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REVISION HISTORY

REVISION	DESCRIPTION	DATE
1.0	Preliminary	Jan 05
1.1	Standardized Format	Feb 05
1.2	Back plate diagram added	Mar 05
1.3	Minor Corrections	Feb 07
1.4	Standardized Format	Mar 07
1.5	Updated card edge drawing	Nov 07
1.6	Added features, block diagram, technical specs & *Vista*LINK® section.	Nov 08
1.7	Removed references to GPI, GPO, LTC specifications	Apr 09

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1. OVERVIEW

The 7700PTX Universal Protocol Translator module provides an interface between third-party and Evertz equipment. The 7700PTX communicates with third-party equipment either via one of four serial ports or via a built in Ethernet port. These ports can provide bi-directional protocol support.

Function:
The function of the 7700PTX generally falls into one of 4 categories:

1. **Third-Party Router Control:** In this mode the 7700PTX affords *Vista*LINK® the ability to control and monitor third-party routers. The 7700PTX can convey UMD information to Evertz monitoring equipment.

2. **Third-Party UMD Interface:** In this mode the 7700PTX translates third-party UMD protocol data into a format suitable for Evertz monitoring equipment.

3. **Third-Party Switcher Interface:** In this mode the 7700PTX extracts tally information from third-party switchers and translates and conveys that tally information to Evertz monitoring equipment.

4. **Third-Party Device Control:** In this mode the 7700PTX allows *Vista*LINK® to control third-party devices such as satellite controllers.

Features:
- 4 serial ports RS232/422 selectable
- Modular, conveniently fits into 7700FR-C 3RU frame
- Frame status trigger
- *Vista*LINK® - capable for remote monitoring and control via SNMP (using *Vista*LINK® PRO)

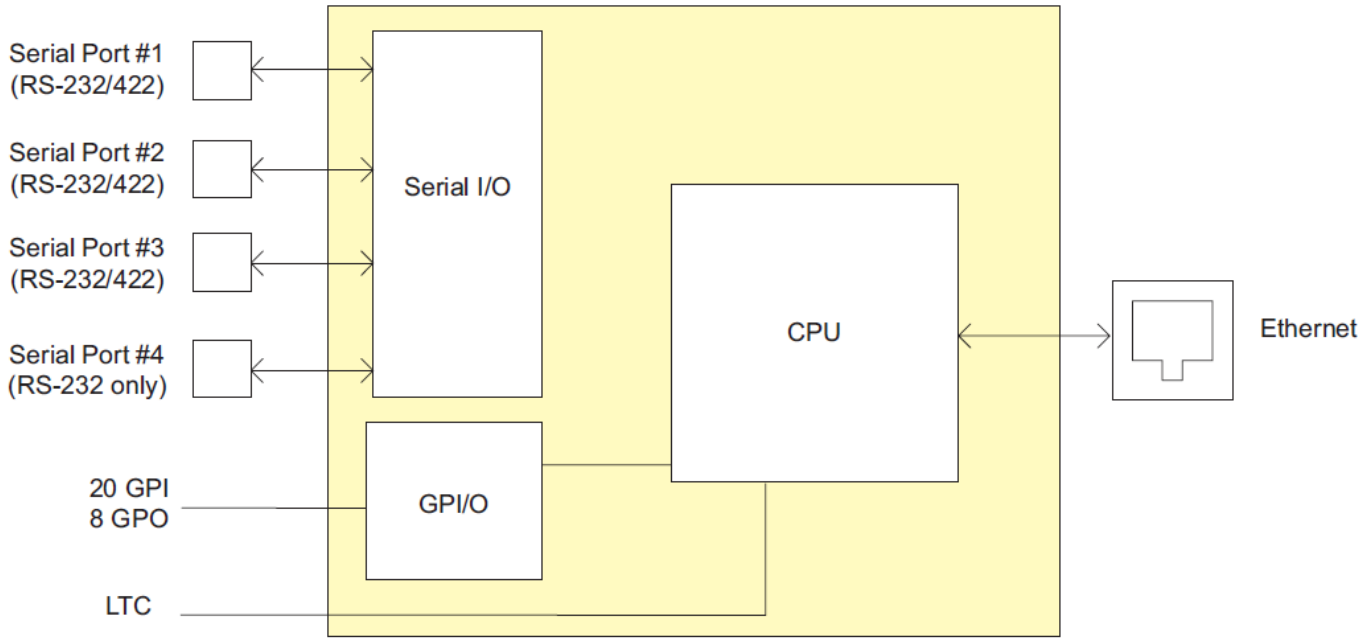

Figure 1-1: PTX Block Diagram

The 7700PTX-XY is a XY Pass-Through protocol translator that can operate on a per-serial port basis, in one of two modes:

1. Router Control
2. NNS

1.1. ROUTER CONTROL MODE

In this mode the 7700PTX-XY is designed to control and/or monitor a router via the XY Pass-Through protocol. The 7700PTX-XY can operate in either or both of two sub-modes:

1. **A control mode:** *Vista*LINK® Pro performs router cross-point switches.

2. **A monitor mode:** The 7700PTX-XY monitors the router for cross point changes and transmits label or description information to a UMD (Under Monitor Display).

When controlling a router, the 7700PTX-XY translates SNMP (Simple Network Management Protocol) application commands into XY Pass-Through protocol packets. The translated packets are then transmitted to one of up to four Quartz routers. These routers are connected serially to the 7700PTX-XY.

Figure 1-2 shows a typical 7700PTX-XY setup.

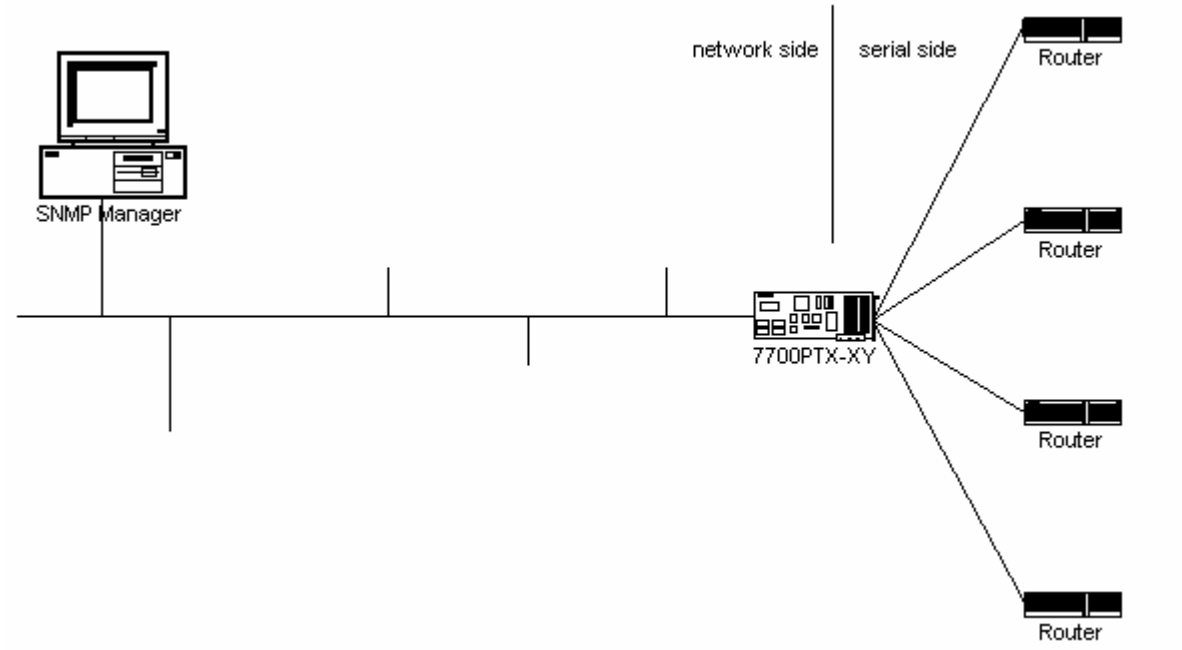

Figure 1-2: Typical 7700PTX-XY Control Setup

1.2. NNS MODE

In this mode the 7700PTX-XY translates a XY Pass-Through protocol status update message into a SNMP set command, which is then transmitted to an NCP. Figure 1-3 shows an example of how the 7700PTX-XY is typically set up.

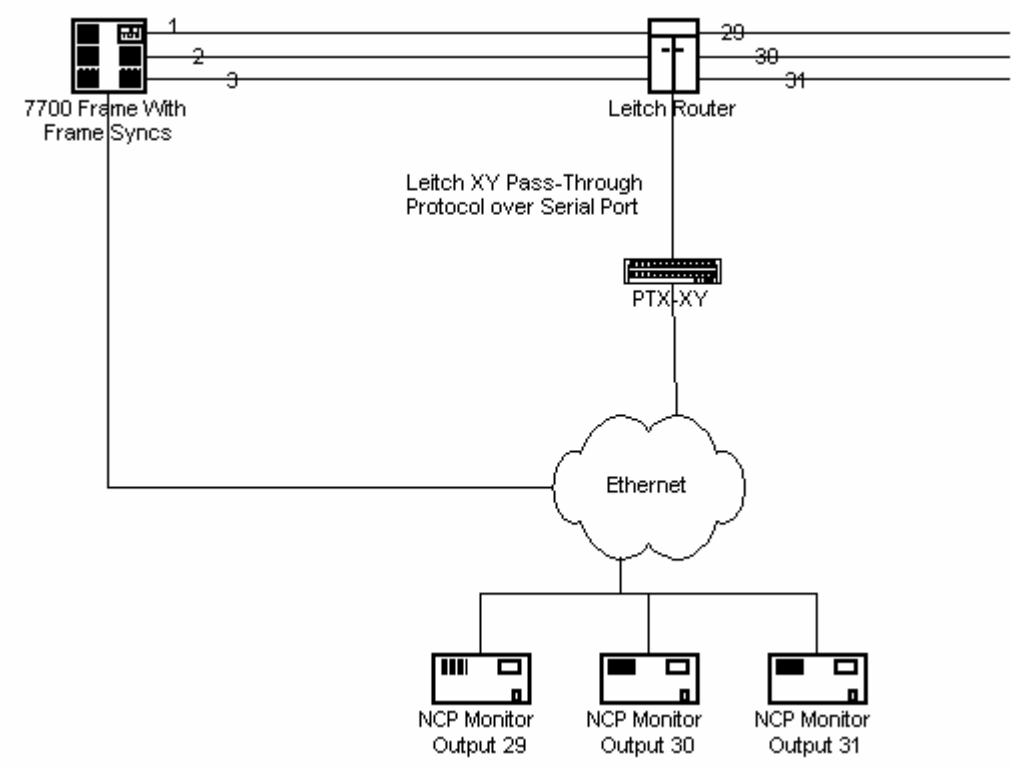

Figure 1-3: Type 7700PTX-XY NNS Setup

With this example, each of router outputs 29 through 31 has an NCP associated with it. The 7700PTX-XY has a table associating router outputs with NCP IP addresses. It also maintains a table of router inputs to 7700 Frame slot numbers, containing frame syncs. In a typical series of events:

- Router sends a status update for output 29 indicating it is connected to input 1.
- 7700PTX-XY converts this update into an SNMP set packet, which is transmitted to the NCP associated with the router output indicated in the status update.
- NCP uses the information in the SNMP set to solicit settings from the frame sync card for the user to modify, if desired.

2. CARD EDGE CONTROLS

2.1. DETERMINING CURRENT IP ADDRESS SETTINGS

To read the current IP address during normal operation, press the toggle switch DOWN. The IP address can be read on the four-character alphanumeric display.

2.2. RESTORING FACTORY DEFAULTS

To restore all settings to factory defaults, apply power to the card while holding the toggle switch UP until the green LED is illuminated.

2.3. CARD EDGE LEDS

LED 22 illuminates when Ethernet activity is detected.

All other card edge LEDs are for factory use only.

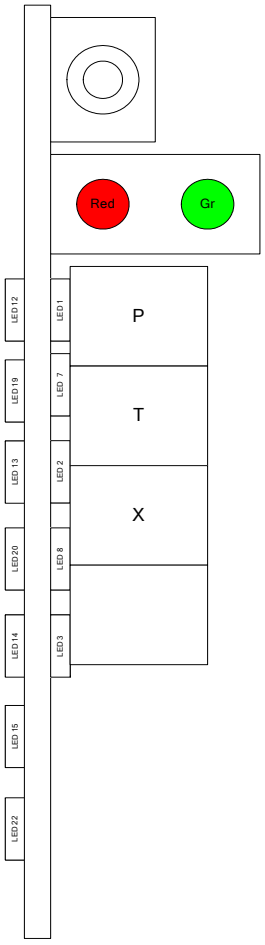

Figure 2-1: PTX Card Edge

3. TECHNICAL SPECIFICATIONS

3.1. DATA INPUT SERIAL PORT

Number of Ports:	4 RS-232 or 3 RS-422
Connector:	Phoenix Terminal Block pins
Baud Rate:	Up to 1Mbaud

3.2. ELECTRICAL

Voltage:	+12V DC
Power:	< 6W
Safety:	ETL Listed, complies with EU safety directives
EMI/RFI:	Complies with FCC Part 15, Class A EU EMC Directive

3.3. PHYSICAL

Number of slots:	2

4. CONFIGURATION

4.1. CONFIGURATION STEPS

Perform the following steps to configure the 7700PTX-XY:

1. Connect a PC running a console application to the PTX debug/monitor port via the adapter cable.
2. Configure the 7700PTX-XY's network parameters.
3. Configure the parameters of each serial port to match those of the router(s).
4. Configure the mode associated with each serial port.
5. Configure the router control mode parameters (if required).
6. Configure the NNS mode parameters (if required).
7. Configure UMD peers if required (has significance for router control mode only).
8. Power off the 7700PTX-XY.
9. Physically wire the serial port(s) of the 7700PTX-XY to the router(s).
10. Power on the 7700PTX-XY.

4.2. DEBUG/MONITOR PORT CONNECTION

The 7700PTX-XY is configured via the debug/monitor port, the header of which is labeled J1. A special Evertz adapter cable allows this port to connect to the COM port of a personal computer. The following steps describe this procedure.

1. Locate the small, keyed, four–pin end of the upgrade cable provided by Evertz.
2. Connect it to the four-pin interface (J1) near the front of the 7700PTX, directly above the card unlock latch.

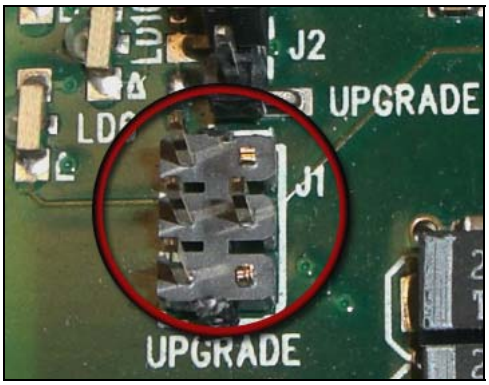

Figure 4-1: Upgrade Jumper

3. Connect the other end of the upgrade cable to a straight-through serial cable. Connect the serial cable to the serial or COM port of the computer.

4. Initiate HyperTerminal on your computer by selecting: "Start\Programs\Accessories\Communications\HyperTerminal".

5. Enter a name for your connection, for example: PTX.

6. Press the <Enter> key. A new "Connect To" window opens.

Figure 4-2: 'Connect To' Window

7. Select COM1 for the "*Connect using*' setting. If COM1 is in use, choose an alternate COM port.

8. Press the <Enter> key or select OK. This opens the "COM Properties" window as shown in Figure 4-3.

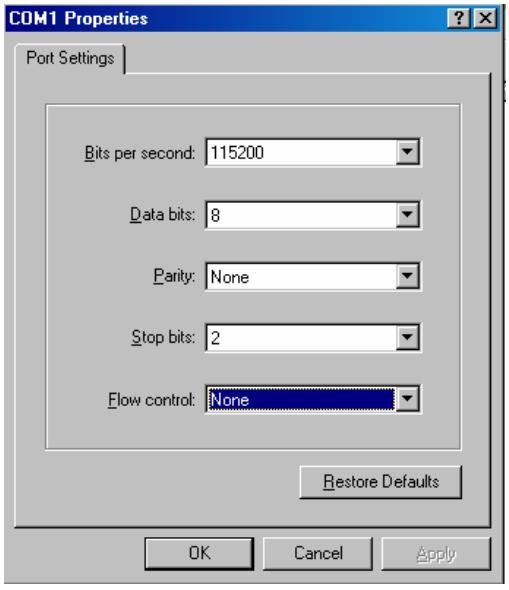

Figure 4-3: COM1 Properties

9. Enter the information as listed in Figure 4-3.

10. Press the <Enter> key or select OK. The "COM Properties" window closes, leaving the *HyperTerminal* window open.

11. Apply power if the 7700PTX-XY does not have power. The boot sequence and Main Menu are displayed in the HyperTerminal window.

12. If the 7700PTX-XY has power, press the <Enter> key to view the 7700PTX- XY's menu system.

13. Various 7700PTX-XY parameters are configurable via the 7700PTX-XY's menu system, the root of which is called *Main Menu*.

4.3. MAIN MENU

Table 4-1 lists the entries available in the 7700PTX-XY's *Main Menu*.

Entry	Item	Notes
1	**Network Configuration**	IP address, subnet mask, gateway, etc.
2	**Serial Port Setup**	Baud rate, number of data bits, etc. of serial ports that connect to router(s).
3	**SNMP Setup**	IP address of SNMP manager(s) to receive traps.
4	**Mode of Operation**	Specifies how the mode under which the serial port will operate.
5	**Router Control Setup**	Parameters associated with operating the serial port in router control mode.
6	**NNS Setup**	Parameters associated with operating the serial port in NNS mode.
7	**Under Monitor Display Setup**	IP address and TCP port of PPV to receive the description of the input associated with a particular output.
8	**Engineering/Debug**	Used for troubleshooting.

Table 4-1: 7700PTX-XY Main Menu

4.4. NETWORK CONFIGURATION

1. From the *Main Menu* select *Network Configuration*.

2. If DHCP (Dynamic Host Configuration Protocol) is desired, then the *Use DHCP* field is set to *True*. Otherwise, the IP address, subnet mask, and gateway (if any) are set and the *Use DHCP* field is set to *False*.

3. Once the network settings are configured, select *Save* and *Exit* before exiting *Network Configuration* to save the settings, otherwise select *Exit*.

The 7700PTX-XY must be rebooted for any network setting changes to take effect.

4.5. SERIAL PORT SETUP

4.5.1. Parameters

The 7700PTX-XY has 4 serial ports. The parameters associated with each serial port are listed in Table 4-2.

Parameter	Special Notes
Baud Rate	
Data Bits	
Parity	
Stop Bits	
Standard	For serial port 4, only RS-232 is valid.

Table 4-2: Serial Port Parameters

The serial port settings of the 7700PTX-XY must match those of the router(s). The 7700PTX-XY must be rebooted for any serial parameter changes to take effect.

4.5.2. Back Plate

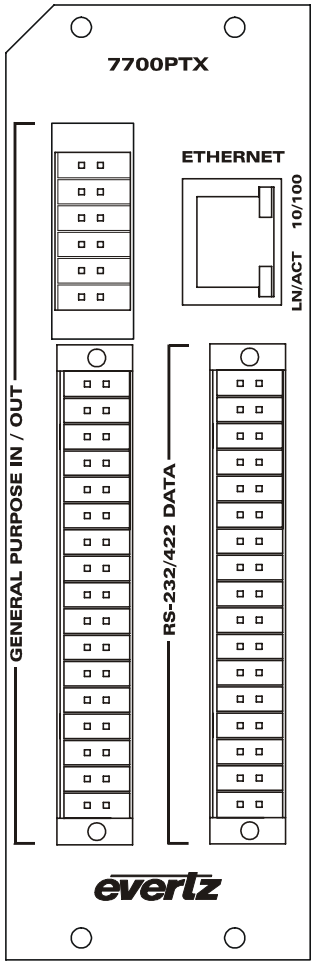

Figure 4-4: 7700PTX Back Plate

4.5.3. RS-232 Wiring

Figure 4-5 shows which pins of the back plate are used for RS-232 serial connections.

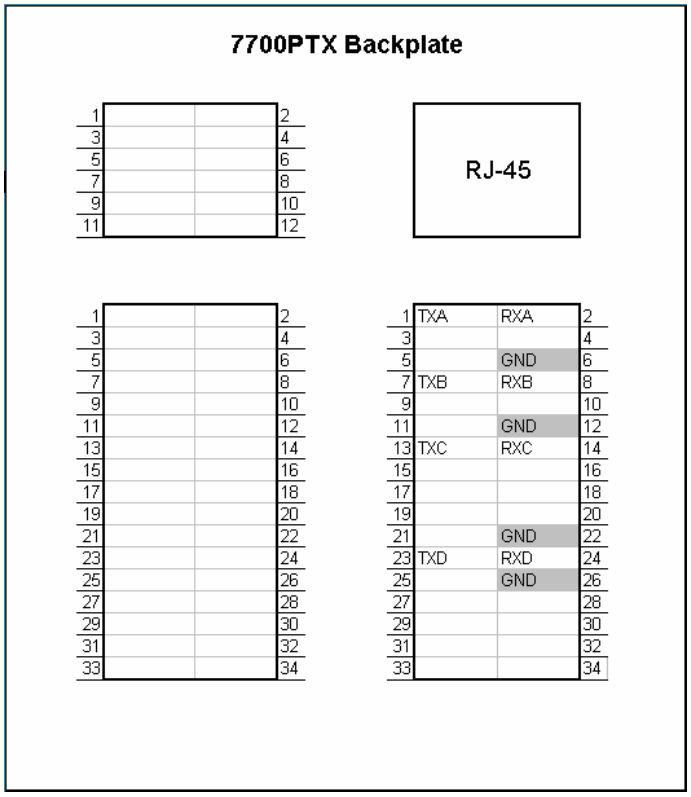

Figure 4-5: RS-232 Pins

Table 4-3 details how to connect the 7700PTX-XY to the router for RS-232 operation.

7700PTX-QUTZ			Router	
Port	**Pin Name**	**Pin**	**Pin**	**Pin Name**
1	**TXA**	1	2	**RX**
	RXA	2	3	**TX**
	GND	6	5	**GND**
2	**TXB**	7	2	**RX**
	RXB	8	3	**TX**
	GND	12	5	**GND**
3	**TXC**	13	2	**RX**
	RXC	14	3	**TX**
	GND	22	5	**GND**
4	**TXD**	23	2	**RX**
	RXD	24	3	**TX**
	GND	26	5	**GND**

Table 4-3: RS-232 Wiring

4.5.4. RS-422 Wiring

Figure 4-6 shows which pins of the back plate are used for RS-422 serial connections.

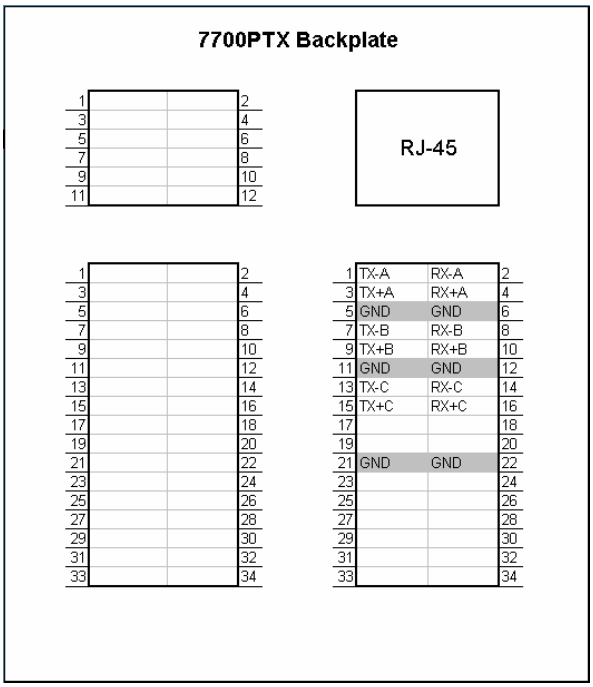

Figure 4-6: RS-422 Pins

Table 4-4 details how to connect the 7700PTX-XY to the router for RS-422 operation.

7700PTX-QUTZ			Router	
Port	**Pin Name**	**Pin**	**Pin**	**Pin Name**
1	**TX-A**	1	8	**RX-**
	TX+A	3	3	**RX+**
	RX-A	2	2	**TX-**
	RX+A	4	7	**TX+**
	GND	6	5	**GND**
2	**TX-B**	7	8	**RX-**
	TX+B	9	3	**RX+**
	RX-B	8	2	**TX-**
	RX+B	10	7	**TX+**
	GND	12	5	**GND**
3	**TX-C**	13	8	**RX-**
	TX+C	15	3	**RX+**
	RX-C	14	2	**TX-**
	RX+C	16	7	**TX+**
	GND	22	5	**GND**

Table 4-4: RS-422 Wiring

The 7700PTX-XY's 4th serial port is not RS-422 capable.

4.6. SNMP SETUP

Table 4-5 lists the parameters associated with the SNMP setup.

Parameter	Notes
Read-only community	Community string used for SNMP gets. The default is *public*.
Read-write community	Community string used for SNMP gets or sets. The default is *private*.

Table 4-5: SNMP Parameters

These parameters must match those of the SNMP manager. Changes to these parameters do not require a reboot of the 7700PTX-XY.

4.7. MODE OF OPERATION

To select the mode under which a serial port will operate follow the steps below:

1. From the *Main Menu* select *Mode Of Operation*.
2. Select *Set mode of operation*.
3. Select the serial port and the mode under which it will operate.

The 7700PTX-XY must be rebooted for any mode change to take effect.

4.8. ROUTER CONTROL PARAMETERS

Changes to any of these parameters do not require a reboot of the 7700PTX-XY.

4.8.1. Number of Inputs and Outputs

The XY Pass-Through protocol does not permit the 7700PTX-XY to automatically determine the size of the router. The number of router inputs and outputs must be set on the 7700PTX-XY. This can be accomplished by:

- Using *Vista*LINK® Pro
- Using the 7700PTX-XY's *Router Control Setup* menu

To configure the number of router inputs and outputs from the console follow the steps below:

1. From the *Main Menu* select *Router Control Setup*.
2. Select *Serial Port 1Rouer Control Setup* (or select the relevant serial port to which the router is connected).
3. Select *Set number of router inputs*.
4. Enter the number of router inputs.
5. Select *Set number of router outputs*.
6. Enter the number of router outputs.
7. Select *Save and Exit*.

4.8.2. Input/Output Descriptions

The XY Pass-Through protocol does not permit the 7700PTX-XY to automatically determine the input or output labels/descriptions. The descriptions must be set on the 7700PTX-XY. This can be accomplished by:

- Using *Vista*LINK® Pro
- Using the 7700PTX-XYs *Router Control Setup* menu

To configure the descriptions from the console follow the steps below:

1. From the *Main Menu* select *Router Control Setup*.
2. Select *Serial Port 1Router Control Setup* (or select the relevant serial port to which the router is connected).
3. Select *Set input description* or *Set output description*.
4. Enter the router input or output.
5. Enter the description.
6. Repeat the process for all router descriptions.
7. Select *Save and Exit*.

4.8.3. Read Level

By default the 7700PTX-XY uses level 0 for cross point reads. Should this need to be changed; the console can be used as follows:

1. From the *Main Menu* select *Router Control Setup*.
2. Select *Serial Port 1Router Control Setup* (or select the relevant serial port to which the router is connected).

3. Select *Set read level*.

4. Enter the level to monitor.

5. Select *Save and Exit*.

The read level should correspond to one of the write levels.

4.8.4. Write Level(s)

By default the 7700PTX-XY used level 0 for cross point writes. Should this need to be changed, the console can be used as follows:

1. From the *Main Menu* select *Router Control Setup*.

2. Select *Serial Port 1Router Control Setup* (or select the relevant serial port to which the router is connected).

3. Use *Add write level* and *Remove write level* to set the appropriate level(s).

4. Select *Save and Exit*.

4.9. NNS PARAMETERS

4.9.1. Router Table Configuration

For the 7700PTX-XY to create the SNMP set messages the appropriate router input -> 7700 Frame slot information and router output -> NCP IP address associations need to be configured. These tables are maintained for each serial port.

4.9.1.1. Router Input/Frame Sync Slot Table

The 7700PTX-XY maintains a table containing up to 32 entries of:

- Router input
- A textual string that identifies the frame sync associated with the router input. The string is of the format FS:*fc_ip_address*:*slot_number*.

Please note: CASE IS IMPORTANT for *FS*. *Fs*, *fs*, *fS* will not work.

Follow the steps below to configure this table:

1. From the *Main Menu* select *NNS Setup*.

2. Select *Serial Port 1 NNS Setup* (or select the relevant serial port).

3. Select *Set router input/frame slot table*.

4. Select *Add entry*.

5. Add the entry given the format noted above.

4.9.1.2. Router Output/NCP IP Address Table

The 7700 PTX-XY maintains a table containing up to 32 entries of:

- Router output
- NCP IP address associated with the router output

Follow the steps below to configure this table:

1. From the *Main Menu* select *NNS Setup*.

2. Select *Serial Port 1 NNS Setup* (or select the relevant serial port).

3. Select Set router output/NCP IP address table.

4. Select *Add entry*.

5. Enter the output number.

6. Enter the NCP IP address to monitor this output.

4.9.2. Example 1

Suppose we have the environment of Figure 4-7.

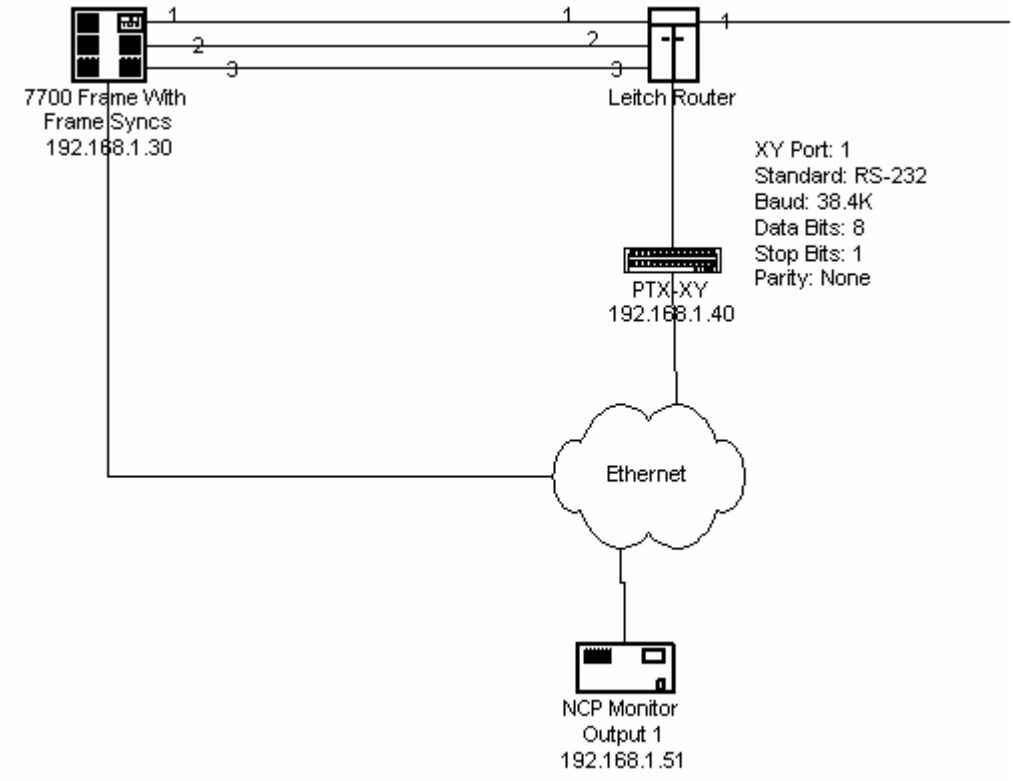

Figure 4-7: NNS Configuration Example 1

The figure shows:

- A 7700 frame with an FC that has IP address 192.168.1.30, which contains frame syncs in slots 1, 2 and 3.
- Frames syncs feed router inputs 1, 2, and 3 respectively.
- A router with a single output.
- An NCP with IP address 192.168.18.51 that monitors router output 1.

The router input/frame sync slot table configuration would correspond to:

Table Entry	Router Input	Frame Sync Slot Info
1	1	FS:192.168.1.30:1
2	2	FS:192.168.1.30:2
3	3	FS:192.168.1.30:3

The router output/NCP IP address table configuration would correspond to:

Table Entry	Router Output	NCP IP Address
1	1	192.168.1.51

4.9.3. Example 2

Suppose we have the environment of Figure 4-8.

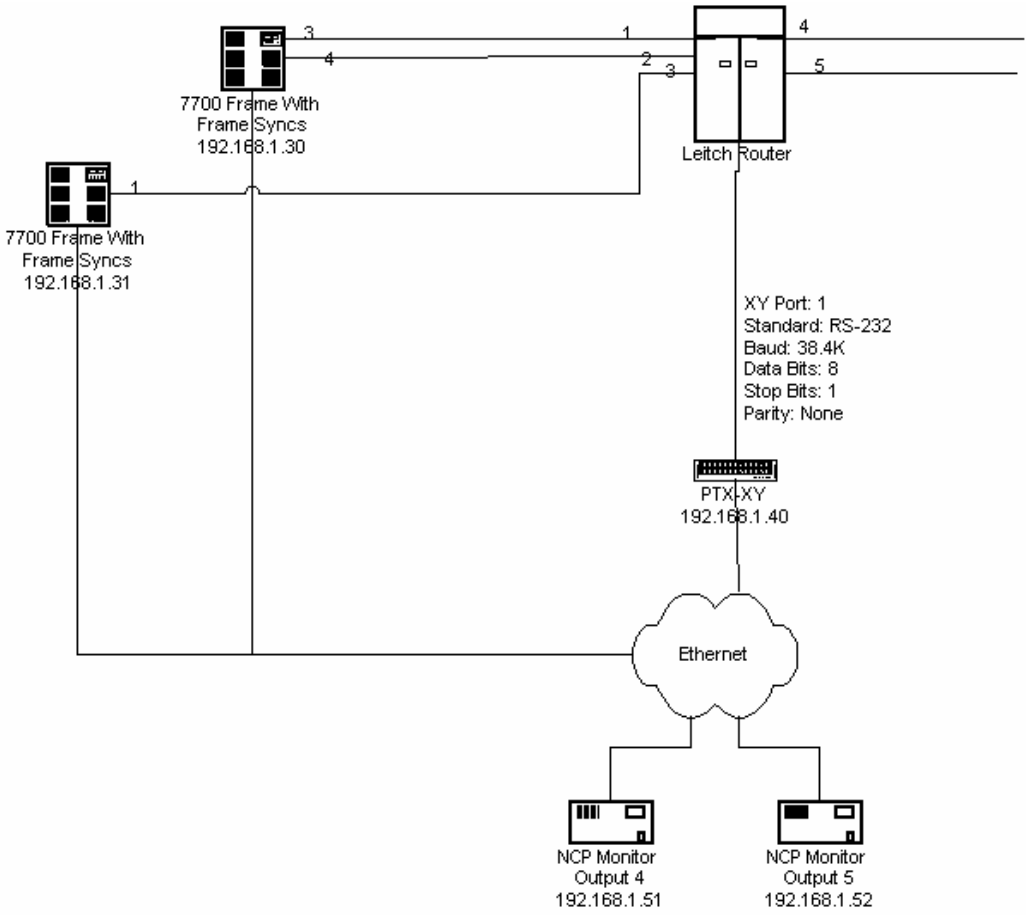

Figure 4-8: NNS Configuration Example 2

The figure shows:

- A 7700 frame with an FC that has IP address 192.168.1.30, which contains frame syncs in slots 3 and 4.
- These frames syncs feed router inputs 1 and 2 respectively.
- A 7700 frame whose FC has IP address 192.168.1.31 that contains a frame sync in slot 1.
- This frame sync feeds router input 3.
- A router with a 2 outputs.
- An NCP with IP address 192.168.1.51 that monitors router output 4.
- An NCP with IP address 192.168.1.52 that monitors router output 5.

The router input/frame sync slot table configuration would correspond to:

Table Entry	Router Input	Frame Sync Slot Info
1	1	FS:192.168.1.30:3
2	2	FS:192.168.1.30:4
3	3	FS:192.168.1.31:1

The router output/NCP IP address table configuration would correspond to:

Table Entry	Router Output	NCP IP Address
1	4	192.168.1.51
2	5	192.168.1.52

4.10. UNDER MONITOR DISPLAY SETUP

The 7700PTX-XY has the ability to transmit router source label information to the UMDs of up to 12 PPVs. As an example, suppose we have the setup of Figure 4-9

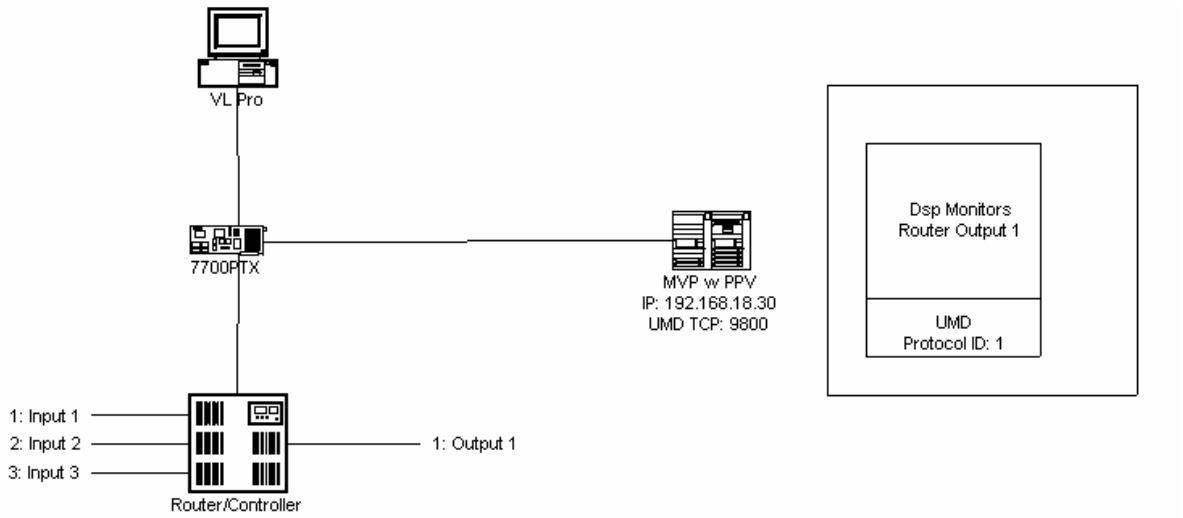

Figure 4-9: UMD Example

Where:

- A router has 3 inputs connected (labeled Input 1, Input 2, and Input 3) and 1 output (labeled Output 1)
- A 7700PTX-XY monitors the router cross points
- An MVP contains a PPV with IP address 192.168.18.30
- The PPV is set to receive UMD data via the Image Video protocol over a TCP, with TCP port configured at 9800
- Protocol ID (PID) set to 1
- A PC running *Vista*LINK® Pro configures the 7700PTX-XY so that the UMD PID associated with router Output 1 matches the PID of the UMD (for example, 1)

The *Under Monitor Display Setup* menu allows the configuration of the IP address and TCP port of the PPV to receive router source label information. In keeping with the above example, the 7700PTX-XY would be configured to have a peer one IP address of 192.168.18.30 and a TCP port of 9800. When router input 1 is on output 1, the UMD of the display should display INPUT 1. If the cross point is switched to input 3, the UMD should display INPUT 3.

The 7700PTX-XY must be rebooted for any UMD peer changes to take effect.

5. TROUBLESHOOTING TIPS

5.1. VLPRO NOTES

1. The 7700PTX-XY must be able to communicate with any connected routers in order for VLPro to operate properly.

2. The 7700PTX-XY must be able to communicate with its configured UMD peers before UMD information can be transmitted.

3. VLPro must associate a UMD protocol ID with a router output in order for UMD information to be transmitted.

5.2. CHECKING ROUTER COMMUNICATION (ROUTER CONTROL MODE)

1. From the *Main Menu* select *Engineering/Debug*.

2. Select *Show task state*.

3. There are four entries, one for each serial port, listed under the heading *Router protocol PCB state…* If the state associated with the serial port is reported as *ready* then the 7700PTX-XY is actively communicating with the router on that port. If the state is consistently reported as *down* then the 7700PTX-XY is unable to communicate with the router in which case the serial port settings or wiring should be checked.

4. Figure 5-1 shows the 7700PTX-XY is able to communicate with a router connected to port 2.

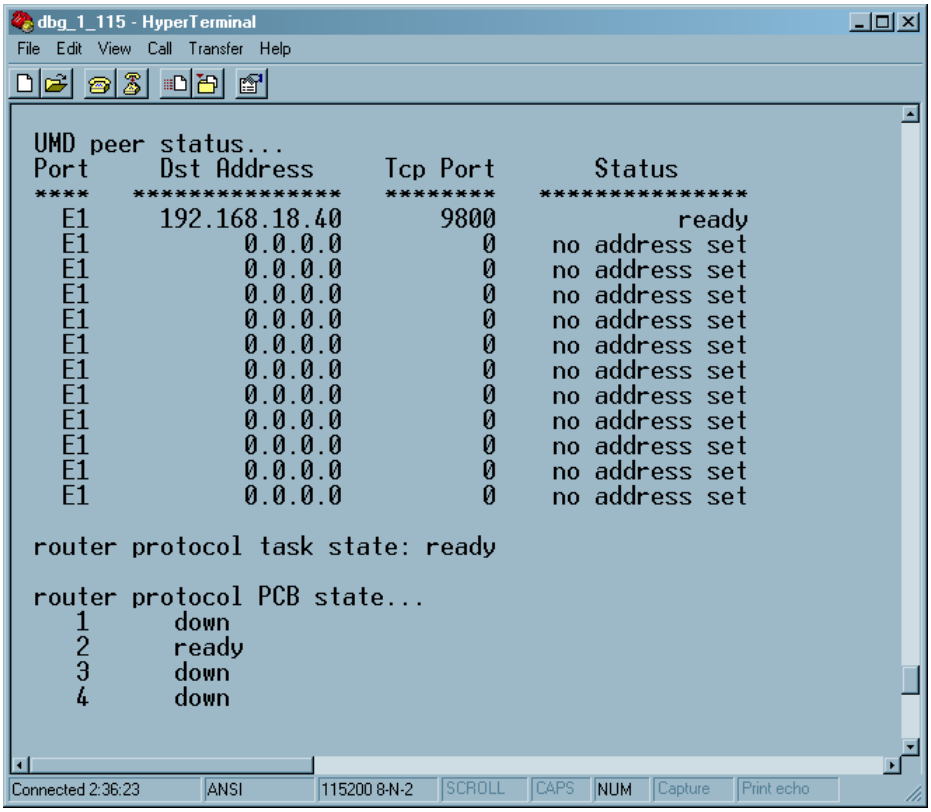

Figure 5-1: Communication States

5.3. CHECKING UMD PEER COMMUNICATION

1. From the *Main Menu* select *Engineering/Debug*.

2. Select *Show task state*.

3. The status of up to 12 UMD peer entries is listed under the heading *UMD peer status…* A status reported as *ready* indicates the 7700PTX-XY is able to communicate with that UMD peer. A status consistently reported as something other than *ready* indicates the inability of the 7700PTX-XY to communicate with that UMD peer. Be sure that the UMD peer has been rebooted after being configured to receive the Image Video over TCP.

4. Figure 5-1 shows the 7700PTX-XY is able to communicate with the UMD peer whose IP address is 192.168.18.40 and who is listening on TCP port 9800.

5.4. ROUTER POLLING

By default, the 7700PTX-XY polls each router at 30-second intervals. A poll consists of an “Enable Reporting” command.

5.5. STATISTICS

The 7700PTX-XY tracks a wide variety of statistical information. These statistics are viewed via the *Show task statistics* entry of the *Engineering/Debug* menu. Some of these statistics are discussed briefly below.

5.5.1. Serial Port Activity

5.5.1.1. Incoming

An example of incoming serial port activity is represented by the following:

```
incoming serial port statistics...
  in      in     in
prot   port   subp                          valid       cmds      cmds    timeout                 no
  id      id     id        in chars       cmds out    too lng  malfrmd  discrds    no outQ  mbufs
**** **** ***** ********** ********** ******* ******* ******* ******* *******
 8XY  1S1       0  0x00000031 0x00000007 0x00000 0x00000 0x00000 0x00000 0x00000
 8XY  2S2       0  0x00000000 0x00000000 0x00000 0x00000 0x00000 0x00000 0x00000
 8XY  3S3       0  0x00000000 0x00000000 0x00000 0x00000 0x00000 0x00000 0x00000
 8XY  4S4       0  0x00000000 0x00000000 0x00000 0x00000 0x00000 0x00000 0x00000
```

These statistics are described in Table 5-1.

Parameter	Notes
In prot id	The router protocol expected on this serial port is displayed in both a numeric (8) and textual (XY) format.
In port id	The port identifier in both numeric (1 – 4) and textual (S1 – S4) format.
In subp id	The sub-port identifier. Serial ports do not require a sub-port ID, therefore this value should be 0.
In chars	The number of alphanumeric characters received from the router. If a router is connected and this value is 0 it may indicate that: The serial port configuration is incorrect. The serial port wiring is incorrect.
Valid cmds out	The number of full XY pass-through status update commands received by the 7700PTX-XY.
Cmds too long	The number of XY pass-through commands received were too long. Typically, this field should be 0. If not, it may point to bad wiring or incorrect serial port settings.
Cmds malfmd	The number of bad XY pass-through commands received by the 7700PTX-XY. Typically, this field should be 0 during normal router operation. If not, it may point to bad wiring or incorrect serial port settings.
Timeout discards	The number of XY pass-through commands discarded due to inactivity. This value gets incremented if part of an XY pass-through command is received. This value should normally be 0.
No outQ	This value should be 0.
No mbufs	The number of XY pass-through commands discarded due to lack of internal storage on the 7700PTX-XY. The value should normally be 0.

Table 5-1: Incoming Serial Port Statistics

5.5.1.2. Outgoing

An example of outgoing serial port activity is represented by the following:

```
outgoing serial port statistics...
Port     Out Cmds
****   **********
  S1     0x00000001
  S2     0x00000001
  S3     0x00000001
  S4     0x00000001
```

These statistics are described in Table 5-2.

Parameter	Notes
Port	The port identifier in textual (S1 – S4) format.
Out Cmds	The number of XY pass-through “Enable Reporting” commands sent by the 7700PTX-XY to the router.

Table 5-2: Outgoing Serial Port Statistics

6. PERFORMING A FIRMWARE UPGRADE

There are two ways to upgrade PTX firmware:

Using FTP to perform the upgrade via TCP/IP. (*recommended procedure*)
Using a terminal application such as *HyperTerminal* to perform the upgrade via a serial connection.

6.1. FTP PROCEDURE

1. Open a command prompt window (in Windows: Start/Programs/Accessories/Command Prompt)

2. Enter the location of the firmware file. For example, type *cd c:\temp*.

3. Enter the command *ftp* followed by the PTX IP address.
   For example, type *ftp –A 192.168.18.22*.

4. Enter the FTP command *put* followed by the firmware file name. For example, *put ptx.bin*.

5. When the transfer is complete enter the FTP command: *bye*.

6. Step 5 begins the process of saving the firmware to the non-volatile flash of the PTX. The save process is displayed as a percentage on the PTX LCD. Once the process is complete, the PTX LCD again displays the product name and firmware version.

7. Power off the PTX.

8. Power on the PTX.

6.2. SERIAL PROCEDURE

1. Power off the PTX.

2. Connect an adapter cable to a PC running a console or terminal application, such as Windows *HyperTerminal*, to the PTX debug/monitor port.

3. Configure the port settings of the terminal program as follows:

Baud	**115200**
Parity	**no**
Data bits	**8**
Stop bits	**2**
Flow Control	**None**

4. Set the PTX run/upgrade jumper to the upgrade position.

5. Power on the PTX.

6. After a few moments, the prompt *PPCBOOT>* will appear. Enter the command *upload.*
7. Start the firmware upload on the terminal application (for instance, in *HyperTerminal* select Transfer/Send File…), use Xmodem as the transfer protocol, and select the firmware file. For example, *ptx.bin.*

8. Once the upload is complete the message *upload okay* is displayed.
9. Power off the PTX.
10. Set the PTX run/upgrade jumper to the run position.
11. Remove the serial adapter cable.
12. Power on the PTX.

7. *VISTA*LINK® REMOTE MONITORING/CONTROL

7.1. WHAT IS *VISTA*LINK®?

*Vista*LINK® is Evertz' 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. An 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®-C Configuration Utility graphical user interface (GUI), third party or custom manager software may be used to monitor and control Evertz *Vista*LINK® enabled products.

2. Managed devices, (such as 7700PTX modules), each with a unique address (OID), communicate with the NMS through an SNMP Agent. The 7700PTX-XY communicates directly with the manager using its internal 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.

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