Extron

Specifications

XTP T USW 103

> **NOTE:** The XTP switcher can be used with other Extron XTP products, with twisted pair cables connecting the units.

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

Video

Gain... Unity

Resolution range

    Digital .... Up to 1920x1200*, 2K, or 1080p (HDTV)
                                                  * reduced blanking

    Analog.................................... Up to 1920x1200* or 1080p (HDTV)
                                                  * reduced blanking

Signal type.................................... Single-link HDMI (or DVI-D*)

    Digital video............................. RGB digital video (DVI and HDMI standards) or Y, Cr, Cb digital component video (HDMI), actively buffered (supports all single-link DVI (if using an optional adapter) and HDMI standards from 640x480 @ 60 Hz to 1900x1200 @ 60 Hz)

    EDID and DDC .... Supports Extended Display Identification Data (EDID) and Display Data Channel (DDC) data using DVI and HDMI standards. EDID and DDC signals are actively buffered.

    HDCP...................................... Compliant with High-bandwidth Digital Content Protection (HDCP) using DVI and HDMI standards

    HPD .... Supports hot plug detection (HPD) of display as a pass-through signal.

Maximum data rate .... 6.75 Gbps (2.25 Gbps per color)

Maximum pixel clock...................... 165 MHz

Formats .... RGB and YCbCr digital video

Standards .... DVI 1.0, HDMI, HDCP 1.1

Video input

Number/signal type........................ 1 analog RGBHV
                                                  2 single link HDMI (DVI-D or DisplayPort*) input

Connectors.................................... 1 female 15-pin HD
                                                  2 female HDMI type A

Nominal level................................. 0.7 Vp-p for RGB

Minimum/maximum levels .... 0.3 V to 1.45 V p-p

Impedance..................................... 75 ohms

Horizontal frequency .... 30 kHz to 100 kHz

Vertical frequency.......................... 24 Hz to 120 Hz

Interconnection between transmitter and receiver

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.

Audio

Gain

Range	Adjustable, -18 dB to +18 dB
Default	Unbalanced output: 0 dB; balanced output +6 dB
Frequency response	20 Hz to 20 kHz, ±0.05 dB
THD + Noise	0.01% @ 1 kHz at nominal level
S/N	>90 dB, at maximum output, balanced (unweighted)
Crosstalk	<-45 dB @ 20 kHz, -72 dB @ 1 kHz or below
Stereo channel separation	>80 dB @ 20 Hz to 20 kHz
Sampling rates	32 kHz, 44.1 kHz, 48 kHz, 96 kHz, 192 kHz
Bit depths	16, 20, 24 bit

Audio input

Number/signal type	1 analog stereo, unbalanced or 2 digital audio, embedded from HDMI
Connectors	1 female 3.5 mm mini audio jack 2 female HDMI type A (shared with video input)
Source formats	LPCM up to 7.1/24-bit/192 kHz, 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
Impedance	>10k ohms, unbalanced, DC coupled
Nominal level	+4 dBu (1.23 mVrms) balanced or -10 dBV (316 mVrms) unbalanced
Maximum level	+7 dBv unbalanced

> **NOTE:** 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

Communications — switcher

Serial control port	1 bidirectional RS-232: 1 rear panel 3.5 mm captive screw connector, 3 pole
Baud rate and protocol	9600 (default) to 115200 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configuration	1 = Tx, 2 = Rx, 3 = Gnd
USB control ports	1 front panel female mini USB B
USB standards	USB 2.0, low speed
Contact closure	(1) 3.5 mm captive screw connector, 4 pole
Contact closure pin configuration	1 = input 1, 2 = input 2, 3 = input 3, 4 = GND
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	RS-232 (±5 V) via (1) 3.5 mm, 5 pole captive screw connector (uses 3 poles) (connector is shared with IR control port)
Serial control port output/input	1 set of proprietary signals on a female RJ-45 jack
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
Ethernet pass-through port	1 female RJ-45 connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
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 40 kHz
IR control pin configuration	3 = GND, 4 = IR Tx, 5 = IR Rx

General

Power supply .... External
Input: 100 to 240 VAC, 50-60 Hz
Output: 12 VDC, 1.5 A, 18 watts

Power consumption

Device .... 9.3 watts, 12 VDC

Device and power supply .... 11.3 watts, 100-240 VAC, 50-60 Hz

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

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, no vents

Thermal dissipation

Device .... 29.4 BTU/hr

Device and power supply .... 36.3 BTU/hr

Mounting

Rack mount............................. Yes, with optional 1U high 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 .... 1.0" H x 8.75" W x 6.0" D (half rack wide)
(2.5 cm H x 22.2 cm W x 15.2 cm D)
(Depth excludes connectors.)

Product weight .... 1.6 lbs (0.7 kg)

Shipping weight .... 4 lbs (2 kg)

Vibration .... ISTA 1A in carton (International Safe Transit Association)

Regulatory compliance.................. CE**, c-UL, UL, C-tick, FCC Class A**, ICES, KCC, VCCI
UL rated for use in plenum airspaces: meets UL 2043 for heat and smoke release, 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.

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