DXLink™ 4K HDMI Decor Style Wallplate Transmitters (US)

DX-TX-DWP-4K-BL (FG1010-330-BL)
DX-TX-DWP-4K-WH (FG1010-330-WH)

Overview

The DXLink HDMI Decor Style Wallplate Transmitter sends HDMI/HDCP, along with embedded audio up to 70 meters over one shielded Cat6A or Cat7 standard twisted pair cable to an Enova DGX Digital Media Switcher.

Common Applications

Mount the DXLink HDMI Decor Style Wallplate Transmitter in the wall, lectern or popular floor box to connect guest equipment and send audio and video signals across the room, on the other side of the house or in a classroom down the hall. Since it is powered remotely, the wallplate can be installed virtually anywhere.

Features

- **4K and Ultra High Definition (UHD) Support** – Experience high-quality video resolution for 4K devices
- **Only One Cable** – Send audio and video over one twisted pair cable
- **Send HDMI signals 70 meters** – Extend the reach of the HDMI signals beyond the capabilities of HDMI cabling

- **Standard Twisted Pair Cable** – Save time and effort in installation by leveraging cost effective twisted pair cable, see the Cabling for Success with DXLink white paper for more details
- **Easy Installation** – Mounts in standard decor style wallplates

Specifications

GENERAL	
Dimensions (HWD)	4 1/5" (10.67 cm) x 1 1/4" (3.18 cm) x 1 3/4" (4.45 cm)
Mounting Options	Mounts onto standard single-gang US, UK, or EU back boxes Mounts into standard decor style wallplates (not included)
Weight	Approximately 0.45 lb (0.2 kg)
Shipping Weight	Approximately 1.05 lb (.47 kg)
MTBF	4,584,000 hrs
Airflow	Convection (openings on all sides of case)
Compatible AMX Products	• Enova DGX 800/1600/3200/6400 Digital Media Switchers with DGX-I-DXL-4K DGX DXLink Twisted Pair 4K Input Board installed • DX-RX-4K, DXLink 4K HDMI Receiver Module as a point-to-point solution (when Wallplate TX is powered by PS-POE-AT-TC or PDXL-2) • PS-POE-AT-TC, High Power PoE Injector • PDXL-2, Power over DXLink Controller •Enova DVX-3255HD, DVX-3256HD and 2255HD, DVX-3155HD, DVX-3156HD and 2155HD All-In-One Presentation Switchers NOTE: For passage of 4K signal content, 4K products must be used. DXLink 4K HDMI Decor Style Wallplate Transmitters are also compatible with DXLink Twisted Pair (non-4K) equipment and Enova DVX-3255HD, DVX-3256HD and DVX-2255HD All-In-One Presentation Switchers. Conditions may apply, please reference hardware reference manuals or contact technical support for details
Regulatory Compliance	UL 60950-1 2nd Ed. Am2 CAN/CSA 22.2 No. 60950-1 2nd Ed. Am2 IEC 60950-1 2nd Ed. Am2 CE EN 60950-1 2nd Ed. Am2 CE EN 55022:2010 Class A CE EN 55024:2010 FCC CFR Title 47 Part 15 Subpart B Class A ICES-003 issue 6 Class A CISPR 22 CISPR 24 RoHS WEEE
Optional Accessories	•PS-POE-AT-TC High Power PoE Injector (FG423-84) •PDXL-2 Power over DXLink Controller (FG1090-170)

DXLink TWISTED PAIR	
Transport Layer Throughput (max)	10.2 Gbps
Twisted Pair Cable Type	• Shielded Cat6A or 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
Twisted Pair Cable Length	Up to 262 ft. (80 m) for full 4K signal support Up to 328 ft. (100 m) for 1080p and below IMPORTANT: DXLink twisted pair cable runs for DXLink equipment shall only be run within a common building. "Common building" is defined as: Where the walls of the structure(s) are physically connected and the structure(s) share a single ground reference.

ACTIVE POWER REQUIREMENTS	
DXLink Power	Power must be supplied by a DXLink Power sourcing device such as an Enova DGX 8/16/32/64 or 800/1600/3200/6400 Digital Media Switcher or compatible Enova DVX All-In-One Presentation Switcher (DVX-3255HD, 3256HD or 2255HD, DVX-3155HD, 3156HD or 2155HD), PS-POE-AT-TC High Power PoE Injector (FG423-84), or PDXL-2 Power over DXLink Controller (FG1090-170). AMX does not support the use of any other power supplies or PoE injectors as these may potentially damage the DXLink equipment. When installed in conjunction with the Enova DGX 100 Series Digital Media Switcher, use the Enova DGX 100 Series Configuration Tool located at www.amx.com/enova to determine the power requirements of the configuration and whether any of the DXLink Transmitters or Receivers should be powered with the local power supplies or the supported Power over DXLink injector. The configuration tool contains instructions on how to determine power requirements. AMX only supports the use of these approved Power over DXLink solutions. Other third party power supplies or non-compatible standard PoE solutions may damage the DXLink equipment.
Power Connector	Included on DXLink Connection
AC Power	AMX POE Injector 100-240 VAC single phase, 50-60 Hz 0.8 A @ 100 VAC max.
Power Consumption (Max)	Enova DXLink Power Consumed (max) 4 W

POWER SUPPLY	
External, Required	Power can also be supplied by a DXLink Power sourcing device such as: • Enova DGX 800/1600/3200/6400 or 8/16/32/64 Digital Media Switcher (with a DXLink Twisted Pair Input Board installed) • Compatible Enova DVX All-In-One Presentation Switcher (3155HD, 3156HD or 2155HD) • PS-POE-AT-TC High Power PoE Injector

	• PDXL-2 Power over DXLink Controller
	When installed in conjunction with an Enova DGX use the Enova DGX Configuration Tool located at AMX.com/Enova to determine the power requirements of the configuration
	AMX only supports the use of these approved Power over DXLink solutions. Other third party power supplies or non-compatible standard PoE solutions may damage the DXLink equipment.

ENVIRONMENTAL	
Temperature (Operating)	32° to 104° F (0° to 40° C)
Temperature (Storage)	-22° to 158° F (-30° to 70° C)
Humidity (Operating)	5% to 85% RH (non-condensing)
Humidity (Storage)	0% to 90% RH (non-condensing)
Thermal Dissipation, Enova DXLink Power Supplied (max)	14 BTU/hr

BACK CONNECTORS	
DXLink Output	RJ-45

CONTROLS & INDICATORS	
Power Indicator	(1) LED (green) indicates whether or not the module is powered on
Digital Video Indicator	(1) LED (green) indicates whether or not the video is present (flashing) and HDCP protected (solid)

HDMI	
Compatible Formats	HDMI, HDCP , DVI (DVI requires conversion cable)
Input Signal Type	HDMI, DVI-D (Single Link with a DVI-to-HDMI cable adapter) DisplayPort ++ (Input only with HDMI cable adapter)
Input Connector	HDMI Type A Female
Propagation Delay (Typ)	5 us
Input Re-clocking (CDR)	Yes
Input Equalization	Adaptive
Video Data Rate (max)	8.91 Gbps
Video Pixel Clock (max)	297 MHz
Progressive Resolution Support	480p up to 4096 x 2160 @ 60 Hz* *Y/Cb/Cr 4:2:0 and 4K Scaler in Bypass NOTE: See full list of formats on page 82 in the DXLink Twisted Pair Transmitters/Receiver Hardware Reference Manual
Interlaced Resolution Support	480i, 576i, 1080i* 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. *Including but not limited to those resolutions shown in the DXLink Twisted Pair

4K Resolution Support	• 3840x2160p@24/25/30 Hz • 4096x2160p@24/25/30 Hz • 3840x2160p@60 Hz, 4:2:0* • 4096x2160p@60 Hz, 4:2:0* * Supported by DX-RX-4K when in Bypass scaling mode. NOTE: See full list of formats in the DXLink Twisted Pair Transmitters/Receiver Instruction Manual
Deep Color Support	24-bit, 30-bit*, 36-bit* *Only supported when the Receiver scaler is in Bypass mode using CEA-861 formats and the resolution is 1080p/60 or less
Color Space Support	RGB 4:4:4 Y/Cb/Cr 4:4:4, 4:2:2 and 4:2:0 Input signal support for YCbCr 4:4:4 and 4:2:2; output color-space is converted to RGB 4:4:4 4:2:0 only supported at 2160p 50/60Hz with 4K RX Scaler in Bypass
3D Format Support	(HDMI Primary Formats) • Frame Packing 1080p up to 24 Hz • Frame Packing 720p up to 50/60 Hz • Frame Packing 1080i up to 50/60 Hz • Top-Bottom 1080p up to 24 Hz • Top-Bottom 720p up to 50/60 Hz • Side-by-Side Half 1080i up to 50/60 Hz NOTE: 3D supported when the HDMI DXLink RX Scaler is in Bypass mode and format is 1080p60 or less
HDMI Cable Requirement	HDMI High Speed Cable, Category 2, Required
Audio Format Support	Dolby TrueHD, Dolby Digital*, DTS-HD Master Audio, DTS*, 2CH through 8CH L-PCM *Dolby Digital and DTS support up to 48 kHz, 5.1 channels.
Audio Resolution	16 bit to 24 bit
Audio Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 96 kHz, 192kHz
HDCP Support	• Supports AMX HDCP 1.4 InstaGate Pro® Technology. • When used with Enova DGX switchers, the key support is up to 16 sinks per output, independent of the source device. • When used as a single point-to-point solution, key support is defined by the source device.
CEC Support	CEC is not currently supported
DDC/EDID Support	• The HDMI EDID in point to point mode is passed up from the sink device. • When used with Enova DGX 16/32 Digital Media Switcher or Enova DVX-2155 or -3155 the HDMI EDID is passed from the Enova Switcher input to the TX and is user re-programmable. The analog video input connection provides a fixed EDID set. • For the EDID list, see the specifications in the "Enova DGX DXLink Twisted Pair 4K Boards" chapter in the Hardware Reference Manual – Enova DGX 100 Series Digital Medial Switchers.

For a detailed PDF or DXF pictorial drawing please visit: http://www.amx.com/products/DX-TX-DWP-4K.asp