Extron

DTP T EU 4K 331
DTP T EU 4K 231
DTP T MK 4K 331
DTP T MK 4K 231

Digital Twisted Pair Transmitters for Extron Flex55, EU- & MK- type junction boxes



User Guide
DTP Systems

68-2962-01, Rev. Ex1
01 26

Safety Instructions

Safety Instructions • English

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Istruzioni di sicurezza • Italiano

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안전 지침 • 한국어

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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.
- La technologie extension paires torsadées fonctionne avec les câbles paires torsadées blindées (UTP) ou non blindées (STP). Afin de s'assurer de la compatibilité entre FCC Classe A et CE, les câbles STP et les connecteurs STP sont nécessaires.

NOTES:

- This unit was tested with shielded I/O cables on the peripheral devices. Shielded cables must be used to ensure compliance with FCC emissions limits.
- 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:

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.

Specifications Availability

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

Extron Glossary of Terms

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

Contents

Introduction 1
About this Guide 1
About the Transmitters 1
Features 3

Installation and Basic Operation 4
Installation Overview 4
Installing the Junction Box or European Cable Channel System 6
Wall or Furniture Preparation 7
Installation Features 8
Connector and Wiring Details 9
Mounting the Transmitter 12
Mounting an EU transmitter in a Raceway Using Spacers (Optional) 13
Removing the Transmitter (Accessing the Side and Rear Features) 14
Front Panel Connection 15
Operation 15
Indications 15
Troubleshooting — If no Image Appears 15
Best Practices for Cleaning the Transmitter 16

Introduction

- About this Guide
- About the Transmitters
- Features

About this Guide

This guide describes the following wallplate-mounted transmitter models:

- **DTP T EU 4K 331**
- **DTP T EU 4K 231**
- **DTP T MK 4K 331**
- **DTP T MK 4K 231**

NOTE: In this guide:

- The units are commonly referred to as “transmitters.”
- Unless specifically identified by the model name, the discussions in the guide apply to any model.

The transmitters output a signal to a compatible DTP receiver. This guide describes how to install, operate, and configure the transmitter.

About the Transmitters

The transmitters covered in this guide are HDMI transmitters with DTP outputs (see **figure 1**). The transmitters are HDCP compliant, and support resolutions up to 4k at 30 Hz with color space 4:4:4 or 4:2:2 and 4k at 60 Hz with color space 4:2:0.

Each transmitter converts one HDMI input, including embedded audio (or DVI video with the appropriate adapter) to a proprietary digital signal. The transmitter and a compatible DTP receiver extend the usable distance of video, audio, and control signals over a single Extron XTP DTP 24 shielded twisted pair (STP) cable (recommended) or other STP cable.

The DTP T EU 4K 331 and DTP T MK 4K 331 are compatible with a DTP HDMI 330 Rx or DTP DVI 330 Rx receiver, with a range of up 330 feet (100 meters).

The DTP T EU 4K 231 and DTP T MK 4K 231 are compatible with a DTP HDMI 230 Rx or DTP DVI 230 Rx receiver, with a range of up 230 feet (70 meters).

The units consist of a device module that snaps into a plastic bezel faceplate. The transmitters in the appropriate bezels fit into EU or MK one-gang junction boxes or European cable channel systems, depending on the transmitter model. The EU bezels can also be mounted directly to a wall or other surface. The products are also compatible with the Extron Flex55 mounting system.

In most applications, a compatible receiver can power the transmitter through the STP cable. An optional 12 VDC power supply can power the unit locally

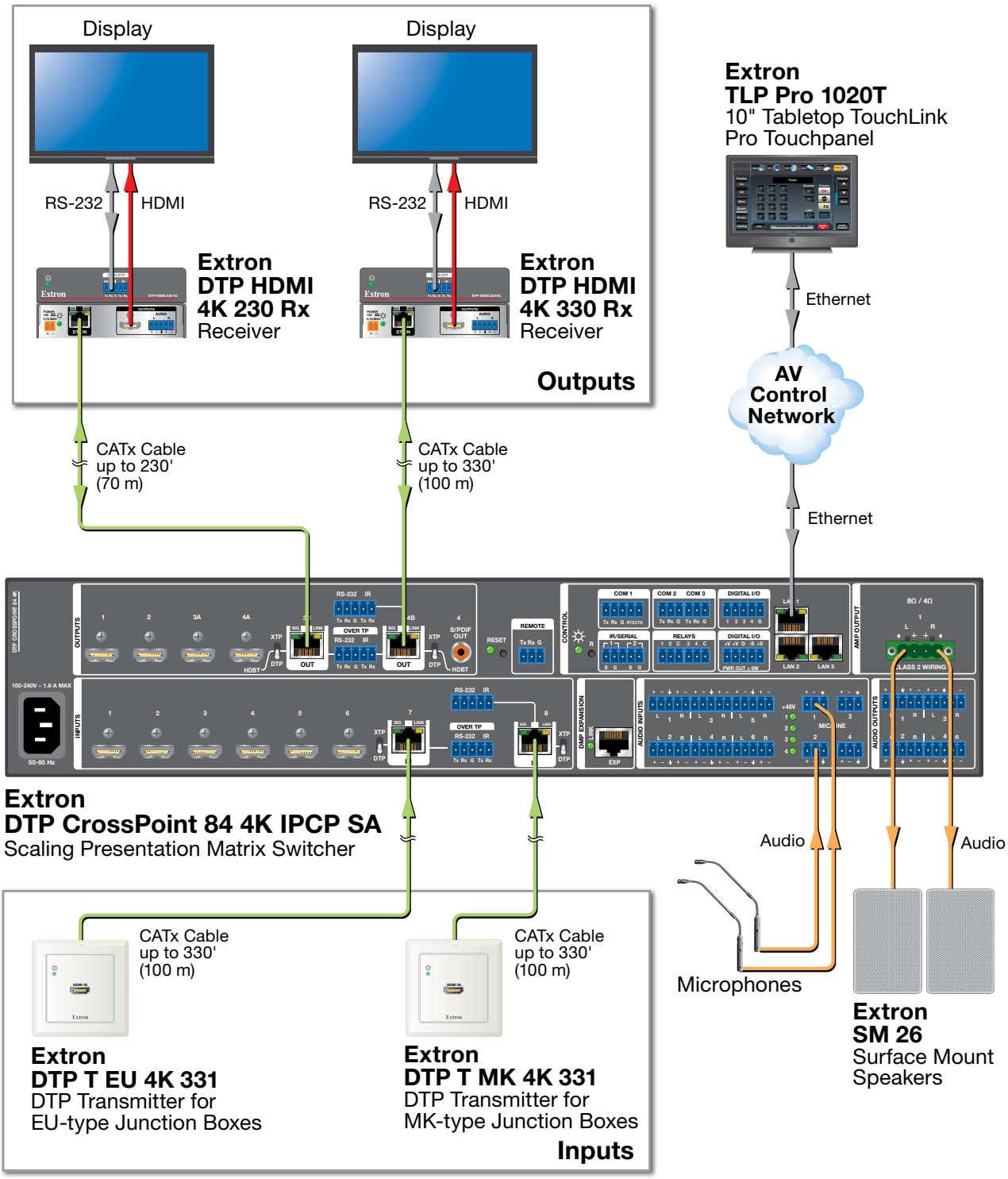


Figure 1. Typical DTP T/R DP 4K 230 Transmitter and Receiver Application in a System with an IN1608

Features

- **Transmits HDMI up to 330 feet (100 meters) (DTP T EU 4K 331 or DTP T MK 4K 331) or 230 feet (70 meters) (DTP T EU 4K 231 or DTP T MK 4K 231) over a single STP cable** — The units provides high reliability and maximum performance on an economical and easily installed cable infrastructure.
- **Supports resolutions up to 4k30 with color space 4:4:4 or 4:2:2 and 4k60 with color space 4:2:0**
- **The DTP output is compatible with HDBaseT-enabled devices** — The DTP output can be configured to send video and embedded audio to HDBaseT-enabled displays.
- **Remotely powered by receiver** — For simplified installation, only one power supply is necessary to power both devices.
- **Compatible with all DTP HDMI 330 (230) and DTP DVI 330 (230) receivers, and DTP 330- (230-)enabled products** — The transmitters can be used with the Extron IN1608, DTP CrossPoint 84, and other DTP 330- (230-)enabled products to meet application requirements.

Installation and Basic Operation

This section contains information for mounting, connecting, and operating the DTP T EU 4K 331, DTP T MK 4K 331, DTP T EU 4K 231, and DTP T MK 4K 231. Topics in this section include:

- **Installation Overview**
- **Installing the Junction Box or European Cable Channel System**
- **Wall or Furniture Preparation**
- **Installation Features**
- **Mounting the Transmitter**
- **Front Panel Connection**
- **Operation**
- **Troubleshooting — If no Image Appears**
- **Best Practices for Cleaning the Transmitter**

Installation Overview

All models can mount into junction boxes. The EU units mount into European junction boxes and directly to a walls or other surfaces. The MK units mount into MK junction boxes.

The DTP T EU 4K 331 and DTP T EU 4K 231 can mount into a European cable channel system (also known as a "trunking system"). The products are also compatible with the Extron Flex55 mounting options (see **www.extron.com**).

To mount and connect the transmitters, consider the following:

- Ensure there is enough space between the rear panel and the back of the junction box or European cable channel system to fit connectors. Figure 2 shows the dimensions of all transmitter models. The depth of all four transmitters is the same. Allow at least 47 mm (1.9 inches) in the junction box for the device plus cable clearance.

  NOTE: The depth of the junction box or European cable channel system may vary.

- If you are using a European cable channel system with a DTP T EU 4K 331 or DTP T EU 4K 231, ensure the transmitter fits in the desired channel.
- If necessary, prepare the mounting surface.

  CAUTION: Failure to check the items listed below may result in personal injury or property damage.

  ATTENTION : La non-vérification des éléments listés ci-dessous peut provoquer des blessures ou 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 the building, electrical, and safety codes.
- Choose a location that allows cable runs without interference.

  NOTE: Cables may need to be installed in the wall or conduits before the unit is installed.

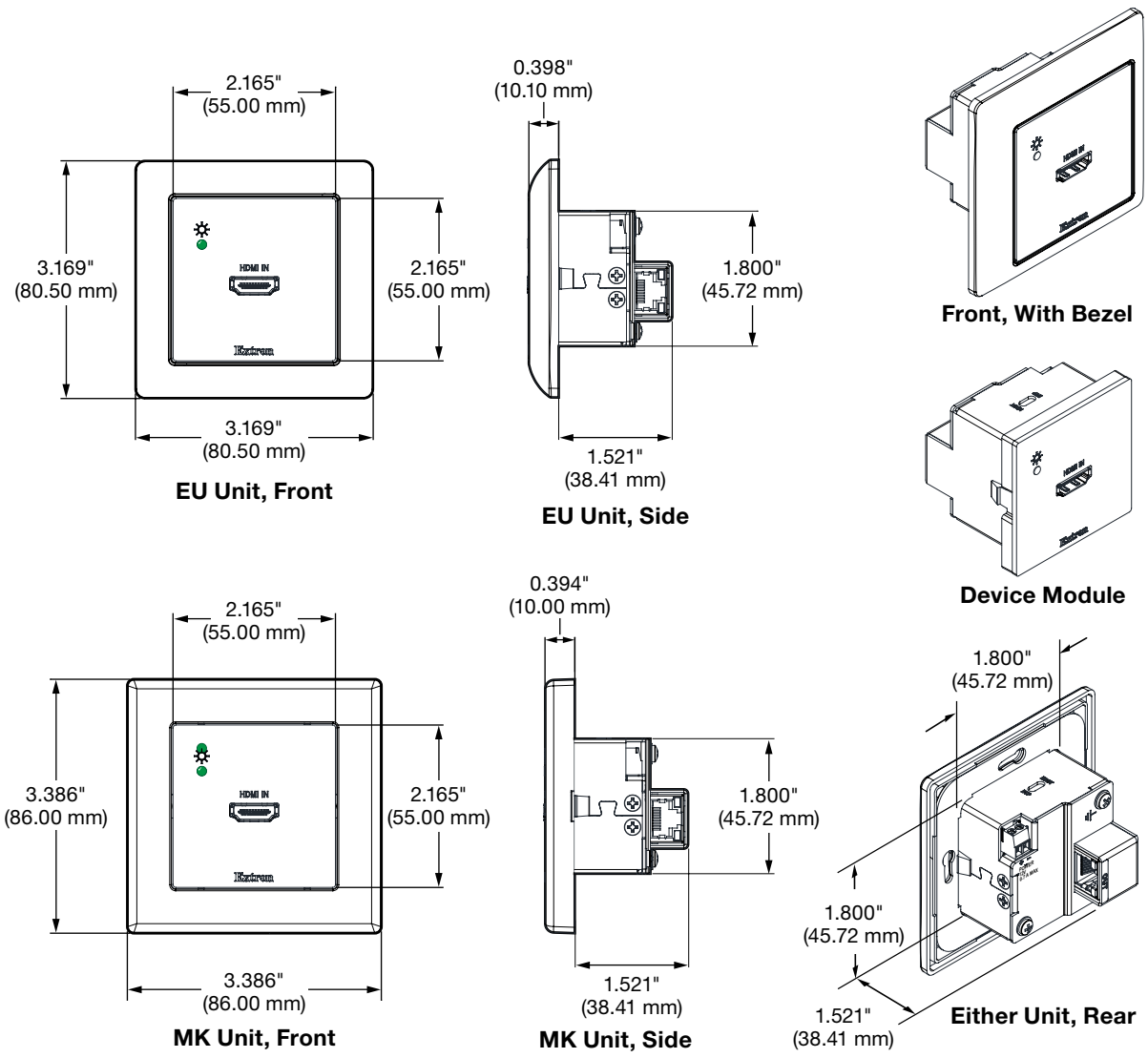


Figure 2. Dimensions

- As applicable:
  - **Choose a location that allows cable runs without interference.**

    NOTE: Cables may need to be installed in the wall or conduits before the unit is installed..

  - **For a junction box or channel system installation**, install the junction box or European cable channel system (see **Installing the Junction Box or European Cable Channel System**).

    NOTE: See the manufacturer for more junction box installation requirements.

  - **For a surface mount**, cut a hole in the mounting surface and affix the mounting bracket (see **Wall or Furniture Preparation**, steps 1 through 4).
- Route and connect cables to the rear panel connectors (see **Installation Features**).
- Mount the unit into the junction box (see **Mounting the Transmitter**) or to the surface (see **Wall or Furniture Preparation,** step 5).
- Connect input to the front panel connector (see **Front Panel Connection**).

Installing the Junction Box or European Cable Channel System

See 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: Smooth the edges of the opening to avoid personal injury during installation and damage to the mounting device or the cables.

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

Wall or Furniture Preparation

Prepare the wall or other mounting surface as follows:

NOTES:

- Ensure that there is ample space under or behind the mounting surface for cables.
- Unlike junction box mounting, the vertical or horizontal orientation of the word “FRONT” does not matter.
- To keep the transmitter securely in place and prevent it from being easily pulled from its mounting surface, ensure that the side of the bracket with the word “FRONT” engraved on it faces out (away from the surface).
- If you want to be able to remove the transmitter easily from its mounting, attach the mounting bracket with “FRONT” facing inward, toward the surface.

1. Hold the mounting bracket over the desired location and mark the cut-out area and the mounting holes in the four corners onto the surface (see figure 3).
2. Remove the surface material marked in step 1.
3. Drill pilot holes if applicable.
4. Secure the mounting bracket using locally acquired wood screws or alternative fasteners.
5. Snap the mounting frame over the bracket.

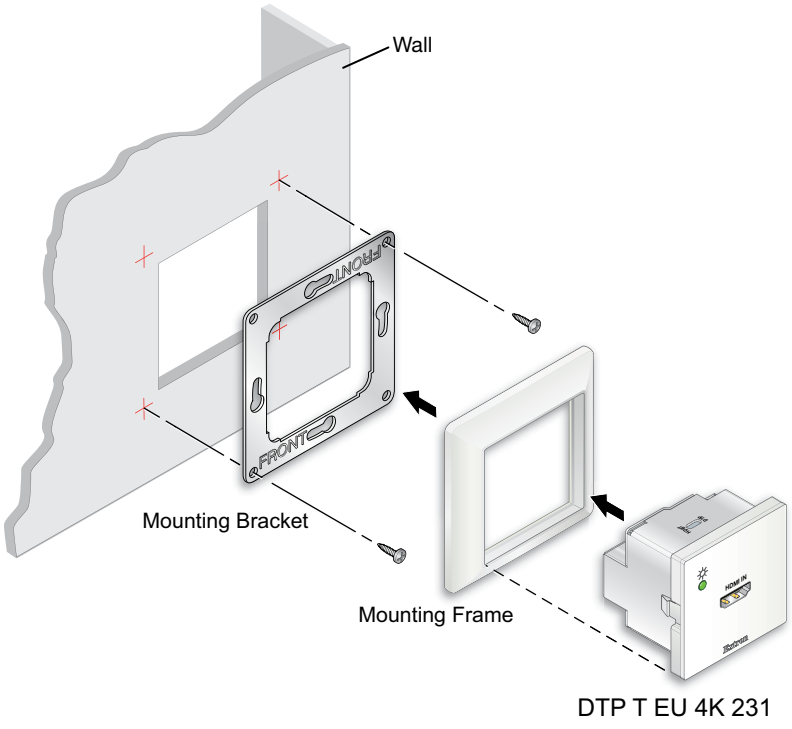


Figure 3. Surface Preparing and Mounting

Installation Features

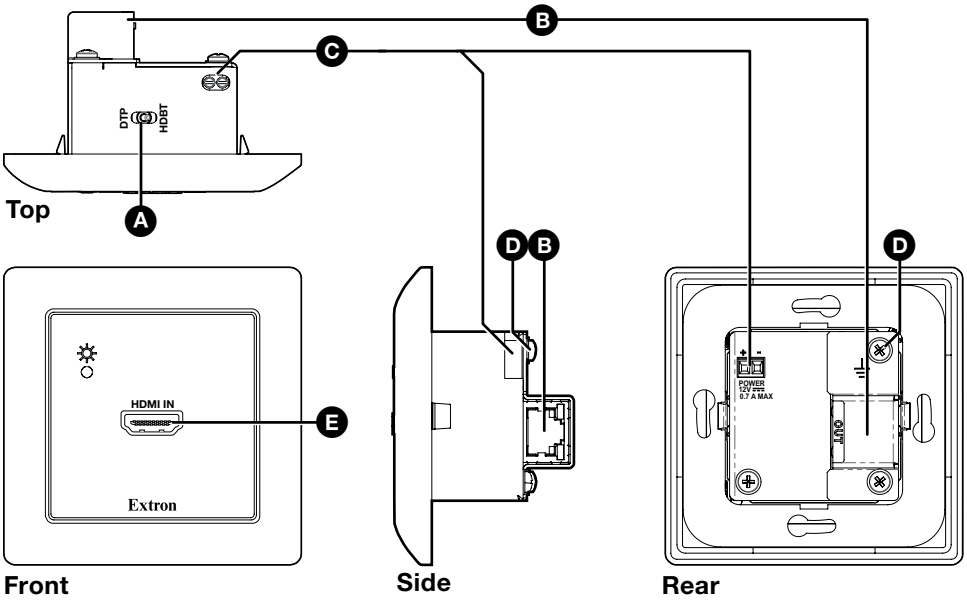


Figure 4. Installation Features

A **TP function switch** (see below) **B** **TP port** **C** **Power connector**

D **Electrostatic ground point** — Use the included grounding strap to ground the unit.

NOTE: This ground eliminates electrostatic discharge only. This is not an electrical safety ground.

E **HDMI input port** (see **Front Panel Connection**)

A **TP function switch** (see figure 4) — If the receiving device is in the Extron DTP series, use a stylus or other tapered object to set this recessed switch to the DTP position. For an HDBaseT-enabled receiver type, set this switch to the HDBT position. This switch tailors the output signal as follows:



ATTENTION:

- Position this switch **BEFORE** connecting the appropriate device to the TP connector. Failure to comply can damage the endpoint.
- Positionnez le sélecteur **AVANT** de connecter l'appareil approprié au connecteur TP. Ne pas respecter cette procédure pourrait endommager le point de connexion.

HDBT position — The TP output consists of HDMI with embedded audio.

DTP position — The TP output consists of HDMI with embedded audio and remote power.

NOTES:

- **When the switch is in the HDBT position**, the transmitter and receiver each requires a local 12 VDC power supply.
- **When the switch is in the DTP position**, one 12 VDC power supply, connected to either the transmitter or the receiver, can power both units.

B **TP port**— Plug one end of a TP cable into this RJ-45 female jack. Plug the opposite end into the DTP Input RJ-45 port on a compatible receiver (see **Twisted pair cable termination and recommendations** to wire the RJ-45 connector and for detailed **NOTES**).



Signal (green) LED — Lights when the transmitter outputs a video signal.

Link (yellow) LED — Lights when a device is connected and communicating.

ATTENTION:

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

C **Power connector** (see **figure 4**) — When the TP function switch is in the DTP position, this connector is probably not necessary. The connected receiving device can remotely power the transmitter via the TP cable.



ATTENTION:

- Remote power is intended for indoors use only. No part of a network that uses remote power can be routed outdoors.
- L'alimentation à distance est exclusivement réservée à un usage en intérieur. Un réseau utilisant une alimentation à distance ne peut pas être routé en extérieur.

If the TP function switch (see **figure 4**, **A**) is in the HDBT position, or if otherwise desired, plug an optional external 12 VDC power supply into this 2-pole direct insertion connector (see **Power supply wiring**).

NOTE: **When the TP function switch is in the DTP position**, one power supply can power both units.

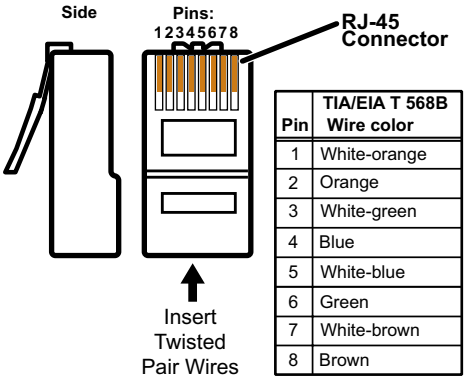
When the TP function switch is in the HDBT position, the transmitter and receiver each requires a local 12 VDC power supply.

E **HDMI input port** (see **Front Panel Connection**)

Connector and Wiring Details

Twisted pair cable termination and recommendations

Figure 7 details the **TIA/EIA T568-B** wiring standard. Use this standard to terminate twisted pair (TP) cables with RJ-45 connectors.



Pin	TIA/EIA T 568B Wire color
1	White-orange
2	Orange
3	White-green
4	Blue
5	White-blue
6	Green
7	White-brown
8	Brown

Figure 5. TP Cable Termination

NOTE: Do **not** use Extron UTP23SF-4 Enhanced Skew-Free AV UTP cable or STP201 cable to link the transmitter and receiver. The DTP T EU and DTP T MK units do not work properly with these cables.

Supported cables

The DTP units are compatible with shielded twisted pair (STP) and unshielded twisted pair (U/UTP) cable. However, Extron strongly recommends that you use STP cable to achieve best performance.

ATTENTION:

- 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 to achieve full transmission distances up to 330 feet (100 m) (DTP T EU 4K 331 and DTP T MK 4K 331) or 230 feet (70 m) (DTP T EU 4K 231 and DTP T MK 4K 231) and reduce transmission errors.

Use the following Extron XTP DTP 24 SF/UTP cables and DTP 24 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 T 568 B standard (see **figure 5**).
- Use no 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 CAT 6 or 6a shielded couplers and punch down connectors.

NOTE: When using TP cable in bundles or conduits, consider the following:

- Do not exceed 40% fill capacity in conduits.
- Do not comb the cable for the first 65 feet (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.

Power supply wiring

NOTE: The transmitter normally receives power from the receiver. A power supply is not included with the transmitter. This section is for wiring an optional power supply.

Figure 6 shows how to wire the connector.

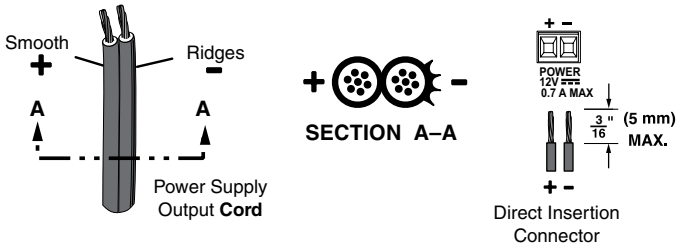


Figure 6. Power Connector Wiring

CAUTION:

ATTENTION :

- The wires must be kept separate from each other while the power supply is plugged in. Remove power before wiring.
- 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.

- The length of exposed wires is important. The ideal length is 3/16 inch (5 mm).
  - Any longer and the exposed wires may touch, causing a short circuit.
  - Any shorter and the wires can be easily pulled out even if tightly fastened by the captive screws.
- La longueur des câbles exposés est importante. La longueur idéale est de 5 mm (3/16 inches).
  - S'ils sont un peu plus longs, les câbles exposés pourraient se toucher et provoquer un court circuit.
  - S'ils sont un peu plus courts, ils pourraient sortir, même s'ils sont attachés par les vis captives.

- Do not tin the power supply leads before installing them in the connector. Tinned wires are not as secure in the connector and could be pulled out.
- Ne pas étamer les conducteurs avant de les insérer dans le connecteur. Les câbles étamés ne sont pas aussi bien fixés dans le connecteur et pourraient être retirés.

ATTENTION:

- If not provided with a power supply, this product is intended to be supplied by a UL Listed power source marked "Class 2" or "LPS" and rated output 12V dc, minimum 1.0 A minimum. 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 end product.
- Si le produit n'est pas fourni avec une source d'alimentation, il doit être alimenté par une source d'alimentation certifié UL de classe 2 ou LPS, avec une tension nominale 12 Vcc, 1 A minimum. Utilisez toujours une source d'alimentation fournie ou recommandée par Extron. L'utilisation d'une source d'alimentation non autorisée annule toute conformité réglementaire et peut endommager la source d'alimentation ainsi que le produit final.

- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities.
- Sauf mention contraire, les adaptateurs AC/DC ne sont pas appropriés pour une utilisation dans les espaces d'aération ou dans les cavités murales.

- 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.
- 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 (see **figure 6**) 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 (voir **l'illustration 6**) permettent de repérer le pôle négatif du cordon d'alimentation.

To verify the polarity before connection, plug in the power supply with no load and check the output with a voltmeter.

Mounting the Transmitter

ATTENTION:

- 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.
- L'installation doit toujours être conforme aux dispositions applicables du Code américain de l'électricité (National Electrical Code) ANSI/NFPA 70, article 75, et du Code canadien de l'électricité, partie 1, section 16.

- Install into a UL listed outlet/junction box with the provided faceplate or a UL listed faceplate.
- Installer dans une prise de courant ou un boîtier de raccordement certifié(e) UL avec le panneau avant fourni ou un panneau avant certifié UL.

- Ensure that the junction box is grounded properly.
- Assurez vous que le boîtier d'encastrement est correctement mis à la terre.

Mount the transmitter to a junction box or surface as follows:

1. Disconnect power from all devices at the source.
2. **For a junction box**, orient the mounting bracket as appropriate for your transmitter (see figure 7):

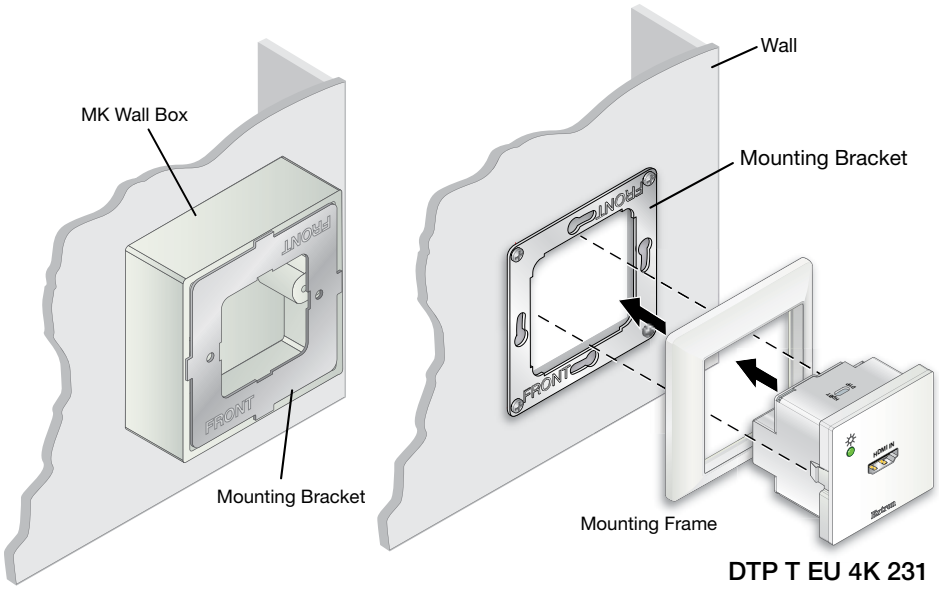


Figure 7. Mounting the Transmitter to a Junction Box

3. **For a junction box**, fasten the provided metal mounting bracket to the mounted junction box, in the proper orientation, using the two included screws.

NOTES:

- To keep the transmitter securely in place and prevent it from being easily pulled from its mounting surface, ensure that the side of the bracket with the word "FRONT" engraved on it faces out (away from the junction box).
- If you want to be able to remove the transmitter easily from its mounting, attach the mounting bracket with the word "FRONT" facing inward, toward the junction box.

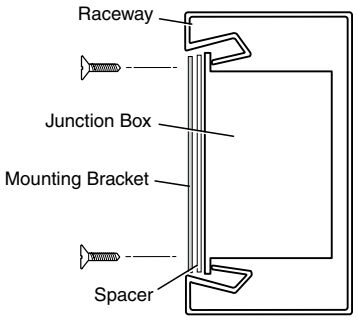
4. Run the TP cable and optional power cable through the junction box (if applicable), the plastic bezel frame, and the mounting bracket.
5. Set the TP function switch to the appropriate position (see **figure 4**, Ⓐ).

6. Connect the rear panel cables to the transmitter.
7. Align the bezel frame to the metal mounting bracket on the mounting surface.
8. Holding the bezel frame in place on the bracket, press the transmitter into the frame until the unit snaps into place and all four tabs on the unit snap into their slots.

Mounting an EU transmitter in a Raceway Using Spacers (Optional)

If the EU transmitter does not stay in place when installed in a cable raceway, this may be due to a gap between the metal mounting bracket and the bezel frame. When this gap exists, the tabs on the sides of the transmitter do not reach the metal mounting bracket and the transmitter does not snap completely into the mounting bracket.

You can fix this problem by installing a spacer (provided with the EU transmitter) between the metal mounting bracket and the rim of the junction box. This spacer is engraved with the words “Optional Spacer” and “Place behind bracket” and has a slightly larger center opening than the mounting bracket.



NOTE: Do not attempt to use the spacer in place of the metal mounting bracket. Because of its larger opening, the spacer cannot hold the EU transmitter in place.

To mount the transmitter EU to a raceway using the spacer:

1. Disconnect power from all devices at the source.
2. Mount the junction box in the raceway.
3. Attach the spacer to the junction box using two of the included screws in the holes at the sides of the spacer. Leave the screw heads protruding approximately 1/8 inch (3.175 mm) from the surface of the spacer (see figure 8).

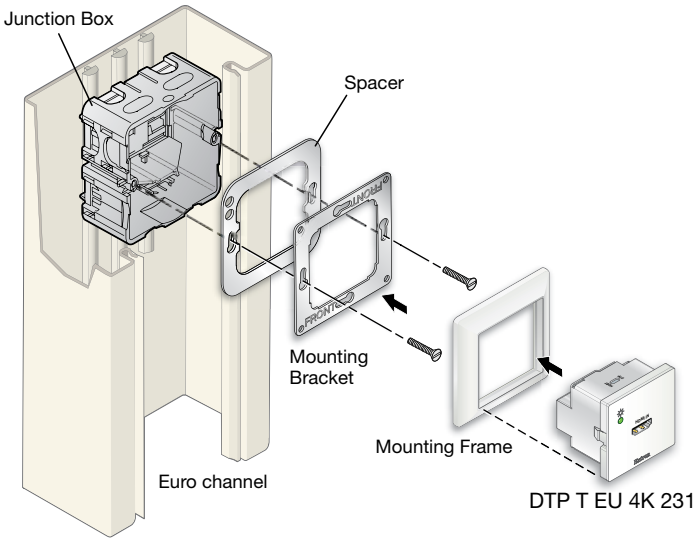


Figure 8. Mounting the EU Transmitter Using a Spacer

4. With the word “FRONT” toward you (away from the spacer and junction box), place the metal mounting bracket onto the spacer so that the screw heads pass through two of the slotted holes in opposite sides of the bracket.
5. Rotate the mounting bracket as necessary to ensure that the transmitter will be positioned straight on the mounting surface and not skewed to either side.
6. Tighten the screws to secure the bracket to the spacer.
7. Pull the TP cable and optional power cable through the junction box and the plastic bezel frame and connect them to the transmitter.

8. Align the bezel frame with the metal mounting bracket on the mounting surface.
9. Press the transmitter into the frame until the unit snaps into place.

Removing the Transmitter (Accessing the Side and Rear Features)



To access the transmitter side and rear panel features after the transmitter has been mounted, you must use a removal tool (included, shown at right) to remove the transmitter from the installation surface.

Remove the transmitter from the mounting surface as follows:

1. Insert the flat tip of the removal tool in the center of the right or left edge of the transmitter, between the unit and the wall frame, all the way to the line below the arrow on the tool (see figure 9).

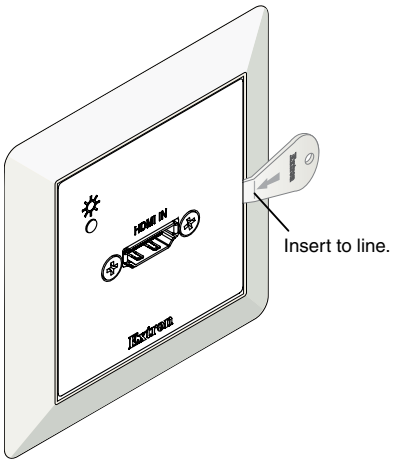


Figure 9. Inserting the Removal Tool in a Transmitter

2. Gently press the removal tool either inward or outward to release the tab holding the transmitter in place in the wall frame.
3. If the transmitter does not immediately come free of the bezel frame, pry the unit outward (away from the wall) until it is free of the installation surface, then lift it out, leaving the metal mounting bracket attached.

NOTE: Without the transmitter to hold the bezel frame in place, the frame is also removed.

To reinstall the transmitter, hold the bezel frame in place on the bracket and press the transmitter into the frame until the unit snaps into place and all four tabs on the unit snap into their slots.

Front Panel Connection

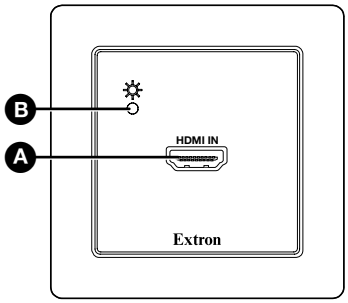
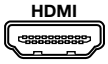


Figure 10. Front Panel HDMI Connection and Indicator

Ⓐ **HDMI input port** — Connect a digital video source to the transmitter via this HDMI connector. It accepts HDMI, and can also accept a DVI or dual mode DisplayPort video source with an appropriate adapter.



NOTE: The maximum HDMI cable length is 4.5 m (15 feet).

Operation

Plug in all system components and turn on the input device (such as a Blu-Ray player or computer) and the output device. Set the input devices to output video using the operating instructions of that device. The image should appear on the screen. If no image appears, see “Troubleshooting — If no Image Appears,” below.

Indications

Ⓑ **Power (☼) LED** (see figure 10) — Lights to indicate power and signal status:

Amber — The transmitter is receiving power from either the connected DTP receiver or a local power supply. No digital video signal is input.

Green — The transmitter is receiving power and is detecting TMDS on the HDMI input connector.

Troubleshooting — If no Image Appears

1. Ensure that all devices are plugged in and powered on.
2. Ensure an active input is applied to the transmitter. The transmitter is receiving an active input if the power LED is lit green.
3. Ensure that the proper signal format is supplied.
4. Check the cabling and make corrections as necessary.
5. Call the Extron S3 Sales & Technical Support Hotline if necessary. See the **end** of this guide for the phone number in your region of the world.

Best Practices for Cleaning the Transmitter



It may become necessary to clean your Extron transmitter.

Cosmetic finishes can be damaged by long term exposure to chemicals. Therefore, Extron recommends the following guidelines when cleaning our products.

The transmitter can be safely cleaned with:

- 70% concentration or higher isopropyl alcohol
- Disinfectant cleaners that:
  - Are non-ammonium based (for example, contains no ammonium chloride)
  - Contain 2% or less sodium hypochlorite (for example, 2% bleach, 98% water)

It is important to follow these general guidelines when cleaning:

- If possible, unplug the device.
- Spray the cleaner on a lint-free cloth until the cloth is damp.
- Do not spray the cleaner directly onto the product.
- Gently clean the product surface using the cloth.

Your health and safety are our top priority. Keeping devices clean, especially those in high-traffic environments and high-use applications, is a crucial step in minimizing the spread of infections. Please contact us if you have any questions about the guidelines outlined or if you have a question about cleaning the product.

Extron Warranty

Extron warrants its powered products against defects in materials and workmanship for a period of three years from the date of invoice. In the event of malfunction during the warranty period, Extron will repair or replace a product to whatever extent it shall deem necessary to restore the product to proper operating condition.

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 non-Extron authorized modification to the product. 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.

Powered Warranty Exception

Everlast™ Power Supplies — Extron warrants Everlast power supplies against any defects in materials and workmanship for a period of seven years from the date of invoice. In the event of a malfunction during the warranty period, Extron will repair or replace the power supply to its original operating condition. Extron engineers will examine the returned product and determine whether the Everlast Power Supply Warranty or Powered Product Warranty applies.

Speakers — Extron warrants Flat Field®, SoundField®, SpeedMount®, Column Array, and System INTEGRATOR® speakers against any defects in materials and workmanship for a period of five years from the date of invoice.

Touchscreens — Extron warrants touchscreen display and overlay components against any defects in materials and workmanship for a period of one year from the date of invoice.

Annotator 300 — Extron warrants the Annotator 300 against any defects in materials and workmanship for a period of five years from the date of invoice.

Non-Powered Warranty Exception

Cable Cubby, Hideaway Surface Access Enclosures and Retractors — Extron warrants Cable Cubby cable access enclosures, HSA Hideaway Surface Access enclosures, and Retractor cable retraction modules for a period of three years from the date of invoice.

Active Cables and Active Adapters — Extron warrants active cables and active adapter cables for a period of three years from the date of invoice.

Cable Termination Tools and Dies — Extron warrants cable termination tools for a period of three years from the date of invoice, excluding the die.

Return Information

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.

NOTE: To assure the highest level of service, a return authorization number must be obtained from Extron before products are returned for service. Products must be shipped to Extron, prepaid along with proof of purchase **only** after obtaining a Return Authorization (RA) number from the Extron Customer Support department.

Please contact Extron to receive an RA (Return Authorization) number:

USA:	714.491.1500 or 800.633.9876	**Asia**:	65.6383.4400
Europe:	31.33.453.4040 or 800.3987.6673	**Japan**:	81.3.3511.7655
Africa and Middle East:	971.4.299.1800		