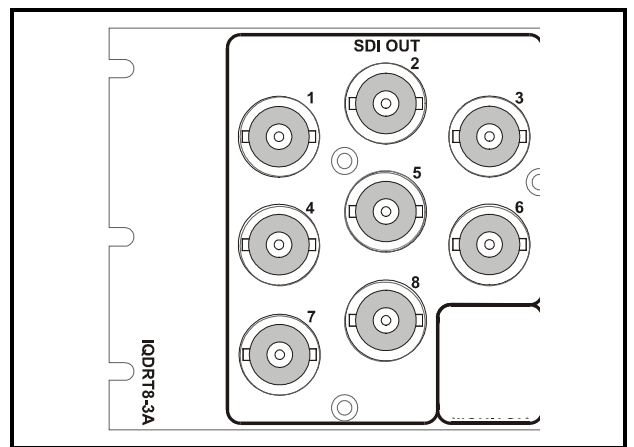
All SDI video output connections are made via these BNC connectors.



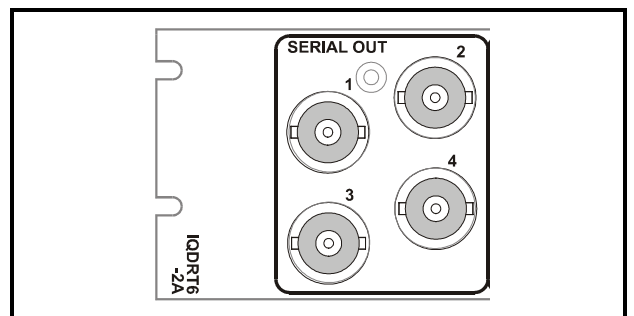
IQDRT8



IQDRT6



IQDRT8-3A



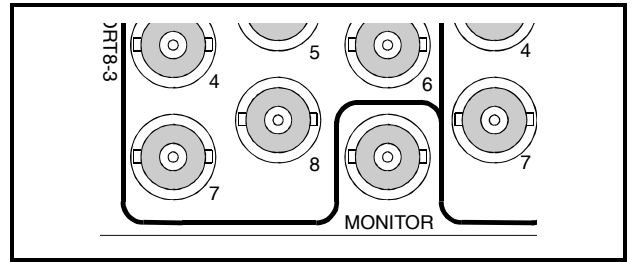
IQDRT8-2A

**Monitor Output**

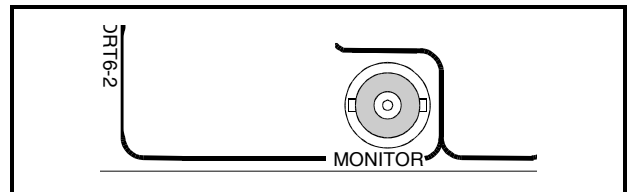
A monitoring output is available via this BNC connector.

A 270Mbit/s SDI monitor output is provided on all versions of the router, which can display any 270Mbit/s input.

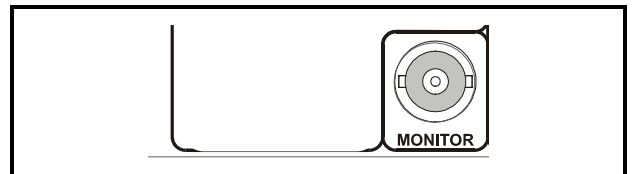
In addition the (-M) version can display all 8 sources or the 8 configured destinations on a single tiled multi-picture monitor output, which also displays crosspoint configuration and indicates input channel status and EDH errors.



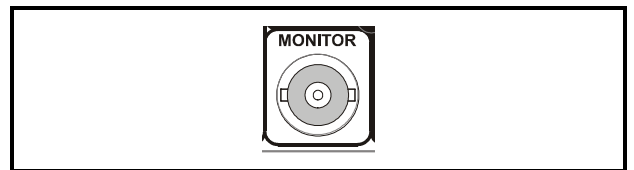
IQDRT8



IQDRT6

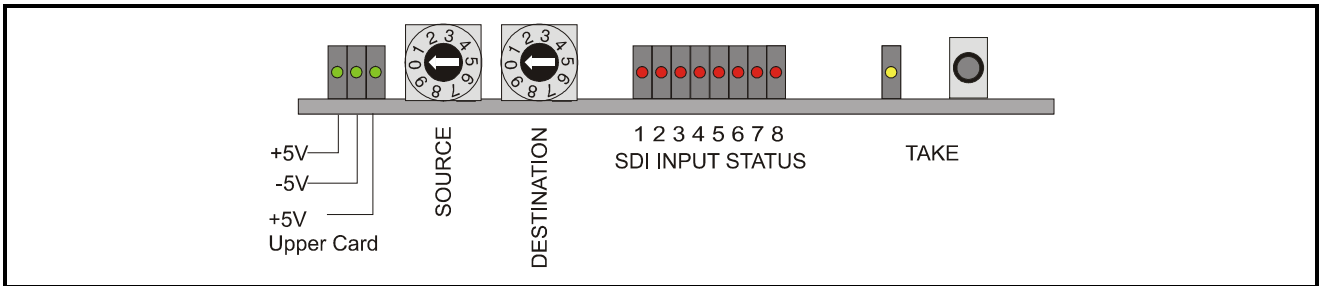


IQDRT8-3A



IQDRT8-2A

CARD EDGE CONTROLS (IQDRT8 and IQDRT6)



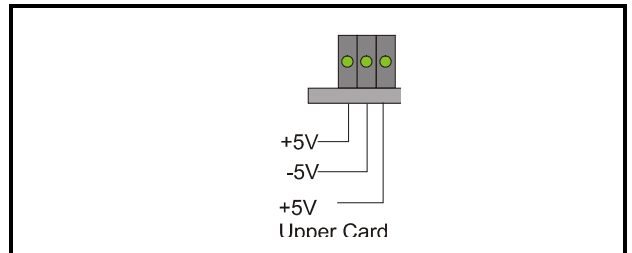
LED INDICATORS

**-5V and +5V**

When illuminated these LED's indicate that the +5V and the -5V power supplies are present.

**+5V Upper Card**

When illuminated this LED indicates that the +5V power supply to the upper card is present.

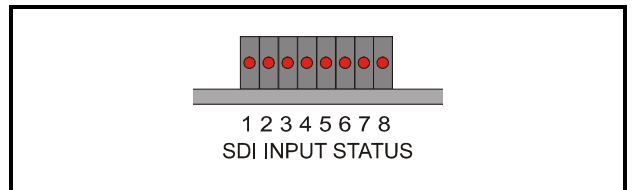


**SDI Input Status**

These LED's indicate the status of the eight inputs.

The LED will be illuminated if there is no SDI signal at that input. The LED will be OFF if the input is OK.

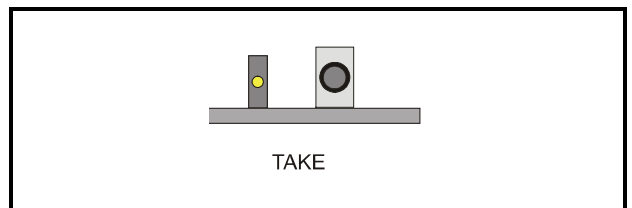
The loss of input is also displayed through Rollcall. The threshold for loss of input is set at approximately 250 m, above this distance the output will be invalid.



**Take**

If a routing assignment has been changed this LED will flash slowly for approximately 30 seconds, flash quickly for 5 seconds and then stop.

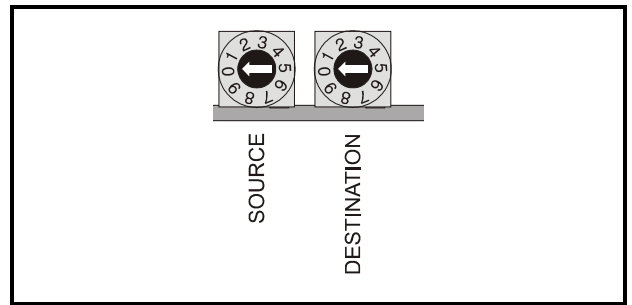
The pushbutton should be pressed before the flashing stops to initiate the change.



**SW1 Source**

This switch selects the source of the input signal as shown in the table below:

Position	Input Source
1	1
2	2
3	3
4	4
5	5
6	6
7	7 (IQDRT8 only)
8	8 (IQDRT8 only)
9	Do not use this position
0	Do not use this position



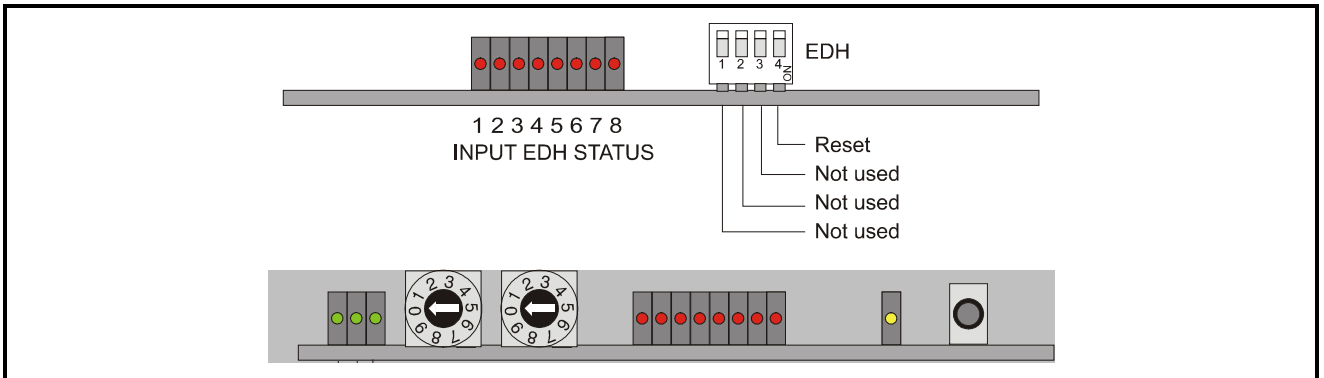
**SW2 Destination**

This switch selects the output destination as shown in the table below:

Position	Output
1	1
2	2
3	3
4	4
5	5 (IQDRT8 only)
6	6 (IQDRT8 only)
7	7 (IQDRT8 only)
8	8 (IQDRT8 only)
9	Do not use this position
0	Do not use this position

*Note that after each change of the Input/Output routing the TAKE pushbutton should be pressed to initiate the change.*

ADDITIONAL CARD EDGE CONTROLS FOR IQDRT8-M



All EDH controls are fitted on the upper card for the IQDRT8-M version.

The eight LED's display EDH information about each input signal.

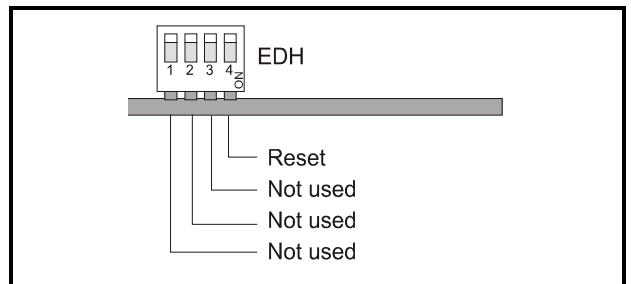
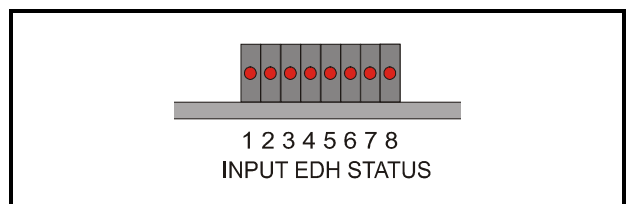
The LEDs will be **illuminated** if EDH data is present in the video stream, **extinguished** if there is no EDH present and **flicker** if there are errors.

**EDH**

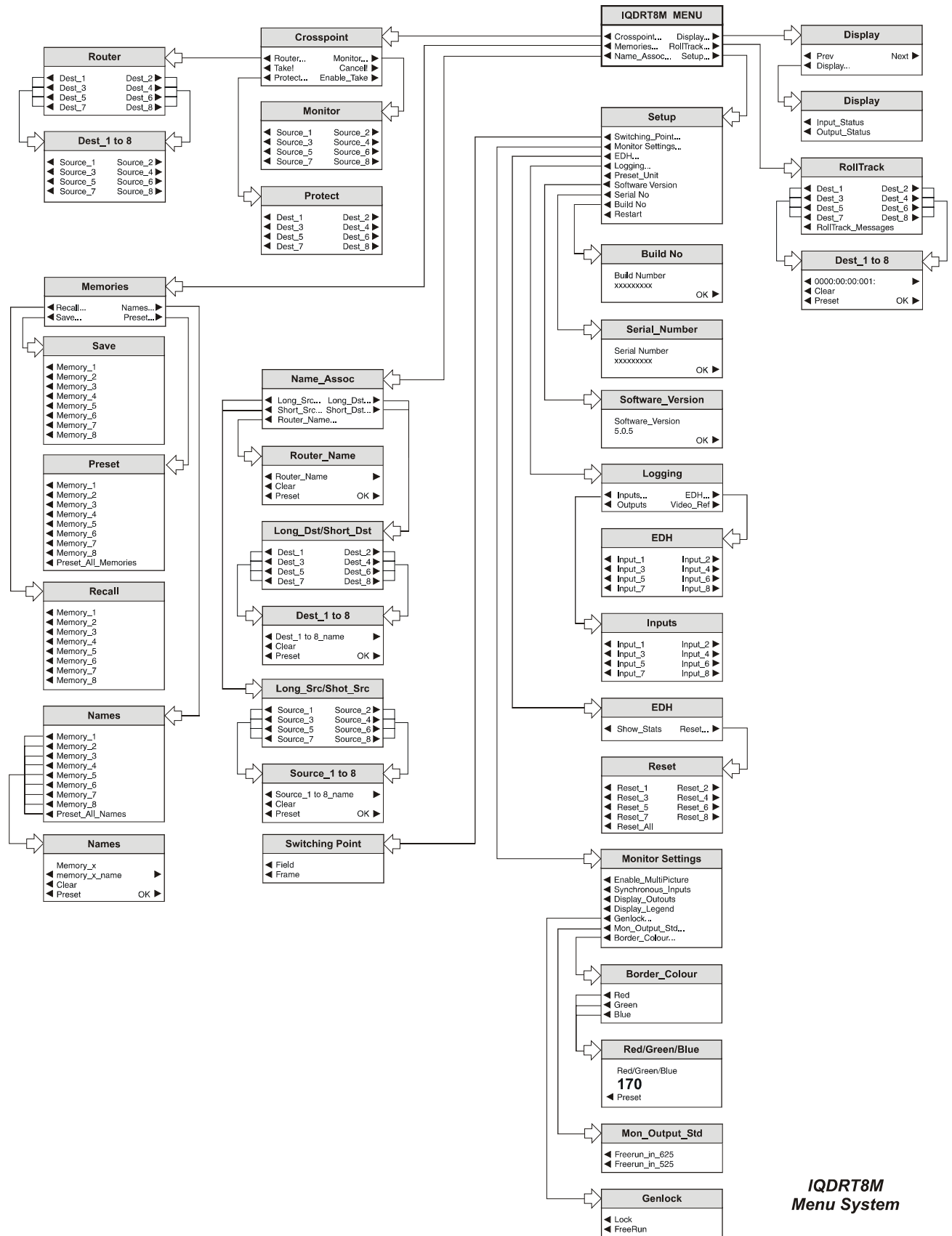
Position 4

Setting this to ON (down) resets the EDH Error log.

Positions 1, 2 and 3 are not used.

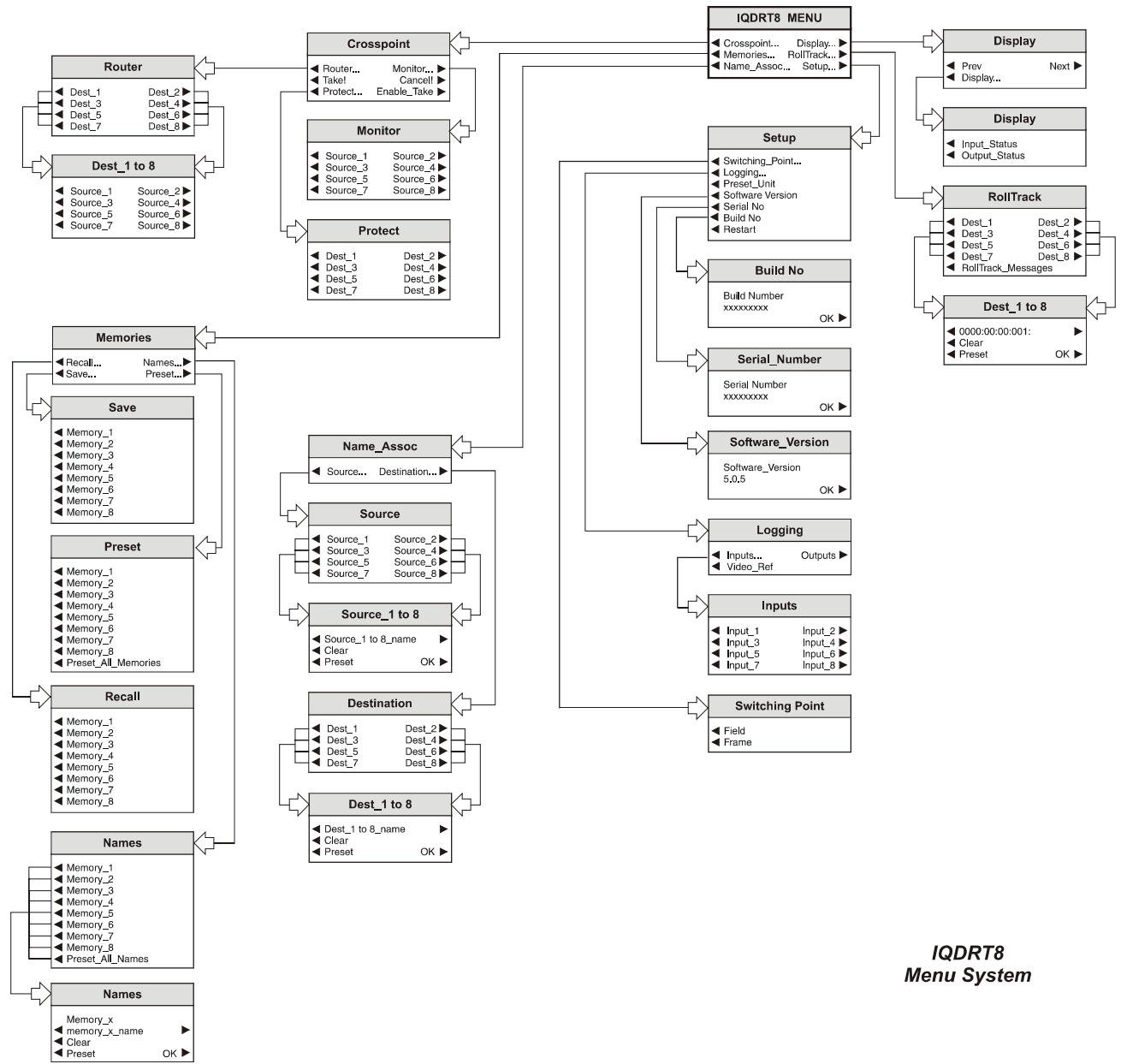


MENU STRUCTURE FOR THE IQDRT8-M



**IQDRT8M  
Menu System**

MENU STRUCTURE FOR THE IQDRT8/6



**IQDRT8  
Menu System**



OPERATION FROM AN ACTIVE CONTROL PANEL

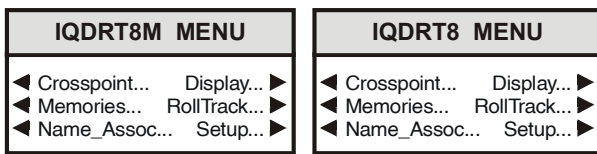
The card may be operated with an active control panel via the RollCall™ network. The menus available for this card are shown on page opposite and will appear in the Control display window. Operational details for the remote control panel will be found in SECTION 1 of the Modular System Operator's Manual.

**MENU DETAILS**

(see IQDRT8-M and IQDRT8 Menu System Diagrams on previous pages)

**MAIN MENU**

The main or top level menu allows various sub-menus to be selected by pressing the button adjacent to the required text line.

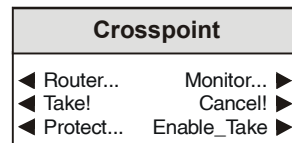


Note that where a menu item is followed by three dots (...) this indicates that a further sub-menu may be selected.

Whenever a menu item is selected the parameters of that selection will be displayed in the Information window of the front panel. Where the selection is purely a mode selection and does not enable a sub-menu, the text will become reversed (white-on-black) indicating that the mode is active. If the mode is not available for selection the text will remain normal.

◀ **Crosspoint...**

This function allows the input/output routing to be set up and operated.



◀ **Enable\_Take**

When selected (text highlighted) this function will allow the **Take** function to be operated.

When not selected (text normal) any changes made to the routing assignments will occur immediately.

Preset is to selected (text highlighted).

◀ **Take!**

Selecting this function will enable the changes made to the router assignments.

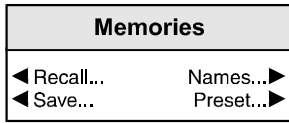
**Cancel!... ▶**

Selecting this function will cancel any changes made to the router assignments if the **Enable\_Take** function has been selected.



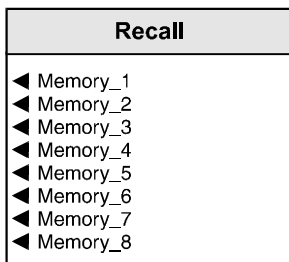
◀ **Memories...**

This function reveals a sub-menu that allows control of the memory functions.



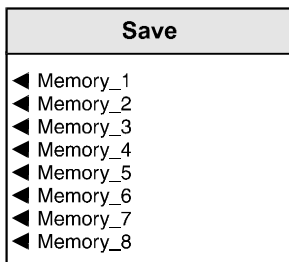
◀ **Recall...**

This function reveals a sub-menu that allows 8 different settings of all items to be recalled from the 8 memory locations as saved in the **Save** function.



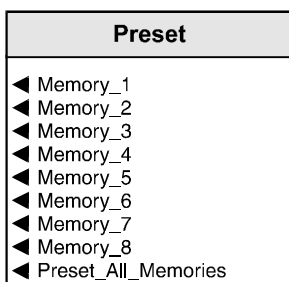
◀ **Save...**

This function reveals a sub-menu that allows the settings of all items to be saved. Up to 8 different set-ups may be saved in the 8 memory locations. They can all be renamed using the **Names** menu



**Preset... ▶**

This selection allows individual (select the location memory number), or all, (select Preset\_All\_Memories), memory locations to be preset to their default (factory) settings.



**Names... ▶**

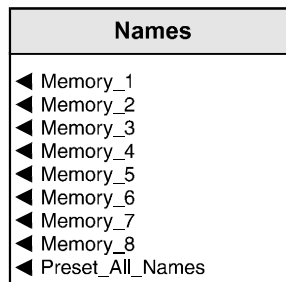
This selection allows the naming of memory 1 to 8 locations.

To name a memory location select:

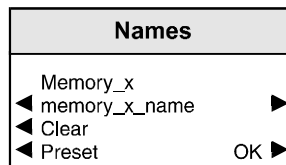
**Names... ▶** to reveal the sub-menu.

Select the memory location to be renamed e.g.

◀ **Memory\_1**



To compile/edit the text the right ▶ and left ◀ buttons adjacent to the upper text line in the menu should be used to select the character position in the text and the spinwheel used to select the character.

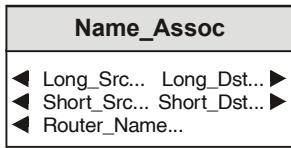


The ◀ **Clear** function blanks out the selected character.

The ◀ **Preset** function loads the default text, for example, Memory\_1.

**O.K. ▶** saves the caption text and returns to the main menu.

◀ **Name\_Assoc... (-M version)**



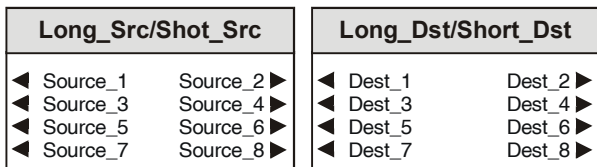
This selection allows the naming of the input sources and the output destinations.

Two types of names may be used for the source and destination; long and short.

The long names (◀ **Long\_Src** or ◀ **Long\_Dst**) are used for most purposes and the short names (◀ **Short\_Src** or ◀ **Short\_Dst**) are those used on the **Multi-Picture** router configuration display.

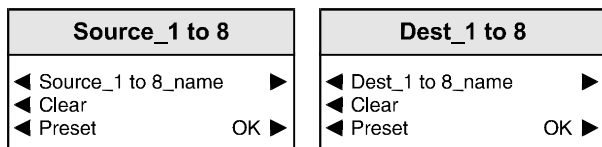
To name an association, select any of the four items to reveal the appropriate sub-menu.

Select the Source/Destination to be renamed from the list.



e.g. ◀ Source\_1

This will reveal the renaming screen.



To compile/edit the text the right ▶ and left ◀ buttons adjacent to the upper text line in the menu should be used to select the character position in the text and the spinwheel used to select the character.

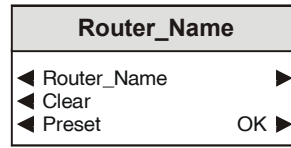
The ◀ **Clear** function blanks out the selected character.

The ◀ **Preset** function loads the default text, for example, Source.

**O.K.** ▶ saves the text and returns to the main menu.

*Note that the new name will replace the old name in all relevant menus.*

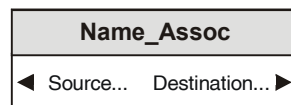
◀ **Router\_Name**



This function allows the router name displayed on the multi-picture monitor display to be set up.

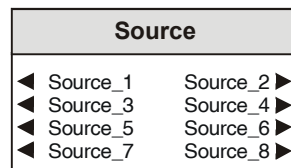
The text may be edited using the same method as used in the **Name Assoc...** item.

◀ **Name\_Assoc... (Standard Version)**

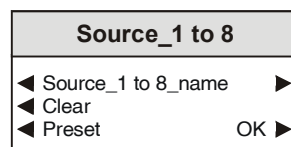


This selection allows the naming of the input sources and the output destinations.

◀ **Source**

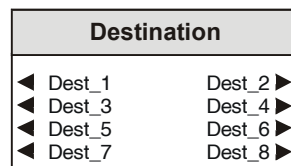


This menu allows the naming of the input sources.

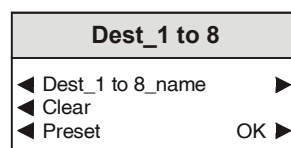


The text may be edited using the same method as used previously.

**Destination ▶**



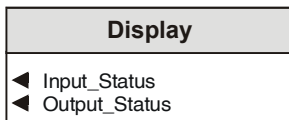
This selection allows the naming of the output destinations.



The text may be edited using the same method as used previously.

**Display... ►**

This menu allows information about the input/output signals to be displayed in the information LCD window.

**◀ Display**

This menu allows information about either the Input\_Status or the Output\_Status to be displayed.

**◀ Input\_Status**

Selecting this item will display information about the input signal status.

**◀ Output\_Status**

Selecting this item will display information about the output signal status.

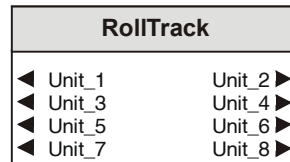
**◀ Prev****Next ▶**

These functions allow the previous or next Input/Output Status to be selected for viewing.

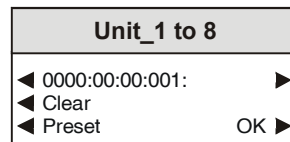
**RollTrack ►**

This function allows information about the status of the changeover switch to be communicated to other RollTrack compatible modules connected to the network.

For example, when a SDI signal source is routed to a new destination it may be required to route the associated audio at the same time via an audio router such as the IQBRT8.



When a unit is selected a further sub-menu then appears to allow the code to be set up.



To edit the text the buttons adjacent to the upper text line in the menu are used to select the character position in the text and the spinwheel used to select the character.

A further sub-menu then appears to allow the code to be set up using the adjacent push buttons to edit the text.

(The right ▶ and left ◀ buttons select the cursor position and the spinwheel selects the character; the clear button sets the text line to all zero's and the OK button accepts the network address)

*For more detailed information see the RollTrack section of this manual.*

The full network address has five sets of numbers.

The first set is the network segment code number

The second set is the number identifying the (enclosure/mainframe) unit

The third set is the slot number in the unit

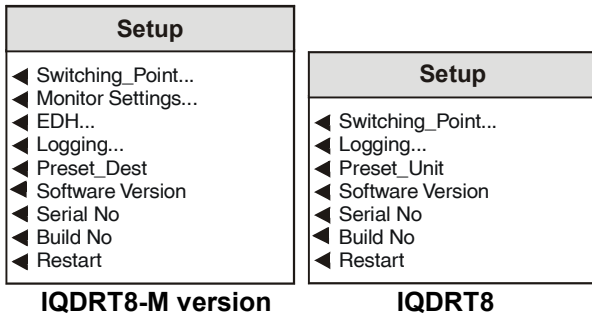
The fourth set separated by an \* is the channel number.

The fifth set is the board type identification.

Once a destination address for a unit has been set the OK function will return to the unit menu to allow another address to be set if required.

**Setup... ▶**

This selection reveals a sub-menu that allows various functions to be set.

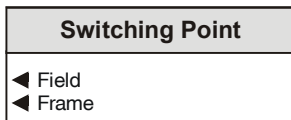


**◀ Switching Point...**

The video switching point will be derived from the Reference signal if present.

For synchronous switching all video inputs must be timed to the reference signal. If no reference input is present the switching will occur as soon as a routing change is made through Rollcall or with the card edge controls.

This function will control the point at which the switchover from one source to another occurs when a routing change is made and a reference signal is present.



**◀ Field**

The switchover will occur during the next available field interval. (Field 1 or 2)

**◀ Frame**

The switchover will occur during the next available frame interval (on field 1).

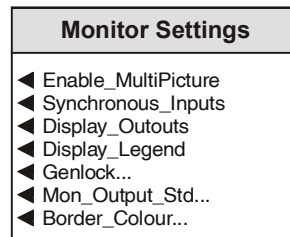
Switching points are in accordance with SMPTE RP 168-1993

625 standard: Midway through line 6 on field 1, line 319 on field 2

525 standard: Midway through line 10 on field 1, line 273 on field 2

**◀ Monitor Settings... (M version only)**

The IQDRT8M has a multi-picture monitor output that displays all eight input channels on a single screen. The router configuration is displayed in an on screen text display. The relevant source or destination name is displayed under each tile preceded by a square block which is green to show valid inputs and yellow to show EDH errors on that source. To indicate loss of input the block is red and noise is displayed in the tile. The monitor output is the same standard as the reference input. The multi-picture monitor can be switched to display any single input if desired.



**◀ Enable\_MultiPicture**

When enabled (text highlighted) the monitor output will become a multi-picture signal an example of which is shown below.



Short names are used here

When not enabled (text normal) the output will be the input selected via the **Crosspoint/Monitor** menu.

**◀ Synchronous\_Inputs**

Synchronous inputs should be selected if all inputs are synchronous. This will cause tiles to be unlocked if any input is missing or not locked. This allows faster updating of each picture tile (i.e. 1 in every 8 frames as opposed to 1 in 16 when not selected)

◀ Display\_Outputs

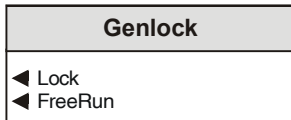
When enabled (text highlighted/reversed) the tiles will display the 8 outputs. When not enabled the 8 inputs are displayed.

◀ Display\_Legend

When enabled text will be displayed on the tiled multi-picture output or single picture monitor output; when disabled the text will not be displayed.

◀ Genlock...

This menu allows the genlock function for the monitoring output to be enabled.



◀ Lock

When enabled this will lock the multi-picture monitor to a suitable signal connected to the reference input connector.  
*Note that the video switching point will be derived from this signal.*

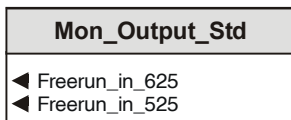
◀ Freerun

When enabled the genlock function will be disabled and the unit will freerun.

*Note that if the unit was in Lock mode and the reference signal is lost the unit will automatically revert to the Freerun mode.*

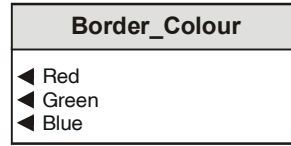
Note that the genlock control only affects the multi-picture monitor output, and does not affect the video switching point.

◀ Mon\_Output\_Std



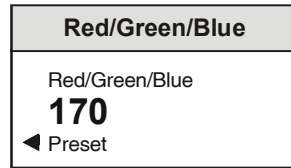
The monitoring output line standard (625 or 525) may be selected here if the Monitoring Genlock function is in the Freerun mode.

◀ Border\_Colour



The colour of the tile border may be set with this function by selecting the primary colours and adjusting their level.

◀ Red/Green/Blue

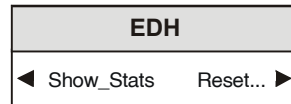


This item allows the individual red, green and blue colour levels to be adjusted.

The level may be set using the spinwheel and the numerical value will be displayed.

Each colour level may be adjusted over a range of 0 to 255 units in steps of one unit. The preset values are Red = 15, Green = 15 and Blue = 95. (Snell & Wilcox Blue)

◀ EDH... (-M version only)

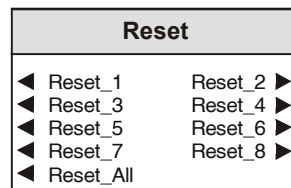


◀ Show\_Stats

This function allows EDH information to be shown in the display.

Reset ▶

This item will reveal a menu that allows any or all of the sources to be selected and reset.



◀ Reset\_All

This item will reset all channels.

## ◀ Logging

If a logging device is attached to the RollCall™ network, information about various parameters will be reported to the logging device assigned in the Remote Control Interface system. (See Section 1, The RCIF Menu System)

The logging sub-menu allows the following information to be made available for logging:

Logging	
◀ Inputs...	EDH... ▶
◀ Outputs	Video_Ref ▶

### ◀ Inputs...

Inputs	
◀ Input_1	Input_2 ▶
◀ Input_3	Input_4 ▶
◀ Input_5	Input_6 ▶
◀ Input_7	Input_8 ▶

An input may be selected from the above list allowing the input status to made available for logging. The -O version allows the change of input sample rate to be selected for logging.

(-M version only)

EDH ▶

EDH	
◀ Input_1	Input_2 ▶
◀ Input_3	Input_4 ▶
◀ Input_5	Input_6 ▶
◀ Input_7	Input_8 ▶

An input may be selected from the above list allowing the EDH status to made available for logging.

### ◀ Outputs

This will report any changes of the crosspoint routing.

Factory preset is nothing enabled

Video\_Ref ▶

The state of the video reference input signal will made available for logging.

Factory preset is nothing enabled



**◀ Preset\_Unit**

Selecting this item sets all adjustment functions that include a preset facility, to their preset values. *Note that this is a momentary action and the text will not become reversed.*

**◀ Software\_Version**

Selecting this item reveals a display showing the version of the software fitted in the module.

Software_Version
Software_Version 5.0.5
OK ▶

Select OK to return to the Setup Menu

**◀ Serial\_Number**

Selecting this item reveals a display showing the serial number of the module.

Serial_Number
Serial Number xxxxxxxx
OK ▶

Select OK to return to the Setup Menu.

**◀ Build No.**

This item shows the factory build number of the module.

Build No
Build Number xxxxxxxx
OK ▶

Select OK to return to the Setup Menu

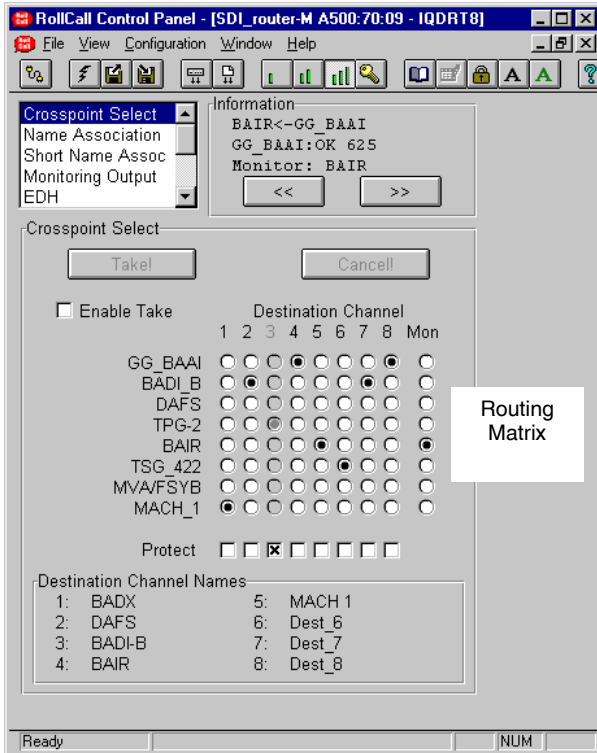
**◀ Restart**

This function allows the unit to reboot and all power-up settings to be enabled. This is an easier method than switching the mains power on and off.

**RollCall Control Templates for the IQDRT8/6**

The first item in the menu is

**Crosspoint Select**



**Information (shown in all windows)**

Information about the routing connections is displayed in this area.

The first line shows the destination (BAIR in this example) is connected to the source (BAAI).

The second line shows the status of the source signal.

The third line shows which source has been selected for monitoring purposes.



These buttons allow the routing connections to be scrolled through and their status displayed.

**The Matrix**

This function allows the input/output routing to be set up by checking the boxes for the source and destination channels.

**Mon (Monitor)**

This function allows an input source to be selected and monitored by a monitoring device connected to the monitoring output on the rear panel.

**Protect**

By checking the appropriate box that particular input/output routing function will not be able to be changed.

*Note that the connection checkbox in the routing matrix will become "greyed-out" under these conditions.*

**Enable Take**

When selected this function will allow the **Take** function to be operated.

When not selected any changes made to the routing assignments will occur immediately.



Selecting this function will enable the changes made to the router assignments.

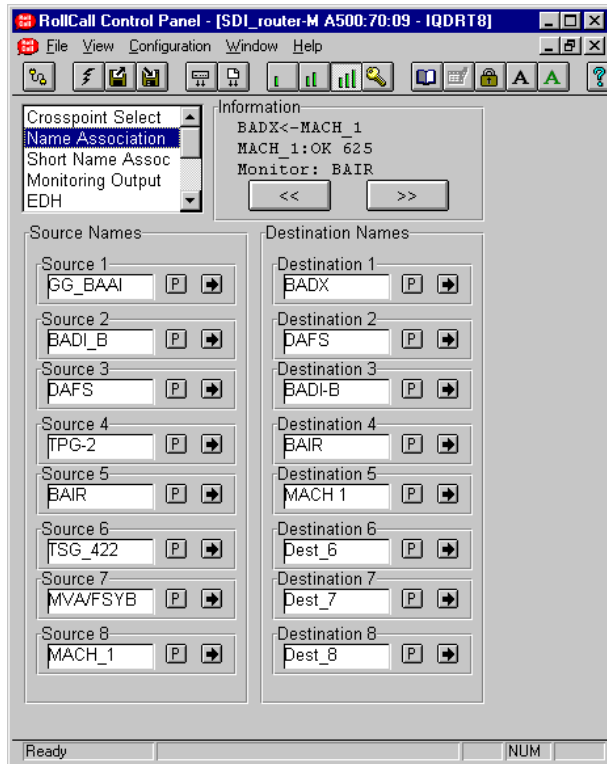


Selecting this function will cancel any changes made to the router assignments if the **Enable Take** function has been selected.

**Destination Channel names**


The destination channel names will also be shown in this area.


**Name Association**



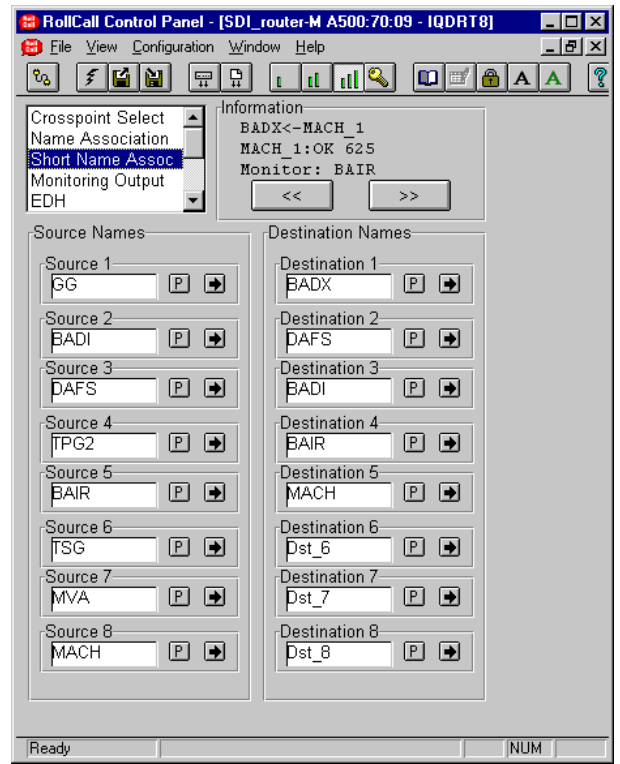
**Source and Destination Names**

This selection allows the naming of the input sources and the output destinations.

To change the memory name, type the new name in the text area and then select  (return).


Selecting Preset  will return the text to the default name.

**Short Name Association (-M version only)**




**Source and Destination Names**

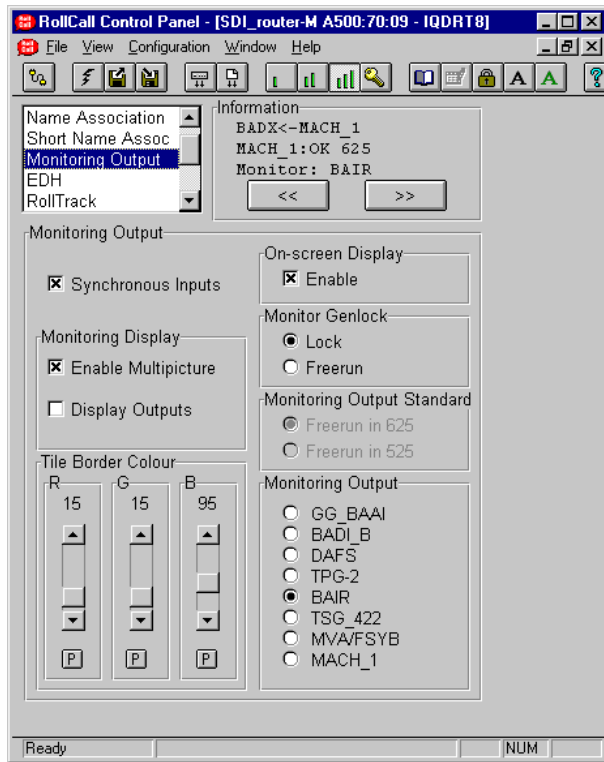
This selection allows the naming of the input sources and the output destinations that are used on the Multi-picture router configuration display.

To change the memory name, type the new name in the text area and then select  (return).

*Note that a maximum of five characters can be used for the short name associations.*

Selecting Preset  will return the text to the default name.

**Monitoring Output (-M version only)**



The IQDRT8M has a multi-picture monitor output that displays all eight input or output channels on a single screen. The router configuration is displayed in an on-screen text display. The relevant source or destination name is displayed under each tile preceded by a square block which is green to show valid inputs and yellow to show EDH errors on that source. To indicate loss of input the block is red and noise is displayed in the tile. The monitor output is the same standard as the reference input. The multi-picture monitor can be switched to display any single input if desired.

This screen allows the characteristics of the monitoring function to be set up.

**Synchronous Inputs**

Synchronous inputs should be selected if **all** inputs are synchronous.

This will cause tiles to be unlocked if any input is missing or not locked. This allows faster updating of each picture tile (i.e. 1 in every 8 frames as opposed to 1 in 16 when not selected)

**Monitoring Display**

**Enable Multipicture**

When enabled the monitor output will become a multi-picture signal an example of which is shown below.



Short names are used here.

When not enabled the monitor output will be the input selected via the **Crosspoint/Monitor** menu.

Default is to Multi-picture enabled.

**Display Outputs**

When selected the tiles will display the 8 outputs. When not selected the 8 inputs are displayed.

**Tile Border Colour**

The colour of the tile border may be set with this function.

The individual red, green and blue levels may be set using scroll bars and the numerical value will be shown above.

Each colour level may be adjusted over a range of 0 to 255 units in steps of one unit.

The preset values are Red = 15, Green = 15 and Blue = 95. (Snell & Wilcox Blue).

**On-Screen Display**

This function allows the on-screen display to be turned ON (Enable checked) or OFF (Enable not checked).

**Monitor Genlock**

This menu allows the genlock function for the monitoring output to be enabled.

**Lock**

When enabled this will lock the multi-picture monitor to a suitable signal connected to the reference input connector.

*Note that the video switching point will be derived from this signal.*

**Freerun**

When enabled the genlock function will be disabled and the unit will freerun.

*Note that if the unit was in Lock mode and the reference signal is lost the unit will automatically revert to the Freerun mode.*

Note that the genlock control only affects the multi-picture monitor output, and does not affect the video switching point.

**Monitoring Output Standard**

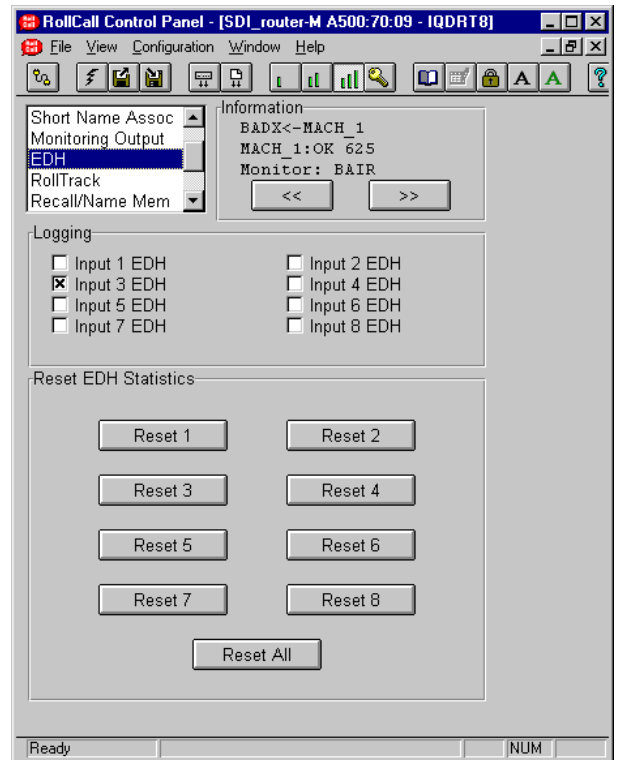
The monitoring output line standard (625 or 525) may be selected here if the Monitoring Genlock function is in the Freerun mode.

**Monitoring Output**

This function allows an input source to be selected and monitored by a monitoring device connected to the monitoring output on the rear panel.

*Note that this control mirrors the monitor output selection of the crosspoint menu.*

**EDH (-M version only)**

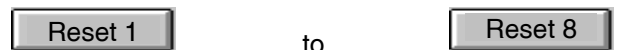


**Logging**

EDH data for each of the input signals may be selected for logging by checking the appropriate box.

**Reset EDH Statistics**

This function allows the EDH data for the selected channel to be reset to zero.

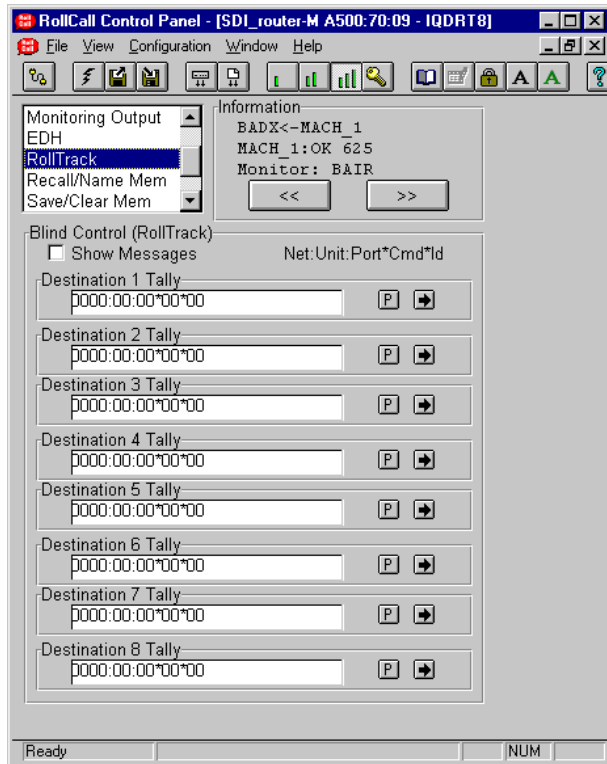


These buttons will reset the EDH data of the selected channel to zero.



This function will reset the EDH data of all channels to zero.

**RollTrack**



This function allows information about the status of the changeover switch to be communicated to other RollTrack compatible modules connected to the network.

For example, when a SDI signal source is routed to a new destination it may be required to route the associated audio at the same time via an audio router such as the IQBRT8.

**Blind Control (RollTrack)**

When RollTrack communication is being used, enabling the **Show Messages** function displays error messages in the information area.

**Show messages**

When enabled a RollTrack error message will be shown in the information window if any of the RollTracks that are configured do not receive an acknowledgement that the command has been received at the destination address (e.g. unit not present, incorrect address or Id set).

**Destination 1-8 Tally**

This function allows the address of the RollTrack compatible module to be entered for each of the router outputs.

The full network address has five sets of numbers.

The first set (0000) is the network segment code number.


The second set (00) is the number identifying the (enclosure/mainframe) unit.


The third set (00) is the slot (Port) number in the unit.

The forth set (00) separated by an \* is the RollCall command number.

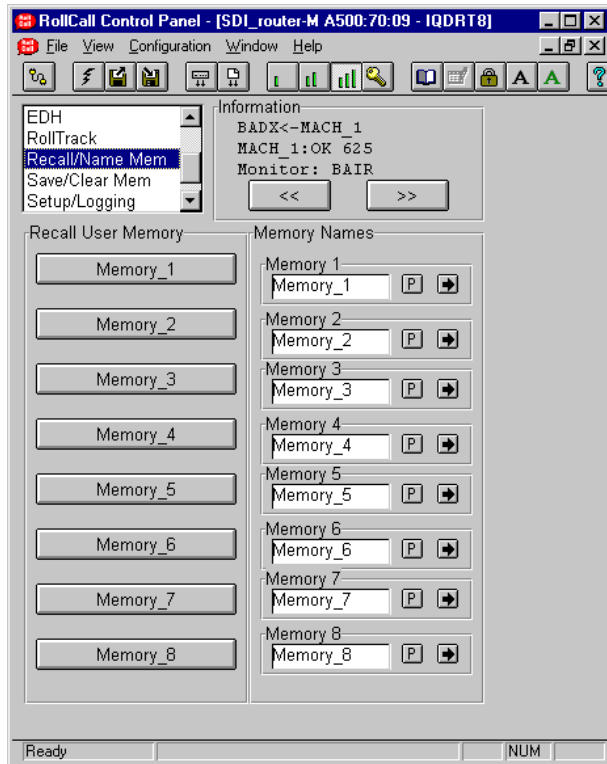
*For details of the RollCall command numbers for specific units please contact your local Snell & Wilcox agent.*

The fifth set (00) separated by an \* is the unit identification.

To change the address, type the new address in the text area and then select  (return)

 (Preset) returns to the default address.

**Recall/Rename Memories**





**Recall User Memory**

This function allows 8 different settings of all items to be recalled from the 8 memory locations as saved in the **Save User Memory** function.

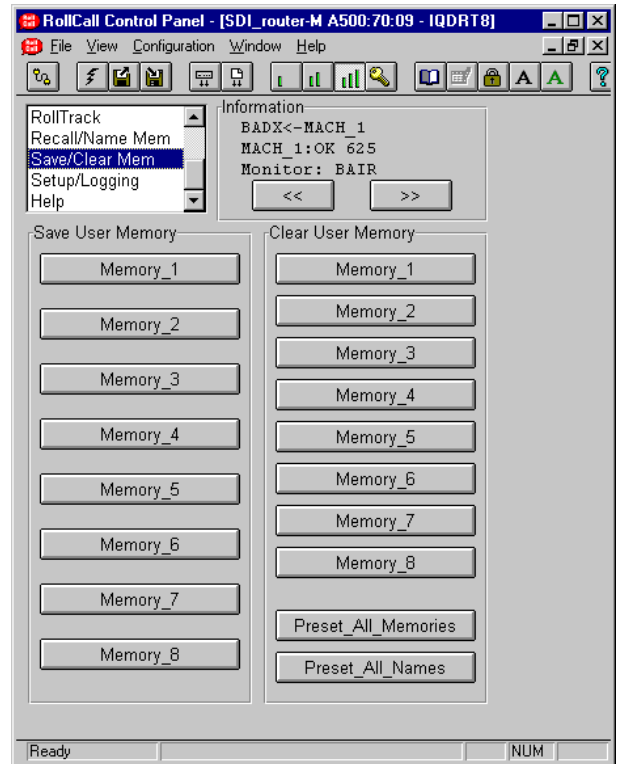
**Memory Names**

This allows the naming of the eight memories.

To change the memory name, type the new name in the text area and then select  (return).

Selecting Preset  will return the text to the default name.

**Save/Clear Memories**



**Save User Memory**

This function allows the settings of all items to be saved. Up to 8 different set-ups may be saved in the 8 memory locations

**Clear User Memory**

This function allows individual memory locations to be cleared and returned to their default (preset) settings.

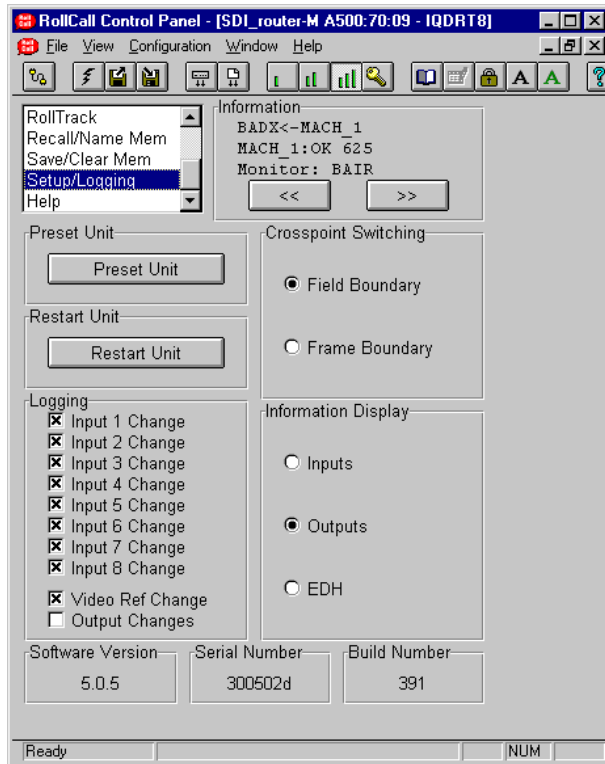
**Preset All Memories**

This item allows all memory locations to be cleared and returned to their default (preset) settings.

**Preset All Names**

This item allows all memory names to be returned to their default (preset) names.

**Setup/Logging**



This item sets all adjustment functions that include a preset facility, to their preset values.  
*Note that this is a momentary action.*



This function allows the unit to reboot and all power-up settings to be enabled. This is an easier method than switching the mains power on and off.

**Logging**

If a logging device is attached to the RollCall™ network, information about various parameters will be reported to the logging device assigned in the Remote Control Interface system. (See Section 1, The RCIF Menu System)

The following information to be made available for logging:

Input 1 to 8 Change (-0 versions)

These report any changes of the presence and sample rate of inputs 1 to 8.

Input 1 to 8 Change (-M versions)

These report the presence of inputs 1 to 8.

**Video Ref Change**

This reports the video line standard (525/625) of the reference signal.  
 Factory preset is not enabled

**Output Changes**

This will report any changes of the crosspoint routing.

**Crosspoint Switching**

This function will control the point at which the switchover from one source to another occurs when a routing change is made and a reference signal is present.

**Field Boundary**

The switchover will occur during the next available field interval. (Field 1 or 2)

**Frame Boundary**

The switchover will occur during the next available frame interval (on field 1).

Switching points are in accordance with SMPTE RP 168-1993

625 standard: Midway through line 6 on field 1,  
 line 319 on field 2

525 standard: Midway through line 10 on field 1,  
 line 273 on field 2

**Information Display**

This item allows the selection of data that may be shown in the Information Display.

Selections available are:           Inputs  
   Outputs  
   EDH

**Software version**

This item shows the version of the software fitted in the module.

**Serial Number**

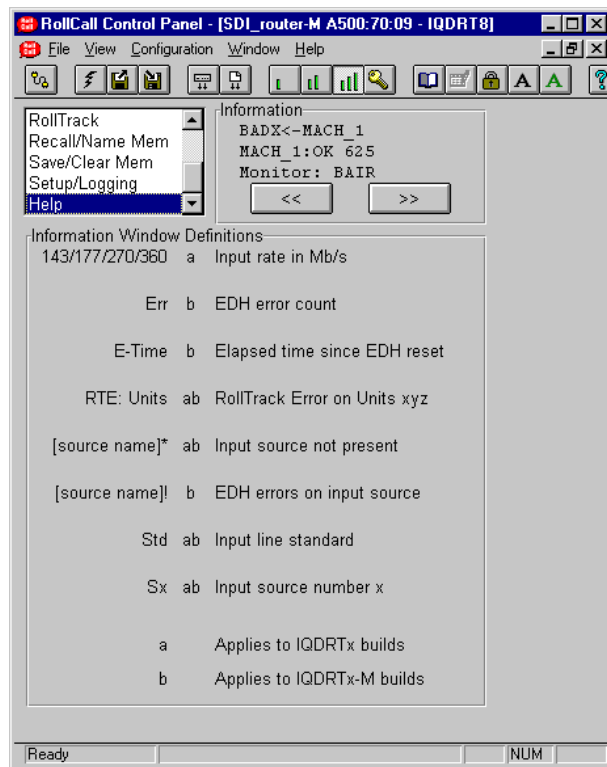
This item shows the serial number of the module.

**Build Number**

This item shows the factory build number of the module.



Help



Information Window Definitions

This screen explains the abbreviations that appear in the information window.

