User Guide

XTP Systems

XTP T EU 202
XTP T MK 202

Two Input XTP Transmitter – Wallplate



Extron

68-2319-01 Rev. D
01 19

Safety Instructions

Safety Instructions • English

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ATENCIÓN: Este símbolo, ⚠, 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.

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Instructions de sécurité • Français

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ATTENTION : Ce pictogramme, ⚠, 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**.

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ATTENTZIONE: Il simbolo, ⚠, se usato sul prodotto, serve ad avvertire l'utente della presenza di importanti istruzioni di funzionamento e manutenzione nella documentazione fornita con l'apparecchio.

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Инструкция по технике безопасности • Русский

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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。

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안전 지침 • 한국어

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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.

Conventions Used in this Guide

Notifications

The following notifications are used in this guide:

WARNING: Potential risk of severe injury or death.
AVERTISSEMENT : Risque potentiel de blessure grave ou de mort.

CAUTION: Risk of minor personal injury.
ATTENTION : Risque de blessure mineure.

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

NOTE: A note draws attention to important information.

TIP: A tip provides a suggestion to make working with the application easier.

Software Commands

Commands are written in the fonts shown here:

```
^AR Merge Scene,,Op1 scene 1,1 ^B 51 ^W^C
[Ø1]R ØØØ4 ØØ3ØØ ØØ4ØØ ØØ8ØØ ØØ6ØØ [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 2Ø8.132.18Ø.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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Introduction

This section contains general information about this guide and the Extron XTP T EU 202 and XTP T MK 202 Wallplate Transmitters, and selected device features. Topics in this section include:

- **Guide Overview**
- **XTP T EU 202 and XTP T MK 202 Wallplate Transmitter Description**
- **System Compatibility**
- **Features**

Guide Overview

This guide contains installation, operation, and control procedures, and reference information for the XTP T EU 202 and XTP T MK 202 Wallplate Transmitter. In this guide, the term "XTP T EU 202" refers to the XTP T EU 202 Wallplate Transmitter and "XTP T MK 202" refers to the XTP T MK 202 Wallplate Transmitter. The terms "transmitter" and "transmitters" refer to either XTP T EU 202 or XTP T MK 202 model or both.

XTP T EU 202 and XTP T MK 202 Wallplate Transmitter Description

The Extron XTP T EU 202 and XTP T MK 202 are two-input transmitters that send HDMI or RGBHV video, audio, and bidirectional RS-232 and IR up to 330 feet (100 meters) over a single shielded twisted pair (STP) cable. These two-gang wallplate transmitters support computer-video to 1920x1200, including HDTV 1080p @ 60 Hz Deep Color and 2K. The transmitters work with XTP Systems for signal distribution and long-distance transmission between remote endpoints.

The transmitters can be powered locally or remotely through an Extron Power Injector or XTP matrix switcher (see **Power Connection** on page 15).

To configure and control the transmitters, connect a host device, such as a computer, to the USB Config port and enter Simple Instruction Set (SIS) commands (see **SIS Configuration and Control** on page 20) or use the XTP System Configuration Software (see **XTP System Configuration Software** on page 25).

The following diagram shows one way the XTP T EU 202 or XTP T MK 202 can be integrated in an XTP point-to-point application. The transmitters can also be used with an XTP matrix switcher (see the XTP matrix switcher user guide at **www.extron.com** for more details on matrix applications and configuration).

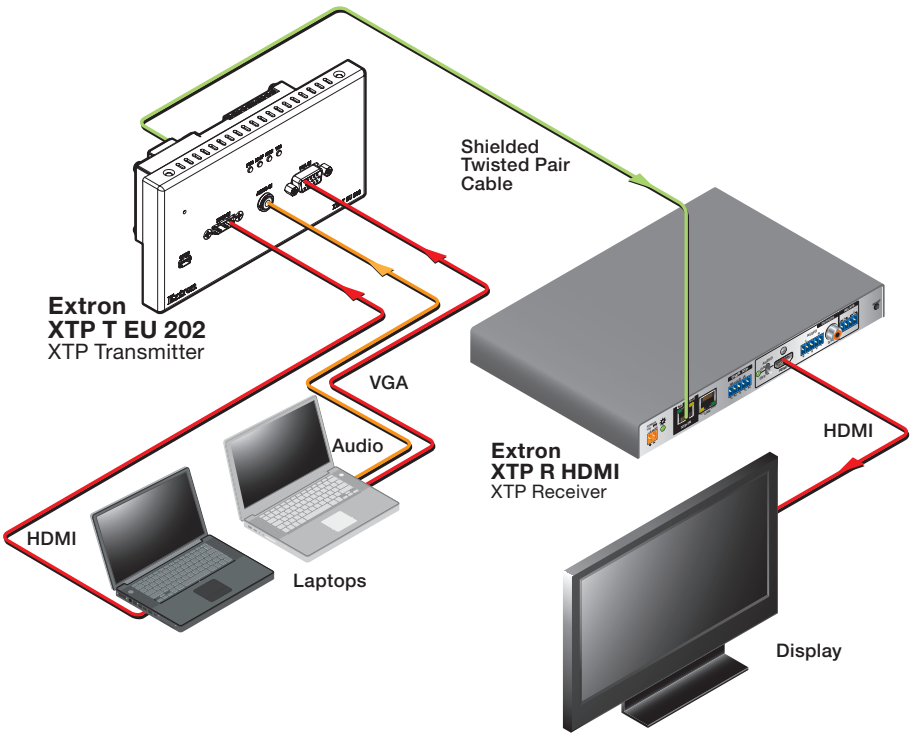


Figure 1. Typical Point-to-Point Application Diagram

System Compatibility

The XTP T EU 202 and XTP T MK 202 are compatible with XTP systems, but the maximum video resolution may be limited with different XTP devices. See the table below for maximum video resolutions and refresh rates for various XTP systems.

		Output		
		Non-4K	**4K Fiber**	**4K PLUS**
Input	**Analog**	1920x1200 @ 60 Hz	1920x1200 @ 60 Hz	1920x1200 @ 60 Hz
	Non-4K Digital	2048x1080 @ 60 Hz	2048x1080 @ 60 Hz	2048x1080 @ 60 Hz
	4K Fiber	2048x1080 @ 60 Hz	4096x2160 @ 24 Hz	4096x2160 @ 24 Hz
	4K PLUS	2048x1080 @ 60 Hz	4096x2160 @ 24 Hz	4096x2160 @ 60 Hz

Features

- **Reliable cable infrastructure** — Provides high reliability and maximum performance on an economical and easily installed cable infrastructure.
- **Wall mountable** — Mounts in an EU or MK two-gang junction box or European cable channel system depending on the transmitter model.
- **Support for computer-video to 1920x1200, including HDTV 1080p/60 Deep Color and 2K signals** — Maintains superior image quality at the highest resolutions.

- **Shielded twisted pair cable compatibility** — Optimized for use with common shielded twisted pair cable types. XTP systems fully support a maximum transmission distance of 330 feet (100 meters) for all compatible resolutions when used with shielded twisted pair cable. Shielded twisted pair cabling with solid center conductor sizes of 24 AWG or better is recommended for optimal performance.
- **Auto-input switching** — Automatically switches to the highest or lowest priority input with an active video signal for simplified operation.
- **Digital conversion of analog video and audio input signals** — Digitizes analog signals, ensuring that a reliable, high quality digital video signal is sent to the output destination.
- **Bidirectional RS-232 and IR insertion** — Allows a remote display to be controlled without the need for additional cabling through bidirectional RS-232 control and IR signals inserted into the XTP output.
- **HDMI specification features** — Support data rates up to 6.75 Gbps, Deep Color up to 12-bit, 3D, and HD lossless audio formats.
- **HDCP compliance** — Ensures display of content-protected media and interoperability with other HDCP-compliant devices.
- **EDID Minder** — Automatically manages EDID communication between connected devices to ensure that all sources properly power up and reliably display content.
- **Key Minder** — Authenticates and maintains continuous HDCP encryption between input and output devices to ensure quick and reliable switching in professional AV environments, while enabling simultaneous distribution of a single source signal to one or more displays.
- **Remote power capability** — Allows the XTP T EU 202 and XTP T MK 202 to be powered by an XTP matrix switcher or XTP power injectors to simplify integration.
- **Multiple embedded audio formats** — Provides reliable operation with HDMI sources, compatible with a broad range of multi-channel audio signals.
- **Selectable analog stereo audio input embedding** — Supports unbalanced audio for extended transmission. This feature enables direct connection of separate stereo audio signals from a laptop, Blu-ray Disc™ player, or other device.
- **Audio input gain and attenuation** — Allows the level of gain or attenuation to be set, eliminating noticeable volume differences when switching between sources.
- **RS-232 control** — Features an RS-232 serial port for control and configuration.
- **XTP compatibility** — Provides a completely integrated solution for multiple digital and analog formats through XTP integrated system products. XTP is a flexible, reliable signal switching and distribution system.

Installation

This section contains information for mounting, connecting, and wiring the XTP T EU 202 and XTP T MK 202. Topics in this section include:

- **Installation Overview**
- **Junction Box or European Cable Channel System Installation**
- **Rear and Side Panel Connectors**
- **Mounting the XTP T EU 202 and XTP T MK 202**
- **Front Panel Connectors**
- **Connection Details**

Installation Overview

Both models mount into a junction box or European cable channel system. The European cable channel system is also known as a “trunking system.” For junction boxes, the XTP T EU 202 mounts into an European junction box and the XTP T MK 202 mounts into an MK junction box.

If using a European cable channel system with an XTP T EU 202, ensure the XTP T EU 202 fits in the desired channel. The dimensions of the XTP T EU 202 are as follows:

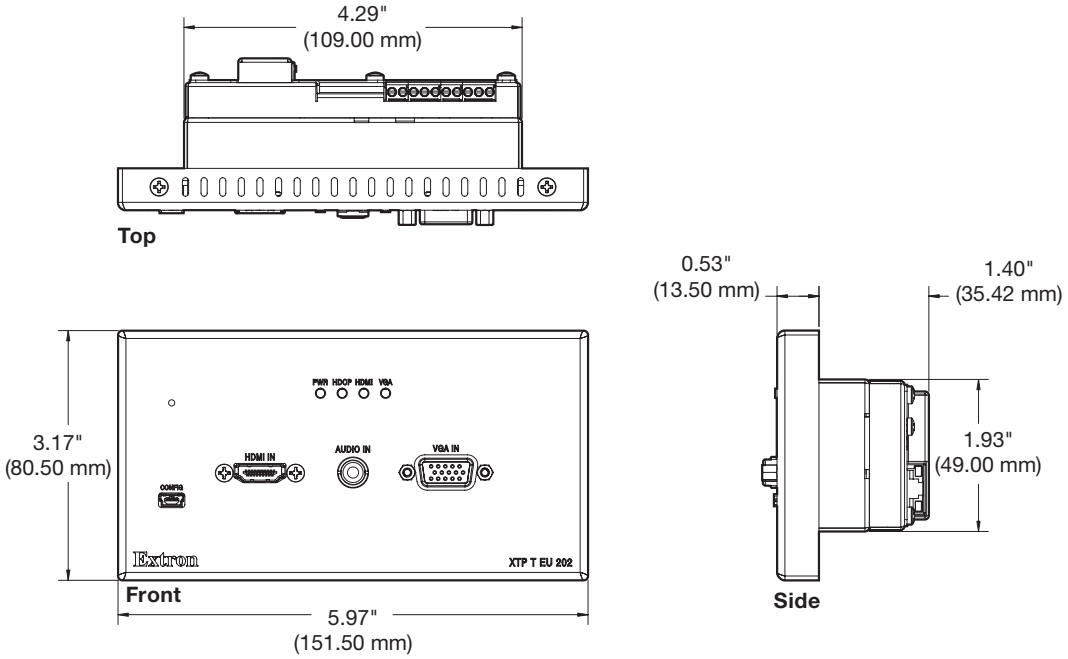


Figure 2. XTP T EU 202 Dimensions

The depth of the XTP T EU 202 and XTP T MK 202 is the same for both transmitters.

To mount and connect the transmitters, consider the following:

1. Ensure there is enough space between the rear panel and the back of the junction box or European cable channel system to fit connectors (see **figure 2** on the previous page for depth considerations).

   NOTE: The depth of the XTP T EU 202 and XTP T MK 202 is the same for both transmitters. The necessary depth of the junction box or European cable channel system may vary, but the XTP T MK 202 requires a minimum depth of 1.58 inches (40 mm).

2. If necessary, prepare the mounting surface.

   CAUTION: Risk of personal injury. Failure to check the items listed below may result in personal injury.

   ATTENTION : Risque de blessure. La non-vérification des éléments listés ci-dessous peut provoquer des blessures.

   ATTENTION:

   - Failure to check the items listed below may result in property damage.
   - La non-vérification des éléments listés ci-dessous peut provoquer des dommages matériels.

   - Ensure there are no utility cables or pipes at the intended location that might be damaged or cause injury when installing the device.
   - Check that the installation meets building, electrical, and safety codes.
   - Ensure there is sufficient space behind the device.
   - Choose a location that will allow cable runs without interference.

     NOTES:

     - Cables may need to be installed in the wall or conduits before installation.
     - The mud ring does not require attachment to wall studs.
     - For metal junction boxes, refer to the manufacturer for more installation requirements.

3. Install the junction box or European cable channel system (see **Junction Box or European Cable Channel System Installation** on the next page).

   NOTE: Refer to the manufacturer for more junction box installation requirements.

4. Route and connect cables to the rear panel connectors (see **Rear and Side Panel Connectors** on page 7).
5. Mount the XTP T EU 202 or XTP T MK 202 into the junction box (see **Mounting the XTP T EU 202 or XTP T MK 202** on page 9).
6. Connect inputs to the front panel connectors (see **Front Panel Connectors** on page 10).
7. Supply power to all connected devices.

Junction Box or European Cable Channel System Installation

Refer to the junction box or European cable channel system manufacturer for additional installation considerations. If required to cut an opening in the mounting surface, consider the following:

- For accuracy, use a template or the mounting enclosure to mark cut guidelines.
- To avoid making the hole too big, cut inside the marked guidelines.

CAUTION: Risk of personal injury. Smooth the edges of the opening to avoid personal injury during installation.

ATTENTION : Risque de blessure. Lissez les bords de l'ouverture afin d'éviter toute blessure lors de l'installation.

ATTENTION:

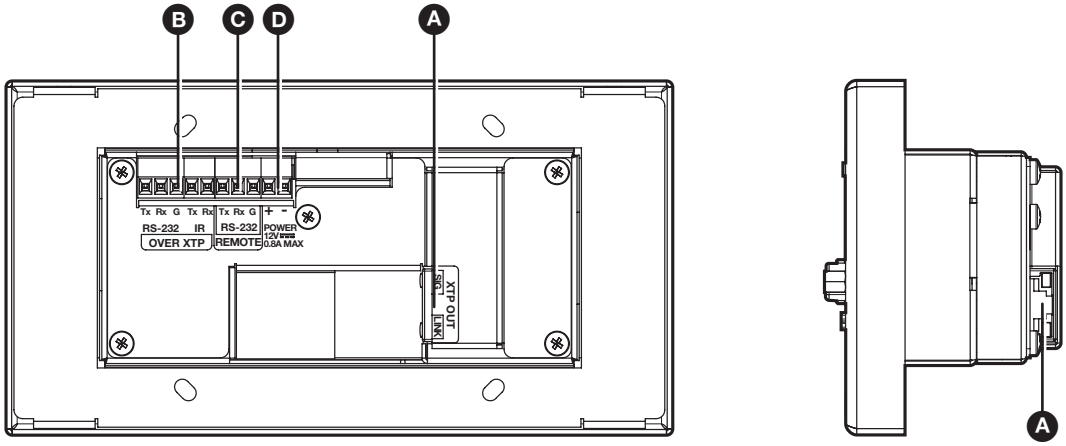
- Smooth the edges of the opening to avoid damage to the mounting device or the cables.
- Lissez les bords de l'ouverture afin d'éviter d'endommager l'appareil de montage ou les câbles.

- Secure cables with clamps or ties to provide strain relief.
- Trim back and insulate shields with heat shrink.

ATTENTION:

- To prevent short circuits, the outer foil shield can be cut back to the point where the cable exits the cable clamp. Both braided and foil shields should be connected to an equipment ground at the other end of the cable.
- Afin d'éviter les court circuits, le blindage en aluminium extérieur peut être réduit jusqu'à ce que le câble sorte de la cosse de câble. Le blindage tressé et le blindage en aluminium devraient être connectés à la masse d'un équipement à l'autre bout du câble.

Rear and Side Panel Connectors



Rear Side

- **A** **XTP output connector**
- **B** **RS-232 and IR Over XTP connector** (see page 8)
- **C** **Remote RS-232 connector** (see page 8)
- **D** **Power connector** (see page 8)

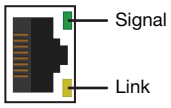
Figure 3. Rear Panel Connectors

A **XTP output connector** — Connect a twisted pair cable to the RJ-45 connector labeled "XTP OUT" on the transmitter and the XTP input port on another XTP device to pass all signals (see **TP Cable Termination and Recommendations** on page 13). This cable carries the following signals:

- Digital video
- Digital audio
- Bidirectional RS-232 and IR commands
- Remote power
- Ethernet communication
- System communication

Signal LED indicator — Lights green when the transmitter outputs an XTP signal to a compatible receiver or matrix switcher.

Link LED indicator — Lights yellow when XTP devices are connected and communication is established.



ATTENTION:

- Do not connect this connector to a computer data or telecommunications network.
- Ne connectez pas ce connecteur à un réseau de données informatiques ou à un réseau de télécommunications.
- XTP remote power is intended for indoor use only. No part of the network that uses XTP remote power should be routed outdoors (see **Remote power** on page 17).
- XTP à distance est destiné à une utilisation en intérieur seulement. Aucune partie du réseau qui utilise l'alimentation XTP à distance ne peut être routée en extérieur (voir **Remote power** à la page 17).

Ⓑ **RS-232 Over XTP port** — To pass bidirectional serial signals between XTP-compatible devices, connect a control device to the 5-pole direct insertion captive screw connector (see **figure 3**, Ⓑ on the previous page). The port includes only the three poles labeled "RS-232."



IR Over XTP port — To transmit and receive IR signals (up to 56 kHz), connect a control device to the 5-pole direct insertion captive screw connector (see **figure 3**, Ⓑ on the previous page). This port includes the two poles labeled "IR" and shares the ground pole with the RS-232 port.



NOTE: RS-232 and IR data can be transmitted simultaneously (see **RS-232 and IR Over XTP Communication** on page 15 for wiring details).

Ⓒ **Remote RS-232 connector** — Connect a host device to the 3.5 mm, 3-pole direct insertion captive screw connector (see **figure 3**, Ⓒ on the previous page) for serial control of the transmitter. See the figure below for wiring considerations.

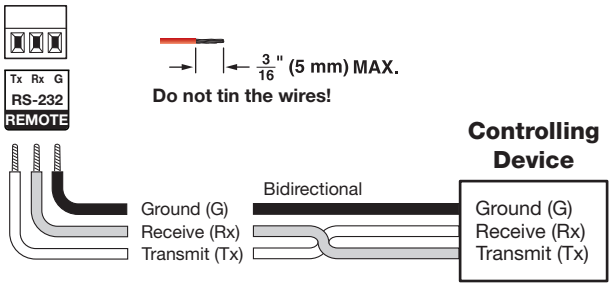


Figure 4. Remote RS-232 Wiring

Ⓓ **Power connector** — Connect an external power supply to the 2-pole direct insertion captive screw connector (see **figure 3**, Ⓓ on the previous page). Confirm the polarity of the power supply wires. For wiring considerations, see **Power Connection** on page 15.

NOTE: The XTP T EU 202 and XTP T MK 202 can also be powered remotely (see **Remote power** on page 17).

Mounting the XTP T EU 202 or XTP T MK 202

NOTE: Some connectors and features are inaccessible after the device is mounted or the faceplate is attached.

1. Mount the mounting plate depending on the junction box model or European cable channel system with the flanged edges pointing away from the junction box.
   - For EU junction boxes, use four long screws to attach the mounting plate to the junction box (see figure 5).

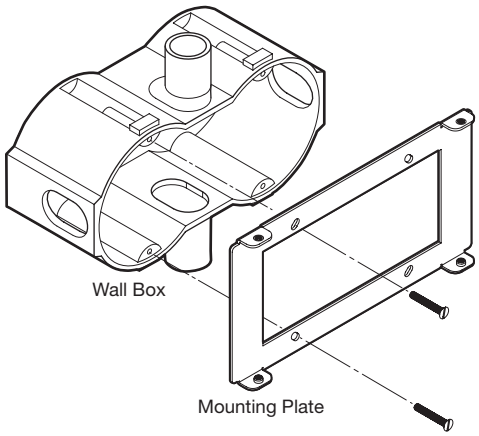


Figure 5. Mounting Plate Installation for the XTP T EU 202

NOTE: Only two screws are shown in figure 6, but to ensure the mounting plate is secure, use four long screws in the four holes shown on the mounting plate.

   - For MK junction boxes, use two long screws to attach the mounting plate to the junction box (see figure 6).

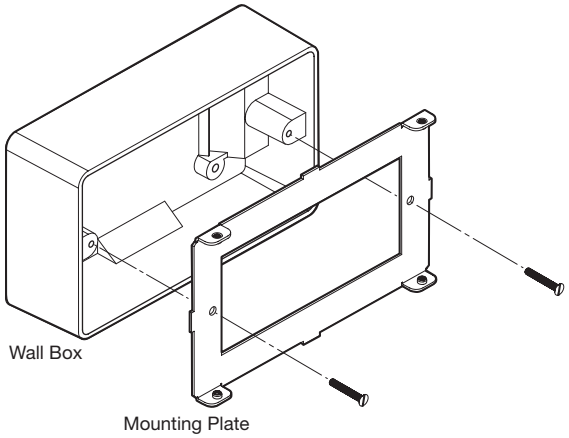


Figure 6. Mounting Plate Installation for the XTP T MK 202

   - To install the adapter plate to a European cable channel system, refer to the manufacturer of the European cable channel system for any additional equipment or installation requirements.

2. Using the four short screws, attach the transmitter to the flanged edges of the mounting plate.

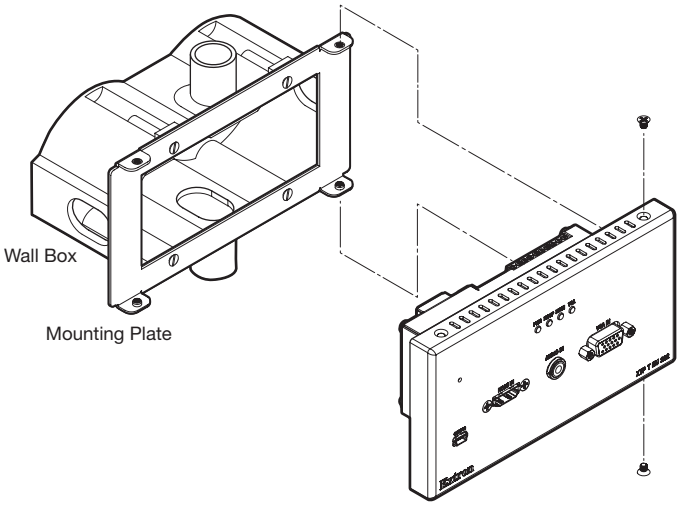
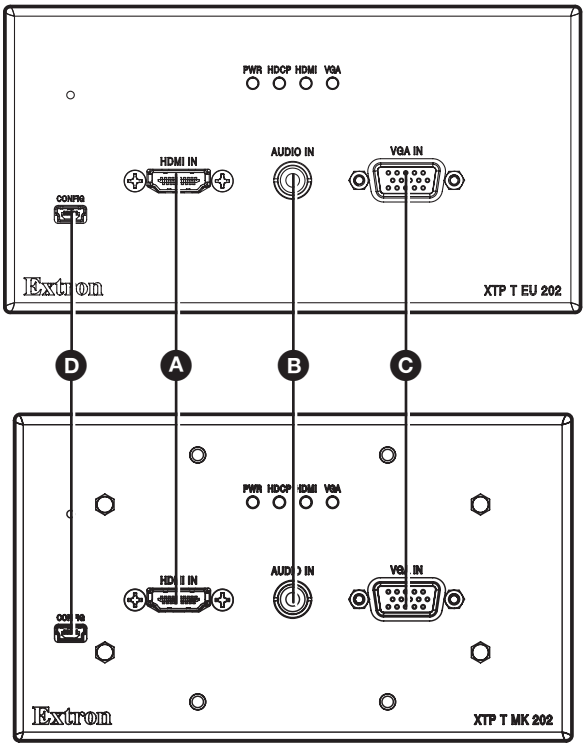


Figure 7. Transmitter Installation (XTP T EU 202 Shown)

NOTE: Only two screws are shown in figure 7, but to ensure the transmitter is secure, use four short screws in the four flanges on the mounting plate.

Front Panel Connectors



- **A** **HDMI input connector** (see page 11)
- **B** **Analog audio input connector** (see page 11)
- **C** **Analog video input connector** (see page 11)
- **D** **Configuration port** (see page 11)

Figure 8. Front Panel Connectors

Ⓐ **HDMI input connector** — Connect a digital video source to the female HDMI connector (see **figure 8**, Ⓐ on the previous page). It accepts HDMI, DVI (with an appropriate adapter), or dual mode DisplayPort video sources.

NOTES:

- The maximum HDMI cable length is 15 feet (4.6 meters).
- Use an Extron HDMI LockIt Cable Lacing Bracket to secure the HDMI connector to the device (see **HDMI Connection** on the next page).

Ⓑ **Analog audio input connector** — Connect an analog audio source to the 3.5 mm tip-ring-sleeve (TRS) connector (see **figure 8**, Ⓑ on the previous page).

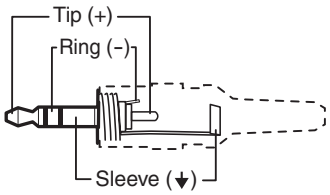


Figure 9. Wiring for TRS Audio

By default, audio input is selected automatically (see **Audio input selection** SIS commands on page 22 to manually select audio inputs). When the HDMI input is selected with automatic audio input selections, the transmitter prioritizes embedded digital audio. The table below shows the audio format that is sent over the XTP connection when a specific audio format is not specified.

Selected Video Input	HDMI Embedded Audio Present	Analog Audio Present	Audio Sent Over XTP
VGA	N/A	Yes	Analog audio
VGA	N/A	No	No audio
HDMI	Yes	No	HDMI embedded audio
HDMI	Yes	Yes	HDMI embedded audio
HDMI	No	Yes	Analog audio
HDMI	No	No	No audio

Ⓒ **Analog video input connector** — Connect a video source to the female 15-pin HD connector (see **figure 8**, Ⓒ on the previous page). It accepts RGBHV video signals.

Ⓓ **Configuration port** — If desired, connect a host device to the front panel USB mini-B Config port (see **figure 8**, Ⓓ on the previous page) for configuring the transmitter.

Connection Details

HDMI Connection

To secure the HDMI cable to the HDMI input connector, use an Extron LockIt Cable Lacing Bracket and a tie wrap.

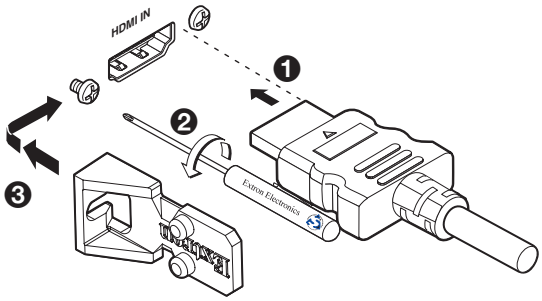
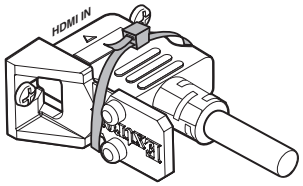


Figure 10. Installing the LockIt Cable Lacing Bracket

1. Plug the HDMI cable into the front panel connection (see figure 10, ❶).
2. Loosen the HDMI connection mounting screw from the panel (❷) enough to allow the LockIt to be placed over it. The screw does not have to be removed.
3. Place the LockIt on the screw and against the HDMI connector (❸), then tighten the screw to secure the bracket.
4. Loosely place the included tie wrap around the HDMI connector and the LockIt (see the image to the right).
5. While holding the connector securely against the lacing bracket, use pliers or similar tools to tighten the tie wrap, and then remove any excess length.

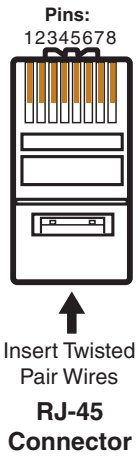


ATTENTION:

- Connect and pull the tie wraps until they are secure. Do not overtighten.
- Connectez et tirez les serre-câbles jusqu'à ce qu'ils soient sécurisés. Ne pas trop serrer.

TP Cable Termination and Recommendations

Use the following pin configurations for twisted pair 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

Figure 11. TP Cable Termination

Supported cables

The XTP T EU 202 and XTP T MK 202 is compatible with shielded twisted pair (F/UTP, SF/UTP, and S/FTP) cable.

ATTENTION:

- 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.
- 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.

Cable recommendations

Extron recommends using the following practices for XTP communication to achieve full transmission distances up to 330 feet (100 meters) 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 cable, 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 (see **figure 11** 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 STP 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.

RS-232 and IR Over XTP Communication

The RS-232 and IR Over XTP connector is for pass-through transmission of serial signals, such as projector control signals, and infrared data. To pass bidirectional serial command signals between XTP-compatible devices, connect a control device to the three poles (Tx, Rx, and G) under “RS-232” of the 5-pole captive screw connector. To transmit and receive IR signals, connect a control device to the three poles (G, Tx, and Rx) under “IR.” The ground (G) pole is shared.

NOTE: RS-232 and IR data can be transmitted or received simultaneously (see figure 12 for wiring considerations).

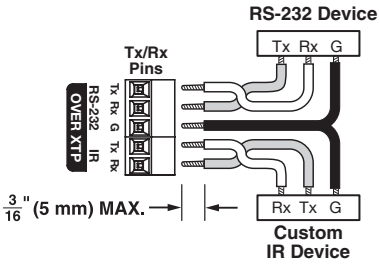


Figure 12. Wiring the RS-232 and IR Over XTP Connector

ATTENTION: The length of the exposed wires in the stripping process is important.

ATTENTION : La longueur des câbles exposés est importante lorsque l’on entreprend de les dénuder.

- The ideal length is 3/16 inch (5 mm).
- La longueur idéale est de 5 mm (3/16 inches).

- Any longer and the exposed wires may touch, causing a short circuit between them.
- S’ils sont un peu plus longs, les câbles exposés pourraient se toucher et provoquer un court circuit.

- Any shorter and the wires can be easily pulled out even if tightly fastened by the captive screws.
- S’ils sont un peu plus courts, ils pourraient sortir, même s’ils sont attachés par les vis captives.

Power Connection

Apply power to the transmitter locally with the provided power supply (if necessary, see figure 13 for wiring considerations) or remotely (through the XTP connector) with a power injector or an XTP matrix switcher.

Local power

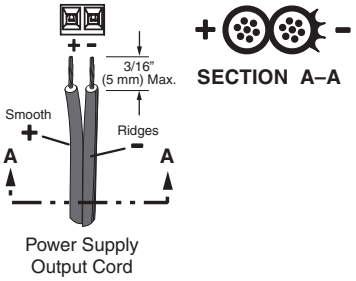


Figure 13. Power Wiring

The XTP T EU 202 and XTP T MK 202 can be connected to a local power supply. See the notifications on the next page for local power considerations.

WARNING: **Electric shock hazard.** The two power cord wires must be kept separate while the power supply is plugged in. Remove power before wiring.

AVERTISSEMENT : Risque de choc électrique grave. Les deux cordons d'alimentation doivent être tenus à l'écart l'un de l'autre quand l'alimentation est branchée. Couper l'alimentation avant de faire l'installation électrique.

ATTENTION:

- This product is intended for use with a UL Listed power source marked "Class 2" or "LPS" rated 12 VDC, 1.0 A minimum, 48 VDC (PoE), minimum 0.35 A, or an Extron UL Listed XTP remote power source. Always use a power supply supplied by or specified by Extron. Use of an unauthorized power supply voids all regulatory compliance certification and may cause damage to the supply and the unit.
- Ce produit est destiné à une utilisation avec une source d'alimentation certifiée UL de classe 2 ou LPS et calibrée à 12 Vcc, 1,0 A minimum, 48 Vcc (PoE), 0,35 A minimum, ou une source d'alimentation délocalisée XTP Extron certifiée UL. Utilisez toujours une source d'alimentation fournie par Extron. L'utilisation d'une source d'alimentation non autorisée annule toute conformité réglementaire et peut endommager la source d'alimentation ainsi que l'unité.

- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities. The installation must always be in accordance with the applicable provisions of IEC 60364. The power supply shall not be permanently fixed to a building structure or similar structure.
- Sauf mention contraire, les adaptateurs AC/DC ne sont pas appropriés pour une utilisation dans les espaces d'aération ou dans les cavités murales. Cette installation doit toujours être en accord avec les mesures qui s'applique au IEC 60364. La source d'alimentation ne devra pas être fixée de façon permanente à une structure de bâtiment ou à une structure similaire.

- Power supply voltage polarity is critical. Incorrect voltage polarity can damage the power supply and the unit. The ridges on the side of the cord identify the power cord negative lead.
- La polarité de la source d'alimentation est primordiale. Une polarité incorrecte pourrait endommager la source d'alimentation et l'unité. Les stries sur le côté du cordon permettent de repérer le pôle négatif du cordon d'alimentation.

- The length of the exposed (stripped) copper wires is important. The ideal length is 3/16 inch (5 mm).
- La longueur des câbles exposés est primordiale lorsque l'on entreprend de les dénuder. La longueur idéale est de 5 mm (3/16 inch).

TIP: Do not tin the stripped power supply leads. Tinned wires are not as secure in the captive screw connectors and could be pulled out.

Remote power

The XTP T EU 202 and XTP T MK 202 can be powered remotely through an XTP Power Injector or through an XTP matrix switcher.

ATTENTION:

- XTP remote power is intended for indoor use only. No part of the network that uses XTP remote power should be routed outdoors.
- L'alimentation à distance XTP est destinée à un usage en intérieur uniquement. Aucune partie du réseau qui utilise l'alimentation XTP à distance ne peut être routée en extérieur.

Power injector

To power the either transmitter remotely with an XTP Power Injector, power a connected receiver locally (see **Local power** on page 15) and connect an XTP Power Injector to the XTP cable run along the XTP connectors (see the *XTP Power Injector User Guide* at **www.extron.com** for more installation information).

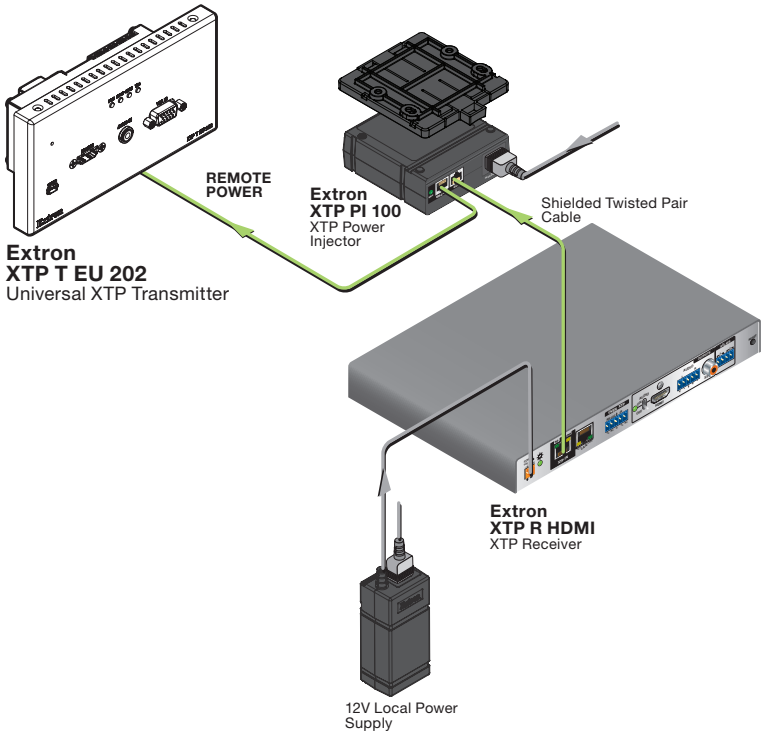


Figure 14. Typical Pont-to-Point Application with Remote Power

NOTE: The power injector provides remote power up to 330 feet (100 meters) with a shielded twisted pair cable with 24 AWG wire.

XTP matrix switcher

XTP matrix switchers have a fixed amount of power available to provide remote power to connected XTP devices (see the XTP matrix switcher user guide at **www.extron.com** for more details). To manage available power from the XTP matrix switcher, use the XTP System Configuration Software with the XTP matrix switcher.

Operation

This section contains information for front panel operation and configuration of the XTP T EU 202 and XTP T MK 202. Topics in this section include:

- **Front Panel Features**
- **EDID**
- **Reset Mode**

After all transmitters, all receivers, and other related devices are connected and powered, the system is fully operational. If any problems are encountered, verify that the cables are routed and connected properly. If problems persist, call the Extron S3 Sales & Technical Support Hotline.

Front Panel Features

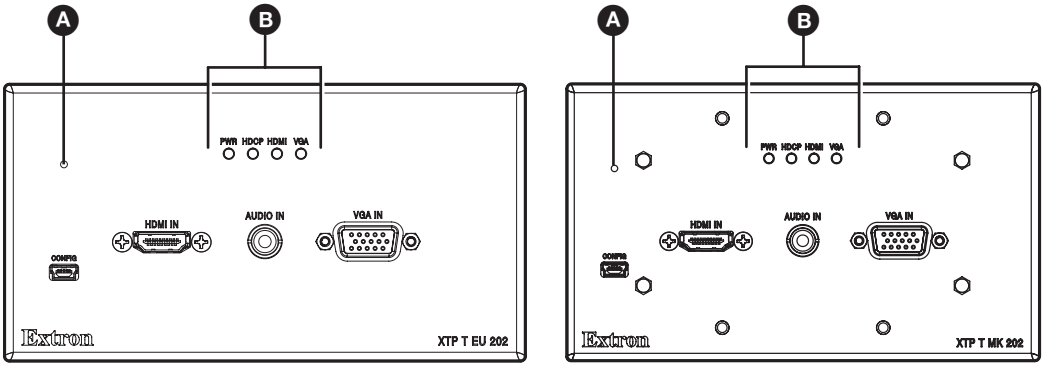


Figure 15. Front Panel Features

A **Reset button** — Press the recessed **Reset** button to reset the device to default settings (see **Reset Mode** on the next page).

B **Signal LED Indicators:**

- **Power LED indicator** — Lights when power is applied to the unit.
- **HDCP LED indicator** — Lights when the input signal is encrypted.
- **HDMI LED indicator** — Lights when an HDMI input video signal is detected.
- **VGA LED indicator** — Lights when a video signal is detected on the VGA input.

EDID

To manage EDID on the XTP T EU 202 and XTP T MK 202, use the XTP System Configuration Software (see **EDID Minder** on page 37). The transmitters can record and save EDID in a user memory location, select a pre-defined EDID, or use EDID from a display connected to a receiver. EDID stored in the user memory location can come from the display connected to a receiver or a custom EDID imported through the XTP System Configuration Software.

NOTE: In matrix applications, EDID on the transmitter is assigned by the XTP matrix switcher using the XTP System Configuration Software.

Reset Mode

Use the recessed **Reset** button (see **figure 15**, Ⓐ on the previous page) on the side panel of the transmitter to restore factory-shipped firmware.

Reset Mode Summary				
Mode		**Mode Activation**	**Result**	**Purpose and Notes**
Factory Reset	1	Hold down the recessed **Reset** button while applying power to the device. **NOTE:** After a mode 1 reset, update the device with the latest firmware version. DO NOT operate the firmware version that results from this mode reset.	The device reverts to the factory default firmware. **NOTE:** If you do not want to update the firmware or perform a mode 1 reset by mistake, cycle power to the device to return to the firmware version running prior to the reset.	Use mode 1 to return to factory firmware for a single power cycle if an incompatibility issue arises.

SIS Configuration and Control

The XTP T EU 202 and XTP T MK 202 can be configured and controlled using Extron Simple Instruction Set (SIS) commands or the XTP System Configuration Software (see **XTP System Configuration Software** on page 25). This section contains basic SIS communication details and SIS commands and responses when connected directly to the XTP T EU 202 or XTP T MK 202. Topics in this section include:

- **Host Device Connection**
- **SIS Overview**
- **Command and Response Tables for SIS Commands**

Host Device Connection

Use a connected computer running the Extron DataViewer utility to send and receive SIS commands and responses. To connect directly to either transmitter, connect the computer to the device through the front panel USB configuration port (see **figure 8**, D on page 10) or the rear panel RS-232 connector (see **figure 3**, C on page 7). The protocol for the serial port is as follows: 9600 baud, no parity, 8 data bits, 1 stop bit, no flow control.

SIS Overview

Host-to-Device and Device-to-Host Communication

SIS commands consist of one or more characters per field. No special characters are required to begin or end a command sequence. When the transmitter determines that a command is valid, it executes the command and sends a response to the host device. All responses from the transmitter to the host end with a carriage return and a line feed (CR/LF = ↵), which signals the end of the response character string. A string is one or more characters.

Device-Initiated Message

When the transmitter is connected through the serial port only and a local event occurs, the device responds by sending a message to the host.

The following copyright message is displayed after a power cycle via RS-232.

`(C) Copyright YYYY, Extron Electronics, XTP T EU-MK 202 Vx.xx, 60-1358-xx`↵

YYYY is the year. `Vx.xx` is the firmware version number. `68-1358-xx` is the device part number.

Error Responses

When the transmitter receives an SIS command and determines that it is valid, it performs the command and sends the corresponding response to the host device. If the command is determined invalid or contains invalid parameters, the transmitter returns an error response to the host. The error response codes are:

E01 = Invalid input number
E06 = Invalid switch attempt in this mode
E10 = Invalid command
E11 = Invalid preset number
E12 = Invalid port number
E13 = Invalid parameter
E14 = Not valid for this configuration
E17 = Invalid command for signal type

Using the Command and Response Tables for SIS Commands

The **command and response tables** beginning on the next page list the commands that the transmitter recognizes as valid, the responses that are returned to the host, a description of the command function or the results of executing the command. Commands can be entered back-to-back in a string with no spaces. Figure 16 shows the hexadecimal equivalent of ASCII characters used in the command and response tables.

NOTE: Upper and lowercase text can be used interchangeably unless otherwise stated.

ASCII and Hexadecimal Conversion Table

First Hexadecimal Digit	Second Hexadecimal Digit															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0											LF			←		
1												Esc				
2	•	!	“	#	$	%	&	‘	(	)	*	+	,	-	.	/
3	Ø	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
4	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
6	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
7	p	q	r	s	t	u	v	w	z	y	z	{	|	}	~	

Figure 16. ASCII to Hexadecimal Conversion

Symbol Definitions

↵ = Carriage return and line feed
← = Carriage return with no line feed
| = Pipe (can be used interchangeably with the ← character).
• = Space
Esc = Escape key
W = Can be used interchangeably with the Esc character.

Command and Response Tables for SIS Commands

Command	ASCII Command (Host to Device)	Response (Device to Host)	Additional Description
Input Commands			
Input selection			
Select input	X1 !	In X1 ↵	Select input X1.
View the selected input	!	In X1 ↵	View the selected input.
Auto switch mode			
Disable auto switch mode	Esc ØAUSW ←	AuswØ ↵	Switch inputs manually.
Set priority to the highest numbered active input	Esc 1AUSW ←	Ausw1 ↵	Automatically switch to the highest numbered active input.
Set priority to the lowest numbered active input	Esc 2AUSW ←	Ausw2 ↵	Automatically switch to the lowest numbered active input.
View setting	Esc AUSW ←	Ausw X3 ↵	View the auto switch mode.
Audio Configuration Commands			
Audio gain and attenuation			
NOTE: Gain and attenuation commands are case-sensitive.			
Set gain	X1*X5G	In X1 •Aud X7 ↵	Set gain to X5.
Set attenuation	X1*X6g	In X1 •Aud X7 ↵	Set attenuation to X6.
Increase audio level	X1+G or X1+g	In X1 •Aud X7 ↵	Increase the audio level by 1 dB.
Decrease audio level	X1-G or X1-g	In X1 •Aud X7 ↵	Decrease the audio level by 1 dB.
View audio level	X1G or X1g	In X1 •Aud X7 ↵	View the audio level.
Audio input selection			
Set audio input format	Esc I2*X2AFMT ←	AfmtI2*X2 ↵	Set the audio input format to X2.
View audio input format	Esc I2AFMT ←	AfmtI2*X2 ↵	View the audio input format.
Black video signal resolution			
Set black video signal resolution	Esc AX8AFMT ←	AfmtA X8 ↵	Set the black video signal resolution to X8.
View black video signal resolution	Esc AAFMT ←	AfmtA X8 ↵	View the black video signal resolution.

KEY:

X1 = Input selection	1 = VGA 2 = HDMI (default)
X2 = Audio input format	Ø = auto, prioritize digital audio (default) 1 = digital embedded 2 = analog
X3 = Auto switch mode	Ø = disable 1 = priority to the HDMI input 2 = priority to the VGA input
X5 = Audio gain	Ø to 24 in 1 dB increments (Ø = Default)
X6 = Audio attenuation	-18 to Ø in 1 dB increments (Ø = default)
X7 = Audio level	-18 to 24 in 1 dB increments (Ø = default)
X8 = Black video signal resolution	2 = 720p @ 50 Hz 4 = 720p @ 60 Hz (default) 6 = 1080p @ 60 Hz

Command	ASCII Command (Host to Device)	Response (Device to Host)	Additional Description
Black video signal for audio only			
NOTE: The switcher uses a black video signal to simulate a 720p or 1080p, 50 Hz or 60 Hz signal so audio can be passed without video.			
Enable black video signal	Esc B1AFMT←	AfmtB1↵	Enable a black video signal.
Disable black video signal	Esc BØAFMT←	AfmtBØ↵	Disable the black video signal.
View setting	Esc BAFMT←	AfmtB X4 ↵	View the black video signal setting.
Picture Adjustment Commands (Analog Only)			
Pixel phase			
Set a pixel phase value	Esc X13 PHAS←	Phas X13 ↵	Adjust the pixel phase to X13.
Increase value	Esc +PHAS←	Phas X13 ↵	Increase the pixel phase value by one.
Decrease value	Esc -PHAS←	Phas X13 ↵	Decrease the pixel phase value by one.
View pixel phase value	Esc PHAS←	Phas X13 ↵	Show the pixel phase value.
Horizontal shift			
Set horizontal shift value	Esc X14 HCTR←	Hctr X14 ↵	Set the horizontal location of the first active pixel in the active window.
Increase value	Esc +HCTR←	Hctr X14 ↵	Increase the shift value by one (move the image to the right).
Decrease value	Esc -HCTR←	Hctr X14 ↵	Decrease the shift value by one (move the image to the left).
View horizontal shift value	Esc HCTR←	Hctr X14 ↵	Show the horizontal location of the first active pixel in the active window.
Vertical shift			
Set vertical shift value	Esc X14 VCTR←	Vctr X14 ↵	Set the vertical location of the first active pixel in the active window.
Increase value	Esc +VCTR←	Vctr X14 ↵	Increase the shift value by one (move the image down).
Decrease value	Esc -VCTR←	Vctr X14 ↵	Decrease the shift value by one (move the image up).
View vertical shift value	Esc VCTR←	Vctr X14 ↵	Show vertical location of the first active pixel in the active window.
Image reset			
Execute an image reset	1A	Aadj1↵	Set picture adjustment settings to the default values.
Preset Commands			
Input presets			
Save an input preset	X15 ,	Spr X15 ↵	Save the current configuration to preset X15.
Recall an input preset	X15 .	Rpr X15 ↵	Recall the preset X15 configuration.

KEY:

X4 = Enable or disable	Ø = off or disable 1 = on or enable (default)
X13 = Pixel phase	Ø-255
X14 = Horizontal or vertical shift	Ø-65535 (32768 = default)
X15 = Preset number	1-8

Command	ASCII Command (Host to Device)	Response (Device to Host)	Additional Description
Auto memories			
Set auto memories	Esc X9AMEM←	AmemX9↵	Enable or disable auto memory.
View setting	Esc AMEM←	AmemX9↵	View the auto memories status.

EDID Commands

NOTE: For EDID management, use the XTP System Configuration Software (see **EDID Minder** on page 37).

Advanced Configuration Commands

HDCP authorized device (HDMI input only)			
HDCP authorized device on	Esc E2*1HDCP←	HdcpE2*1↵	Designate the transmitter as an HDCP authorized device (default).
HDCP authorized device off	Esc E2*ØHDCP←	HdcpE2*Ø↵	Do not designate the transmitter as an HDCP authorized device.
View HDCP authorized device status	Esc E2HDCP←	HdcpE2*X4↵	View the HDCP authorized device status.
Test pattern			
Set a test pattern	X10J	Tst X10↵	Set color bars test pattern resolution and refresh rate.
View the current test pattern	J	Tst X10↵	View the current test pattern setting.
Reset mode			
System reset	Esc ZXXX←	Zpx↵	Resets unit to factory default.
Status			
View input signal presence	ØLS	Frq X11 X11↵	View the input signal presence of each input. In the response, the first X11 is the VGA input. The second X11 is the HDMI input.
View HDCP input	Esc IHDCP←	HdcpI X12 X12↵	View the HDCP status of the HDMI input.
View firmware version	Q	x.xx↵	View the firmware version.
View full firmware version	*Q	x.xx.xxxx↵	View the full firmware version.
View part number	N	6Ø-1358-23↵ or 6Ø-1358-35↵	View the device part number. The response is based on the model.

KEY:

X4 = HDCP authorization
- Ø = HDCP authorization off
- 1 = HDCP authorization on (default)

X9 = Enable or disable
- Ø = disabled
- 1 = enabled (default)

X10 = Color bar test pattern
- Ø = disable (default)
- 1 = 720p @ 50 Hz
- 3 = 720p @ 60 Hz
- 5 = 1080p @ 60 Hz

X11 = Signal presence
- Ø = Video or TMDS not detected
- 1 = Video or TMDS detected

X12 = HDCP status
- Ø = No source
- 1 = HDCP compliant source
- 2 = non-HDCP compliant source

XTP System Configuration Software

This section contains installation and configuration procedures for the XTP System Configuration Software for configuring and controlling the XTP T EU 202 or XTP T MK 202. They can also be controlled with SIS commands (see **SIS Configuration and Control** on page 20). Topics in this section include:

- **Software Installation**
- **Software Operation**

Software Installation

The XTP System Configuration Software is available for download on the Extron website, **www.extron.com**. To download the software from the Extron website, locate it on the `Download Center` page or go to the XTP System Configuration Software product page.

Software Download Center Page

Follow these steps to download and install the XTP System Configuration Software.

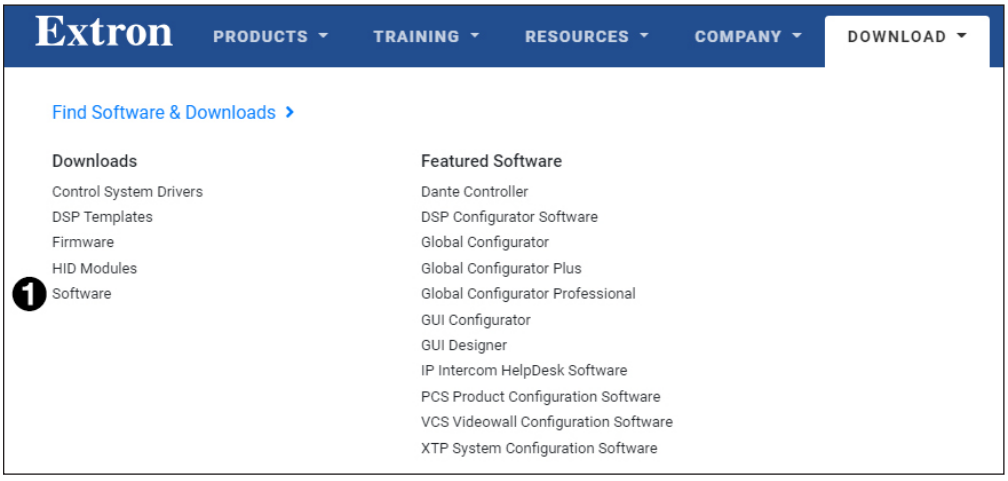


Figure 17. Extron Website Download Page

1. On the Extron website, go to the **`Download`** tab and click **`Software`** (see figure 17, ❶).

   TIP: If the XTP System Configuration Software is listed under "Featured Software" on the **`Download`** tab, click the **`XTP System Configuration Software`** link to go directly to the product page (see **Software Product Page** on the next page).



Figure 18. XTP System Configuration Software Download Link

2. Click the **X** link (see figure 18, ❶).
3. Locate the XTP System Configuration Software and click the **Download** link (see figure 18, ❷) to the right of the product name.
4. Submit any required information to start the download. Note where the file is saved.
5. Open the executable (.exe) file from the save location.
6. Follow the instructions that appear on the screen to install the program.

Software Product Page

The software product page contains information about the software.

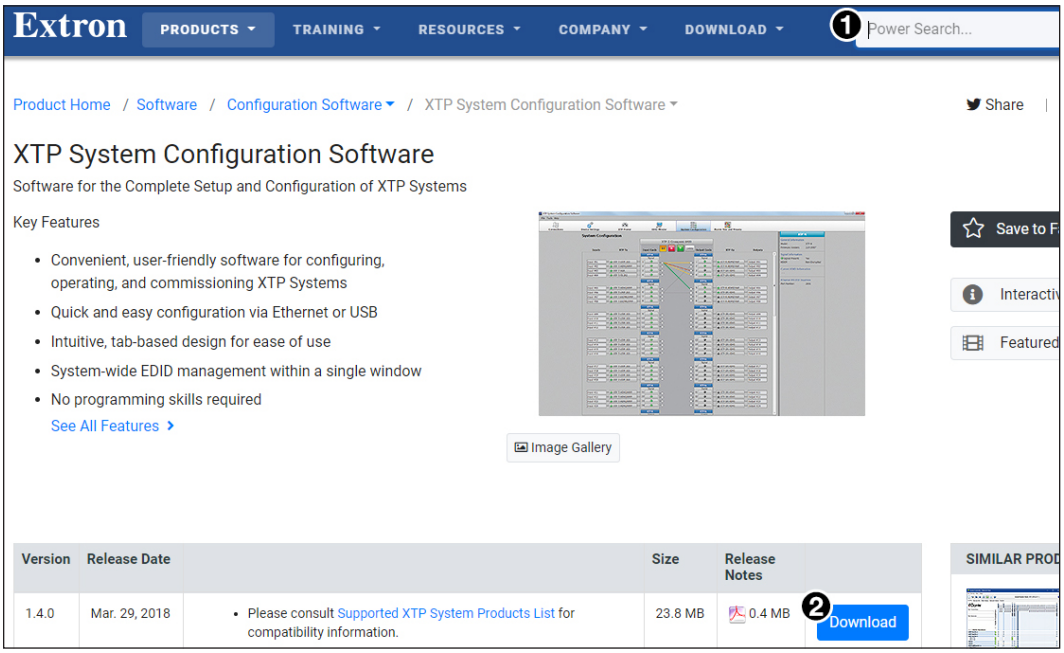


Figure 19. XTP System Configuration Software Product Page

To download and install the XTP System Configuration Software from this page:

1. In the **Search** field (see figure 19, ❶) type `XTP System Configuration Software`.
2. Press <**Enter**> on the keyboard or select **XTP System Configuration Software** from the drop-down menu.
3. Click the **Download** button (see figure 19, ❷).
4. Submit any required information to start the download. Note where the file is saved.
5. Open the saved executable (.exe) file.
6. Follow the instructions that appear on the screen to install the program.

Software Operation

The XTP T EU 202 and XTP T MK 202 can be controlled directly from the front panel configuration port (see **figure 8**, D on page 10) or remotely from an XTP matrix switcher.

Connections

The XTP System Configuration Software opens to the `Connections` screen. This screen is used to establish communication with an XTP device through USB connection. Ensure the transmitter is connected and powered on before attempting to connect to it.

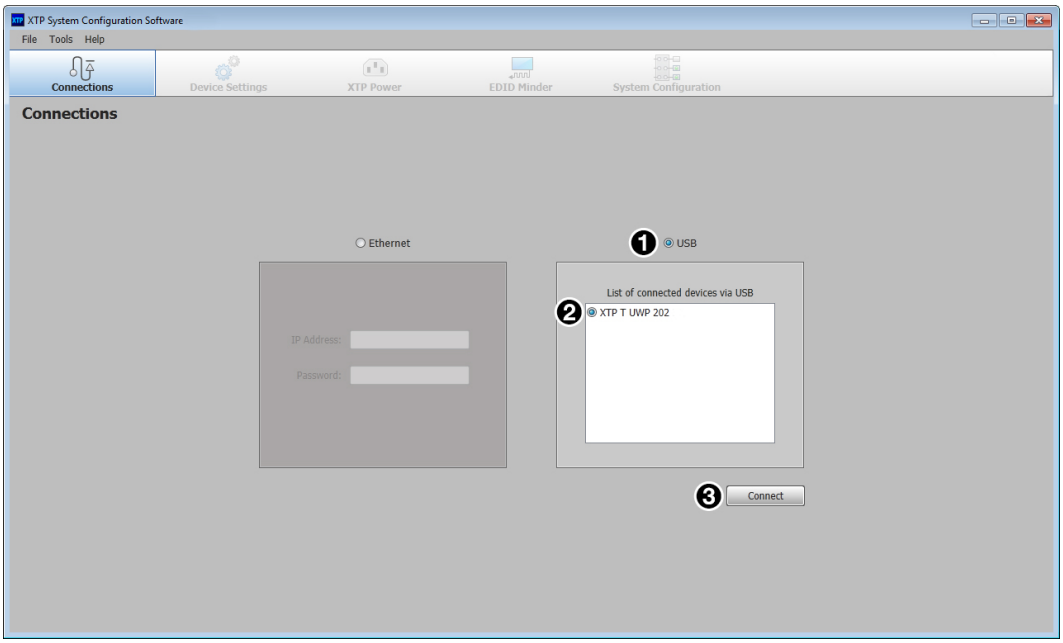


Figure 20. Connections Screen

To connect to a device:

1. Open the XTP System Configuration Software.
2. From the `Connections` screen in the XTP Configuration Software, select the **`USB`** radio button (see figure 20, 1).
3. From the displayed list, select the connected device to be controlled (2).
4. Click the **`Connect`** button (3). The `Device Settings` screen opens (see **Device Settings** on page 31).

Menu Bar

The top menu bar contains three menus for configuring software settings.

File menu

The `File` menu contains options for disconnecting from the transmitter and exiting the program. To access the menu, click the **`File`** menu.

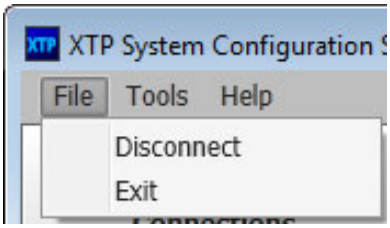


Figure 21. File Menu

Disconnect

This option disconnects the connected device from the XTP System Configuration Software.

From the **`File`** menu, select **`Disconnect`**. The `Connections` screen opens.

NOTE: If the device is already disconnected, the **`Disconnect`** option is disabled until a device is connected.

Exit

This option disconnects the transmitter from the software and closes the application.

From the **`File`** menu, select **`Exit`** to close the application.

Tools menu

The `Tools` menu contains an option for updating firmware. To access this menu, click the **`Tools`** menu.

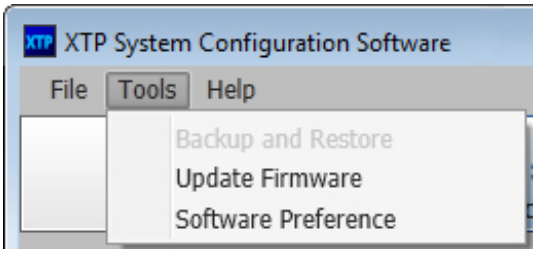


Figure 22. Tools Menu

NOTE: The **`Backup and Restore`** and **`Commissioning Report`** options are not available when directly connected to the XTP T EU 202 or XTP T MK 202. See an XTP matrix switcher user guide (**www.extron.com**) for more information on these features.

Update Firmware

This option uploads firmware from the host device to the connected device.

1. From the **Tools** menu, select **Update Firmware**. A dialog box opens to ask permission to disconnect from the device.

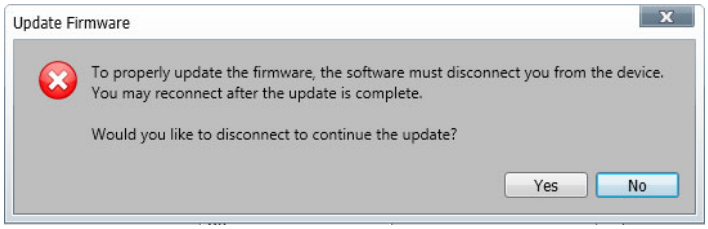


Figure 23. Confirm Disconnect Dialog Box

2. Click the **Yes** button to disconnect from the device and continue with the firmware update process. The Update Firmware dialog box opens.

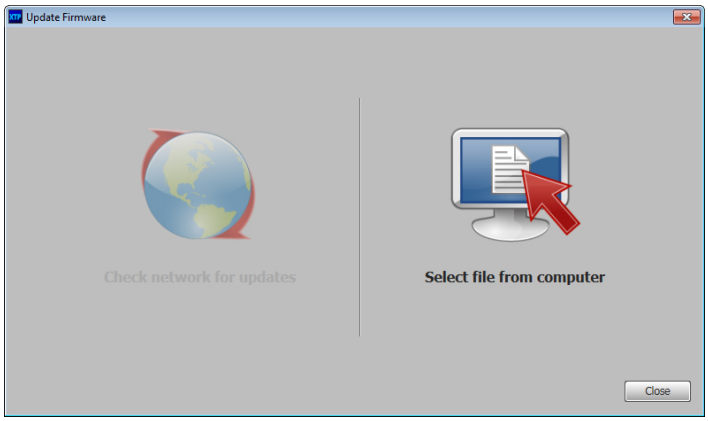


Figure 24. Update Firmware Dialog Box

3. Click the **Select file from computer** icon to select a firmware file from the connected host device. The Browse dialog box opens.
4. Select the desired firmware file and click the **Open** button.
5. Click the **Close** button after the firmware finishes updating.

Software Preference

This option resets all disabled confirmation dialogs to the default settings.

1. From the **Tools** menu, select **Software Preference**. The Software Preference dialog box opens.

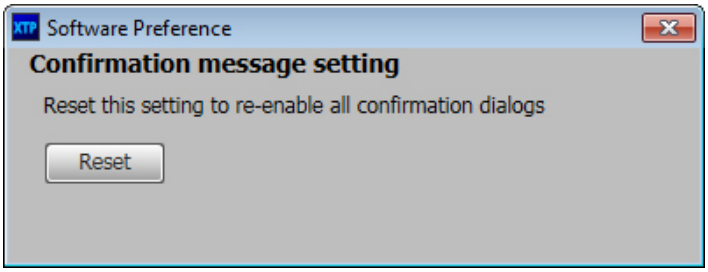


Figure 25. Software Preference Dialog Box

2. Click the **Reset** button. The dialog box closes.

Help menu

The **Help** menu contains a way to access XTP System Configuration Software information, a link to the help file, and a link to the Extron website.

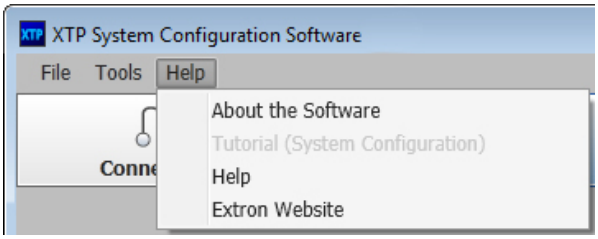


Figure 26. Help Menu

NOTE: The **Tutorial (System Configuration)** option is not available when directly connected to the XTP T EU 202 or XTP T MK 202.

About the Software

This option provides basic information about the XTP System Configuration Software, including version number and copyright information.

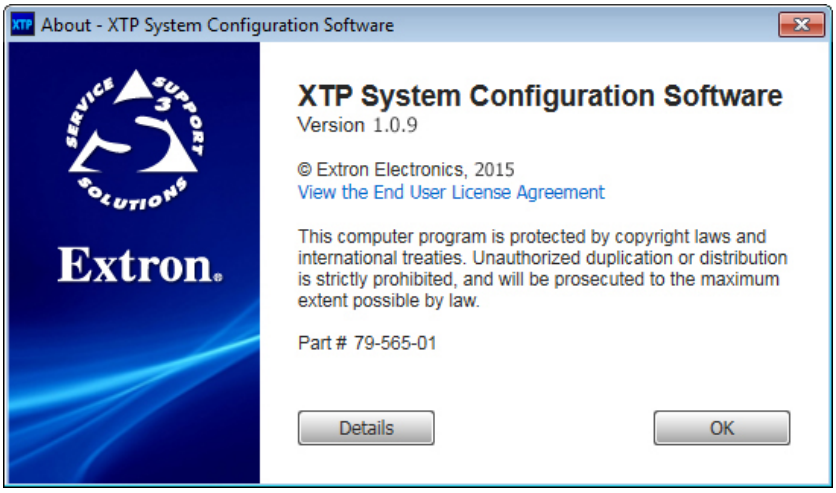


Figure 27. About - XTP System Configuration Software Dialog Box (Example)

1. From the **Help** menu, select **About the Software**. The **About** dialog box opens.
2. Click the **Details** button for more information.
3. Click the **Ok** button to close the dialog box.

Help

This option opens the *XTP System Configuration Software* help file in a Web browser.

From the **Help** menu, select **Help**.

Extron Website

This option opens the Extron website in a Web browser.

From the **Help** menu, select **Extron Website**.

Device Settings

The `Device Settings` screen allows a user to view and edit various device settings for the device directly connected to the PC running the XTP software. Click the **`Device Settings`** button (see figure 28, ❶) on the `Global Navigation` bar to open the `Device Settings` screen.

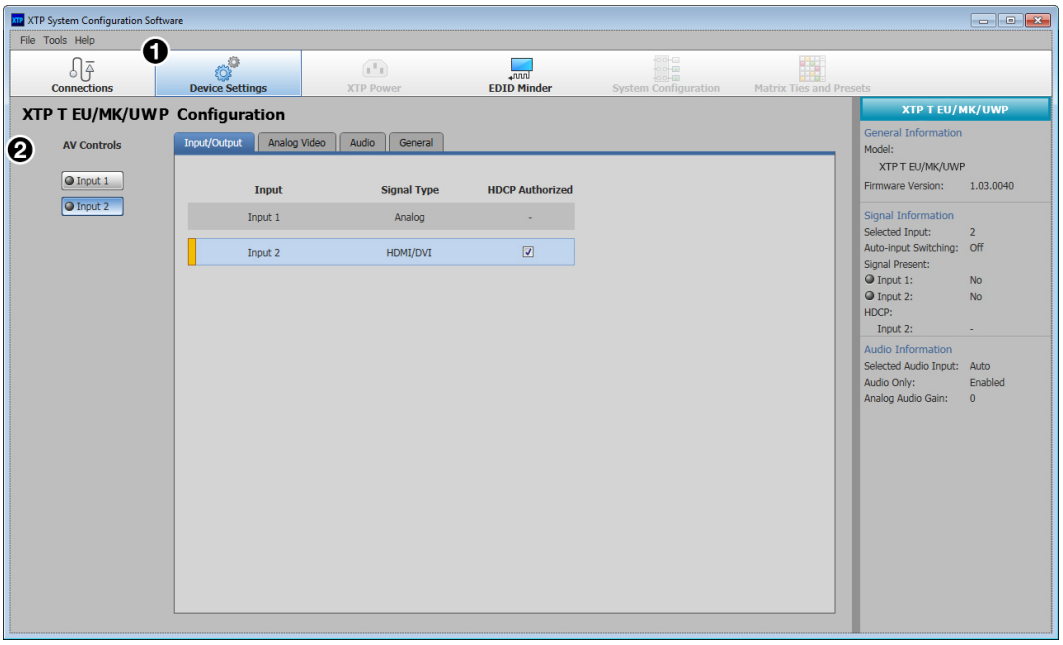


Figure 28. Transmitter Device Settings Screen

AV Controls panel

The `AV Controls` panel, located on the left, is used to select an input.

❷ **Input Selection** — Click an **`Input`** button to select an input. As a new input is selected, the summary within the `Device Information` panel changes to reflect the currently selected input.

NOTE: The signal indicators on the AV input buttons display green when a signal is present on the corresponding input or gray when there is no signal present.

Input/Output tab

Click the **`Input/Output`** tab (see figure 29, ❶) to open the `Input/Output` screen. It contains input information and options to apply automatic settings to individual inputs.

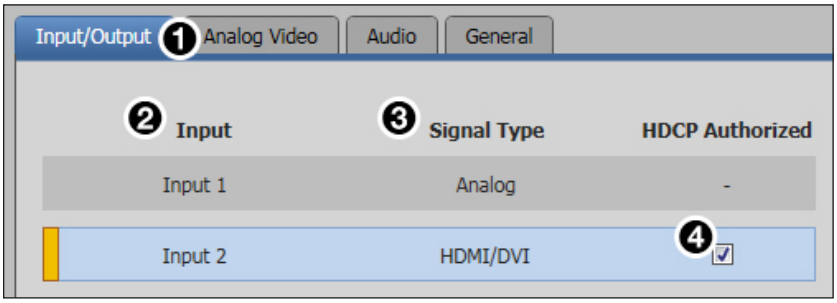


Figure 29. Input/Output Tab

❷ **Input Name** — Displays the input name.

❸ **Signal Type** — Displays the signal type of each input. Input 1 is `Analog`. Input 2 is `HDMI/DVI`.

❹ **HDCP Authorization** — Select the **`HDCP Authorized`** check box to have input 2 report as an HDCP authorized device. If the box is not checked, the source is blocked from encrypting its output. This may result in some content not being passed by the source device.

NOTE: HDCP authorization is for the HDMI input only.

Analog Video tab

Click the **Analog Video** tab (see figure 30, ❶) to open the Analog Video screen. It contains signal sampling, image shifting, and saving and recalling input preset options.

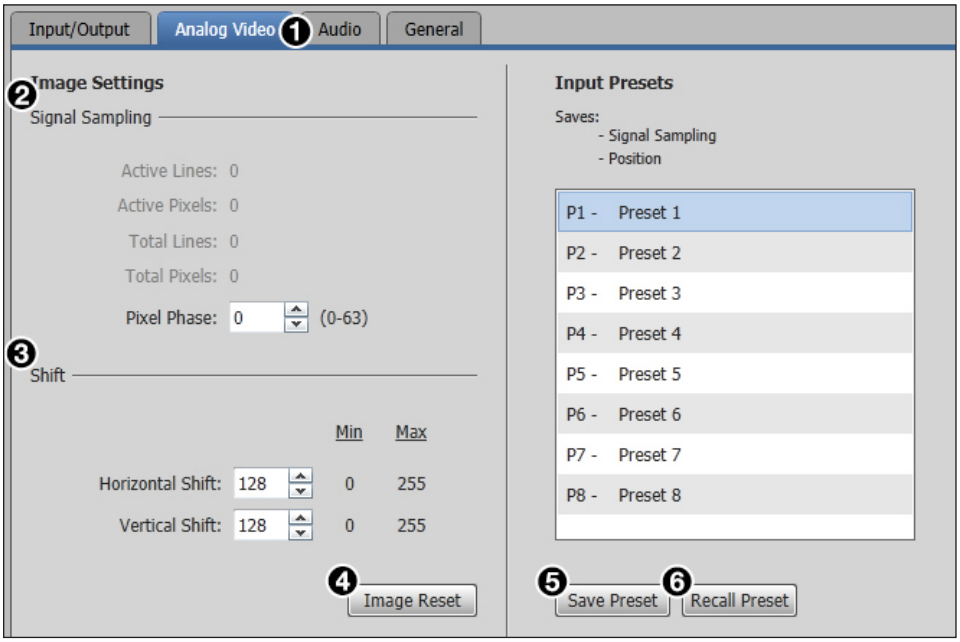


Figure 30. Analog Video Tab

Signal Sampling panel

Signal sampling optimizes the input signal to the transmitter for input 1.

❷ **Signal Sampling** — To adjust pixel phase settings, enter a value within acceptable range displayed in parentheses to the right of the corresponding field or click the **Up** and **Down** arrows.

Shift panel

Shifting moves the position of an image.

❸ **Horizontal and Vertical Shift** — To adjust the horizontal and vertical shift settings, enter a value within the Min and Max values displayed to the right of the corresponding field or click the **Up** or **Down** arrows.

❹ **Image Reset** — Click the **Image Reset** button to set pixel phase, horizontal shift, and vertical to the default values.

Input Presets panel

Input presets save signal sampling and shift settings to be recalled later.

❺ **Save Preset** — To save a preset, select one from the list of presets and click the **Save Preset** button.

❻ **Recall Preset** — To recall a saved preset, select the desired preset from the list of presets and click the **Recall Preset** button.

Audio tab

Click the **Audio** tab (see figure 31, ❶) to open the Audio screen. It contains settings for input format and analog audio gain.

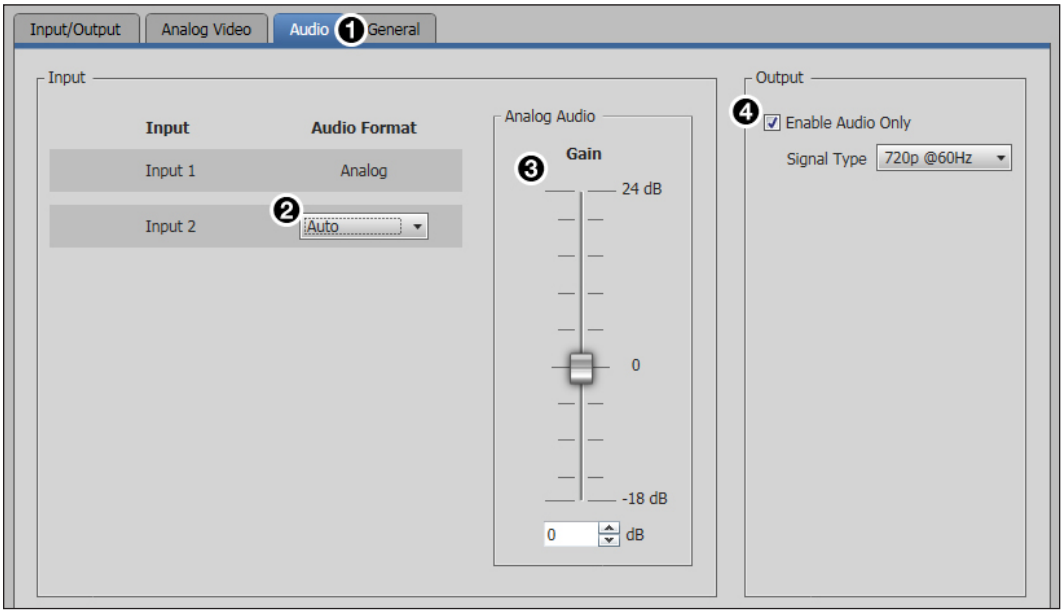


Figure 31. Audio Tab

Audio input panel

❷ **Audio Input Format** — From the **Audio Format** drop-down list, select the format for input 2. It can be Auto, HDMI, or Analog.

- **Auto** — Automatically detects the input audio format. When enabled, HDMI audio has priority over analog audio.
- **HDMI** — Transmits embedded audio from an HDMI signal.
- **Analog** — Transmits an analog audio signal.

❸ **Analog Audio Gain** — Click and drag the handle of the **Gain** fader, enter a value in the field, or click the **Up** or **Down** arrow to adjust the analog input gain.

Audio output panel

❹ **Audio only** — Select the **Enable Audio Only** check box to enable a black video signal for audio-only transmission to the HDMI output connector on a connected receiver. By default, the check box is selected.

If selected, also select the black video signal resolution from the **Signal Type** drop-down list. The default resolution is 720p @ 60 Hz.

General tab

Click the **General** tab (see figure 32, ❶) to open the General screen. It contains settings for auto switch mode and factory reset.

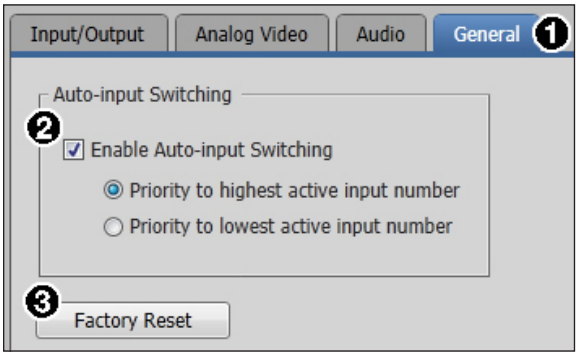


Figure 32. General Tab

Auto-input Switching section

❷ **Auto-input Switching** — Click the **Enable Auto-Input Switching** check box to enable auto switch mode. Two settings are available for this mode.

- Click the **Priority to highest active input number** radio button to automatically switch to the highest numbered active input (HDMI).
- Click the **Priority to lowest active input number** radio button to automatically switch to the lowest numbered active input (VGA).

Factory reset

❸ **Factory Reset** — Click the **Factory Reset** button to reset the transmitter to factory settings except for firmware.

NOTE: This is the same as the Esc ZXXX SIS command (see the **Reset mode** command on page 24.

Device Information panel

The `Device Information` panel displays device information and settings.

General Information section

❶ **Model** — Displays the device model.

❷ **Firmware Version** — Displays the full firmware version.

Signal Information section

❸ **Selected Input** — Displays the input number of the currently selected input.

❹ **Auto-input Switching** — Displays the On or Off status of auto switch mode.

❺ **Signal Present** — Displays the signal presence of both inputs.

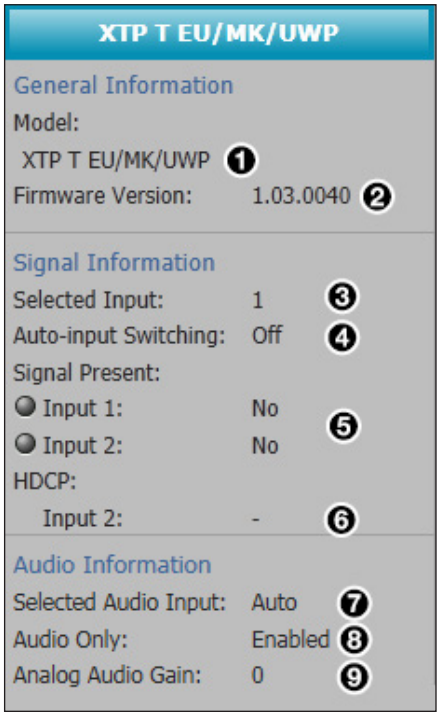
❻ **HDCP** — Displays the HDCP status of inputs 2.

Audio Information section

❼ **Selected Audio Input** — Displays the format of the currently selected audio input.

❽ **Audio Only** — Displays whether the black video signal for audio-only transmission is enabled.

❾ **Analog Audio Gain** — Displays the analog audio gain in dB.



EDID Minder

Use the `EDID Minder` screen to assign unique EDID to the input or match current output EDID to the input. Click the **`EDID Minder`** button (see figure 33, ❶) on the `Global Navigation` bar. The `EDID Minder` screen opens.

The `EDID Minder` screen displays a table of EDID options and connected output devices, which are each represented by output display icons.

- Factory default EDID options are displayed in blue.
- Connected output resolutions and devices are displayed in green.
- Custom loaded or saved EDID options are displayed in yellow.

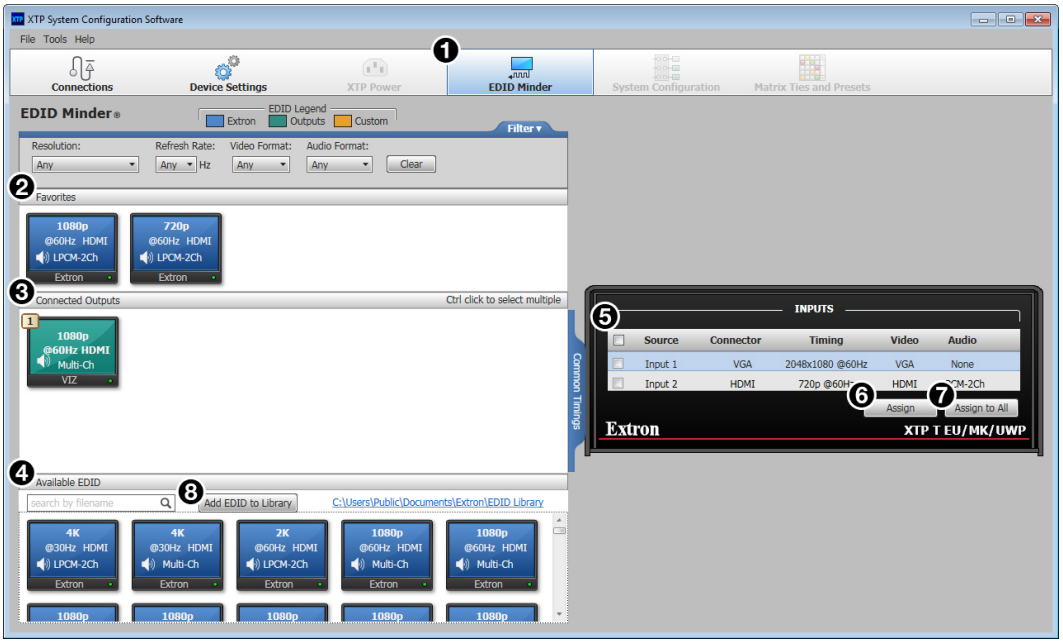


Figure 33. EDID Minder Screen

Assign EDID

To assign EDID to selected inputs:

1. Select an available EDID icon from the `Favorites`, `Connected Outputs`, or `Available EDID` panel (❷-❹).
2. Select the check box of the connected input (❺).
3. Click the **`Assign`** button below the input area (❻).

TIP: Alternatively, EDID can be assigned by dragging and dropping the desired EDID onto the input.

To assign EDID to all inputs:

1. Select an available EDID icon from the `Favorites`, `Connected Outputs`, or `Available EDID` panel (❷-❹).
2. Click the **`Assign to All`** button (❼).

Add an EDID File to the EDID Library

1. In the Available EDID panel, click the **Add EDID to Library** button (see figure 33, ❽ on the previous page). The Browse window opens.
2. Navigate to and select the desired EDID file and click **Open**. The EDID file appears in the Available EDID panel (see figure 33, ❹ on the previous page).
3. Assign the EDID file from the Available EDID panel to import the EDID to the device.

Save output EDID

1. Right-click on the desired EDID icon in the **Connected Outputs** panel (see figure 33, ❸ on the previous page).
2. Select the **Save EDID to Library** option. The EDID setting is saved to the connected PC. Alternatively, right-click on the desired EDID, select **Copy**, and then **Paste** the EDID into the Favorites or Available EDID panel.

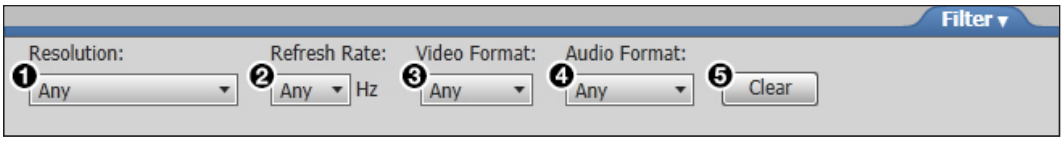
Set favorite EDID

To add commonly used EDID settings to the Favorites panel for quick access, perform one of the following methods:

- Click and drag the desired EDID icon from the Connected Outputs or the Available EDID panel to the Favorites panel. The EDID setting is copied to the Favorites panel (see figure 33, ❷ on the previous page).
- Right-click the desired EDID and select **Copy**. Then, **Paste** the EDID setting into the Favorites panel.

EDID filters

The filters (see figure 34) can be used to easily locate a specific EDID setting.



❶ Resolution filter
❷ Refresh Rate filter
❸ Video Format filter
❹ Audio Format filter
❺ Clear button

Figure 34. EDID Minder Filters

To use a filter or combination of filters, perform the following:

1. Select an EDID setting from one of the drop-down lists of the associated filter (see figure 34, ❶-❹). The available EDID options that match the filter selection are displayed in their respective panels.
2. Repeat step 1 to apply more filters.

NOTE: To clear the currently applied filters, click the **Clear** button next to the filters (see figure 34, ❺). All filters are reset.

Common timings

This function automatically displays available EDID settings that are common among multiple selected outputs.

1. Hold <**Ctrl**> and click the desired outputs in the Connected Outputs panel. The **Common Timings** tab (located to the right of the Connected Outputs panel) appears, listing the EDID settings common among the selected outputs.
2. Select the desired common EDID. The EDID is shown in the Available EDID panel.

Reference Information

This section contains an example of a mounting template.

Mounting Template

Figure 35 is a example of a mounting template for preparing mounting surfaces. It is not to full scale.

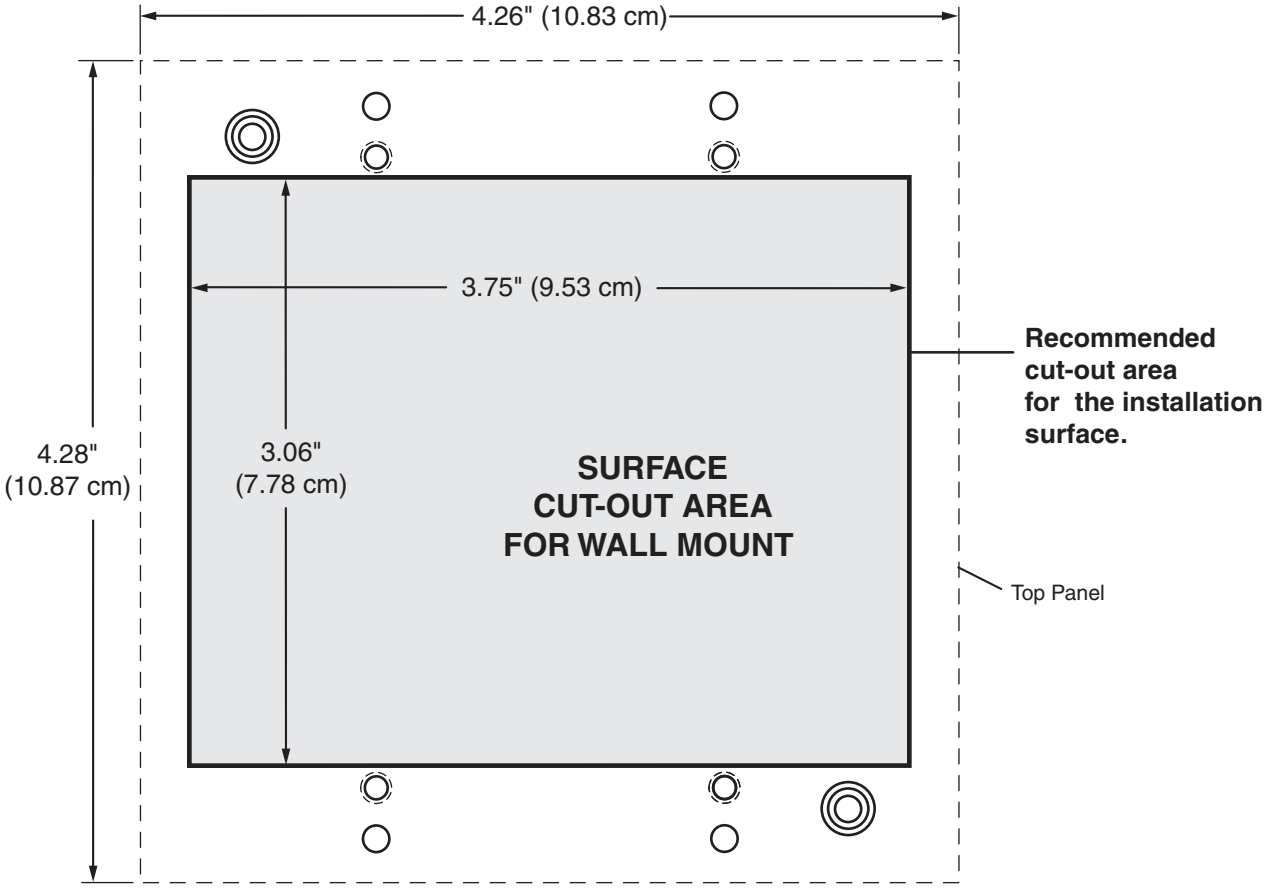


Figure 35. Mounting Template for 2-Gang Mud Rings (Not to Full Scale)

NOTE: Measure the template before cutting.

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.

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

Europe and Africa:
Extron Europe
Hanzeboulevard 10
3825 PH Amersfoort
The Netherlands

China:
Extron China
686 Ronghua Road
Songjiang District
Shanghai 201611
China

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

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.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.