Setup Guide

Matrix Switchers



XTP CrossPoint Series

Configurable Digital Video Matrix Switchers







68-1736-50 Rev. E 12 16

Safety Instructions

Safety Instructions • English

WARNING: This symbol, A, when used on the product, is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

ATTENTION: This symbol, △, when used on the product, is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the Extron Safety and Regulatory Compliance Guide, part number 68-290-01, on the Extron website, www.extron.com.

Sicherheitsanweisungen • Deutsch

WARNUNG: Dieses Symbol ▲ auf dem Produkt soll den Benutzer darauf aufmerksam machen, dass im Inneren des Gehäuses dieses Produktes gefährliche Spannungen herrschen, die nicht isoliert sind und die einen elektrischen Schlag verursachen können.

VORSICHT: Dieses Symbol △ auf dem Produkt soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.

Weitere Informationen über die Sicherheitsrichtlinien, Produkthandhabung, EMI/EMF-Kompatibilität, Zugänglichkeit und verwandte Themen finden Sie in den Extron-Richtlinien für Sicherheit und Handhabung (Artikelnummer 68-290-01) auf der Extron-Website, www.extron.com.

Instrucciones de seguridad • Español

ADVERTENCIA: Este símbolo, A, cuando se utiliza en el producto, avisa al usuario de la presencia de voltaje peligroso sin aislar dentro del producto, lo que puede representar un riesgo de descarga eléctrica.

ATENCIÓN: Este símbolo, Δ, cuando se utiliza en el producto, avisa al usuario de la presencia de importantes instrucciones de uso y mantenimiento recogidas en la documentación proporcionada con el equipo.

Para obtener información sobre directrices de seguridad, cumplimiento de normativas, compatibilidad electromagnética, accesibilidad y temas relacionados, consulte la Guía de cumplimiento de normativas y seguridad de Extron, referencia 68-290-01, en el sitio Web de Extron, www.extron.com.

Instructions de sécurité • Français

AVERTISSEMENT: Ce pictogramme, ▲, lorsqu'il est utilisé sur le produit, signale à l'utilisateur la présence à l'intérieur du boîtier du produit d'une tension électrique dangereuse susceptible de provoquer un choc électrique.

ATTENTION: Ce pictogramme, Δ , lorsqu'il est utilisé sur le produit, signale à l'utilisateur des instructions d'utilisation ou de maintenance importantes qui se trouvent dans la documentation fournie avec le matériel.

Pour en savoir plus sur les règles de sécurité, la conformité à la réglementation, la compatibilité EMI/EMF, l'accessibilité, et autres sujets connexes, lisez les informations de sécurité et de conformité Extron, réf. 68-290-01, sur le site Extron, www.extron.com.

Istruzioni di sicurezza • Italiano

AVVISO: Questo simbolo, ▲,quando viene utilizzato il prodotto, serve ad avvisare l'utente della presenza di tensioni pericolose non isolate all'interno del prodotto, che può presentare un rischio di scosse elettriche.

ATTENTZIONE: Questo simbolo, △, quando viene utilizzato il prodotto, serve ad avvisare l'utente di importanti istruzioni di uso e manutenzione (assistenza) nella letteratura fornita con l'apparecchiatura.

Per informazioni sulle linee guida di sicurezza, adempimenti normativi, compatibilità EMI/EMF, accessibilità e argomenti correlati, vedere la sicurezza di Extron e Regulatory Compliance Guide, parte numero 68-290-01, sul sito Web Extron, www.extron.com.

Instrukcje bezpieczeństwa • Polska

OSTRZEŻENIE: Ten symbol, A, gdy używany na produkt, ma na celu poinformować użytkownika o obecności izołowanego i niebezpiecznego napięcia wewnątrz obudowy produktu, który może stanowić zagróżenie porażenia prądem elektrycznym.

UWAGI: Ten symbol, A, gdy używany na produkt, jest przeznaczony do ostrzegania użytkownika ważne operacyjne oraz instrukcje konserwacji (obsługi) w literaturze, wyposażone w sprzęt.

Informacji na temat wytycznych w sprawie bezpieczeństwa, regulacji wzajemnej zgodności, zgodność EM/EMF, dostępności i Tematy pokrewne, zobacz Extron bezpieczeństwa i regulacyjnego zgodności przewodnik, część numer 68-290-01, na stronie internetowej Extron, www.extron.com.

Инструкция по технике безопасности • Русский

ПРЕДУПРЕЖДЕНИЕ: Данный символ, А, если указан на продукте, предупреждает пользователя о наличии неизолированного опасного напряжения внутри корпуса продукта, которое может привести к поражению электрическим током.

ВНИМАНИЕ: Данный символ, ∆, если указан на продукте, предупреждает пользователя о наличии важных инструкций по эксплуатации и обслуживанию в руководстве, прилагаемом к данному оборудованию.

Для получения информации о правилах техники безопасности, соблюдении нормативных требований, электромагнитной совместимости (ЭМП/ЭДС), возможности доступа и других вопросах см. руководство по безопасности и соблюдению нормативных требований Extron на сайте Extron: www.extron.com, номер по каталогу - 68-290-01.

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注意: △产品上的这个标志意在提示用户设备随附的用户手册中有 重要的操作和维护(维修)说明。

关于我们产品的安全指南、遵循的规范、EMI/EMF的兼容性、无障碍 使用的特性等相关内容,敬请访问 Extron 网站 www.extron.com,参见 Extron 安全规范指南,产品编号 68-290-01。

安全記事 • 繁體中文

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有關安全性指導方針、法規遵守、EMI/EMF 相容性、存取範圍和相關 主題的詳細資訊,請瀏覽 Extron 網站: www.extron.com,然後參閱 《Extron 安全性與法規遵守手冊》,準則編號 68-290-01。

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안전 지침 • 한국어

경고: 이 기호 ▲, 가 제품에 사용될 경우, 제품의 인클로저 내에 있는 접지되지 않은 위험한 전류로 인해 사용자가 감전될 위험이 있음을 경고합니다.

주의: 이 기호 △, 가 제품에 사용될 경우, 장비와 함께 제공된 책자에 나와 있는 주요 운영 및 유지보수(정비) 지침을 경고합니다.

안전 가이드라인, 규제 준수, EMI/EMF 호환성, 접근성, 그리고 관련 항목에 대한 자세한 내용은 Extron 웹 사이트(www.extron.com)의 Extron 안전 및 규제 준수 안내서, 68-290-01 조항을 참조하십시오.

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FCC Class A Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. The Class A limits provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference. This interference must be corrected at the expense of the user.

ATTENTION: The Twisted Pair Extension technology works with unshielded twisted pair (UTP) or shielded twisted pair (STP) cables; but to ensure FCC Class A and CE compliance, STP cables and STP Connectors are required.

For more information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the "Extron Safety and Regulatory Compliance Guide" on the Extron website.

Battery Notice

This product contains a battery. **Do not open the unit to replace the battery.** If the battery needs replacing, return the entire unit to Extron (for the correct address, see the Extron Warranty section on the last page of this guide).

- **CAUTION:** Risk of explosion. Do not replace the battery with an incorrect type. Dispose of used batteries according to the instructions.
- **ATTENTION :** Risque d'explosion. Ne pas remplacer la pile par le mauvais type de pile. Débarrassez-vous des piles usagées selon le mode d'emploi.

Class 1 Laser Product

Any service to this product must be carried out by Extron Electronics and its qualified service personnel.

CAUTION: Using controls, making adjustments, or performing procedures in a manner other than what is specified herein may result in hazardous radiation exposure.

NOTE: For more information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the "Extron Safety and Regulatory Compliance Guide" on the Extron website.

Produit laser de classe 1

Si ce produit a besoin d'un quelconque entretient, celui-ci doit être fait par Extron Electronics et son personnel qualifié.

ATTENTION : L'utilisation de commandes, la réalisation de réglages, ou l'exécution de procédures de manière contraire aux dispositions établies dans le présent document, présente un risque d'exposition dangereuse aux radiations.

Remarque : Pour plus d'informations sur les directives de sécurité, les conformités de régulation, la compatibilité EMI/EMF, l'accessibilité, et les sujets en lien, consultez le « **Informations de sécurité et de conformité Extron** » sur le site internet d'Extron.

Conventions Used in this Guide

Notifications

ATTENTION:

- Risk of property damage.
- Risque de dommages matériels.

NOTE: A note draws attention to important information.

Software Commands

Commands are written in the fonts shown here:

```
^ARMerge Scene,,Op1 scene 1,1 ^B51 ^W^C
```

[Ø1] RØØØ4ØØ3ØØØØ4ØØØØ8ØØØØ6ØØ[Ø2] 35[17][Ø3]

Esc X1 *X17 * X20 * X23 * X21 CE

NOTE: For commands and examples of computer or device responses mentioned in this guide, the character "Ø" is used for the number zero and "O" is the capital letter "o."

Computer responses and directory paths that do not have variables are written in the font shown here:

Reply from 208.132.180.48: bytes=32 times=2ms TTL=32 C:\Program Files\Extron

Variables are written in slanted form as shown here:

ping xxx.xxx.xxx.xxx -t SOH R Data STX Command ETB ETX

Selectable items, such as menu names, menu options, buttons, tabs, and field names are written in the font shown here:

From the **File** menu, select **New**. Click the **OK** button.

Specifications Availability

Product specifications are available on the Extron website, **www.extron.com**.

Extron Glossary of Terms

A glossary of terms is available at http://www.extron.com/ technology/glossary.aspx

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xiv XTP CrossPoint Series • Contents

Introduction

This section gives an overview of the Extron XTP CrossPoint Series configurable matrix switchers. Topics in this section include the following:

- Guide Overview
- Product Description

Guide Overview

NOTE: For more information on any subject in this guide, see the *XTP CrossPoint Series User Guide* at www.extron.com.

This setup guide helps you to easily and quickly set up and configure your XTP CrossPoint Series matrix switcher. Step-by-step instructions show you how to:

- Install the input and output boards (see Removing and Installing a Board or Blank Panel on page 48).
- Connect the hardware (see Inputs and Outputs on page 5).
- **Perform basic operations** (see **Front Panel Operations** on page 18).
- Use both the front panel controls (see Front Panel Operations on page 18) and selected Simple Instruction Set (SIS) commands (see Selected SIS Commands on page 23).
- Connect to the built-in HTML pages, which you can use to operate the matrix switcher (see XTP System Configuration Program on page 46).
- Reconfigure the matrix switcher by adding or removing boards (see Removing and Installing a Board or Blank Panel on page 48).

Product Description

The XTP CrossPoint Series matrix switchers distribute and transcode signals in a variety of video and audio formats, identified by the input and output boards installed, defined in the table on the next page. The matrix switcher routes an input signal of a format supported by an installed input board to any combination of outputs with formats supported by installed output boards. The matrix switcher can route multiple input-to-output configurations simultaneously.

Input and O	utput Boards
Input Boards	Output Boards
XTP CP 4i (twisted pair [TP] inputs)	XTP CP 4o (TP outputs)
XTP CP 4i 4K (TP inputs)	XTP CP 4o 4K (TP outputs)
XTP CP 4i Fiber 4K (fiber optic inputs)	XTP CP 4o Fiber 4K (fiber optic outputs)
XTP II CP 4i HD 4K PLUS (HDMI 4K inputs)	XTP II CP 40 HD 4K PLUS (HDMI 4K outputs)
XTP CP 4i HDMI (HDMI inputs)	XTP 40 HDMI (HDMI outputs)
XTP CP 4i DVI Pro (DVI Pro inputs)	XTP CP 40 DVI Pro (DVI Pro outputs)
	XTP CP 40 SA (stereo analog audio outputs)
XTP CP 4i 3G-SDI (3G/HD-SDI/SDI inputs)	
XTP CP 4i VGA (universal analog inputs)	





The XTP CrossPoint Series matrix switchers are assembled from user-installed and hot-swappable input and output boards. The Input and Output Boards table on the previous page identifies the types of input boards and output boards currently available, each of which can receive (input boards) or output (output boards) up to four signals (see **Inputs and Outputs** on page 5 for details).

The XTP CrossPoint 1600 can support up to four input boards and four output boards of any of the type listed in the Input and Output Boards table, for a total of 16 inputs and 16 outputs.

The XTP CrossPoint 3200 can support up to eight input boards and eight output boards of any of the type listed in the Input and Output Boards table, for a total of 32 inputs and 32 outputs.

The matrix switcher can be remotely controlled via an Ethernet LAN port, serial port, or USB port connection using either the Extron XTP System Configuration Software or SIS commands.

Endpoint Configuration

In an XTP system, the transmitters connected to the input boards and the receivers connected to the output boards are known as "endpoints."

When you configure an XTP system (consisting of an XTP CrossPoint Series matrix switcher and its connected endpoints), connect a computer to the matrix switcher and configure the endpoints from the matrix switcher.

Do not connect the computer directly to the endpoint for configuration when it is part of an XTP system.

Swapping Board and Endpoints

When you replace an input board, an output board, or an endpoint, the matrix switcher automatically applies settings to the new device. If the stored settings are incompatible with the newly installed device, the matrix switcher applies a default configuration.

Installation

This section describes installation of the XTP CrossPoint matrix switchers, including connections and features. Topics that are covered include:

- Rear Panel
- Front Panel

Rear Panel



Figure 2. XTP CrossPoint 1600 Matrix Switcher Rear Panel

B Reset button (see page 11)

(F) Power connector (see page 11)

G Power connector (see page 11)

- A Input boards (see next page)
- **B** Output boards (see page 8)
- G LAN port (see page 11)
- **D** Remote port (see page 11)

I/O Board Configuration Overview

See figure 2 and **figure 3** on the next page. Input boards are installed in one or two blocks or spaces and output boards are installed in separate spaces. Each board position is identified by the input or output numbers supported by the position (1-2, 5-8, and so on).

On the XTP CrossPoint 1600, boards are installed horizontally, input boards in the top space and output boards in the bottom space. Inputs or output positions are 1-4 on the top space and 13-16 on the bottom space.

On the XTP CrossPoint 3200, boards are installed vertically; input boards on the left and output boards on the right. Input or output positions are 1-4 in the left space and 29-32 in the right.



Figure 3. XTP CrossPoint 3200 Matrix Switcher Rear Panel

ATTENTION:

- Unplug the product and other devices before proceeding.
- Débranchez le produit et les autres appareils avant de procéder.

Inputs and Outputs

NOTE: See item (A) on **figure 2** on the previous page and figure 3 above.

A Input boards space — Install input boards.

XTP CP 4i and XTP CP 4i 4K (XTP input board)



ATTENTION:

wire the connectors).

- Do not connect these ports to a computer data or telecommunications network.
- Ne connectez pas ces ports à des données informatiques ou à un réseau de télécommunications.



2 XTP power indicators — Indicate the status of the power over XTP (PoX) provided to the endpoint as follows:

Lit green — The board is providing XTP power to the endpoint.

Lit amber — XTP power is available, but disabled.

Blinking amber – XTP power is not available, but enabled.

Lit red — A wiring fault exists.

Unlit — The endpoint cannot receive power over XTP.

- **B** LAN connectors As desired, connect a TP cable between a host device or control LAN and this connector for passive extension to the LAN (Ethernet) connector on the connected endpoint (see TP connectors on page 12 to wire the connector).
- A RS-232/IR Over XTP connectors If desired. connect serial RS-232 signals, modulated IR signals, or both to these 3.5 mm, 5-pole captive screw connectors for bidirectional RS-232 and IR communications on the associated inputs (see RS-232 and **IR connectors** on page 14 to wire the connectors).

XTP CP 4i Fiber 4K (fiber optic input board)



5 XTP in connectors — Connect up to four fiber optic cable between these ports and the Tx port of a compatible Extron fiber optic transmitter. This board uses small form factor pluggable (SFP) modules with industry-standard LC fiber optics connectors to provide reliable physical connectivity and precise fiber core alignment.

between a host device or control LAN and this



connector for passive extension to the LAN (Ethernet) connector on the connected endpoint (see **TP connectors** on page 12 to wire the connector).

A RS-232/IR Over XTP connectors – If desired, connect serial RS-232 signals, modulated IR signals, or both to these 3.5 mm, 5-pole

captive screw connectors for bidirectional RS-232 and IR communications on the associated inputs (see RS-232 and **IR connectors** on page 14 to wire the connectors).









- **G** XTP Out connectors Connect up to four fiber optic cable between these ports and the Tx port of a compatible Extron fiber optic receiver.
- B LAN connectors As desired, connect a TP cable between a host device or control LAN and this connector for passive extension to the LAN (Ethernet) connector on the connected endpoint (see **TP connectors** on page 12 to wire the connector).
- A RS-232/IR Over XTP connectors If desired, connect serial RS-232 signals, modulated IR signals, or both to these 3.5 mm, 5-pole captive screw connectors for bidirectional RS-232 and IR



communications on the associated inputs (see RS-232 and **IR connectors** on page 14 to wire the connectors).

PoX provided to the endpoint as follows: **Lit green** — The board is providing XTP power to the endpoint. **Lit amber** — XTP power is available, but disabled.

page 4.

5

NOTE: See item **(B)** on figure 2 on page 4 and figure 3 on

XTP power indicators — Indicate the status of the

ß 6 ഒ 5 6





connectors).

Remote Control

NOTE: See item **(c)** and item **(d)** on **figure 2** on page 4 and **figure 3** on page 4.

G LAN (Ethernet) port − If desired, connect a network WAN or LAN hub, a control system, or a computer to the Ethernet RJ-45 port (see TP connectors on the next page to wire the connector).

NOTE: The factory default IP address is 192.168.254.254.

Remote RS-232/RS-422 port — If desired, connect a control system or computer to the rear panel Remote RS-232/RS-422 port (see Remote port connector on page 17 to wire the connectors).

NOTE: The XTP System Configuration software **CANNOT** interface with the matrix switcher via the Remote RS-232/RS-422 port. A third-party control system or a computer issuing SIS commands can use this port.

Reset

NOTE: See item (a) on figure 2 on page 4 and figure 3 on page 4.

Reset button — Initiates four levels of reset of the matrix switcher. For different reset levels, press and hold the recessed button wile the matrix switcher is running or while you power up the matrix switcher.

See the *XTP CrossPoint Series User Guide*, available at **www.extron.com**.

Power

NOTE: See item **(**) on **figure 2** on page 4 and **figure 3** on page 4.

- **Power connector** Plug the matrix switcher into a grounded AC source.
- G Attached AC power connector –

North America — Plug the power cord into a NEMA L6-20 220 VAC, 60 Hz power outlet (see the drawing at right).

Other regions — Install a 200-240 VAC power connector, standard for the matrix switcher installation site, and plug the power cord into a 200-240 VAC, 50-60 Hz power outlet.



L6-20R

North America

X: Hot Y: Hot G: Ground

ATTENTION:

- Extron recommends that this procedure be performed by a licensed electrician only. See the *XTP II CrossPoint Series User Guide*, available at www.extron.com, for installation instructions, warnings, and other important information.
- Extron recommande que cette tâche soit exécutée par un électricien agréé uniquement. Voir le *XTP II CrossPoint Series User Guide*, disponible sur www.extron.com pour obtenir des informations relatives aux instructions de montage, Aux avertissements, et à d'autres éléments importants.

Additional Connector Information

TP connectors

All LAN ports, whether on XTP boards or the matrix switcher Ethernet port use Category (CAT) 5e, CAT 6a, or CAT 7 (CATx) unshielded twisted pair (UTP) or shielded twisted pair (STP) cables.

The XTP ports are compatible with Extron XTP DTP 24 SF/UTP cables as well as CATx shielded twisted pair (F/UTP, SF/UTP, and S/FTP) and unshielded twisted pair (U/UTP) cable.

The TP cables are terminated with RJ-45 connections and are limited to a length of 330 feet (100 m). The cables can be terminated as straight-through cable or a crossover cable and must be properly terminated for your application (see figure 4).



NOTE: Do not stretch or bend cables. Transmission errors can occur.

The matrix switcher LAN port and the LAN ports on the input and output boards support both 10 Mbps (10Base-T — Ethernet) and 100 Mbps (100Base-T — Fast Ethernet), half-duplex and full duplex Ethernet connections. Both Ethernet speeds require CAT 5e cable at minimum.

Matrix switcher and XTP board LAN cables

The LAN ports require CATx, crossover or patch cables.

XTP board XTP cables

ATTENTION:

- Do not connect these boards to a computer data or telecommunications network.
- Ne connectez pas ces cartes à des données informatiques ou à un réseau de télécommunications.
- Do not use Extron UTP23SF-4 Enhanced Skew-Free AV UTP cable or STP201 cable to link the XTP products.
- N'utilisez pas le câble AV Skew-Free UTP version améliorée UTP23SF d'Extron ou le câble STP201 pour relier les produits XTP avec les émetteurs.
- To ensure FCC Class A and CE compliance, STP cables and STP connectors are required.
- Afin de s'assurer de la compatibilité entre FCC Classe A et CE, les câbles STP et les connecteurs STP sont nécessaires.

Extron recommends using the following practices to achieve full transmission distances up to 330 feet (100 m) and reduce transmission errors.

Use the following Extron XTP DTP 24 SF/UTP cables and connectors for the best performance:

XTP DTP 24/1000	Non-Plenum 1000' (305 m) spool	22-236-03
XTP DTP 24P/1000	Plenum 1000' (305 m) spool	22-235-03
XTP DTP 24 Plug	Package of 10	101-005-02
If not using XTP DTP 24 AWG, solid condu	24 cable, at a minimum, Extron re actor, STP cable with a minimum 4	commends 00 MHz

Terminate cables with shielded connectors to the TIA/EIA T568B standard only (patch cables, see figure # on the previous page).

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 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 m, 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.

RS-232 and IR connectors

Figure 5 shows how to wire the RS-232 and IR connector.





NOTES:

- The length of exposed wires is important. The ideal length is 3/16 inch (5 mm).
 - If the stripped section of wire is longer than 3/16 inch, the exposed wires may touch, causing a short circuit.
 - If the stripped section of wire is shorter than 3/16 inch, wires can be easily pulled out even if tightly fastened by the captive screws.
- Do not tin the power supply leads before installing them in the connector. Tinned wires are not as secure in the connector and could be pulled out.

HDMI connectors

Use a Locklt Lacing Bracket to securely fasten each HDMI cable to the matrix switcher as follows:

- Plug the HDMI cable into the panel connection ().
- Loosen, but do not remove, the HDMI connection mounting screw from the panel enough to allow the LockIt to be placed over it (2).
- Place the LockIt Lacing Bracket on the screw and against the HDMI connector (③), then tighten the screw to secure the bracket.



ATTENTION:

- Do not overtighten the HDMI connector mounting screw. The shield it fastens to is very thin and can easily be stripped.
- Ne serrez pas trop la vis de montage du connecteur HDMI. Le blindage auquel elle est attachée est très fin et peut facilement être dénudé.
- Loosely place the included tie wrap around the HDMI connector and the LockIt Lacking Bracket (4).
- While holding the connector securely against the lacing bracket, use pliers or similar tool to tighten the tie wrap ((5)) then remove any excess length.

Local audio connectors



Unbalanced Stereo Output

Balanced Stereo Output

Figure 6. Audio Input and Output Connector Wiring

ATTENTION:

- For unbalanced audio output, connect the sleeves to the ground contact. DO NOT connect the sleeves to the negative (-) contacts.
- Pour l'audio asymétrique, connectez les manchons au contact au sol. Ne PAS connecter les manchons aux contacts négatifs (–).

NOTE: The length of exposed wires is important (see the RS-232 connector **NOTES** on page 14 for more information).

Analog video connectors

The universal analog video boards can accept RGB video and (with adapters) component video, S-video, and composite video (see figure 8).

	Pin	Function	Pin	Function	Pin	Function
10 5 1 6	1	Red video	6	Red return	11	Monitor ID bit
	2	Green video	7	Green return	12	Monitor ID bit
	3	Blue video	8	Blue return	13	H. sync
15 11	4	Monitor ID bit	9	Not used	14	V. sync
	5	H. svnc return	10	V. svnc return	15	Monitor ID bit

Figure 7. Analog Video Connector Wiring

For component video, use the R-(R-Y) and R return pins (pins 1 and 6), G(Y) and G return pins (pins 2 and 7), and B(B-Y) and B return pins (pins 3 and 9).

For S-video, use the B, B return (C-chroma), G, and G return (Y-luma) pins.

For composite video, use the G pin and the associated return pin.

Input only sync signals, no video signals, on the sync pins, 13 and 14.

Remote port connector

	Pin	RS-232	Function	RS-422	Function
	1	—	Not used	—	Not used
	2	Тx	Transmit	Tx–	Transmit (-)
5 1	3	Rx	Receive	Rx–	Receive (-)
	4	—	Not used	—	Not used
	5	Gnd	Ground	Gnd	Ground
9.6	6	—	Not used	—	Not used
5 0	7	—	Not used	Rx+	Receive (+)
	8	—	Not used	Tx+	Transmit (+)
	9	—	Not used	—	Not used



Front Panel



Figure 9. Front Panel Features

- Configuration port If desired, connect a control system or computer to the front panel configuration port, a USB mini-B port.
- B Primary and Redundant Power Supply LEDs -

NOTES:

- The XTP CrossPoint 3200 has four power supplies installed and indicated.
- The XTP CrossPoint 1600 has two power supplies installed and indicated in its standard configuration (only two LEDs lit). It is available in a four-power-supply, redundant power upgrade configuration, in which it indicates all four supplies.

Green — Indicates that the associated power supply is operating within normal tolerances.

Red — Indicates that the associated power supply is operating outside the normal tolerances or has failed.

Front Panel Operations

The section describes simple XTP CrossPoint matrix switcher operation from the front panel. Topics that are covered include:

- **Creating a Tie**
- Saving or Recalling a Preset •
- Setting the Front Panel Locks (executive Modes) •
- Viewing and Adjusting the Audio Level
- Viewing Ties (and Muting Outputs) •

Creating a Tie

A "tie" is an input-to-output connection.

A "set of ties" is an input tied to two or more outputs. (An output can never be tied to more than one input.)

A "configuration" is one or more ties, one or more sets of ties, or is a combination.

- 1. Press and release the Esc button to clear any input button, output button, or control button indicators that may be lit.
- 2. Press and release the Video and Audio I/O buttons to select or deselect video, audio, or both as desired.

Green when selected VIDEO AUDIO Off when deselected



Red when selected Off when deselected

NOTE: Audio or video can be broken away (tied by itself) by selecting only the Video button or only the Audio button.

Press and release the desired input button.

The button lights to indicate the selection.



4. Press and release the desired output buttons.

Amber indicates video and audio tie. Green indicates video only tie. Red indicates audio only tie. Green indicates the need ENTER to confirm the change.

5. Press and release the Enter button. All button indicators turn off.

Saving or Recalling a Preset

A "preset" is a configuration that has been stored.

 Save a preset — Press and hold the Preset button until it blinks.

Save a preset	PRESET 2 seconds	
	Press and hold.	The Preset button blinks.
Recal	l a preset — Press ar	nd release the Preset button
Recall a preset	PRESET	PRESET
	Press and release.	The Preset button lights.
	All input and output buttons When a preset is <i>saved</i> , t assigned preset locations	s with assigned presets light red . he configuration data at s is overwritten.
Í		INPUTS
	1 2 3 4	5 6 (15 16

2. Press and release the desired input or output button.



3. Press and release the Enter button.

Setting the Front Panel Locks (Executive Modes)

The matrix switcher has three levels of front panel security lock that limit the operation of the matrix switcher from the front panel. The three levels are:

- Lock mode 0 The front panel is completely unlocked.
- Lock mode 1 All functions are locked from the front panel (except for setting Lock mode 2). Some functions can be viewed.
- Lock mode 2 Basic functions are unlocked. Advanced functions are locked and can be viewed only.

Basic functions consist of:

- Making ties
- Saving and recalling presets
- Setting input audio gain and attenuation
- Changing Lock modes

Advanced functions consist of:

- Setting audio output mutes
- Setting audio output volume
- Setting audio/RS-232 wire pair and front panel configuration

The matrix switcher is shipped from the factory in Lock mode 2

Selecting Lock Mode 2 or Toggling Between Mode 2 and Mode 0

NOTES:

- If the matrix switcher is in Lock mode 0 or mode 1, this procedure selects mode 2. The **Preset**, **View**, and **Esc** buttons blink twice.
- If the matrix switcher is in Lock mode 2, this procedure selects mode 0 (unlocks the matrix switcher). The View and Esc buttons blink twice.

Toggle the lock on or off by pressing and holding the **Preset**, **View**, and **Esc** buttons simultaneously until the buttons blink (approximately 2 seconds).



Selecting Lock Mode 2 or Toggling Between Mode 2 and Mode 1

NOTES:

- If the matrix switcher is in Lock mode 0 or mode 1, this procedure selects mode 2. The **Preset**, **View**, and **Esc** buttons blink twice.
- If the matrix switcher is in Lock mode 2, this procedure selects mode 1. The View and Esc buttons blink twice.

Toggle the lock on and off by pressing and holding the **View** button and **Esc** button simultaneously for approximately 2 seconds.



Viewing and Adjusting the Audio Level

NOTES:

- Gain and attenuation can be adjusted for local inputs only.
- Volume can be adjusted for the local outputs only.
- 1. Press and hold the Audio button until it blinks.



2. Press an input or output button. The output buttons display the input level and the input buttons display the volume; the more lit buttons, the higher the level (see the "Operation" section of the XTP CrossPoint Series User Guide to read the displayed value).



Output buttons display gain/attenuation. Input buttons display volume.

1 Lit button 1 Unlit button

3. Increase/decrease the level or volume by pressing the Esc (▲) And View (▼) buttons.



4. Press and release the Audio button to exit.

Viewing Ties (and Muting Outputs)

1. Press the **View** button. Output buttons light for outputs that have no ties established.

NOTE: If an output button blinks, that output is muted. To toggle mute on and off, press and hold the output button for 2 seconds.

- **2.** Press an input button. The buttons for all tied outputs light.
- **3.** Press an output button. The buttons for the tied input and all tied outputs light.
- 4. Press the View button again to exit View mode. All input and output buttons return to an unlit state.

Remote Control

This section describes using the remote control features of the XTP CrossPoint matrix switchers to control the devices. Topics that are covered include:

- Selected SIS Commands
- XTP System Configuration Program

Selected SIS Commands

You can use Simple Instruction Set (SIS) commands for operation and configuration of the matrix switchers (see SIS Command and Response Table for Matrix Switcher Commands on page 26). You can also use these commands to configure the endpoints (see the various command and response tables for endpoint SIS commands, beginning on page 37). You can run these commands from a PC connected to the Ethernet port (see LAN (Ethernet) port on page 11), serial port (see Remote RS-232/ RS-422 port on page 11), or USB port (see Configuration port on page 17) on the matrix switcher.

Establishing a Network (Ethernet) Connection

NOTE: The first time you connect to the matrix switcher via the LAN port, you may need to change the default settings (IP address, subnet mask, and [optional] administrator name and password) of the controller.

Establish a network connection as follows:

1. Open a TCP socket to port 23 using the IP address of the matrix switcher.

NOTE: The factory default IP address is 192.168.254.254.

The matrix switcher responds with a copyright message including the name, firmware version, and part number of the product, and the current date and time.

NOTES:

- If the matrix switcher is not password-protected, the device is now ready to accept SIS commands.
- If the matrix switcher is password-protected, a Password prompt appears.
- **2.** If necessary, enter the appropriate password.

Number of Connections

A switcher can have up to 200 simultaneous TCP connections, including all HTTP sockets and Telnet connections. When the connection limit is reached, the switcher accepts no new connections until some have been closed. No error message or indication is given that the connection limit has been reached. To maximize the performance of your switcher, keep the number of connections low and close unnecessary open sockets.

Establishing a USB Port Connection

A standard USB cable and the Extron DataViewer utility, version 2.0 or newer, can be used for connection to the XTP CrossPoint matrix switcher Configuration port. The USB cable, available at any local electronics store, should be terminated on one end with a USB mini-B male connector.

NOTE: Before you use the USB port for the first time, install the USB driver on your computer. The simplest way to do this is to install the XTP System Configuration software and then run the Found New Hardware Wizard.

Host-to-Switcher Instructions

The switcher accepts SIS commands through its serial port, its USB port, or its LAN port. SIS commands consist of one or more characters per command field. They do not require any special characters to begin or end the command character sequence. Each switcher response to an SIS command ends with a carriage return and a line feed (CR/LF = \leftarrow), which signals the end of the response character string. A string is one or more characters.

NOTE: The tables that begin on the next page are a partial list of SIS commands. For a complete listing, see the *XTP CrossPoint Series User Guide*.

Common SIS Command Symbols

The following symbols are used throughout the command and response tables, which start on **page 26**.

- = Space
- E = Carriage return and line feed
- Carriage return (no line feed)
- = Pipe (can be used interchangeably with the character)
- Esc = Escape key (hex 1B)
- W = Can be used interchangeably with the **Esc** character

Arrangement of Command and Response Tables

The following pages present five command and response tables, each defining a subset of SIS commands and their responses, with examples where appropriate. The following tables are presented:

- SIS Command and Response Table for Matrix Switcher Commands, starting on the next page — SIS commands to control and monitor the XTP CrossPoint matrix switcher itself and specific input and output boards.
- SIS Command and Response Table for Transmitter Endpoints, starting on page 37 — SIS commands to control and monitor XTP transmitter endpoints from the matrix switcher.
- SIS Command and Response Table for Receiver Endpoints, starting on page 39 — SIS commands to control and monitor XTP receiver endpoints from the matrix switcher.
- SIS Command and Response Table for Switching Transmitter Endpoint, starting on page 42 — SIS commands to control and monitor the XTP T USW 103 and XTP T USW 103 4K switcher endpoint from the matrix switcher.
- SIS Command and Response Table for IP-Specific Commands, starting on page 45 — SIS commands to control and monitor the IP interface of the XTP CrossPoint matrix switcher.

Commands
Switcher
Matrix
s for
Table
Response
and
Command
SIS

Command	SIS Command (Host to Unit)	Response (Unit to Host)	Additional Description
Create ties			
NOTES: • Commands can be enter	red back-to-back in a strir	ig, with no spaces. For exa	mple: 1*1!02*02&003*003%4*24\$.
 The matrix switchers support 	pport 1-, 2-, and 3-digit nu	umeric entries (1 * 1 !, Ø2 * Ø	2&, or ØØ3*ØØ3%).
 The & tie command for F and the % read tie comm 	RGB and the % tie commanand for video.	nd for video can be used ir	terchangeably, as can the & read tie command for RGB
 Audio breakaway comm 	and functions are depend	ent on the audio routing se	ections of the inputs and outputs.
Tie input <u>[X1]</u> video and audio to output <u>[X2]</u>	X1*X2!	OutX2•InX1•All→	Tie the video and audio from input K1 to output K2.
Example:	1*31	Outø3•Inø1•All←	Tie input 1 to output 3.
Tie input X1 to output X2 , RGBHV <i>Example</i> (see Notes, above):	X1 *X2& 1Ø*4&	Out <mark>X2</mark> •In <mark>X1</mark> •RGB← OutØ4•In1Ø•RGB←	Tie input X1 RGB to output X2 . Audio is broken away. Tie input 10 RGB to output 4.
Tie input X1 to output X2 , video <i>Example</i> (see Notes, above):	X1 *X2% 7*5%	Out <mark>X2</mark> •In <mark>X1</mark> •Vid← OutØ5•InØ7•Vid←	Tie input <u>X1</u> video to output <u>X2</u> . Audio is broken away. Tie input 7 video to output 5.
Tie input X1 to output X2 , audio <i>Example</i> (see Notes, above):	<mark>X1</mark> * <u>X2</u> \$ 24 *Ø4\$	Out <mark>X2</mark> •In <u>X1</u> •Aud ← OutØ4•In24•Aud ←	Tie input X1 audio to output X2 . Audio is broken away. Tie input 24 audio to output 4.
Tie input X1 to all outputs	X1*!	In <u>X1</u> All≁	$x_1 * \delta$, $x_1 * \delta$, and $x_1 * \delta$ are also valid.
Quick multiple tie	Esc+0X1*X2!X1*X2	↓ 2.5 2	Enter multiple tie commands (1, $\&$, $\$$, and $\$$) before the \blacktriangleleft .
Read output tie	X2&		RGBHV input <u>K1</u> is tied to output <u>K2</u> . <u>K2</u> %, <u>K2</u> %, and <u>K2</u> \$ are also valid.
NOTE: • = Space <u>K1</u> = Input number <u>K2</u> = Output number	ØØ – 16 or 32 (ØØ = ur Ø1 – 16 or 32	tied)	

Command	SIS Command (Host to Unit)	Response (Unit to Host)	Additional Description
Input video format (available for	inputs on an XTP CP	4i VGA universal analo	g input board only)
Set format	X1*X3\	Itypx1*x3*x4←	Set input K1 to K3 video format. The board reports the
			detected video format, 🖂, in response.
Example:	1*Ø\	Ityp1*Ø*5←	Set input 1 to auto. The board reports RGB video.
View format	X1 \	X3 * X4 ←	Show set (蹈) and detected (妊) video format for input ा
Image reset (available for inputs	on an XTP CP 4i VG/	<u> universal analog input</u>	board only)
Execute an image reset	EscIX1*2AADJ ←	AadjIX1*2≁	Reset input signal timing to Extron default for input 🖾.
Color (available for inputs on an	XTP CP 4i VGA unive	rsal analog input board	only)
NOTE: Color adjustments are availi	able for RBGcvS (SCAF	 interlaced component 	video (YUVi), S-video, and NTSC composite video inputs.
Set a specific color value	EscIX1*X5C0LR←	ColrIX1*X5←	Specify the color adjustment.
Increment color value	EseIX1+COLR -	ColrIX1*X5←	Increase the color setting by one.
Decrement color value	EseIX1–COLR←	ColrIX1*X5←	Decrease the color setting by one.
View the color value	EscIX1C0LR ←	XG+	Show the color setting.
NOTE: X1 = Input number	Ø1 – 16 or 32		
x3 = Set input video forma	t Ø = Auto		
	1 = Video	4 = YUV interlace	
	2 = S-video	5 = RGB	
	3 = SCART	6 = YUV	
X4 Entected video forma	tt Identical to X3, abov	e, except Ø = no signal.	
X5 = Picture adjustments	Ø through 255		

Additional Description	only)	o inputs.	Specify the tint adjustment.	Increase the tint setting by one.	Decrease the tint setting by one.	Show the tint setting.	board only)	onent video (YUVi), S-video, and NTSC composite video	Specify the brightness adjustment.	Increase the brightness.	Decrease the brightness.	Show the brightness setting.	ard only)	ent video (YUVi), S-video, and NTSC composite video	Specify the contrast adjustment.	Increase the contrast.	Decrease the contrast.	Show the contrast setting.	
Response (Unit to Host)	sal analog input board (and NTSC composite video	TintIX1*X5≁	TintIX1*X5←	TintIX1*K5←	X 5 ↓	universal analog input	(SCART), interlaced compo	BritIX1*X5←	BritIX1*X5←	BritIX1*X5←	X 5 ▲	niversal analog input bo	CART), interlaced compon	ContIX1*X5←	ContIX1*X5←	Cont I X1+ X5←	₩	
SIS Command (Host to Unit)	XTP CP 4i VGA univer	able for NTSC S-video, a	EscIX1*X5TINT ←	Esc]IX1+TINT ←	Esc]IX1-TINT ←	EscIX1TINT ←	on an XTP CP 4i VGA	re available for RBGcvS	EscIX1*X5BRIT←	Esc]IX1+BRIT ←	EscIX1–BRIT ←	Esc]IX1BRIT ←	n an XTP CP 4i VGA u	available for RBGcvS (S	EscIX1*X5CONT ←	EscIX1+CONT ←	EscIX1-CONT -	Esc I X1 CONT -	Ø1 – 16 or 32 Ø through 255
Command	Tint (available for inputs on an	NOTE: Tint adjustments are avail	Set a specific tint value	Increment tint value	Decrement tint value	View the tint value	Brightness (available for inputs	NOTE : Brightness adjustments a inputs.	Set a specific brightness value	Increment brightness value	Decrement brightness value	View the brightness value	Contrast (available for inputs o	NOTE : Contrast adjustments are inputs.	Set a specific contrast value	Increment contrast value	Decrement contrast value	View the contrast value	NOTE: <u>K1</u> = Input number <u>K5</u> = Picture adjustments

Command	SIS Command (Host to Unit)	Response (Unit to Host)	Additional Description
Pixel phase (available for inputs	on an XTP CP 4i VGA	universal analog input b	oard only)
NOTE: Pixel phase adjustments are	e available for RBGHV a	nd non-interlaced compone	nt video (YUVp) video inputs.
Set a specific pixel sampling phase	Esc]IX1*X5PHAS ←	PhasIx1*x5≁	Specify the pixel sampling phase.
Increment sampling value	EscIX1+PHAS ←	PhasIX1*X5←	Increase the phase value.
Decrement sampling value	EscIX1–PHAS ←	PhasIX1*X5←	Decrease the phase value.
View the sampling value	EscI X1PHAS -	X5+	Show the pixel sampling phase.
Horizontal shift (available for inp	uts on an XTP CP 4i \	/GA universal analog inp	ut board only)
Specify a horizontal position	EseIX1*X6HCTR ←	HctrIX1*X6←	Set input ki horizontal position to ke.
Increment right	EseIX1—HCTR ←	HctrIX1*X6←	Shift the Kil input right.
Decrement left	EseIX1+HCTR←	HctrIX1*X6←	Shift the Kil input left.
View the horizontal position	EseIX1HCTR ←	→ 9X	Show the horizontal position.
Vertical shift (available for inputs	s on an XTP CP 4i VG/	A universal analog input	board only)
Set a specific vertical position	EscIX1*X6VCTR ←	VctrIX1*X6←	Set input K1 vertical position to K6.
Increment up	EscIX1+VCTR -	VctrIX1*X6←	Shift the Kil input up.
Increment down	EseIX1–VCTR←	VctrIX1*X6←	Shift the Kil input down.
View the vertical position	EscIX1VCTR ←	X6 +	Show the vertical position.
NOTE: Xi = Input number Xi = Picture adjustments Xi = Shift	Ø1 – 16 or 32 Ø through 255 Ø through 65535		

		Guide.														compliant
ditional Description	t board only)	e the XTP II CrossPoint Switchers User (mand character is a comma.	nand character is a period.			6 or 32.		6 or 32.		output X2 (video off).	te output 🗵 (video on).	ute on, 0 = mute off.	all video outputs.	te all video outputs.	compliant 2 = source is not HDCP c or 5 = monitor connected but not encryp al 2-channel audio)
Ad	analog inpu	plete list, se	Com	Com			n is 1		n is 1		Mute	Unm	1 = 1	Mute	Unm	ce is HDCP 1, 3, nuted) Analog (loc
Response (Unit to Host)	P 4i VGA universal	be saved. For the com	Spr <u>x1</u> *1* <u>x7</u> ~	RprX1*1*X7+		→ ®X	X8¹X8²X8³ X8n ←	₽	X9¹X9²X9³ X9 ⁿ ←		Vmt⊠*1 ←	Vmtx2*Ø←	X10+	Vmt1←	VmtØ←	onnected 1 = sour o monitor connected nected and encrypted) 1 = on (r e example above) 2 = mbedded digital audio)
SIS Command (Host to Unit)	inputs on an XTP C	t of variables that can	⊡*1* <u>X</u> 7,]*1* <u>X</u>].		se]IX1HDCP ←	ise] I *HDCP ←	seOX2HDCP ←	isc]0 * HDCP ←		23*1B	2*ØB	2B	°*	[*B	 Ø1 - 16 or 32 Ø1 - 16 or 32 Ø1 - 16 or 32 1 through 8 Ø = no source c ts) Ø, 2, 4, or 6 = n 7 = monitor con Ø = Auto (see the second second
Command	nalog input presets (available for	OTE: Analog input presets are a se	save an analog input preset	Recall an analog input preset	DCP status	/iew input HDCP status	/iew HDCP status of all inputs E	/iew output HDCP status	/iew HDCP status of all outputs E	ideo mutes	/ideo mute 🛛 🛛 🕅	/ideo unmute E	Read video mute	3 lobal video mute	Global video unmute	OTE:Kil = Input numberKil = Output numberKil = Output numberKil = HDCP status (for inputKil = HDCP status (for outputKil = InputKil = Input audio source

Command	SIS Command	Response	Additional Description
linuit audio calaction			
IIIbut audio selection			
Input audio selection	EscIX1*X11AFMT -	AfmtIX1*X11←	
Example:	EscI1*ØAFMT 🔶	AfmtI1*Ø ≁	Auto (Ø): Digital audio takes priority over analog audio.
View input audio selection	Esc I X1AFMT 🔶	X11+L	
View input audio all selections	Esc]IAFMT ←	<u>×11</u> 1'×11 ² ×11 ³ ×11 ⁿ ≁	Each $\underline{\text{Kr1}}$ is the enable or disable status of an output, starting at output 1. <i>n</i> is 16 or 32.
Audio input gain and attenuatior	-		
NOTE: The set gain (G) and set att	enuation (g) commar	nds are case sensitive.	
Set input level to +dB value	<u>X1*X12</u> G	In <u>ki</u> ∙Aud <u>ki3</u> ←	
Set input level to -dB value	X1*X140	In <u>x1</u> ●Aud <u>x13</u> ←	
Increment gain	X1+G	In <u>x1</u> ●Aud <u>x13</u> ←	Increase gain by 1 dB.
Decrement gain	X1—G	In <u>x1</u> ●Aud <u>x13</u> ←	Decrease gain by 1 dB.
Read input level	X1G	X13~	
Audio output volume			
Set the volume to a specific value	X2*X15V	0u t 🔀 🖝 V o 1 🛛 1 🕶 🖊	
Increment volume	X2+V	0u t 🛛 20 1 🕅 1 1 5 🚽	Increase volume by 1 step.
Decrement volume	X2-V	0u t 🛛 20 1 🕅 15 🚽	Decrease volume by 1 step.
Read output volume	X2V	X15 ←	
NOTE: • = Space			
<u> X1</u>] = Input number X11] = Input audio source	Ø1 – 16 Ø = Au	3 or 32 <u>k</u> 2 = Output number to (see the example above)	Ø1 – 16 or 32 2 = Analog (local 2-channel audio)
	1 = HD	MI (de-embedded digital audio	o) (default)
<u> X12</u> = Audio gain	Ø to +2	:4 (1 dB per step)	
X13 = Numeric dB value	-18 to	+24 (45 steps of gain or atten	uation) (Default = Ø dB)
<u> X15</u> = Audio attenuation X15 = Volume adiustment	1 - 18 range Ø - 64	(1 dB per step) (1 dB/step except for 0-to-1. v	which is 22 dB) (default = 64 [0 dB])
	D		

Command	SIS Com	nand Res	sponse it to Host)	Additic	nal Description	_	
Audio mutes			h				
Audio mute, HDMI	<u>x</u> 2*1Z	Amt	⊒*1 •	Mute outp	out x2 HDMI (emb	edded digital audic	o off).
Audio mute, analog	X2*2Z	Amt	⊡*2 ≁	Mute outp	out <u>x2</u> analog (ane	llog audio off).	
Audio mute, both	X2*3Z	Amt	<u></u>]∗3 ≁	Mute all o	utput X2 audio (H	DMI and analog au	dio off).
Audio unmute	x2*ØZ	Amt	⊒*Ø≁	Unmute o	utput 🖾 (HDMI al	nd analog audio on	.()
Read audio mute	X2Z			1 = mute	on, Ø = mute off.		
Global audio mute, HDMI	1*Z	Amt 1	ł	Mute all e	mbedded digital	audio outputs.	
Global audio mute, analog	2*Z	Amt2	Ţ	Mute all a	nalog audio outpu	uts.	
Global audio mute, both	3*Z	Amt3	ł	Mute all e	mbedded digital	and analog audio o	utputs.
Global audio unmute	Z*Ø	Amtø	Ţ	Unmute a	ll audio outputs.		
Video and audio test patterns							
NOTE: The available audio test p	pattern is a 1 l	kHz audio tone.					
Output test pattern on all outputs	EscX42TEST+	← Tstx		Output th	e selected test pa	ttern.	
Disable test pattern	Esc]ØTEST ←	TstØ	Ţ	Normal of	peration, test patt	ern disabled.	
View test pattern status	EscTEST ←	<u>×42</u> ←					
NOTE: • = Space							
<u>x2</u> = Output number	-	ð1 – 16 or 32					
<u>x10</u> = Mute	-	ð = off (unmuted)	2 = 2	nalog on (analo	og muted)		
- - - -	:	1 = HDMI on (HDN	/II muted) 3 = F	IDMI and analc	g on (both muted		
x42 = lest pattern and res	solution	ØØ = Disable	Color bars	Color bars	Black screen	Black screen	
		(default)	No audio	Audio	No audio	Audio	
		720p, 50 Hz	Ø1	07	Ø2	Ø8	
		720p, 60 Hz	Ø3	Ø9	Ø4	1Ø	
		1080p, 60 Hz	Ø5	11	ØG	12	

Command	SIS Command (Host to Unit)	Response (Unit to Host)	Additional Description
Captive screw and Ethernet serie XTP CP 40 4K [XTP input and out	I port insertion enable tput], and XTP CP 4i fi	ss (available for inputs an ber, and XTP CP 40 fiber	i outputs on XTP CP 4i, XTP CP 4i 4K, XTP CP 4o, boards only)
Enable an input captive screw serial port insertion	EscIX1*ØLRPT ←	LrptIX1*Ø↓ E	-nable the captive screw serial port insert on input K1. This lisables the Ethernet RS-232 insert.
Enable an input Ethernet serial port insertion	EscIX1*1LRPT ←	LrptIX1+1 ← E	enable the Ethernet serial port insert on input $\overline{\mathrm{KI}}$. This disables the captive screw serial port insert.
Set all RS-232 input insertions	EscIX16*LRPT ←	LrptIØØ* <u>Ki6</u> ←	
View input insertion	EscIX1LRPT -	<u>X16</u> ← L	
View all input insertions	EscI LRPT ←	<u>x16</u> ¹ <u>x16</u> ² <u>x16</u> ³ <u>x16</u> ⁿ ← ¹ (One $\underline{\text{Kig}}$ for each installed input, starting at input 1. Inputs hat are not on an input board report as \emptyset .
Enable an output captive screw serial port insertion	EscIOX2*ØLRPT ←	Lrpt0x2*Ø≠J	Enable the captive screw serial port insert on output <u>ka</u> . This disables the Ethernet serial port insert.
Enable an output Ethernet serial port insertion	EscOX2*1LRPT ←	Lrpt0x2*1←	Enable the Ethernet serial port insert on output <u>Ka</u> . This disables the captive screw serial port insert.
Set all RS-232 output insertions	Esc0X16*LRPT ←	Lrpt0ØØ* <u>×16</u> ←	
View output insertion	Esc0x2LRPT ←	X16 -	
View all output insertions	Esc]OLRPT ←	<u>X16</u> '\X16 ² X16 ² X16 ⁿ ←	One <u>Kiel</u> for each installed output, starting at output 1. Outputs that are not on an output board report as Ø.
NOTE: Kil = Input number Kil = Output number Kil = Captive screw or UAF	Ø1 – 16 or 32 Ø1 – 16 or 32 RT Ø = Captive s	2 2 screw RS-232 insert (default	1 = Ethernet RS-232 insert (UART)

Command	SIS Commal (Host to Unit)	nd Response (Unit to Host)	Additional Description
Ethernet serial port insert paran	neters (availabl	e for inputs and outputs o	n XTP CP 4i, XTP CP 4i 4K, XTP CP 4o, XTP CP 4o 4K [XTP
Set serial port parameters	Esc X17*X18, X19], x20, x21CP ←	
		Cpn <u>X17</u> Ccp <u>X18</u> , <u>X19</u>	j, <u>kzo</u> j, <u>kz</u> ij ≁
Read serial port parameters	Esc X17CP -	<u>×18</u> , <u>×19</u> , <u>×20</u> , <u>×21</u>	
Configure current port timeout	EscØ*X22TC←	PtiØ* <u>x22</u> ←	
Read current port timeout	EscØTC ←	X22 +	
Configure global IP port timeout	Esc1 * X22TC ←	Pti1* <u>x22</u> ←	
Read global IP port timeout	Esc1TC←	X22 -	
Set UART start point	EscX23MD ←	Pmd <u>x23</u> ←	Sets the initial (lowest) port number for the range of numbers assigned to the serial port and UARTs.
Read UART start point	EscMD ←	× 23	
NOTE: KIT = Port number KIB = Baud rate KIB = Parity K20 = Data bits K21 = Stop bits K22 = Port timeout (10-sec K23 = UART starting point	: increments)	g 33 - 18 or 34 = UARTS 1 - 9600 (default), 19200, 38400 odd, even, none, mark, space 7, 8 (default) 1 (default), 2 1 (= 10 seconds) - 65000 (def The starting point (<u>xza</u>) ¹⁵ is no <u>xza</u>) ¹² through <u>[xza</u>) ¹⁷ (1600) or <u>xza</u>) ¹³ through <u>[xza</u>) ¹⁷ (1600) or <u>2000</u> is unus 2000 is unus 2001 through	16 or 32 (XTP input and output board ports) 9, 115200 9 (only the first letter is required) (default = n) fault is 38 = 300 seconds = 5 minutes) rear panel RS-232/RS-422 port. 10 used. 10 us
Output 1 through 16)
		2ø33 throug	h 2064 (XTP CrossPoint 3200) = Output 1 through 32

Command	SIS Command (Host to Unit)	Response (Unit to Host)	Additional Description
View video and audio mutes			
View output mutes	Esc VM ←	<u>x24</u> 1⁺ <u>x24</u> 2 <u>x24</u> 1′ ←	Each $\underline{\mathbf{x}}$ response is the mute status of an output, starting from output 1. $n =$ either 16 or 32.
Example :	EscVM←		Audio is muted on outputs 2 and 3, video on output 5, and
(XTP CrossPoint 3200)	MutØ22Ø1ØØØØØØ	ଉଉଉଉଉଉଉଉଉଉଅଅଉଉଉଉ ←	I video and audio on output 26. All other outputs are unmuted. The Mut portion of the response is shown in verbose modes 2 and 3 only.
List Digital Sync Validation Prov	cessing (DSVP)		
List sync of all inputs	ØLS	<u> </u>	16 or 32 ($\%$ <u>kras</u> s; each is the signal status of an input, starting from input 1.
Example	ØLS	no input detected input d	etected
(XTP CrossPoint 3200):		Response Status: 22 2 1 1 Input: 1 2 3 4 5 6	5 g @←
Lock (Executive) modes			
NOTE: See Setting the front par	nel locks (executive mo	<mark>des)</mark> on page 19 for more info	ormation on the Lock modes.
Lock all front panel functions	1X	Exe1 ←	Enable Lock mode 1.
Lock advanced front panel functions	2X	Exe2 ←	Enable Lock mode 2.
Unlock all front panel functions	ØX	Exe0+1	Enable Lock mode 0.
View lock status	×	X26 +	
NOTE: X24 = Video and audio m	ute status	Ø = no mutes	2 = audio mute
<u>x25</u> = Signal detection st: <u>x26</u> = Lock mode	atus	1 = Video mute Ø = no input connected Ø = lock mode 0 (unlocked)	3 = video and audio mute 1 = input connected 1 = lock mode 1 2 = lock mode 2 (default)

Command	SIS Command (Host to Unit)	Response (Ibit to Host)	Additional Description
Information requests	L	61	
Information request	Ι	<u> </u>	In the response: V <u>kzzīXkza</u> is the video matrix size. A <u>kzzī</u> Xk <u>za</u> is the audio matrix size.
Request part number	Z	×29	See the www.extron.com, for part numbers.
Request input/output board configuration	Z *	K29 ,K30 ¹ K30 ² K30 ¹ /X31 ¹ /X31	² Kail ⁿ ← Part number, dot, 4 or 8 (ⁿ) Ka0s; each is the input board installed, starting from input slot 1, followed by 4 or 8 (ⁿ) Ka1s; each is the output board installed, starting from
Example (XTP CrossPoint 3200)	Z *	Input slot 6 = XTP CP 4i Input slot 3 = XTP CP 4i HDMI 6Ø - <i>nnn - nn</i> . <u>GGH</u> Input: ¹ 23	output slot 1. VGA Output slot 2 = XTP CP 4o (XTP) Dutput slot 7 = No Board IF XF I HDDDEJ XXM⊷ 45678
Query firmware version Example:	σσ	<u>xa2</u> +1 1.23+1	The factory-installed controller firmware version is 1.23 (sample value only).
NOTE: • = Space <u>K27</u> = Number (quantity) o <u>K289</u> = Number (quantity) o <u>K299</u> = Number <u>K309</u> = Installed input boar <u>K311</u> = Installed output boa	f inputs 4, 8, 12, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	6, 26, 24, 28, 32 6, 26, 24, 28, 32 1 1 41 (TP) K = XTF P 41 (TP) N = XTF P 41 (TP) P = XTF P 41 (TP) P = XTF P 41 DVI Pro N = XTF P 40 4K (TP) N = XTF P 40 HDMI U = XTF	o CP 4i HDMI DMA o CP 4i Fiber 4K o CP 4i 3G-SDI o CP 4i HD 4K PLUS board installed o CP 4o SA (stereo audio) o CP 4o HD 4K PLUS
<u>x32</u> = Firmware version nL	J = XTP CI Jumber to second decima	P 40 DVI Pro X = No I place (x.xx)	board installed

SIS Command and response Table for Transmitter Endpoints

NOTE: These commands a	llow you to control and monitor t	ne HDMI transmitter endpoint 1	from the matrix switcher.
Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
Audio routing selection			
NOTE: These commands sele	ect between the audio embedded	in the digital video stream and th	ne 2-channel analog audio.
Input audio selection	EscIX1*X11AFMT ←	AfmtIX1*X11←	
Example:	EscI1+רAFMT ←	AfmtI1*Ø ≁	Auto (Ø): HDMI (digital) takes priority over analog.
View input audio selection	Esc]IX1AFMT ←	X11+-	
View all input audio selection	s esoIAFMT ←	<u>x11</u> ¹x11 ² x11 ³ x11 ⁿ ≁	Each <u>Ki11</u> is the enable or disable status of an input, starting at input 1. <i>n</i> is 16 or 32.
Audio input gain and atten	uation		
NOTE: The set gain (G) and	set attenuation (g) commands are	e case sensitive.	
Set input level to +dB value	X1*X12G	Ink1●Audk13←	
Example:	1*2G	InØ1•Aud+Ø2≁	Set input 1 audio gain to +2 dB.
Set input level to -dB value	X1*X14G	In <u>k1</u> ●Aud x13 ←	
Increment gain	X1+G	In <u>k1</u> ●Aud x13 ←	Increase gain by 1 dB.
Example:	5+G	InØ5∙Aud+Ø3 ≁	Increase audio input 5 level from +2 dB to +3 dB.
Decrement gain	X1-G	In <u>k1</u> ●Aud <u>k13</u> ←	Decrease gain by 1 dB.
Read input level	<u>x1</u> G	X13+	
XI = vade XI = Input number	Ø1 – 16 or 32		
X11 = Input audio so	urce Ø = Auto (see the exam	ole above) 2 = Analog (lc	ical 2-channel audio)
	1 = HDMI (de-embedde	d digital audio) (default)	
<u>x12</u> = Audio gain	Ø to +24 (1 dB per step		
X13 = Numeric dB ve X14 - Audio attenuat	alue	gain or attenuation) (Default =	Ø dB)
VILLE HUND ALLEHINAL	ווחוו ו – וס וו חם הבו סובה/		

Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
List Digital Sync Validation Pr	ocessing (DSVP)		
List sync of all inputs	ØLS	<u>x25</u> 1' <u>x25</u> 2 <u>8</u> 3 <u>x25</u> 0 ≁	16 or 32 (°) x28; each is the signal status of an input, starting from input 1.
Example	ØLS	no input detected input det	ected
		Hesponse Status: 222111	Z
HDCP status			
View input HDCP status	EscI X1HDCP←	→ ®X	
View HDCP status of all inputs	EscI *HDCP ←	X8 ¹ X8 ² X8 ³ X8 ¹ ≁	16 or 32 (") $\underline{\rm XB}{\rm s};$ each is the HDCP status of an input, starting from input 1.
NOTE: XI = Input number	Ø1 – 16 or 32		
図 = HDCP status (for ii	nputs) $\emptyset = no source ($ 1 = Source is H	connected HDCP-compliant	
	2 = Source is n	not HDCP compliant	
<u>x25</u> = Signal detection s	status Ø = no input co	nnected 1 = input conne	ected

Endpoints
- Receiver
Table for
Response
and
Command
SIS

NOTE: These commands all	ow you to control and mon	itor the HDMI receiver endp	point from the matrix switcher.
Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
HDCP status			
View output HDCP status	Esc)0X2HDCP ←		
View HDCP status of all outputs	EscO*HDCP ←	x9¹x9²x9³ <u>x9</u> ∩ →	
Video mutes			
Video mute	X2*1B	Vmtx2*1 ←	Mute output 🗵 (video off).
Video unmute	x2*ØB	Vmtx2*Ø←	Unmute output 🗵 (video on).
Read video mute	X2B	X104	$1 = mute on, \emptyset = mute off.$
Global video mute	1*B	Vmt1≁	Mute all video outputs.
Global video unmute	Ø*B	VmtØ≁	Unmute all video outputs.
Audio output volume			
Set the volume to a specific value	X2*X15V	0utz2•Vo1 <u>x15</u> +	
Example:	1 * 5Øv	OutØ1•Vol5Ø≁	Set output 1 volume to 79%.
Increment volume	X2+V	0utx2•Vo1x15←	Increase volume by 1 step.
Example:	1+V	OutØ1•Vol51+	
Decrement volume	X2-V	0utx2•Vo1x15←	Decrease volume by 1 step.
Read output volume	X2V	X15 ←	
NOTE: • = Space E2 = Output number E10 = Mute E11 = Volume adjustmer E11 = HDCP status (for o	Ø1 – 16 or 32 Ø = off (unmute Ø = 64 (1 dB/st Ø, 2, 4, or 6 = 1 1, 3, or 5 = Mo 7 = Monitor co	ed) 1 = on (muted) ep except for 0-to-1, which is No monitor connected initor connected but not encryt	22 dB) (default = 64 [0 dB]) pted

Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
Audio mutes			
Audio mute, HDMI and S/PDIF	<u>x2</u> *1Z	Amtx2*1 ←	Mute output x2 embedded digital (audio off).
Audio mute, analog	x2*2Z	Amtx2*2↔	Mute output <u>x</u> a analog (analog audio off).
Audio mute, both	X2*3Z	Amtx2*3≁	Mute all output <u>x2</u> audio (digital and analog audio off).
Audio unmute	X2*ØZ	Amt <u>x</u> ⊒*Ø ≁	Unmute output 区 (digital and analog audio on).
Read audio mute	ZZX	X10+L	$1 = mute on, \emptyset = mute off.$
Global audio mute, HDMI and S/PDIF	1*Z	Amt1 ≁	Mute all embedded digital audio outputs.
Global audio mute, analog	2*Z	Amt2 ≁	Mute all analog audio outputs.
Global audio mute, both	3*Z	Amt34	Mute all embedded digital and analog audio outputs.
Global audio unmute	Ø*Z	Amtø≁	Unmute all audio outputs.
View video and audio mutes			
View output mutes	Esc)VM ←	x33 ¹ x33 ² x33n≁	Each $\underline{xa3}$ response is the mute status of an output, starting from output 1. $n =$ either 16 or 32.
Example : (XTP II CrossPoint 3200)	Esc VM← Mut0220100000000	10000000000000000000000000000000	Audio is muted on outputs 2 and 3, video on output 5, and video and audio on output 26. All
			other outputs are unmuted.
NOTE: <u>X2</u> = Output number	Ø1 – 16 or 32		
<u>x10</u> = Mute <u>x33</u> = Video and audio r	$\emptyset = \text{off (unmuted)}$ nute $\emptyset = \text{no mute}$ $1 = v$	1 = on (muted) video mute 2 = audio mute	3 = video and audio mute

Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
Relay controls			
Turn on an endpoint relay	Esc X2 * X34] * 1 RELY ←	Re1yx2*x34*1 ←	Turn on relay <u>K34</u> in output <u>K3</u> .
Turn off an endpoint relay	Esc X2 * X34]*ØRELY ←	Relyx2*x34*Ø≁	Turn off relay X34 in output <u>X2</u> .
Toggle an endpoint relay	Esc X2 * X34]*2RELY ←	Re1yx2*x34*2≁	Toggle (on-to-off or off-to-on) relay K34 in output K2.
Pulse an endpoint relay	Esc X2 * X34]* 3 * X35]REL Y ←	Re1yx2*x34*3*x35 ≁	Turn on relay <u>Kaa</u> in output <u>Ka</u> for an interval defined as <u>Kaa</u> . Each step of <u>Kaa</u> is 16 ms.
Example:	Esc]1 * 2 * 3 * 45RELY ←	Rely1*2*3*45 ≁	Turn on relay 2 in output endpoint 1 for 720 ms (0 72 sec [x33] = 45 * 16 ms = 720 ms)
View an endpoint relay status	Esck2*k34RELY ←	X36←L	On or off.
NOTE: X2 = Output number	Ø1 – 16 or 32		
x34 = Relay on endpoint	1 or 2		
x35 = Pulse duration	Ø through 65535 (each st	ep = 16 ms, see the example	above)
x36 = Relay status	$\emptyset = Off$ 1 = On		

SIS Command and Response Table for Switching Transmitter Endpoint

NOTE: These comman	ids allow you to control a	nd monitor the universal s	witcher endpoint from the matrix switcher.
Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
Select an endpoint switc	ther input		
Select an input	Esc X1 * X55 * 3ET I E ←	X1 * X55 * 3 ←	Select input x55 on input x6.
Show selected input	Esc X1ETIE ←	X1 * X55 video * X55 audio ←	The two <u>Kss</u> s are always the same.
Input video format (avail:	able for endpoint input 1	only)	
Set format	X1*X3\	I t y px1 *x3 *x4←	Set input 1 on endpoint XI to X3 video format. The
			endpoint reports the detected video format, X4, in response.
Example:	1*Ø\	Ityp1*Ø*5 ≁	Set input 1 on endpoint 1 to auto. The endpoint reports RGB
			video.
View format	X1/	X3+ X4 ←	Show set (x3) and detected (x4) video format for input 1 on
			endpoint <u>K1</u> .
Image reset (available fo	r endpoint input 1 only)		
Execute an image reset	X1 A	Aad j x1 ≁	Reset input signal timing to Extron default for endpoint K1.
	0 0 1 1 0 1 0	20	
x3 = Set input vid	leo format Ø = Auto	- 76	
	1 = Video	4 = YUV interlace	
	2 = S-vide	30 5 = RGB	
	3 = SCAF	T 6 = YUV	
X4= Detected vioX55= Transmitter	leo format Identical t endpoint input 1-3 for the	o X3 , above, except Ø = no si e XTP T USW 103 or XTP T US	gnal. SW 103 4K

Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
Horizontal shift (available	for endpoint input 1 only)		
Specify a horizontal position	EscIX1*X6HCTR←	HctrIX1*X6←	Set input XI horizontal position to X6.
Increment right	EscIX1+HCTR -	HctrIX1*X6←	Shift the Kil input right.
Decrement left	EscIX1_HCTR ←	HctrIX1*X6←	Shift the Kil input left.
View the horizontal position	EscIX1HCTR ←	₽ 9X	Show the horizontal position.
Vertical shift (available for	endpoint input 1 only)		
Set a specific vertical	EscIX1*X6VCTR←	VctrIX1*X6←	Set input K1 vertical position to K6.
position			
Increment up	EscIX1+VCTR←	VctrIX1*X6←	Shift the Kil input up.
Increment down	EscIX1→VCTR ←	VctrIX1*X6←	Shift the kil input down.
View the vertical position	EscIX1VCTR -	7	Show the vertical position.
Analog input presets			
NOTE: Analog input presets	s are a set of variables that c	an be saved. For the compl	ete list, see the XTP CrossPoint Series User Guide.
Save an analog input preset	<u>X1</u> *1* <u>X</u> 3,	Spr⊠i*1*⊠≁	Command character is a comma.
Recall an analog input	X1*1*X7.	Rprx1*1*x7 ≁	Command character is a period.
preset			
NOTE: XI = Input number	Ø1 – 16 or 32		
<u>xe</u>] = Shift <u>X</u>] = Analog input p	Ø through 65535 reset 1 through 8		

Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
Input audio selection	•	•	
NOTE: These commands se	elect between the audio embe	edded in the digital video stree	im and the 2-channel analog audio.
Input audio selection	EscIX1*X11AFMT ←	AfmtIX1*X11←	
Example:	EscI1*ØAFMT ←	AfmtI1∗Ø ≁	Auto (Ø): Digital audio takes priority over analog audio.
View input audio selection	EscIX1AFMT -	×11	
View all input audio	EscIAFMT ←	×11 ¹ ×11 ² ×11 ³ ×11 ⁿ ←	Each X11 is the enable or disable status of an output, starting
selections			at output 1. <i>n</i> is 16 or 32.
Audio input gain and atter	nuation		
NOTE: The set gain (G) and	d set attenuation (g) comman	nds are case sensitive.	
Set input level to +dB value	X1*X12G	I nk1∙Audk13≁	
Example:	1*2G	InØ1•Aud+Ø2←	Set input 1 audio gain to +2 dB.
Set input level to -dB value	X1*X14g	I n X1 ●Aud X13 ←	
Increment gain	X1+G	I n X1 ●Aud X13 ←	Increase gain by 1 dB.
Example:	5+6	InØ5•Aud+Ø3←	Increase audio input 5 level from +2 dB to +3 dB.
Decrement gain	<u>x1</u> –G	I n X1 ●Au d X13 ←	Decrease gain by 1 dB.
Read input level	<u>X1</u> G	X13+1	
NOTE: • = Space			
x1 = Input number	Ø1 – 16 or 32		
<u>x11</u> = Input audio s	source $\emptyset = auto$ (see the	example above)	
	1 = HDMI (de-emi	bedded digital audio) (defau	lt)
$ \mathbf{X}12 = Audio cain$	6 to +24 (1 dB ne	z-criarrei auuroj er sten)	
$\overline{x13} = Numeric dB$	value -18 to +24 (45 st	eps of gain or attenuation) (I	Default = Ø dB)
<u>x14</u> = Audio attenu	ation 1 – 18 (1 dB per s	step)	

Command	SIS Command (Host to Unit to Endpoint)	Response (Endpoint to Unit to Host)	Additional Description
List Digital Sync Validatio	on Processing (DSVP)		
List sync of all inputs	ØLS	<u>X25</u> ¹1 <u>X25</u> ² <u>X25</u> 3 <u>X25</u> n ←	16 or 32 $\binom{n}{2}$ Kizels; each is the signal status of an input, starting
Example	ØLS	no input detected input d	rrom input 1. etected
(XTP CrossPoint 3200):		Response Status: 2 2 2 2 1 1 Input: 1 2 3 4 5 6	5 2 ··· 32 32
SIS Command and Re	sponse Table for IP-S	Specific Commands	
Command	SIS Command (host to	unit) Response (ur	nit to host) Additional Description
IP and serial port setup			
Set IP address	Esc X37CI ←	I p i <u>k37</u> ←	Default: 192.168.254.254
Read IP address	EscCI ←	×37 ←	
Set subnet mask	Esc[X37]CS -	I psx37 ←	Default: 255.255.Ø.Ø
Read subnet mask	EscCS ←	→	
Set gateway IP address	Esc X37CG -	I pgx37 ←	Default: Ø.Ø.Ø.Ø
Read gateway IP address	EscCG ←	<u>×37</u> ←	
Set DHCP on or off	Esc X38]DH ←	I dhx38≁	Default: Ø (Off)
Read DHCP on/off status	EscDH←	X38 ▲	
NOTE: x25 = Signal detec	ction status Ø = no inp	out connected 1 = in	put connected
x37] = IP address x38] = DHCP	<i>מחה חחה.</i> מ = off, 1	<i>nnn.nnn</i> = on	

XTP System Configuration Program

Another way to operate the matrix switcher is via the Windows[®]based XTP System Configuration software. For details on installing and operating the program, see the *XTP System Configuration Software Help* file.

NOTES:

- If your Ethernet connection to the matrix switcher is unstable, try turning off the proxy server in your web browser. In Microsoft Internet Explorer, click Tools > Internet
 Options > Connections > LAN Settings, uncheck the Use a proxy server... box, and then click OK.
- For details on operating the matrix switcher via HTML pages, see the "HTML Operation" section in the *XTP CrossPoint* Series User Guide.
- 1. Start the web browser program.
- 2. Click tin the Address field.
- 3. Enter the Matrix IP address in the Address field.

NOTE: 192.168.254.254 is the factory-specified default value for this field.

 Press the keyboard <Enter> key. The matrix switcher checks whether it is password-protected.

If the matrix switcher is not password-protected, it checks and downloads the HTML start-up page. The matrix switcher is ready for operation via HTML remote control.

If the matrix switcher is password-protected, it downloads the Windows Security dialog box (see figure 10).

Windows Security
The server 192.168.254.254 is asking for your user name and password. The server reports that it is from XTP CP 1600.
Warning: Your user name and password will be sent using basic authentication on a connection that isn't secure.
User name Password Remember my credentials
OK Cancel

Figure 10. Windows Security Dialog Box



5. Enter the appropriate administrator or user password in the **Password** field and click **OK**.

The matrix switcher downloads the HTML start-up page (see figure 11). The matrix switcher is ready for operation via HTML remote control.

• Elec	etronics	2					
	e Hallagement C			Logge	d on: Admin	Log Off	800.633.9876
S	ystem Statu	S					
	System Informat	ion					
	Unit Name:	XTP-II-C	P-3200-08-68-66				
	Model:	XTP II 3	200	Firmware Version:	1.05		
	Part Number:	60-nnni	7-01	Temperature:	+075.20 F	/ 24.00 C	
	Date:	9/01/20	15	# of Connections:	005		
	Time:	07:01 A	м				
	Power Status						
	Power Supply 1 Power Supply 2	Pass Pass	11.38 V 12.01 V	Power Supply 3: Power Supply 4:	Pass Pass	11.38 V 48.00 V	
	+3.3 Volts:	3.28 V					
	Fan Status						
	Fan 1: Pas Fan 2: Pas Fan 3: Pas Fan 4: Pas	s 0 s 0 s 0	0897 RPM 0888 RPM 0897 RPM 1048 RPM	Fan 5: Pass Fan 6: Pass Fan 7: Pass	01028 00902 00883	RPM RPM RPM	
	Serial Port Settin	igs					
	Port Type:	RS-232					
	Baud Rate:	9600					
	Data Bits:	8					
	Parity:	None					
	Stop Bits:	1					

Figure 11. HTML Startup Page

Configuration

Removing and Installing a Board or Blank Panel

NOTES:

- For proper cooling and air flow, boards or blank panels should be installed in all locations during normal matrix switcher operations.
- The input and output boards are hot-swappable. You do not need to power down the matrix switcher to remove and install a board.

Circuit boards can be added or removed to increase or decrease the I/O configuration (size) of the matrix switcher. Remove and replace an I/O board or blank panel as follows:

- 1. For a board, disconnect any connected cables.
- 2. Rotate the left and right knurled knobs to completely loosen the captive screws.
- **3.** Gently pull on the knurled knobs to loosen the board or panel from the backplane.
- **4.** Slide the board or panel out of the chassis (see **figure 12** on the next page).

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. Electrostatic discharge can damage circuits, even if you cannot feel, see, or hear it.
- Ne pas toucher les composants électroniques ou les connecteurs sur la carte mère ou sur les circuits imprimés sans être électriquement relié à la terre. Manipuler les circuits imprimés en les tenant seulement par leurs bords. Les ESD peuvent endommager l'équipement, même si vous ne pouvez pas le sentir, le voir ou l'entendre.
- **5.** Place the removed board on an anti-static surface or in an anti-static container.

- 6. For a board, orient the board to be installed horizontally (XTP CrossPoint 1600) or vertically XTP CrossPoint 3200) and so that the IN or OUT silkscreen on the back panel is right side up.
- **7.** For a board, align the board with the left and right chassis guides (see figure 12).
- 8. Gently slide the board or blank panel into the enclosure. For a board, slide it toward the front panel until it meets resistance.



Figure 12. Board Removal and Installation

- 9. For a board, gently seat the board in the backplane.
- **10.** Use a screwdriver to tighten the left and right knurled knobs to lock the board or panel in place.

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Extron Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America, and Central America:

Extron Electronics 1230 South Lewis Street Anaheim, CA 92805 U.S.A.

Europe and Africa:

Extron Europe Hanzeboulevard 10 3825 PH Amersfoort The Netherlands

Asia:

Extron Asia 135 Joo Seng Road, #04-01 PM Industrial Bldg. Singapore 368363 Singapore

Japan:

Extron Electronics, Japan Kyodo Building, 16 Ichibancho Chiyoda-ku, Tokyo 102-0082 Japan

China:

Extron China 686 Ronghua Road Songjiang District Shanghai 201611 China

Middle East:

Extron Middle East Dubai Airport Free Zone F13, PO Box 293666 United Arab Emirates, Dubai

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions, or if modifications were made to the product that were not authorized by Extron.

NOTE: If a product is defective, please call Extron and ask for an application engineer to receive an RA (return authorization) number. This will begin the repair process.

USA:	714.491.1500 or 800.633-9876	Europe:	31.33.453.4040
Asia:	65.6383.4400	Japan:	81.3.3511.7655

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

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+1.714.491.1510 +1.919.850.1000 +1.714.491.1517 FAX +1.919.850.1001 FAX		Extron Japan +81.3.3511.7655 +81.3.3511.7656 FAX	Extron China +86.21.3760.1568 +86.21.3760.1566 FAX
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