

Specifications

XTP R HD 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 rate¹ 24, 25, 30, 50, or 60 fps
 Chroma sampling¹ 4:4:4, 4:2:2, or 4:2:0
 Color bit depth¹ 8 bits per color
 Signal type DisplayPort 1.1, DVI 1.0, HDMI 1.4, HDCP 2.2
 Max. video data rate 10.2 Gbps (3.4 Gbps per color)

NOTE: ¹Subject to the maximum data rate limit. Use our calculator at www.extron.com/4Kdata to determine video parameters supported by this data rate.

NOTE: The XTP R HD 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 1.4; 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.

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, ± 0.05 dB
THD + Noise.....	<0.1% @ 20 Hz - 20 kHz at nominal level
S/N.....	>90 dB, at maximum balanced output (unweighted)
Crosstalk.....	≤ -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 1 digital audio via S/PDIF output connector
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole 1 female HDMI type A (shared with video output) 1 female RCA jack (tip, ring)
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
S/PDIF.....	LPCM up to 7.1/24-bit/192 kHz, Dolby® Digital EX, Dolby Digital 5.1, Dolby Digital 2/0 Surround, Dolby Digital 2/0, DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS Digital Surround 5.1, DTS 2 Channel
Analog.....	Analog stereo audio
Impedance	
Analog.....	50 ohms unbalanced, 100 ohms balanced
Digital.....	75 ohms (for S/PDIF output)
Maximum level (Hi-Z).....	>+12 dBV balanced; +6 dBV unbalanced
Gain error.....	± 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
Relay number/type.....	2 normally open relays
Relay control connectors	(1) 3.5 mm captive screw connectors, 4 pole
Relay control contact rating.....	24 V, 1 A

General

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts
Power consumption	
Device	9.1 watts, 12 VDC
Device and power supply	11.3 watts, 12 VDC

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 +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, vents on sides and top
Thermal dissipation	
Device	30.0 BTU/hr
Device and power supply	37.6 BTU/hr
Mounting	
Rack mount.....	Yes, with optional 1U high rack shelf
Furniture mount	Yes, with optional under-desk mounting kit
Enclosure type	Metal
Enclosure dimensions	1.0" H x 8.68" W x 6.0" D (half rack wide) (2.5 cm H x 22.1 cm W x 15.2 cm D) (Depth excludes connectors.)
Product weight	1.6 lbs (0.7 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
EMI/EMC.....	CE**, C-tick, FCC Class A**, ICES, VCCI
Environmental.....	Complies with the appropriate requirements of RoHS, WEEE.

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

Warranty	3 years parts and labor
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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.

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