DATA SHEET

DXLink 4K60 HDMI Receiver Module

DX-RX-4K60 (FG1010-512-01)

Overview

The AMX DXLink 4K60 HDMI Receiver Module is a 4K60 4:4:4 capable distance transport solution that features built-in SmartScale® Technology to deliver HDMI 2.0 with HDCP 2.2 that is perfectly scaled for each connected display automatically, eliminating the integration challenges that can occur when sources and displays have different optimal resolutions. It securely distributes full 4K60 4:4:4 video end-to-end as well as audio, control, Ethernet, and USB 2.0 over one shielded Cat6, Cat6A or Cat7 standard twisted pair cable. DXLink 4K60 HDMI Receiver Modules are perfect for receiving HDMI and control signals over long distances from a remote DXLink 4K60 Transmitter Module or other compatible AMX Transmitter such as the DGX DXLink 4K60 Twisted Pair Output Board. The receiver's built-in control ports can be used to control a destination device and the ICSLan port provides an IP network access port when used in conjunction with the Enova DGX 100 Series.

Common Applications

The DXLink 4K60 HDMI Receiver Module is ideal for distributing full 4K60 4:4:4 video end-to-end securely in any situation where the highest video quality is required or when a simple installation is desired:

- Colleges and universities that distribute audio and video within or between classrooms for collaborative or distributed learning.
- Corporations that distribute audio and video within meeting spaces.
- Healthcare facilities distributing high-resolution video within training rooms, simulation rooms, or labs.

Features

- **HDMI 2.0 4K60 4:4:4 Over Distance** – Ideal for users running critical viewing applications such as operations centers requiring transport which uses the full fidelity of their displays
- **High Dynamic Range (HDR) and Deep Color Support** – Support for HDR10 and 36-bit Deep Color

- **HDCP 2.2** – Supports the latest video standards to realize the full capabilities of HDMI interfaces, including transport of HDCP 2.2 Premium Content protected media such as 4K UHD Movies
- **HDBaseT Compatible** – Compliant with the HDBaseT standard, making them compatible with third party HDBaseT sources and displays
- **USB 2.0** – High-speed USB 2.0 data from devices like web cameras and storage devices are transmitted without the need for separate cables
- **As Always, Just One Cable** – Just like all current DXLink solutions, video, audio and control are delivered over a single twisted pair cable. Many competitive products require dual cable runs which adds significant cost. 4K60 4:4:4 can be transmitted up to 100m when using Cat6a shielded cable or better
- **Twisted Pair Cable** – Save time and effort in installation by leveraging cost effective twisted pair cable

Specifications

GENERAL	
Dimensions (HWD)	1" x 8 2/3" x 6 1/3" (2.54 cm x 22 cm x 16 cm)
Compatible AMX Products	• Enova DGX 800, 1600, 3200 and 6400 Digital Media Enclosure • Enova DVX-2265-4K, DVX-3266-4K All-In-One Presentation Switchers • DXLink HDMI TX-4K60 as a point-to-point solution • PS-POE-AT-TC High Power PoE Injector • PDXL-2 Power over DXLink Controller
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.
Twisted Pair Cable Length	Shielded Cat6A and Cat7 support up to 328 ft. (100 m) all resolutions, Shielded Cat6 supports up to 262 ft (80 m)
Airflow	Convection (openings on top of case)
ID Pushbutton	Black ID pushbutton for setting IP mode and reverting to default configuration and firmware
Optional Accessories	• AVB-VSTYLE-SURFACE-MNT,V Style Module Surface Mount (FG1010-722) • AVB-VSTYLE-RMK-1U,V Style Module Tray (FG1010-720) • AVB-VSTYLE-RMK-FILL-1U,V Style Module Tray w/fill Plates (FG1010-721) • AVB-VSTYLE-POLE-MNT,V Style Module Pole Mount (FG1010-723)

	• CC-NIRC, NetLinx IR Emitter Cable (FG10-000-11) • IR03, External IR Receiver Module (FG-IR03) • PS-POE-AT-TC High Power PoE Injector (FG423-84) • PDXL-2 Power over DXLink Controller (FG1090-170)

POWER SUPPLY	
External, Included	Each HDMI RX ships with a desktop power supply (ENERGY STAR® qualified) with power cord
AC Power	100-240 VAC single phase, 50-60 Hz
External, Optional	Power can also be supplied by a DXLink Power sourcing device such as: • Enova DGX 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 s olutions. 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)

BACK CONNECTORS	
HDMI Output	HDMI Type A Female
Analog Stereo Output	3.5mm Mini-Stereo Jack
ICS LAN/Ethernet Port	RJ-45 Connector;TCP/IP Port (ICS LAN 10/100)
IR RX	3.5mm Mini-Stereo Jack Port for IR03 Receiver (Optional)
IR TX	3.5mm Pluggable Phoenix Terminal Block Port for IR01 Emitter (Optional)
Serial	3.5mm Pluggable Phoenix Terminal Block Bidirectional RS-232 Standard NetLinx Baud Rate 1200-115k Parity support Odd/Even/None
USB Host	USB Type B Connector
USB Device	USB Type A Connector
DXLink Output	RJ-45
Local Power	2.1 mm DC Power Jack

USB	
USB Transport	USB HID and USB 2.0 supported point-to-point to DGX DXLink 4K60 Output Boards and DXLink 4K60 HDMI Transmitters. Can support either a Host or Device port connection depending on the USB Mode switch selection.

CONTROLS & INDICATORS	
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
Power Indicator	(1) LED (green) indicates whether the module is powered on

LINK/ACT	(1) LED (green) lights when the Ethernet cable is connected and an active link is established. This LED also blinks when receiving Ethernet data packets
Status	(1) LED (green) lights when the Controller is programmed and communicating properly
HDCP	(1) LED (green) Indicates HDCP Status
USB Mode Switch	(1) Slide Switch selects USB Host or Device mode

HDMI	
Compatible Formats	HDMI2.0, HDCP2.2, DVI (DVI requires adapter cable)
Output Signal Type	HDMI DVI-D (Single Link With Cable Adapter) DisplayPort ++ (Input Only, With HDMI Cable Adapter)
Output Connector	HDMI Type A Female
Video Data Rate (Max)	18 Gbps
Video Pixel Clock (Max)	600 MHz
Resolution Support	480p up to 3840x2160 @ 60Hz 4:4:4 and 4:2:2, including • 3840x2160p@50/60 Hz, 4:2:0 • 4096x2160p@50/60 Hz, 4:2:0
Deep Color Support	24-bit, 30-bit, 36-bit - 30 and 36-bit color are supported in CTA-861 formats up to 3840x2160p@30Hz 4:4:4; 3840x2160p@50/60Hz 4:2:2; 3840x2160p@50/60Hz 4:2:0 and 4096x2160p@50/60 Hz, 4:2:0 - 30 and 36-bit color formats require any downstream DXLink DX-RX-4K60 Scaler to be placed in Bypass mode
Color Space Support	sRGB, BT.601, BT.709, BT.2020 RGB 4:4:4, YCbCr 4:4:4, 4:2:2 and 4:2:0 - YCbCr 4:4:4, 4:2:2 and 4:2:0 will be output as RGB 4:4:4 when a downstream DX-RX-4K60 has its scaler enabled
HDMI Cable Requirement	HDMI Premium Certified High-Speed Cable, Category 2, Recommended HDMI High-Speed Cable, Category 2, Required

Audio Format Support	Dolby TrueHD, Dolby Digital, Dolby Digital Plus, DTS-HD Master Audio, DTS, 2 CH through 8 CH L-PCM - Dolby Digital and DTS support up to 48 kHz, 5.1 channels - Audio formats other than 2CH LPCM require the DX-RX-4K60 to have its scaler set to bypass
Local Audio Support	Yes for audio insertion
HDCP Support	Supports HDCP 1.x and HDCP 2.2 with Premium Content support with HDCP 2.2
CEC Support	None

ANALOG AUDIO	
Output Signal Types	Stereo Analog
Output Connectors	3.5mm Mini-Stereo Jack

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 2.18.2020.

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