

DTP Systems

DTP R HWP 4K 231 D

DTP R HWP 4K 331 D

DTP HDMI Twisted Pair Receivers - 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

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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.

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

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

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

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

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.

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UWAGI: Ten symbol, ⚠, gdy używany na produkt, jest przeznaczony do ostrzeżenia 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.

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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.

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:

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.

Specifications Availability

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

Extron Glossary of Terms

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

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Introduction

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About this Guide

This guide provides instructions for experienced, professional installers to install, operate, and configure the Extron DTP R HWP 4K 231 D and DTP R HWP 4K 331 D receivers.

The terms “extender” and “receiver” are used interchangeably in this guide to refer DTP R HWP 4K 231 D and DTP R HWP 4K 331 D receivers.

About the DTP R HWP 4K D Units

The Extron DTP R HWP 4K 231 and 331 D extenders are a family of DTP HDMI receivers (see figure 1). They are housed in one-gang sized enclosures that can be mounted in Underwriters Laboratories (UL®) standard wall boxes with decorator-style faceplates. They are also capable of receiving HDMI digital video, analog audio, and RS-232 or IR control signal over one shielded twisted pair (STP) cable.

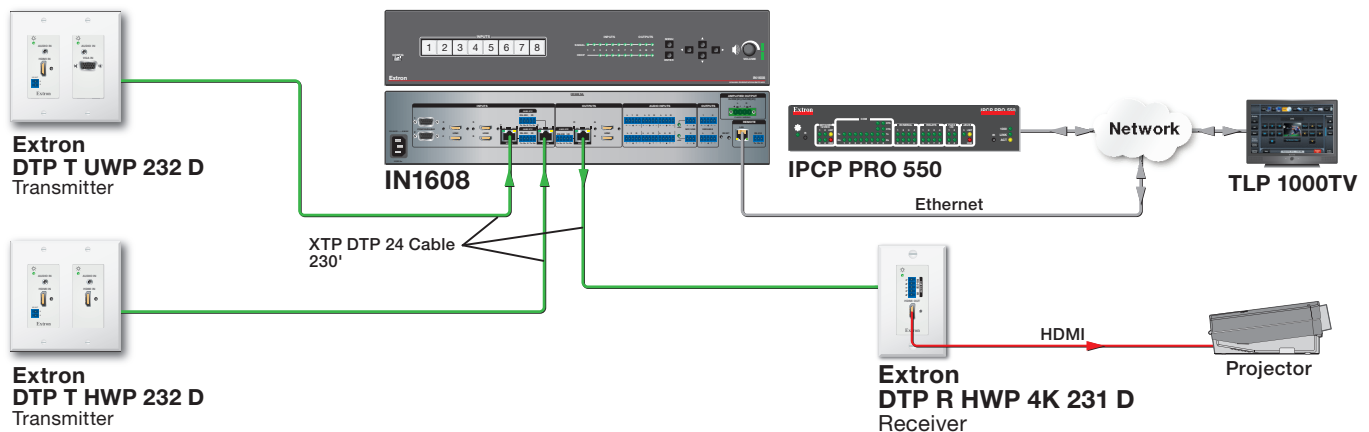


Figure 1. A Typical Transmitter and Receiver Application

A DTP R HWP 4K D system consists of a receiver (Rx) and a Transmitter (Tx). The receivers and the corresponding compatible transmitters are sold separately. A single power supply connected to the receiver can power units through the twisted pair cable that links the units. The receiver can also be powered remotely.

Features

- **Receives HDMI plus control and analog audio over a shielded CATx cable** — Provides high reliability and maximum performance on an economical and easily installed cable infrastructure. Maximum transmission distance is determined by the resolution of the signal and the twisted pair cable, graphics card, and display used in the system.
 - **DTP R HWP 4K 231 D** receivers can receive video, control, and audio (if applicable) signals up to 230 feet (70 meters) over STP cable.
 - **DTP R HWP 4K 331 D** receivers can receive video, control, and audio (if applicable) signals up to 330 feet (100 meters) over STP cable.
- **Compatible with CATx shielded twisted pair cable** — Shielded twisted pair cabling with solid center conductor sizes of 24 AWG or better is recommended for optimal performance.
- **Accepts additional analog stereo audio signals** — Accepts stereo analog audio from a DTP-enabled product. Embedded digital audio is not de-embedded from the digital video signal.
- **Supports multiple embedded audio formats** — The DTP R HWP 4K 231 D is compatible with a broad range of multi-channel audio signals, providing reliable operation with HDMI sources.
- **Supported HDMI specification features include data rates up to 10.2 Gbps, Deep Color up to 12 bit, 3D, HD lossless audio formats, and CEC pass-through**
- **Supports EDID and HDCP transmission** — DDC channels are actively buffered, allowing continuous communication between source and display.
- **Bidirectional RS 232 and IR pass-through for AV device control** — Bidirectional RS 232 control and IR signals can be transmitted alongside the video signal, allowing remote AV devices to be controlled without the need for additional cabling.
- **Remote power capability** — For simplified installation, the receiver can be remotely powered by a DTP-enabled product over the twisted pair connection.
- **Mounts in an included single-gang decorator-style wallplate** — The single-gang decorator-style wallplate is available in black or white to blend with a wide range of environments.

Installation and Operation

This section describes the installation and the operation of the extenders, including:

- **Mounting the Receiver**
- **DTP R HWP 4K 231 and 331 D Connections**
- **Connection Details**
- **Power Supply Wiring**
- **RS-232 and IR Over DTP Connector Wiring**
- **Operation**

Mounting the Receiver

ATTENTION:

- Installation and service must be performed by authorized personnel.
- L'installation et l'entretien doivent être effectués par le personnel autorisé uniquement.
- The unit must be installed in accordance with the National Electrical Code and with local electrical and safety codes.
- L'unité doit être installée conformément au National Electric Code et aux normes électriques et de sécurité locales.

The receivers can be installed in a one-gang electrical wall box or with a mud ring with a decorator-style wall plate cover (supplied).

UL and Safety Guidelines

The following UL guidelines pertain to the installation of the decorator-style receivers into a wall or furniture.

- These units are not to be connected to a centralized DC power source or used beyond their rated voltage range.
- These units must be installed in UL Listed wall boxes.
- These units must be installed with conduit in accordance with National Electrical Code.

Site Preparation and Wall Box Installation

Choose a location that allows cable runs without interference. Allow enough depth for both the wall box and the cables. Install the cables into the wall, furniture, or conduits before installing the DTP R HWP 4K 231 D or DTP R HWP 4K 331 D receiver.

NOTE: The extender units are very deep and have connectors on the back side. Extron recommends a one-gang wall box which has a depth of at least 3.0 inches (7.6 cm) to accommodate the connectors and cables.

To install a new wall box (not provided), perform steps 1 through 9. If a suitable wall box is already installed, perform steps 6 through 9 on the next page. Use UL Listed wall boxes.

1. If a wall box is not available to use for a template, use the **Decorator-Style Template Dimensions** on page 14 to create a template. If installing directly into furniture, cut out the center portion of the template.
2. Place the wall box (or the full size template) against the installation surface, and mark the opening guidelines.
3. Cut out the material from the marked area.
4. Insert the wall box into the opening. The rear connectors on the box or wall plate should fit easily into the opening. Enlarge or smooth the edges of the opening if needed.
5. Secure the wall box with nails or screws, leaving the front edge flush with the outer wall or furniture surface (see figure 2).

NOTES:

- If attaching the wall box to wood, use four #8 or #10 screws or 10-penny nails. A minimum of 0.5 inch (1.3 cm) of screw thread must penetrate the wood.
- If attaching the wall box to metal studs or furniture, use four #8 or #10 self-tapping sheet metal screws or machine bolts with matching nuts.

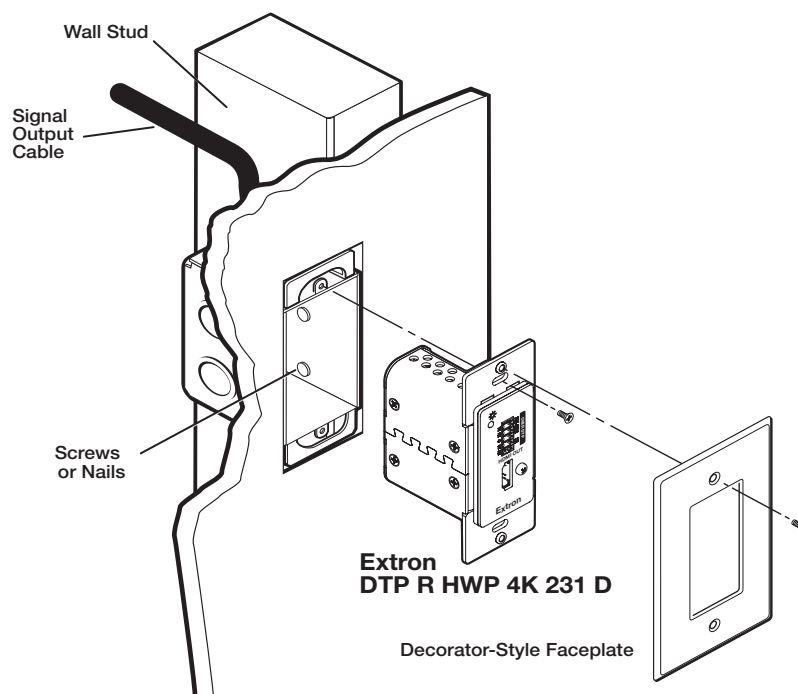


Figure 2. Installing the Wall Box and Mounting the Unit

6. Feed the twisted pair cables and, if applicable, the power cables through the opening and through the wall box punch-out holes, securing them with cable clamps to provide strain relief.

NOTES:

- In order to fit in the wall box, the twisted pair cables and RJ-45 connectors should not have a boot installed.
- In a point-to-point application, one power supply can power both the transmitter and the receiver. (see [Power Supply Wiring](#) on page 10).

7. Trim back and insulate exposed cable shields with heat shrink to reduce the chance of short circuits.

To prevent short circuits, the outer foil shield can be cut back to the point where the cable exits the cable clamp.

8. Connect the cables to the rear of the unit (see [figure 5](#) on page 8 for connector details).
9. Connect front panel devices (see [Front Panel](#) on [page 7](#) and [Twisted Pair Cable Configurations](#) on [page 9](#)), connect the power supply, and test the transmitter and receiver system. Make any cabling adjustments before final installation, as the cables will be inaccessible afterwards.
10. Follow [Final Installation](#) on the next page.

Mud Ring Installation

1. Using the mud ring as a guide, mark the edges and cut out the material within the marked area.
2. Insert the mud ring into the opening, rotate and secure the locking arms with the supplied screws shown in figure 3.
3. Follow steps 6 through 9 of [Site Preparation and Wall Box Installation](#), and [Final Installation](#) on the next page.

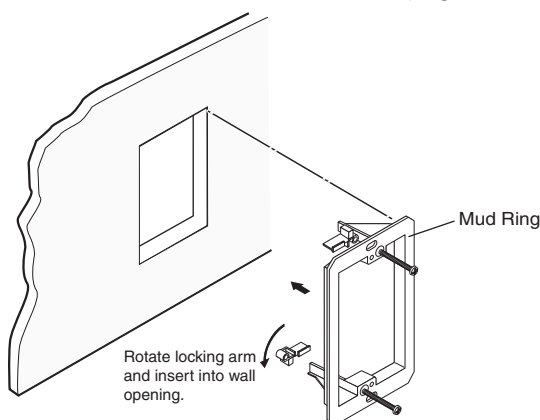


Figure 3. Installing the Mud Ring

Final Installation

After testing and making any adjustments, do the following:

1. At the power outlet, unplug the power supply.

NOTE: In a point-to-point application, one power supply can power both the transmitter and the receiver (see **Power Supply Wiring** on page 11).

2. Mount the receiver into the wall box or mud ring and attach the supplied decorator-style faceplate to the unit (see **figure 2** on page 4).
3. At the power outlet, reconnect the power supply.

DTP R HWP 4K 231 and 331 D Connections

Front Panel

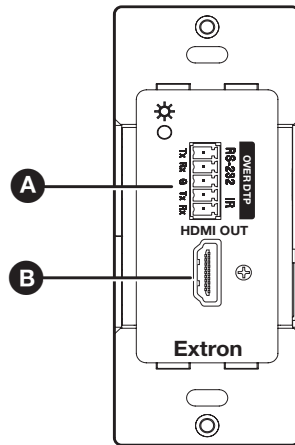


Figure 4. DTP R HWP 4K 231 and 331 D Front Panel Connectors

- A RS-232 and IR Over DTP** — Connect a serial RS-232 signal port, a modulated IR signal port, or both to this 3.5 mm, 5-pole captive screw connector for bidirectional RS-232 and IR communication (see [RS-232 and IR Over DTP connector wiring](#) on page 13 to wire the connector).
- B HDMI output connector** — Connect an HDMI cable between this connector and a sink device.

Rear Panel

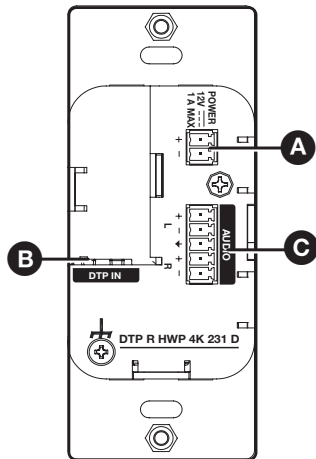


Figure 5. DTP R HWP 4K 231 and 331 D Rear Panel Connectors

- A DC power input connector** — Plug the external 12 VDC power supply (not included) into either this 2-pole connector (see **Power supply wiring** on page 11 to wire the power connector).
- B DTP Input connector** — Connect one end of the twisted pair cable to the RJ-45 connector on the receiver (see **Twisted Pair Cable Configurations** on page 9 to properly wire the RJ-45 connectors).

ATTENTION:

- Do not connect this input to a telecommunications or computer data network.
- Ne connectez pas ce connecteur à un réseau de données informatiques ou à un réseau de télécommunications.

Signal LED — Lights when the unit is receiving any valid signal on the DTP In connector.

Link LED — Link is established between the units on the DTP cable.

- C Audio output connector** — Connect an audio device, such as an audio amplifier or powered speakers, to this 5-pole, 3.5 mm captive screw connector that outputs the transmitted, unamplified, line level analog audio.

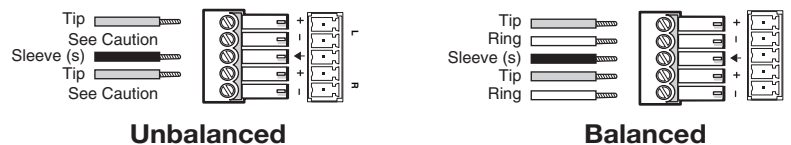


Figure 6. Audio Output Connector Wiring

CAUTION: For unbalanced audio, connect the sleeves to the ground contact. DO NOT connect the sleeves to the negative (-) contacts.

ATTENTION : Pour l'audio asymétrique, connectez les manchons au contact au sol. Ne PAS connecter les manchons aux contacts négatifs (-).

Connection Details

Detailed Pin Assignments, Wiring, and Sample Applications

HDMI connectors

Use LockIt Lacing Brackets to securely fasten HDMI cables to devices as follows (see figure 7).

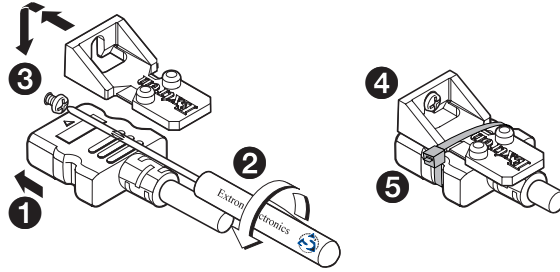


Figure 7. Installing the LockIt Lacing Bracket

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

Twisted Pair Cable Configurations

Use the following pin configurations for shielded twisted pair cables.

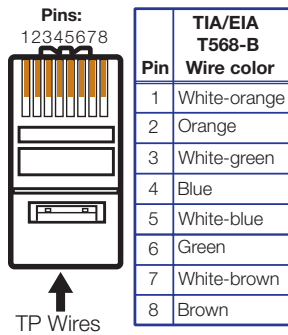


Figure 8. Twisted Pair Cable Configuration

Supported Cables

The receivers are compatible with shielded twisted pair cable (F/UTP, SF/UTP, and S/FTP).

ATTENTION:

- Do not use Extron UTP23SF-4 Enhanced Skew-Free AV UTP cable to link the device with DTP transmitters or receivers.
- N'utilisez pas le câble AV Skew-Free UTP version améliorée UTP23SF d'Extron pour relier le appareil avec les émetteurs ou les récepteurs DTP.

Cable Recommendations

Extron recommends using the following practices to achieve full transmission distances 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.
- Limit the use of more than two pass-through points, which may include patch points, punch down connectors, couplers, and power injectors. If these pass-through points are required, use shielded couplers and punch down connectors.

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

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

Power Supply Wiring

NOTES:

- In a point-to-point application, only one power supply is required.
- A power supply is included with each individually-packaged transmitter.

Figure 9 shows how to wire the connector.

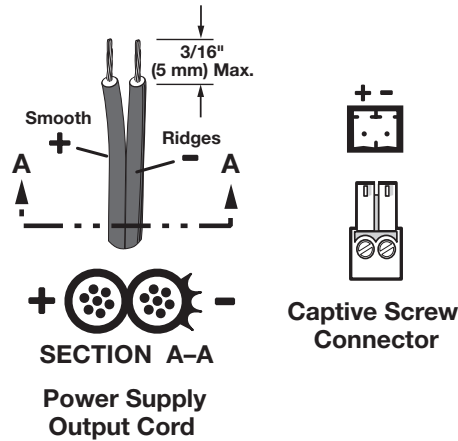


Figure 9. Power Connector Wiring

CAUTION: The wires must be kept separate while the power supply is plugged in. Remove power before wiring.

ATTENTION : 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:

- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities.
- Ces sources d'alimentation ne sont pas appropriées 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 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 9 on previous page) 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.

ATTENTION:

- To verify the polarity before connection, plug in the power supply with no load and check the output with a voltmeter.
- Pour vérifier la polarité avant la connexion, brancher l'alimentation hors charge et mesurer sa sortie avec un voltmètre.
- If not provided with a power supply, this product is intended to be supplied by a power source marked "Class 2" or "LPS" and rated at 12 VDC and a minimum of 1.0 A. 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.
- Si ce produit ne dispose pas de sa propre source d'alimentation électrique, il doit être alimenté par une source d'alimentation de classe 2 ou LPS et paramétré à 12 V et 1.0 A minimum. 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.
- The length of the exposed (stripped) copper wires is important.
The ideal length is 3/16 inch (5 mm). Longer bare wires can short together. Shorter wires are not as secure in the connectors and could be pulled out.
- La longueur des câbles exposés est primordiale lorsque l'on entreprend de les dénuder. **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.

NOTE: Do not tin the power supply leads before installing them in the direct insertion connector. Tinned wires are not as secure in the connectors and could be pulled out.

RS-232 and IR Over DTP Connector Wiring

RS-232 and IR Over DTP Connector

Wire the front panel IR control connector as shown in figure 10.

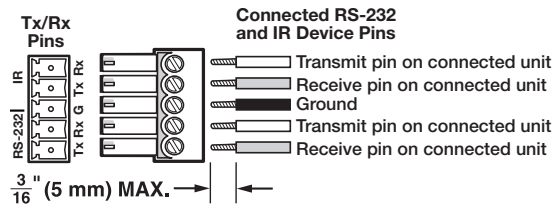


Figure 10. RS-232 and IR Over DTP Out Connector Wiring

ATTENTION:

- The length of the exposed (stripped) copper wires is important. **The ideal length is 3/16 inch (5 mm).** Longer bare wires can short together. Shorter wires are not as secure in the connectors and could be pulled out.
- La longueur des câbles exposés est primordiale lorsque l'on entreprend de les dénuder. **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.

NOTE: Do not tin the wires before installing them in the direct insertion connector. Tinned wires are not as secure in the connectors and could be pulled out.

Operation

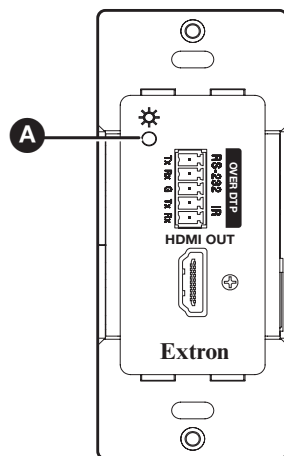


Figure 11. Receiver LED Indicator

Receiver LED

A Power LED —

Amber — The unit is receiving power, either locally or remotely (on DTP cable).

Green — The unit is receiving an active HDMI input transmitted on the DTP cable.

System Operation

After the receiver, the transmitter, and their connected devices are powered up, the system is fully operational. If any problems are encountered, ensure all cables are routed and connected properly.

Reference Information

This section includes decorator-style template dimensions for installation of the DTP R HWP 4K 231 and 331 D receivers.

Decorator-Style Template Dimensions

To create a template, use the dimensions shown on figure 12.

NOTES:

- The drawing is not full size or to scale. **DO NOT** scale up or print to use as a template.
- Full size templates are available at www.extron.com.

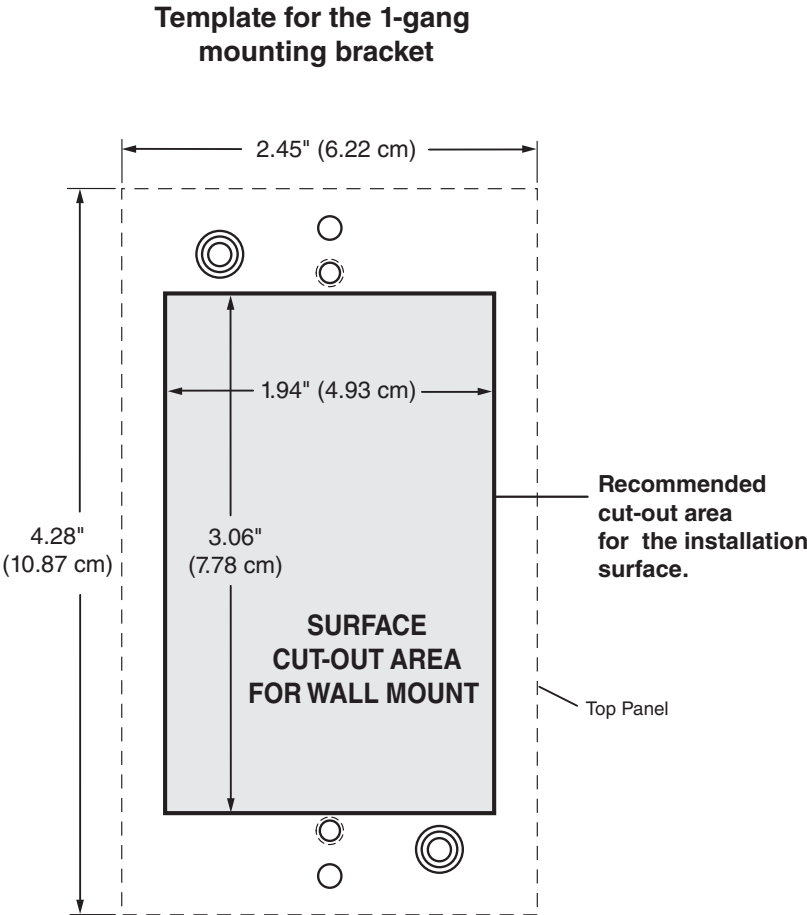


Figure 12. Decorator-Style Template Dimensions

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.

Extron Headquarters +1.800.633.9876 (Inside USA/Canada Only) Extron USA - West +1.714.491.1500 +1.714.491.1517 FAX	Extron USA - East +1.919.850.1000 +1.919.850.1001 FAX	Extron Europe +800.3987.6673 (Inside Europe Only) +31.33.453.4040 +31.33.453.4050 FAX	Extron Asia +65.6383.4400 +65.6383.4664 FAX	Extron Japan +81.3.3511.7655 +81.3.3511.7656 FAX	Extron China +86.21.3760.1568 +86.21.3760.1566 FAX	Extron Middle East +971.4.299.1800 +971.4.299.1880 FAX	Extron Australia +61.8.8113.6800 +61.8.8351.2511 FAX	Extron India 1800.3070.3777 (Inside India Only) +91.80.3055.3777 +91.80.3055.3737 FAX
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