

Specifications

DTP2 T 212

TRUE 4K 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	
3840 x 2160 at 60 Hz		

Frame rate¹ DTP2 output 24, 25, 30, 50, 60, or 120 fps
 HDMI output 24, 25, 30, 50, 60, 120, 144, or 240 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; 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

NOTE: Extron strongly recommends compatibility testing while designing, and before installing, any 3D system. There are several unique 3D formats in use by source devices and display manufacturers. The level of 3D product support is governed by pixel clock, signal format, and communication between source and sink devices. Please contact an Extron Applications Engineer for more information.

Maximum data rate 18 Gbps (6 Gbps per color)

Maximum pixel clock 600 MHz

Resolution range Up to 2560x1600* @ 60 Hz or
 UHD (3840x2160 @ 60 Hz)
 with 4:4:4 chroma subsampling
 *reduced blanking

Color but depth 8, 10, 12 bits — subject to the maximum data rate limit

Formats RGB and YCbCr digital video

Standards DVI 1.0; HDMI 1.4, 2.0b; HDCP 1.4, 2.3; CEA-861-F

Video input

Number/signal type 2 single link HDMI (or DVI-D*)

Connectors 2 female HDMI type A

NOTE: *Appropriate HDMI to DVI-D cables or adapters are required for DVI signal input/output.

Video output

Connectors	1 local HDMI output, 1 female RJ-45 output
Horizontal frequency	24 kHz to 135 kHz for resolutions up to 18 Gbps
Vertical frequency	DTP2: 24 Hz to 120 Hz for resolutions up to 18 Gbps HDMI: 24 Hz to 240 Hz for resolutions up to 18 Gbps
Termination standard	TIA/EIA T568B
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.

Audio

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 PC level stereo, unbalanced
	2 Digital Embedded Audio on HDMI

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) (2) Female HDMI
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

Communications — switcher

Serial control port	1 RS-232, 3.5 mm, 3-pole captive screw connector, rear panel
Pin configuration	Pin 1 = Tx, Pin 2 = Rx, Pin 3 = GND
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Pin configuration	Pins 1 and 2 of captive screw connector shorted together enable auto-input switching.
USB control port	1 female mini USB, type B, front panel
USB standards	USB 2.0, high speed
Contact closure/tally output	(1) 3.5 captive screw connector, 3-pole (1) 3.5 captive screw connector, 4-pole
Pin configuration	Contact Closure - Pin 1 = Input 1 contact, Pin 1 = Input 2 contact, Pin 2 = GND (for both captive screw)
Pin configuration	Tally - Pin 3 = Input 1 tally ground, Pin 3 = Input 2 tally ground, Pin 4 = +5V (on Input 2 captive screw)
Program control	Extron Simple Instruction Set™ (SIS™)

Communications — external device (RS-232/IR over TP)

Quantity/type	(1) RS-232 and IR via (1) 3.5 mm 5-pole captive screw connector
Serial control pass-through ports ...	(1) Bidirectional RS-232
Output/DTP Rx	(1) RS-232 (1) 3.5 mm 5-pole captive screw connector (shared with IR port)
Baud rate and protocol	300 to 115200 baud 8 or 7 data bits 1 or 2 stop bits No parity (default), even or odd parity
Serial control pin configurations.....	Pin 1 = Tx, Pin 2 = Rx, Pin 3 = GND
IR control pass-through ports.....	(1) bidirectional TTL level (0 to 5V) modulated infrared control from 30 KHz to 60 kHz
Output/DTP Rx.....	(1) RS-232 (1) 3.5 mm 5-pole captive screw connector (shared with RS-232 port)
IR control pin configuration	Pin 3 = GND, Pin 4 = IR Tx, Pin 5 = IR Rx

General

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 2.0 A, 24 Watts
Power consumption	
Device	10.1 watts
Device and power supply	12.5 watts
Remote power budget	18 watts

NOTE: DTP2 devices can only send power to other DTP2 devices. DO NOT send power to DTP devices or they will be damaged.

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 top and sides
Thermal dissipation	
Device	28.0 BTU/hr
Device and power supply	36.5 BTU/hr
Mounting	
Rack mount.....	Yes, with optional rack shelf Back of the rack mountable with optional back-of-the-rack mounting kit
Furniture mount	Yes, with optional under-desk mounting kit
Enclosure type	Metal
Enclosure dimensions	1.00" H x 8.75" W x 6.0" D (1 inch high, half rack wide) (2.54 cm H x 22.2 cm W x 15.2 cm D) (Depth excludes connectors.)
Product weight	1.0 lb (0.453 kg)
Regulatory compliance.....	CE, c-UL, UL, C-Tick, FCC Class A, ICES, RoHs, WEEE, VCCI
Product warranty	3 years parts and labor
Everlast power supply warranty.....	7 years parts and labor

NOTE: All nominal levels are at $\pm 10\%$.

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at www.extron.com.

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