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REVISION HISTORY

<u>REVISION</u>	DESCRIPTION	DATE
0.1	Preliminary Version	Oct 08
0.2	Updated menu items	Jan 09
0.3	Updated product name	Feb 09
0.4	Added panel configuration information	Jun 09
1.0	First Release.	Oct 09

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1. OVERVIEW

The 7700R16X16 Series is a small form factor router designed for critical applications where space is limited, whether for existing facilities that have run out of rack space or for trucks and vans. The 7700R16X16 Series uses only 3 slots of a traditional Evertz 7700FR-C Multiframe and has its own integrated controller. This means five 16x16 routers can fit in just 3RU.

The 7700R16X16 Series consists of 16 equalized inputs and 16 reclocked outputs. Each input and each output is interfaced through a common crosspoint that is controlled by the main processing unit.

The processing unit interfaces the various control options such as Q-Link, Ethernet and serial with the crosspoint, allowing full control of the routing resources. The processing unit also provides a video reference to the crosspoint to maintain clean switching on the switch line.

Features:

- Hot-swappable, front-loading modular 16x16 routing
- Full support for SMPTE 292M (1.5 Gb/s), SMPTE 259M (270, 360, 143 Mb/s) with all outputs maintaining polarity from input to output
- Features independent isolated outputs to ensure no cross channel loading effects (no need to terminate unused outputs)

Inputs:

- 16 Inputs
- SMPTE 292M (1.5 Gb/s), SMPTE 259M (270 Mb/s, 360 Mb/s, 143 Mb/s)
- Return Loss > 15 dB up to 1.5 Gb/s
- Automatic cable equalization up to 100m at 1.5 Gbs

Outputs:

- 16 re-clocked outputs
- Return loss > 15 dB up to 1.5 Gbs
- Wideband jitter < 0.2 UI





Figure 1-1: 7700R16X16 Series Block Diagram



2. INSTALLATION

The 7700R16X16 Series comes with a companion rear plate that occupies three slots in the frame. For information on inserting the module into the frame see section 3 of the 7700FR chapter.



Figure 2-1: 7700R16X16 Series Rear IO Module

2.1. VIDEO CONNECTIONS

- **INPUTS:** Input DIN connectors 1 to 16 will accept serial digital signals compatible with SMPTE 292M and SMPTE 259M standards.
- **OUTPUTS:** The 16 reclocked DIN connectors are used to route the input video. Inputs can be routed via various control options detailed in section 4.2.

MONITOR OUTPUT: The BNC connector provides a video output that is controlled by one of the control options.



2.2. GENLOCK REFERENCE

REFERENCE: The Reference signal may be NTSC or PAL colour black or tri-level sync. There must be a reference present to ensure the crosspoint changes occur during the field-blanking interval. If the reference is missing then the routing will occur asynchronously. If you experience problems with clean switching then refer to application note AN-0008.

Jumper J13 on the 7700R16X16 Series selects whether the selected reference input is terminated to 75 ohms (default) or to high impedance. The Genlock reference may also be supplied to the 7700R16X16 Series card through the Frame Genlock if the 7700FR-G frame or 7800FR is being utilized.

2.3. Q-LINK CONNECTION

Q-LINK:

The rear of the 7700R16X16 Series has a BNC connector to allow connection to an external Q-Link. Q-Link is a dedicated control system specific to Evertz brand of Quartz products.



Note: Q-Link connection to the 7700R16X16 Series router requires an SC-1000. See section 4.2.2 for more details.

2.3.1. Manual Remote Control - Using Q-Link

All 7700R16X16 Series routers can be connected to other Evertz routers and remote control panels by a single coaxial link called Q-Link. This link uses standard 75Ω video cable daisy-chained from frame to frame and from panel to panel over a maximum cable length of 500m. Each end of the link must be terminated in 75Ω .



Note: The installer must fit a 75Ω terminator at each end of the cable.

This daisy-chain method ensures the best transmission quality of the control signals down the cable. Short cuts that might save cable (i.e. running stubs to some panels) are not recommended as this may, under certain circumstances, cause data errors.

The system can support up to 16 devices. Each unit being connected to the Q-Link has its own address switch, which is set up as part of the system configuration.



2.4. SERIAL CONNECTIONS

S1, S2: The 12-pin terminal strip has two serial ports, S1 and S2. The 7700R16X16 Series supports Quartz (-1) protocol commands over the serial port. For information regarding the Quartz protocol, contact Evertz service.

The pin-out for the serial ports is shown in Table 2-1 below:

RS422 12-pin Terminal Strip					
PIN	PIN SIGNAL PIN SIGNAL				
1	S1 Tx+	2	S1 Rx+		
3	S1 Tx-	4	S1 Rx-		
5	S2 Tx+	6	S2 Rx+		
7	S2 Tx-	8	S2 Rx-		
9	GND	10	GND		
11	GPI	12	GPO		

Table 2-1: RS-422 Pin out

As an option it is possible to convert either of the two serial ports to RS-232 with the following pin-out, as shown in Table 2-2.

RS232 12-pin Terminal Strip					
PIN	PIN SIGNAL PIN SIGNAL				
1	S1 TXD	2	S1 RXD		
3	S1 RTS	4	S1 CTS		
5	S2 TXD	6	S2 RXD		
7	S2 RTS	8	S2 CTS		
9	GND	10	GND		
11	GPI	12	GPO		

Table 2-2: RS-232 Pin out



2.5. ETHERNET CONNECTIONS

ETHERNET: There is one RJ-45 network connector on the rear panel. The RJ-45 connector is an Ethernet port used for monitoring and control of the system, etc. See section 4.2.1 for information on connecting to an Ethernet network. See section 4.1.2 for information on configuring the network address for the router.

2.5.1. Connecting to an Ethernet Network

The 7700R16X16 Series uses 10Base-T (10 Mbps), 100Base-TX (100 Mbps) or Gigabit (1Gbps) twisted pair Ethernet cabling systems. When connecting for 10Base-T systems, category 3, 4, or 5 UTP cable as well as EIA/TIA – 568 100 Ω STP cable may be used. When connecting for 100Base-TX systems, category 5 UTP cable is required. The cable must be "straight-through" with a RJ-45 connector at each end. Establish the network connection by plugging one end of the cable into the RJ-45 receptacle of the 7700R16X16 Series and the other end into a port of the supporting hub.

The straight-through RJ-45 cable can be purchased or can be constructed using the pin-out information in Table 2-3. A colour coded wiring table is provided in Table 2-3 for the current RJ-45 standards (AT&T 258A or EIA/TIA 258B colour coding shown). Also refer to the notes following the table for additional wiring guide information.

	Pin #	Signal	EIA/TIA 568A	AT&T 258A or	10BaseT
Pin				EIA/TIA 568B	or 100BaseT
	1	Transmit +	White/Green	White/Orange	Х
	2	Transmit –	Green/White or White	Orange/White or Orange	Х
Farm Farm Farm Farm Farm Farm Farm	3	Receive +	White/Orange	White/Green	Х
	4	N/A	Blue/White or Blue	Blue/White or Blue	Not used (required)
	5	N/A	White/Blue	White/Blue	Not used (required)
	6	Receive –	Orange/White or Orange	Green/White or Green	Х
	7	N/A	White/Brown	White/Brown	Not used (required)
	8	N/A	Brown/White or Brown	Brown/White or Brown	Not used (required)

Table 2-3: Standard RJ-45 Wiring Colour Codes

Note the following cabling information for this wiring guide:

- Only two pairs of wires are used in the 8-pin RJ-45 connector to carry Ethernet signals.
- Even though pins 4, 5, 7 and 8 are not used, it is mandatory that they be present in the cable.
- 10BaseT and 100BaseT use the same pins (a crossover cable made for one will also work with the other).
- Pairs may be solid colours and not have a stripe.
- Category 5 cable must use Category 5 rated connectors.

The maximum cable run between the router and the supporting hub is 300 ft (90 m). The maximum combined cable run between any two end points (i.e. router and PC/laptop via network hub) is 675 feet (205 m).

Devices on the Ethernet network continually monitor the receive data path for activity as a means of checking that the link is working correctly. When the network is idle, the devices also send a link test signal to one another to verify link integrity.



3. SPECIFICATIONS

3.1. SERIAL VIDEO INPUTS

Standard:	SMPTE 292M, SMPTE 259M
Signal Level:	800mV p-p nominal
Impedance:	75Ω terminating
Return Loss:	15dB (5 - 270MHz)
Cable Equalization:	Belden 1694A 300m @270Mhz
	100m @ 1.5Gb/s
Connectors:	BNC per IEC 61169-8 Annex A

3.2. SERIAL VIDEO OUTPUTS

Standard:	Same as input (Reclocking)
Signal Level:	800mV p-p ± 10%
Impedance:	75Ω terminating
Return Loss:	15dB (5 - 270MHz)
DC Offset:	0 ± 0.5V
Connectors:	BNC per IEC 61169-8 Annex A
Signal Path:	•
Rise/fall Times:	0.6 to 0.9ns
Path Length:	12ns, typical
Output Jitter:	0.2UI p-p with < 250m input cable

3.3. SWITCHING REFERENCE

Reference Inputs:	Analog 625 or 525, Tri-Level
Signal Level:	1V p-p ± 3dB
Impedance:	75Ω
Switching Line:	Lines 6/319 (625)
-	Lines 10/273 (525) Line 7(HD)

3.4. CONTROL

Q-Link to Remote Panels	
Cable Type:	75 Ω video cable
Max Length:	500m
Serial	
Signal:	RS-232/422
Connector:	Terminal block socket
Ethernet:	RJ45



3.5. ELECTRICAL

Voltage:+12VDCPower:TBDEMI/RFI:Complies with FCC regulations for class A devices
Complies with EU EMC directive

3.6. PHYSICAL

7700/7800 frame mounting: Number of Slots: 3



4. OPERATION

4.1. SYSTEM CONFIGURATION

4.1.1. Setting Communication Settings from the Card Edge

A shaft encoder and four digit dot-matrix display allows card edge navigation for a set of menus used to configure the 7700R16X16 Series router. To enter the menu system, rotate the shaft encoder in either direction.

On all menus, there are three selectable items: *View, Set* and *End*. Selecting *View* will display the current value of the item, while *End* will return the display to the main menu. Selecting *Set* will allow the current setting to be changed.

To adjust any parameter, use the shaft encoder to move up or down to the desired parameter and press the shaft encoder. The item will be underlined and flashing indicating that you can now adjust the parameter. Using the shaft encoder, adjust the parameter to its desired value.

When you have stopped at the desired value, press the shaft encoder again. This will update the parameter to the selected value. Continue selecting and adjusting other parameters. Scroll to the *End* option when you have completed your selection.

The following chart provides a brief description of the menus that are accessible through the front panel.

QLAD	Sets the Q-Link address of the device.
IPAD	Sets the IP address of the device.
NETM	Sets the Netmask.
DHCP	Controls the Dynamic Host Configuration Protocol function.



Note: The router must be rebooted in order for network changes to take affect.

4.1.2. Accessing the Configuration and Monitoring Menu

The 7700R16X16 Series router contains a configuration and monitoring menu that allows the user to change some internal settings of the device and also to monitor various components on the router. Before accessing the configuration and monitoring menu, the IP address of the device must be set.

The dot-matrix display on the front will show the default factory setting of the TCP/IP address of the router.



The configuration and monitoring menu can be accessed using the TELNET network protocol. As standard the 7700R16X16 Series uses port 4000 as its server port, which allows control and monitoring to be achieved from a PC using the Telnet function. Using any TELNET client, telnet into the configuration and monitoring menu of the device by typing *telnet* followed by the IP address, and then followed by *4000*. (For example, telnet 192.168.0.0 4000)



Note: Access to the configuration and monitoring menu is done through port 4000.

If there is a problem communicating over Ethernet, then the user should check that there is a network connection to the router from a PC command prompt by typing *ping* followed by the IP address. (For example, ping 192.168.0. 0)

All menu items can be accessed using the number listed beside the menu item. Once in a menu, use the numbers beside the items to set the value. Follow the on screen instructions to set the value of the parameter, save and exit the configuration.

When all desired changes have been made, exit the telnet section by hitting Ctrl-D or closing the telnet session.

4.1.3. Configuration and Monitoring Menu

The following chart provides a brief description of the menus that are accessible through the configuration and monitoring option.

Network Configuration	Configuration of network settings.
Serial Port Setup	Configuration of serial ports.
SNMP Setup	Configuration of Simple Network Management Protocol settings.
Panel Setup	Configuration of Ethernet control panels.
Status Monitoring	Monitoring of crosspoint and signal paths.
Engineering/Debug	Configuration of video signal settings.



4.1.3.1 Configuring Network Settings

The *Network Configuration* menus are used to configure parameters associated with the Ethernet communications of the device. The following chart provides a brief description of the items available in the *Network Configuration* menu.

Set IP Address	Sets the IP Address for the device.
Set Netmask	Sets the Netmask for the device.
Set Gateway	Sets the Gateway for the device.
Set Broadcast Address	Sets the Broadcast Address for the device.
Use DHCP	Sets the Dynamic Host Configuration Protocol mode for the device.
View Live Network Settings	Displays the current network settings of the device.



Note: The router must be rebooted in order for network changes to take affect.

4.1.3.2 Setting the Serial Port Setup

The *Serial Port Setup* menus are used to configure parameters associated with the serial communications of the device. The following chart provides a brief description of the items available in the *Serial Port Setup* menu.

Serial Port 1 Setup

Sets the Baud Rate and Data Format for serial port 1.

Serial Port 2 Setup

Sets the Baud Rate and Data Format for serial port 2.

Show All Setups

Displays the current settings for all serial ports.

Please note that at the time of printing, the data format for both serial ports is not configurable and should be set to *no parity, 8 bits*, and *1 stop bit*. (N81)

4.1.3.3 Setting the SNMP Setup

The *SNMP Setup* menus are used to configure parameters associated with the SNMP communications of the device. The following chart provides a brief description of the items available in the *SNMP Setup* menu.

Set Trap IP Address

Sets the IP addresses that will receive traps from the device.

Remove Trap IP Address

Removes IP addresses of devices receiving traps.



4.1.3.4 Setting the Panel Setup

The *Panel Setup* menus are used to configure parameters associated with the Ethernet panel communications of the device. The following chart provides a brief description of the items available in the *Panel Setup* menu.

Set Panel IP Address	Sets the IP addresses of panels that are able to control the device.
Remove Panel IP Address	Removes IP addresses of panels controlling the device.

4.1.3.5 Setting the Status Monitoring

The *Status Monitoring* menus are used to view parameters associated with the crosspoint and reclockers of the device. The following chart provides a brief description of the items available in the *Status Monitoring* menu.

View Live XPT Status

View Video Signal Information Displays the input that is currently mapped to each of the outputs through the crosspoint.

Displays various information regarding both inputs and outputs, such as locked status, video standard, and reclocker status.

4.1.3.6 Setting the Engineering/Debug

The *Engineering/Debug* menus are used to view and set parameters associated with the frame and video configuration of the device. The following chart provides a brief description of the items available in the *Engineering/Debug* menu.

View / Set Frame Configuration

View / Set Video Signal Configuration Configuration of the Q-Link address, inputs, outputs, level, and Q-Link port.

Configuration of the video input standard, reclockers.



Note: The Engineering/Debug menu contains some controls that are intended for debug purposes. Any item not mentioned in this manual should not be modified under normal circumstances.



4.1.3.6.1 Viewing / Setting the Frame Configuration

The *View / Set Frame Configuration* menus are used to view and set parameters associated with the frame. The following chart provides a brief description of the items available in the *View / Set Frame Configuration* menu.

View Frame Information	Displays Q-Link address, inputs, outputs, level, and Q-Link port.
Set QLink Address	Sets the Q-Link address of the device.
Set Number of Inputs	Sets the number of inputs of the device.
Set Number of Outputs	Sets the number of outputs of the device.
Set Level Number	Sets the level number of the device.
Set Q-Link Port State	Sets the state of the Q-Link Port.

4.1.3.6.2 Viewing / Setting the Video Signal Configuration

The *View / Set Video Signal Configuration* menus are used to view and set parameters associated with the video signals. The following chart provides a brief description of the items available in the *View / Set Video Signal Configuration* menu.

View Video Signal Configuration	Displays input video standard and output cable driver and reclocker status.
Set Video Input Standard	Sets the input video standard of the device.
Set Video Output Reclocker Routing	Sets the state of the reclockers, whether they are enabled or bypassed.



4.2. CONTROL SYSTEMS

The 7700R16X16 Series router is fully compatible with all Quartz router control panels and interfaces, including connectivity to a comprehensive list of third-party control solutions.

The 7700R16X16 Series router can be configured with the following control options: Q-Link, Ethernet, or Serial interfaces. Sections 4.2.1 to 4.2.3 provide more details regarding these options.

4.2.1. Controlling the 7700R16X16 Series Using Ethernet

The 7700R16X16 Series supports Evertz control panels that have an Ethernet connection. The 7700R16X16 Series supports Quartz (-1) protocol commands over the Ethernet port (slave end); therefore, any control device that supports Quartz protocol can control the 7700R16X16 Series via Ethernet.

The 7700R16X16 Series router can also be controlled using direct router controls via the CP2200E or using Ethernet panels that contain their own WinSetup configurations.



Note: Ethernet control access to the 7700R16X16 Series is done through port 2000.

The 7700R16X16 Series router will support up to 10 Ethernet panels at once. To setup the panels, the IP address for each panel must be added to the 7700R16X16 Series so that the 7700R16X16 Series is aware of which panels to communicate with. Section 5.1.1 describes the method used to setup the 7700R16X16 Series for use with Ethernet control panels. Consult the instruction manual for the respective panels to setup their IP address and configuration.



4.2.2. Controlling the 7700R16X16 Series Using Q-Link

The 7700R16X16 Series router supports Evertz control panels that have a Q-Link connection. The Q-Link control requires the use of a Quartz SC-1000 system controller to translate the control commands from the panels to the 7700R16X16 Series and vice versa.

The control cards interface to the external Q-Link connections. The rear Q-Link module has two BNC connectors to allow connection to two terminated Q-Links.



Figure 4-1: Single Q-Link Connection to Multiple Remote Control Panels

The Q-Link is used to connect remote control panels or the SC-1000 system controller as shown in Figure 4-1.

The processor that is currently in control (usually the master) has control of the Q-Link connectors via a control signal passed on the back plane. Q-Link operation requires all Q-Link devices to have a unique one byte Q-Link address.

4.2.3. Controlling the 7700R16X16 Series Using Serial

The rear panel of the 7700R16X16 Series has two separate DB9 female serial connectors. The 7700R16X16 Series supports Quartz (-1) protocol commands over the serial port (slave end). Any control device that supports Quartz protocol can control the 7700R16X16 Series via the serial ports.

For information regarding the Quartz protocol, contact Evertz service. See section 2.4 for a description of the pin outs.



5. CONFIGURATION

5.1. CONFIGURING PANELS FOR USE WITH THE 7700R16X16 SERIES

The 7700R16X16 Series is able to host up to ten Ethernet control panels without the requirement of an external control system. All information regarding names is stored on the panels and not the 7700R16X16 Series. The following section details the steps required to setup the 7700R16X16 Series to communicate with Ethernet control panels.

5.1.1. Using WinSetup to Create Panel Configurations

WinSetup is used to configure the Ethernet panels. WinSetup is supplied with a comprehensive help system that can be accessed by pressing **F1** (function key F1) from any screen. The help system can also be entered from the *Help*, *Index* menu.

The following dialog box, as shown in Figure 5-1 of the Winsetup main screen. Any part of the system can be configured from the menu at the top of the screen. The grey bars above each main section and the line items within the main sections can both be used for quick access to specific items.

🗢 7700R16X16-HD.qrs - Quartz System Co	nfigurati 🔳 🗖 🔀
File Level Frame Sources Destinations Panels	System Options Help
System :	
Version : 1.0	
LEVELS	
VIDEO	o
	Lomms Window
	DOWNLOAD
FRAMES	
QT-SD-1616 Serial Video	
<u>,</u>	
SOURCES DE	STINATIONS
PANELS	
CP-1000E	
<u> </u>	
SPECIAL INTERFACES	
<u> </u>	
Quartz	
2000	

Figure 5-1: WinSetup Main Screen

When generating a new system configuration some of the menus and functions are greyed out (not available). This is deliberate to ensure the proper sequence of steps is followed. Carry out the following functions to configure the system.

1. **Levels:** The 7700R16X16 Series only supports a single level of control.



- 2. **Frames:** Enter the frames dialog and click the **New** button. This will show all routers listed by part number. Select the QT-SD-1616 part number for the 7700R16X16 Series.
- 3. **Sources:** Enter the sources dialog and click the **Add** button to fill the name table with SRC-1 to SRC-16. The names within this table will be the ones used on the panels. Any changes here will be reflected on all of the panels.
- 4. **Destinations:** Enter the destination dialog and set up the destination names in the same way as used for the source names.
- 5. **Panels:** Enter the panels dialog and click the **New** button. This will show all panels listed by part number Select the part number that matches the part number on the panel's serial number label. A new dialog will appear displaying a graphic of the panel as shown in Figure 5-2.

ay Definition LCD Properties		
Name CP-1000E Q-link Address 10 Hex. Description 16 LCD Button Panel	Networking Use Ethernet instead of Qlink IP Address 192.168.0.1 Preview Bus Type None Value	Default Parameters Sub-Panel Sub-panel 1 Destination DST-1 Levels VIDED
Configure Primary Menu 01: Menu 1 Configure Secondary Menu 01: Menu 1	▼ Top Clear Menu N	ames
SRC SRC <td>SRC SRC SRC SRC SRC SRC 11 12 13</td> <td>SRC SRC SRC 14 15 16</td>	SRC SRC SRC SRC SRC SRC 11 12 13	SRC SRC SRC 14 15 16

Figure 5-2: WinSetup Panel Configuration Screen

Each button can be programmed by selecting the button and then editing the functions in the Key section of the dialog. Each panel should also be given a name for later identification. Under the *Networking* section, enter the IP address of the panel. The default parameters control how the panel will function at power up. In this example the panel will always control DST-1 to start with. Now add any further panels that the system will need.



5.1.2. Exporting Panel Configurations to Panels

Once all desired panels have been added, select the Panel button from the main screen in WinSetup and the following prompt will appear as shown below.

System Panel	S		
Part Number CP-1000E	Name CP-1000E	Address 0x10	New Edit Copy Increment default destination Delete FTP Export Export Import
	1 Panels Defined		ОК

Figure 5-3: WinSetup System Screen

Select each panel individually and click the **FTP export** button. This will export the configuration for the selected panel to a bin file. A bin file should be generated for each panel in the system.

To upload the bin file to each respective panel, use the following steps:

- 1. Ftp into the panel, by typing the command ftp 192.168.0.1 in a command window.
- 2. Press enter twice for login and password (both the login and password should be left blank).
- 3. Type the command 'cd config' to change to the config directory.
- 4. Type the command '**put**' then leave a space and drag the bin file that you created into the command window.
- 5. Type 'bye' to exit from the session.

The configuration that was created along with the source and destination names is now stored on the panel and ready to communicate with the 7700R16X16 Series.

5.1.3. Adding Panels to the 7700R16X16 Series

Once the configuration has been sent to each panel, the 7700R16X16 Series must be setup to communicate with the panels. Follow the instructions outlined below to set up the system:

- 1. Telnet into the 7700R16X16 Series configuration menu as detailed in section 4.1.2.
- 2. Navigate to the Panel Setup menu.
- 3. Go to the Set Panel IP address menu.
- 4. Enter the IP address of the panel.
- 5. Select Save and Exit.



6. *VISTALINK*® REMOTE MONITORING/CONTROL

6.1. WHAT IS VISTALINK®?

*Vista*LINK[®] is Evertz's remote monitoring and configuration platform which operates over an Ethernet network using Simple Network Management Protocol (SNMP). SNMP is a standard computer network protocol that enables different devices sharing the same network to communicate with each other. *Vista*LINK[®] provides centralized alarm management, which monitors, reports, and logs all incoming alarm events and dispatches alerts to all the VLPro Clients connected to the server. Card configuration through *Vista*LINK[®] PRO can be performed on an individual or multi-card basis using simple copy and paste routines, which reduces the time to configure each module separately. Finally, *Vista*LINK[®] enables the user to configure devices in the network from a central station and receive feedback that the configuration has been carried out.

There are 3 components of SNMP:

- 1. A SNMP manager, also known as a Network Management System (NMS), is a computer running special software that communicates with the devices in the network. Evertz *Vista*LINK_® Pro Manager graphical user interface (GUI), third party or custom manager software may be used to monitor and control Evertz *Vista*LINK_® enabled fiber optic products.
- 2. Managed devices (such as 7700R16X16 Series), each with a unique address (OID), communicate with the NMS through an SNMP Agent.
- 3. A virtual database, known as the Management Information Base (MIB) lists all the variables being monitored, which both the Manager and Agent understand. Please contact Evertz for further information about obtaining a copy of the MIB for interfacing to a third party Manager/NMS.



6.2. VISTALINK® MONITORED PARAMETERS

The following parameters can be remotely monitored through the VistaLINK® interface.

Parameter	Description
Card Type	Indicates the model of the device.
Q-Link Address	Indicates the Q-Link address of the device.
Number of Video Inputs	Indicates the number of video inputs of the device.
Number of Video Outputs	Indicates the number of video outputs of the device.
Reference Detected	Indicates the presence of a valid video reference signal.
Reference Standard	Indicates the video standard of the reference signal.
Serial Port 1 Standard	Indicates the configuration of serial port 1.
Serial Port 2 Standard	Indicates the configuration of serial port 2.
Input Status	Indicates the status of the video input on input BNCs 1 to 16.

Table 6-1: VistaLINK_® Monitored Parameters

6.3. VISTALINK® CONTROLLED PARAMETERS

Parameter	Description
Video Input Standard	Sets the video input standard for the device.
Output Control	Enable or disable the video output on output BNCs 1 to 16.
Reclocker Control	Enable or disable the reclocker on output BNCs 1 to 16.
Cross-point Control	Sets the input routed to output BNCs 1 to 16.

Table 6-2: VistaLINK® Controlled Parameters

6.4. VISTALINK® TRAPS

Parameter	Description
Become Active	Raises a trap when the router comes online.

Table 6-3: *Vista*LINK_® Traps Parameters