

DTP DP 4K 230

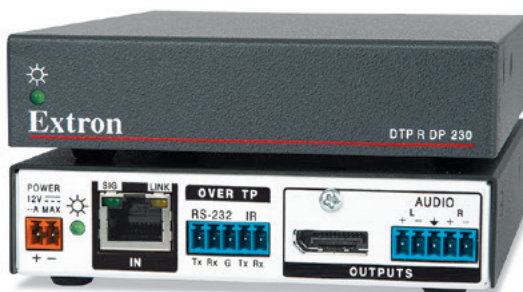
DISPLAYPORT TWISTED PAIR EXTENDER

DTP
SYSTEMS

4K UHD



DTP T DP 4K 230



DTP R DP 4K 230

- ▶ Transmits DisplayPort 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
- ▶ Output supports Type 2 dual-mode DisplayPort for interoperability with 4K-capable devices – DTP R DP 4K 230
- ▶ Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- ▶ DTP™ output is compatible with HDBaseT-enabled devices – DTP T DP 4K 230
- ▶ Accepts additional analog stereo audio signals
- ▶ Bidirectional RS-232 and IR pass-through for AV device control
- ▶ Remote power capability
- ▶ HDCP compliant
- ▶ Supports EDID and HDCP transmission
- ▶ Supports DisplayPort data rates up to 10.8 Gbps
- ▶ 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

The Extron DTP DP 4K 230 extender sends DisplayPort, 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.



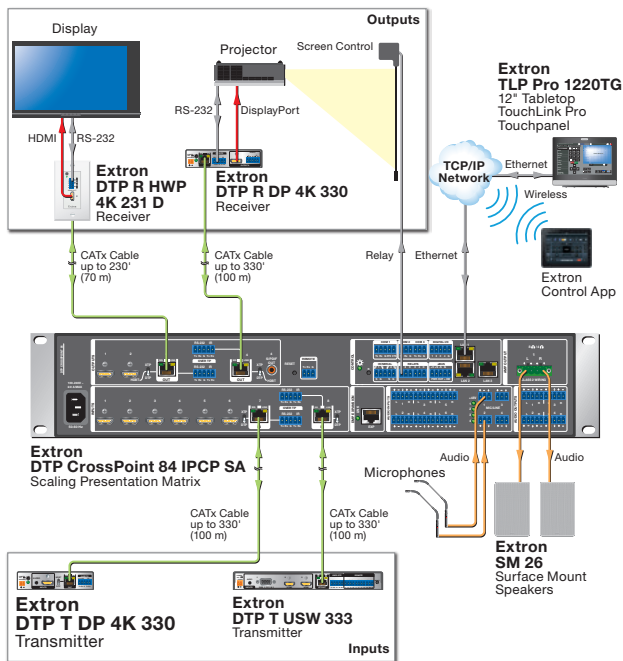
Extron Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron **DTP DP 4K 230** is a transmitter and receiver set for sending DisplayPort, 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 of incorporating higher resolution DisplayPort signals with embedded audio into DTP Systems. The DTP DP 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 2560x1600 and 1080p/60 Deep Color. 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 DP 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 receiver supports Type 2 dual-mode DisplayPort for HDMI, 4K capable devices. The transmitter offers an HDBaseT output mode for sending digital video and embedded audio, plus bidirectional control signals to any HDBaseT-enabled display. The DTP DP 4K 230 can be integrated with an Extron DTP CrossPoint® 84 Presentation Matrix Switcher, or other DTP-enabled products to support sources, plus displays and other output devices at remote locations.

APPLICATION DIAGRAM



SPECIFICATIONS

TRUE 4K SPECIFICATION

Max 4K Capabilities		
Resolution and Frame Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 30 Hz 3840 x 2160 at 30 Hz	4:4:4	8 bit

Frame Rate ¹	23, 25, 30 fps
Chroma Sampling ¹	4:4:4 or 4:2:2
Color Bit Depth ¹	8 bits per color
Signal Type	DisplayPort, HDCP
Max. video data rate	10.8 Gbps (2.7 Gbps per lane)

NOTE: ¹Subject to the maximum data rate limit. Use our calculator (<http://www.extron.com/product/videotools.aspx>) to determine video parameters supported by this data rate.

NOTE: This product consists of a transmitter (DTP T DP 4K 230) and a receiver (DTP R DP 4K 230), sold separately, with a twisted pair cable linking the transmitter and receiver.

INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Connector	1 female RJ-45 per unit
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.

NOTE: Input and output mode signaling:

DTP: HDMI with embedded audio, analog audio, RS-232 and IR, and remote power

HDBaseT: HDMI with embedded audio plus RS-232 and IR

AUDIO INPUT

Signal type

Analog audio (over DTP) Stereo (2 channel), balanced/unbalanced

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

COMMUNICATION — 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)

Serial control port output/input

Receiver RS-232 via a 3.5 mm, 3 pole captive screw connector

GENERAL

Power supply

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

Model	Version Description	Part number
DTP T DP 4K 230	DisplayPort Tx - 230 feet (70 m)	60-1076-12
DTP R DP 4K 230	DisplayPort Rx - 230 feet (70 m)	60-1076-13

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

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