

Extron

Specifications

DTP3 T 212 D

TRUE 4K specifications

Max. 4K and 5K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
5120 x 1440 at 60 Hz	4:4:4	8 bit
5120 x 2880 at 30 Hz		
4096 x 2160 at 60 Hz		
3840 x 2160 at 60 Hz		
4096 x 2160 at 30 Hz		
3840 x 2160 at 30 Hz	4:2:0	12 bit
4096 x 2160 at 60 Hz		
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, 10, or 12 bits per color
 Signal type HDMI 2.0b, DisplayPort 1.2 (Alt Mode), HDCP 2.3
 Max. video data rate 18 Gbps (6 Gbps per color)

NOTE: ¹Subject to the maximum data rate limit. Use our calculator at www.extron.com/8Kdata rate to determine video parameters supported by this data rate.

Video

Maximum data rate 18 Gbps (6 Gbps per color)
 Maximum pixel clock 600 MHz
 Resolution range
 HDMI
 VESA 640x480 to 4096x2160
 SMPTE Up to 1080p @ 120 Hz or 4K @ 60 Hz (4:4:4 chroma sampling)
 Ultra Wide & 5K 2560x1080, 3440x1440, 3840x1080, 3840x1440, 3840x1600, 5120x1080* @ 60 Hz, 5120x1440* @ 60 Hz, 5120x2160 @ 30 Hz, 5120x2560* @ 30 Hz, 5120x2880* @ 30 Hz
 USB-C
 VESA 640x480 to 4096x2160
 SMPTE Up to 1080p @ 120 Hz or 4K @ 60 Hz (4:4:4 chroma sampling)
 Ultra Wide & 5K 2560x1080, 3440x1440 @ 30 Hz, 3840x1080, 3840x1440, 3840x1600 @ 30 Hz, 5120x1080* @ 30 Hz, 5120x1440* @ 30 Hz

NOTE: *Indicated rates not available via standard 256-byte EDID and may require custom video card configuration.

Horizontal Frequency Range 15 kHz to 270 kHz for resolutions up to 18 Gbps
 Vertical Frequency Range 24 Hz to 240 Hz for resolutions up to 18 Gbps
 Color bit depth 8, 10, or 12 bits — subject to the maximum data rate limit
 Formats RGB and YCbCr digital video
 HDR HDR10, HDR10+, Dolby Vision
 Standards DVI 1.0, HDMI 2.0b, DisplayPort 1.2 (Alt Mode), HDCP 1.x, HDCP 2.3

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NOTE: Extron strongly recommends compatibility testing while designing, and before installing, any HDR system. There are several HDR formats in use by source and display manufacturers. The level of HDR product support is governed by pixel clock, signal format, and signal communication between source and sink devices. Please contact an Extron Application Engineer for more information.

Video input

Number/signal types

HDMI input 1 HDMI (or Single link DVI-D, with appropriate DVI-HDMI adapters)
USB-C input 1 USB-C (DP Alt-Mode, 2 or 4 lanes supported)

Connectors

HDMI input 1 female HDMI type A
USB-C input 1 female USB type C

Video output

Number/signal type 1 DTP3 or HDBaseT, configurable
Connector 1 female RJ-45

Audio

Sampling rates 32 kHz, 44.1 kHz, 48 kHz, 96 kHz, 192 kHz
Bit depths 16, 20, 24 bit
Gain Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response 20 Hz to 20 kHz, ± 0.5 dB
THD + Noise 0.03% @ 20 Hz to 20 kHz at maximum output
S/N >90 dB, at maximum output (15 dBu), balanced (unweighted)
Stereo channel separation >80 dB @ 1 kHz to 20 kHz

Audio input

Number/signal type 1 analog, balanced/unbalanced
..... 1 digital embedded audio on HDMI
..... 1 digital embedded audio on USB type C

NOTE: Analog audio can be configured for embedding onto the digital video signal at the Transmitter. Embedded digital audio can be (configured) de-embedded from the digital video signal at the Receiver end.

Connectors (1) 3.5 mm stereo jack, 2 channel; tip (L), ring (R), sleeve (ground)
..... 1 female HDMI type A (shared with video input)
..... 1 female USB type C
Impedance >10k ohms, DC coupled
Nominal level -10 dBV (316 mVrms)
Maximum level +7 dBV (unbalanced)

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

Source formats 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

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Interconnection between transmitter and receiver

Connectors..... 1 female RJ-45 per unit

Termination standard TIA/EIA T568B

Signal Transmission Distance (using XTP DTP 24 cable)

1080p @ 60 Hz Up to 330' (100 m) using shielded twisted pair STP or XTP DTP 24 cable

4K/UHD @ 30 Hz Up to 330' (100 m) using shielded twisted pair STP or XTP DTP 24 cable

4K/UHD @ 60 Hz ⁽¹⁾..... Up to 150' (45 m) using shielded twisted pair STP or XTP DTP 24 cable
Using 1 coupler with 3' (0.9 m) to 9' (2.7 m) patch cable
Using 2 couplers with two 3' (0.9 m) (max) patch cables (each patch cable cannot exceed 3')

Using two punch downs with two 3' (0.9 m) to 9' (2.7 m) patch cables

4K/UHD @ 60 Hz ⁽²⁾..... Up to 175' (53 m) using shielded twisted pair STP cable or XTP DTP 24 cable with no couplers

Cable requirements Solid conductor, 24 AWG or better

Cable recommendations 400 MHz bandwidth, STP (shielded twisted pair)

Signal Transmission Distance (using XTP DTP 22 cable)

1080p @ 60 Hz Up to 330' (100 m) using XTP DTP 22 cable

4K/UHD @ 30 Hz Up to 330' (100 m) using XTP DTP 22 cable

4K/UHD @ 60 Hz ⁽¹⁾⁽²⁾ Up to 330' (100 m) using XTP DTP 22 cable
Using 1 coupler with 3' (0.9 m) to 16' (4.9 m) patch cable
Using 2 couplers with 4' (1.2 m) (max) patch cables (each patch cable cannot exceed 4')

Using two punch downs with 3' (0.9 m) to 8' (2.4 m) patch cables

Cable requirements Solid conductor, 22 AWG or better

Cable recommendations 500 MHz bandwidth, STP (shielded twisted pair)

NOTE: Extron XTP DTP 22 shielded twisted pair cable is strongly recommended for optimal performance.

⁽¹⁾ With coupler(s), ⁽²⁾ No couplers

Communications

Control/Remote — Transmitter

Serial control port 1 RS-232 (±5V), 3.5 mm, 3-pole captive screw connector

Baud rate and protocol 900 baud, 8 data bits, 1 stop bits, non-parity

Serial control pin

configuration 1 = Tx, 2 = Rx, 3 = GND

USB control port 1 front panel, female USB type C

USB standards USB 2.0, low speed

Program control Extron Simple Instruction Set (SIS™)

Extron Product Configuration Software (PCS)

Communications — External Device (pass-through, unidirectional or bidirectional)

Serial control pass-through

ports 1 RS-232, 3.5 mm, 3-pole captive screw connector

Baud rate 300 to 115200 baud

Protocol 8 or 7 data bits

1 or 2 stop bits

No parity (default), even or odd parity

Serial control pin

configuration 1 = Tx, 2 = Rx, 3 = GND

NOTE: Protocol is mirrored between the connected DTP3 endpoints and the "Over TP" port. Signals from a control device pass into each "Over TP" port, are embedded with the DTP signal, and sent to the individual DTP3 endpoints for control of remote sink or source devices.

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General

Power supply	External (included with Tx) Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts
Power consumption	
Device	6.4 watts
Device and power supply	7.2 watts
Remote power budget	18 watts

NOTE: The transmitter can be powered either locally by an external power supply or remotely by a receiver on the other end of the twisted pair cable.

Ambient 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, vent holes
Thermal dissipation	
Device	21.8 BTU/hr
Device and power supply	24.6 BTU/hr
Mounting	
Furniture or wall mount	Wall or furniture mount in a decorator-style opening
Enclosure type	Metal
Enclosure dimensions	
Faceplate	2.6" H* x 1.3 W x 0.25" D (66 mm H* x 33 mm W x 6 mm D)
Device	2.7" H* x 3.5" W x 2.0" D (68 mm H* x 89 mm W x 51 mm D)

NOTE: *Height is 4.2" (104 mm) including mounting tabs.

Product weight	0.55 lbs (0.25 kg)
Regulatory compliance	CE, c-UL, UL, C-tick, FCC Class A, ICES, VCCI Complies with the appropriate requirements of RoHS, WEEE
Product warranty	3 years parts and labor
Everlast power supply warranty	7 years parts and labor

NOTE: All nominal levels are at ±10%.
Specifications are subject to change without notice.

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