Overview

Because the Precis SD (Slam Dunk) Distribution Matrix is available in eight configuration sizes of RGBHV, four with and four without stereo audio, the illustrations in this guide may differ from the model(s) you purchased. For complete documentation for this product (including signal specifications), see the *AMX AutoPatch CD* or visit **www.amx.com.** This product supports full Device Discovery through the Duet module.

FIG. 1 Precis SD 12x8 enclosure

Precis SD systems are available in the following configurations; all models have front control panels.

Model	Configuration	Description
FGP37-0804-560	8x4	RGBHV
FGP37-0804-567	8x4	RGBHV+Stereo, DVC*
FGP37-0808-560	8x8	RGBHV
FGP37-0808-567	8x8	RGBHV+Stereo, DVC*
FGP37-1204-560	12x4	RGBHV
FGP37-1204-567	12x4	RGBHV+Stereo, DVC*
FGP37-1208-560	12x8	RGBHV
FGP37-1208-567	12x8	RGBHV+Stereo, DVC*

* DVC – Digital Volume Control

General Specifications

Specifications	
Approvals	CE, ETL, cETL
MTBF	86,600 hours
Operational Temperature	32° to 110° F (0° to 43° C)
Humidity	0 to 90% non-condensing
AC Power	100 VAC to 240 VAC single phase, 50 Hz to 60 Hz
Power Consumption	80 Watts per enclosure (max.) 57 Watts per fully loaded enclosure (typical)
Thermal Dissipation	273 BTU (max.) 194 BTU per fully loaded enclosure (typical)
Dimensions	10.4 in. (26.4 cm) depth 17.4 in. (44.2 cm) width without rack ears 18.8 in. (47.7 cm) width with rack ears 5.2 in. (13.2 cm) height, 3 RU
Weight	Approximately 12 lbs (5.4 kg) per enclosure

Installation
Rack Mounting

To rack mount a Precis SD enclosure:

1. Attach the rack ears as shown in FIG. 2 (screws provided).
2. Install in a rack leaving a minimum of one empty rack unit above and below (required); three empty rack units above and below are recommended.
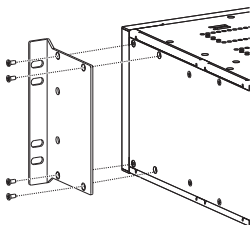

FIG. 2 Attach rack ears to sides of enclosure

Attaching Input & Output Cables/Wires

Before connecting all input and output cables/wires, attach only the first two inputs and outputs and execute a test switch (see "Completing the Installation," next page). When the test switch is successful, attach the rest of the input and output cables and wires.

500 MHz Video & Hi-Z Sync Connectors – BNC

Five connectors are required to route an RGBHV signal. FIG. 3 shows five BNC cable connectors attached for routing R, G, B, H, and V signals to the destination device through Output 8. Input cable connectors are attached in the same way.
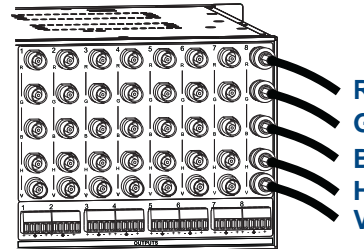

FIG. 3 Five BNC connectors are required for an RGBHV signal

Stereo Audio Connectors – 5-Term

Precis SD models featuring stereo audio have 5-position terminal block connectors that can be wired for balanced (differential) or unbalanced (single-ended) audio (FIG. 4).
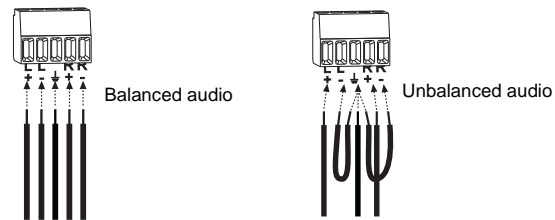

Balanced audio   Unbalanced audio

FIG. 4 5-Term stereo audio wiring

Note: *When using shielded twisted-pair wire, connect the shield (ground) at one end only (recommend receiving end) to minimize low frequency noise (see FIG. 5).*

Source and destination devices require either balanced or unbalanced connections. More than one of the options shown in FIG. 5 can be used in the same system.
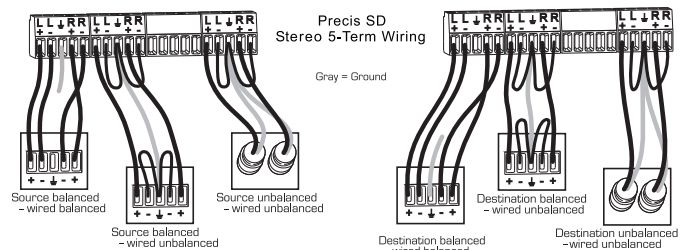

FIG. 5 Options for source-to-Precis SD-to-destination 5-Term wiring

Establishing External Control (if applicable)

The Precis SD can be controlled by attaching an external control device/system to the CONTROL port or to the REMOTE port, which uses AutoPatch XNNet protocol for AMX AutoPatch devices.

Serial Control (PCs, AMX Control Devices, & third-party controllers)

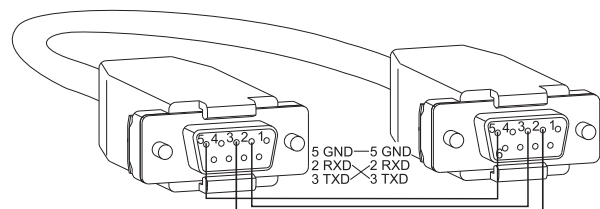Use the pinout in FIG. 6 when connecting a PC to the CONTROL port.

FIG. 6 RS-232 null modem cable pin diagram

To establish external serial control:

1. Plug the null modem cable into the enclosure's CONTROL port (FIG. 7).
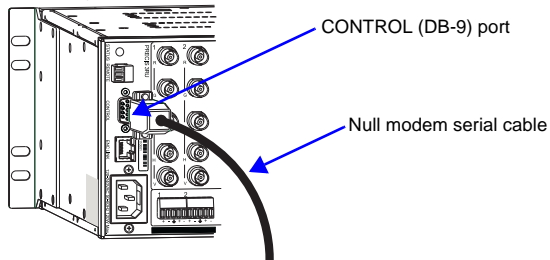

CONTROL (DB-9) port

Null modem serial cable

FIG. 7 Attach null modem serial cable

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

XNNet Control (SBCs, remote control panels, etc.)

Communication Cable Requirements:
- Two-conductor, 20 AWG, 7/28 strand cable with a drain wire or shield, such as Alpha 2412C (customer supplied)
- Maximum cable length: 1,000 ft. (305 m) total, including linked devices

On large control networks, termination may be required on the last linked device; for termination information, see the device's documentation.

To establish external XNNet control:

1. Attach XNNet link cable to XNNet device according to the device instructions.
2. Unplug the REMOTE connector on the Precis SD and loosen the screws.
3. Insert XNNet link cable wires according to FIG. 8 (either wire can be inserted in either outside slot).
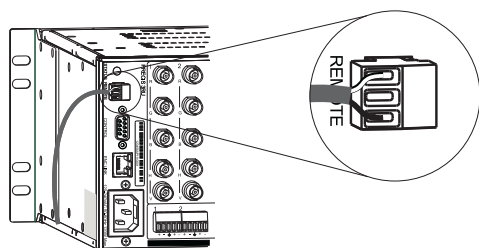4. Tighten screws and plug in the REMOTE connector.

FIG. 8 Insert wires into REMOTE connector

Applying Power

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

To apply power:

1. Attach power cord and plug into power source (turn on power source if necessary). The Power Indicator on the front of the enclosure illuminates.
2. Apply power to any external devices (remote control panels, etc.) and then to the source and destination devices.

Completing the Installation

The Precis SD ships from the factory with a default switch that routes the signal from Input 1 to all outputs. Before using the system for normal operations, disconnect the default switch and execute a test switch to verify that the system is working correctly.

To complete the installation:

1. Disconnect the factory default switch.
2. Execute a test switch that routes Input 1 to Output 2 using one of the following control options (right column). (RGBHV signals require five connectors; *all* cables for that signal must be attached for the test switch.)
3. Attach remaining source and destination devices.

Control Options Startup & Test Switch

Control Panel (front or remote) – when power is applied, the Power LED on the front illuminates.

All Level Key   Input Keys   Power & Comm Indicators
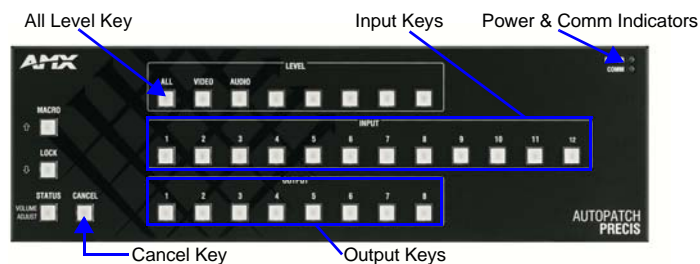
Cancel Key   Output Keys

FIG. 9 Precis SD front control panel (with audio control)

To disconnect the default switch: press Cancel Key to ensure panel is in Switch mode. Press the All Level Key, which illuminates. Press Input Key 1, which flashes. After a moment, all Output Keys illuminate. Press each Output Key; as each key turns off, the output is disconnected from the input.

To execute the test switch: press Cancel Key to ensure panel is in Switch mode. Press the All Level Key, which illuminates. Press Input Key 1, which flashes. Press Output Key 2. When Output Key 2 illuminates, the switch is successful.

AMX Control Devices – the Precis SD is compatible with a number of AMX control devices. For specific control programming information, contact your AMX representative.

APControl 3.0 – install and open the program. From the APControl Launchbar menu, select System / New; select Heritage System / Next; select Manual Configuration Entry / Next; enter VMs and number of inputs and outputs; click Add VM / Next; finish Wizard instructions.

To disconnect the default switch: From the Launchbar menu, deselect all active crosspoints.

To execute the test switch: 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 documentation and Quick Start Guide). For instructions on disconnecting the default switch and executing a test switch, see the APWeb (Interface) documentation on the CD.

BCS Commands (HyperTerminal) – when power is applied, a short splash screen appears.

To disconnect the default switch: enter `DL0I1T` into the terminal emulation program. When `DL0I1T` appears, the command is successful.

To execute a test switch: enter `CL0I1O2T` into the terminal emulation program. When `CL0I1O2T` appears, the switch is successful.

Audio Adjustment

If the enclosure contains stereo audio, "Adjust Audio" is to the left of the Status Key and arrows are to the left of the Macro and Lock Keys (FIG. 10). All Precis SD models with stereo audio support Volume Control and Input Gain Control.

To access audio adjustments:

1. Press and hold down the Status Key until it blinks.
2. Select the output or input needing adjustment.
3. Increase audio by pressing and releasing the Up Arrow Key (Macro Key). Decrease audio by pressing and releasing the Down Arrow Key (Lock Key).
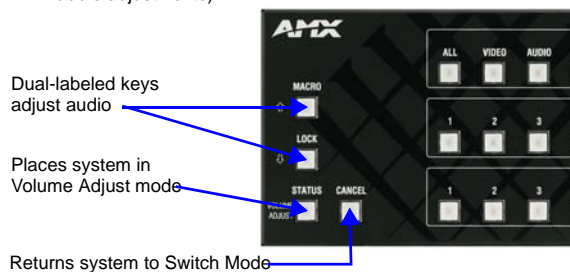4. Press the Cancel Key when done with audio adjustments (does not cancel audio adjustments).

Dual-labeled keys adjust audio

Places system in Volume Adjust mode

Returns system to Switch Mode

FIG. 10 Audio adjustment keys

Additional Information Covered in Precis SD Instruction Manual

See the "Precis SD Instruction Manual" on the CD or at **www.amx.com** for the following:
- Control panel operations (including locking/unlocking)
- Defining and executing macros (local presets); pre-defined in XNConnect
- Volume and input gain adjustments (optional features)

Reference Document for the Precis SD

The "BCS Protocol Instruction Manual" is on the *AMX AutoPatch CD* and at **www.amx.com**.

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