

6x2+1 4K60 4:4:4 All-In-One Presentation Switcher (4 HDMI Inputs, 2 DXLink 4K60 Inputs)

DVX-2265-4K (FG1906-0201)
DVX-2265-4K-TAA (AMX-FG1906-0202)



Overview

The DVX-2265-4K 6x2+1 All-In-One Presentation Switcher is a unified audio, video, and control device that replaces a rack full of equipment for a solution that is less expensive, easier to install, and more reliable.

The compact 2U Presentation Switcher supports the latest video technologies to deliver full 4K60 4:4:4 and HDR video on every output. Audio technology from Crown, BSS, and dbx provide the legendary audio quality for which Harman products are known and the inclusion of Dante audio makes it possible to distribute that audio over the network.

The integrated NX processor provides extensive security features and technologies such as a mobile friendly HTML5 web interface, an ICSLan isolated network, and automatic binding of DXLink endpoints.

DVX 4K60 delivers the lowest Total Cost of Ownership in the industry thanks to ease of support, maintenance, and configuration as well as reduced hardware and cabling costs.

Common Applications

The DVX-2265-4K is ideal for dramatically simplifying AV control and distribution in small to medium-sized conference rooms, boardrooms, and classrooms that can benefit from 4K60 4:4:4 resolution. Its small size and variety of flexible inputs and outputs also make it great for any complex collaboration space with multiple displays, rooms that require support for video conferencing, or any room or facility with space constraints, especially those that lack space in equipment racks.

Features

- **4K60 4:4:4 Support – HDMI 2.0 and HDCP 2.2 Support – Scaled Outputs** – Supports the highest possible video quality over HDMI and category cable.
- **High Dynamic Range (HDR) and Deep Color Support** – Support for HDR10 and 36-bit Deep Color.
- **Simple Configuration and Support** – HTML5 Web Interface with built-in status and troubleshooting features alleviates the need for proprietary configuration software and internal network allows for automatic configuration of endpoints
- **Dante Audio** – 8 input channels and 8 output channels of IP audio
- **Crown DriveCore Amplifier** – 120W per channel stereo at 4/8 ohms or 120W mono at 70/100 Volt.
- **USB 2.0** - High-speed USB 2.0 data from devices like conferencing cameras and storage devices are transmitted without the need for separate cables.
- **DXLink™ Twisted Pair Inputs and Outputs** – Send and receive audio, video, bi-directional control, USB 2.0, and Ethernet to DXLink HDMI Receivers and Transmitters up to 100m away over one twisted pair cable.
- **All-In-One Device** – Controller, matrix switcher, video scaler, audio signal processor, amplifier, plus twisted pair distribution - all in a space-saving 2U chassis.
- **Simplicity & Reliability** – Replaces the need for numerous individual components and equipment, ensuring high reliability and savings on configuring and programming costs.
- **Low Total Cost of Ownership** – With a consistent platform across a variety of sizes, it is easy to standardize on the DVX and reduce costs for hardware, training, support, troubleshooting, and sparing.
- **Unrivaled Network Security** – With Dual NICs to isolate AMX or third-party AV equipment from the primary network, IPv6, 802.1X for protected network access, LDAP integration with unlimited user-defined groups, syslog support, and support for encrypted IP communication using FIPS 140-2 validated cryptographic modules, the Enova DVX provides rock-solid security.
- **Optimal Video Image Quality Every Time** – Exclusive SmartScale Technology automatically scales the image to the best resolution and video parameters for each display—even for displays of different resolutions— without manual setup, eliminating the need for costly external scalers.
- **BSS Audio Processing** – Includes an integrated digital signal processor with advanced capabilities like independent 10-band parametric EQ, independent input gain adjustments, and variable compression, allowing precision tuning to match unique source and room attributes.
- **dbx AFS2** - Advanced Feedback Suppression
- **Audio Breakaway** – Embedded audio from any HDMI or DXLink input can be de-embedded from the video, processed through the DSP, and switched to any analog, HDMI or DXLink output.
- **Audio Matrix Switching** – Four independently switched and processed audio paths provide four unique volume, EQ, ducking and mixing configurations for perfectly tuned room audio as well as integration with audio/video conferencing, induction loop systems, voice re-enforcement speakers and audio recording devices.
- **Enhanced Microphone Processing** – Independent 3-band parametric EQ, compression, gating, auto-ducking, and limiting on each microphone input ensures crystal clear communication.

Specifications

GENERAL	
Enclosure	Metal with dark gray matte finish
Dimensions (HWD)	3 1/2" x 17 1/3" x 15" (8.8 cm x 44.0 cm x 38.0 cm) without front rack mounting brackets 3 1/2" x 19" x 15" (8.8 cm x 44.0 cm x 48.3 cm) with front rack mounting brackets
Weight	10.27 Kg without front rack mounting brackets 10.60 Kg with front rack mounting brackets
Regulatory Compliance (PENDING)	FCC Part 15 Class A EN 55032 EN 55035 IEC/EN 60950 IEC/EN 62368-1 UL 60950 UL 62368-1 RoHS/WEEE EMC (Australia) EMC (Canada) EMC (Japan)
Included Accessories	<ul style="list-style-type: none"> • (1) Power Cord, US • (1) Power Cord, EU • (1) Power Cord, UK • (2) Front Rack Mounting Bracket (Attached) • (4) Rubber foot (Attached) • (2) IR Emitter • (3) 4-position, 3.5mm Phoenix Male Connector • (8) 3-position, 3.5mm Phoenix Male Connector • (4) 5-position, 3.5mm Phoenix Male Connector • (1) 3-position, 5.08mm Phoenix Male Connector • (1) 4-position, 5.08mm Phoenix Male Connector
Optional Accessories	<ul style="list-style-type: none"> • CC-3.5ST5-RCA2F, 5-pin 3.5mm Phoenix to 2 RCA Female Cable (FG10-003-20) • DX-RX-4K60, DXLink HDMI Receiver Module (FG1010-512-01) • DX-TX-4K60, DXLink HDMI Transmitter Module (FG1010-312-01) • DXL-RX-4K60, DXLite HDMI Receiver Module (FG1010-505) • DXL-TX-4K60, DXLite HDMI Transmitter Module (FG1010-311) • EXB-IRS4, ICSLan IR/S Interface, 4 IR/S and 4 Inputs (FG2100-23) • EXB-COM2, ICSLan Serial Interface, 2 Ports (FG2100-22) • EXB-REL8, ICSLan Relay Interface, 8 Channels (FG2100-20) • EXB-I/O8, ICSLan Input/Output Interface, 8 Channels (FG2100-21) • EXB-MP1, ICSLan Multi-Port, 1 COM, 1 IR/S, 2 I/O, 1 IR RX (FG2100-26) • CBL-HDMI-FL HDMI, High Speed Flat Cable (FG10-2180-16) • CBL-DP-FL, DisplayPort High Speed Flat Cable (FG10-2181-16) • CBL-ETH-FL, Ethernet Cat5e Flat Cable (FG10-2182-16)

ACTIVE POWER REQUIREMENTS	
Power Consumption	63 Watts typical without amplifier

	103 Watts typical average with amplifier 56 Watts idle
Power Connection	IEC Power Cord Connector 100-240 VAC, 10A 47-63 Hz
Power Factor Correction (PFC)	Supported, complies with N60555-2 and EN61000-3-2

ENVIRONMENTAL	
Temperature (Operating)	0° C to 40° C (32° F to 104° F)
Temperature (Storage)	-10° C to 70° C (14° F to 158° F)
Humidity (Operating)	5% to 85% RH, Non-condensing
Heat Dissipation (Typical)	215 BTU/hr.

ETHERNET	
Connection	(1) RJ-45
Description	10/100/1000 Port RJ-45 connector provides TCP/IP communication. Auto MDI/MDI-X enabled. Supports IPv4 and IPv6 networks. Supports HTTP, HTTPS, Telnet, FTP.
Link/Act Indicator	Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ-45 connector and one on the front panel
Speed Indicator	Speed LED (yellow) lights ON when the connection speed is 1000 Mbps Ethernet connection and turns OFF when the speed is 10 or 100 Mbps

INTEGRATED AMPLIFIER	
Integrated Amplifier	Selectable between: 2 x 120 W RMS into 8 Ohms Class D stereo amplifier (4 Ohms stable) Or 120 W, 70V / 100 V mono amplifier NOTE: Only one amplifier output can be in use at any one time. NOTE: This amplifier is floating output, DO NOT connect any output to ground!

ICSLAN	
ICSLan Connection	(1) RJ-45, 10/100 Port RJ-45 connector. Auto MDI/MDI-X enabled. Supports IPv4 and IPv6 networks.
ICSLan Link/Active Indicator	ICSLan LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ-45 connector and one on the front panel
ICSLan Speed Indicator	Speed LED (yellow) lights ON when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbps

ONBOARD MASTER	
Controller	Integrated Controller is the equivalent of a NetLinx NX-2200 Integrated Controller with the exception of the number of control ports
Memory	NVRAM: 1 MB Memory Card: 16 GB Micro SD DDRAM: 512 MB Note: Supports external USB Solid State Drive

Processor	1600 MIPS
Program Port	(1) USB Standard B
Configuration Dip Switch	4-Position
ID Pushbutton	Black ID pushbutton for setting IP mode and reverting to default configuration and firmware It has no effect on the Internal Switcher Device
Status Indicator	Status LED (green) blinks to indicate that the system is programmed and communicating properly
Input Indicator	Input LED (yellow) blinks to indicate that the Controller is receiving data
Output Indicator	Output LED (red) blinks to indicate that the Controller is transmitting data
USB Host Port	(2) USB Standard A, one on front and one on back, USB Host port supports Solid State drive for upgrading firmware, loading code files, copying configuration data and remote storage

CONTROL PORTS & INDICATORS	
RS-232 Port (Rear Panel)	(2) 3-position 3.5mm Screw Terminal NetLinx Ports 1 and 2 300 -115,200 baud
Serial Indicators (Front Panel)	(2) sets of LEDs (red/yellow) indicate when serial Ports 1-2 are transmitting and receiving data
IR/Serial Port (Rear Panel)	(2) 2-position 3.5mm Screw Terminal 2 IR Transmit / 1-way Serial ports NetLinx Ports 11-12 Support high-frequency carriers up to 1.142 MHz 2 IR/Serial data signals can be generated simultaneously
IR/Serial Indicators (Front Panel)	(2) LEDs (red) indicate when each of the IR/Serial ports (11-12) are transmitting control data
I/O Channels (Rear Panel)	(1) 4-position 3.5mm Screw Terminal 2-channel binary I/O port for contact closure with each input being capable of voltage sensing +12V DC and GND Included on the connector NetLinx Port 22 Channels 1-2
I/O Indicators (Front Panel)	(2) LEDs (yellow) indicate each of the I/O channels (1-2) are active
Relays (Rear Panel)	(2) 2-position 3.5 mm Screw Terminal, (2) single-pole, single-throw relays NetLinx Port 21 Channels 1-2 Each relay can switch up to 24 VDC or 28 VAC @ 1 A Each relay is independently controlled
Relay Indicators (Front Panel)	(2) LEDs (red) indicate when each of the relay channels (1-2) are active (closed)

INTEGRATED MATRIX SWITCHER CONTROL	
LCD Display	Liquid crystal display (2 lines with 20 characters per line) indicates current volume level and displays the Video, Audio, and Tools menus
SWITCH Pushbutton	Press to enter the SWITCH menu on the LCD display. Choose to switch audio, video or both from any input to any output. Press the TAKE pushbutton to implement the switch
TAKE Pushbutton	While in the SWITCH menu, press to implement an audio/video switch. When not in the SWITCH menu, press to cycle through audio and/or video inputs

VIDEO MENU Pushbutton	Press to access the Video menu on the LCD display. Multiple presses cycle through the various VIDEO menus
AUDIO MENU Pushbutton	Press to access the Audio menu on the LCD display. Multiple presses cycle through the various AUDIO menus
Navigation Pushbuttons	(4) directional buttons for navigating the options in the Video and Audio menu (on the LCD display)
STATUS Pushbutton	Press to access the STATUS menu on the LCD display
EXIT Pushbutton	Press to exit any menu
VIDEO MUTE Pushbutton	Press to mute/un-mute (enable/disable) all video output displays. Video Mute results in a blank screen on the output display
AUDIO MUTE Pushbutton	Press to mute/un-mute all audio outputs

INTEGRATED MATRIX SWITCHER	
Video Switching	6x2 Matrix Video Switching, any of the 6 inputs can be routed to any or all of the 2 video outputs
Video Inputs	(4) HDMI; supports HDMI/ HDCP (2) DXLink; supports digital video, HDCP, audio, Ethernet, bi-directional control and power Design Note: Supported capabilities for DXLink vary by connected device, see connected device manual for more information
Video Outputs	(2) HDMI; supports HDMI/ HDCP (1) DXLink; mirrors associated HDMI output; supports digital video, audio, Ethernet and bi-directional control
Video Resolution Support	Supports resolutions up to 4096 x 2160 @ 30Hz, including 3840 x 2160 @ 60Hz. See Operations Reference Guide for details for each signal type
Progressive Resolution Support	480p up to 4096 x 2160 @ 30Hz, including 3840 x 2160 @ 60Hz. If input is interlaced, all scaled outputs will deinterlace video to a progressive resolution format. If in scaler Bypass mode, interlaced input will pass through unaltered
HDCP Support	Full matrix HDCP1.4 and HDCP2.0 support (includes any input to any or all outputs) Key Management System AMX HDCP InstaGate Pro Technology Key support up to 16 sinks per output, independent of source device
EDID Management	A preferred EDID can be selected for each input or any display EDID can be mirrored to any input independently
Audio Switching	12x4 Matrix Audio Switching. Each of the 4 audio outputs has independent volume, EQ, ducking, sync delay and mixing. Any of the 4 audio paths can be routed to any analog, HDMI or Dante output (each mirrored DXLink output passes audio sent to its associated HDMI output)
Audio Inputs	(2) 3.5 mm 5-position captive-wire terminals; support balanced (differential) or unbalanced (single-ended) stereo audio (6) 3.5 mm 3-pin captive-wire MIC connectors; supports up to six mono microphones, unbalanced or balanced audio (4) HDMI connections support digital audio (2) DXLink connections support audio from DXLink Transmitters (8) Dante mono input channels. Each of 4 pairs of mono Dante inputs can be configured as 2 mono mic inputs to be mixed, or 1 stereo audio input to be switched.

Audio Outputs	<p>(1) Amplified audio output; 4-position captive wire connector; supports amplified, variable, mono or stereo audio into 4-8 Ohm</p> <p>(1) Amplified audio output; 3-position captive wire connector; supports 70V or 100V mono audio</p> <p>Connect speakers to either but not both simultaneously</p> <p>(2) Line level audio output; supports balanced or unbalanced mono or stereo</p> <p>(8) Dante mono outputs; each of 4 pairs can be configured as mono or stereo; mirrors any of the 4 audio outputs, or 2 HDMI outputs</p> <p>(2) HDMI connections support digital versions of analog audio or direct pass-through audio</p> <p>(1) DXLink output mirrors associated HDMI output; supports digital version of analog audio or direct pass-through.</p>
Audio Breakaway	Yes, stereo audio from any input can be de-embedded from its associated video, processed through the DSP, and switched independently to any analog, Dante or HDMI output for a total of up to four unique audio output signals. (DXLink outputs are mirrored to associated HDMI outputs so they will pass the same associated audio.)

HDMI	
Input Connections	(4) HDMI Type A Female, Ports (1-4)
Input Signal Type Support	HDMI/HDCP, DVI/HDCP, Display Port ++
Data Rate (Max)	18 Gbps
Pixel Clock (Max)	600 MHz
Input Equalization	Yes
Input Re-Clocking (CDR)	Yes
Output Connections	(2) HDMI Type A Female, Ports (1-2)
Output Signal Type Support	HDMI/HDCP1.4 and HDCP2.0, DVI/HDCP1.4 and HDCP2.0
Output Scaling	SmartScale or Manual Configuration or Bypass SmartScale output resolution support: All resolutions between 480p and 4096 x 2160 @ 30Hz via automatic SmartScale query of the display's declared EDID Detailed Timing Definition
Deep Color Support	Scaled Outputs: 24-bit Pass-thru Outputs: 24-bit, 30-bit, 36-bit
Color Space Support	Y,Cb,Cr & RGB
HDCP1.4 Compliance	Yes
HDCP2.0 Compliance	Yes
Audio Format Support for HDMI	Supports Dolby TrueHD, Dolby Digital, Dolby Digital Plus, Dolby Atmos, DTS-HD Master Audio, DTS, L-PCM
Note	<p>DisplayPort ++ requires DisplayPort to HDMI adapter cable</p> <p>Supports full matrix switching, video processing and scaling of 8 bit per color standard Input video signals.</p> <p>Supports full matrix switching and pass-thru of all HDMI compliant video signals including Deep Color</p> <p>Each output can deliver processed and scaled video or pass-thru video from any video input</p> <p>Each output can embed audio from any of the 4 audio</p>

	outputs as Stereo L-PCM or can pass-thru Dolby TrueHD, Dolby Digital, Dolby Digital Plus, Dolby Atmos, DTS-HD Master Audio, DTS, L-PCM audio from the selected video source
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DXLINK	
Input Connections	(2) RJ-15; Port (5,6) (2) USB Micro AB for point-to-point USB connection to a compatible DXLink Transmitter
Input Compatible Formats	Digital video, audio, Ethernet, bi-directional control and power (supported capabilities for DXLink vary by connected device, see connected device manual for more information)
Output Connections	(1) RJ-45; Port (2); DXLink output mirrors HDMI output 2 (1) USB Micro AB for point-to-point USB connection to a compatible DXLink Receiver
Output Compatible Formats	Digital Video with embedded audio, analog audio, Ethernet, bidirectional control Supports full matrix switching and pass-thru of all HDMI compliant video signals including Deep Color Audio Signal Types: Supports Dolby TrueHD, Dolby Digital, Dolby Digital Plus, Dolby Atmos, DTS-HD Master Audio, DTS, L-PCM
Output Re-Clocking	Yes
Output Scaling	SmartScale or Manual Configuration or Bypass
HDCP Support	Yes
Twisted Pair Cable Type	Shielded Cat6, Cat6A and Cat7 DXLink twisted pair cable runs for DXLink equipment shall only be run within a common building where a common building is defined as: the walls of the structure(s) are physically connected and the structure(s) share a single ground reference For more details and helpful cabling information, reference the white paper titled Cabling for Success with DXLink , or contact your AMX representative

ANALOG AUDIO	
Analog Audio Input Connections	(2) 3.5 mm 5-position captive-wire terminals; support balanced (differential) or unbalanced (single-ended) stereo audio
Input Level (Nominal)	+4 dBu (1.228 Vrms) balanced or -10 dBV (0.3162 Vrms) unbalanced
Input Level (Maximum)	+8.2 dBu 2 Vrms
Input Impedance	>12 kOhms balanced, >12 kOhms unbalanced
Analog Audio Output Connections	(1) Amplified audio output; 4-position captive wire connector; supports amplified, variable, mono or stereo audio into 4 or 8 Ohms. (1) Amplified audio output; 3-position captive wire connectors; supports 70V or 100V mono audio. Connect a speaker to either but not both simultaneously (2) Line level audio output; supports balanced or unbalanced mono or stereo
Volume Control	-100 dB to +0 dB in 1 dB steps

Balance Control	20 steps each left and right
Output Level (Maximum)	8.2 dBu (line level)
Output Impedance	200 Ohms (line level)
Audio Channel Crosstalk	Balanced Line Inputs: -100 dB @ 0 dBV, 20 Hz to 20 kHz Unbalanced Line Inputs: -80 dB @ 0 dBV, 20 Hz to 20 kHz
Audio Frequency Response	AMP: (+0.5 dB, -1 dB) 20 Hz to 20 kHz @ 8 Ohms Line: (+0.5 dB, -1 dB) 20 Hz to 20 kHz
Audio Input Compression	Independent Compression per input Attack: 1 to 2000 ms Release: 10 to 5000 ms Compression Ratio: 1 to 20 Threshold: -60 to 0 dB
Audio Input Gain Compensation	-24 dB to +24 dB, 1 dB steps
Audio Output Equalizer	10-band parametric EQ with variable center frequency, filter type and Q per band Center Frequency: 20 Hz to 20 kHz EQ Gain: -12 to +12 dB Q: 0.1 to 20 Filter Types: Bell, Base Shelf, Treble Shelf, Low Pass, High Pass, Band Pass, Band Stop
Audio Output Sync Delay	0 to 200 ms
Audio S/N Ratio	AMP: 106 dB @ 8 Ohms, full output, 1kHz A-weighted Line: 106 dB @ 2 Vrms, AES17
Audio THD+N	AMP: <0.01% @ 8 Ohms, 20 Watts, 20 Hz to 20 kHz <0.025% @ 8 Ohms, 120 Watts, 20 Hz to 20 kHz Line: <0.003% @ 0 dBV, 1 kHz
Note	Independent EQ, Volume and Balance control per output

MICROPHONE AUDIO	
Microphone Input Connections	(6) 3.5 mm 3-pin captive-wire MIC connectors; supports up to two mono microphones, unbalanced or balanced audio
Microphone Input Level (Maximum)	8.2 dBu
Microphone Input Format Support	Line or Mic level, balanced or unbalanced audio
Microphone Input Impedance	3.5 kOhms, accepts 60 to 600 Ohms sources
Microphone Input Frequency Response	(+0.5 dB, -1 dB) 20 Hz to 20 kHz
Microphone Input Gain	-24 dB to 84 dB, 1 dB steps
Microphone Input Equalizer	3-band parametric EQ with variable center frequency, filter type and Q Center Frequency: 20 Hz to 20 kHz EQ Gain per Band: -12 to +12 dB Q per band: 0.1 to 20 Filter Types: Bell, Base Shelf, Treble Shelf, Low Pass, High Pass, Band Pass, Band Stop
Microphone Input Compression	Independent Compression per Microphone Attack: 1 to 2000 ms Release: 10 to 5000 ms Compression Ratio: 1 to 20 Threshold: -60 to 0 dB
Microphone Gating	Independent Gating per Microphone Attack: 1 to 2000 ms Release: 10 to 5000 ms Depth: 0 to 20 dB Hold Off: 0 to 2000 ms Threshold: -60 to 0 dB
Microphone Limiter	Independent Limiting per Microphone Attack: 1 to 2000 ms Release: 10 to 5000 ms

	Threshold: -60 to 0 dB
Microphone Ducking	Independent Ducking per each of 4 audio paths Attack: 1 to 2000 ms Release: 10 to 5000 ms Attenuation: 0 to 20 dB Hold Off: 0 to 4000 ms Threshold: -60 to 0 dB
Microphone Inputs Note	Phantom Power: switchable 48 V to each microphone @ 7 mA max per port

DANTE AUDIO	
Dante Audio Inputs	(8) On Primary or Secondary RJ-45 Connector. Eight mono Dante/AES67 digital audio inputs with support for 48KHz.
Dante Audio Outputs	(8) On Primary or Secondary RJ-45 Connector. Eight mono Dante/AES67 digital audio outputs with support for 48KHz.

About AMX by HARMAN

Founded in 1982 and acquired by HARMAN in 2014, AMX® is dedicated to providing AV solutions for an IT World. AMX solves the complexity of managing technology with reliable, consistent and scalable systems comprising control, video switching and distribution, digital signage and technology management. AMX systems are deployed worldwide in conference rooms, classrooms, network operation/command centers, homes, hotels, entertainment venues and broadcast facilities, among others. AMX is part of the HARMAN Professional Group, the only total audio, video, lighting, and control vendor in the professional AV market. HARMAN designs, manufactures and markets premier audio, video, infotainment and integrated control solutions for the automotive, consumer and professional markets. Revised 8.30.16. ©2016 Harman. All rights reserved. Specifications subject to change.