

Specifications

DTP2 R 212 and DTP2 R 212 SA Switching Receivers

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	12 bit
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, 12 bits per color
 Signal type HDMI 2.0b, HDCP 2.2
 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/4Kdata 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 2560x1600 @ 60 Hz or 1080p @ 60 Hz, 12-bit color
 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz
 4K (4096x2160) @ 60 Hz*, UHD (3840x2160) @ 60 Hz
 *4:2:0 color space
 Formats RGB and YCbCr digital video
 Standards DVI 1.0, HDMI 2.0b, HDMI 1.4a, CEA-861F, HDCP 2.2, HDCP 1.4

Video input

Number/signal type 1 DTP2
 1 HDMI (or single link DVI-D, with appropriate DVI-HDMI adapters)
 Connectors 1 female RJ-45
 1 female HDMI, type A

Interconnection between transmitter and receiver

Connectors 1 female RJ-45 per unit
 Termination standard TIA/EIA T568B
 Signal transmission distance Up to 330' (100m) 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

Number/signal type.....	1 HDMI output
Connectors.....	1 female HDMI, type A

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
Bass	+12 dB to -24 dB @ 100 Hz
Treble.....	+12 dB to -24 dB @ 8 Hz

Audio input

Number/signal type	
HDMI input.....	1 embedded digital audio from HDMI
DTP/DTP2 input.....	1 stereo, unbalanced analog 1 embedded digital audio from DTP
Embedded digital audio source formats	2-ch PCM
Connectors.....	1 female HDMI type A 1 female RJ-45 connector for audio over DTP
Impedance.....	>10k ohms unbalanced, >20k ohms balanced
Nominal level.....	Over DTP input: +4 dBu, -10 dBu, adjustable
Maximum level.....	+15 dBu at rated THD+N when input gain is set to 0dB
CMRR.....	>80 dB @ 1 KHz

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

Audio output – Analog

Number/signal type	
DTP2 R 212	1 stereo, balanced/unbalanced analog audio output (fixed and variable)
DTP2 R 212 SA.....	1 stereo, balanced/unbalanced analog audio output (fixed and variable) 1 amplifier output (1 stereo [default] or 2 mono, 2 channels total)
Connectors.....	(1) 3.5 mm captive screw connector, 5-pole 1 female HDMI type A
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Gain error.....	± 0.5 dB channel to channel
Maximum level (Hi-Z).....	>+21 dBu, balanced; >+15 dBu, unbalanced
Output volume range	0 to -100 dB in 1 dB steps
Nominal level when the main volume is set to default	-2 dBu (632 mVrms) balanced output

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

Audio output – power amplifier (DTP2 R 212 SA)

Number/signal type.....	1 stereo or 2 mono (2 channels total)
Connector.....	(1) 5 mm captive screw connector, 4-pole
Load impedance.....	4 ohms, minimum
Amplifier type.....	Class D
Output power	8 watts rms per channel, 8 ohms, 1 kHz, 1% THD 15 watts rms per channel, 4 ohms, 1 kHz, 1% THD
Frequency response	20 Hz to 20 kHz, +1/-3 dB @ 8 ohms
THD + Noise.....	<0.1% -3 dB below clipping @ 1 kHz, 8 ohm load
S/N.....	90 dB, 20 Hz to 20 kHz, unweighted
Damping factor.....	>100 @ 8 ohms

Communications – switcher

Serial control port.....	1 RS-232, 3.5 mm captive screw connector, 3-pole, 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
USB control port.....	1 female mini-USB, type B, front panel
USB standards.....	USB 2.0, high speed
Ethernet data rate.....	10/100Base-T, half/full duplex, with autodetect
Ethernet protocol.....	ARP, ICMP (ping), IP, TCP, DHCP, HTTP, Telnet, SMTP
Program control.....	Extron PCS® Extron Simple Instruction Set (SIS™) Microsoft® Internet Explorer®, Telnet

Communication – RS-232/IR over DTP2 and RS-232/IR Display Control – external device (IR/RS-232 over DTP2 and sink displays)

Serial control pass-through port.....	1 -232 via 3.5 mm, 5-pole captive screw connector (shared with IR port)
Baud rates.....	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
IR control pass-through ports.....	1 directional TTL level (0 to 5 V) modulated infrared control from 30 kHz up to 60 kHz
Output/DTP Rx.....	3.5 mm captive screw connector, 5-pole (shared with RS-232 port)
IR control pin configuration.....	3 = Gnd, 4 = IR Tx, 5 = IR Rx

General

Power supply.....	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 4A, 48 watts
Power input requirements.....	12 VDC
Power consumption	
Device.....	TBD watts, 12 VDC
Device and power supply.....	TBD watts, 12 VDC
Remote power capability	
DTP2 R 212.....	Can transmit or receive power via DTP2
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.....	TBD BTU/hr
Device and power supply.....	TBD BTU/hr
Mounting	
Rack mount.....	Yes, with optional rack shelf kit
Furniture mount.....	Yes, with optional under-desk mounting kit
Enclosure type.....	Metal
Enclosure dimensions.....	1.00" H x 13.1" W x 6.0" D (1" high, 3/4 rack wide) (2.54 cm H x 33.3 cm W x 15.2 cm D) (Depth excludes connectors)
Product weight.....	TBD lb (TBD 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
Warranty.....	3 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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