

XTP II CrossPoint Series • Setup Guide

IMPORTANT:
Go to www.extron.com for the complete user guide, installation instructions, and specifications before connecting the product to the power source.

The XTP II CrossPoint Series matrix switchers route multiple signals between multiple local and remote sources and display devices. This guide provides instructions for an experienced installer to install and connect any XTP II CrossPoint matrix switcher.

The different matrix switcher models share the same basic features but they may be arranged differently.

- **XTP II CrossPoint 1600** — Supports up to four input and four output boards in horizontal slots.
- **XTP II CrossPoint 3200** — Supports up to eight input and eight output boards in vertical slots.
- **XTP II CrossPoint 6400** — Supports up to 16 input and 16 output boards in vertical slots.

Figure 1 shows the rear panel features of an XTP II CrossPoint 3200 matrix switcher but they apply to the other matrix switcher models.

Board Space	Enclosure Features
<p>A Input board space B Output board space See “Board and Blank Plate Installation” below for details.</p>	<p>C RS-232 and RS-422 connector D Ethernet LAN connector E Reset button and LED F AC power connector See Rear Panel Features on the next page for details.</p>

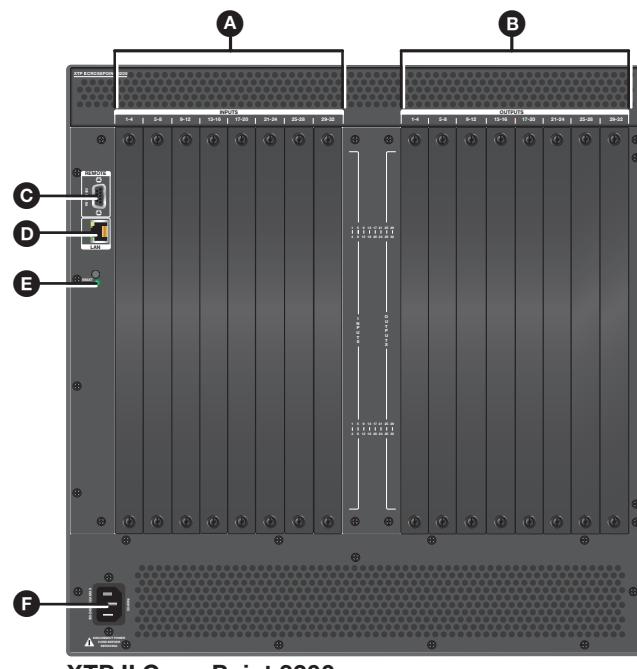


Figure 1. XTP II CrossPoint Matrix Switcher Rear Panel Features

Installation

Board and Blank Plate Installation

Changing the boards changes the configuration of the matrix switcher. All boards are hot-swappable and can be installed without removing power to the matrix switcher. Ensure a board or blank plate is installed in every slot (see figure 1, **A** and **B**).

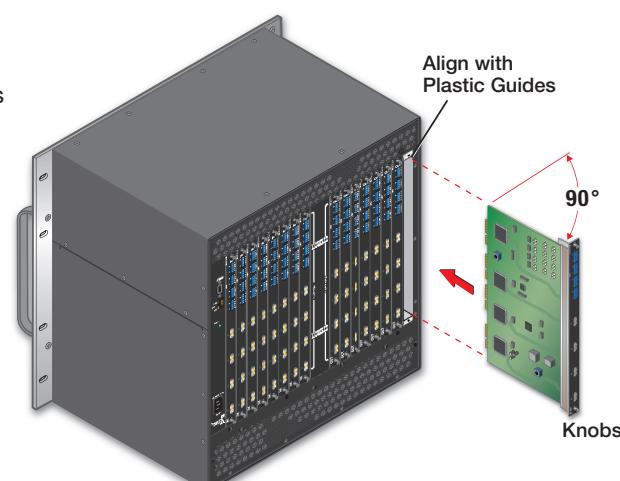
ATTENTION: Do not touch the electronic components or the connectors on the backplane or on the circuit boards without being electrically grounded. Handle circuit boards by their edges only.

Removal

1. For boards, disconnect connected cables.
2. Loosen the two knobs on the board or blank plate until the screws attaching the board are separated from the enclosure.
3. For boards, gently pull the knobs away from the enclosure to dislodge the board from the enclosure.
4. Slide the board or pull the plate out of the slot. Place boards on an anti-static surface or in an anti-static container.

Installation

1. If another board or blank plate interferes with the installation of a new board, remove it (see Removal).
2. For boards, slide the board in the slot along the guides and firmly push it into the enclosure so the panel is flush with the enclosure.
3. Tighten the two knobs on each end of the board or blank plate to secure it to the enclosure.



XTP II CrossPoint 3200

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Mounting

Use screws on each side of the matrix switcher to attach the front panel to a rack (see the *XTP II CrossPoint Series User Guide* at www.extron.com for more mounting information).

Rear Panel Features

C Remote RS-232 and RS-422 connector (see figure 1 on the previous page)
— For RS-232 or RS-422 serial control of the matrix switcher, connect a host device to the 9-pin HD connector. Wire the connector for RS-232 or RS-422 communication as shown to the right.

D Ethernet LAN connector — For 10/100BASE-T, half duplex or full duplex Ethernet control of the matrix switcher, connect a host device, LAN, or WAN to the RJ-45 connector with crossover or patch cable.

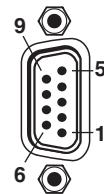
Default protocol for this port:

- IP address = 192.168.254.254
- Subnet mask = 255.255.0.0
- Gateway address = 0.0.0.0

E Reset button and LED — Hold the recessed reset button in to perform various resets (see the *XTP II CrossPoint Series User Guide* for more information about reset modes).

F Power connector — Connect a power source to the AC power connector.

- AC Power** — Connect a 100 VAC to 240 VAC, 50-60 Hz power source to this connector with a standard IEC power cord.
- Attached AC power** (XTP II CrossPoint 6400 only)
 - North America** — Connect the power cord into a NEMA L6-20 220VAC, 60 Hz power outlet.
 - Other regions** — Have a licensed electrician install a 200-240 VAC power connector. Then, connect the power cord into a 200-240 VAC, 50-60 Hz power outlet. Ensure the wiring is in accordance with electrical codes.



Pin	RS-232	RS-422
1		
2	Tx	Tx-
3	Rx	Rx-
4		
5	Gnd	Gnd
6		
7		Rx+
8		Tx+
9		



ATTENTION: Extron recommends that this procedure be performed by a licensed electrician only (see the *XTP II CrossPoint Series User Guide*).

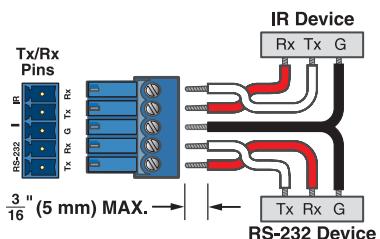
Board Connections

The available connectors depend on the board models. The following connector information represents potential connectors included with input and output boards.

XTP interconnection connectors

XTP twisted pair, 4K twisted pair, and fiber boards may include the following connectors:

- XTP twisted pair input connectors** — Connect a shielded twisted pair cable between the XTP input connector on the input board and the XTP output connector on an XTP twisted pair device (see [Twisted pair recommendations](#) on the next page).
- XTP twisted pair output connectors** — Connect a shielded twisted pair cable between the XTP output connector on the output board and the XTP input connector on an XTP twisted pair device (see [Twisted pair recommendations](#)).
- XTP fiber input connectors** — Connect a fiber optic cable between the XTP input connector on the input board and the XTP output connector on an XTP fiber device (see [Fiber communication](#) on page 4).
- XTP fiber output connectors** — Connect a fiber optic cable between the XTP output connector on the output board and the XTP input connector on an XTP fiber device (see [Fiber communication](#) on page 4).
- Pass-through LAN connectors** — Connect a control device or device to control to the RJ-45 connector with crossover or patch cable to pass 10/100BASE-T Ethernet communication.
- RS-232 and IR Over XTP** — To pass bidirectional serial or infrared signals to a control device or device to control, connect the device to the RS-232 and IR Over XTP connector. Wire the connector as shown to the right.



Input connectors

Input boards for local sources may include the following connectors:

- **HDMI input connectors** — Connect a digital video source to a female HDMI input connector. It can accept HDMI, DVI (with an appropriate adapter), or dual mode DisplayPort video signals.

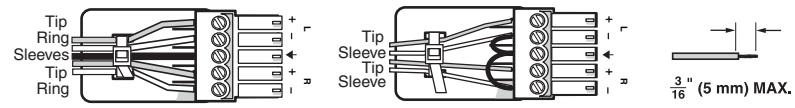
NOTE: Use an Extron LockIt® Lacing Bracket to secure HDMI cables to the rear panel connectors.

- **DVI input connectors** — Connect a digital video source to a female DVI input connector.
- **SDI input and Loop Out connectors** — Connect a 3G-SDI, HD-SDI, or SDI video source to a BNC input connector. For each input, connect an optional digital display for local output of the source on the corresponding BNC Loop Out connector.

NOTE: Use 75 ohm terminators on unused Loop Out connectors.

- **VGA input connectors** — Connect an analog RGB video source to a female 15-pin HD VGA connector.

- **Analog audio input connectors** — Connect balanced or unbalanced stereo audio to a 3.5 mm, 5-pole captive screw connector. Wire the connector as shown to the right.



Output connectors

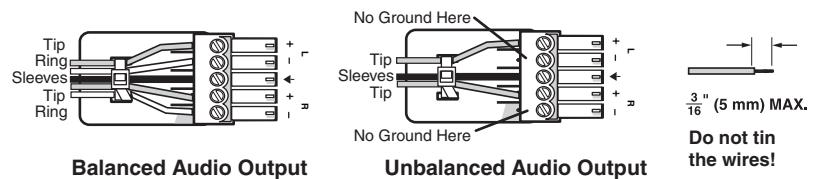
Output boards for local output devices may include the following connectors:

- **HDMI output connectors** — Connect a digital video display to a female HDMI output connector.

NOTE: Use an Extron LockIt® Lacing Bracket to secure HDMI cables to the rear panel connectors.

- **DVI output connectors** — Connect a digital video display to a female DVI output connector.

- **Analog audio output connectors** — Connect a balanced or unbalanced, stereo or mono audio device to a 3.5 mm, 5-pole captive screw connector for 2-channel stereo analog audio. Wire the connector as shown to the right.



Connection Details

Twisted pair recommendations for XTP communication

ATTENTION: Do not connect this connector to a computer data or telecommunications network.

The twisted pair input and output boards are compatible with shielded twisted pair (F/UTP, SF/UTP, and S/FTP) cable. Extron recommends using the following practices to achieve full transmission distances up to 330 feet (100 meters) and reduce transmission errors.

- Use Extron XTP DTP 24 SF/UTP cable for the best performance. At a minimum, Extron recommends 24 AWG, solid conductor, STP cable with a minimum bandwidth of 400 MHz.
- Terminate cables with shielded connectors to the TIA/EIA-T568B standard.
- Limit the use of more than two pass-through points, which may include patch points, punch down connectors, couplers, and power injectors. If these pass-through points are required, use shielded couplers and punch down connectors.

NOTE: When using shielded twisted pair cable in bundles or conduits, consider the following:

- Do not exceed 40% fill capacity in conduits.
- Do not comb the cable for the first 20 meters, where cables are straightened, aligned, and secured in tight bundles.
- Loosely place cables and limit the use of tie wraps or hook-and-loop fasteners.
- Separate twisted pair cables from AC power cables.

TIA/EIA-T568B	
Pin	Wire Color
1	White-orange
2	Orange
3	White-green
4	Blue
5	White-blue
6	Green
7	White-brown
8	Brown

Insert Twisted Pair Wires
RJ-45 Connector

Fiber communication

WARNING: Potential risk of severe injury. The fiber optic devices output continuous invisible light (class 1 rated), which may be harmful to the eyes; use with caution.

- Do not look into the fiber optic cable connectors or into the fiber optic cables themselves.
- Plug the attached dust caps into the optical transceivers when the fiber optic cable is unplugged.

Operation

After the XTP devices and all connected devices are properly connected and powered on, the system is fully operational. To locally manage ties and presets, adjust audio levels, or set various other settings, use the front panel buttons (see the *XTP II CrossPoint Series User Guide* at www.extron.com for front panel operation features and procedures). To configure and control the matrix switcher remotely, use one of the following methods.

XTP System Configuration Software

The Extron XTP System Configuration Software (recommended) provides a graphical interface to configure and control the matrix switcher and connected XTP devices. To use the software:

1. Download the software from www.extron.com and install it on a PC with a Windows® operating system.
2. Connect the PC to the front panel USB configuration connector or a network connected to the Ethernet LAN connector.
3. For more information about the software, open the software and click **Help** from the **Help** menu.

SIS Commands

Simple Instruction Set (SIS™) commands configure and control the matrix switcher and connected XTP devices. To enter SIS commands through the matrix switcher:

1. Download the Extron DataViewer utility from www.extron.com and install it on a PC with a Windows operating system.
2. Connect the PC to the front panel USB configuration connector, a network connected to the rear panel Ethernet LAN connector, or rear panel RS-232 and RS-422 connector.
3. For a list of SIS commands and expected responses, see the *XTP II CrossPoint Series User Guide* at www.extron.com.

Internal Web Pages

The internal web pages allow configuration and control of the matrix switcher through a network. To use the internal web pages:

1. Connect a PC to the same network connected to the Ethernet LAN connector on the matrix switcher.
2. Open a web browser and enter the IP address of the matrix switcher in the browser **Address** field.
3. Press the <Enter> key on the keyboard (see the *XTP II CrossPoint Series User Guide* at www.extron.com).

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the [Extron Safety and Regulatory Compliance Guide](http://www.extron.com) on the Extron website.