

# DTP HDMI 4K 230

## HDMI TWISTED PAIR EXTENDER

**DTP**  
SYSTEMS

**4K UHD**

- ▶ Transmits HDMI plus control and analog audio up to 230 feet (70 meters) over a shielded CATx cable
- ▶ Supports computer and video resolutions up to 4K, including 1080p/60 Deep Color
- ▶ Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- ▶ Bidirectional RS-232 and IR pass-through for AV device control
- ▶ Accepts additional analog stereo audio signals
- ▶ 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
- ▶ HDCP compliant
- ▶ Supports EDID and HDCP transmission
- ▶ Remote power capability
- ▶ UL 2043 plenum rated receiver
- ▶ Compatible with all DTP™ 230 Series models and DTP-enabled products
- ▶ 1" (2.5 cm) high, quarter rack width metal enclosures
- ▶ Highly reliable, energy-efficient external universal power supply included with Tx models



DTP HDMI 4K 230 Tx

DTP HDMI 4K 230 Rx

The Extron DTP HDMI 4K 230 extender sends HDMI, analog audio, and bidirectional control signals up to 230 feet (70 meters) over a shielded CATx cable. The HDCP-compliant extender set features a compact enclosure that enables discreet installation in a wide variety of applications.



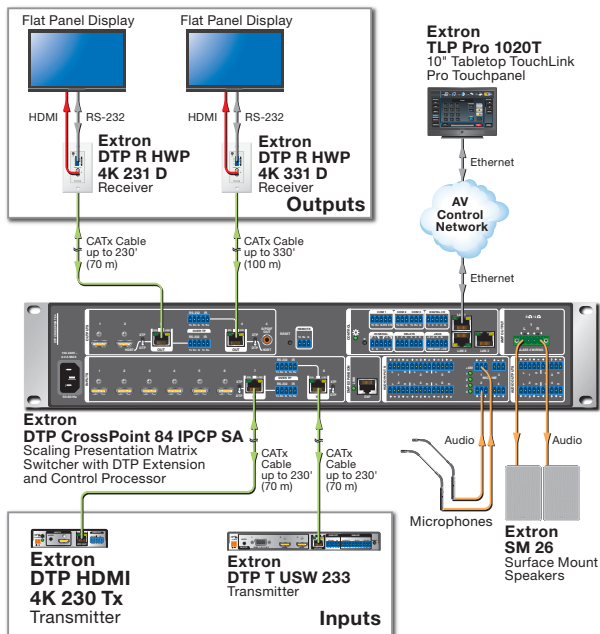
**Extron® Electronics**  
INTERFACING, SWITCHING AND CONTROL

## DESCRIPTION

The Extron **DTP HDMI 4K 230** is a transmitter and receiver set for sending HDMI, audio, and bidirectional RS-232 and IR signals up to 230 feet (70 meters) over a shielded CATx cable to Extron DTP™-enabled products. It provides an economical and effective means for extending HDMI with embedded multi-channel audio from HDMI-equipped devices. The DTP HDMI 4K 230 accepts analog stereo audio signals for simultaneous transmission over the same shielded twisted pair cable. It supports video signals at resolutions up to 4K, including 1080p/60 Deep Color. The DTP HDMI 4K 230 enables the reliable transmission of HDMI signals, supporting Deep Color up to 12-bit, CEC pass-through, and embedded HD lossless audio formats. In addition, DDC communication of EDID and HDCP is continuously maintained between a source and display, ensuring direct compatibility and optimal signal transmission between devices.

For installation flexibility, the DTP HDMI 4K 230 transmitter or receiver can be remotely powered over the shielded twisted pair cable by a DTP-enabled product. The twisted pair extender also supports simultaneous transmission of bidirectional RS-232 and IR signals from a control system for AV device control. The DTP HDMI 4K 230 can be integrated with an Extron DTP CrossPoint® 84 Presentation Matrix Switcher, or other DTP-enabled products to support inputs, plus displays and other output devices at remote locations.

## APPLICATION DIAGRAM



## SPECIFICATIONS

### TRUE 4K SPECIFICATION

| Max 4K Capabilities   |                                |                         |
|---|--------------------------------|-------------------------|
| Resolution and Refresh Rate   | Chroma Sampling                | Max Bit Depth per Color |
| 4096 x 2160 at 30 Hz<br>3840 x 2160 at 30 Hz  | 4:4:4                          | 8 bit                   |
| 4096 x 2160 at 60 Hz<br>3840 x 2160 at 60 Hz  | 4:2:0                          |                         |
| Frame rate <sup>1</sup>   | 24, 25, 30, 50, or 60 fps      |                         |
| Chroma sampling <sup>1</sup>  | 4:4:4, 4:2:2, or 4:2:0         |                         |
| Color bit depth <sup>1</sup>  | 8 bits per color               |                         |
| Signal type   | HDMI 1.4, HDCP 2.3             |                         |
| Max. video data rate  | 10.2 Gbps (3.4 Gbps per color) |                         |
| <b>NOTE:</b> <sup>1</sup> Subject to the maximum data rate limit. Use our calculator ( <a href="http://www.extron.com/product/videotools.aspx">http://www.extron.com/product/videotools.aspx</a> ) to determine video parameters supported by this data rate. |                                |                         |

### VIDEO INPUT – TRANSMITTER

**Connectors** 1 female HDMI type A

### INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

#### Signal transmission distance

|                         |   |
|-------------------------|---|
| 1080p @ 60 Hz           | Up to 230' (70 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable |
| 2560x1600 @ 60 Hz       | Up to 130' (40 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable |
| 4K/UHD @ 30Hz and 60 Hz | Up to 130' (40 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable |

**Cable requirements** Solid conductor, 24 AWG or better

**Cable recommendations** 400 MHz bandwidth, STP (shielded twisted pair)

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

### VIDEO OUTPUT – RECEIVER

**Connectors** 1 female HDMI type A

### AUDIO INPUT

**Number/signal type** 1 PC level stereo, unbalanced

**NOTE:** Analog audio is not embedded onto the digital video signal. Embedded digital audio is not de-embedded from the digital video signal.

### AUDIO OUTPUT

**Number/signal type** 1 stereo (2 channel), balanced/unbalanced

### GENERAL

**Power supply** External  
Input: 100-240 VAC, 50-60 Hz  
Output: 12 VDC, 1 A, 12 watts

| Model              | Version Description       | Part number |
|--------------------|---------------------------|-------------|
| DTP HDMI 4K 230 Tx | HDMI Tx - 230 feet (70 m) | 60-1271-12  |
| DTP HDMI 4K 230 Rx | HDMI Rx - 230 feet (70 m) | 60-1271-13  |

### Decorator-Style

| Model                | Version Description                         | Part number |
|----------------------|---|-------------|
| DTP HDMI 4K 230 D Tx | Decorator-Style Tx, Black - 230 feet (70 m) | 60-1441-12  |
| DTP HDMI 4K 230 D Tx | Decorator-Style Tx, White - 230 feet (70 m) | 60-1441-13  |
| DTP HDMI 4K 230 D Rx | Decorator-Style Rx, Black - 230 feet (70 m) | 60-1441-22  |
| DTP HDMI 4K 230 D Rx | Decorator-Style Rx, White - 230 feet (70 m) | 60-1441-23  |

For complete specifications, please go to [www.extron.com](http://www.extron.com)  
Specifications are subject to change without notice.

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