

6x3 All-In-One Presentation Switchers with NX Control (Multi-Format, HDMI Inputs)

DVX-2250HD-SP (FG1906-11) 2x25W 8-Ohm DVX-2250HD-T (FG1906-13) 75W 70/100V



Overview

The Enova® DVX-2250HD 6x3 All-In-One Presentation Switcher is a unified audio, video, and control device that replaces the need for numerous individual components and eliminates the integration and reliability challenges that accompany them. The compact 3U Presentation Switcher integrates a variety of different functionality, such as a scaler, analog to digital signal converter, twisted pair transmitter and amplifier with built-in professional grade audio processing into a single box. With AMX-exclusive features, the DVX-2250HD is a simple to install, flexible solution, perfectly suited for smaller conference rooms and classrooms.

The DVX-2250HD includes the next generation NetLinx Integrated Controller technology, the NX-Series. This new controller provides a scalable platform for the future by combining high performance, backward compatibility and extensive network security features.

The DVX-2250HD includes a long list of features to ensure optimal audio and video quality from virtually any source. The state-of-the-art professional grade audio DSP delivers quality audio throughout a room. The DVX-2250HD's multi-format video inputs support analog and digital signals including HDMI with HDCP sources - all in the same connector. Built-in SmartScale® Technology outputs video that is perfectly scaled for each connected display, eliminating the integration challenges that can occur when sources and displays have different optimal resolutions - making the DVX-2250HD easy to specify, easy to install and easy to use.

The Enova DVX's all-in-one architecture also 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-2250HD is ideal for dramatically simplifying AV control and distribution in small to medium-sized and large conference rooms, boardrooms and classrooms.
- The flexible DVX-2250HD is perfect for any complex collaboration space with a mix of analog and digital sources, multiple displays, or rooms that require support for video conferencing.
- The DVX-2250HD is perfect for any room or facility with space constraints, especially those that lack space in equipment racks.

Features

- All-In-One Device Controller, matrix switcher, scaler, analog to digital converter, amplifier, plus twisted pair distribution and professional-grade audio DSP – all in a space-saving 3U chassis
- Simplicity & Reliability Replaces the need for numerous individual components and equipment, ensuring high reliability and saving 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 NIC to isolate AMX or third-party AV equipment from the primary network, IPv6 and wired 802.1X for protected network access, and user-defined LDAP login group support, the Enova DVX provides rock-solid security
- IPv6 and wired 802.1x Supports modern networking standards for internet protocol IPv6 and port-based Network Access Control utilizing X.509 certificates for access to protected networks
- 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 information—without manual setup, eliminating the need for costly external scalers
- Crystal Clear Audio Includes an integrated digital signal processor with advanced capabilities like independent 10-band parametric EQ, independent input gain adjustments and variable compression, allow precision tuning to match unique source and room attributes
- Audio Breakaway Stereo audio from any analog input or de-embedded from any HDMI input can be broken away from its associated video, processed through the DSP, and switched independently to any analog, HDMI or S/PDIF audio output
- Audio Matrix Switching Three 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
- Matrix Switching Freely route any input to any or all outputs without blocking 6x3 video switcher and 8x3 audio switcher with audio breakaway
- AV and Control Over Twisted Pair Send audio, video, bi-directional control and Ethernet up to 100m over one standard twisted pair cable
- HDMI/HDCP Switching with Simplicity of Analog End-to-end distribution of HDMI/HDCP without interruption or key constraints using exclusive InstaGate Pro® Technology
- Multi-Format Ports Built for analog signals RGBHV, Component, S-Video, and Composite, and digital HDMI/HDCP and DVI signals - all on the same connector
- Enhanced Diagnostics On Serial & IR Ports Provides real time error feedback when Serial and IR ports are disconnected or improperly wired
- 3D Support Pass through latest video formats including 3D and Deep Color
- DXLink™ Twisted Pair Outputs Send audio, video, bi-directional control, Ethernet and power to DXLink
 HDMI Receivers up to 100m away over one twisted pair cable for more details and helpful cabling
 information, reference the white paper titled Cabling for Success with DXLink, or contact your AMX
 representative
- Saves Energy Includes features that dramatically reduce energy utilization. Use the interactive DVX Energy Savings Calculator to estimate savings for your particular configuration

Specifications

ifications	
GENERAL	
Enclosure	Metal with black matte finish
Dimensions (HWD)	5 3/16" x 17" x 14" (13.2 cm x 43.2 cm x 35.6 cm)
Weight	18.2 lb (8.26 Kg)
Regulatory Compliance	FCC Part 15 Class A
	CE EN 55022
	CE EN 55024
	CE EN 60065
	IEC 60065
	IC CISPR 22 Class A
	C-Tick CISPR 22 Class A
	LVD EN 60950-1
	UL 60065 RoHS
	WEEE
Included Accessories	• (1) Power Cord, Universal
iliciadea Accessories	• (1) Commoning Strip, Cypher, 8 Pos., 3.5 mm,
	Phoenix Connector
	• (2) Front Rack Mounting Brackets
	• (8) #8-32 x .375 screws
	• (4) Rubber feet
	• (2) CC-NIRC, IR Emitter with 3.5mm Phoenix
	Connector (FG10-000-11)
	• (1) CC-DVIM-VGAF, DVI to HD-15 Female Adapter
	(FG10-2170-13)
Optional Accessories	CC-DVI-5BNCM, DVI to 5 BNC Male Cable (FG10-
	2170-08)
	 CC-DVI-RCA3M, DVI to 3 RCA Male Cable (FG10-
	2170-09)
	• CC-DVI-SVID, DVI to S-Video Cable (FG10-2170-10)
	• CC-3.5ST5-RCA2F, 5-pin 3.5mm Phoenix to 2 RCA
	Female Cable (FG10-003-20)
	 DX-RX, DXLink HDMI Receiver Module (FG1010-500)
	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) • CBL-RGB+A-FL RGB with Audio Flat Cable (FG10-
	2183-16) • CBL-RGB+A-FL RGB with Stereo Flat Cable (FG10-
	2183-16)

ACTIVE POWER REQUIREMENTS	
Power Consumption	80 Watts typical without amplifier
•	85 to 90 Watts typical average with amplifier
	30 Watts typical in low-power mode
Power Connector	IEC Power Cord Connector
	100-240 VAC
	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
Heat Dissipation (Typical)	300 BTU/hr
Heat Dissipation (Standby)	100 BTU/hr
ETHERNET	
Connection	(1) RJ-45
Description	10/100 Port RJ-45 connector provides TCP/IP
	communication. Auto MDI/MDI-X enabled. Support
	IPv4 and IPv6 networks. Supports HTTP, HTTPS, Teli
	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 100 Mbps Ethernet connection and turns C
	when the speed is 10 Mbps
INTEGRATED AMPLIFIER	
Integrated Amplifier	DVX-2150HD-SP: 2 x 25 W RMS into 8 Ohms Class D
	stereo amplifier (4 Ohms stable)
	DVX-2150HD-T: 75 W, 70 V / 100 V mono amplifier
ICSLAN	
ICSLan Connection	(1) RJ-45, 10/100 Port RJ-45 connector. Auto
	MDI/MDI-X enabled. Supports IPv4 and IPv6 netwo
	Supports HTTP, HTTPS, Telnet, FTP
ICSLan Link/Active Indicator	ICSLan LED (green) blinks when receiving Ethernet of
	packets, one on Ethernet RJ-45 connector and one
	the front panel
ICSLan Speed Indicator	Speed LED (yellow) lights On when the connection
	speed is 100 Mbps Ethernet connection and turns C
	when the speed is 10 Mbps
ONBOARD MASTER	
Controller	Integrated Controller is the equivalent of a NetLink
	2200 Integrated Controller
Memory	NVRAM: 1 MB
	Memory Card: 16 GR SD

• Memory Card: 16 GB SD

• Note: Supports external USB Solid State Drive

• DDRAM: 1 GB

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	
AxLink Port (1)	(1) 4-position 3.5mm Screw Terminal, provides data
	and power to external AxLink control devices
AxLink Indicator	(1) AxLink LED (green) indicates the state of the AxLir
	port
RS-232/422/485 Port	(1) 10-position 3.5mm Screw Terminal
	NetLinx Port 1
	XON/XOFF (transmit on / transmit off)
	CTS/RTS (clear to send/ready to send)
	300 - 115,200 baud
RS-232 Port	(3) 5-position 3.5mm Screw Terminal
	NetLinx Ports 2-4
	XON/XOFF (transmit on / transmit off)
	CTS/RTS (clear to send/ready to send)
	300 - 115,200 baud
Serial Indicator	(4) sets of LEDs (red/yellow) indicate when serial Por
	1-4 are transmitting and receiving data
IR/Serial	(4) 2-position 3.5mm Screw Terminal
•	4 IR Transmit / 1-way Serial ports
	NetLinx Ports 11-14
	Support high-frequency carriers up to 1.142 MHz
	4 IR/Serial data signals can be generated
	simultaneously
IR/Serial Indicators	(4) LEDs (red) indicate when each of the IR/Serial por
·	(11-14) are transmitting control data
I/O Channels	(4) One 6-position 3.5mm Screw Terminal
	4-channel binary I/O port for contact closure with ea
	input being capable of voltage sensing
	NetLinx Port 22
	Channels 1-4
I/O Indicator	(4) LEDs (yellow) indicate each of the I/O channels (1
	4) are active
Relays	(4) 2-position 3.5 mm Screw Terminal, (4) single-pole
	single-throw relays
	NetLinx Port 21
	Channels 1-4
	Each relay can switch up to 24 VDC or 28 VAC @ 1 A
	Each relay is independently controlled
Relay Indicators	(4) LEDs (red) indicate when each of the relay channel
•	(1-4) are active (closed)

INTEGRATED MATRIX SWITCHER CONTROL	
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
LCD Display	Liquid crystal display (2 lines with 20 characters per line) indicates current volume level and displays the Video, Audio, and Tools menus
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	6 x 3 Matrix Video Switching, any of the 6 inputs can
Video Inputs	be routed to any or all of the 3 video outputs (2) Multi-Format DVI-I; supports HDMI/HDCP, DVI, RGB, S-Video, Composite, Component (Y/Pb/Pr) (4) HDMI; supports HDMI/HDCP
Video Outputs	(2) HDMI; supports HDMI/HDCP (1) DXLink; supports digital video, audio, Ethernet, b
Video Resolution Support	Supports resolutions up to 1920 x 1200 @ 60 Hz. Se Operations Reference Guide for details for each sign type
Progressive Resolution Support	480p up to 1920x1200 @ 60 Hz If input is interlaced, all scaled outputs will deinterlavideo to a progressive resolution format. If in scaler Bypass mode interlaced input will pass through unaltered
HDCP Support	Yes, full matrix HDCP 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 source device
EDID Management	A preferred EDID can be selected for each input or a display EDID can be mirrored to any input independently
Audio Switching	8 x 3 Matrix Audio Switching. Each of the 3 audio outputs has independent volume, EQ, ducking, sync delay and mixing. Any of the 3 audio paths can be routed to any analog, HDMI or S/PDIF output

Audio Inputs	(2) female 1/8" stereo mini-phono jacks; support
	unbalanced audio
	(2) 3.5 mm 5-position captive-wire terminals; support
	balanced (differential) or unbalanced (single-ended)
	stereo audio
	(2) 3.5 mm 3-pin captive-wire MIC connectors;
	supports up to two mono microphones, unbalanced or
	balanced audio
Audio Outputs	(4) HDMI connections support digital audio DVX-2250HD-SP (FG1906-11):
Addio Odiputs	(1) Amplified audio output; 4-position captive wire
	connector; supports amplified, variable, mono or
	stereo audio
	(2) Line level audio output; supports balanced or
	unbalanced mono or stereo
	(1) S/PDIF output; mirrors any of the 4 analog audio
	outputs, or 4 HDMI outputs (each mirrored DXLink
	output passes S/PDIF if sent to its associated HDMI
	output)
	(2) HDMI connections support digital versions of
	analog audio or direct pass-through audio
	(1) DXLink outputs support digital version of analog
	audio or direct pass-through
	DVX-2250HD-T (FG1906-13):
	(1) Amplified audio output; 2-position captive wire
	connector; supports 70 V or 100 V mono audio –
	connect speakers to either but not both
	simultaneously
	(2) Line level audio output; supports balanced or
	unbalanced mono or stereo
	(1) S/PDIF output; mirrors any of the 4 analog audio
	outputs, or 4 HDMI outputs (each mirrored DXLink
	output passes S/PDIF if sent to its associated HDMI
	output) (2) HDML connections support digital versions of
	(2) HDMI connections support digital versions of analog audio or direct pass-through audio
	(1) DXLink outputs support digital version of analog
	audio or direct pass-through
Audio Breakaway	Yes, stereo audio from any input can be embedded to
ridalo Breditaway	or de-embedded from its associated video, processed
	through DSP, and switched independently to any
	analog or HDMI output (DXLink outputs are mirrored
	to associated HDMI outputs so they will pass the
	associated audio, as will the S/PDIF output which
	mirrors one of the other audio outputs)

MULTI-FORMAT VIDEO WITH DVI-I	
Multi-Format Input Connections	(2) DVI-I; Ports (1-2)
Multi-Format Supported Video	HDMI/HDCP, DVI/HDCP, RGB, S-Video, Composite, Component (Y/Pb/Pr) See specifications for each signal style over DVI-I for more detail
Pixel Clock (Max)	165 MHz (225 MHz in pass-thru mode up to 1080p)
Input Equalization	Yes
Input Re-Clocking (CDR)	Yes

Input Level 1 VP-p nominal 75 Ohms, nomi	COMPONENT (Y/Pb/Pr) WITH DVI-I	
Input Impedance Note Requires DVI-I to 3 RCA Adapter or DVI-I to 5 BNC Adapter AC coupled: Insensitive to DC offset S-VIDEO WITH DVI-I Input Level Input Impedance Note Requires DVI-I to S-Video Adapter AC coupled: Insensitive to DC offset COMPOSITE WITH DVI-I Input Level Input Impedance 1 Vp-p nominal Input Impedance 75 Ohms, nominal Input Impedance Requires DVI-I to 3 RCA Adapter or DVI-I to 5 BNC Adapter AC coupled: Insensitive to DC offset RGBHV WITH DVI-I Supported Video RGBHV, RGBS, RGsB Input Level Input Impedance Imput Imp	Innut Level	1 Vn-n nominal
Requires DVI-I to 3 RCA Adapter or DVI-I to 5 BNC Adapter		
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S-VIDEO WITH DVI-I Input Level 1 Vp-p nominal 75 Ohms, nominal	Note	
Input Level Input Impedance Requires DVI-I to S-Video Adapter AC coupled: Insensitive to DC offset COMPOSITE WITH DVI-I Input Level Input Impedance Note Requires DVI-I to 3 RCA Adapter or DVI-I to 5 BNC Adapter AC coupled: Insensitive to DC offset RGBHV WITH DVI-I Supported Video RGBHV, RGBS, RGSB Input Level Input Impedance RGBHV, RGBS, RGSB Input Level RGBHV, RGBS, RGSB Input Level RGBHV, RGBS, RGSB Input Level RGBHV, RGBS, RGSB RGBHV, RGS, RGSB RGBHV, RGBS, RGSB RGBHV, RGS, RGSB		AC coupled: Insensitive to DC offset
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Note TS Ohms, nominal Requires DVI-I to S-Video Adapter AC coupled: Insensitive to DC offset	Input Level	1 Vp-p nominal
AC coupled: Insensitive to DC offset COMPOSITE WITH DVI-I Input Level	Input Impedance	75 Ohms, nominal
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Input Level 1 Vp-p nominal 75 Ohms, nomi		AC coupled: Insensitive to DC offset
Input Impedance 75 Ohms, nominal Requires DVI-I to 3 RCA Adapter or DVI-I to 5 BNC Adapter AC coupled: Insensitive to DC offset RGBHV WITH DVI-I Supported Video Input Level Input Impedance 75 Ohms, nominal Input Impedance 975 Ohms, nominal 10 DVI mpedance 10 DVI with DVI-I Supported Video Requires DVI to HD15 Adapter or DVI-I to 5 BNC Adapter DVI WITH DVI-I Supported Video Sync Input Level 2 to 5 Vp-p Sync Input Impedance Note Pormat: RGB HDMI WITH DVI-I HDCP Compliance Yes Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Input video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	COMPOSITE WITH DVI-I	
Input Impedance 75 Ohms, nominal Requires DVI-I to 3 RCA Adapter or DVI-I to 5 BNC Adapter AC coupled: Insensitive to DC offset RGBHV WITH DVI-I Supported Video Input Level Input Impedance 75 Ohms, nominal Input Impedance 975 Ohms, nominal 10 DVI mpedance 10 DVI with DVI-I Supported Video Requires DVI to HD15 Adapter or DVI-I to 5 BNC Adapter DVI WITH DVI-I Supported Video Sync Input Level 2 to 5 Vp-p Sync Input Impedance Note Pormat: RGB HDMI WITH DVI-I HDCP Compliance Yes Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Input video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	Input Level	1 Vp-p nominal
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Supported Video RGBHV, RGBS, RGSB Input Level 1	RGBHV WITH DVI-I	
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DVI WITH DVI-I Supported Video Sync Input Level 2 to 5 Vp-p Sync Input Impedance Note Format: RGB HDMI WITH DVI-I HDCP Compliance Yes Note Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Input video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	Note	Requires DVI to HD15 Adapter or DVI-I to 5 BNC
Supported Video Sync Input Level 2 to 5 Vp-p Sync Input Impedance Note Format: RGB HDMI WITH DVI-I HDCP Compliance Note Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Input video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)		Adapter
Sync Input Level Sync Input Impedance Sync Input Impedance Pormat: RGB Light Mith DVI-I HDCP Compliance Note Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Inputivideo signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	DVI WITH DVI-I	
Sync Input Impedance Note Format: RGB HDMI WITH DVI-I HDCP Compliance Note Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Input video signals. Supports full matrix switching and passthru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	Supported Video	DVI 1.0
Note HDMI WITH DVI-I HDCP Compliance Note Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Inpu video signals. Supports full matrix switching and passthru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	Sync Input Level	2 to 5 Vp-p
HDMI WITH DVI-I HDCP Compliance Note Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Inpu video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	Sync Input Impedance	2.5 pf Typical, 10 pF Maximum
HDCP Compliance Note Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Inpu video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	Note	Format: RGB
Note Requires DVI to HDMI Adapter Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Inpu video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	HDMI WITH DVI-I	
Signal Types: Supports full matrix switching, video processing and scaling of 8 bit per color standard Inpu video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	HDCP Compliance	Yes
processing and scaling of 8 bit per color standard Inpu video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)	Note	Requires DVI to HDMI Adapter
processing and scaling of 8 bit per color standard Inpu video signals. Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)		Cignal Types Connecte full metals switching will-
video signals. Supports full matrix switching and pass- thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)		
thru of all HDMI compliant video signals including 3-D and Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)		
And Deep Color HDMI WITH HDMI Type A Female Input Connections (4) HDMI Type A Female, Ports (5-10)		
Input Connections (4) HDMI Type A Female, Ports (5-10)		
	HDMI WITH HDMI Type A Female	
	Input Connections	(4) HDMI Type A Female. Ports (5-10)
	Input Signal Type Support	HDMI/HDCP, DVI/HDCP, Display Port ++

Data Rate (Max)	4.95 Gbps (6.75 Gpbs in pass-thru mode up to 1080p)
Pixel Clock (Max)	165 MHz (225 MHz in pass-thru mode up to 1080p)
Input Equalization	Yes
Input Re-Clocking (CDR)	Yes
Output Connections	(2) HDMI Type A Female, Ports (1-2)
Output Signal Type Support	HDMI/HDCP, DVI/HDCP
Output Scaling	SmartScale or Manual Configuration or Bypass SmartScale output resolution support: All resolutions between 480p and 1920 x 1200 @ 60 Hz via automatic SmartScale query of the display's declared EDID Detailed Timing Definition
Deep Color Support	Scaled Outputs: 24-bit, pass-thru Outputs: 30-bit, 36-bit
Color Space Support	Y,Cb,Cr & RGB
3D Format Support	Yes, when in Bypass mode, HDMI primary formats
HDCP Compliance	Yes
Audio Format Support for HDMI	Supports Dolby TrueHD, Dolby Digital, DTS-HD Master Audio, DTS, L-PCM
Note	DisplayPort ++ requires DisplayPort to HDMI adapter cable
	Supports full matrix switching, video processing and scaling of 8 bit per color standard input video signals.
	Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D and Deep Color
	Each output can deliver processed and scaled video or pass-thru video from any video input
	Each output can embed audio from any of the 3 analog audio outputs as Stereo L-PCM or can pass-thru Dolby TrueHD, Dolby Digital, DTS-HD Master Audio, DTS and L-PCM audio from the selected video source

DXLINK WITH RJ-45	
Output Connections	(1) RJ-45; Port (3)
Output Compatible Formats	Digital Video with embedded audio, analog audio, Ethernet, bi directional control and power Supports full matrix switching and pass-thru of all
	HDMI compliant video signals including 3D and Deep Color Audio Signal Types: Supports Dolby TrueHD, Dolby Digital, 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 <u>Cabling for Success</u> with <u>DXLink</u> , or contact your AMX representative
Note	Supports full matrix switching, video processing and scaling of 8 bit per color standard Input video

	scaling of 6 bit per color standard input video
ANALOG AUDIO	
Analog Audio Input Connections	(2) female 1/8" stereo mini-phono jacks; support
	unbalanced audio
	(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)	+14 dBu
Input Impedance	>12 kOhms balanced, >12 kOhms unbalanced
Analog Audio Output Connections	DVX-2250HD-SP (FG1906-11):
	(1) Amplified audio output; 4-position captive wire
	connector; supports amplified, variable, mono or
	stereo audio
	(2) Line level audio output; supports balanced or
	unbalanced mono or stereo
	DVX-2250HD-T (FG1906-13):
	(1) Amplified audio output; 2-position captive wire
	connectors; supports 70 V or 100 V 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)	+17 dBu (line level)
Output Impedance	200 Ohms (line level)
Audio Channel Crosstalk	Balanced Line Inputs: -98 dB @ 0 dBV, 20 Hz to 20 kF
, and distance of costant	Unbalanced Line Inputs: -70 dB @ 0 dBV, 20 Hz to 20
	kHz
Audio Frequency Response	AMP: 20 Hz to 20 kHz ±0.75 dB @ 8 Ohms
	Line: 20 Hz to 20 kHz ±0.1 dB
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, 1dB steps
Audio Output Equalizer	10-band parametric EQ with variable center frequence
	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 Shelving, Treble Shelving, Low
	Pass, High Pass, Band Pass, Band Stop
Audio Output Sync Delay	0 to 200 ms
Audio S/N Ratio	AMP: 85 dB @ 8 Ohms, full output, 1 kHz A-weighted
Audia TUD N	Line: 105 dB @ 10 dBV, AES17
Audio THD+N	AMP: < 0.15% @ 8 Ohms, 20 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	(2) 3.5 mm 3-pin captive-wire MIC connectors;
	supports up to two mono microphones, unbalanced o
	balanced audio
Microphone Input Level (Maximum)	5 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 Gain	-24 dB to +89 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 Shelving, Treble Shelving, 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 3 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
	@ 8 mA total

S/PDIF DIGITAL AUDIO	
S/PDIF Audio Outputs	(1) S/PDIF output; mirrors either of the 3 analog audio outputs or 4 HDMI outputs or DXLink output
S/PDIF Audio Output Note	Output can mirror any of the 3 analog audio outputs as stereo digital audio, or L-PCM, Dolby Digital and DTS audio being passed-thru to any of the 4 HDMI outputs



For a more detailed PDF or DXF pictorial drawing please visit: http://www.amx.com/products/DVX-2250HD.asp



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