



User Manual

IQORX80 and IQORX99 3G/HD/SD-SDI Multi-Channel Fiber Receiver

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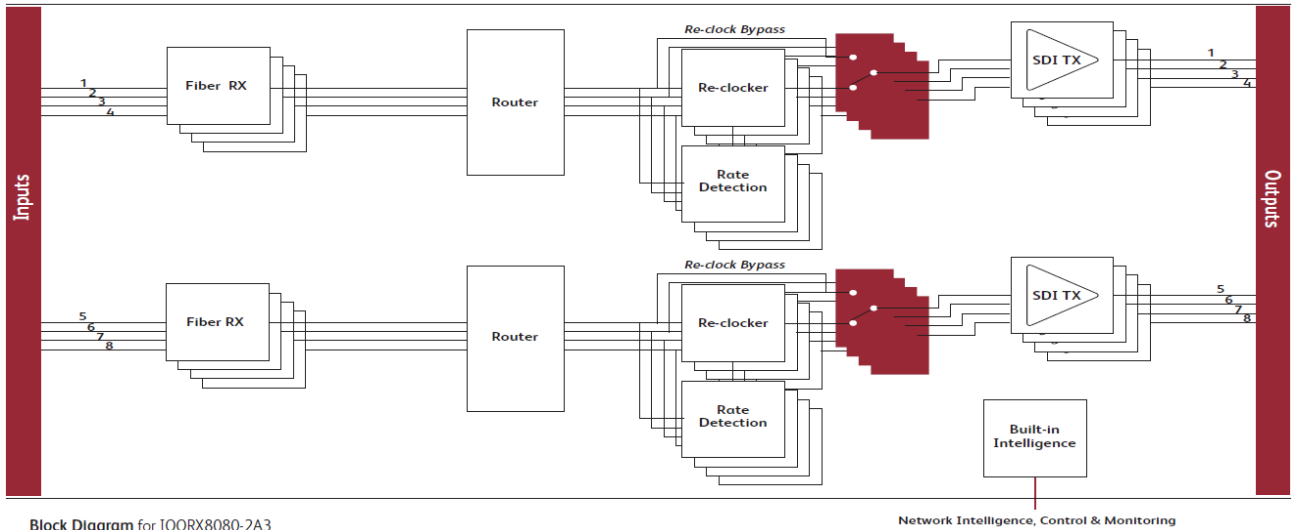
This information applies to the receiver modules in the Optical Converter Platform range. In the case of the IQORX99, some of the RollCall screens will be missing if the SFPs for the channels associated with those screens are not fitted and, in some cases, although the screen will be present, the group boxes or controls associated with particular channels will be missing or disabled.

Module Description

The IQORX80 converts eight single mode fiber optic signals to 3G/HD/SD-SDI signals. The unit is available in single or dual width versions with either DIN1.0/2.3, HDBNC or BNC connectors with a wide band receiver suitable for CWDM applications.

The IQORX99 is a special version of the product with a partial fit of channels.

Block Diagram

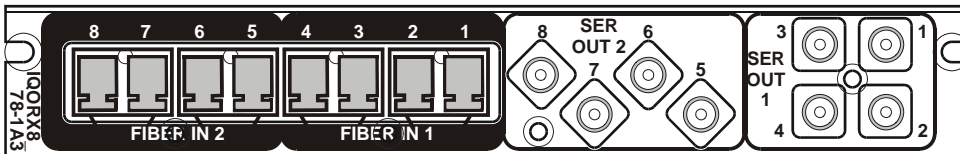


Block Diagram for IQORX8080-2A3

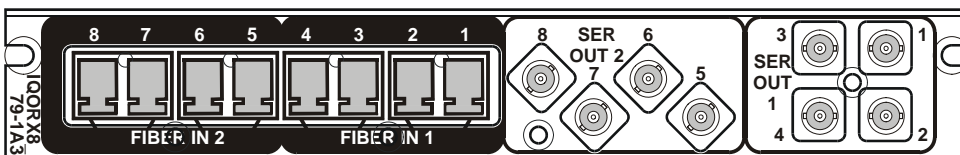
Network Intelligence, Control & Monitoring

Rear Panel View

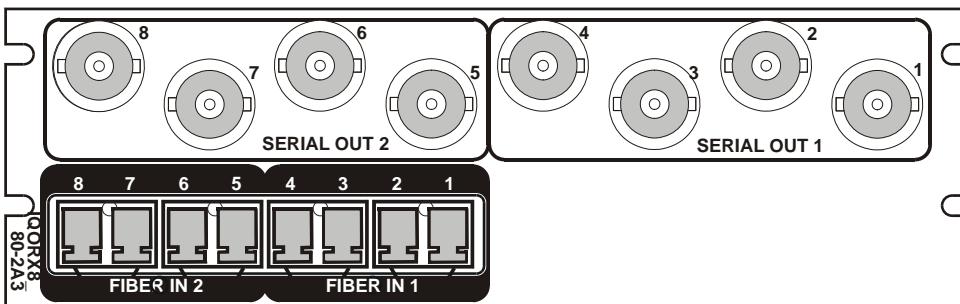
Single width Fibre and DIN1.0/2.3 (**IQORX8078-1A3**)



Single width Fibre and HD BNC (**IQORX8079-1A3**)



Double width Fibre and BNC (**IQORX8080-2A3**)



Order Codes

<i>IQORX8078-1A3</i>	3G/HD/SD-SDI multi-channel fiber receiver. 8 x optical inputs, 8 x 3G/HD/SD-SDI outputs (DIN 1.0/2.3).
<i>IQORX8079-1A3</i>	3G/HD/SD-SDI multi-channel fiber receiver. 8 x optical inputs, 8 x 3G/HD/SD-SDI outputs (HD BNC).
<i>IQORX8080-2A3</i>	3G/HD/SD-SDI multi-channel fiber receiver. 8 x optical inputs, 8 x 3G/HD/SD-SDI outputs (BNC).

Note: All these versions are also available for the new IQ 3U B enclosure. Please append order code with A3 (A enclosure) or B3 (B enclosure) as appropriate.

Feature Summary

- 8 channels single mode fiber optic receiver for 3G/HD/SDSDI and DVB ASI signals.
- 8 channels of electrical SDI outputs for 3G/HD/SDSDI and DVB ASI signals.
- Input wavelengths of 1260 nm to 1610 nm.
- Reclocking for 3 Gbps, 1.5 Gbps HD-SDI and 270 Mbps SDI signals, or asynchronous operation for other frequencies.
- Input channel routing – inputs 1 to 4 can be routed to output channels 1 to 4, and inputs 5 to 8 can be routed to output channels 5 to 8.
- Input selection logic – two configurations can be preset with routing. Configurations can be selected on input signal status.
- RollCall monitoring allows all signal paths to be managed.
- High density DIN1.0/2.3 and HDBNC options provide compact space saving single slot solution.
- The SFP receivers are hot-pluggable – i.e. they may be removed and inserted without removing power from the module.

Technical Profile

Inputs and Outputs

Signal Inputs

Optical	3 Gbps HD-SDI, 1.485 Gbps HD-SDI or 270 Mbps SD-SDI (asynchronous operation available at other frequencies)
Connector / format	LC single mode SFP
Conforms to:	SMPTE 297-2006
Inputs	8

Signal Outputs

Electrical	3 Gbps HD-SDI, 1.485 Gbps HD-SDI or 270 Mbps SD-SDI (asynchronous operation available at other frequencies)
Connector / format	BNC / 75 Ohm, DIN1.0/2.3, HDBNC panel jack
Conforms to	SMPTE 424M (HD level A) SMPTE 292M (HD) SMPTE 259M-C (SD)
Outputs	1 to 4 per Channel

Controls

Indicators

Power	OK (Green)
CPU	OK (Green flashing)
Good	Hardware OK (Green)
Warning	SFP fit not as sold (Yellow), SFP warning active (Yellow flashing), OK (Off)
Error	Hardware error (Red), SFP alarm active (Red flashing), OK (Off)
Input 1-8	SD-OK (Yellow), HD-OK (Green), 3G-OK (Blue), other-OK (White flashing), Bypass (Rate colour flashing), Loss (Red)

RollCall Functions

Input 1-8 rate select	3G, HD, SD, other
Reclock bypass	On/Off
Output 1-4 select	Input 1-4
Output 5-8 select	Input 5-8
Input status	Present, Loss, Unknown, Unrouted, Data Rate
Output Mute	On/Off
Logging	Input 1-8 Type Input 1-8 Bit Rate Input 1-8 Present Input 1-8 Loss Input 1-8 Power Output Configuration
RollTrack controls	On/Off, Index, Source, Address, Command, Status, Sending
RollTrack outputs	Unused Input 1-8 OK Input 1-8 Rate Unknown Input 1-8 None

Input 1-8 3G
Input 1-8 HD
Input 1-8 SD
Input 1-8 Power OK
Input 1-8 Power High
Input 1-8 Power Low
Output Configuration

Specifications

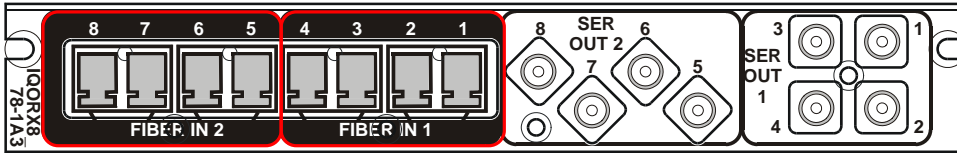
Electrical	3 Gbps SDI, SMPTE 424M 1.5 Gbps HD-SDI, SMPTE 292M 270 Mbps SDI, SMPTE 259MC / DVB-ASI
Connector / format	BNC/ 75 Ohm panel jack on standard Snell connector panel
Return loss	>-15 dB (270 Mbps, 1.5 Gbps) >-10 dB (3 Gbps)
Output jitter	SD-SDI 0.2 UI (10 Hz) / 0.2 UI (1 kHz) 3G/HD-SDI 1.0 UI (10 Hz) / 0.2UI (100 kHz)
Module power	10.5 W max
Wavelength	1260 - 1610 nm
Optical power input range	0 dBm to -18 dBm

Connections

Fiber Inputs

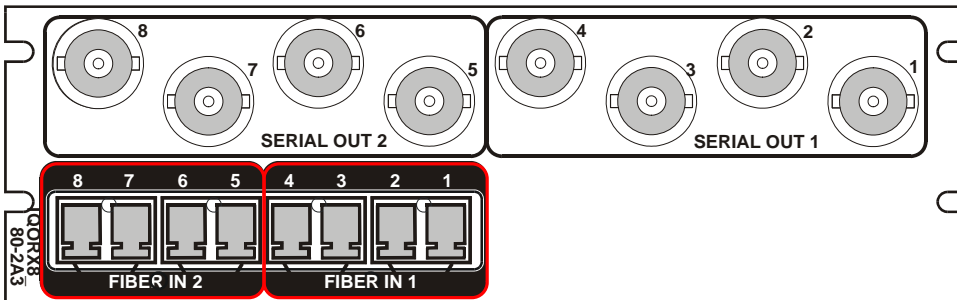
IQORX8078-1A3 and IQORX8079-1A3

Fiber input to the module is made via 8 LC connectors



IQORX8080-2A3

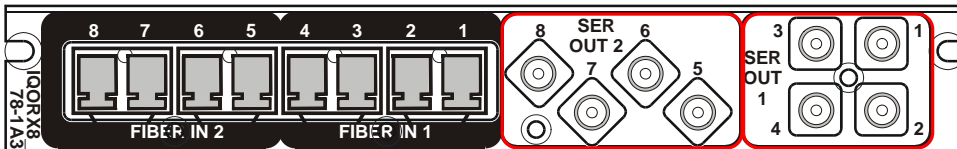
Fiber input to the module is made via 8 LC connectors



SDI Outputs

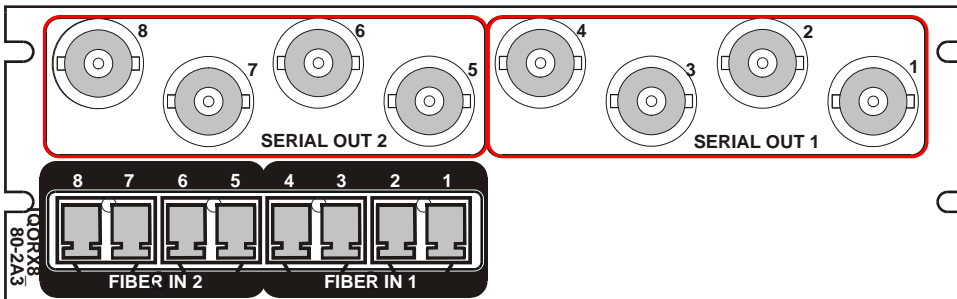
IQORX8078-1A3 and IQORX8079-1A3

SDI output from the unit is made via 8 DIN 1.0/2.3 or HD BNC (75ohm) panel jack connectors.

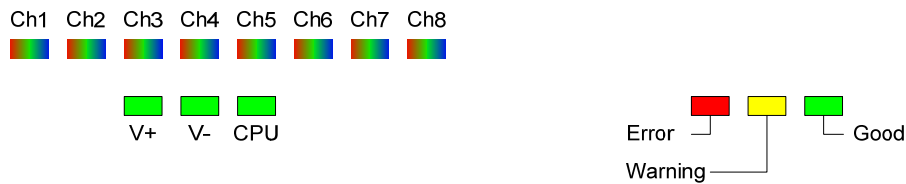


IQORX8080-2A3

SDI output from the unit is made via 8 BNC / 75ohm panel jack connectors.



Card Edge Controls



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

CPU This led will flash to indicate that the CPU is running.

Input Channel Status (Ch1 to Ch8)

- Off** The SFP receiver might not be fitted or the channel is not applicable to this product.
- Yellow** SD - re-clocker locked at 270 MHz, flashes when in RC-bypass
- Green** HD - re-clocker locked at 1.485/1.4835 GHz, flashes when in RC-bypass
- Blue** 3G - re-clocker locked at 2.97/2.967 GHz, flashes when in RC-bypass
- White (flashing)** Unknown rate detected, forcing RC-bypass. Input might actually be un-routed with all rates selected in the dialog.
- Red** No signal present.
- Red (flashing)** Input detected, but rate is in error. This is as a result of the rate selection logic on the RollCall dialogue, or the channel is un-routed and not all rates are selected.

Error (Red) When illuminated indicates that SFPs are fitted incorrectly or missing (see SFP Fit Errors and Warnings).

When flashing indicates that an SFP status alarm has been activated (e.g. temperature or supply voltage) other than the Rx Power Alarm.

Warning (Yellow) Illuminates to indicate that the order in which the SFPs are fitted has changed from the original documented fit (see SFP Fit Errors and Warnings).

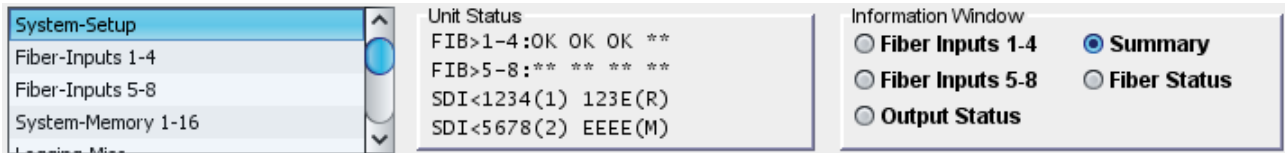
Flashes to indicate that an SFP status warning has been activated (e.g. temperature or supply voltage) other than the Rx Power Warning.

Good (Green) Illuminates to indicate all SFPs are fitted and functioning correctly.

Controlling the IQORX80/99 from the RollCall Control Panel

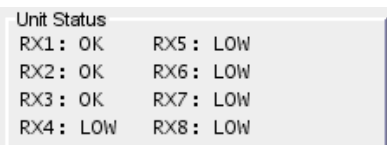
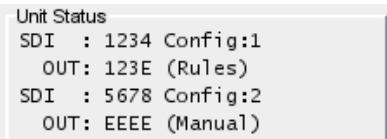
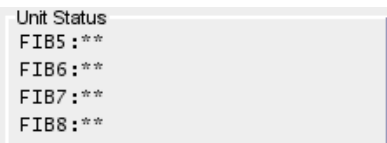
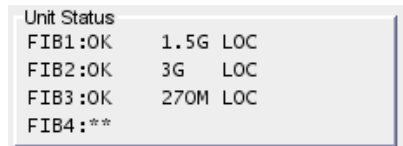
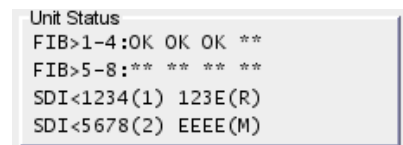
Unit Status

Information about the status of the unit is displayed in the Unit Status section on each RollCall Control Panel screen. The default is the Summary.



The radio buttons in the Information Window are used to select what is displayed in Unit Status.

- Summary** – shows a cryptic view of the channel input status, the output routing and the mode selection. On the top two lines it shows signals present on Fiber inputs 1, 2 and 3 and no input present on 4 and 5 - 8. On the bottom two lines it shows the selected Config with Routing and Mode for the Fiber → SDI channels. Blank status means the fiber receiver isn't fitted for that channel or a transmitter is fitted by mistake.
- Fiber Inputs 1-4** – shows a more detailed view of Fiber channel input status; includes status field, bit rate and whether locked (**LOC**) or bypassing the reclocker (**BYP**). A **U** in the first field indicates the input is not routed to an output and therefore its bit rate cannot be measured. **Err** indicates that a signal has been detected but its bit rate is not one of those selected for that input.
- Fiber Inputs 5-8** – as above but for the fiber inputs 5-8.
- Output Status** – shows the status for the SDI outputs. On the top two lines it shows that Fiber I/Ps 1, 2 and 3 are routed to SDI O/Ps 1, 2 and 3, SDI O/P 4 shows **E** which means it is muted due to an input error, Config **1** is selected and the Mode is **Rules**. The bottom two lines show that SDI O/Ps 1, 2, 3 and 4 are muted due to input errors, Config **2** is selected and the mode is **Manual**. **M** instead of **E** in the routing status would indicate muted using the channel's Mute control.
- Fiber Status** – shows the status of the SFP fiber receivers. **LOW** or **HIGH** means low or high Power; **LOW** is the normal state if there is no input signal. Blank status means the fiber receiver is not fitted for that channel.



System-Setup Screen

The **Setup** screen displays basic information about the unit. Use the functions on the screen to restart the unit, return all settings to their factory defaults, and to change the names of the inputs.

The screenshot shows the System-Setup screen with the following sections:

- System-Setup Menu:** System-Setup (selected), Fiber-Inputs 1-4, Fiber-Inputs 5-8, System-Memory 1-16.
- Unit Status:**

```

FIB>1-4:OK OK OK **
FIB>5-8:** ** ** **
SDI<1234(1) 123E(R)
SDI<5678(2) EEEE(M)

```
- Information Window:**
 - Fiber Inputs 1-4
 - Summary
 - Fiber Inputs 5-8
 - Fiber Status
 - Output Status
- Product Information:**
 - Product: IQORX80-3G
 - Software Version: 5.0.5
 - Serial No.: S12345678
 - Build: 0003304868
 - KOS: V115
 - Firmware: 00.001.01 01.000.02
 - PCB: RKADM1Y
 - Licensed Options: SDHD;3G
 - Rear ID: 5:GK9DIN
 - Defaults: Defaults Settings, Factory Defaults
 - IO Mod 1 ID: 2:RKIOM8V4F
 - IO Mod 2 ID: 0:None fitted
 - Restart button
 - Proc Mod ID: SAACS RKPRMLED1Y
- SFP Details Table:**

ID	W/L	Vendor	Part No.	Status
CH 1	82	OPTOWAY	SPS-9110VW-2RG	OK
CH 2	82	OPTOWAY	SPS-9110VW-2RG	OK
CH 3	82	OPTOWAY	SPS-9110VW-2RG	OK
CH 4	82	OPTOWAY	SPS-9110VW-2RG	OK
CH 5	82	GENNUM	GO2920CM	OK
CH 6	82	GENNUM	GO2920CM	OK
CH 7	82	GENNUM	GO2920CM	OK
CH 8	82	GENNUM	GO2920CM	OK
- Input Names:** Eight input name fields (CHANNEL 1 to CHANNEL 8), each with a 'P' (Reset) and 'S' (Save) button.

Product: The top left part of the screen shows the various versions, options, identifiers, etc., associated with the product's hardware, firmware and software and also provides a means of setting controls to defaults or restarting the unit. Note that the Firmware release is in two parts, the left-hand being for the Administration module FPGA and the right-hand part being for the I/O module FPGA.

To restart the unit, simulating a power-up/power-down cycle, click **Restart**.

To reset all of the unit's settings to their factory defaults, click **Factory Defaults**.

- *NOTE: this also clears all of the saved memory settings.*

To reset all of the unit's settings to their factory defaults, leaving user memories intact, click **Default Settings**.

SFP Details: The top right part of the screen shows the details of the SFP transmitters and receivers fitted. The Status column indicates whether the SFPs fitted are correct for the particular product.

Input 1-8 Name: The bottom half of the screen has entry fields for 8 **Input Names**. These are the input names displayed in logging. To change a name, type the name in the text field and click **S**. To return the name to its factory default, click **P**.

Fiber-Inputs 1-4 Screen

The Fiber-Inputs 1-4 screen enables the:

- Inputs and outputs to be configured.
- The configuration mode to be used selected.
- The rules governing configuration use to be specified.



Fiber Inputs 1-4

- **SD/DVB-ASI (270 Mb):**
- **HD (1.5Gb):**
- **3G (3 Gb):**
- **Others:** Check one or more of these checkboxes to determine which types of signal are deemed to be valid for a particular input. If a signal is present on the input but not selected as valid, its status will be **Error**. **Others** is for signals of type other than the above. Also, because the reclockers are on the *outputs*, if an input is detected as present but not routed to an output, its bit rate will be unknown and its status would be **Error** unless this box was checked.
- **Reclock Bypass:** Check this to bypass the reclocker, which is on the output signal.
- The **Channel Ident**, **I/P Name**, receiver **SFP Status** (relating to product SPF fit), **I/P State**, **I/P Rate**, **Rx Power** (value and alarm status) are shown for each channel.

Config 1 and Config 2

Use the radio buttons to specify the **Fiber** input for each of the four **SDI** outputs.

Select **Mute On Inp Err** to apply a mute to the output if there is no valid signal on its input as defined by the checkboxes; includes signal lost. Select **Mute** to manually apply a mute to the output.

Swap Config 1 <> 2

Click **Swap Config** to swap the Config 1 setup with the Config 2 setup.

Mode

These controls specify which configuration is to be used, or whether the configuration choice should be made by the rules configured in the **Rules** section.

Primary & Secondary Inputs

Use the radio buttons to select which input channels are used in the **Rules** section.

Rules

These controls specify which configuration is to be used if the **Use Rules** option is selected in the Mode section. The option enables the configuration to be switched automatically if an input fails or changes to an inappropriate rate.

- **Config 1 On Primary Input OK:** this selection will use Config 1 if the Primary Input is receiving a valid input signal.
- **Config 2 On Primary Input Err:** this selection will switch to Config 2 if the Primary Input 1 is not receiving a valid input signal.
- **Config 1 On Secondary Input Err:** this selection will switch to Config 1 if the Secondary Input is not receiving a valid input signal.

Primary Input Delay for Rules

- **OK Timer:** this specifies the time that the Primary Input must be receiving a valid signal in order to be considered 'OK' by any rules. Range is 0-5 s in steps of 0.1 s, default = 0.5 s.
- **Err Timer:** this specifies the time that Primary Input must be receiving an invalid (or lost) signal in order to be considered in error by any rules. Range is 0-5 s in steps of 0.1 s, default = 0.5 s.

Secondary Input Delay for Rules

- **Err Timer:** this specifies the time that the Secondary Input must be receiving an invalid (or lost) signal in order to be considered in error by any rules. Range is 0-5 s in steps of 0.1 s, default = 0.5 s.

NOTE: Because the reclockers that measure the rate of the signals are on the *outputs* rather than the *inputs* of the routing cross-points, an input must be routed in order for its rate to be determined. Therefore, depending on which Rules are selected, the Primary and/or the Secondary input channels have to be routed in one or both of the two configurations in order for the rule to work...

- **Config 1 On Primary Input OK:** Because this is a rule for switching from Config 2 back to Config 1, the Primary must be routed in Config 2.
- **Config 2 On Primary Input Err:** Because this is a rule for switching from Config 1 to Config 2, the Primary must be routed in Config 1.
- **Config 1 On Secondary Input Err:** Because this is a rule for switching back from Config 2 back to Config 1, the Secondary must be routed in Config 2. Also, to prevent the configuration switching backwards and forwards between configurations, it must also be routed in Config 1.

Fiber-Inputs 5-8 Screen

The Fiber-Inputs 5-8 screen enables the:

- Inputs and outputs to be configured.
- The configuration mode to be used selected.
- The rules governing configuration use to be specified.

Fiber Inputs 5-8

- **SD/DVB-ASI (270 Mb):**
- **HD (1.5Gb):**
- **3G (3 Gb):**
- **Others:** Check one or more of these checkboxes to determine which types of signal are deemed to be valid for a particular input. If a signal is present on the input but not selected as valid, its status will be **Error**. **Others** is for signals of type other than the above. Also, because the reclockers are on the *outputs*, if an input is detected as present but not routed to an output, its bit rate will be unknown and its status would be **Error** unless
- **Reclock Bypass:** Check this to bypass the reclocker, which is on the output signal.
- The **Channel Ident**, **I/P Name**, receiver **SFP Status** (relating to product SPF fit), **I/P State**, **I/P Rate**, **Rx Power** (value and alarm status) are shown for each channel.

Config 1 and Config 2

Use the radio buttons to specify the **Fiber** input for each of the four **SDI** outputs.

Select **Mute On Inp Err** to apply a mute to the output if there is no valid signal on its input as defined by the checkboxes; includes signal lost. Select **Mute** to manually apply a mute to the output.

Swap Config 1 <> 2

Click **Swap Config** to swap the Config 1 setup with the Config 2 setup.

Mode

These controls specify which configuration is to be used, or whether the configuration choice should be made by the rules configured in the Rules section.

Primary & Secondary Inputs

Use the radio buttons to select which input channels are used in the Rules section.

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These controls specify which configuration is to be used if the **Use Rules** option is selected in the Mode section. The option enables the configuration to be switched automatically if an input fails or changes to an inappropriate rate.

- **Config 1 On Primary Input OK:** this selection will use Config 1 if the Primary Input is receiving a valid input signal.
- **Config 2 On Primary Input Err:** this selection will switch to Config 2 if the Primary Input 1 is not receiving a valid input signal.
- **Config 1 On Secondary Input Err:** this selection will switch to Config 1 if the Secondary Input is not receiving a valid input signal.

Primary Input Delay for Rules

- **OK Timer:** this specifies the time that the Primary Input must be receiving a valid signal in order to be considered 'OK' by any rules. Range is 0-5 s in steps of 0.1 s, default = 0.5 s.
- **Err Timer:** this specifies the time that Primary Input must be receiving an invalid (or lost) signal in order to be considered in error by any rules. Range is 0-5 s in steps of 0.1 s, default = 0.5 s.

Secondary Input Delay for Rules

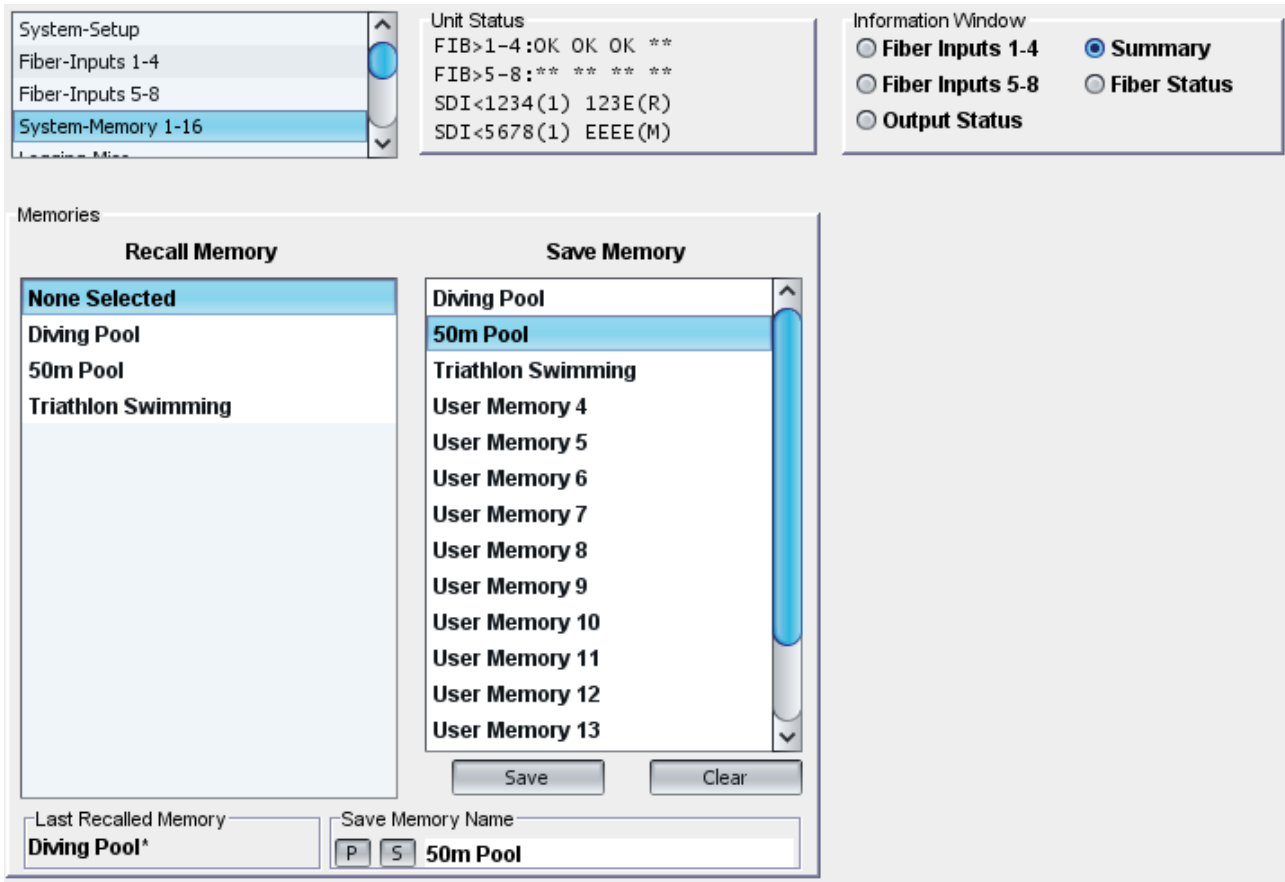
- **Err Timer:** this specifies the time that the Secondary Input must be receiving an invalid (or lost) signal in order to be considered in error by any rules. Range is 0-5 s in steps of 0.1 s, default = 0.5 s.

NOTE: Because the reclockers that measure the rate of the signals are on the *outputs* rather than the *inputs* of the routing cross-points, an input must be routed in order for its rate to be determined. Therefore, depending on which Rules are selected, the Primary and/or the Secondary input channels have to be routed in one or both of the two configurations in order for the rule to work...

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- **Config 2 On Primary Input Err:** Because this is a rule for switching from Config 1 to Config 2, the Primary must be routed in Config 1.
- **Config 1 On Secondary Input Err:** Because this is a rule for switching back from Config 2 back to Config 1, the Secondary must be routed in Config 2. Also, to prevent the configuration switching backwards and forwards between configurations, it must also be routed in Config 1.

System-Memory 1-16 Screen

Use the Memory function to save up to 16 setups to be recalled later. Default memory names can be changed to provide more meaningful descriptions.



To save settings:

- In the **Save Memory** column, select a memory location, and then click **Save**. The current settings are saved and the memory appears in the **Recall Memory** column.

To change a memory name:

- In the **Save Memory Name** field, type the new memory name, and then click **S**. To return the memory to its default value, click the preset button (**P**).

Use the **Recall Memory** function to recall the settings saved in a memory location. **Last Recalled Memory** displays the most recently recalled memory. If a control is changed after a setup has been recalled, **Last Recalled Memory** will display an asterisk (*) beside the memory name.

To recall a memory:

- In the **Recall Memory** column, select the memory to recall. The recalled settings will be applied and the memory name will appear in the **Last Recalled Memory** section.

Logging

Logged parameters are made available to logging devices connected to the RollCall Network. They are also displayed on a number of RollCall Screens where they can selectively be switched off to prevent them being logged externally.

- Fiber-Inputs 1-4
- Fiber-Inputs 5-8
- System-Memory 1-16
- Logging-Misc

Unit Status

FIB>1-4:OK OK OK **

FIB>5-8:** ** ** *

SDI<1234(1) 123E(R)

SDI<5678(1) EEEE(M)

Information Window

Fiber Inputs 1-4 **Summary**

Fiber Inputs 5-8 Fiber Status

Output Status

Logging Misc

Log Enable	Log Field	Log Value
	SN=	S12345678
<input checked="" type="checkbox"/> OS Version	OS_VERSION=	V115 Release
<input checked="" type="checkbox"/> Build No.	BUILD_NUMBER=	0003304868
<input checked="" type="checkbox"/> Hardware Ver.	HARDWARE_VERSION=	RKADM1Y
<input checked="" type="checkbox"/> Firmware Ver.	FIRMWARE_VERSION=	0001.01.0001.01
<input checked="" type="checkbox"/> Rear ID	REAR_ID=	5
<input checked="" type="checkbox"/> Rear Status	REAR_STATUS=	OK
<input checked="" type="checkbox"/> Slot Width	SLOT_WIDTH=	1
<input checked="" type="checkbox"/> Slot Start	SLOT_START=	12
<input checked="" type="checkbox"/> IO Mod 1 ID	IOMOD1_ID=	2:RKIOM8V4F
<input checked="" type="checkbox"/> IO Mod 2 ID	IOMOD2_ID=	0:None fitted
<input checked="" type="checkbox"/> Proc Mod ID	PROCMOD_ID=	SAACS RKPRMLED1Y
<input checked="" type="checkbox"/> Up Time	UPTIME=	000:00:12:00
<input checked="" type="checkbox"/> Licensed Options	LICENSED_OPTIONS=	SDHD;3G

Fiber-Inputs 1-4

Fiber-Inputs 5-8

System-Memory 1-16

Logging-Misc

Logging-SDI 1-4

Unit Status

FIB>1-4:OK OK OK **

FIB>5-8:** ** ** *

SDI<1234(1) 123E(R)

SDI<5678(1) EEEE(M)

Information Window

Fiber Inputs 1-4

Summary

Fiber Inputs 5-8

Fiber Status

Output Status

Logging Control

Log Enable	Log Field	Log Value
Logging Config		
<input checked="" type="checkbox"/> Config 1-4 In Use	CONFIG_1_4_INUSE=	1
Logging SDI 1		
<input checked="" type="checkbox"/> Input Ident	INPUT_1_IDENT=	FIBER IN 1
<input checked="" type="checkbox"/> Input Name	INPUT_1_NAME=	CHANNEL 1
<input checked="" type="checkbox"/> Input Type	INPUT_1_TYPE=	SD/HD/3G SDI
<input checked="" type="checkbox"/> Input State	INPUT_1_STATE=	OK
<input checked="" type="checkbox"/> Input SDI Bitrate	INPUT_1_SDIRATE=	1.5Gb/s
Logging SDI 2		
<input checked="" type="checkbox"/> Input Ident	INPUT_2_IDENT=	FIBER IN 2
<input checked="" type="checkbox"/> Input Name	INPUT_2_NAME=	CHANNEL 2
<input checked="" type="checkbox"/> Input Type	INPUT_2_TYPE=	SD/HD/3G SDI
<input checked="" type="checkbox"/> Input State	INPUT_2_STATE=	OK
<input checked="" type="checkbox"/> Input SDI Bitrate	INPUT_2_SDIRATE=	3.0Gb/s
Logging SDI 3		
<input checked="" type="checkbox"/> Input Ident	INPUT_3_IDENT=	FIBER IN 3
<input checked="" type="checkbox"/> Input Name	INPUT_3_NAME=	CHANNEL 3
<input checked="" type="checkbox"/> Input Type	INPUT_3_TYPE=	SD/HD/3G SDI
<input type="checkbox"/> Input State	INPUT_3_STATE=	OK
<input checked="" type="checkbox"/> Input SDI Bitrate	INPUT_3_SDIRATE=	270Mb/s
Logging SDI 4		
<input checked="" type="checkbox"/> Input Ident	INPUT_4_IDENT=	FIBER IN 4
<input checked="" type="checkbox"/> Input Name	INPUT_4_NAME=	CHANNEL 4
<input checked="" type="checkbox"/> Input Type	INPUT_4_TYPE=	SD/HD/3G SDI
<input checked="" type="checkbox"/> Input State	INPUT_4_STATE=	FAIL:Lost
<input checked="" type="checkbox"/> Input SDI Bitrate	INPUT_4_SDIRATE=	UNKNOWN

<ul style="list-style-type: none"> System-Memory 1-16 Logging-Misc Logging-SDI 1-4 <li style="background-color: #e0f0ff;">Logging-SDI 5-8 	<p>Unit Status</p> <p>FIB>1-4:OK OK OK **</p> <p>FIB>5-8:** ** ** *</p> <p>SDI<1234(1) 123E(R)</p> <p>SDI<5678(1) EEEE(M)</p>	<p>Information Window</p> <p><input type="radio"/> Fiber Inputs 1-4</p> <p><input type="radio"/> Fiber Inputs 5-8</p> <p><input type="radio"/> Output Status</p> <p><input checked="" type="radio"/> Summary</p> <p><input type="radio"/> Fiber Status</p>
---	---	---

Log Enable	Log Field	Log Value
Logging Control		
Logging Config		
<input checked="" type="checkbox"/> Config 5-8 In Use	CONFIG_5_8_INUSE=	1
Logging SDI 5		
<input checked="" type="checkbox"/> Input Ident	INPUT_5_IDENT=	FIBER IN 5
<input checked="" type="checkbox"/> Input Name	INPUT_5_NAME=	CHANNEL 5
<input checked="" type="checkbox"/> Input Type	INPUT_5_TYPE=	SD/HD/3G SDI
<input checked="" type="checkbox"/> Input State	INPUT_5_STATE=	FAIL:Lost
<input checked="" type="checkbox"/> Input SDI Bitrate	INPUT_5_SDIRATE=	UNKNOWN
Logging SDI 6		
<input checked="" type="checkbox"/> Input Ident	INPUT_6_IDENT=	FIBER IN 6
<input checked="" type="checkbox"/> Input Name	INPUT_6_NAME=	CHANNEL 6
<input checked="" type="checkbox"/> Input Type	INPUT_6_TYPE=	SD/HD/3G SDI
<input checked="" type="checkbox"/> Input State	INPUT_6_STATE=	FAIL:Lost
<input checked="" type="checkbox"/> Input SDI Bitrate	INPUT_6_SDIRATE=	UNKNOWN
Logging SDI 7		
<input checked="" type="checkbox"/> Input Ident	INPUT_7_IDENT=	FIBER IN 7
<input checked="" type="checkbox"/> Input Name	INPUT_7_NAME=	CHANNEL 7
<input checked="" type="checkbox"/> Input Type	INPUT_7_TYPE=	SD/HD/3G SDI
<input checked="" type="checkbox"/> Input State	INPUT_7_STATE=	FAIL:Lost
<input checked="" type="checkbox"/> Input SDI Bitrate	INPUT_7_SDIRATE=	UNKNOWN
Logging SDI 8		
<input checked="" type="checkbox"/> Input Ident	INPUT_8_IDENT=	FIBER IN 8
<input checked="" type="checkbox"/> Input Name	INPUT_8_NAME=	CHANNEL 8
<input checked="" type="checkbox"/> Input Type	INPUT_8_TYPE=	SD/HD/3G SDI
<input checked="" type="checkbox"/> Input State	INPUT_8_STATE=	FAIL:Lost
<input checked="" type="checkbox"/> Input SDI Bitrate	INPUT_8_SDIRATE=	UNKNOWN

Logging-SDI 1-4

Logging-SDI 5-8

Logging-Fiber Rx 1-4

Logging-Fiber Rx 5-8

Custom BallTrack

Unit Status

FIB>1-4:OK OK OK **

FIB>5-8:** ** ** *

SDI<1234(1) 123E(R)

SDI<5678(1) EEEE(M)

Information Window

Fiber Inputs 1-4

Summary

Fiber Inputs 5-8

Fiber Status

Output Status

Logging Control

Log Enable	Log Field	Log Value
Logging Fiber Rx 1		
<input checked="" type="checkbox"/> Rx Power State	INPUT_1_RX_POWER_STATE=	OK
<input checked="" type="checkbox"/> Rx Power	INPUT_1_RX_POWER=	-0.9dBm
<input checked="" type="checkbox"/> Rx SFP Status	INPUT_1_SFP=	OK
Logging Fiber Rx 2		
<input checked="" type="checkbox"/> Rx Power State	INPUT_2_RX_POWER_STATE=	OK
<input checked="" type="checkbox"/> Rx Power	INPUT_2_RX_POWER=	-1.3dBm
<input checked="" type="checkbox"/> Rx SFP Status	INPUT_2_SFP=	OK
Logging Fiber Rx 3		
<input checked="" type="checkbox"/> Rx Power State	INPUT_3_RX_POWER_STATE=	OK
<input checked="" type="checkbox"/> Rx Power	INPUT_3_RX_POWER=	-1.4dBm
<input checked="" type="checkbox"/> Rx SFP Status	INPUT_3_SFP=	OK
Logging Fiber Rx 4		
<input checked="" type="checkbox"/> Rx Power State	INPUT_4_RX_POWER_STATE=	FAIL:LOW
<input checked="" type="checkbox"/> Rx Power	INPUT_4_RX_POWER=	< -40.0dBm
<input checked="" type="checkbox"/> Rx SFP Status	INPUT_4_SFP=	OK

Logging-misc

Logging-SDI 1-4

Logging-SDI 5-8

Logging-Fiber Rx 1-4

Logging-Fiber Rx 5-8

Unit Status

FIB>1-4:OK OK OK **

FIB>5-8:** ** ** *

SDI<1234(1) 123E(R)

SDI<5678(1) EEEE(M)

Information Window

Fiber Inputs 1-4

Summary

Fiber Inputs 5-8

Fiber Status

Output Status

Logging Control

Log Enable	Log Field	Log Value
Logging Fiber Rx 5		
<input checked="" type="checkbox"/> Rx Power State	INPUT_5_RX_POWER_STATE=	FAIL:LOW
<input checked="" type="checkbox"/> Rx Power	INPUT_5_RX_POWER=	< -40.0dBm
<input checked="" type="checkbox"/> Rx SFP Status	INPUT_5_SFP=	OK
Logging Fiber Rx 6		
<input checked="" type="checkbox"/> Rx Power State	INPUT_6_RX_POWER_STATE=	FAIL:LOW
<input checked="" type="checkbox"/> Rx Power	INPUT_6_RX_POWER=	-37.0dBm
<input checked="" type="checkbox"/> Rx SFP Status	INPUT_6_SFP=	OK
Logging Fiber Rx 7		
<input checked="" type="checkbox"/> Rx Power State	INPUT_7_RX_POWER_STATE=	FAIL:LOW
<input checked="" type="checkbox"/> Rx Power	INPUT_7_RX_POWER=	-37.0dBm
<input checked="" type="checkbox"/> Rx SFP Status	INPUT_7_SFP=	OK
Logging Fiber Rx 8		
<input checked="" type="checkbox"/> Rx Power State	INPUT_8_RX_POWER_STATE=	FAIL:LOW
<input checked="" type="checkbox"/> Rx Power	INPUT_8_RX_POWER=	< -40.0dBm
<input checked="" type="checkbox"/> Rx SFP Status	INPUT_8_SFP=	OK

Each logging screen comprises three columns:

- **Log Enable:** Select the check boxes that correspond to the parameters for which log information should be collected.
- **Log Field:** Displays the name of the logging field.
- **Log Value:** Displays the current log value.

RollCall Log Fields

Log Field	Log Description	Log Value (example)
SN=	<Serial number>	S13400781
OS_VERSION=	<Operating system version>	V115 Release
BUILD_NUMBER=	<Software build number>	0003304836
HARDWARE_VERSION=	<Hardware version number>	RKADM1Y
FIRMWARE_VERSION=	<Firmware version number>	0001.01.0001.01
REAR_ID=	<Rear panel type>	5
REAR_STATUS=	<Validity of rear panel type>	OK
		WARN:Mismatch
SLOT_WIDTH=	<Width of rear panel>	1
SLOT_START=	<Module slot number>	12
IOMOD1_ID=	<1 st I/O module type>	1:RKIOM4V2F
IOMOD2_ID=	<2 nd I/O module type>	0:None fitted
UPTIME=	<Time since last restart in days:hrs:mins:sec>	001:23:35:00
LICENSED_OPTIONS=	<License file information>	SDHD
		SDHD:3G
		FAIL:Bad File
		WARN:NONE
		FAIL:NoFile
CONFIG_1_4_INUSE=	<Routing configuration for SDI Inputs 1-4>	Config(1)
		Config (2)
CONFIG_5_8_INUSE=	<Routing configuration for Fiber Inputs 1-4>	Config (1)
		Config (2)
INPUT_1_IDENT	<Fixed input identifier>	FIBER IN 1
...
INPUT_8_IDENT	<Fixed input identifier>	FIBER IN 8
INPUT_1_NAME	<Editable input name>	CHANNEL 1 (default)
...
INPUT_8_NAME	<Editable input name>	CHANNEL 8 (default)
INPUT_1_TYPE	<Input type>	SD/HD/3G SDI
...
INPUT_8_TYPE	<Input type>	SD/HD/3G SDI
INPUT_1_STATE	<Input state>	OK
		FAIL:Lost
		WARN:Error
		WARN:Unrouted
		FAIL:Lost
		WARN:Error
		<blank> (SFP fit error)
...
INPUT_8_STATE	<Input state>	
INPUT_1_SDIRATE	<Input bit rate>	UNKNOWN
		270Mb/s
		1.5Gb/s
		3.0Gb/s
...
INPUT_8_SDIRATE	<Input bit rate>	
INPUT_1_SFP	<SFP fit status for Fiber I/P 1>	OK
		<blank> No SFP Required (TR99)
		ERR:Tx
		ERR:No Rx
		ERR:Extra Rx (RX99)
		WARN:Elec Rx
		ERR:UNKNOWN
...
INPUT_8_SFP	<SFP fit status for Fiber I/P 8>	

INPUT_1_RX_POWER_STATE	<Rx SFP 1 power alarm/warning state>	OK
		WARN:LOW
		FAIL:LOW
		WARN:HI
		FAIL:HI
		<blank> (SFP fit error)
...	...	
INPUT_8_RX_POWER_STATE	<Rx SFP 8 power alarm/warning state>	
INPUT_1_RX_POWER	<Rx SFP 1 power>	-4.1dBm
...
INPUT_8_RX_POWER	<Rx SFP 8 power>	-4.1dBm

System-RollTrack Screen

The RollTrack settings allow information to be sent, by means of the RollCall network, to other compatible units on the same network.

Use the settings on the **RollTrack** screen to:

- Enable or disable the RollTrack functions.
- Configure up to 32 RollTrack outputs.
- Specify the conditions that trigger RollTrack data transmission.
- Set RollTrack destinations.
- Specify the RollTrack commands to be sent.

RollTrack Sources

The RollTrack Source specifies the source of the information that triggers the transmission of data.

RollTrack Addresses

The full RollTrack Address comprises four sets of numbers. For example, 0000:10:01*99.

The first set, 0000 in the example, is the network segment code number.

The second set, 10 in the example, identifies the (enclosure/mainframe) unit.

The third set, 01 in the example, identifies the slot number in the unit.

The fourth set, 99 in the example, is a user-configured number that uniquely identifies the destination unit in a multi-unit system. This ensures that only the correct unit responds to commands. If left at 00, an incorrectly fitted unit may respond inappropriately.

RollTrack Commands

Each RollTrack command comprises two sets of numbers, for example, 33039:3. The first set, 33039 in the example, is the RollTrack command number, which identifies the command.

The second set, 3 in the example, is the value that is sent with the command.

Using RollTracks

To enable or disable RollTrack functions:

- To disable RollTrack functions, select the Disable All check box.
- To enable the RollTrack functions, clear the Disable All check box.

To configure a RollTrack action:

1. Select the **Index** number. This identifies the RollTrack action being configured. Up to 32 RollTrack actions can be created.
2. From the **Source** list, select the source of the information that will trigger RollTrack transmission.
3. Enter the RollTrack **Address** and click **S**. To return the address to its default value, click the preset button (**P**).
4. Enter the RollTrack **Command** and click **S**. To return the value to its default, click the preset button (**P**).

Viewing RollTrack Information

RollTrack Sending and **RollTrack Status** display information about the status of RollTracks.

RollTrack Sending displays the information when the unit is actively sending a RollTrack command:

- **No**: The command is not being sent.
- **Yes**: The command is being sent.

RollTrack Status displays the status of the currently selected RollTrack Index:

- **OK**: RollTrack message sent and received OK.
- **Unknown**: RollTrack message has been sent but has not yet completed.
- **Timeout**: RollTrack message sent, but acknowledgement not received. This could be because the destination unit is not at the specified location.
- **Bad**: RollTrack message has not been sent correctly, acknowledged at the destination unit. This could be because the destination unit is not of the type specified.
- **Disabled**: RollTrack sending is disabled.