

Overview

The Precis^{LT} Distribution Matrix is available in various sizes and board configurations; therefore the illustrations in this guide may differ from the model(s) you purchased. The Precis^{LT} is available in the following models:

- Standard Video & Stereo
- Component Video & Stereo
- S-Video & Stereo
- RGBHV/HD-15 & Stereo

Configurations available: 4x4, 4x8, 8x4, and 8x8. The Precis^{LT} Instruction Manual contains complete documentation for this product; see the *AMX AutoPatch Software & Documentation CD* or visit www.amx.com.

General Specifications

| Specifications | |
|----------------------------------|--|
| Approvals | CE, UL, cUL |
| AC Power | 100 - 240 VAC single phase (50 - 60 Hz) |
| Power Consumption per enclosure: | |
| Standard Video & Stereo | 35 Watts (max.), 15 Watts (typical) |
| S-Video & Stereo | 35 Watts (max.), 15 Watts (typical) |
| Component Video & Stereo | 60 Watts (max.), 25 Watts (typical) |
| RGBHV/HD-15 & Stereo | 60 Watts (max.), 25 Watts (typical) |
| Operational Temperature | 32° - 110° F (0° - 43° C) |
| Humidity | 0 to 90% non-condensing |
| Dimensions (depth & width) | 10.4 in. (26.42 cm) depth 19.0 in. (48.26 cm) width with mounting ears 17.4 in. (44.20 cm) width without mounting ears |
| Height | 1 RU Models: 1.7 in. (4.32 cm) 2 RU Models: 3.5 in. (8.89 cm) |
| Weight per enclosure | 1 RU Models: Approx. 7.0 lb. (3.18 kg) 2 RU Models: Approx. 10.5 lb. (4.75 kg) |

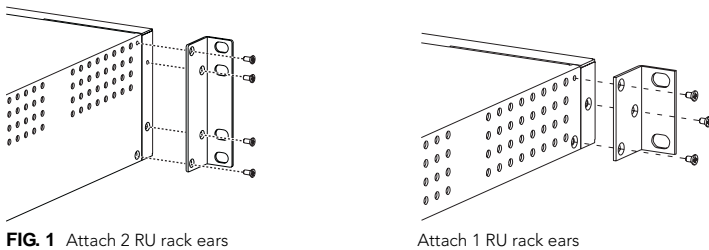
Installation

ESD Warning: Avoid ESD (Electrostatic Discharge) damage to sensitive components; be sure you and the enclosure(s) are properly grounded before touching any internal materials.

Rack Mounting

To rack mount a Precis^{LT} enclosure:

1. Attach the rack ears as shown in FIG. 1 (screws provided).
2. Install in a rack (we recommend leaving a minimum of one empty rack unit above and below).



Attaching Input & Output Cables/Wires

Attach sources and destinations to the Precis^{LT} according to the labels on the enclosure.

Standard & Component Video – BNC

Video BNC connectors are used for standard and component video. Component signals (e.g., Y/Pb/Pr) require more than one BNC connection. The example in FIG. 2 shows three BNC cable connectors attached for routing a three-component signal as Input 1.

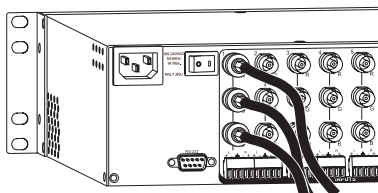


FIG. 2 Three BNC connectors are required for a three-component signal

S-Video

AutoPatch S-Video cables lock on to S-Video connectors. Standard S-Video cables may be used, but will not lock.

To fasten a locking S-Video connector: hold the connector at a slight angle to the right while pushing in or pull back on the connector housing while pushing the connector in.

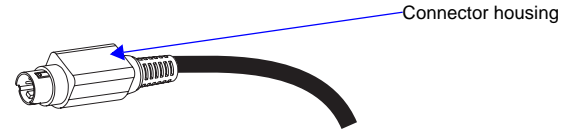
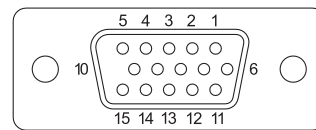


FIG. 3 Pull back on connector housing while pushing in

RGBHV/HD-15

RGBHV/HD-15 connectors use the pinouts in FIG. 4.



Input (VESA DDC Compliant)

| | | |
|-----------|-----------------|---------------------|
| 1. Red | 6. Red GND | 11. ID Bit |
| 2. Green | 7. Green GND | 12. DDC SDA |
| 3. Blue | 8. BlueGND | 13. Horizontal Sync |
| 4. ID Bit | 9. +5 V out DDC | 14. Vertical Sync |
| 5. GND | 10. GND | 15. DDC SCL |

Output

| | | |
|-----------|-----------------|---------------------|
| 1. Red | 6. Red GND | 11. ID Bit |
| 2. Green | 7. Green GND | 12. ID Bit |
| 3. Blue | 8. BlueGND | 13. Horizontal Sync |
| 4. ID Bit | 9. +5 V out DDC | 14. Vertical Sync |
| 5. GND | 10. GND | 15. ID Bit |

FIG. 4 HD-15 input and output board connector pinouts

Note: 55 mA supplied on output pin 9; power draw not to exceed 50 mA per port.

Stereo Audio – 3-Term (RGBHV/HD-15 Model Only)

Three-position terminal block connectors are wired for unbalanced (single-ended) stereo audio (see FIG. 5).

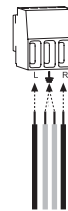


FIG. 5 Insert the wires and re-tighten clamps

More than one of the options shown in FIG. 6 can be used in the same system.

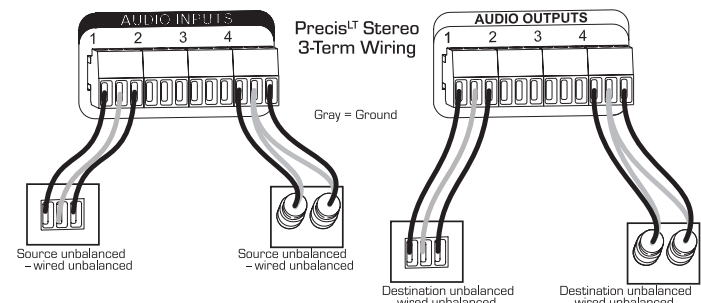


FIG. 6 Options for source-to-PrecisLT-to-destination 3-Term wiring

Stereo Audio – 5-Term

Five-position terminal block connectors can be wired for balanced (differential) or unbalanced (single-ended) stereo audio.

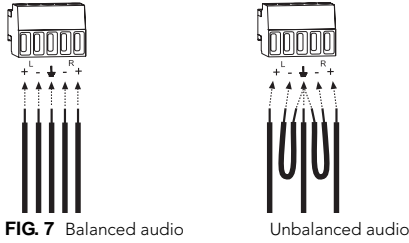


FIG. 7 Balanced audio Unbalanced audio

Note: When using a shielded twisted-pair cable, connect the shield (ground) at one end only (recommend receiving end) to minimize low frequency noise (see FIG. 8).

Source and destination devices require either balanced or unbalanced connections. More than one of the options shown in FIG. 8 can be used in the same system.

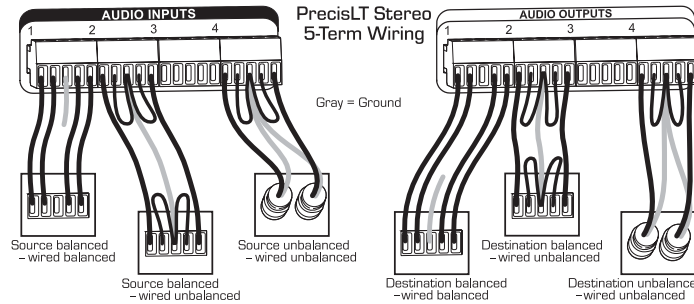


FIG. 8 Options for source-to-PrecisLT-to-destination 5-Term wiring

Video & Audio – RCA

RCA connectors are used for component video and unbalanced stereo audio. The example in FIG. 9 shows RCA jacks attached for routing Y/Pb/Pr and stereo audio source signals as Input 1.

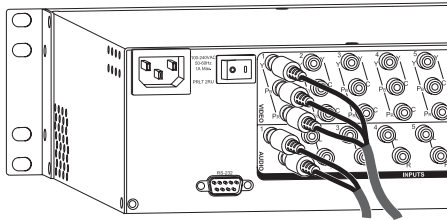


FIG. 9 Insert the RCA plugs into the RCA jacks

Establishing Serial Control (if applicable)

The PrecisLT can be controlled by attaching an external control device/system to the RS-232 serial port.

Serial Control (PCs & third-party controllers)

Use the pinout in FIG. 10 when connecting a PC to the PrecisLT serial port.

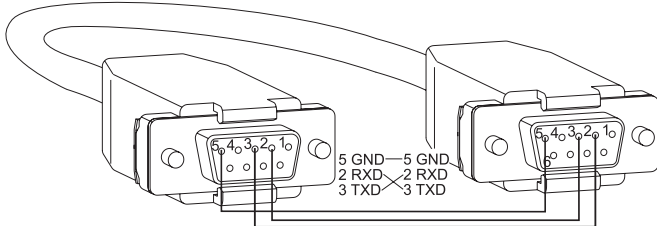


FIG. 10 RS-232 null modem cable pin diagram

To establish external serial control:

1. Plug the null modem cable into the serial port on the enclosure (see FIG. 11 top of next column).

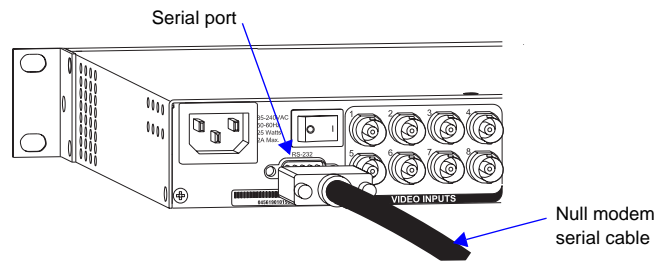


FIG. 11 Connect the null modem cable to the serial port

2. Plug the other end of cable into the serial port on the serial controller/device.
3. Open serial communication software and set port settings to match the PrecisLT settings (baud = 9600, data bits = 8, stop bit = 1, parity and flow control = none).

Applying Power & Control Startup

Important: We recommend attaching all power cords to a surge protector and/or an AC line conditioner.

To apply power:

1. Attach power cord(s) and plug into power source (turn on power source if necessary). Press the "I" side of the enclosure's power switch. The Power Indicator on the front of the enclosure illuminates.
2. Apply power to any external devices (PCs, SBCs, etc.) and then to the source and destination devices.

Completing the Installation

We recommend completing the installation by executing a test switch routing Input 1 to Output 2. The PrecisLT ships with a default switch routing Input 1 to all outputs. This default switch must be disconnected before performing a test switch. The method of executing the switch depends on the control option used (see below).

- **Front Control Panel** – press Cancel Key to ensure panel is in Switch Mode. To disconnect the default switch: Press Input Key 1. Input Key 1 blinks and all output keys illuminate. Press each output key, then press the Take Key. When all the output keys turn off, the default switch is disconnected. To execute a test switch: Press Input Key 1. Input Key 1 blinks. Press Output Key 2. Output Key 2 illuminates. Press the Take Key. When the illuminated keys turn off, the switch is successful.

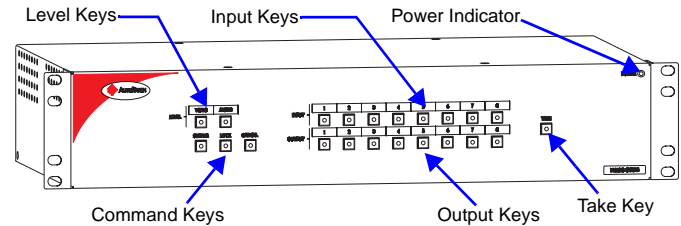


FIG. 12 Typical PrecisLT control panel

- **NetLin[®] or Duet Compatible Devices** – see the specific controller device documentation for instructions on installation and executing switches.
- **APControl 3.0 (PC based)** – install and open the program. From the APControl Launchbar menu, select System/New; select Heritage System/Next; select Manual Configuration Entry/Next; enter and Add VM information/Next; finish Wizard instructions. From the Launchbar menu, select Views/CrossBar and click on the crosspoint for Input 1 / Output 2.
- **APWeb** – connect the APWeb Module (see the APWeb Module Quick Start Guide). For instructions on executing switches, see the APWeb (Interface) supplement on the *AMX AutoPatch CD*.
- **BCS Commands (HyperTerminal)** – when power is applied, a short splash screen appears. To disconnect the default switch: enter DI1T into the terminal emulation program. To execute a test switch: Enter CI102T (routes Input 1 to Output 2). When CI102T appears, the switch is successful.

The system is now ready to attach the remaining source and destination devices.

Additional Information Covered in PrecisLT Instruction Manual

See the instruction manual on the CD or at www.amx.com for the following:

- Control panel operations
- BCS commands for system operation
- Product specifications for specific models