

Specifications

WallVault Digital Systems (for PVS 407D) (WVS 201D, WVS 211D, WVS 401D, and WVS 411D)

TRUE 4K specification – HDMI inputs 1 to 6

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 rate ¹	24, 25, 30, 50, or 60 fps
Chroma sampling ¹	4:4:4, 4:2:2, or 4:2:0
Color bit depth ¹	8 bits per color
Signal type	HDMI 1.4, HDCP 1.4
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/8Kdatarate to determine video parameters supported by this data rate.

NOTE: The PVS 407D must have firmware version 2.00 or greater for 4K support on all HDMI inputs.

Overall system

STP transmission	Up to 150' (46 m) for 2K rate, or up to 130' (40 m) for 4K/30Hz, using Extron XTP DTP 24 cable
Product warranty	3 years parts and labor

PVS 407D switcher/power amplifier

Video input	
Number/signal type	Inputs 1 - 6: HDMI (or DVI) digital video Inputs 2 and 4 can be analog RGB
Connectors	2 female RJ-45 2 female HDMI type A

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

Video — Inputs 1 to 6	
Maximum data rate	10.2 Gbps (3.4 Gbps per color)
Maximum pixel clock	300 MHz
Resolution range	Up to 4096x2160 @ 30 Hz, 3840x2160 @ 30Hz, 4K/UHD @ 60 Hz with 4:2:0 Chroma subsampling
Formats	RGB and YCbCr digital video
Standards	DVI 1.0, HDMI 1.4, HDCP 1.4, CEA-861E

Specifications • WallVault Digital Systems (for PVS 407D) (Continued)

Video output	
Number/signal type	1 single link HDMI (or DVI-D)
Connectors	1 female HDMI type A
Audio input (see the PVT series wallplates audio specifications)	
Number/signal type	2 proprietary signals from Extron PVT Series wallplate transmitters 1 stereo, balanced/unbalanced (input 7)
Connectors	2 female RJ-45 1 female 3.5 mm captive screw connector, 5 pole (input 7)
Voicelift receiver input.....	1 female RJ-45, -10 dBV (316 mVrms) nominal level
Aux input	1 female 3.5 mm captive screw connector, 3 pole
Audio output	
Number/signal type	1 line output, stereo/mono, balanced/unbalanced, fixed/variable 1 power amplifier, stereo or dual mono (default), 2 channels total
Connectors	(1) 3.5 mm captive screw connector, 5 pole (1) 5.0 mm captive screw connector, 4 pole

NOTE: Unbalanced wired outputs produce 6 dB of attenuation. Balanced output has unity gain/attenuation.

Power amplifier	
Amplifier type.....	Class D
Impedance	4/8 ohms (single channel) 4/8 ohms (stereo)
Output power	25 watts (rms) per channel (1 watt tolerance) at 4/8 ohms, 20 Hz to 20 kHz, 1% THD
Ethernet control interface	
Switch type.....	Unmanaged
Ethernet ports.....	4 female RJ-45 with built-in link/speed and activity LEDs
Ethernet data rate.....	10/100Base-T (10/100 Mbps) with autodetect
General	
Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 4 A, 48 watts, or 12 VDC, 4.2 A, 50 watts
Power input requirements.....	12 VDC, 3 A
Power consumption	
WVS 201D and WVS 211D	
Device.....	23.5 watts, 12 VDC
Device and power supply	27.1 watts, 110-240 VAC, 50-60 Hz
WVS 401D and WVS 411D	
Device.....	30.4 watts, 12 VDC
Device and power supply	37.1 watts, 110-240 VAC, 50-60 Hz
Mounting	
Wall mount	Yes, with included wall mounting kit
Enclosure dimensions.....	1.9" H x 13.5" W x 3.5" D (48 mm H x 343 mm W x 89 mm D)
Product weight.....	2.9 lbs (1.3 kg), including power supply (1.1 lbs [0.5 kg])
Regulatory compliance	CE, c-UL, C-tick, FCC Class A, ICES, VCCI, UL UL listed for use in plenum airspaces: meets UL 2043 for heat and smoke release, excluding the power supply; meets UL 60065 for safety. Complies with the appropriate requirements of RoHS, WEEE

Specifications • WallVault Digital Systems (for PVS 407D) (Continued)

Interconnection between PVT wallplates and PVS switcher

Connector.....	1 female RJ-45 per wallplate
Termination standard.....	TIA/EIA T568A or T568B Included Extron cables are T568B
Signal transmission distance.....	Up to 4096x21060 @30 Hz, 3840x2160 @30 Hz, 4K/UHD @ 60 Hz with 4:2:0 Chroma subsampling. Up to 150' (46 m) for 2K rate, or up to 130' (40 m) for 4K/30 Hz, using Extron XTP DTP 24 cable. Standard included cable length is 35' (11 M).
Cable requirements.....	Solid conductor, 24 AWG or better 400 MHz bandwidth, STP (shielded twisted pair)

NOTE: Extron XTP DTP 24 shielded twisted pair cable is required for optimal performance.

PVT HDMI RGB, PVT HDMI, and PVT HD RGB wallplates

NOTE: These wallplates are compatible only with an Extron PoleVault® PVS 407D Digital Switcher. They are not compatible with other models of twisted pair receivers.

Video - digital

Maximum data rate	10.2 Gbps (3.4 Gbps per color)
Maximum pixel clock	300 MHz
Resolution range	Up to 4096x2160 @ 30 Hz, 3840x2160 @ 30 Hz, 4K/UHD @ 60 Hz with 4:2:0 Chroma subsampling
Formats.....	RGB and YCbCr digital video
Standards.....	DVI 1.0, HDMI 1.4, HDCP 1.4, CEA-861E

Video input and loop-through

Number/signal type

PVT HDMI RGB.....	1 single link HDMI (or DVI-D) 1 VGA-UXGA RGBHV, RGBS 1 buffered RGBHV, RGBS local monitor loop-through
PVT HDMI.....	2 single link HDMI (or DVI-D)
PVT HD RGB.....	1 single link HDMI (or DVI-D) 1 VGA-UXGA RGBHV, RGBS

Connectors

PVT HDMI RGB.....	1 female HDMI type A 2 female 15-pin HD (1 for input, 1 for loop-through)
PVT HDMI.....	2 female HDMI type A
PVT HD RGB.....	1 female HDMI type A 1 female 15-pin HD

Video output

Number/signal type	1 digital proprietary signal
Connectors	1 female RJ-45

Audio input

Number/signal type

PVT HDMI RGB.....	2 analog stereo, unbalanced or 1 digital audio, embedded on the HDMI signal 1 analog pass-through
PVT HDMI.....	2 analog stereo, unbalanced, or 2 digital audio embedded on the HDMI signal
PVT HD RGB.....	2 analog stereo, unbalanced or 1 digital audio, embedded on the HDMI signal

Specifications • WallVault Digital Systems (for PVS 407D) (Continued)

Connectors	
PVT HDMI RGB	(2) 3.5 mm stereo mini audio jacks (tip, ring, sleeve) 1 female HDMI type A (embedded on the HDMI signal) (1) 3-pole captive screw connector (pass-through)
PVT HDMI.....	(2) 3.5 mm stereo mini audio jacks (tip, ring, sleeve) 2 female HDMI type A (embedded on the HDMI signal)
PVT HD RGB.....	(2) 3.5 mm stereo mini audio jacks (tip, ring, sleeve) 1 female HDMI type A (embedded on the HDMI signal)
Audio output to a PoleVault switcher	
Number/signal type	1 digital proprietary signal
Connector	1 female RJ-45
Audio output, pass through — PVT HDMI RGB only	
Number/signal type	1 stereo, unbalanced
Connector	(1) 3.5 mm mini audio jack (tip, ring, sleeve)
General	
Power.....	Supplied by the PoleVault Digital switcher
Power input requirements.....	12.0 VDC, 1.0 A
Mounting	
Furniture or wall mount	Yes, with the included decorator-style wallplate
Enclosure dimensions	
Faceplate.....	2.6" H x 3.2" W x 0.2" D (66 mm H x 81 mm W x 6 mm D) (Fits the openings in a 2 gang decorator-style wallplate.)
Device	2.7" H* x 3.6" W x 2.0" D (69 mm H* x 91 mm W x 51 mm D) (Depth excludes connectors.) *Height excludes mounting tabs.
Product weight.....	0.6 lbs (0.3 kg)
Regulatory compliance	**CE, c-UL, UL, C-tick, **FCC Class A, ICES, VCCI

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

MLC Plus 100

Ethernet control	
Network interface controllers (NICs)	1
Connector	1 female RJ-45 connector
Data rate	10/100/1000Base-T, half/full duplex with autodetect
Protocols.....	DHCP, DNS, HTTP, HTTPS, ICMP, NTP, SFTP, SMTP, SNMP, SSH, TCP/IP, UDP/ IP
Serial control	
Quantity/type.....	2 bidirectional RS-232
Connectors	(2) 3.5 mm captive screw connector, 3 pole
Baud rate and protocol.....	300 to 115200 baud (9600 baud = default); 8 (default) or 7 data bits; 1 (default) or 2 stop bits; no parity (default), even, odd, mark, or space parity.

NOTE: These ports support software flow control. The default is no flow control.

Digital input control	
Quantity/type.....	1 digital input
Connectors	(1) 3.5 mm captive screw connector, 2 pole
IR control	
Quantity/type.....	1 TTL level (0 to 5 V) infrared (carrier and non-carrier) up to 300 kHz
Connectors	(1) 3.5 mm captive screw connector, 2 pole

Specifications • WallVault Digital Systems (for PVS 407D) (Continued)

Relay control	
Quantity/type.....	2 normally open relays
Relay control connectors	(1) 3.5 mm captive screw connector, 3 pole
Relay control contact rating	24 VDC, 1 A
Volume control	
Quantity/type.....	1 volume control (compatible with select Extron devices)
Connectors	(1) 3.5 mm captive screw connector, 3 pole
General	
Power.....	Supplied by PoleVault digital switcher
Power input requirements.....	12 VDC, 1 A, 12 watts, max. Or power over Ethernet (PoE) (complies with PoE 802.3af, class 3)
Mounting	
Rack mount.....	No
Furniture or wall mount	Yes, in a standard US 2-gang electrical junction box or mud ring
Enclosure type.....	Plastic faceplate and high-impact plastic rear enclosure
Enclosure dimensions	
Faceplate.....	4.5" H x 4.6" W x 0.3" D (114 mm H x 117 mm W x 8 mm D)
Device	2.7" H* x 3.5" W x 2.2" D (69 mm H* x 89 mm W x 55 mm D) (Depth excludes faceplate and buttons. Fits most 2 gang US boxes or mud rings. Allow at least 2.4" [61 mm] depth in the wall or furniture.)
Product weight.....	0.8 lb (0.4 kg)
Regulatory compliance	CE, c-UL, C-tick, FCC Class A, ICES, VCCI, UL Complies with the appropriate requirements of Section 508 of the Rehabilitation Act (29U.S.C.794d).
Mounting	
Wall mount	Yes, with included hardware
Maximum load capacity	15 lbs (6.8 kg)
Material.....	Steel base plate, aluminum cover
Dimensions	
Base plate	17.1" H x 16.4" W x 1.5" D (434 mm H x 417 mm W x 38 mm D)
Cover	17.3" H x 16.5" W x 2.75" D (439 mm H x 419 mm W x 70 mm D)
Product weight	5.5 lbs (2.5 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety.....	c-UL, UL, OSHPD anchorage pre-approval

USFM 100 (WVS 201D and WVS 401D Systems only)

Mounting	Wall mount with included hardware
Maximum projector load capacity...	40 lbs (18.1 kg) projector weight (does not include the UPB 125)
Material.....	Steel (structural parts), plastic (covers), aluminum (boom arm covers)
Dimensions	
Base plate	11.1" H x 34.4" W x 2.2" D (282 mm H x 874 mm W x 56 mm D)
Base plate with covers	12.9" H x 36.3" W x 2.7" D (328 mm H x 922 mm W x 70 mm D)
Boom arm	12.5" H x 3.6" W x 21.7 - 31.8" D (318 mm H x 91 mm W x 551- 808 mm D)
Boom extension range	17.5" (445 mm)
Product weight	17 lbs (7.7 kg)

NOTE: Weights exclude the UPB 125.

Regulatory compliance	c-UL, UL, OSHPD anchorage pre-approval
-----------------------------	--

Specifications • WallVault Digital Systems (for PVS 407D) (Continued)

UPB 125 (WVS 201D and WVS 401D Systems only)

Adjustment ranges.....	The UPB 125 can be angled within the following ranges to level the projector: ±5° roll ±20° pitch 360° yaw
Maximum load capacity	40 lbs (18.1 kg)
Material.....	Metal
Projector bracket dimensions.....	3.2" H x 7.0" W x 7.0" D (81 mm H x 178 mm W x 178 mm D) (Dimensions exclude legs/feet.)
Product weight	2.7 lbs (1.2 kg)
Regulatory compliance	CE, c-UL, UL

FF 120 Flat Field® Speakers

Power capacity	16 W (rms) continuous pink noise 32 W (rms) continuous program
Nominal coverage angle.....	170° conical coverage
Nominal impedance	8 ohms per speaker
Mounting	Drops into a 2' x 2' (610 mm x 610 mm) or 2' x 4' (610 mm x 1220 mm) suspended tile
Enclosure outer dimensions	3.25" H x 23.75" W x 11.75" D (83 mm H x 603 mm W x 299 mm D)
Product weight	Single: 4.7 lbs (2.1 kg)
Regulatory compliance	CE, NFPA90A, NFPA70; UL listed for use in plenum airspaces: meets UL 2043 for heat and smoke release; meets UL 1480 - speakers for commercial and professional use.

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.

4926-D7