

# **10x4** All-In-One Presentation Switchers (Multi-Format, HDMI, 4 DXLink<sup>™</sup>Inputs)

DVX-3156HD-SP (FG1905-22) 2x25W 8-Ohm DVX-3156HD-T (FG1905-24) 75W 70/100V



## Overview

The Enova® DVX-3156HD 10x4 All-In-One Presentation Switcher is a single, 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-3156HD is a simple to install, flexible solution, perfectly suited for large and complex conference rooms, classrooms and auditoriums, as well as dual room applications where multiple rooms can share a single DVX.

The DVX-3156HD 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-3156HD'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-3156HD 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-3156HD, with its 4 DXLink inputs, is ideally suited for dual room applications, where multiple collaboration spaces share a single DVX for control.
- The DVX-3156HD is ideal for dramatically simplifying AV control and distribution in medium-sized and large conference rooms, boardrooms, classrooms, lecture halls and auditoriums.
- With the included DXLink inputs, the DVX-3156HD is perfect for rooms where the AV rack is not near your source devices and display.
- The flexible DVX-3156HD 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-3156HD 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
- 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 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
- Matrix Switching Freely route any input to any or all outputs without blocking 10x4 video switcher and 14x4 audio switcher with audio breakaway
- AV and Control Over Twisted Pair Send and receive 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 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
- 3D Support Pass through latest video formats including 3D and Deep Color
- DXLink™ Twisted Pair Outputs Send audio, video, bi-directional control and Ethernet to DXLink HDMI Receivers up to 100m away over one twisted pair cable

- DXLink Twisted Pair Inputs Receive audio and video from DXLink Multi-Format Transmitters and Solecis
  Digital Switchers and deliver bi-directional control and Ethernet. In addition the DVX provides power to
  DXLink Multi-Format Transmitters. 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**

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)
Certifications	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
La alcala di Annona di a	RoHS / WEEE Compliant
Included Accessories	•2 CC-NIRC, IR Emitter w/3.5mm Phoenix (FG10-000
	11) •1 CC-DVIM-VGAF, DVI to VGA Adapter (FG10-2170-
	13)
	•(2) Front Rack Mounting Brackets (62-1905-16 and
	62-1905-17)
	•Enova DVX-3155HD All-In-One Presentation Switch
	Installation Guide
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-DVIM-VGAF, DVI to HD-15 Female Adapter (FG1
	2170-13)
	•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
	DX-TX, DXLink Multi-Format Transmitter Module
	(FG1010-310)
	•DX-TX-DWP, DXLink Multi-Format Decor Style
	Wallplate Transmitters (US) (FG1010-325-BL/WH)
	•DX-TX-WP, DXLink Multi-Format Wallplate Transmitters (FG1010-320-BL/WH)
	•SDX-410-DX, 4x1 HDMI Digital Switcher with DXLink
	Output (FG1010-304)
	•SDX-510M-DX, 5x1 Multi-Format Digital Switcher
	with DXLink Output (FG1010-315)
	•SDX-810-DX, 8x1 HDMI Digital Switcher with DXLink
	Output (FG1010-308)
	•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)

<ul> <li>EXB-I/O8, ICSLan Input/Output Interface, 8 Channels (FG2100-21)</li> <li>EXB-MP1, ICSLan Multi-Port, 1 COM, 1 IR/S, 2 I/O, 1 IR RX (FG2100-26)</li> <li>CBL-HDMI-FL HDMI, High Speed Flat Cable with RedMere® Technology (FG10-2180-16)</li> <li>CBL-DP-FL, DisplayPort High Speed Flat Cable with RedMere Technology (FG10-2181-16)</li> </ul>
RedMere Technology (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)

ACTIVE POWER REQUIREMENTS	
Power Consumption	90 Watts typical without amplifier 95 to 100 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. This is an Auto MDI/MDI-X enabled port, which allows you to use either straight-through or crossover Ethernet cables. The Ethernet Port LEDs show communication activity, connection status, speeds, and mode information
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 OFF when the speed is 10 Mbps

INTEGRATED AMPLIFIER	
Integrated Amplifier	DVX-3156HD-SP: 2 x 25 W RMS into 8 Ohms Class D stereo amplifier (4-ohm stable)
	DVX-3156HD-T: 75 W, 70 V / 100 V mono amplifier

ONBOARD MASTER	
Controller	Integrated Controller is the equivalent of a NetLink NI-
	3101-SIG Central Controller
Memory	256 MB SDRAM

	1 MB Non-volatile (NV) SRAM 4 GB FLASH
Program Port	(1) DB-9 connector that supports RS-232 communications to a PC for system configuration and diagnostics
Configuration Dip Switch	8-position Master configuration DIP switch allows setting the Serial Programming port baud rate and onboard Master execution mode (PRD or normal)
ID Pushbutton	Black ID pushbutton sets the NetLinx Device ID assignments of the Internal Control Device. 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

CONTROL PORTS & INDICATORS	
AxLink Port	(1) AxLink Port: 1 3.5 mm captive-wire connector
	provides data and power to external control devices
AxLink Indicator	(1) AxLink LED (green) indicates the state of the AxLink
	port
I/O Channels	(1) 6-Pin 3.5 mm (female) captive-wire connector
	8-channel binary I/O port for contact closure with each
	input being capable of voltage sensing
	NetLinx Port 17
	Channels 1-8
I/O Indicator	(8) LEDs (yellow) indicate that one or more of the I/O
	channels (1-8) are active
IR/Serial	(2) 8-pin 3.5 mm (female) captive-wire connectors
	8 IR Transmit / 1-way Serial ports
	NetLinx Ports 9-16
	Supports high-frequency carriers up to 1.142 MHz
	8 IR/Serial data signals can be generated
	simultaneously
IR/Serial Indicators	(8) LEDs (red) indicate that one or more of the IR/Serial
	ports (1-8) are transmitting control data
Relays	(4) single-pole, single-throw relays
	(2) 8-pin 3.5 mm (female) captive-wire connectors
	NetLinx Port 8
	Channels 1-8
	Each relay can switch up to 24 VDC or 28 VAC @ 1 A
	Each relay is independently controlled
Relay Indicators	(8) LEDs (red) indicate that one or more of the relay
	channels (1-8) are active (closed)
RS-232/422/485 Ports	(6) bi-directional RS-232/422/485 serial ports
	(6) DB9 Male Connectors
	NetLinx Ports 1-6
	XON/XOFF (transmit on / transmit off)
	CTS/RTS (clear to send/ready to send)
	300 - 115,200 baud
RS-232/422/485 Indicators	(6) sets of LEDs (red/yellow) indicate that RS-
	232/422/485 Ports (1-6) are transmitting or receiving
	data

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	10x4 Matrix Video Switching, any of the 10 inputs can
	be routed to any or all of the 4 video outputs
Video Inputs	(2) Multi-Format DVI-I; supports HDMI/HDCP, DVI,
	RGB, S-Video, Composite, Component (Y/Pb/Pr)
	(4) HDMI; supports HDMI/HDCP
	(4) DXLink; supports digital video, HDCP, audio,
	Ethernet, bi-directional control and power
Video Outputs	(4) HDMI; supports HDMI/HDCP
	(2) DXLink; mirrors associated HDMI outputs; supports
	digital video, audio, Ethernet and bi-directional control
Video Resolution Support	Supports resolutions up to 1920 x 1200 @ 60Hz. See
	Operations Reference Guide for details for each signal
	type
Progressive Resolution Support	480p up to 1920x1200 @ 60 Hz
	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	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 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	14x4 Matrix Audio Switching. Each of the 4 audio
	outputs has independent volume, EQ, ducking, sync

Audio Inputs	routed to any analog, HDMI or S/PDIF output  (2) female 1/8" stereo mini-phono jacks; support unbalanced audio
Audio Inputs	
	l linnalanced alidio
	<ul><li>(4) 3.5 mm 5-position captive-wire terminals; support balanced (differential) or unbalanced (single-ended)</li></ul>
	stereo audio
	(2) 3.5mm 3-pin captive-wire MIC connectors;
	supports up to two mono microphones, unbalanced of
	balanced audio
	(4) HDMI connections support digital audio
	(4) DXLink connections support audio from DXLink
	Transmitters
Audio Outputs	DVX-3156HD-SP (FG1905-22):
radio outputs	(1) Amplified audio output; 4-position captive wire
	connector; supports amplified, variable, mono or
	stereo audio
	(3) 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 (the two DXLink outputs
	that mirror 2 assigned HDMI outputs support the
	S/PDIF as well)
	(4) HDMI connections support digital versions of
	analog audio or direct pass-through audio
	(2) DXLink outputs mirror associated HDMI outputs;
	support digital version of analog audio or direct pass-
	through
	DVX-3156HD-T (FG1905-24):
	(1) Amplified audio output; 2-position captive wire
	connector; supports 70V or 100V mono audio –
	connect speakers to either but not both
	simultaneously
	(3) 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 (the two DXLink outputs
	that mirror 2 assigned HDMI outputs support the
	S/PDIF as well)
	(4) HDMI connections support digital versions of
	analog audio or direct pass-through audio
	(2) DXLink outputs mirror associated HDMI outputs;
	support digital version of analog audio or direct pass- through
Audio Breakaway	Yes, stereo audio from any input can be embedded to
	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
	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
COMPONENT (Y/Pb/Pr) WITH DVI-I	
Input Level	1 Vp-p nominal
Input Impedance	75 Ohms, nominal
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	
3 11523 11111 5111	
Input Level	1 Vp-p nominal
Input Impedance	75 Ohms, nominal
Note	Requires DVI-I to S-Video Adapter
	AC coupled: Insensitive to DC offset
COMPOSITE WITH DVI-I	
00111 03112 01111 0011	
Input Level	1 Vp-p nominal
Input Impedance	75 Ohms, nominal
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	1 Vp-p nominal
Input Impedance	75 Ohms, nominal
Sync Input Level	2 to 5 Vp-p
Sync Input Impedance	2.5 pf Typical, 10pF Maximum
Note	Requires DVI to HD15 Adapter or DVI-I to 5 BNC Adapter
DVI WITH DVI-I	
Supported Video	DVI 1.0
Sync Input Level	2 to 5 Vp-p
Sync Input Impedance	2.5 pf Typical, 10pF Maximum
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 (5-8)
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	(4) HDMI Type A Female, Ports (1-4)
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 automati 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 o pass-thru video from any video input
	Each output can embed audio from any of the 3 analo 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	
Input Connections	(4) RJ-15; Port (7-10)
Input Compatible Formats	Digital video, audio, Ethernet, bi-directional control and power from DXLink Transmitters
Output Connections	(2) RJ-45; Port (1,3); DXLink outputs mirror HDMI outputs 1 and 3
Output Compatible Formats	Digital Video with embedded audio, analog audio, Ethernet, Bi directional control  Supports full matrix switching and pass-thru of all HDMI compliant video signals including 3-D 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

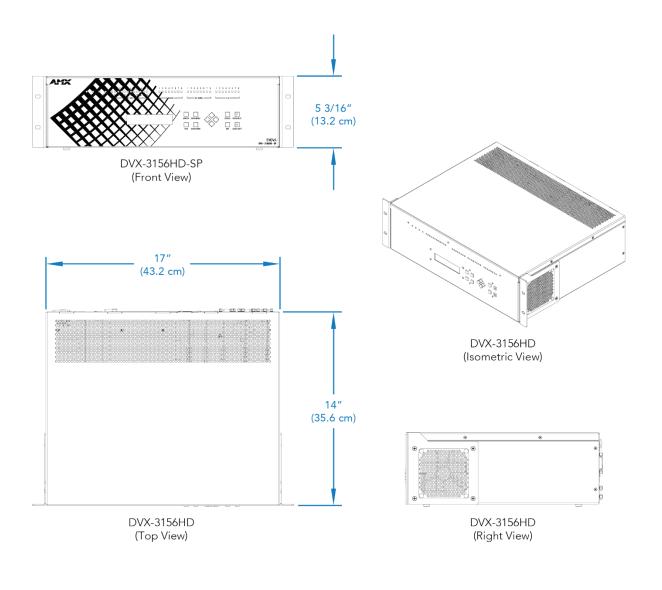
ANALOG AUDIO	
Analog Audio Input Connections	<ul><li>(2) female 1/8" stereo mini-phono jacks; support unbalanced audio</li><li>(4) 3.5 mm 5-position captive-wire terminals; support balanced (differential) or unbalanced (single-ended) stereo audio</li></ul>
Input Level (Nominal)	+4 dBu (1.228 Vrms) balanced or -10 dBV (0.3162 Vrms) unbalanced
Input Level (Maximum)	+14 dBu 2 Vrms
Input Impedance	>17 kOhms balanced, >10 kOhms unbalanced
Analog Audio Output Connections	DVX-3156HD-SP (FG1905-22):  (1) Amplified audio output; 4-position captive wire connector; supports amplified, variable, mono or stereo audio  (3) Line level audio output; supports balanced or unbalanced mono or stereo  DVX-3156HD-T (FG1905-24):  (1) Amplified audio output; 2-position captive wire connectors; supports 70V or 100V mono audio – connect a speaker to either but not both simultaneously  (3) Line level audio output; supports balanced or
Volume Control	unbalanced mono or stereo -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 KHz 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, 1 dB steps
Audio Output Equalizer	10-band parametric EQ with variable center frequency, filter type and Q per band Center Frequency: 20 to 20K Hz EQ Gain: -12 to +12 dB Q: 0.1 to 20 Filter Types: Bell, Base Shelving, Treble Shelving, Low

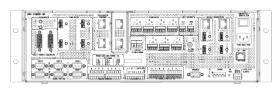
	Pass, High Pass, Band Pass, Band Stop
Audio Output Sync Delay	0 to 200 ms
Audio S/N Ratio	AMP: 85 dB @ 8 Ohms, full output, 1 kHz A-weighted
	Line: 105 dB @ 10 dBV, AES17
Audio THD+N	AMP: < 0.15% @ 8 Ohms, 20 Watts, 20 Hz to 20 kHz
	Line: 0.003% @ 0 dBV, 1 kHz
Note	Independent EQ, Volume and Balance control per
	output

MICROPHONE AUDIO	
Microphone Input Connections	(2) 3.5mm 3-pin captive-wire MIC connectors; supports up to two mono microphones, unbalanced of 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	-24dB to +89dB, 1dB steps
Microphone Input Equalizer	3-band parametric EQ with variable center frequency, filter type and Q Center Frequency: 20 to 20K Hz 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 48V to each microphone @ 8 mA total

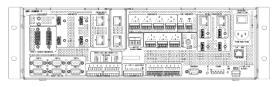
S/PDIF DIGITAL AUDIO	
S/PDIF Audio Outputs	(1) S/PDIF output; mirrors either of the 4 analog audio outputs or 4 HDMI outputs (each mirrored DXLink output passes S/PDIF if sent to its associated HDMI output)
S/PDIF Audio Output Note	Output can mirror any of the 4 analog audio outputs as stereo digital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

For a more detailed pictorial drawing please visit: <a href="http://www.amx.com/products/DVX-3156HD.asp">http://www.amx.com/products/DVX-3156HD.asp</a>





DVX-3156HD-SP (Back View)



DVX-3156HD-T (Back View)

# 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, infortainment and integrated control solutions for the automotive, consumer and professional markets. Revised 11.6.14. ©2014 Harman. All rights reserved. Specifications subject to change.

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