

# DTP HDMI 230

## HDMI TWISTED PAIR EXTENDER

- ▶ Transmits HDMI plus control and analog audio over a single CATx cable
- ▶ Extends 1080p/60 Deep Color and 1920x1200 signals up to 230 feet (70 meters)
- ▶ Compatible with CAT 5e, CAT 6 and CAT 7 twisted pair cable
- ▶ Bidirectional RS-232 and IR control pass-through
- ▶ Accepts additional analog stereo audio signals
- ▶ Supported HDMI specification features include data rates up to 6.75 Gbps, Deep Color up to 12-bit, 3D, HD lossless audio formats, and CEC
- ▶ HDCP compliant
- ▶ Supports EDID and HDCP transmission
- ▶ Remote powering of transmitter or receiver
- ▶ LED indicator for signal presence and power
- ▶ RJ-45 signal and link LED indicators for DTP port
- ▶ 1" (2.5 cm) high, quarter rack width metal enclosures
- ▶ Energy-efficient external universal power supply included with Tx models



DTP HDMI 230 Tx

DTP HDMI 230 Rx

The Extron DTP HDMI 230 extender sends HDMI, analog audio, and bidirectional control signals up to 230 feet (70 meters) over a single CATx cable. This HDCP-compliant extender set delivers superior image quality by maintaining the digital signal path of HDTV and high resolution computer-video throughout the system.



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

## DESCRIPTION

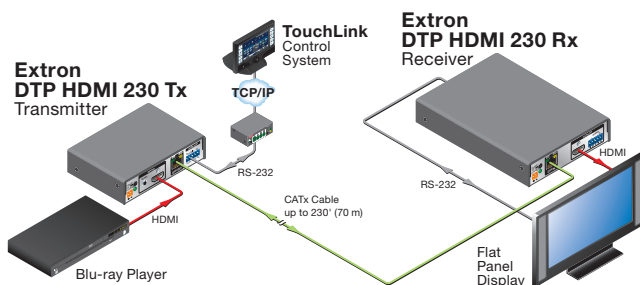
The Extron **DTP HDMI 230** is a transmitter and receiver set for transmission of HDMI, audio, and bidirectional RS-232 and IR signals over a single CATx cable. It provides an economical and effective means for extending HDMI with embedded multi-channel audio from HDMI-equipped devices. In addition, the DTP HDMI 230 accepts separate analog stereo audio signals and digitizes them for simultaneous transmission over the same single twisted pair cable. It is capable of sending 1080p/60 Deep Color and 1920x1200 signals up to 230 feet (70 meters). The DTP HDMI 230 enables the reliable, long distance transmission of HDMI signals, supporting Deep Color up to 12-bit, CEC, 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.

The DTP HDMI 230 can be used as a point-to-point solution or integrated within HDMI switching and distribution environments to extend inputs or outputs to remote locations. The twisted pair extender supports simultaneous transmission of bidirectional RS-232 and IR signals from a control system, providing remote control to source equipment or remote displays. Also, either device can be remotely powered over the twisted pair cable, allowing both devices to share one external power supply.

## KEY FEATURES

- ▶ Transmits HDMI plus control and analog audio over a single CATx cable
- ▶ Extends 1080p/60 Deep Color and 1920x1200 signals up to 230 feet (70 meters)
- ▶ Compatible with CAT 5e, CAT 6, and CAT 7 twisted pair cable
- ▶ Extron strongly recommends using shielded twisted pair cabling for optimal performance
- ▶ Accepts additional analog stereo audio signals
- ▶ Supported HDMI specification features include data rates up to 6.75 Gbps, Deep Color up to 12-bit, 3D, HD lossless audio formats, and CEC
- ▶ Remote powering of transmitter or receiver

## APPLICATION DIAGRAM



## SPECIFICATIONS

**NOTE:** \*Appropriate HDMI to DVI-D cables or adapters are required for DVI signal input/output.

### VIDEO

Maximum data rate	6.75 Gbps (2.25 Gbps per color)
Resolution range	Up to 1920x1200 or 1080p @ 60 Hz; 8, 10, or 12 bit color depth

### VIDEO INPUT – TRANSMITTER

Number/signal type	1 single link HDMI (or DVI-D*)
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### INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Connectors	1 female RJ-45 per unit
Signal transmission distance	Up to 200' (60 m) using CAT 5e/6/7 UTP or STP cable (24 AWG or better) Up to 230' (70 m) using CAT 6a UTP or STP cable (24 AWG or better)

### VIDEO OUTPUT – RECEIVER

Number/signal type	1 single link HDMI (or DVI-D*)
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### AUDIO

Gain	Unbalanced output: 0 dB; balanced output +6 dB
Frequency response	20 Hz to 20 kHz, ±0.5 dB

### AUDIO INPUT

Number/signal type	1 PC level stereo, unbalanced
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### AUDIO OUTPUT

Number/signal type	1 stereo (2 channel), balanced/unbalanced
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### CONTROL/REMOTE

External device (pass-through, unidirectional or bidirectional)

Serial control port input/output

Transmitter	RS-232 via (1) 3.5 mm, 5 pole captive screw connector for RS-232 control (±5 V) (connector is shared with IR control port)
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Baud rates	Up to 115200 baud
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IR control port	(1) 3.5 mm, captive screw connector, 5 pole (connector is shared with RS-232 control port) TTL level (0 to 5 V) modulated infrared control from 30 kHz up to 60 kHz
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### GENERAL

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts
Power consumption	11.0 watts, 12 VDC, total, for both transmitter and receiver

Enclosure type	Metal
Enclosure dimensions	Transmitter: 1.0" H x 4.3" W x 3.0" D (quarter rack wide) (2.5 cm H x 10.9 cm W x 7.6 cm D) (Depth excludes connectors.) Receiver: 1.0" H x 4.3" W x 6.0" D (quarter rack wide) (2.5 cm H x 10.9 cm W x 15.2 cm D) (Depth excludes connectors.)

Model	Version Description	Part number
DTP HDMI 230 Tx	HDMI Transmitter	60-1271-12
DTP HDMI 230 Rx	HDMI Receiver	60-1271-13

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

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