

## Specifications

### XTP R HWP 201 4K

#### TRUE 4K specification

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
4096 x 2160 at 30 Hz	4:4:4	8 bit
3840 x 2160 at 30 Hz		
4096 x 2160 at 60 Hz	4:2:0	
3840 x 2160 at 60 Hz		

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 ..... DisplayPort 1.1, DVI 1.0, HDMI 2.0, HDCP 2.2  
 Max. video data rate ..... 10.2 Gbps (3.4 Gbps per color)

**NOTE:** <sup>1</sup>Subject to the maximum data rate limit. Use our calculator at [www.extron.com/4Kdata](http://www.extron.com/4Kdata) to determine video parameters supported by this data rate.

**NOTE:** The XTP R HWP 201 4K receiver can be used with other XTP products, with twisted pair cables connecting the units.

#### Video

Gain ..... Unity  
 Resolution range ..... Up to 2560x1600 @ 60 Hz\* or  
 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz,  
 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling  
 \* reduced blanking  
 Signal type ..... Single-link HDMI (or DVI-D or DisplayPort)  
 Maximum data rate ..... 10.2 Gbps (3.4 Gbps per color)  
 Maximum pixel clock ..... 300 MHz (600 MHz for 4K rates with 4:2:0 chroma subsampling)  
 Formats ..... RGB and YCbCr digital video  
 Standards ..... DisplayPort 1.1, DVI 1.0, HDMI 2.0; HDCP 2.2

#### Shielded twisted pair interconnection

Connectors ..... 1 female RJ-45 per unit  
 Termination standards ..... TIA/EIA T568B  
 Signal transmission distance ..... 330' (100 m) using shielded twisted pair or XTP DTP 24 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.

# Specifications • XTP R HWP 201 4K (Continued)

## Video output

Number/signal type.....	1 single link HDMI (or DVI-D)
Connectors.....	1 female HDMI type A

## Audio

Gain.....	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response.....	20 Hz to 20 kHz, $\pm 0.05$ dB
THD + Noise.....	<0.1% @ 20 Hz - 20 kHz at nominal level
S/N.....	>90 dB, at maximum balanced output (unweighted)
Crosstalk.....	$\leq -80$ dB @ 1 kHz, fully loaded
Stereo channel separation.....	>80 dB @ 1 kHz
Sampling rates.....	32 kHz, 44.1 kHz, 48 kHz, 96 kHz, 192 kHz
Bit depths.....	16, 20, 24 bit

## Audio output

Number/signal type.....	1 analog stereo (2-channel), balanced/unbalanced 1 digital audio, embedded with HDMI output
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole 1 female HDMI type A (shared with video output)
Supported formats	
HDMI.....	LPCM up to 7.1/24-bit/192 kHz, Dolby® Atmos, Dolby TrueHD, Dolby Digital Plus™, Dolby Digital EX, Dolby Digital 5.1, Dolby Digital 2/0 Surround, Dolby Digital 2/0, DTS-HD Master Audio, DTS-HD, DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS Digital Surround 5.1, DTS 2 Channel
Analog.....	Analog stereo audio
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Maximum level (Hi-Z).....	>+12 dBV balanced; +6 dBV unbalanced
Gain error.....	$\pm 0.5$ dB channel to channel
Volume control range.....	-100 dB to 0 dB (control 0 to 100 in 1 dB steps)

**NOTE:** Attenuation = volume number minus 64. The default is 0 dB = volume number 64.

**NOTE:** 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV  $\approx$  2 dBu

## Communications – receiver

USB control ports.....	1 front panel female mini USB B
USB standards.....	USB 2.0, low speed
Program control.....	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™)

## Communications – external device (pass-through, unidirectional or bidirectional)

Serial control port input/output.....	1 set of proprietary signals on a female RJ-45 jack
Serial control port output/input.....	RS-232 (+5) via (1) 3.5 mm, 5-pole captive screw connector (uses 3 poles) (connector is shared with IR control port)
Baud rates.....	Up to 115200 baud
Protocol.....	Data bits = 5 - 8 Stop bits = 1 or 2 Parity = odd, even, none Flow control = XON, XOFF, none
Serial control pin configuration.....	1 = Tx, 2 = Rx, 3 = Gnd
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 56 kHz
IR control pin configuration.....	3 = Gnd, 4 = IR Tx, 5 = IR Rx
Ethernet pass-through port.....	1 female RJ-45 connector
Ethernet data rate.....	10/100Base-T, half/full duplex with autodetect

# Specifications • XTP R HWP 201 4K (Continued)

## General

Power supply .....	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts
Power consumption	
Device .....	TBD
Device and power supply .....	TBD

**NOTE:** Each XTP receiver can be powered either locally by an external power supply or remotely using an optional power injector or XTP CrossPoint matrix switcher.

Temperature/humidity .....	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +104 °F (0 to +40 °C) / 10% to 90%, noncondensing
Cooling .....	Convection, vents on sides and top
Thermal dissipation	
Device .....	TBD
Device and power supply .....	TBD
Mounting	
Furniture or wall mount .....	Wall or furniture mount in a decorator-style opening.
Enclosure type .....	Metal
Enclosure dimensions	
Faceplate .....	Two (2.6" H x 1.3" W x 0.9" D [6.6 cm H x 3.3 cm W x 2.3 cm D])
Device .....	2.8" H x 3.7" W x 1.9" D (7.2 cm H x 9.4 cm W x 4.9 cm D) (Depth excludes connectors. Fits some 2-gang boxes.)
Product weight .....	0.8 lbs (0.4 kg)
Vibration .....	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance.....	CE**, c-UL, UL, C-tick, FCC Class A**, ICES, VCCI UL rated for use in plenum airspaces, excluding the power supply. Complies with the appropriate requirements of RoHS and WEEE.

**NOTE:** \*\*CE and FCC testing is conducted with STP (shielded twisted pair) cable.

Warranty .....	3 years parts and labor
----------------	-------------------------

**NOTE:** All nominal levels are at ±10%.

**NOTE:** Specifications are subject to change without notice.

**NOTE:** Shipping weights and dimensions are available at [www.extron.com](http://www.extron.com).

4443-D4