DVDO

DVDO-USBC-HDMI-PS-42-Xtend

4x2 Seamless Presentation Switcher / Extender With USB-C & HDMI Inputs & Dante

DVDO-USBC-HDMI-PS-42-Xtend is a 4x2 seamless presentation switcher with 2 HDMI inputs, 2 USB-C inputs (4K60 DP Alt mode, USB 3.2 Gen 1 and 60W charging), 2 HDMI outputs and 1 HDBaseT output.

It can extend uncompressed 4K@30Hz signals up to 230ft/70m and 4K@60Hz signals up to 131ft/40m over HDBaseT 3.0 with a single Cat6A cable.

The outputs support either single full screen or various multiview display modes (Auto / Dual / PIP / PBP / Triple / Quad / Custom).

The unit provides USB switching and extension through multiple USB Host and device ports on both Tx and Rx.

It also provides audio embedding & de-embedding and includes Dante 2x2 audio input & output as well as a built-in audio DSP with gain, EQ, volume & delay adjustments.

It can be controlled via the front panel buttons, IR, RS-232 or TCP/IP with an intuitive web GUI and supports PoE from Tx to Rx.
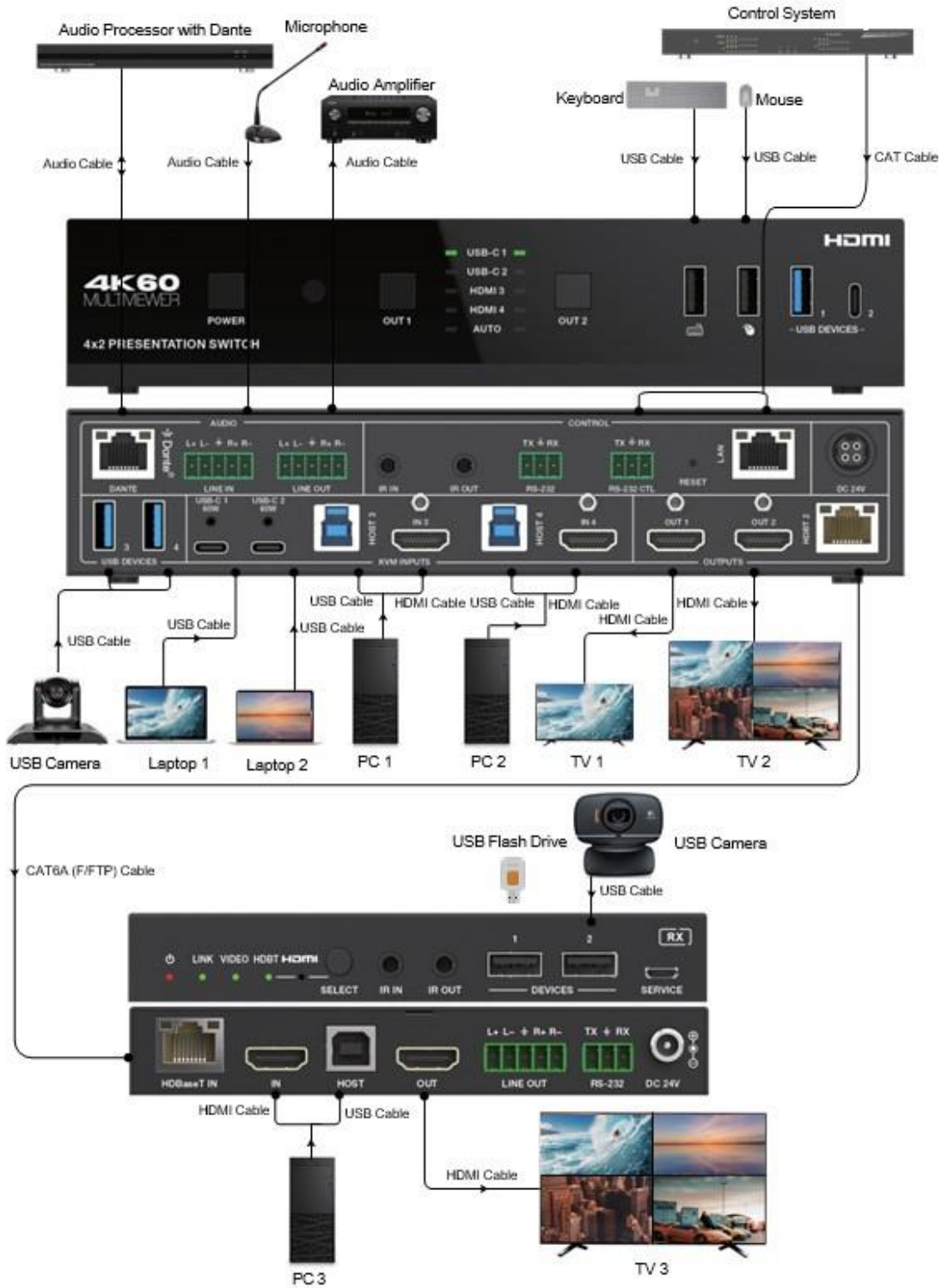
Features

- HDMI 2.0b, HDCP 2.3, HDBaseT 3.0 & DP 1.4 compliant

- Video resolutions up to 4K@60Hz 4:4:4 @ 18Gbps

- Transmission of uncompressed 4K30 & 1080p signals up to 230ft/70m and 4K60 signals up to 132ft/40m over HDBaseT 3.0 via single Cat6A cable

- Multiple multiview display modes: Auto / Single / PIP / PBP / Triple / Quad / Custom

- 4x2 seamless switching (single screen) and fast switching (multiview)

- Manual & auto switching modes

- Inputs: 2 USB-C, 2 HDMI, 1 analog audio, 1 Dante 2ch

- Outputs: 1 HDMI, 1 HDMI + 1 HDBT mirrored, 1 analog audio, 1 Dante 2ch

- Dante 2x2 audio input and output

- USB-C supports 4K60 DisplayPort Alt Mode, USB 3.2 Gen 1 up to 5Gbps, 1G LAN and 60W charging

- Local USB 3.2 switching and extending USB 2.0 over HDBT 3.0

- Local USB KVM hotkeys and mouse switching

- Audio embedding & de-embedding

- Built-in DSP with gain, equalizer, volume and delay control

- Advanced EDID management

- CEC/RS-232 control to turn external devices ON/OFF

- Control via front panel buttons, IR remote, RS-232, TCP/IP or intuitive Web GUI

- Standard PoE from Tx to Rx (TX_PSE, RX_PD)

Applications

- Conference Rooms
- Education
- Training Rooms
- Lecture Halls
- Boardrooms
- Classrooms

Application Diagram

Technical Specifications

Technical	
Compliance	HDMI 2.0b / HDCP 2.3 / DP 1.4
Video Bandwidth	18Gbps
USB Bandwidth	USB 3.2 Gen 1 up to 5Gbps
Network Bandwidth	1Gbps (LAN and USB-C connections)
Video Resolutions	Up to 4K@60Hz 4:4:4
IR	Frequency: Wideband 20K-60KHz / Level: 12Vp-p
Color Depth	8/10/12-bit
Color Space	RGB, YCbCr 4:4:4 / 4:2:2 / 4:2:0
Audio Formats	**USB-C/HDMI/HDBT**: Digital audio, 32-192kHz / 24bit, LPCM 2CH **LINE IN**: Analog audio, Balanced/unbalanced 2CH, Max input level 2Vrms **LINE OUT**: Analog audio, Balanced 2CH (Max output level 2Vrms)/unbalanced 2CH (Max output level 1Vrms) **DANTE**: Digital audio 2x2 in/out, LPCM 2CH 44.1K-96KHz 16/24Bit]
Transmission Distance	**HDBT**: 230ft/70m (1080p & 4K30); 131ft/40m (4K60) **HDMI & USB-C**: 9.8ft/3m
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
Connections	
Transmitter	**Inputs**: 2 x HDMI [Type A, 19-pin female] 2 x USB-C [24-pin female] 1 x Line In [5pin-3.5mm phoenix connector] 1 x DANTE [RJ45] **Outputs**: 2 x HDMI [Type A, 19-pin female] 1 x HDBT [RJ45, 48V POE/PSE] 1 x Line Out [5pin-3.5mm phoenix connector] **Controls**: 1 x RS-232 [3pin-3.5mm phoenix connector] 1 x RS-232 CTL [3pin-3.5mm phoenix connector] 1 x LAN [RJ45] 2 x USB 3.2 Host [USB Type B, 9-pin female] 3 x USB 3.2 Device [USB Type A, 9-pin female] 2 x USB 1.1 KVM [Type A, 4-pin female] 1 x USB-C Device [24-pin female] 1 x IR In [3.5mm stereo mini-jack, 12V level] 1 x IR Out [3.5mm stereo mini-jack, 12V level]
Receiver	**Inputs**: 1 x HDMI [Type A, 19-pin female] 1 x HDBaseT [RJ45, 48V POE/PSE] **Outputs**: 1 x HDMI [Type A, 19-pin female] 1 x Line Out [5pin-3.5mm phoenix connector] **Controls**: 1 x RS-232 [3pin-3.5mm phoenix connector] 1 x USB Host [Type B, 4-pin female] 2 x USB Device [Type A, 4-pin female] 1 x SERVICE [Micro USB, 5-pin female] 1 x IR In [3.5mm stereo mini-jack, 12V level] 1 x IR Out [3.5mm stereo mini-jack, 12V level]

Tx Analog Audio	
Input Impedance	10K Ohms
Output Impedance	330 Ohms
Line Input Level (Maximum)	8.2dBu (2Vrms) @ balanced or unbalanced audio
Line Output Level (Maximum)	8.2dBu (2Vrms) @ balanced audio 2.2dBu (1Vrms) @ unbalanced audio
Frequency Response	(+0.5 dB, -1 dB) 20 Hz to 20 kHz
Audio Output Sync Delay	< 1ms
Audio S/N Ratio	93dB @ 2Vrms, 1kHz A-weighted
Audio THD+N	<0.1% @ 0dBV, 1kHz
Rx Analog Audio	
Output Impedance	330 Ohms
Line Output Level (Maximum)	8.2dBu (2Vrms) @ balanced audio 2.2dBu (1Vrms) @ unbalanced audio
Frequency Response	(+0.5 dB, -1 dB) 20 Hz to 20 kHz
Audio Output Sync Delay	0 to 50ms
Audio S/N Ratio	93dB @ 2Vrms, 1kHz A-weighted
Audio THD+N	<0.1% @ 0dBV, 1kHz
Dante Audio	
Audio Formats	LPCM2.0
Sample Rate	44.1 / 48 / 88.2 / 96KHz at 24 bits
Audio Delay	2 / 3 / 4 / 5 / 10ms
Network Bandwidth	100Mbps
Mechanical	
Housing	Front panel: Aluminum; Rear case: Metal Enclosure
Color	Black
Dimensions	Transmitter: 220mm [W]×220mm [D]×44.5mm [H] Receiver: 140mm [W]×105mm [D]×21.5mm [H]
Weight	Transmitter: 1.78kg; Receiver: 424g
Power Supply	Input: AC100 - 240V 50/60Hz Output: DC 24V/8A (US/EU standard, CE/FCC/UL certified)
Power Consumption	170W (Max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-40°C ~ 60°C / -40°F ~ 140°F
Operating Humidity	20%~80% RH (non-condensing)
Storage Humidity	10%~90% RH (non-condensing)