Extron Electronics
INTERFACING, SWITCHING AND CONTROL

DTP R HWP 4K D Series • Setup Guide

This setup guide provides instructions for an experienced installer to set up and operate the Extron DTP R HWP 4K 231 D and DTP R HWP 4K 331 D extenders.

Extron DTP T UWP 232 D Transmitter

Extron DTP T HWP 232 D Transmitter

IN1608

XTP DTP 24 Cable 230'

IPCP PRO 550

Network

Ethernet

TLP 1000TV

HDMI

Projector

Extron DTP R HWP 4K 331 D Receiver
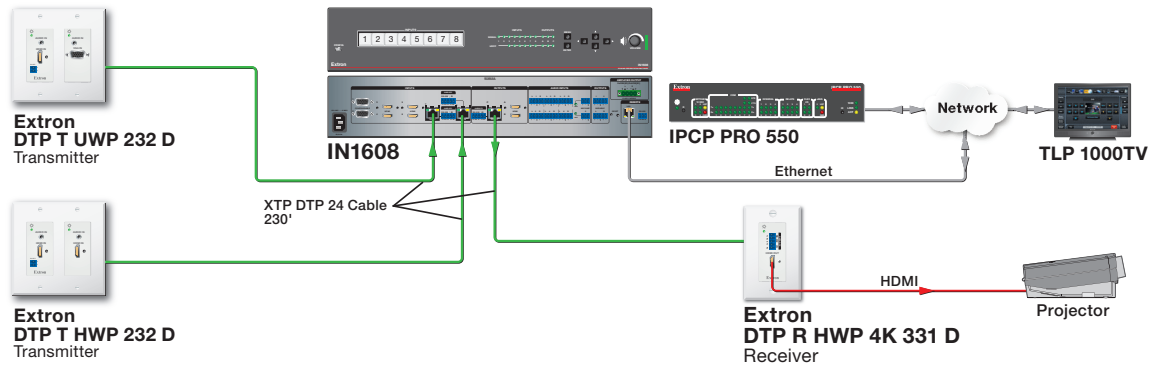
Installation

Step 1 — Disconnect Power

Disconnect all equipment power sources.

### Step 2 — Prepare the Mounting Surface

> **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.

> **NOTE:** Use the included mud ring (MR 200) or a UL approved 1-gang RACO wall box (not supplied) with a depth of at least 3.0 inches (7.6 cm). For more information, see the full product user guide at **www.extron.com**.

a. Place either the mud ring (see figure on page 1) or the wall box (see figure on page 2) against the installation surface and mark the opening guidelines.

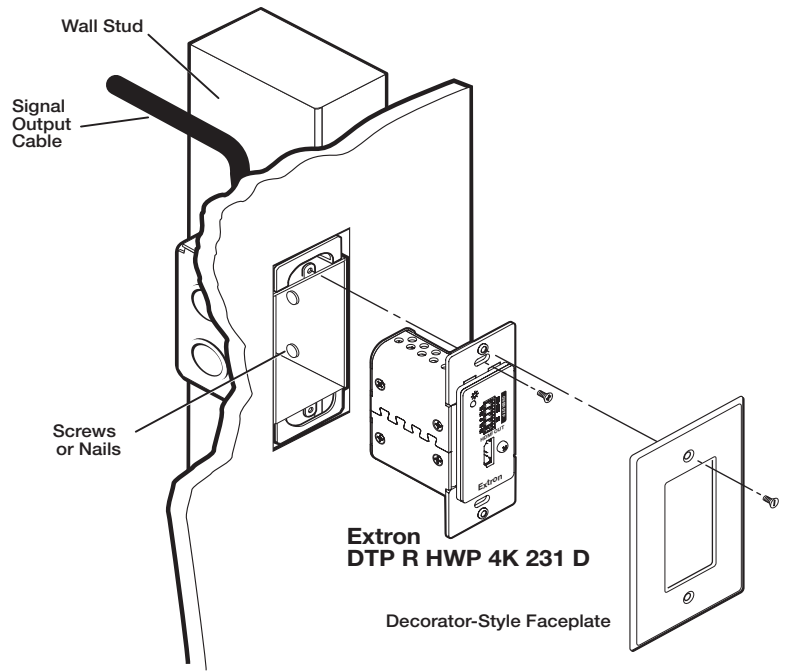> **TIP:** Use a level to mark the opening.

b. Cut out the material from the marked area.

c. Either:
   - Insert the mud ring into the opening, rotate the locking arms, and secure it with the supplied screws,

     or
   - Secure the wall box to the wall stud with 10-penny nails or #8 or #10 screws, leaving the front edge flush with the surface.

Mud Ring

Rotate locking arm and insert into wall opening.
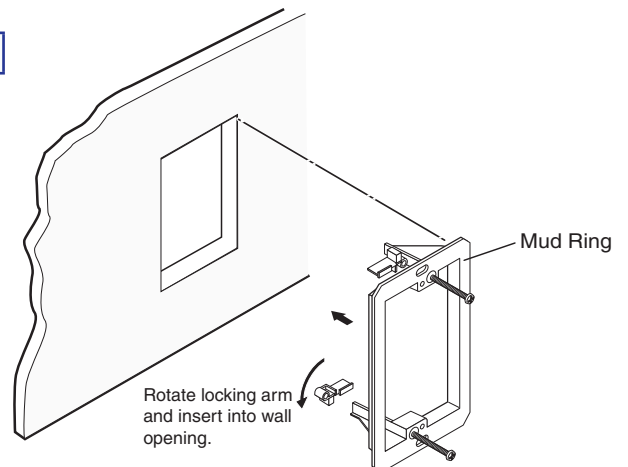
d. Run all required cables (see steps **3**, **4**, and **5**), thread the cables through the mud ring or walll box, and secure them with cable clamps.

TIP: In order to fit the unit in the junction box, do not install boots on TP cables and RJ-45 connectors.

Wall Stud

Signal Output Cable

Screws or Nails

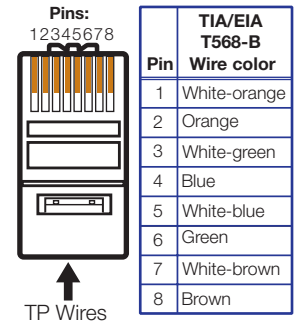**Extron DTP R HWP 4K 231 D**

Decorator-Style Faceplate

Step 3 — Run Cables Between Units

Connect the rear panel transmitter output to a rear panel receiver input using twisted pair cable. Wire the cable as shown in the diagram to the right.

For optimal performance, Extron highly recommends the following:

- RJ-45 termination with shielded twisted pair cable must comply with TIA/EIA-T568B wiring standard for all connections. For more information on TP cable wiring and termination, see the *DTP R HWP 4K 231 and 331 D User Guide* at **www.extron.com**.

- Use shielded twisted pair cable, 24 AWG solid conductor or better, with a minimum cable bandwidth of 400 MHz.

Pins:
12345678

TP Wires

Pin	TIA/EIA T568-B Wire color
1	White-orange
2	Orange
3	White-green
4	Blue
5	White-blue
6	Green
7	White-brown
8	Brown

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 ou le câble STP201 pour relier le appareil avec les émetteurs ou les récepteurs DTP.

NOTE: Extron XTP DTP 24 Shielded twisted pair cable is strongly recommended for optimal performance.

- Use shielded RJ-45 plugs to terminate the cable.

- Limit the use of RJ-45 patches. Overall transmission distance capabilities vary depending on the number of patches used. If possible, limit the number of patches to two total.

- If RJ-45 patches must be used in the system, shielded patches are recommended.

Step 4 — Connect Output Device

Front Panel

Ⓐ **DTP RS-232 and IR connectors** — To pass serial or infrared data or control signals, such as serial control of a projector, connect the host device to the transmitter and the peripheral device to the receiver via the RS-232 and IR captive screw connectors on both units.

Ⓑ **HDMI output connector** — Connect an HDMI cable between this port and the input on a sink device.
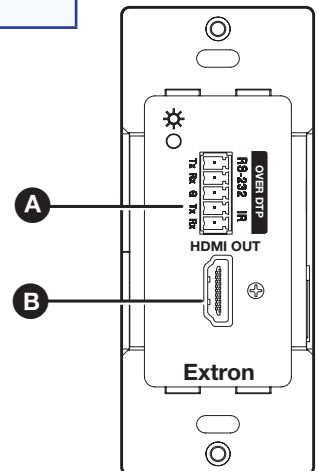
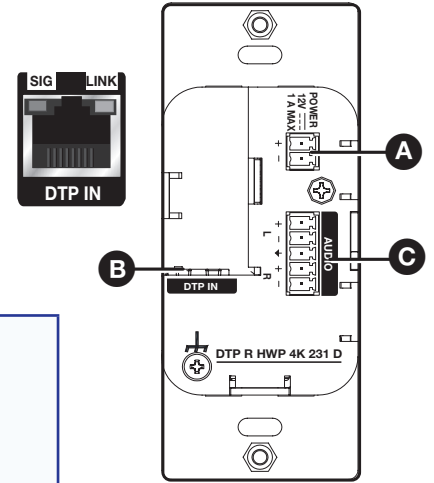**DTP R HWP 4K 231 D and DTP R HWP 4K 331 D Front Panel**

Rear Panel

A **DC power input connector —** Wire and plug the included external 12 VDC power supply into either this 2-pole connector or the power input connector on the transmitter (see the *DTP R HWP 4K 231 and 331 D User Guide* at **www.extron.com** for wiring information).

B **DTP IN connector** — Connect the opposite end of the twisted pair cable from the transmitter output connector to this RJ-45 connector.

> **ATTENTION:**
> - Do not connect these outputs to a telecommunications or computer data network.
> - Ne connectez pas ces appareils à des données informatiques ou à un réseau de télécommunications.

> **NOTES:**
> - The DTP R HWP 4K 231 D models can receive video, control, and audio (if applicable) signals up to 230 feet (70 meters).
> - The DTP R HWP 4K 331 D models can receive video, control, and audio (if applicable) signals up to 330 feet (100 meters).

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 a balanced or unbalanced stereo or mono audio device to the receiver via the Audio captive screw connector. See the drawing below.

DTP R HWP 4K 231 D and DTP R HWP 4K 331 D Rear Panel

Tip
See Caution
Sleeve (s)
Tip
See Caution

Unbalanced

Tip
Ring
Sleeve (s)
Tip
Ring
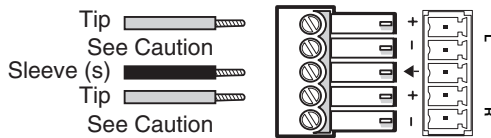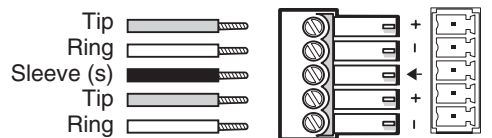
Balanced

> **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 (–).

Step 5 — Power the Units

The units can be powered one of two ways:

- Locally with the included power supply. A compatible transmitter can then be powered remotely through the DTP line.
- Remotely via the DTP line by a locally powered DTP transmitter.

> **NOTE:** See the *DTP R HWP 4K 231 and 331 D User Guide* at **www.extron.com** for wiring information.

Step 6 — Final Installation

a. Make all connections, power the units, and test the system for satisfactory operation.

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

c. Mount the receiver into the wall box, and attach the supplied decorator-style faceplate to the unit.

d. At the power outlet, reconnect the power supply to power up both units.

Operation

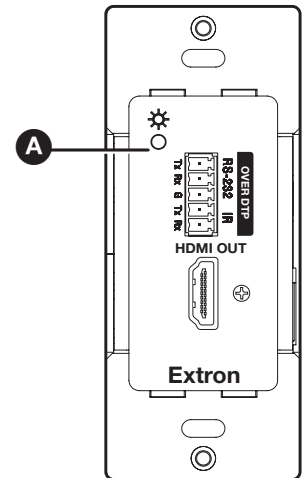After all devices are powered up, the system is fully operational.

Receiver LED

Ⓐ Power LED —

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

Green — The unit is powered on and is receiving an active HDMI signal, transmitted on the DTP cable.

If any problems are encountered, verify that the cables are routed and connected properly. If your problems persist, call the **Extron S3 Sales and Technical Support Hotline** that is closest to you, at the number shown below.

DTP R HWP 4K 231 D
and DTP R HWP 4K 331 D
Front Panel