

XTP T UWP 202

XTP Transmitter – Decorator-Style Wallplate



Safety Instructions

Safety Instructions • English

WARNING: This symbol, , 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, , 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, , 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, , 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

AVVERTENZA: Il simbolo, , se usato sul prodotto, serve ad avvertire l'utente della presenza di tensione non isolata pericolosa all'interno del contenitore del prodotto che può costituire un rischio di scosse elettriche.

ATTENZIONE: 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.

Per informazioni su parametri di sicurezza, conformità alle normative, compatibilità EMI/EMF, accessibilità e argomenti simili, fare riferimento alla Guida alla conformità normativa e di sicurezza di Extron, cod. articolo 68-290-01, sul sito web di Extron, www.extron.com.

Instrukcje bezpieczeństwa • Polska

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

UWAGI: Ten symbol, , 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 EMI/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, , 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.

安全说明 • 简体中文

警告:  产品上的这个标志意在警告用户该产品机壳内有暴露的危险电压, 有触电危险。

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

警告: ⚠ 若產品上使用此符號，是為了提醒使用者，產品機殼內存在著可能會導致觸電之風險的未絕緣危險電壓。

注意 ⚠ 若產品上使用此符號，是為了提醒使用者，設備隨附的用戶手冊中有重要的操作和維護（維修）說明。

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。

安全上のご注意・日本語

警告: この記号 ⚠ が製品上に表示されている場合は、筐体内に絶縁されていない高電圧が流れ、感電の危険があることを示しています。

注意: この記号 ⚠ が製品上に表示されている場合は、本機の取扱説明書に記載されている重要な操作と保守(整備)の指示についてユーザーの注意を喚起するものです。

安全上のご注意、法規遵守、EMI/EMF適合性、その他の関連項目については、エクストロンのウェブサイト www.extron.com より『Extron Safety and Regulatory Compliance Guide』(P/N 68-290-01) をご覧ください。

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.

Copyright

© 2015-2019 Extron Electronics. All rights reserved. www.extron.com

Trademarks

All trademarks mentioned in this guide are the properties of their respective owners.

The following registered trademarks (®), registered service marks (SM), and trademarks (TM) are the property of RGB Systems, Inc. or Extron Electronics (see the current list of trademarks on the [Terms of Use](#) page at www.extron.com):

Registered Trademarks (®)
Extron, Cable Cubby, ControlScript, CrossPoint, DTP, eBUS, EDID Manager, EDID Minder, Flat Field, FlexOS, Glitch Free, Global Configurator, Global Scriptor, GlobalViewer, Hideaway, HyperLane, IP Intercom, IP Link, Key Minder, LinkLicense, LockIt, MediaLink, MediaPort, NetPA, PlenumVault, PoleVault, PowerCage, PURE3, Quantum, Show Me, SoundField, SpeedMount, SpeedSwitch, StudioStation, System <i>INTEGRATOR</i> , TeamWork, TouchLink, V-Lock, VideoLounge, VN-Matrix, VoiceLift, WallVault, WindoWall, XTP, XTP Systems, and ZipClip
Registered Service Mark (SM): S3 Service Support Solutions
Trademarks (TM)
AAP, AFL (Accu-Rate Frame Lock), ADSP (Advanced Digital Sync Processing), Auto-Image, CableCover, CDRS (Class D Ripple Suppression), Codec Connect, DDSP (Digital Display Sync Processing), DMI (Dynamic Motion Interpolation), Driver Configurator, DSP Configurator, DSVP (Digital Sync Validation Processing), eLink, EQIP, Everlast, FastBite, FOX, FOXBOX, IP Intercom HelpDesk, MAAP, MicroDigital, Opti-Torque, PendantConnect, ProDSP, QS-FPC (QuickSwitch Front Panel Controller), Room Agent, Scope-Trigger, ShareLink, SIS, Simple Instruction Set, Skew-Free, SpeedNav, Triple-Action Switching, True4K, Vector TM 4K, WebShare, XTRA, and ZipCaddy

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:

```
^ARMerge Scene,,Op1 scene 1,1^B51^W^C  
[01]R000400300004000080000600[02]35[17][03]
```

```
[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>.

Contents

Introduction 1

Guide Overview	1
XTP T UWP 202 Wallplate Transmitter	
Description	1
System Compatibility	2
Features	3

Installation 4

Installation Overview	4
Metal Junction Box or Mud Ring Installation	5
Mounting Surface Preparation	5
Mud Ring Installation	6
UL Listed Metal Junction Box Installation	7
Rear Panel Connectors	8
Mounting the XTP T UWP 202	10
Front Panel Connectors	11
Connection Details	12
HDMI Connection	12
TP Cable Termination and	
Recommendations	13
RS-232 and IR Over XTP Communication	15
Power Connection	15

Operation 18

Front Panel Features	18
EDID	19
Reset Mode	19

SIS Configuration and Control 20

Host Device Connection	20
SIS Overview	20
Host-to-Device and Device-to-Host	
Communication	20
Device-Initiated Message	20
Error Responses	21
Using the Command and Response Tables	
for SIS Commands	21
Symbol Definitions	21

Command and Response Tables for SIS	
Commands	22
Input Commands	22
Audio Configuration Commands	22
Picture Adjustment Commands	
(Analog Only)	23
Preset Commands	24
EDID Commands	24
Advanced Configuration Commands	24

XTP System Configuration Software 26

Software Installation	26
Software Download Center Page	26
Software Product Page	27
Software Operation	28
Connections	28
Menu Bar	29
Device Settings	32
EDID Minder	38

Reference Information 40

Mounting Template	40
-------------------------	----

Introduction

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

- [Guide Overview](#)
- [XTP T UWP 202 Wallplate Transmitter Description](#)
- [System Compatibility](#)
- [Features](#)

Guide Overview

This guide contains procedures for installation, operation, and control of the XTP T UWP 202 Wallplate Transmitter as well as reference information. In this guide, the terms “XTP T UWP 202” and “transmitter” are used interchangeably to refer to all models of the XTP T UWP 202 Wallplate Transmitter.

XTP T UWP 202 Wallplate Transmitter Description

The Extron XTP T UWP 202 is a two-input transmitter that sends 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. This two-gang wallplate transmitter supports computer-video signals up to 1920x1200, including HDTV 1080p @ 60 Hz Deep Color and 2K. The XTP T UWP 202 works with XTP Systems for signal distribution and long-distance transmission between remote endpoints. It comes in a model with a front panel Ethernet port to enable Ethernet extensions for LAN access (XTP T UWP 202) and a model without a front panel Ethernet port (XTP T UWP 202 NL).

The XTP T UWP 202 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 XTP T UWP 202, 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 26).

The following diagram shows one way the XTP T UWP 202 can be integrated in an XTP point-to-point application. The transmitter can also be used with an XTP matrix switcher (see the XTP matrix switcher user guide for more details on matrix applications and configuration).

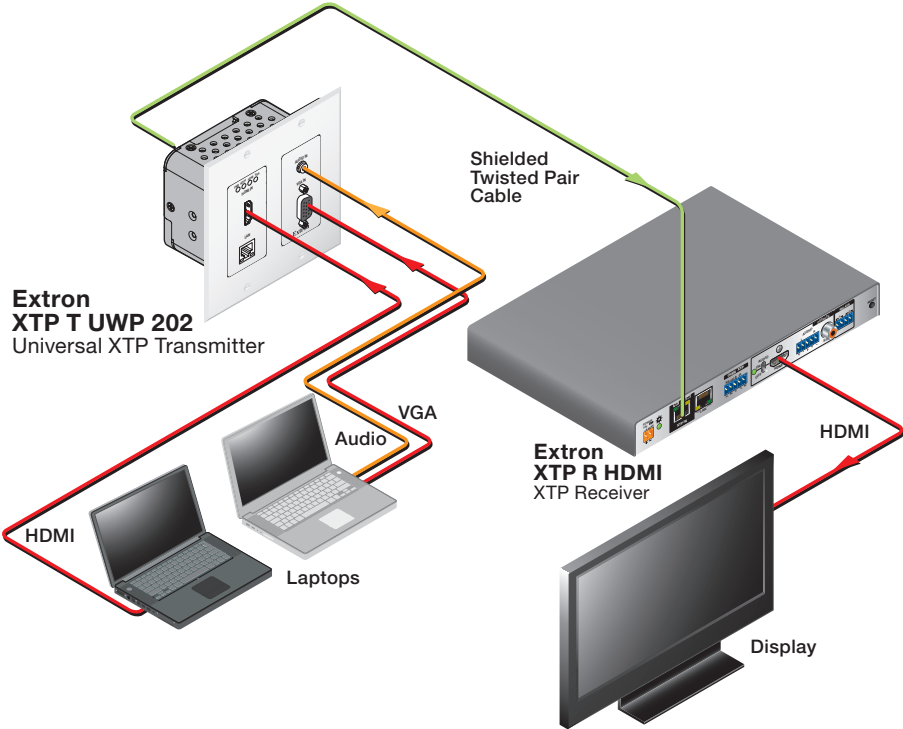


Figure 1. Typical Point-to-Point Application Diagram (LAN Model Shown)

System Compatibility

The XTP T UWP 202 is 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 a standard two-gang metal junction box or the provided mud ring.
- **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 UWP 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.
- **EDID and HDCP transmission** — Allows continuous communication between source and display by actively buffering DDC channels.
- **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 UWP 202. Topics in this section include:

- [Installation Overview](#)
- [Metal Junction Box or Mud Ring Installation](#)
- [Rear Panel Connectors](#)
- [Mounting the XTP T UWP 202](#)
- [Front Panel Connectors](#)
- [Connection Details](#)

Installation Overview

The XTP T UWP 202 can be installed into the provided mud ring or a UL Listed metal electrical junction box.

ATTENTION:

- Do not mount multiple devices adjacent to each other in the same metal junction box. Add at least a one gang space between devices.
- Ne procédez pas à une installation juxtaposée des appareils dans le même boîtier de dérivation métallique. Veuillez laisser un espace d'un gang minimum entre chaque appareil.

1. 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.

2. Cut a hole in the mounting surface (see [Mounting Surface Preparation](#)).
3. Install the mud ring or metal junction box in the mounting surface (see [Mud Ring Installation](#) on the next page or [UL Listed Metal Junction Box Installation](#) on page 7).
4. Route and connect cables to the rear panel connectors (see [Rear Panel Connectors](#) on page 8).
5. Mount the XTP T UWP 202 to the mud ring or metal junction box (see [Mounting the XTP T UWP 202](#) on page 10).
6. Connect inputs to the front panel connector (see [Front Panel Connectors](#) on page 11).
7. Supply power to all connected devices.

Metal Junction Box or Mud Ring Installation

Mounting Surface Preparation

1. Using an appropriate template or the mounting enclosure as a guide, mark the area of the wall that will be cut with a soft pencil (for the provided mud ring, see [Mounting Template](#) on page 40).

NOTES:

- If using a junction box, use a UL Listed metal one only.
- Check with the manufacturer of the metal junction box for specific installation requirements.
- Install junction boxes against wall studs.

2. Use a jigsaw or small hand saw to carefully cut away the material within the guidelines drawn in step 1.

NOTE: If using a template or the mud ring as a guide for cutting the hole in drywall, cut inside the guidelines to maximize the contact between the mud ring and drywall.

3. If using a mud ring in a wall with insulation inside, remove at least 6 inches of the insulation in all directions around the cutout.

NOTE: If a wall stud interferes with removing 6 inches of insulation around the cutout, remove the insulation between the cutout and wall stud.

4. Check the size of the opening by laying the mud ring or metal junction box against it. The mounting device should fit snugly in the opening.
5. If needed, use a saw, file, or sandpaper to enlarge the hole.

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.

Mud Ring Installation

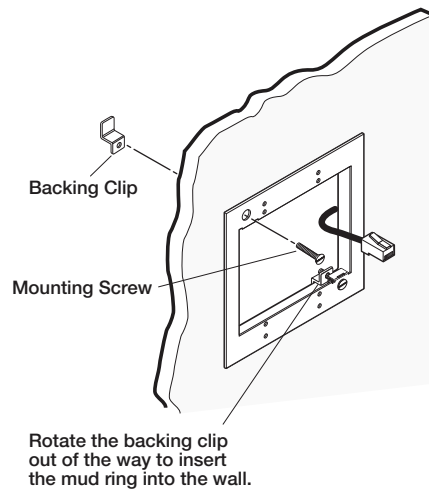


Figure 2. Installing the Mud Ring with Backing Clips

1. Place 1.25 inches (3.18 cm) long or 0.75 inch (1.90 cm) #6-32 thread machine screws through the large holes in the two corners of the mounting bracket. Use the shortest screw possible.
2. Loosely fasten the mounting backing clip on the end of each screw.
3. Insert the mounting bracket into the opening in the wall (see [Mounting Surface Preparation](#) on the previous page).
4. Rotate each backing clip so that the tab is behind the installation surface to hold the bracket snugly in place when the screw is tightened.

NOTE: The backing clip can be installed as shown in Layout A or Layout B (see figure 3).

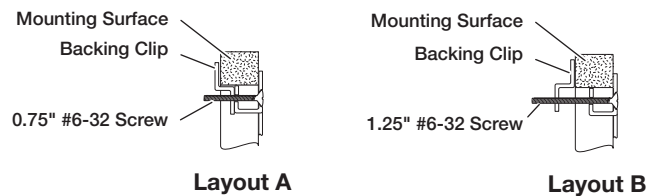


Figure 3. Backing Clip Installation

5. Use a cross-head (Phillips) screwdriver to fasten the screws and backing clips in place.

UL Listed Metal Junction Box Installation

Metal junction boxes may differ slightly from model to model.

NOTES:

- If using a junction box, use a UL Listed metal one only.
- Check with the manufacturer of the metal junction box for specific installation requirements.

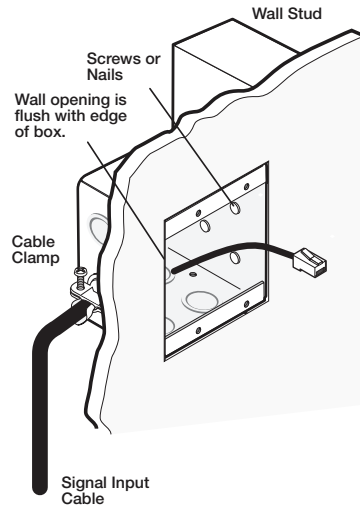


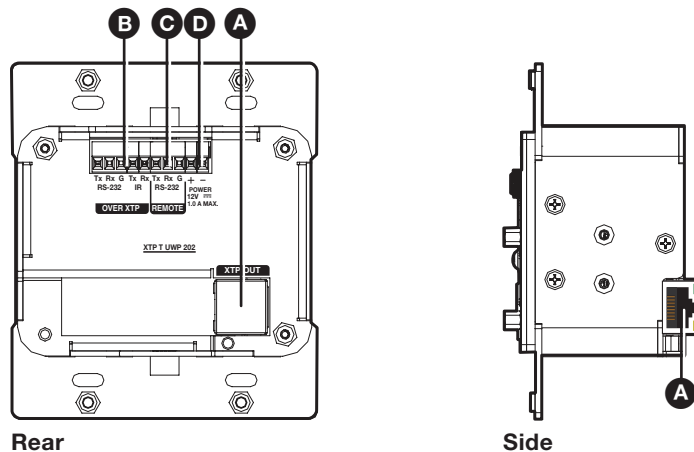
Figure 4. Installing a Metal Junction Box

1. Insert the metal junction box into the hole in the wall (see [Mounting Surface Preparation](#) on page 5).
2. Secure it to the stud using two screws or nails, as appropriate. The front edge of the metal junction box must be flush with the front surface of the wall.
3. Feed cables through a knockout opening in the metal junction box.
4. Secure cables with clamps or ties to provide strain relief.
5. 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 Panel Connectors



Rear

Side

- A XTP output connector** (see page 8)
- B RS-232 and IR Over XTP connector** (see page 9)
- C Remote RS-232 connector** (see page 9)
- D Power connector** (see page 9)

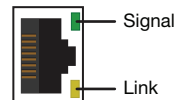
Figure 5. Rear Panel Connectors

- A XTP output connector** — Connect a twisted pair cable to the RJ-45 connector labeled “XTP OUT” on the XTP T UWP 202 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).

- B 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 5, B](#) 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 5, B](#) 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).

- C Remote RS-232 connector** — Connect a host device to the 3.5 mm, 3-pole direct insertion captive screw connector (see [figure 5, C](#) on the previous page) for serial control of the transmitter. See the figure below for wiring considerations.

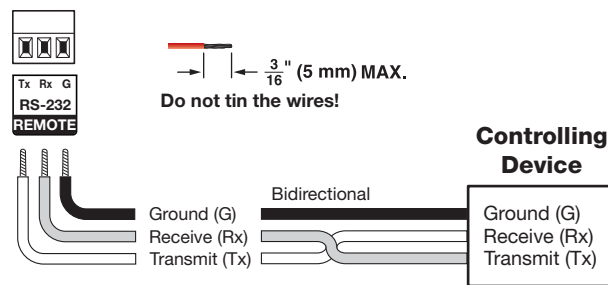


Figure 6. Remote RS-232 Wiring

- D Power connector** — Connect an external power supply to the 2-pole direct insertion captive screw connector (see [figure 5, D](#) on the previous page). Confirm the polarity of the power supply wires. For wiring considerations, see [Power Connection](#) on page 16.

NOTE: The XTP T UWP 202 can also be powered remotely (see [Remote power](#) on page 17).

Mounting the XTP T UWP 202

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

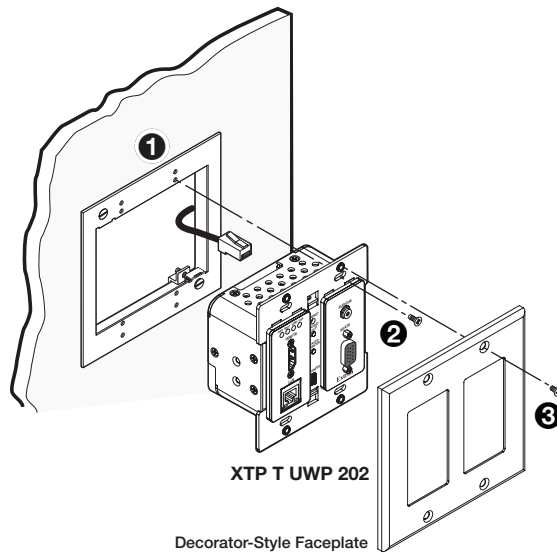


Figure 7. Installing the XTP T UWP 202 (LAN Model Shown) in the Provided Mud Ring

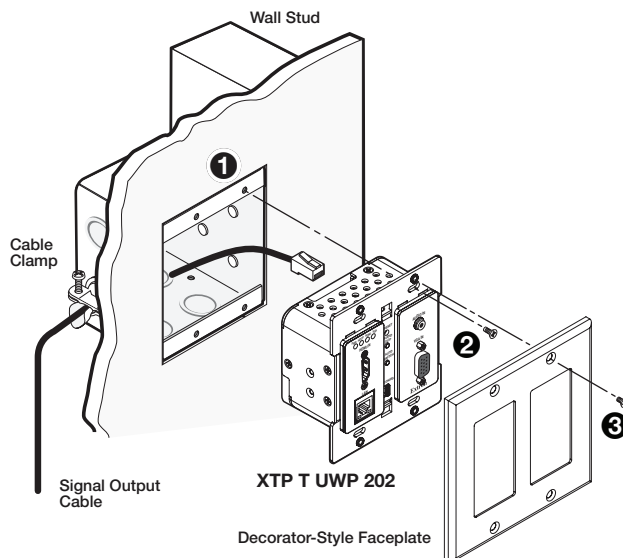
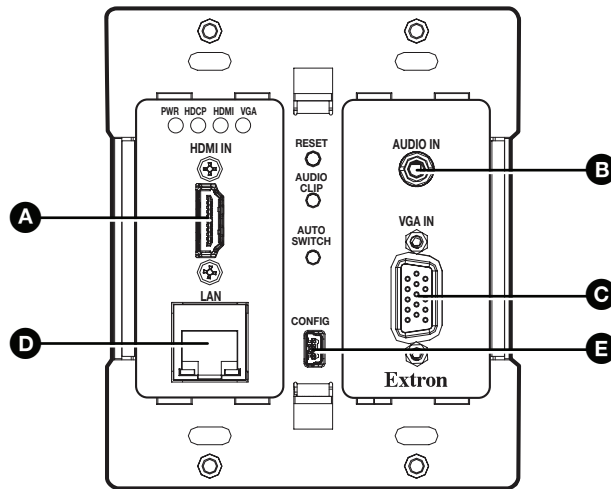


Figure 8. Installing the XTP T UWP 202 (LAN Model Shown) in a Metal Junction Box

1. Align the mounting screws on the XTP T UWP 202 with the available holes on the mud ring (see figure 7, ①) or metal junction box (see figure 8, ①).
2. Using the provided screws, attach the XTP T UWP 202 to the mud ring (see figure 7, ②) or metal junction box (see figure 8, ②).
3. Use four mounting screws to attach the decorator-style faceplate to the XTP T UWP 202 (see figure 7 or 8, ③).

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 12)
- D LAN connector** (LAN models only) (see page 12)
- E Configuration port** (see page 12)

Figure 9. Front Panel Connectors

- A HDMI input connector** — Connect a digital video source to the female HDMI connector. 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 page 12).

- B Analog audio input connector** — Connect an analog audio source to the 3.5 mm tip-ring-sleeve (TRS) jack.

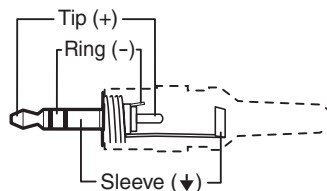


Figure 10. Wiring for TRS Audio

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](#) on the next page 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

- C Analog video input connector** — Connect a video source to the female 15-pin HD connector (see [figure 9, C](#) on the previous page). It accepts RGBHV video signals.
- D LAN connector (LAN model only)** — Connect a control device or device to be controlled to this LAN connector (see [figure 9, D](#) on the previous page) for 10/100Base-T Ethernet communication through this pass-through port. LEDs on this connector indicate link and activity status.
- E Configuration port** — If desired, connect a host device to the front panel USB mini-B Config port (see [figure 9, E](#) 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.

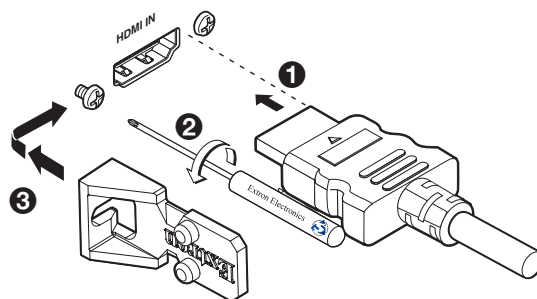
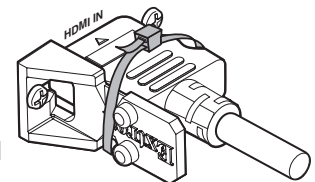


Figure 11. Installing the LockIt Cable Lacing Bracket

1. Plug the HDMI cable into the front panel connection (see [figure 11, 1](#)).
2. Loosen the HDMI connection mounting screw from the panel ([2](#)) 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 ([3](#)), and 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 cable 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.

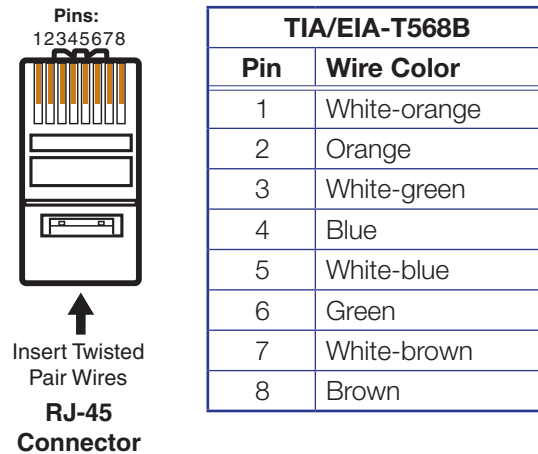


Figure 12. TP Cable Termination

Supported cables

The XTP T UWP 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 12** 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 13 for wiring considerations).

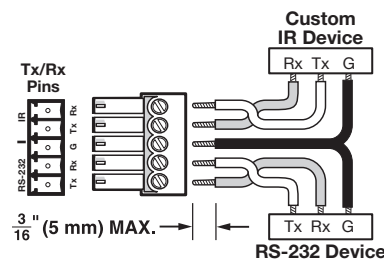


Figure 13. Wiring the RS-232 and IR Over XTP Connector

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 14 for wiring considerations) or remotely (through the XTP connector) with a power injector or an XTP matrix switcher.

Local power

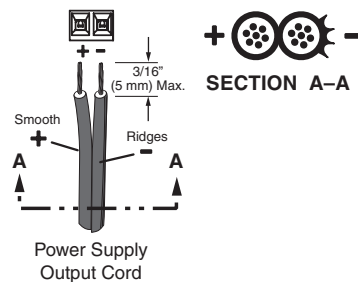


Figure 14. Power Wiring

The XTP T UWP 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 National Electrical Code ANSI/NFPA 70, article 725 and the Canadian Electrical Code part 1, section 16. 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 National Electrical Code ANSI/NFPA 70, article 725, et au Canadian Electrical Code, partie 1, section 16. 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 UWP 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 XTP T UWP 202 remotely with an XTP Power Injector, power one device locally (see **Local power** on page 15) and connect an XTP Power Injector to the XTP cable run along the XTP ports (see the *XTP Power Injector User Guide* at www.extron.com for more installation information).

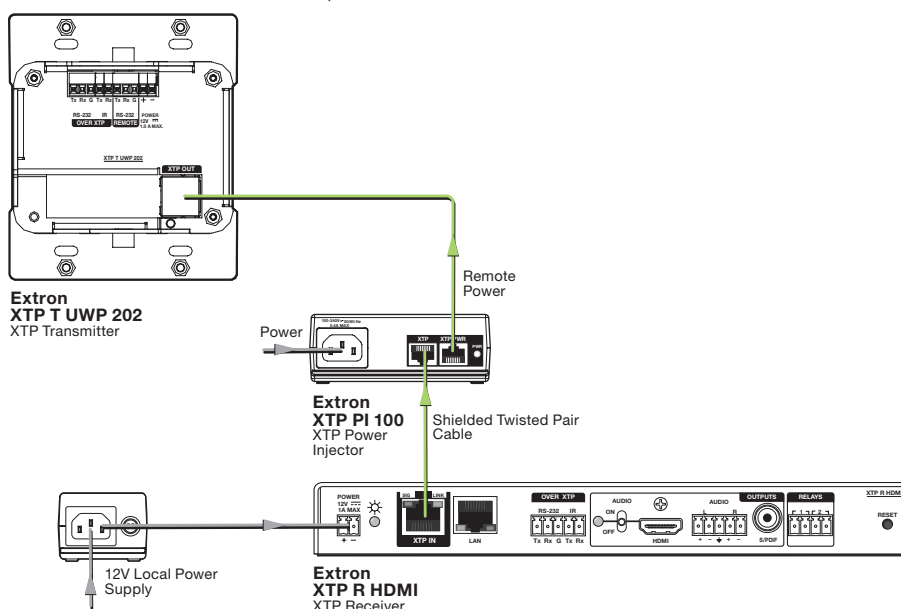


Figure 15. Typical Point-to-Point Application with Remote Power

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 appropriate 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 UWP 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 (see Extron the Extron [website](#) for contact information).

Front Panel Features

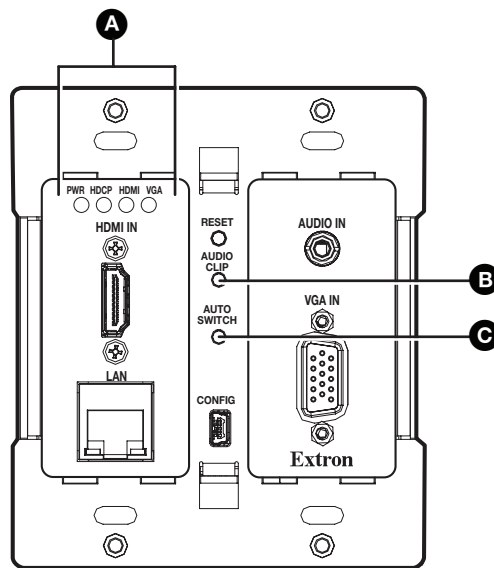


Figure 16. Front Panel Features

A 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.

B Audio clipping LED indicator — Lights when the analog audio input signal is -3 dBFS or above. The light remains lit for 200 ms after the audio input signal drops below -3 dBFS.

C Auto switch LED indicator — Lights when the transmitter is in auto switch mode (see [Auto switch mode](#) SIS commands on page 22).

EDID

To manage EDID on the XTP T UWP 202, use the XTP System Configuration Software (see [EDID Minder](#) on page 38). The XTP T UWP 202 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 17, **A**) on the front panel of the transmitter to restore factory-shipped firmware. To access the **Reset** button, the faceplate may need to be removed from the device (see [Mounting the XTP T UWP 202](#) on page 10).

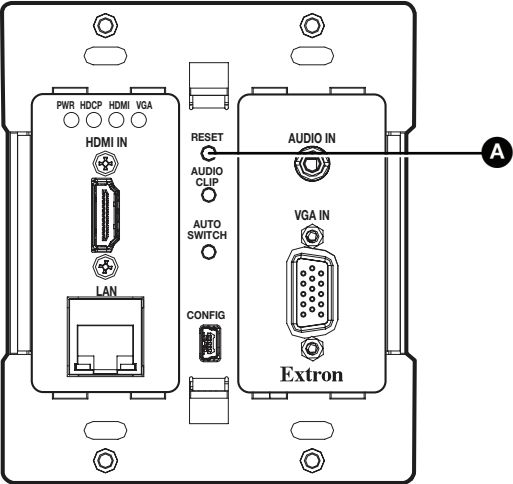


Figure 17. Rear Panel Reset Button

Reset Mode Summary			
Mode	Mode Activation	Result	Purpose and Notes
Factory Reset	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 UWP 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 26). This section contains basic SIS communication details and SIS commands and responses when connected directly to the XTP T UWP 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 an XTP T UWP 202, connect the computer to the XTP T UWP 202 through the front panel USB configuration port (see [figure 9](#), **E** on page 11) or the rear panel RS-232 connector (see [figure 5](#), **C** on page 8). The protocol for the serial port is 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 XTP T UWP 202 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 messages are displayed after a power cycle via RS-232. The specific message displayed depends on the XTP T UWP 202 model.

NOTE: Black and white models are not differentiated in the displayed part number.

© Copyright YYYY, Extron Electronics, XTP T UWP 202 Vx.xx, 60-1216-12**↵**

© Copyright YYYY, Extron Electronics, XTP T UWP 202 NL, Vx.xx, 60-1410-12**↵**

YYYY is the year. Vx.xx is the firmware version number.

Error Responses

When the XTP T UWP 202 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	E12 = Invalid port number
E06 = Invalid switch attempt in this mode	E13 = Invalid parameter
E10 = Invalid command	E14 = Not valid for this configuration
E11 = Invalid preset number	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, and 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 18 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																	
		Second Hexadecimal Digit															
		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
First Hexadecimal Digit	0											LF			↶		
	1												Esc				
	2	●	!	“	#	\$	%	&	‘	(	)	*	+	,	-	.	/
	3	∅	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	x	y	z	{		}	~	

Figure 18. 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[X2]↵	View the auto switch mode.
Audio Configuration Commands			
Audio gain and attenuation			
NOTE: Gain and attenuation commands are case-sensitive.			
Set gain	[X1]*[X5]G	In[X1]•Aud[X7]↵	Set gain to [X5].
Set attenuation	[X1]*[X6]g	In[X1]•Aud[X7]↵	Set attenuation to [X6].
Increment audio level	[X1]+G or [X1]+g	In[X1]•Aud[X7]↵	Increase the audio level by 1 dB.
Decrement audio level	[X1]-G or [X1]-g	In[X1]•Aud[X7]↵	Decrease the audio level by 1 dB.
View audio level	[X1]G or [X1]g	In[X1]•Aud[X7]↵	View the audio level.
Audio input selection			
Set audio input format	[Esc] I 2*[X3]AFMT↵	Afmt I 2*[X3]↵	Set the audio input format to [X3].
View audio input format	[Esc] I 2AFMT↵	Afmt I 2*[X3]↵	View the audio input format.
Black video signal resolution			
Set black video signal resolution	[Esc] A[X8]AFMT↵	Afmt A[X8]↵	Set the black video signal resolution to [X8].
View black video signal resolution	[Esc] AAFMT↵	Afmt A[X8]↵	View the black video signal resolution.
KEY:			
[X1] = Input selection		1 = VGA	
		2 = HDMI (default)	
[X2] = Auto switch mode		Ø = disable	
		1 = priority to the HDMI input (default)	
		2 = priority to the VGA input	
[X3] = Audio input format		Ø = auto, prioritize digital audio (default)	
		1 = digital embedded	
		2 = analog	
[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 transmitter uses a black video signal to simulate a 720p (50 Hz or 60 Hz) or 1080p (60 Hz) signal so audio can be passed without video.			
Set black video signal	[Esc] B[X4] AFMT ←	AfmtB[X4]↵	Enable or disable a 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] [X10] PHAS ←	Phas[X10]↵	Adjust the pixel phase to [X10].
Increment value	[Esc] +PHAS ←	Phas[X10]↵	Increase the pixel phase value by one.
Decrement value	[Esc] - PHAS ←	Phas[X10]↵	Decrease the pixel phase value by one.
View pixel phase value	[Esc] PHAS ←	Phas[X10]↵	Show the pixel phase value.
Horizontal shift			
Set horizontal shift value	[Esc] [X11] HCTR ←	Hctr[X11]↵	Set the horizontal location of the first active pixel in the active window.
Increment value	[Esc] +HCTR ←	Hctr[X11]↵	Increase the shift value by one (move the image to the right).
Decrement value	[Esc] - HCTR ←	Hctr[X11]↵	Decrease the shift value by one (move the image to the left).
View horizontal shift value	[Esc] HCTR ←	Hctr[X11]↵	Show the horizontal location of the first active pixel in the active window.
Vertical shift			
Set vertical shift value	[Esc] [X11] VCTR ←	Vctr[X11]↵	Set the vertical location of the first active pixel in the active window.
Increment value	[Esc] +VCTR ←	Vctr[X11]↵	Increase the shift value by one (move the image down).
Decrement value	[Esc] - VCTR ←	Vctr[X11]↵	Decrease the shift value by one (move the image up).
View vertical shift value	[Esc] VCTR ←	Vctr[X11]↵	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.

KEY:

[X4] = Enable or disable

Ø = off or disable

1 = on or enable (default)

[X10] = Pixel phase

Ø - 255

[X11] = Horizontal or vertical shift

Ø - 65535 (32768 = default)

Command	ASCII Command (Host to Device)	Response (Device to Host)	Additional Description
Preset Commands			
Input presets			
Save an input preset	[X12] ,	Spr[X12]↵	Save the current configuration to preset [X12].
Recall an input preset	[X12] .	Rpr[X12]↵	Recall the preset [X12] configuration.
Auto memories			
Set auto memories	[Esc][X9]AMEM↵	Amem[X9]↵	Enable or disable auto memory.
View setting	[Esc]AMEM↵	Amem[X9]↵	View the auto memories status.
EDID Commands			
NOTE: For EDID management, use the XTP System Configuration Software (see EDID Minder on page 38).			
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*0HDCP↵	HdcpE2*0↵	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	[X13]J	Tst[X13]↵	Set color bars test pattern resolution and refresh rate.
View the current test pattern	J	Tst[X13]↵	View the current test pattern setting.
Device name			
Set device name	[Esc][X14]CN↵	Ipn•[X14]↵	Set the device name to [X14].
Reset device name	[Esc]•CN↵	Ipn•UWP_202↵	Reset the device name to the factory default name.
View device name	[Esc]CN↵	Ipn•[X14]↵	View the current device name.
KEY:			
[X4] = Enable or disable		0 = off or disable	
[X9] = Enable or disable		1 = on or enable (default)	
[X12] = Preset number		0 = disabled	
[X13] = Color bar test pattern		1 = enabled (default)	
[X14] = Device name		1 - 8	
		0 = disable (default)	
		1 = 720p @ 50 Hz	
		3 = 720p @ 60 Hz	
		5 = 1080p @ 60 Hz	
		Text label, maximum seven alphanumeric characters	

Command	ASCII Command (Host to Device)	Response (Device to Host)	Additional Description
Reset mode			
System reset	[Esc] ZXXX ←	Zpx ←	Resets unit to factory default.
Status			
View input signal presence	ØLS	Frq [X15] [X15] ←	View the input signal presence of each input. In the response, the first [X15] is the VGA input. The second [X15] is the HDMI input.
View HDCP input	[Esc] IHDCP ←	HdcpI [X16] [X16] ←	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-1216-12 ← or 6Ø-141Ø-12 ←	View the device part number. The response is based on the model. Black and white models are not differentiated.
KEY: [X15] = Signal presence [X16] = HDCP status Ø = video or TMDS not detected 1 = video or TMDS detected 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 UWP 202. 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, locate it on the [Download Center](#) page or go to the XTP System Configuration Software product page (see [Software Product Page](#) on the next page).

Software Download Center Page

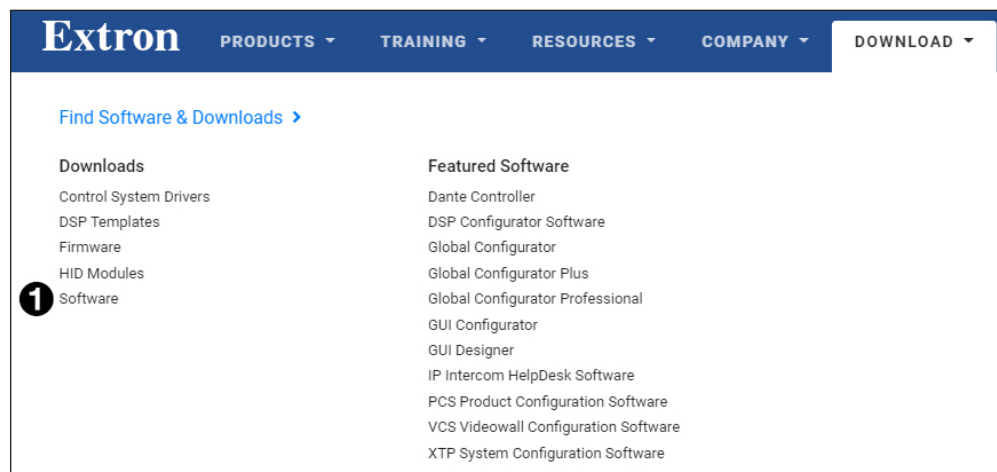


Figure 19. Extron Website Download Page

1. On the Extron website, go to the **Download** tab and click **Software** (see figure 19, ①).

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).

Description	Part Number	Version	Date	Size
XTP System Configuration Software Software for the complete setup and configuration of XTP Systems (Please consult Supported XTP System Products List for compatibility information)	79-565-01	1.4.0	Mar. 29, 2018	23.8 MB Download

Figure 20. XTP System Configuration Software Download Link

- Click the **X** link (see figure 20, **1**).
- Locate the XTP System Configuration Software and click the **Download** link (see figure 20, **2**) to the right of the product name.
- Submit any required information to start the download. Note where the file is saved.
- Open the saved executable (.exe) file.
- Follow the instructions that appear on the screen to install the program.

Software Product Page

Extron PRODUCTS TRAINING RESOURCES COMPANY DOWNLOAD **1** Power Search...

Product Home / Software / Configuration Software / XTP System Configuration Software

XTP System Configuration Software

Software for the Complete Setup and Configuration of XTP Systems

Key Features

- Convenient, user-friendly software for configuring, operating, and commissioning XTP Systems
- Quick and easy configuration via Ethernet or USB
- Intuitive, tab-based design for ease of use
- System-wide EDID management within a single window
- No programming skills required

[See All Features >](#)

Image Gallery

Version	Release Date	Size	Release Notes
1.4.0	Mar. 29, 2018	23.8 MB	Please consult Supported XTP System Products List for compatibility information.

2 [Download](#)

SIMILAR PROD

Figure 21. XTP System Configuration Software Product Page

- In the **Search** field (see figure 21, **1**) type “XTP System Configuration Software.”
- Press <Enter> on the keyboard or select **XTP System Configuration Software** from the drop-down menu.
- Click the **Download** button (see figure 21, **2**).
- Submit any required information to start the download. Note where the file is saved.
- Open the saved executable (.exe) file.
- Follow the instructions that appear on the screen to install the program.

Software Operation

The XTP T UWP 202 can be controlled directly from the rear panel configuration port (see [figure 9](#), **E** on page 11) 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 proceeding.

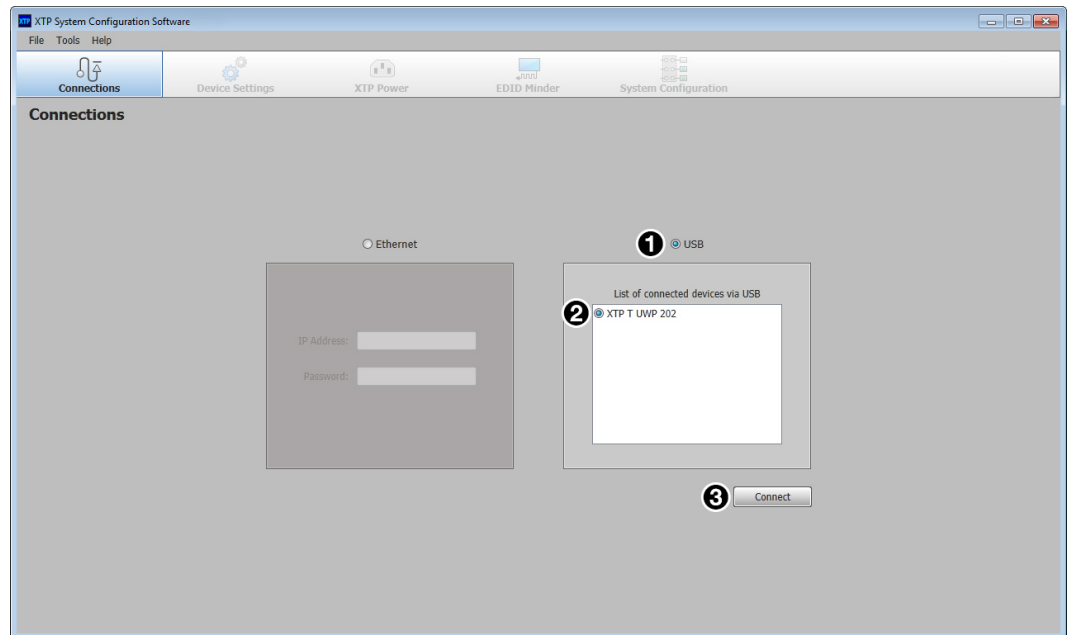


Figure 22. Connections Screen

To connect to a device:

1. Open the XTP System Configuration Software.
2. From the **Connections** screen, select the **USB** radio button (see figure 22, **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 32).

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.

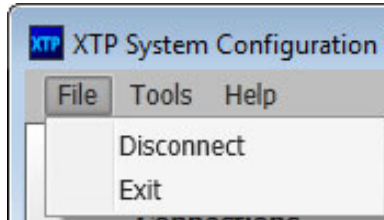


Figure 23. File Menu

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.

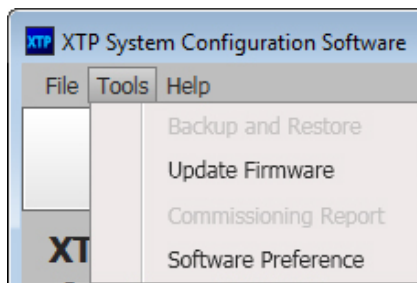


Figure 24. Tools Menu

NOTE: The **Backup and Restore** and **Commissioning Report** options are not available when directly connected to the XTP T UWP 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.

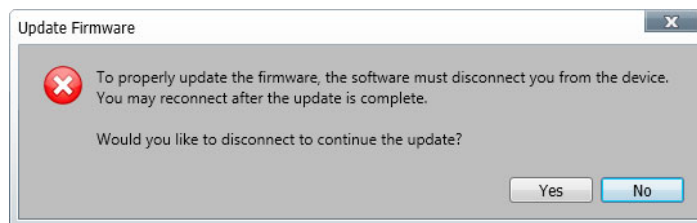


Figure 25. Confirm Disconnect Dialog Box

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

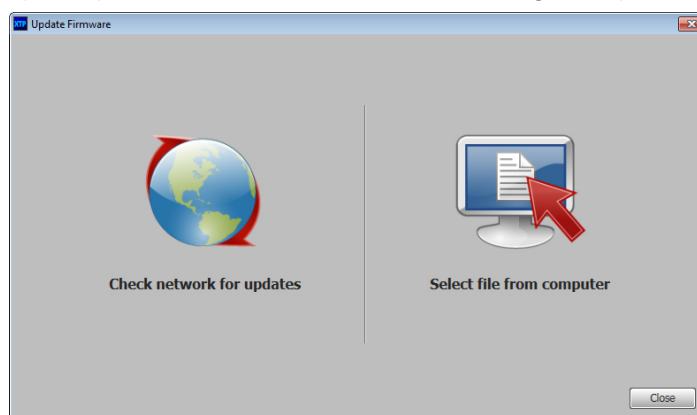


Figure 26. Update Firmware Dialog Box

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.

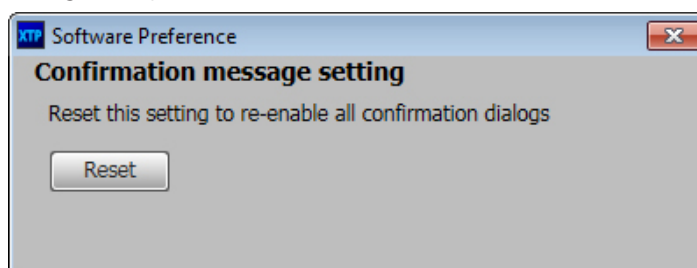


Figure 27. Software Preference Dialog Box

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.

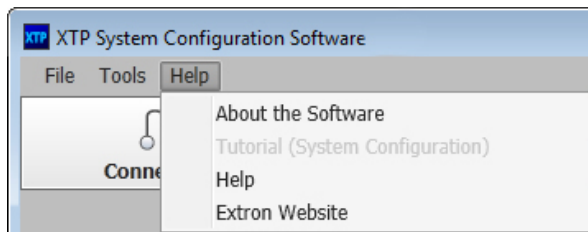


Figure 28. Help Menu

NOTE: The **Tutorial (System Configuration)** option is not available when directly connected to the device.

About the Software

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

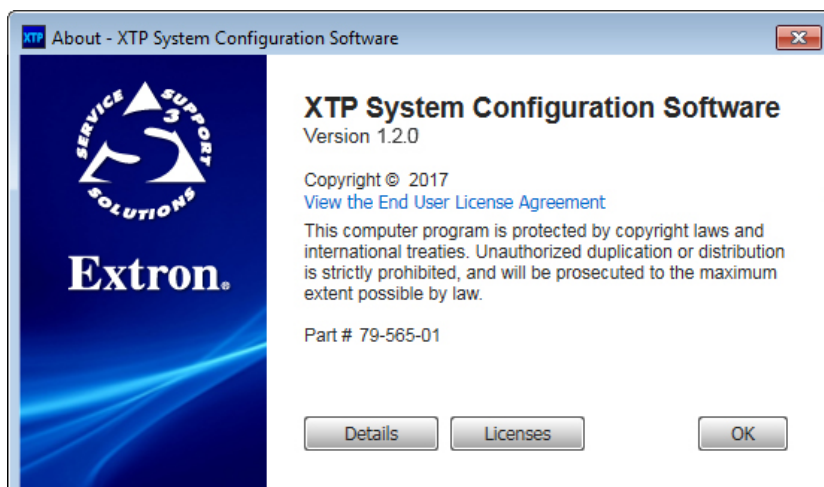


Figure 29. About - XTP System Configuration Software Dialog Box (Example)

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 30, ❶) on the **Global Navigation** bar to open the **Device Settings** screen.

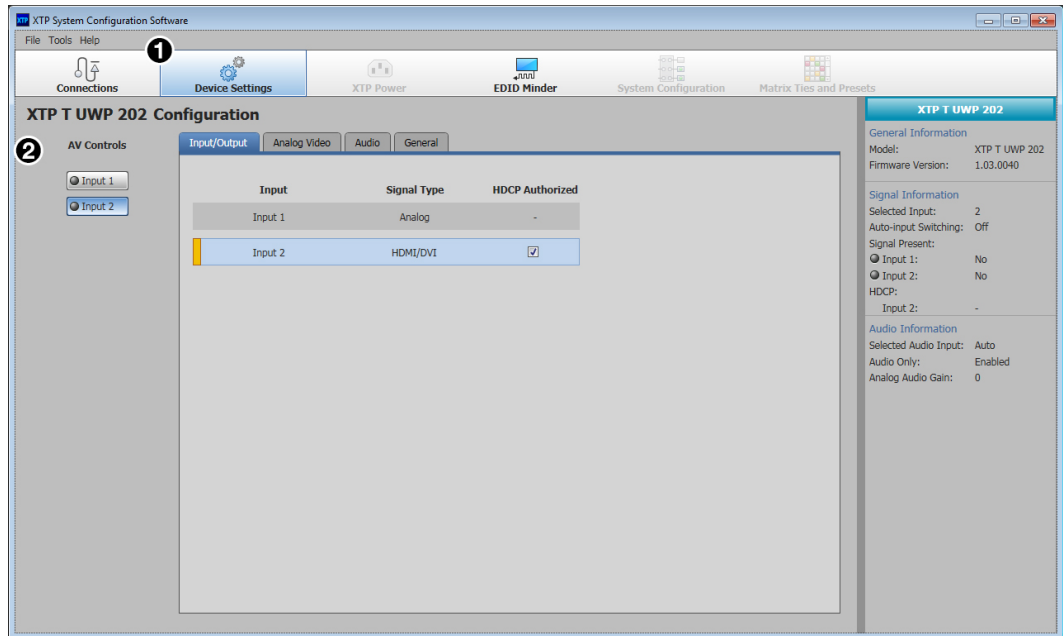


Figure 30. Transmitter Device Settings Screen

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 31, ❶) to open the Input/Output screen. It contains input information and options to apply automatic settings to individual inputs.

❷ Input	❸ Signal Type	HDCP Authorized
Input 1	Analog	-
Input 2	HDMI/DVI	☒ ❹

Figure 31. 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 32, ❶) to open the Analog Video screen. It contains signal sampling, image shifting, and saving and recalling input preset options.

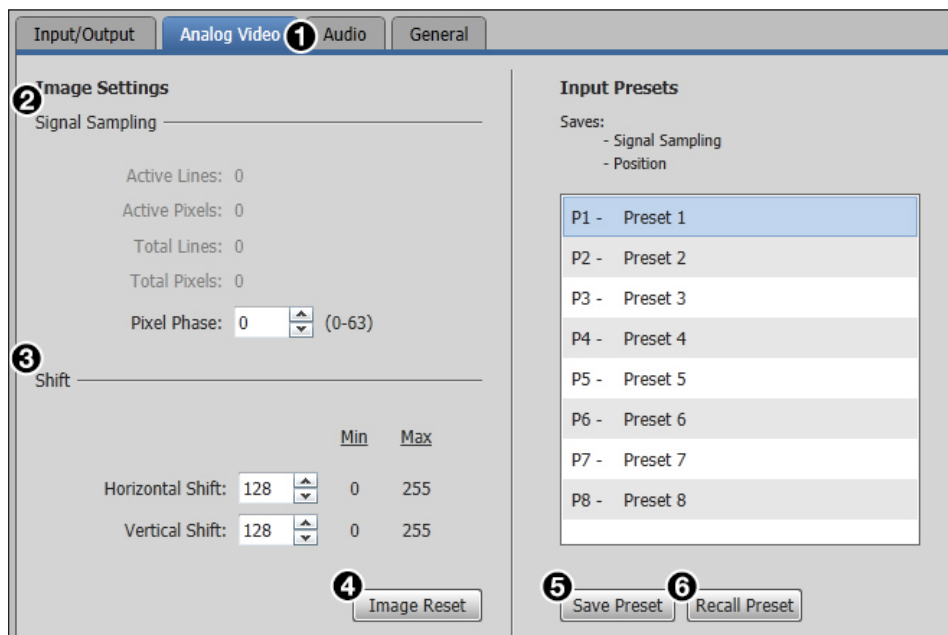


Figure 32. Analog Video Tab

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 33, ①) to open the Audio screen. It contains settings for input format and analog audio gain.

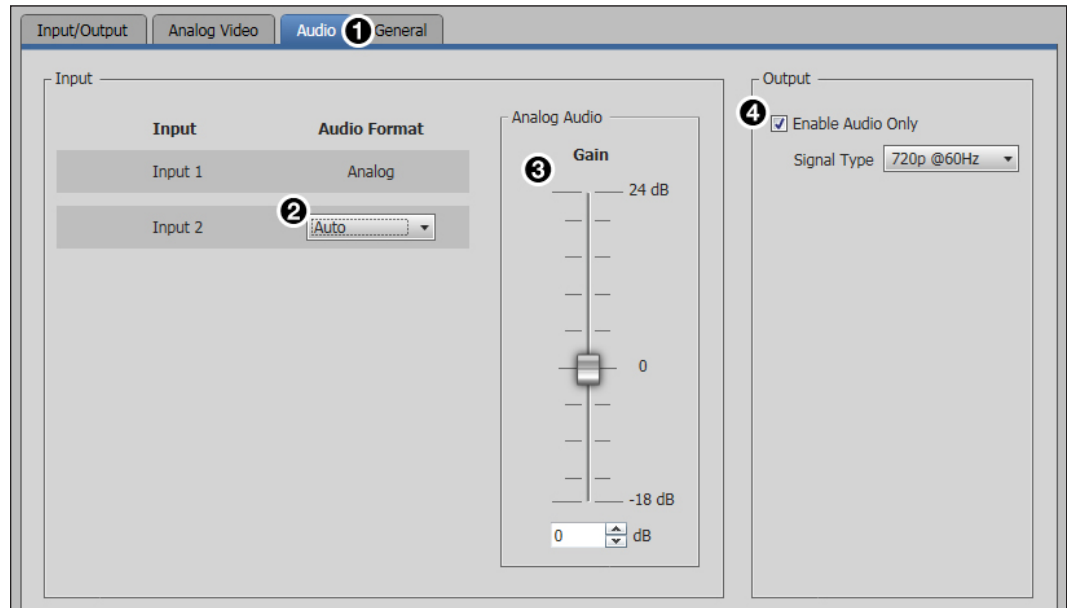


Figure 33. Audio Tab

Audio input panel

- ② **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.
- ③ **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

- ④ **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 not 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 34, ①) to open the **General** screen. It contains settings for auto switch mode and factory reset.

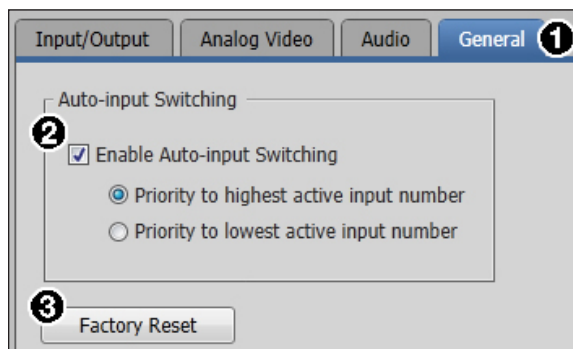


Figure 34. General Tab

Auto-input Switching section

② **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

③ **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 25).

Device Information panel

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

- ❶ **Model** — Displays the device model.
- ❷ **Firmware Version** — Displays the full firmware version.
- 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.
- ❼ **Selected Audio Input** — Displays the format of the currently selected audio input.
- ❽ **Analog Audio Gain** — Displays the analog audio gain in dB.

XTP T UWP 202	
General Information	
Model:	XTP T UWP 202 ❶
Firmware Version:	1.03.0040 ❷
Signal Information	
Selected Input:	1 ❸
Auto-input Switching:	Off ❹
Signal Present:	
● Input 1:	No ❺
● Input 2:	No
HDCP:	
Input 2:	- ❻
Audio Information	
Selected Audio Input:	Analog ❼
Analog Audio Gain:	0 ❽

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 35, ①) 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.

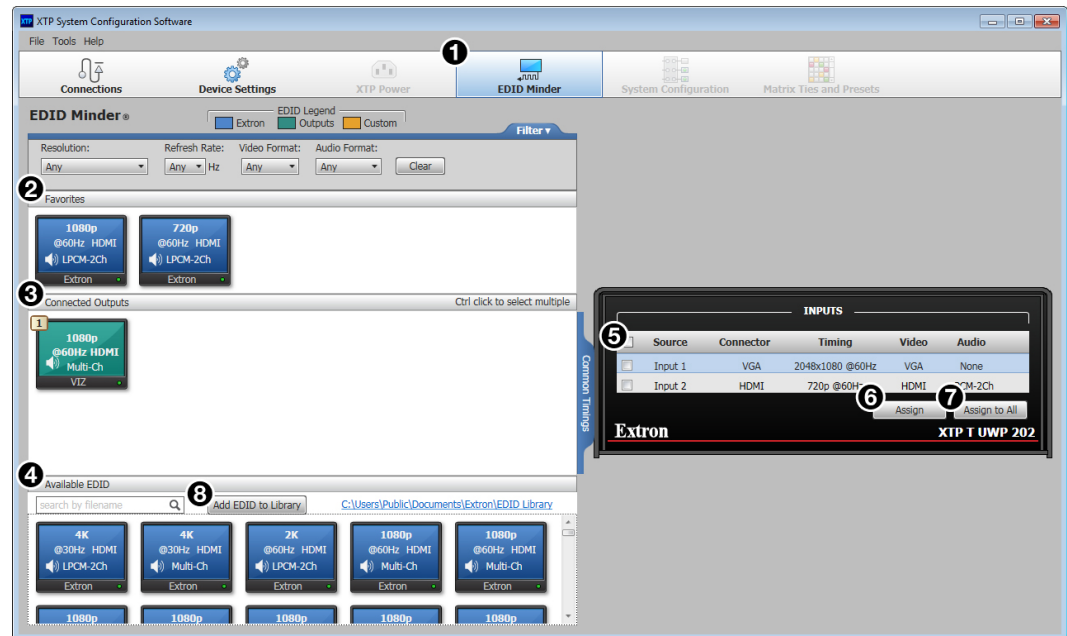


Figure 35. EDID Minder Screen

Assign EDID

To assign EDID to selected inputs:

1. Select an available EDID icon from the Favorites, Connected Outputs, or Available EDID panel (②-④).
2. Select the check box of the connected input (⑤).
3. Click the **Assign** button below the input area (⑥).

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 (②-④).
2. Click the **Assign to All** button (⑦).

Add an EDID File to the EDID Library

1. In the Available EDID panel, click the **Add EDID to Library** button (see [figure 35](#), ⑧ 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 35](#), ④ 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 35](#), ③ 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.

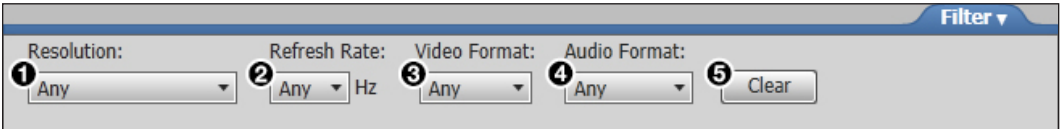
Set favorite EDID

To add commonly used EDID settings to the Favorites panel (see [figure 35](#), ② on the previous page) for quick access, perform one of the following methods:

- Click and drag the desired EDID icon from the **Connected Outputs** (see [figure 35](#), ③ on the previous page) or the **Available EDID** panel (see [figure 35](#), ④ on the previous page) to the **Favorites** panel. The EDID setting is copied to the **Favorites** panel.
- Right-click the desired EDID and select **Copy**. Then, **Paste** the EDID setting into the **Favorites** panel.

EDID filters

The filters (see [figure 36](#)) can be used to easily locate a specific EDID setting.



- | | |
|-----------------------|-----------------------|
| ① Resolution filter | ④ Audio Format filter |
| ② Refresh Rate filter | ⑤ Clear button |
| ③ Video Format filter | |

Figure 36. 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 36](#), ①-④). 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 36](#), ⑤). 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 possible mounting dimensions.

Mounting Template

Figure 37 is a example of a mounting template for preparing mounting surfaces. It is not to full scale.

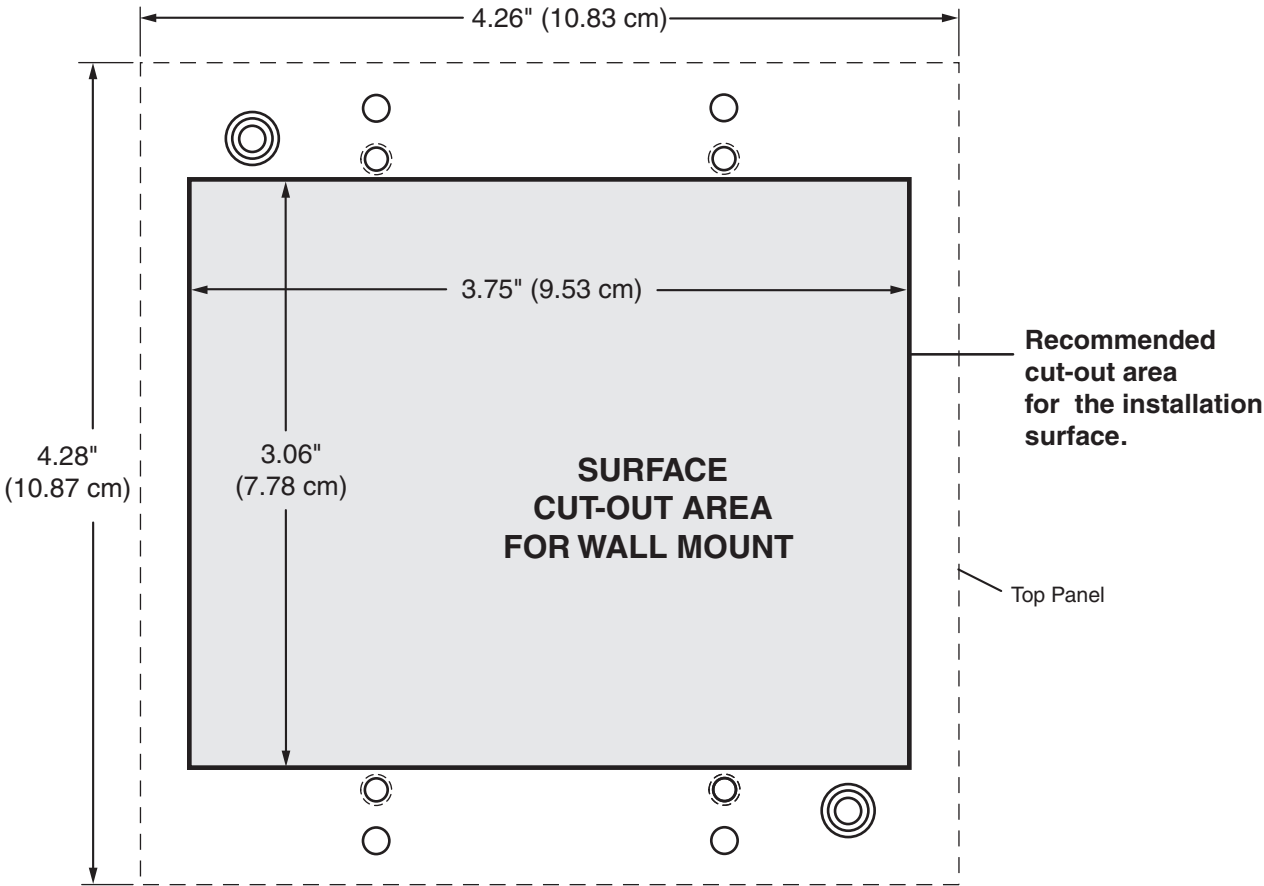


Figure 37. Mounting Template for 2-Gang Mud Rings (Not to Full Scale)

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.