

DTP2 R 211

HDMI 4K/60 DTP2 RECEIVER WITH AUDIO DE-EMBEDDING

DTP
SYSTEMS

18 Gbps
4K/60 4:4:4



The Extron DTP2 R 211 is a long distance, digital twisted pair receiver that works with Extron DTP®-enabled products to send HDMI, audio, and bidirectional RS-232 and IR signals up to 330 feet (100 meters) over a shielded CATx cable. It supports video signals at resolutions up to 4K/60 at 4:4:4 chroma sampling, and complies with HDCP 2.2. The compact enclosure size and remote power capability make the DTP2 R 211 ideal for discreet placement behind displays, in equipment racks, or wherever needed to meet application requirements.

- ▶ Receives HDMI plus control and analog audio up to 330 feet (100 meters) over a shielded CATx cable
- ▶ Supports computer and video resolutions up to 4K/60 @ 4:4:4
- ▶ Stereo audio de-embedding
- ▶ Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats
- ▶ Support for HDR – High Dynamic Range video
- ▶ HDCP 2.2 compliant
- ▶ Remote power capability
- ▶ Extron XTP DTP-24 shielded twisted pair cable is strongly recommended for optimal performance
- ▶ Accepts additional analog stereo audio signals
- ▶ Bidirectional RS-232 and IR pass-through for AV device control
- ▶ Supports multiple embedded audio formats
- ▶ Supports EDID and HDCP transmission
- ▶ Compatible with all DTP transmitters and DTP-enabled products
- ▶ 1" (2.5 cm) high, quarter rack width metal enclosure



Extron Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

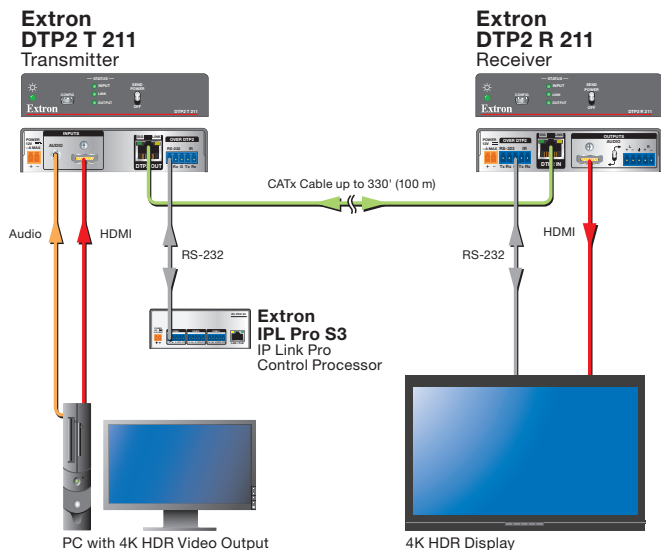
The Extron **DTP2 R 211** is a long distance, digital twisted pair receiver that works with Extron DTP®-enabled products to send HDMI, audio, and bidirectional RS-232 and IR signals up to 330 feet (100 meters) over a shielded CATx cable. It supports video signals at resolutions up to 4K/60 at 4:4:4 chroma sampling, and complies with HDCP 2.2. In addition, this DTP2 receiver features a stereo output that is selectable between de-embedded or pass-through analog audio. The compact enclosure size and remote power capability make the DTP2 R 211 ideal for discreet placement behind displays, in equipment racks, or wherever needed to meet application requirements.

The HDCP-compliant DTP2 R 211 enables reliable, long distance transmission of HDMI signals at data rates up to 18 Gbps with support for HDR, 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 compatibility and optimal signal transmission between devices.

The DTP2 R 211 also accepts stereo analog audio from a DTP-enabled matrix switcher, switcher, or signal processor. The stereo output is selectable for de-embedded or pass-through analog audio, and HDMI audio is made available as balanced or unbalanced analog stereo. Audio signals are sent over the same shielded twisted pair cable as the video and control signals, eliminating the need for a separate cable run to support analog audio at the receiver.

Other integrator-friendly features include simultaneous transmission of bidirectional RS-232 and IR signals from a control system for AV device control and remote power capability.

APPLICATION DIAGRAM



SPECIFICATIONS

4K UHD SPECIFICATION

Max 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
3840 x 2160 at 60 Hz	4:4:4	8 bit
4096 x 2160 at 30 Hz		12 bit
3840 x 2160 at 30 Hz		
4096 x 2160 at 60 Hz	4:2:0	12 bit
3840 x 2160 at 60 Hz		
Frame rate ¹	24, 25, 30, 50, or 60 fps	
Chroma sampling ¹	4:4:4, 4:2:2, or 4:2:0	
Color bit depth ¹	8, 10, or 12 bits per color	
Signal type	HDMI 1.4, 2.0b; HDCP 2.2, 1.4	
Max. video data rate	18 Gbps (6 Gbps per color)	
NOTE: ¹ Subject to the maximum data rate limit. Use our calculator at www.extron.com/4KdataRate to determine video parameters supported by this data rate.		

INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Connectors	1 female RJ-45 per unit
Signal transmission distance	Up to 330' (100 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 1 Digital Embedded Audio on HDMI
--------------------	---

AUDIO OUTPUT

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

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)
-------------	--

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
--	--

GENERAL

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts
--------------	---

Remote power capability

	Supports one endpoint (DTP2) NOTE: DTP2 devices can only send power to other DTP2 devices. DO NOT send power to DTP devices or they will be damaged.
--	--

Model	Version Description	Part number
DTP2 R 211	HDMI 4K/60 Rx - 330 feet (100 m)	60-1631-53

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

WORLDWIDE SALES OFFICES

Anaheim • Raleigh • Silicon Valley • Dallas • New York • Washington, DC • Toronto • Mexico City • Paris • London
Frankfurt • Madrid • Stockholm • Amersfoort • Moscow • Dubai • Johannesburg • Tel Aviv • Sydney • Melbourne
Bangalore • Mumbai • New Delhi • Singapore • Seoul • Shanghai • Beijing • Hong Kong • Tokyo

www.extron.com