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)	5 1/5" x 8 3/4" x 1" (13.18 cm x 22.22 cm x 2.54 cm)
Installation	Mounts onto standard double-gang US back box 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	896,000 hrs
Airflow	Convection (openings on top 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 NOTE: For passage of 4K signal content, 4K products must be used. DXLink Twisted Pair 4K Transmitters are

	also compatible with the following DXLink Twisted Pair (non-4K) equipment. Conditions may apply, please reference hardware reference manuals or contact technical support for details
Regulatory Compliance	CE UL cUL FCC Class A RoHS WEEE
Recommended Accessories	CC-USB, USB Programming Cable (FG10-5965)

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)

ACTIVE POWER REQUIREMENTS	
DXLink Power	Power must be supplied by a DXLink Power sourcing device such as an Enova DGX 100 Series Digital Media Switcher, 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
Power Consumption (Max)	Enova DXLink Power Supplied (max) 4K HDMI Wallplate TX 4 W

POWER SUPPLY	
External, Required	Power must be supplied by a DXLink Power sourcing device such as:

	• Enova DGX 100 Series Digital Media Switcher with DGX-I-DXL-4K DGX DXLink Twisted Pair 4K Input Board installed • PS-POE-AT-TC High Power PoE Injector (FG423-84) • PDXL-2 Power over DXLink Controller (FG1090-170). 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.

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)
Heat Dissipation (Max.)	13 BTU/hr

FRONT CONNECTORS User Accessible (accessible with faceplate mounted)	
HDMI Input	HDMI connector (with locking center screw) for digital video and embedded digital audio (supports a DVI-D signal with use of DVI-to-HDMI cable adapter). When more than one audio signal is present, HDMI embedded audio takes precedence over analog audio. HDMI Type A Female
Analog Video Input	DXLink (RJ-45) connectors transport digital video and embedded audio over twisted pair cable to DXLink devices or boards, including digitally transcoded analog video signals.
Analog Stereo Input	3.5mm stereo jack

FRONT CONNECTORS Setup Front Connectors (not accessible with faceplate mounted)	
ID Pushbutton	• Toggle between DHCP and static IP addressing • Places system in NetLinx Device ID assignment mode • Reset the factory default settings • Restore the factory firmware image
Reset Pushbutton	Resets/reboots the CPU of the wallplate

BACK CONNECTORS	
DXLink Output	RJ-45

CONTROL	
Advanced Configuration Interface	USB Mini-B Connector

INDICATORS	
Power Indicator	Green indicates whether or not the module is powered on

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 Voltage (Nominal)	1.0 Vpp Differential
Input Re-clocking (CDR)	Yes
Input Equalization	Adaptive
Data Rate (Max)	4.95 Gbps / 6.75 Gbps
Video Pixel Clock (Max)	165 MHz / 225 MHz
Progressive Resolution Support	480p up to 4096 x 2160 @ 60 Hz *Y/Cb/Cr 4:2:0
Interlaced Resolution Support	480i, 576i, 1080i (including but not limited to those resolutions shown 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 and 4:2:2 Input signal support for Y/Cb/Cr 4:4:4 and 4:2:2; output color-space is converted to RGB 4:4:4.
3D Format Support	• 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: Scaler on the corresponding output board or Receiver must be set to Bypass mode.
4K Format 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.
Audio Format Support	Dolby TrueHD, Dolby Digital, DTS-HD Master Audio, DTS, 2 CH L-PCM, 6 CH L-PCM, 8 CH 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
Local Audio Support	RX extraction

HDCP Support	• Supports AMX HDCP 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. • 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