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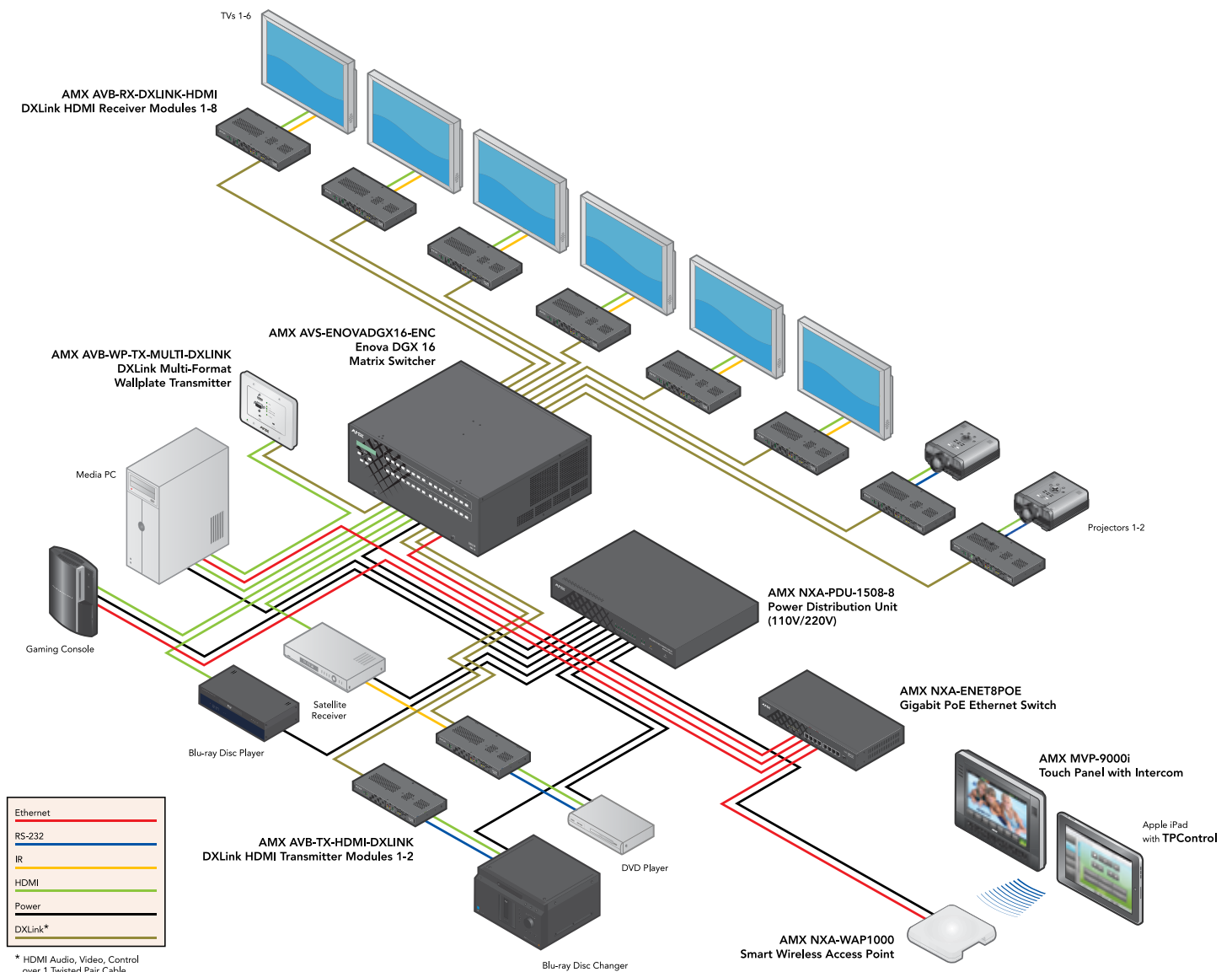
DIGITAL MEDIA SWITCHERS

HDMI WITH THE SIMPLICITY OF ANALOG

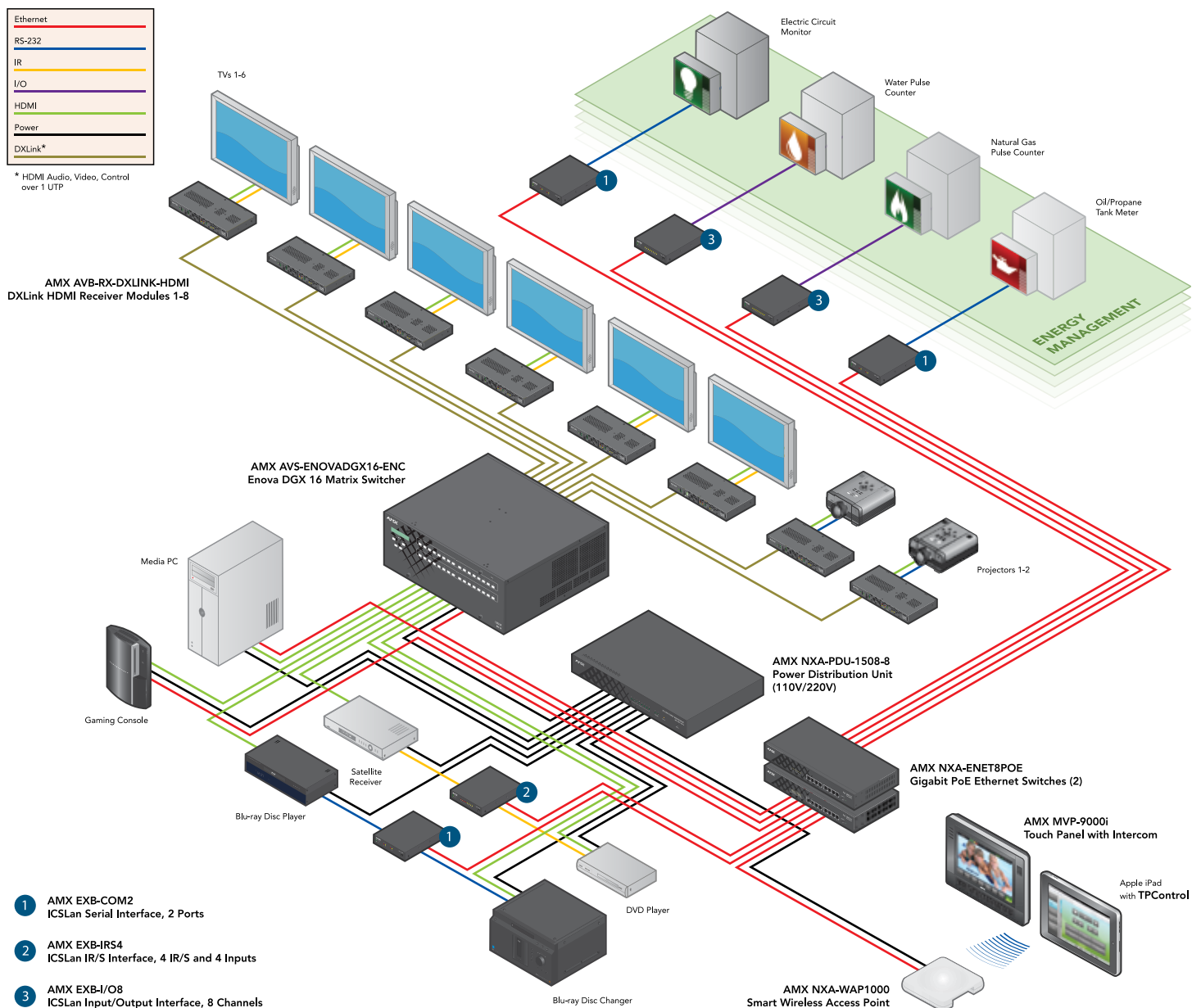
No Tools, No Delays, No Key Constraints - It Just Works

Digital Media Switchers function as the centerpiece of a complete solution that manages and distributes analog and digital audio and video including HDMI with HDCP compliance, control and Ethernet. Easily integrate HDMI into system designs and enjoy hassle-free plug-and-play operation. A comprehensive set of Enova® DGX hot swappable boards can be used in conjunction with DXLink and DGX Transmitters and Receivers to provide an end-to-end distribution system over twisted pair

SYSTEM DIAGRAM



cable or fiber. An integrated NetLinX® Controller and embedded Ethernet switch enable management of the entire solution including source equipment and display devices located throughout the environment – all from a single point of control.



Analog & Digital

Video • Audio

AVS-ENOVADGX16-ENC

Enova® DGX 16 Enclosure

(FG1058-16)

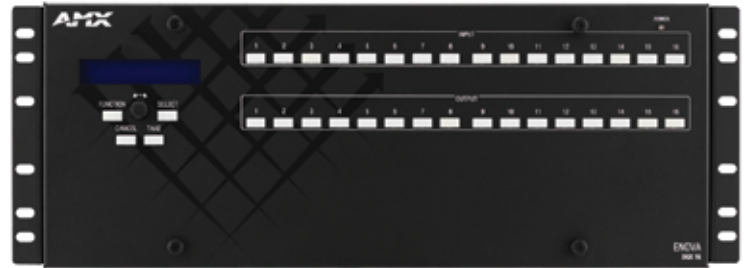


OVERVIEW

The Enova DGX 16 Enclosure includes an integrated NetLinx Controller, redundant power supplies and can be populated with Enova DGX video input and output boards in addition to optional audio insert/extract boards. There are four connections per video board, and each enclosure holds four video input boards and four video output boards for a maximum matrix of 16x16.

The Enova DGX 16 is far beyond a modular matrix switcher with built-in controller, it functions as the centerpiece of a complete integrated solution that manages and distributes analog and digital audio and video including HDMI/HDCP, control and Ethernet. Easily integrate HDCP into system designs and enjoy hassle-free plug-and-play operation. No tools, no delays, and no key constraints – it just works with AMX's exclusive InstaGate Pro™ Technology. Built for today's and tomorrow's needs a comprehensive set of Enova DGX hot swappable boards can be used in conjunction with DXLink and DGX Transmitters and Receivers to provide an end-to-end distribution system over twisted pair cable or fiber. An integrated NetLinx Controller and embedded Ethernet switch enables management of the entire solution including source equipment and display devices located throughout the environment – all from a single point of control.

In addition to eliminating HDCP delays, InstaGate Pro allows traditionally key limited sources to be switched freely to all connected HDCP compliant displays – eliminating HDCP key limitations that plague large applications. Built-in SmartScale® Technology on every output provides video that is perfectly scaled for each connected display, eliminating the integration challenges that can occur when sources and displays have different supported resolutions - making it easy to specify, easy to install and easy to use. With the powerful combination of analog-to-digital signal conversion, video scaling and high speed digital switching the system delivers perfect video every time – regardless of signal type.



As part of a complete distribution system, easily send analog or digital audio and video including HDMI with HDCP signals, plus control and power up to 100 meters over one standard twisted pair cable to and from the Enova DGX using the DXLink Transmitters/Receivers. For applications with further distance requirements DGX Fiber Transmitters/Receivers can be used.

COMMON APPLICATION

The Enova DGX 16 is ideal for commercial or residential installations requiring the highest quality video to be shared between 16 local or remote AV sources and destinations. Compact form factor allows for installation in locations where space is limited and included redundant power supplies provides for constant uptime for mission critical applications.

FEATURES

- **HDMI/HDCP Switching with Simplicity of Analog** – End-to-end distribution of HDMI/HDCP without interruption or key constraints using InstaGate Pro Technology
- **AV and Control over Twisted Pair** – Send audio, video, bi-directional control and Ethernet up to 100m over one standard twisted pair cable
- **Embedded NetLinx Controller** – Allows any connected device to be managed, monitored or controlled
- **Integrated Ethernet Switch** – Pass Ethernet or stream IP video through the attached DXLink Transmitter or Receiver
- **Analog to Digital Video Conversion with Scaled Outputs** – Converts any source signal to digital and uses SmartScale Technology to automatically output video that is perfectly scaled for each connected display
- **4 RU Enclosure** – Comparatively speaking, that's half the space of the competition
- **InstaGate Pro Technology** – Easily integrate HDCP into system designs and enjoy hassle-free matrix switching to all compliant displays. No tools, no delays, and no key constraints – it just works

- **SmartScale Technology** – Automatically responds to the display's declared EDID information and scales the video to the best resolution and video parameters for that display without manual setup; this prevents inferior video quality when sources are forced to lower resolutions to support the least capable display in the system
- **DXLink Twisted Pair Input and Output Boards** – HDCP Compliant boards send audio, video, control, Ethernet and power over one standard twisted pair cable up to 200m – 100m to the matrix switcher and 100m after the matrix switcher
- **Built-in NetLinx Controller** – Easily program and manage the entire solution including source equipment and display devices located across multiple rooms – all from a single point of control
- **Easily Convert Analog to Digital Signals** – Use legacy analog sources with the Enova DGX and automatically convert their signals to digital
- **Hot Swappable Video Input / Output Boards** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards
- **Audio Insert / Extract Boards** – Add audio from a local source or breakaway embedded audio and send to a separate audio system to distribute throughout an environment
- **Fiber Input and Output Boards** – Use in conjunction with DGX Fiber Transmitters and Receivers to send analog and digital audio and video* over fiber
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD
- **High Speed Digital Switching** – 12.8 Gbps ensures perfect pixel for pixel reproduction of video
- **Fully Redundant Power Supplies With Independent Power Paths** – Ensures maximum reliability for applications that require 24/7 uptime

*Fiber input and output boards provide support for non-HDCP signals only

DEALER BENEFITS

- **HDCP With Simplicity of Analog** – Hassle-free plug-and-play operation eliminates the need for time-consuming cumbersome work around tools to deal with HDCP key constraints and resolution incompatibilities
- **All-In-One Control and Distribution Solution** – Power combination of modular matrix switcher, built-in controller, embedded Ethernet switch and video scaling on every output simplifies the end-to-end distribution and management of audio, video and control throughout multiple rooms
- **Fast Easy Installation** – Leverage pre-existing standard twisted pair infrastructure to distribute high-definition video, audio, control and Ethernet

CUSTOMER BENEFITS

- **Picture Perfect** – Prevents degraded video due to incompatibilities between different display resolutions by scaling the video to match each display's preferred resolution using innovative SmartScale Technology
- **Interruption Free Content** – Exclusive InstaGate Pro Technology allows audio and video to be switched quickly and easily to every connected display without the difficulties typically associated with HDCP
- **Audio, Video and Control Everywhere** – Provides end-to-end distribution of audio, video and control signals throughout a residence or commercial facility over twisted pair cable



BULLSEYE TARGET PRODUCT

This is a Target Product as defined in the U.S. BullsEye Partnership Program. Participating AMX Dealers can be rewarded for purchasing Target Products as a % of their total annual net revenue.



HELPFUL HINT

InstaGate Pro provides for true, non-limited matrix switching from any HDCP source device to any or all connected destination devices



WATCH THE VIDEO

See our Enova DGX Digital Media Switchers live from InfoComm 2011 by watching our video profile on YouTube:

www.youtube.com/user/AMXtalk?blend=7&ob=5#p/u/4/wkNAQTMeenU



TRAINING AVAILABLE

For important installation, configuration and programming techniques, AMX University training is available. Just visit www.amx.com/training



AWARD WINNER

Best New Product at InfoComm 2011: AMX's Enova DGX

The Enova converts analog and digital video and control, which runs through a 16x16 or 32x32 Enova Digital Media Switcher. The switcher also includes a gigabit Ethernet switch that's fully integrated. You get digital media, control and data on a single Cat5 cable.



InstaGate Pro™ Technology

No tools, no delays and no key constraints. AMX's exclusive InstaGate Pro Technology allows traditionally key limited sources to be freely switched to any display without the typical HDCP delays.



SmartScale® Technology

Enjoy crystal clear perfect resolution on every display using AMX's exclusive SmartScale Technology which automatically outputs video that is perfectly scaled to each connected display.

SPECIFICATIONS

DIMENSIONS (HWD)

- AC Power:100-240 VAC single phase, 50-60 Hz
- Power Consumption (Max):TBA
- Power Consumption (Typ):TBA
- BTU/HR (Max):TBA
- BTU/HR (Typ):TBA
- DXLink Power Capacity:TBA
- Operational Temperature:32° to 104° F (0° to 40° C)
- Storage Temperature:-22° to +158° F (-30° to +70° C)
- Humidity:0 to 90% non-condensing
- Per Channel Aggregate Data Rate (Max):12.8 Gbps
- Noise Level:TBA

Note: Specifications are subject to change

DIMENSIONS (HWD)

- 6 13/16" x 19" x 15" (17.4 cm x 48.3 cm x 38 cm)
- RU: 4

WEIGHT

- TBA
- Shipping Weight: TBA

MTBF

TBA

APPROVALS (PENDING)

CE, FCC Class A, UL, cUL, RoHS / WEEE compliant

INTEGRATED CONTROLLER

- ICS LAN/Ethernet Port:
 - NetLinX On Board Master is an NI-3100 Class Controller
 - TCP/IP Uplink Port (LAN 10/100/1000)
- Processor:
 - CPU 404 MIPS PowerPC
- Memory:
 - SDRAM 256 MB
 - NVRAM 1 MB
 - Flash 256 MB
- ICS LAN/Ethernet Port:
 - Supports up to 64-Port Unmanaged 10/100 Ethernet Switch^
 - Static IP or DHCP/DNS, SSL, Auto-negotiating, Half/Full duplex, Auto MDI/MDI-X
 - Cross-Over
 - TCP/IP, UDP/IP, CIP, SMTP, SNMP, Built-in Web server
 - Includes support for DXLink Devices
 - RJ-45 Connector

- Program Port (USB):
 - USB Mini-AB (used for NetLinX Studio control)

ENCLOSURE CONTROL

- Control Port (Serial):
 - Bidirectional RS-232
 - Baud Rates of 9600 (default), 19200, 38400, 57600
 - DB-9 Connector
- Control Port (USB):
 - USB Mini-B
- ENC LINK Ports:
 - AutoPatch Link Ports
 - Ethernet (10/100)
 - RJ-45 Connector

^ Cascaded architecture actual throughput dependent on loading. Worst case per port throughput 10 Mbps, best case 100 Mbps. Input/Output or end-point will need TCP-IP interface.

For audio, video and signal transport specifications please see AMX Data Sheets for the following compatible input / output boards:

Compatible Boards

AVS-ENOVADGX32-VI-HDMI, Enova DGX HDMI Input Board
(FG1058-540)

AVS-ENOVADGX32-VO-HDMI, Enova DGX HDMI Output Board
(FG1058-550)

AVS-ENOVADGX32-VI-DVI, Enova DGX DVI Input Board
(FG1058-600)

AVS-ENOVADGX32-VO-DVI, Enova DGX DVI Output Board
(FG1058-610)

AVS-ENOVADGX32-VI-DXLINK, Enova DGX DXLink Twisted Pair Input Board
(FG1058-570)

AVS-ENOVADGX32-VO-DXLINK, Enova DGX DXLink Twisted Pair Output Board
(FG1058-580)

AVS-ENOVADGX32-AUD-INS-EXT, Enova DGX Audio Insert / Extract Board
(FG1058-700)

AVS-EPDGX32-OI-SC, 4 SC Fiber Connection Epica DGX Input Board
(FG1056-500)

AVS-EPDGX32-OO-SC, 4 SC Fiber Connection Epica DGX Input Board
(FG1056-510)

RECOMMENDED ACCESSORIES

DESCRIPTION

PART

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AVS-ENOVADGX32-VO-DVI	Enova DGX DVI Output Board	(FG1058-610)	20
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AVS-ENOVADGX32-AUD-INS-EXT	Enova DGX Audio Insert / Extract Board	(FG1058-700)	24
AVB-TX-HDMI-DXLINK	DXLink HDMI Transmitter Module	(FG1010-300)	26
AVB-TX-MULTI-DXLINK	DXLink Multi-Format Transmitters	(FG1010-310)	29
AVB-WP-TX-MULTI-DXLINK	DXLink Multi-Format Wallplate Transmitters	(FG1010-320-BL/WH)	34
AVB-RX-DXLINK-HDMI	DXLink HDMI Receiver Module	(FG1010-500)	38

Analog & Digital

Video • Audio

AVS-ENOVADGX32-ENC

Enova® DGX 32 Enclosure

(FG1059-32)



OVERVIEW

The Enova DGX 32 Enclosure includes an integrated NetLinx Controller, redundant power supplies and can be populated with Enova DGX video input and output boards in addition to optional audio insert/extract boards. There are four connections per video board, and each enclosure holds eight video input boards and eight video output boards for a maximum matrix of 32x32.

The Enova DGX 32 is far beyond a modular matrix switcher with built-in controller, it functions as the centerpiece of a complete integrated solution that manages and distributes analog and digital audio and video including HDMI/HDCP, control and Ethernet. Easily integrate HDCP into system designs and enjoy hassle-free plug-and-play operation. No tools, no delays, and no key constraints – it just works with AMX's exclusive InstaGate Pro™ Technology. Built for today's and tomorrow's needs a comprehensive set of Enova DGX hot swappable boards can be used in conjunction with DXLink and DGX Transmitters and Receivers to provide an end-to-end distribution system over twisted pair cable or fiber. An integrated NetLinx Controller and embedded Ethernet switch enables management of the entire solution including source equipment and display devices located throughout the environment – all from a single point of control.

In addition to eliminating HDCP delays, InstaGate Pro allows traditionally key limited sources to be switched freely to all connected HDCP compliant displays – eliminating HDCP key limitations that plague large applications. Built-in SmartScale® Technology on every output provides video that is perfectly scaled for each connected display, eliminating the integration challenges that can occur when sources and displays have different supported resolutions - making it easy to specify, easy to install and easy to use. With the powerful combination of analog-to-digital signal conversion, video scaling and high speed digital switching the system delivers perfect video every time – regardless of signal type.



As part of a complete distribution system, easily send analog or digital audio and video including HDMI with HDCP signals, plus control and power up to 100 meters over one standard twisted pair cable to and from the Enova DGX using the DXLink Transmitters/Receivers. For applications with further distance requirements DGX Fiber Transmitters/Receivers can be used.

COMMON APPLICATION

The Enova DGX 32 is ideal for commercial or residential installations requiring the highest quality video to be shared between 32 local or remote AV sources and destinations. Compact form factor allows for installation in locations where space is limited and included redundant power supplies provides for constant uptime for mission critical applications.

FEATURES

- **HDMI/HDCP Switching with Simplicity of Analog** – End-to-end distribution of HDMI/HDCP without interruption or key constraints using InstaGate Pro Technology
- **AV and Control over Twisted Pair** – Send audio, video, bi-directional control and Ethernet up to 100m over one standard twisted pair cable
- **Embedded NetLinx Controller** – Allows any connected device to be managed, monitored or controlled
- **Integrated Ethernet Switch** – Pass Ethernet or stream IP video through the attached DXLink Transmitter or Receiver
- **Analog to Digital Video Conversion with Scaled Outputs** – Converts any source signal to digital and uses SmartScale Technology to automatically output video that is perfectly scaled for each connected display
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- **Built-in NetLinx Controller** – Easily program and manage the entire solution including source equipment and display devices located across multiple rooms – all from a single point of control
- **Easily Convert Analog to Digital Signals** – Use legacy analog sources with the Enova DGX and automatically convert their signals to digital
- **Hot Swappable Video Input / Output Boards** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards
- **Audio Insert / Extract Boards** – Add audio from a local source or breakaway embedded audio and send to a separate audio system to distribute throughout an environment
- **Fiber Input and Output Boards** – Use in conjunction with DGX Fiber Transmitters and Receivers to send analog and digital audio and video* over fiber
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD
- **High Speed Digital Switching** – 12.8 Gbps ensures perfect pixel for pixel reproduction of video
- **Fully Redundant Power Supplies With Independent Power Paths** – Ensures maximum reliability for applications that require 24/7 uptime

*Fiber input and output boards provide support for non-HDCP signals only

DEALER BENEFITS

- **HDCP With Simplicity of Analog** – Hassle-free plug-and-play operation eliminates the need for time-consuming cumbersome work around tools to deal with HDCP key constraints and resolution incompatibilities
- **All-In-One Control and Distribution Solution** – Power combination of modular matrix switcher, built-in controller, embedded Ethernet switch and video scaling on every output simplifies the end-to-end distribution and management of audio, video and control throughout multiple rooms
- **Fast Easy Installation** – Leverage pre-existing standard twisted pair infrastructure to distribute high-definition video, audio, control and Ethernet

CUSTOMER BENEFITS

- **Picture Perfect** – Prevents degraded video due to incompatibilities between different display resolutions by scaling the video to match each display's preferred resolution using innovative SmartScale Technology
- **Interruption Free Content** – Exclusive InstaGate Pro Technology allows audio and video to be switched quickly and easily to every connected display without the difficulties typically associated with HDCP
- **Audio, Video and Control Everywhere** – Provides end-to-end distribution of audio, video and control signals throughout a residence or commercial facility over twisted pair cable



BULLSEYE TARGET PRODUCT

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HELPFUL HINT

InstaGate Pro provides for true, non-limited matrix switching from any HDCP source device to any or all connected destination devices



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TRAINING AVAILABLE

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AWARD WINNER

Best New Product at InfoComm 2011: AMX's Enova DGX

The Enova converts analog and digital video and control, which runs through a 16x16 or 32x32 Enova Digital Media Switcher. The switcher also includes a gigabit Ethernet switch that's fully integrated. You get digital media, control and data on a single Cat5 cable.



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SmartScale® Technology

Enjoy crystal clear perfect resolution on every display using AMX's exclusive SmartScale Technology which automatically outputs video that is perfectly scaled to each connected display.

SPECIFICATIONS

DIMENSIONS (HWD)

- AC Power:100-240 VAC single phase, 50-60 Hz
- Power Consumption (Max):TBA
- Power Consumption (Typ):TBA
- BTU/HR (Max):TBA
- BTU/HR (Typ):TBA
- DXLink Power Capacity:TBA
- Operational Temperature:32° to 104° F (0° to 40° C)
- Storage Temperature:-22° to +158° F (-30° to +70° C)
- Humidity:0 to 90% non-condensing
- Per Channel Aggregate Data Rate (Max):12.8 Gbps
- Noise Level:TBA

Note: Specifications are subject to change

DIMENSIONS (HWD)

- 10 1/2" x 19" x 20" (26.54 cm x 48.3 cm x 51 cm)
- RU: 6

WEIGHT

- TBA
- Shipping Weight: TBA

MTBF

TBA

APPROVALS (PENDING)

CE, FCC Class A, UL, cUL, RoHS / WEEE compliant

INTEGRATED CONTROLLER

- ICS LAN/Ethernet Port:
 - NetLinX On Board Master is an NI-3100 Class Controller
 - TCP/IP Uplink Port (LAN 10/100/1000)
- Processor:
 - CPU 404 MIPS PowerPC
- Memory:
 - SDRAM 256 MB
 - NVRAM 1 MB
 - Flash 256 MB
- ICS LAN/Ethernet Port:
 - Supports up to 64-Port Unmanaged 10/100 Ethernet Switch^
 - Static IP or DHCP/DNS, SSL, Auto-negotiating, Half/Full duplex, Auto MDI/MDI-X
 - Cross-Over
 - TCP/IP, UDP/IP, CIP, SMTP, SNMP, Built-in Web server
 - Includes support for DXLink Devices
 - RJ-45 Connector

- Program Port (USB):
 - USB Mini-AB (used for NetLinX Studio control)

ENCLOSURE CONTROL

- Control Port (Serial):
 - Bidirectional RS-232
 - Baud Rates of 9600 (default), 19200, 38400, 57600
 - DB-9 Connector
- Control Port (USB):
 - USB Mini-B
- ENC LINK Ports:
 - AutoPatch Link Ports
 - Ethernet (10/100)
 - RJ-45 Connector

^ Cascaded architecture actual throughput dependent on loading. Worst case per port throughput 10 Mbps, best case 100 Mbps. Input/Output or end-point will need TCP-IP interface.

For audio, video and signal transport specifications please see AMX Data Sheets for the following compatible input / output boards:

Compatible Boards

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AVS-ENOVADGX32-VI-HDMI

Enova® DGX HDMI Input Board

(FG1058-540)



OVERVIEW

The AVS-ENOVADGX32-VI-HDMI is a HDCP compliant HDMI input board for the Enova DGX 16 and Enova DGX 32. It has four connections and supports HDMI with embedded audio, DisplayPort or DVI signals.

COMMON APPLICATION

The Enova DGX HDMI Input Board is ideal for applications where source devices are located within 15 meters of the Enova DGX Matrix Switcher, allowing direct digital inputs into the system and eliminating the need for external transmitters.

FEATURES

- **InstaGate Pro™ Technology** – Easily integrate HDMI/HDCP into system designs and enjoy hassle-free matrix switching to all compliant displays. No tools, no delays, and no key constraints – it just works
- **Hot Swappable** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD



Digital | Digital

Video • Audio



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InstaGate Pro™ Technology

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SPECIFICATIONS

HDMI W/ HDCP

- Compatible Formats:
 - HDMI 1.4a, HDCP 1.3, DVI 1.0
- Signal Type Support:
 - HDMI
 - DVI-D (Single Link With HDMI Cable Adapter)
 - DisplayPort ++ (Input Only, With HDMI Cable Adapter)
- Data Rate (Max): 4.95 Gbps / 6.75 Gbps[^]
- Pixel Clock (Max): 165 MHz / 225 MHz[^]
- Progressive Resolution Support: 480p up to 1920x1200 @ 60 Hz
- Input Interlaced Resolution Support: 480i, 576i, 1080i
- Input Equalization: Yes, Adaptive up to 100ft (30m) at 225MHz^{^^}
- Input Re-clocking (CDR): Yes
- Deep Color Support: 24-bit, 30-bit[^], 36-bit[^]
- Color Space Support: TBA
- 3D Format Support:
 - Yes[^] (HDMI Primary Formats)
 - Frame Packing 1080p up to 24Hz
 - Frame Packing 720p up to 50/60Hz
 - Frame Packing 1080i up to 50/60Hz
 - Top-Bottom 1080p up to 24Hz
 - Top-Bottom 720p up to 50/60Hz
 - Side-by-Side Full 1080p up to 24Hz
 - Side-by-Side Full 720p up to 50/60Hz
 - Side-by-Side Half 1080p up to 50/60Hz
 - Side-by-Side Half 720p up to 50/60Hz
- Audio Format Support:
 - Dolby TrueHD, Dolby Digital*, DTS-HD Master Audio,
 - DTS*, L-PCM
- Audio Resolution: 16 bit to 24 bit
- Audio Sample Rate: 32 kHz, 44.1 kHz, 48 kHz, 96 kHz**, 192kHz**
- Local Audio Support: Yes, Insertion and/or Extraction of 2 CH L-PCM selectable by channel
- DDC/EDID Support:
 - EDID provided by Enova DGX 32
 - EDID is user re-programmable
- 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
- CEC Support: None
- Input Voltage (Nominal): 1.0 Vpp Differential
- Connectors: 4 HDMI Type A Female Ports

- HDMI Input Board Propagation Delay: 2 us
- HDMI Audio Synchronization: Progressive and Interlace Video Formats @ 60Hz frame rate: Audio is actively delayed to match video within 8ms leading or lagging.

[^] Only supported when the HDMI Output Scaler is in Bypass mode and format is 1080p60 or less.

^{^^} Cable distance support dependent on cable type and signal format.

*Dolby Digital and DTS support up to 48kHz, 5.1 channels.

**2 Channel L-PCM support up to 48kHz at all resolutions. 2 Channel L-PCM support up to 192kHz at 1080p (50,59 60Hz). 2 Channel L-PCM support up to 96kHz at 720p (50,59 60Hz), 1080p (24, 25, 30, 50, 59, 60Hz), 1080i (50, 59, 60 fields).

Digital | Digital

Video • Audio

AVS-ENOVADGX32-VI-DVI

Enova® DGX DVI Input Board

(FG1058-600)



OVERVIEW

The AVS-ENOVADGX32-VI-DVI is an HDCP compliant DVI input board for the Enova DGX 16 and Enova DGX 32. It has four DVI connections per board and supports HDMI, DisplayPort or DVI signals.

COMMON APPLICATION

The Enova DGX DVI Input Board is ideal for applications where source devices are located within 15 meters of the Enova DGX Matrix Switcher, allowing direct digital inputs into the system and eliminating the need for external transmitters.

FEATURES

- **InstaGate Pro™ Technology** – Easily integrate HDMI/HDCP into system designs and enjoy hassle-free matrix switching to all compliant displays. No tools, no delays, and no key constraints – it just works
- **Hot Swappable** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards
- **3D Support** – Pass through latest video formats including 3D and Deep Color



BULLSEYE TARGET PRODUCT

This is a Target Product as defined in the U.S. BullsEye Partnership Program. Participating AMX Dealers can be rewarded for purchasing Target Products as a % of their total annual net revenue.



HELPFUL HINT

InstaGate Pro provides for true, non-limited matrix switching from any HDCP source device to any or all connected destination devices



WATCH THE VIDEO

See our Enova DGX Digital Media Switchers live from InfoComm 2011 by watching our video profile on YouTube:

www.youtube.com/user/AMXtalk?blend=7&ob=5#p/u/4/wkNAQTMeenU



TRAINING AVAILABLE

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AWARD WINNER

Best New Product at InfoComm 2011: AMX's Enova DGX

The Enova converts analog and digital video and control, which runs through a 16x16 or 32x32 Enova Digital Media Switcher. The switcher also includes a gigabit Ethernet switch that's fully integrated. You get digital media, control and data on a single Cat5 cable.



InstaGate Pro™ Technology

No tools, no delays and no key constraints. AMX's exclusive InstaGate Pro Technology allows traditionally key limited sources to be freely switched to any display without the typical HDCP delays.

SPECIFICATIONS

DVI W/HDCP

- Compatible Formats: DVI 1.0, HDCP 1.3
- Signal Type Support:
 - DVI-D (Single Link)
 - HDMI (With DVI Cable Adapter)
 - DisplayPort ++ (Input Only, With DVI Cable Adapter)
- HDMI Mode Support: DVI boards can be run in HDMI mode with an EDID update which will provide full HDMI functionality and board specifications
- Data Rate (Max): 4.95 Gbps
- Pixel Clock (Max): 165 MHz
- Progressive Resolution Support: 480p up to 1920x1200 @ 60 Hz
- Input Interlaced Resolution Support: 480i, 576i, 1080i
- Input Equalization: Yes, Adaptive up to 100ft (30m) at 165MHz^^
- Input Re-clocking (CDR): Yes
- Color Space Support: RGB 4:4:4
- Local Audio Support: Yes, Insertion and/or Extraction of 2 CH L-PCM selectable by channel
- DDC/EDID Support:
 - EDID provided by Enova DGX 32
 - EDID is user re-programmable
- 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
- Input Voltage (Nominal): 1.0 Vpp Differential
- DVI Input Board Propagation Delay: 2 us
- Connector: 4 DVI-I Ports (DVI-D Single Link is the supported signal type)

^ Cable distance support dependent on cable type and signal format.

Analog & Digital

Video • Audio

AVS-ENOVADGX32-VI-DXLINK

Enova® DGX DXLink™ Twisted Pair Input Board

(FG1058-570)



OVERVIEW

The AVS-ENOVADGX32-VI-DXLINK is a HDCP compliant twisted pair cable input board for the Enova DGX 16 and Enova DGX 32. It has four connections per board designed to receive audio and video from DXLink Transmitters while passing bi-directional control, Ethernet and USB signals over one standard twisted pair cable up to 100m. DXLink Power is available from the DXLink Input Board to power a DXLink Transmitter.

COMMON APPLICATION

The Enova DGX DXLink Twisted Pair Input Board is ideal for applications where source devices are located up to 100 meters away from the Enova DGX Matrix Switcher and need to be distributed throughout a commercial or residential environment.

FEATURES

- **Only One Cable** – Receive audio and video while passing control, Ethernet, USB signals and power over one twisted pair cable
- **Send HDMI signals up to 100 Meters** – Extend the reach of the HDMI/HDCP signals far beyond the capabilities of typical HDMI cabling
- **Standard Twisted Pair Cable** – Save time and effort in installation by leveraging pre-existing cost effective twisted pair cable
- **Hot Swappable** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards
- **HDCP Compliant**
- **Power Remote Transmitters** – DXLink Power is available from the DXLink Input Board to power a DXLink Transmitter
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD



BULLSEYE TARGET PRODUCT

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HELPFUL HINT

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AWARD WINNER

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InstaGate Pro™ Technology

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SPECIFICATIONS

SIGNAL TRANSPORT – DXLINK W/HDCP

- Compatible Formats:HDMI Video / Audio / Ethernet / USB (HID) / Power and Control
- Signal Type Support:DXLink
- Transport Layer Throughput (Max):10.2 Gbps
- Video Data Rate (Max):4.95 Gbps / 6.75 Gbps^
- Video Pixel Clock (Max):165 MHz / 225 MHz^
- Progressive Resolution Support:480p up to 1920x1200 @ 60 Hz
- Interlaced Resolution Support*:480i, 576i, 1080i
- Deep Color Support:24-bit, 30-bit^, 36-bit^
- Color Space Support:TBA
- 3D Format Support:
 - Yes^ (HDMI Primary Formats)
 - Frame Packing 1080p up to 24Hz
 - Frame Packing 720p up to 50/60Hz
 - Frame Packing 1080i up to 50/60Hz
 - Top-Bottom 1080p up to 24Hz
 - Top-Bottom 720p up to 50/60Hz
 - Side-by-Side Full 1080p up to 24Hz
 - Side-by-Side Full 720p up to 50/60Hz
 - Side-by-Side Half 1080p up to 50/60Hz
 - Side-by-Side Half 720p up to 50/60Hz
- Audio Format Support:Dolby TrueHD, Dolby Digital*, DTS-HD Master Audio, DTS*, L-PCM
- Audio Resolution:16 bit to 24 bit
- Audio Sample Rate:32 kHz, 44.1 kHz, 48 kHz, 96 kHz**, 192kHz**
- Local Audio Support:Yes, Insertion and/or Extraction of 2 CH L-PCM selectable by channel
- 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
- CEC Support:None
- ICSP, TCP/IP, USB, IR, Control Management:Control distribution is managed by the Enova DGX on-board NetLinX Master and Ethernet Switch
- DXLink Power:DxLink TX and RX units can have power supplied over Twisted Pair cable when connected to a DXLink Input or Output board of the Enova DGX Matrix Switcher
- Connectors:4 RJ-45 Ports

^ Only supported when the HDMI Output Scaler is in Bypass mode and format is 1080p60 or less.

*Dolby Digital and DTS support up to 48kHz, 5.1 channels.

**2 Channel L-PCM support up to 48kHz at all resolutions. 2 Channel L-PCM support up to 192kHz at 1080p (50,59 60Hz). 2 Channel L-PCM support up to 96kHz at 720p (50,59 60Hz), 1080p (24, 25, 30, 50, 59, 60Hz), 1080i (50, 59, 60 fields).

Digital | Digital

Video • Audio

AVS-ENOVADGX32-VO-HDMI

Enova® DGX HDMI Output Board

(FG1058-550)



OVERVIEW

The AVS-ENOVADGX32-VO-HDMI is a HDCP compliant HDMI output board for the Enova DGX 16 and Enova DGX 32. It has four connections and supports HDMI or DVI signals. Like all output boards for the Enova DGX, the AVS-ENOVADGX32-VO-HDMI features SmartScale® Technology which 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.

COMMON APPLICATION

The Enova DGX HDMI Output Board is ideal for applications where destinations are located within 15 meters of the Enova DGX Matrix Switcher, eliminating the need for external receivers. Integrated SmartScale Technology provides optimal display resolution for each connected display.

FEATURES

- **InstaGate Pro™ Technology** – Easily integrate HDCP into system designs and enjoy hassle-free matrix switching to all compliant displays. No tools, no delays, and no key constraints – it just works
- **SmartScale Technology** – Automatically responds to the display's declared EDID information and scales the video to the best resolution and video parameters for that display without manual setup; this prevents inferior video quality when sources are forced to lower resolutions to support the least capable display in the system
- **Hot Swappable** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD



BULLSEYE TARGET PRODUCT

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HELPFUL HINT

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TRAINING AVAILABLE

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AWARD WINNER

Best New Product at InfoComm 2011: AMX's Enova DGX

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InstaGate Pro™ Technology

No tools, no delays and no key constraints. AMX's exclusive InstaGate Pro Technology allows traditionally key limited sources to be freely switched to any display without the typical HDCP delays.



SmartScale® Technology

Enjoy crystal clear perfect resolution on every display using AMX's exclusive SmartScale Technology which automatically outputs video that is perfectly scaled to each connected display.

SPECIFICATIONS

HDMI W/HDCP

- Compatible Formats:HDMI 1.4a, HDCP 1.3, DVI 1.0
- Signal Type Support:
 - HDMI
 - DVI-D (Single Link With HDMI Cable Adapter)
 - DisplayPort ++ (Input Only, With HDMI Cable Adapter)
- Data Rate (Max):4.95 Gbps / 6.75 Gbps^
- Pixel Clock (Max):165 MHz / 225 MHz^
- Progressive Resolution Support:480p up to 1920x1200 @ 60 Hz
- Output Re-clocking:Yes
- Output Scaling:SmartScale, or optional manual configuration, or optional 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:24-bit, 30-bit^, 36-bit^
- Color Space Support:TBA
- 3D Format Support:Yes^ (HDMI Primary Formats)
 - Frame Packing 1080p up to 24Hz
 - Frame Packing 720p up to 50/60Hz
 - Frame Packing 1080i up to 50/60Hz
 - Top-Bottom 1080p up to 24Hz
 - Top-Bottom 720p up to 50/60Hz
 - Side-by-Side Full 1080p up to 24Hz
 - Side-by-Side Full 720p up to 50/60Hz
 - Side-by-Side Half 1080p up to 50/60Hz
 - Side-by-Side Half 720p up to 50/60Hz
- Audio Format Support:Dolby TrueHD, Dolby Digital*, DTS-HD Master Audio, DTS*, L-PCM
- Audio Resolution:16 bit to 24 bit
- Audio Sample Rate:32 kHz, 44.1 kHz, 48 kHz, 96 kHz**, 192kHz**
- Local Audio Support:Yes, Insertion and/or Extraction of 2 CH L-PCM selectable by channel
- DDC/EDID Support:
 - EDID provided by Enova DGX 32
 - EDID is user re-programmable
- 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
- CEC Support:None
- Input Voltage (Nominal):1.0 Vpp Differential
- Connectors:4 HDMI Type A Female Ports
- HDMI Input Board Propagation Delay:2 us
- HDMI Audio Synchronization:Progressive and Interlace Video Formats @ 60Hz frame rate: Audio is actively delayed to match video within 8ms leading or lagging.

^ Only supported when the HDMI Output Scaler is in Bypass mode and format is 1080p60 or less.

^^Cable distance support dependent on cable type and signal format.

*Dolby Digital and DTS support up to 48kHz, 5.1 channels.

**2 Channel L-PCM support up to 48kHz at all resolutions.

2 Channel L-PCM support up to 192kHz at 1080p (50,59 60Hz). 2 Channel L-PCM support up to 96kHz at 720p (50,59 60Hz), 1080p (24, 25, 30, 50, 59, 60Hz), 1080i (50, 59, 60 fields).

Digital | Digital

Video • Audio

AVS-ENOVADGX32-VO-DVI

Enova® DGX DVI Output Board

(FG1058-610)



OVERVIEW

The AVS-ENOVADGX32-VO-DVI is a HDCP compliant DVI output board for the Enova DGX 16 and Enova DGX 32. It has four DVI connections per board and supports HDMI or DVI signals. Like all output boards for the Enova DGX, the AVS-ENOVADGX32-VO-DVI features SmartScale® Technology which 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.

COMMON APPLICATION

The Enova DGX DVI Output Board is ideal for applications where destinations are located within 15 meters of the Enova DGX Matrix Switcher, eliminating the need for external receivers. Integrated SmartScale Technology provides optimal display resolution for each connected display.

FEATURES

- **InstaGate Pro™ Technology** – Easily integrate HDMI/HDCP into system designs and enjoy hassle-free matrix switching to all compliant displays. No tools, no delays, and no key constraints – it just works
- **SmartScale Technology** – Automatically responds to the display's declared EDID information and scales the video to the best resolution and video parameters for that display without manual setup; this prevents inferior video quality when sources are forced to lower resolutions to support the least capable display in the system
- **Hot Swappable** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Use legacy analog sources with the Enova DGX and automatically convert to their signals to digital



BULLSEYE TARGET PRODUCT

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HELPFUL HINT

InstaGate Pro provides for true, non-limited matrix switching from any HDCP source device to any or all connected destination devices



WATCH THE VIDEO

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www.youtube.com/user/AMXtalk?blend=7&ob=5#p/u/4/wkNAQTMeenU



TRAINING AVAILABLE

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AWARD WINNER

Best New Product at InfoComm 2011: AMX's Enova DGX

The Enova converts analog and digital video and control, which runs through a 16x16 or 32x32 Enova Digital Media Switcher. The switcher also includes a gigabit Ethernet switch that's fully integrated. You get digital media, control and data on a single Cat5 cable.



InstaGate Pro™ Technology

No tools, no delays and no key constraints. AMX's exclusive InstaGate Pro Technology allows traditionally key limited sources to be freely switched to any display without the typical HDCP delays.



SmartScale® Technology

Enjoy crystal clear perfect resolution on every display using AMX's exclusive SmartScale Technology which automatically outputs video that is perfectly scaled to each connected display.

SPECIFICATIONS

DVI W/HDCP

- Compatible Formats: DVI 1.0, HDCP 1.3
- Signal Type Support:
 - DVI-D (Single Link)
 - HDMI (With DVI Cable Adapter)
- HDMI Mode Support: DVI boards can be run in HDMI mode with an EDID update which will provide full HDMI functionality and board specifications
- Data Rate (Max): 4.95 Gbps
- Pixel Clock (Max): 165 MHz
- Progressive Resolution Support: 480p up to 1920x1200 @ 60 Hz
- Output Re-clocking: Yes
- 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
- Color Space Support: RGB 4:4:4
- Local Audio Support: Yes, Insertion and/or Extraction of 2 CH L-PCM selectable by channel
- DDC/EDID Support:
 - EDID provided by Enova DGX 32
 - EDID is user re-programmable
- 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
- Output Voltage (Nominal): 1.0 Vpp Differential
- Output Rise Time / Fall Time: TBA
- Output +5V DDC Pin: 50 mA
- DVI Output Board Propagation Delay: 24 ms for progressive, 48 ms for interlace
- Connector: 4 DVI-I Ports (DVI-D Single Link is the supported signal type)

AVS-ENOVADGX32-VO-DXLINK

Enova® DGX DXLink™ Twisted Pair Output Board

(FG1058-580)

Analog & Digital |
Digital
Video • Audio



OVERVIEW

The AVS-ENOVADGX32-VO-DXLINK is a HDCP compliant twisted pair cable output board for the Enova DGX 16 and Enova DGX 32. It has four connections per DXLink output board and is designed to transmit audio and video to DXLink Receivers while passing bi-directional control, Ethernet and USB signals over one standard twisted pair cable up to 100m. DXLink Power is available from the DXLink Output Board to power a DXLink Receiver.

COMMON APPLICATION

The Enova DGX DXLink Twisted Pair Output Board is ideal for applications where destination devices are located up to 100 meters away from the Enova DGX Matrix Switcher and need to be distributed throughout a commercial or residential environment.

FEATURES

- **Only One Cable** – Send audio and video while passing control, Ethernet, USB signals and power over one twisted pair cable
- **Send HDMI signals up to 100 Meters** – Extend the reach of the HDMI/HDCP signals far beyond the capabilities of typical HDMI cabling
- **Standard Twisted Pair Cable** – Save time and effort in installation by leveraging pre-existing cost effective twisted pair cable
- **Hot Swappable** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards
- **HDCP Compliant**
- **Powered Remote Receivers** – DXLink Power is available from the DXLink Output Board to power a DXLink Receiver
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD



BULLSEYE TARGET PRODUCT

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HELPFUL HINT

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TRAINING AVAILABLE

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AWARD WINNER

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InstaGate Pro™ Technology

No tools, no delays and no key constraints. AMX's exclusive InstaGate Pro Technology allows traditionally key limited sources to be freely switched to any display without the typical HDCP delays.

SPECIFICATIONS

SIGNAL TRANSPORT – DXLINK W/HDCP

- Compatible Formats:HDMI Video / Audio / Ethernet / USB (HID) / Power and Control
- Signal Type Support:DXLink
- Transport Layer Throughput (Max):10.2 Gbps
- Video Data Rate (Max):4.95 Gbps / 6.75 Gbps^
- Video Pixel Clock (Max):165 MHz / 225 MHz^
- Progressive Resolution Support:480p up to 1920x1200 @ 60 Hz
- Interlaced Resolution Support*:480i, 576i, 1080i
- Deep Color Support:24-bit, 30-bit^, 36-bit^
- Color Space Support:TBA
- 3D Format Support:
 - Yes^ (HDMI Primary Formats)
 - Frame Packing 1080p up to 24Hz
 - Frame Packing 720p up to 50/60Hz
 - Frame Packing 1080i up to 50/60Hz
 - Top-Bottom 1080p up to 24Hz
 - Top-Bottom 720p up to 50/60Hz
 - Side-by-Side Full 1080p up to 24Hz
 - Side-by-Side Full 720p up to 50/60Hz
 - Side-by-Side Half 1080p up to 50/60Hz
 - Side-by-Side Half 720p up to 50/60Hz
- Audio Format Support:Dolby TrueHD, Dolby Digital*, DTS-HD Master Audio, DTS*, L-PCM
- Audio Resolution:16 bit to 24 bit
- Audio Sample Rate:32 kHz, 44.1 kHz, 48 kHz, 96 kHz**, 192kHz**
- Local Audio Support:Yes, Insertion and/or Extraction of 2 CH L-PCM selectable by channel
- 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
- CEC Support:None
- ICSP, TCP/IP, USB, IR, Control Management:Control distribution is managed by the Enova DGX on-board NetLinX Master and Ethernet Switch
- DXLink Power:DxLink TX and RX units can have power supplied over Twisted Pair cable when connected to a DXLink Input or Output board of the Enova DGX Matrix Switcher
- Connectors:4 RJ-45 Ports

^ Only supported when the HDMI Output Scaler is in Bypass mode and format is 1080p60 or less.

*Dolby Digital and DTS support up to 48kHz, 5.1 channels.

**2 Channel L-PCM support up to 48kHz at all resolutions. 2 Channel L-PCM support up to 192kHz at 1080p (50,59 60Hz). 2 Channel L-PCM support up to 96kHz at 720p (50,59 60Hz), 1080p (24, 25, 30, 50, 59, 60Hz), 1080i (50, 59, 60 fields).

AVS-ENOVADGX32-AUD-INS-EXT

Enova® DGX Audio Insert / Extract Board

(FG1058-700)

Analog

Audio



OVERVIEW

The AVS-ENOVADGX32-AUD-INS-EXT is an audio insert / extract board for the Enova DGX 16 and Enova DGX 32. The board provides insert or extract access to the first 16 video input or output positions. The Enova DGX 16 and Enova DGX 32 enclosures both support one audio insert/extract board on the input side and one on the output side. The audio insert/extract board simplifies system design by allowing audio from a source located near the Enova DGX to be plugged directly into the system. This can dramatically reduce the overall cost of the system by eliminating the need for additional Transmitters or Receivers. Breakaway embedded audio and send to a separate audio system to be distributed throughout an environment.

COMMON APPLICATION

The Enova DGX Audio Insert / Extract Board is ideal for applications when local sources such as computers with analog audio outputs are plugged directly into the Enova DGX. Inserted audio can be embedded onto any Enova DGX output. The board also allows de-embed audio from Enova DGX HDMI inputs to be sent to a separate audio system.

FEATURES

- **De-embed Audio** – Breakaway embedded audio from Enova DGX inputs and send to a separate audio system to distribute throughout an environment
- **Embed Audio** – Insert local analog audio into pre-switched digital video paths or post switched digital audio paths depending on audio insert/extract board location
- **Individually Configurable** – Each audio access point can be individually configured for insertion or extraction functionality
- **Hot Swappable** – Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards



BULLSEYE TARGET PRODUCT

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AWARD WINNER

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SPECIFICATIONS

ANALOG AUDIO

AUDIO INSERTION

- Audio Signal Type: Analog Stereo, up to 16 channels per enclosure
- Analog Input Level (Max): +3 dBu, unbalanced
- Input Impedance: 10k Ω
- Analog to Digital Conversion: 48 kHz Sample Rate, 24-bit
- Analog to Digital Reference Level: +3 dBu = 0 dBfs
- Optimal Analog Audio Operating Range: -30 dBu to +2 dBu
- Input Connectors: Terminal Block (Supports 28 to 18 AWG)

AUDIO EXTRACTION

- Audio Signal Type: Analog Stereo, up to 16 channels per enclosure
- Analog Output Level (Max): +2.8 dBu, unbalanced
- Output Impedance: TBA
- Output Frequency Response: TBA
- Audio Output THD+N: TBA
- Audio Out SNR: TBA
- Digital to Analog Resolution: 24 bit, 2 Channel
- Digital to Analog Reference Level: 0 dBfs = +3 dBu
- Optimal Digital Audio Operating Range: -30 dBfs to -2 dBfs
- Audio Synchronization: TBA
- Output Connectors: 16 Terminal Block Ports (Supports 28 to 18 AWG)

Note: Specifications are subject to change

AVB-TX-HDMI-DXLINK

DXLink™ HDMI Transmitter Module

(FG1010-300)



OVERVIEW

The DXLink HDMI Transmitter sends HDMI with HDCP, control, and Ethernet while passing USB signals up to 100 meters over a single standard twisted pair cable. As part of a complete distribution system, use the DXLink Transmitter with the Enova DGX DXLink Twisted Pair Input Boards. The DXLink Transmitter can also be used as a point-to-point solution with the DXLink HDMI Receiver. The DXLink Transmitter is powered from the DXLink Twisted Pair Input Board of the Enova DGX, it also includes a power supply for point-to-point use with a stand-alone receiver.

COMMON APPLICATION

The DXLink HDMI Transmitter is ideal for any long distance HDMI run. It is designed to send HDMI and control signals to a remote display across the room, on the other side of the house or to a classroom down the hall. The transmitter has built-in control ports that can be used to control a source and the ICSLan port provides an IP access point.

FEATURES

- **Only One Cable** – Send audio and video while passing control, Ethernet, USB signals and power over one twisted pair cable
- **Send HDMI signals up to 100 meters** – Extend the reach of the HDMI signals far beyond the capabilities of typical HDMI cabling
- **HDMI port** – Supports HDMI with HDCP, DisplayPort or DVI signals using the appropriate breakout cable
- **Standard Twisted Pair Cable** – Save time and effort in installation by leveraging cost effective twisted pair cable
- **USB Support** – Delivers signals from a remote keyboard and mouse to locally connected PC
- **Power Remotely** – Power is carried over one twisted pair cable to simplify installation when used with the Enova DGX
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD

- **Ethernet Connectivity** – Provides ICSLan Ethernet support at the Transmitter - add Ethernet connectivity to a Touch Panel, plug in a WAP or stream IP audio/video to a Ethernet enabled source device
- **HDCP compliance**

DEALER BENEFITS

- **HDMI/HDCP with the Simplicity of Analog** – Hassle-free plug-and-play operation eliminates the need for time consuming, cumbersome work-around tools to deal with HDCP key constraints and resolution incompatibilities
- **Simplified Design and Installation** – Audio, video, control, USB signals, Ethernet and power are distributed over one twisted pair cable speeding up installation at remote endpoints
- **Reduce Network Drops** – Centralized Ethernet communication from the Enova DGX can be implemented with the ICSLan port - providing IP access points at every DXLink Transmitter and Receiver

CUSTOMER BENEFITS

- **Interruption-Free Content** – Exclusive InstaGate Pro™ Technology allows audio and video to be switched quickly and easily to every connected display without the difficulties typically associated with HDCP
- **Audio, Video and Control Everywhere** – Compact low-profile design and remote powering capabilities allows the transmitter to be installed in discreet locations out of sight without additional wiring



BULLSEYE TARGET PRODUCT

This is a Target Product as defined in the U.S. BullsEye Partnership Program. Participating AMX Dealers can be rewarded for purchasing Target Products as a % of their total annual net revenue.



TRAINING AVAILABLE

For important installation, configuration and programming techniques, AMX University training is available. Just visit www.amx.com/training



A CLOSER LOOK



SPECIFICATIONS

GENERAL

- AC Power:100-240 VAC single phase, 50-60 Hz 0.6 A @ 115 VAC max
- DXLink Power:TX unit can alternatively have power supplied over twisted pair cable when connected to a DXLink Power sourcing device such as an Enova DGX Matrix Switcher
- Power Consumption (Max):TBA
- Power Consumption (Typ):12 V (+/-10%), 1.5A (18 W) per unit (Estimate)
- Thermal Dissipation (Max):TBA
- Thermal Dissipation (Typ):61 BTU/hr (Estimate)
- Power Connector:2.1 mm DC Power Jack
- Operational Temperature:32° to 104° F (0° to 40° C)
- Storage Temperature:-22° to 158° F (-30° to 70° C)
- Humidity:0 to 90% non-condensing
- Mounting Options:Compatible with all V Style versatile mounting options including rack, surface or pole
- Advanced Configuration Interface:USB Mini-B Connector
- Transport Layer Throughput (Max):10.2 Gbps
- Compatible AMX Products:DXLink HDMI RX, Enova DGX 16 and Enova DGX 32 Matrix Switcher
- Twisted Pair Cable Type:Cat5e, Cat6/6e, Cat6a, Cat7, STP, FTP
- Twisted Pair Cable Length:Up to 328 ft (100 m)*

Note:Specifications are subject to change

*Cable quality required in order to meet 100 meter distance should meet ANSI/TIA/EIA 568A-5 or better specification and be rated for 250 MHz or better.

DIMENSIONS (HWD)

1" x 8 3/4" x 5 1/5" (2.54 x 22.12 cm x 13.08 cm)

WEIGHT

- Approx. 1.1 lb (0.50 kg)
- Shipping Weight: Approx. 2.20 lb (1.00 kg)

MTBF

TBA

APPROVALS (PENDING)

CE, FCC, UL, cUL, RoHS

FRONT CONNECTORS

Advanced Configuration Interface:USB Mini-B Connector

BACK CONNECTORS

- HDMI Input:HDMI Type A Female
- Analog Stereo Input:3.5mm Mini-Stereo Jack
- S/PDIF Digital Audio Input:RCA Jack
- ICSLAN/Ethernet Port:RJ-45 Connector, TCP/IP Port (ICSLAN 10/100)

- Serial:
 - 3.5mm Pluggable Phoenix Terminal Block
 - Bidirectional RS-232
 - Standard NetLinx Baudrate 1200-115k
 - Parity support Odd/Even/None
- 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)
- USB (HID):USB Type B Connector
- DXLink Output:RJ-45
- Local Power:2.1 mm DC Power Jack

CONTROLS & INDICATORS

- ID Pushbutton:Places system in NetLinx Device ID assignment mode
- Power Indicator:Green indicates whether or not the module is powered on
- Video Indicator:Green LED indicates the presence of video and audio signals through the module
- Audio Indicator:Green LED indicates the presence of audio signals through the module
- IR TX Indicator:Red LED lights during the transmission of IR data via the rear IR port
- IR RX Indicator:Yellow LED lights during the receipt of IR data via the rear IR port
- RS-232 TX Indicator:Red LED shows serial transmit (TX) data activity
- RS-232 RX Indicator:Yellow LED shows serial receive (RX) data activity
- LINK/ACT:Green LED lights when the Ethernet cable is connected and an active link is established. This LED also blinks when receiving Ethernet data packets
- Status:Green LED lights when the Controller is programmed and communicating properly
- CEC Indicator:Yellow LED shows CEC data activity when in point-to-point mode
- USB Indicator:Yellow LED shows USB (HID) activity

HDMI

- Compatible Formats:HDMI 1.4a, HDCP 1.3, DVI 1.0
- Input Signal Type:
 - HDMI
 - DVI-D (Single Link With HDMI Cable Adapter)
 - DisplayPort ++ (Input Only, With HDMI Cable Adapter)
- Data Rate (Max):4.95 Gbps / 6.75 Gbps^
- Pixel Clock (Max):165 MHz / 225 MHz^
- Progressive Resolution Support:480p up to 1920x1200 @ 60 Hz including but not limited to those resolutions shown on Digital Video Resolution Support Appendix
- Interlaced Resolution Support:480i, 576i, 1080i
- Audio Format Support:Dolby TrueHD, Dolby Digital^^, DTS-HD Master Audio, DTS^^, L-PCM

- Audio Resolution:16 bit to 24 bit
- Audio Sample Rate:32 kHz, 44.1 kHz, 48 kHz, 96 kHz^{^^}, 192kHz^{^^^}
- Local Audio Support:Yes for audio insertion
- HDCP Support:
 - Yes
 - Supports AMX HDCP InstaGate Pro Technology
 - When used with an AMX Matrix Switch the key support is up to 16 sinks per output, independent of source device When used as a single point to point solution the key support is defined by the source device
- CEC Support:Pass-Through in point to point mode, not supported when passing through Matrix Switcher
- DDC/EDID Support:EDID in point to point mode is passed up from the sink device when used with an AMX Matrix Switch the EDID is provided by the TX and is user re-programmable
- Input Re-clocking (CDR):Yes
- Input Equalization:Yes, Adaptive
- Input Connector:HDMI Type A Female
- Propagation Delay (Typ):2 us
- Signal Type Support:HDMI
- Deep Color Support:24-bit, 30-bit[^], 36-bit[^]
- Color Space Support:TBA
- 3D Format Support:
 - Yes[^] (HDMI Primary Formats)
 - Frame Packing 1080p up to 24Hz
 - Frame Packing 720p up to 50/60Hz
 - Frame Packing 1080i up to 50/60Hz
 - Top-Bottom 1080p up to 24Hz
 - Top-Bottom 720p up to 50/60Hz
 - Side-by-Side Full 1080p up to 24Hz
 - Side-by-Side Full 720p up to 50/60Hz
 - Side-by-Side Half 1080p up to 50/60Hz
 - Side-by-Side Half 720p up to 50/60Hz

[^] Only supported when the DXLink Rx Scaler is in Bypass mode and format is 1080p60 or less.

^{^^} Dolby Digital and DTS support up to 48kHz, 5.1 channels.

^{^^^} 2 Channel L-PCM support up to 48kHz at all resolutions. 2 Channel L-PCM support up to 192kHz at 1080p (50,59 60Hz). 2 Channel L-PCM support up to 96kHz at 720p (50,59 60Hz), 1080p (24, 25, 30, 50, 59, 60Hz), 1080i (50, 59, 60 fields).

Note-Reminder: Interlace video supported into the Transmitter, progressive only supported out of the Receiver unless in non-scaling bypass mode

AUDIO (ANALOG & DIGITAL S/PDIF)

- Input Signal Types:
 - Stereo Analog, S/PDIF
 - Video signal must be present to pass Audio
- Analog Input Level (Max):+3 dBu, unbalanced
- Analog Input Impedance:10k Ω
- Analog to Digital Conversion:48 kHz Sample Rate, 24-bit
- S/PDIF Resolution:16 to 24 bit
- S/PDIF Sample Rate:32 kHz, 44.1 kHz, 48 kHz, 96 kHz^{^^^}
- S/PDIF Input Signal Level Range:200 mVpp to 600mVpp terminated
- S/PDIF Input Impedance:75 Ω
- Analog to Digital Reference Level:TBA
- Optimal Analog Audio Operating Range:TBA
- Optimal Digital Audio Operating Range:TBA
- Input Connectors:3.5mm Mini-Stereo Jack (Analog Stereo) RCA Jack (S/PDIF)

^{^^^} 96 kHz audio only available when source video resolution is 800x600 @ 60Hz(40 MHz pixel clock) or greater. Otherwise 48 kHz max

DIGITAL VIDEO RESOLUTION SUPPORT APPENDIX

CEA(RGBHV): 640x480p@59Hz, 720x480p@59Hz, 720(1440)x480i@59Hz, 720x480p@60Hz, 720x480p@119Hz, 720x480p@120Hz, 720x480p@239Hz, 720x480p@240Hz, 720x576p@50Hz, 720(1440)x576i@50Hz,

720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz, 960x576p@50Hz, 960(1920)x576i@50Hz, 1280x720p@23Hz, 1280x720p@24Hz, 1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz, 1280x720p@50Hz, 1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz, 1280x720p@119Hz, 1280x720p@120Hz, 1920x1080p@23Hz, 1920x1080p@24Hz, 1920x1080i@25Hz, 1920x1080p@25Hz, 1920x1080i@29Hz, 1920x1080p@29Hz, 1920x1080i@30Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@59Hz, 1920x1080p@60Hz

CVR (RGBHV): 768x480p@60Hz, 800x600p@60Hz, 800x600p@120Hz, 848x480p@60Hz, 960x600p@60Hz, 1024x576p@60Hz, 1024x640p@60Hz, 1024x768p@60Hz, 1024x768p@120Hz, 1064x600p@60Hz, 1152x720p@60Hz, 1152x864p@60Hz, 1224x768p@60Hz, 1280x720p@60Hz, 1280x768p@60Hz, 1280x768p@120Hz, 1280x800p@120Hz, 1280x960p@60Hz, 1280x1024p@60Hz, 1360x768p@60Hz, 1360x768p@120Hz, 1400x1050p@60Hz, 1440x900p@60Hz, 1536x960p@60Hz, 1600x1000p@60Hz, 1600x1200p@60Hz, 1680x1050p@60Hz, 1704x960p@60Hz, 1728x1080p@60Hz, 1800x1350p@60Hz, 1864x1050p@60Hz, 1920x1080p@60Hz, 1920x1200p@60Hz

CVT (RGBHV): 640x360p@85Hz, 640x400p@75Hz, 640x400p@85Hz, 640x480p@75Hz, 640x480p@85Hz, 768x480p@60Hz, 768x480p@75Hz, 768x480p@85Hz, 800x600p@50Hz, 800x600p@60Hz, 800x600p@75Hz, 800x600p@85Hz, 848x480p@50Hz, 848x480p@60Hz, 848x480p@75Hz, 848x480p@85Hz, 960x600p@50Hz, 960x600p@60Hz, 960x600p@75Hz, 960x600p@85Hz, 1024x576p@50Hz, 1024x576p@60Hz, 1024x576p@75Hz, 1024x576p@85Hz, 1024x640p@50Hz, 1024x640p@60Hz, 1024x640p@75Hz, 1024x640p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1064x600p@50Hz, 1064x600p@60Hz, 1064x600p@75Hz, 1064x600p@85Hz, 1152x720p@50Hz, 1152x720p@60Hz, 1152x720p@75Hz, 1152x720p@85Hz, 1152x864p@60Hz, 1224x768p@50Hz, 1224x768p@60Hz, 1224x768p@75Hz, 1224x768p@85Hz, 1280x720p@50Hz, 1280x720p@60Hz, 1280x720p@75Hz, 1280x720p@85Hz, 1280x768p@50Hz, 1280x768p@60Hz, 1280x768p@75Hz, 1280x768p@85Hz, 1280x800p@50Hz, 1280x800p@75Hz, 1280x800p@85Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@50Hz, 1360x768p@60Hz, 1360x768p@75Hz, 1360x768p@85Hz, 1400x1050p@50Hz, 1400x1050p@60Hz, 1400x1050p@75Hz, 1440x900p@60Hz, 1440x900p@75Hz, 1440x900p@85Hz, 1536x960p@50Hz, 1536x960p@60Hz, 1536x960p@75Hz, 1600x1000p@50Hz, 1600x1000p@60Hz, 1600x1200p@50Hz, 1600x1200p@60Hz, 1680x1050p@50Hz, 1680x1050p@60Hz, 1704x960p@50Hz, 1704x960p@60Hz, 1728x1080p@50Hz, 1728x1080p@60Hz, 1864x1050p@50Hz, 1864x1050p@60Hz, 1920x1080p@50Hz, 1920x1200p@50Hz

DMR(RGBHV): 1280x800p@60Hz, 1366x768p@60Hz, 1600x900p@60Hz

DMT(RGBHV): 640x350p@85Hz, 640x400p@85Hz, 640x480p@60Hz, 640x480p@72Hz, 640x480p@75Hz, 640x480p@85Hz, 720x400p@85Hz, 800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz, 800x600p@85Hz, 848x480p@60Hz, 1024x768i@43Hz, 1024x768p@60Hz, 1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@70Hz, 1152x864p@75Hz, 1152x864p@85Hz, 1280x800p@60Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024i@43Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@60Hz, 1366x768p@60Hz, 1600x1200i@48Hz, 1600x1200p@60Hz

AVB-TX-MULTI-DXLINK

DXLink™ Multi-Format Transmitter Module

(FG1010-310)



OVERVIEW

The DXLink Multi-Format Transmitter sends analog and digital audio and video signals including HDMI/HDCP, control, and Ethernet while passing USB signals up to 100 meters over one standard twisted pair cable. The DXLink Transmitter can also be used as a point-to-point solution with a DXLink HDMI Receiver. The DXLink Transmitter is powered from the DXLink input card of the Enova DGX. The transmitter features both a multi-format analog port to support legacy devices and an HDMI port to support newer digital devices.

COMMON APPLICATION

The DXLink Multi-Format Transmitter sends analog or digital video, audio and control to a remote display across the room, on the other side of the house or to a classroom down the hall. The transmitter's built-in control ports can be used to control a source and the ICSLan port provides an IP access point.

FEATURES

- **Only One Cable** – Send audio and video while passing control, Ethernet, USB signals and power
- **Native NetLinX Control Everywhere** – Control connected source and display devices using the built-in IR and RS232 ports
- **Send HDMI signals up to 100 meters** – Extend the reach of the HDMI signals far beyond the capabilities of typical HDMI cabling
- **Multi-Format Analog Port and HDMI Port** – Supports legacy analog signals - RGBHV, Component, S-video, and Composite, and digital HDMI/HDCP, DisplayPort and DVI signals
- **Standard Twisted Pair Cable** – Save time and effort in installation by leveraging pre-existing cost effective twisted pair cable
- **USB Support** – Delivers signals from a remote keyboard and mouse to locally connected PC
- **Power Remotely** – Power is carried over one twisted pair cable to simplify installation when used with the Enova DGX
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD

- **Ethernet Connectivity** – Provides ICSLan Ethernet support at the Transmitter - add Ethernet connectivity to a Touch Panel, plug in a WAP or stream IP audio/video to a Ethernet enabled source device
- **HDCP compliance**

DEALER BENEFITS

- **HDMI/HDCP with the Simplicity of Analog** – Hassle-free plug-and-play operation eliminates the need for time consuming, cumbersome work-around tools to deal with HDCP key constraints and resolution incompatibilities
- **Simplified Design and Installation** – Audio, video, control, USB signals, Ethernet and power are distributed over one twisted pair cable speeding up installation at remote endpoints
- **Reduce Network Drops** – Centralized Ethernet communication from the Enova DGX can be implemented with the ICSLan port - providing IP access points at every DXLink Transmitter and Receiver

CUSTOMER BENEFITS

- **Interruption-Free Content** – Exclusive InstaGate Pro™ Technology allows audio and video to be switched quickly and easily to every connected display without the difficulties typically associated with HDCP
- **Audio, Video and Control Everywhere** – Compact low-profile design and remote powering capabilities allows the transmitter to be installed in discreet locations out of sight without additional wiring



BULLSEYE TARGET PRODUCT

This is a Target Product as defined in the U.S. BullsEye Partnership Program. Participating AMX Dealers can be rewarded for purchasing Target Products as a % of their total annual net revenue.

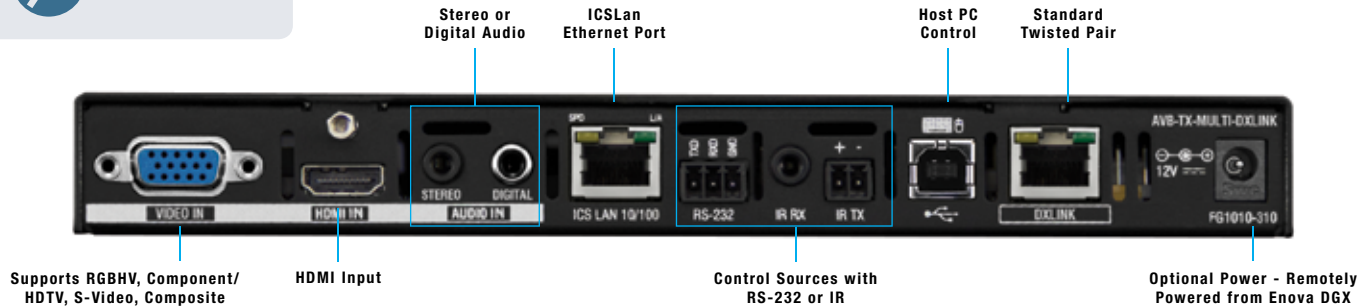


TRAINING AVAILABLE

For important installation, configuration and programming techniques, AMX University training is available. Just visit www.amx.com/training



A CLOSER LOOK



SPECIFICATIONS

GENERAL

- AC Power: 100-240 VAC single phase, 50-60 Hz 0.6 A @ 115 VAC max
- DXLink Power: TX unit can alternatively have power supplied over twisted pair cable when connected to a DXLink Power sourcing device such as an Enova DGX Matrix Switcher
- Power Consumption (Max): TBA
- Power Consumption (Typ): 12 V (+/-10%), 1.5A (18 W) per unit (Estimate)
- Thermal Dissipation (Max): TBA
- Thermal Dissipation (Typ): 61 BTU/hr (Estimate)
- Power Connector: 2.1 mm DC Power Jack
- Operational Temperature: 32° to 104° F (0° to 40° C)
- Storage Temperature: -22° to 158° F (-30° to 70° C)
- Humidity: 0 to 90% non-condensing
- Mounting Options: Compatible with all V Style versatile mounting options including rack, surface or pole
- Advanced Configuration Interface: USB Mini-B Connector
- Transport Layer Throughput (Max): 10.2 Gbps
- Compatible AMX Products: DXLink HDMI RX, Enova DGX 16 and Enova DGX 32 Matrix Switcher
- Twisted Pair Cable Type: Cat5e, Cat6/6e, Cat6a, Cat7, STP, FTP
- Twisted Pair Cable Length: Up to 328 ft (100 m)*

Note: Specifications are subject to change

*Cable quality required in order to meet 100 meter distance should meet ANSI/TIA/EIA 568A-5 or better specification and be rated for 250 MHz or better.

DIMENSIONS (HWD)

1" x 8 3/4" x 5 1/5" (2.54 x 22.12 cm x 13.08 cm)

WEIGHT

- Approx. 1.1 lb (0.50 kg)
- Shipping Weight: Approx. 2.20 lb (1.00 kg)

MTBF

TBA

APPROVALS (PENDING)

CE, FCC, UL, cUL, RoHS

FRONT CONNECTORS

Advanced Configuration Interface: USB Mini-B Connector

BACK CONNECTORS

- Video Input: HD-15 (RGBHV, RGBs, RGsB, Y/Pb/Pr, Y/c / S-Video, composite – breakout cable is required for non RGBHV formats)
- HDMI Input: HDMI Type A Female
- Analog Stereo Input: 3.5mm Mini-Stereo Jack
- S/PDIF Digital Audio Input: RCA Jack
- ICSLAN/Ethernet Port: RJ-45 Connector, TCP/IP Port (ICS LAN 10/100)
- Serial:
 - 3.5mm Pluggable Phoenix Terminal Block
 - Bidirectional RS-232
 - Standard NetLinx Baudrate 1200-115k
 - Parity support Odd/Even/None
- 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)
- USB (HID): USB Type B Connector
- DXLink Output: RJ-45
- Local Power: 2.1 mm DC Power Jack

CONTROLS & INDICATORS

- ID Pushbutton: Places system in NetLinx Device ID assignment mode
- Power Indicator: Green indicates whether or not the module is powered on
- Digital Video Indicator: Green LED indicates the presence of video and audio signals through the module
- Audio Indicator: Green LED indicates the presence of audio signals through the module
- Analog Video Indicator: 3 Green LEDs, 1 lights to indicate the presence of the type of analog video through the Multi-Format TX (composite, Y/c; Y/Pb/Pr or RGB; RGBHV or RGsB)
- IR TX Indicator: Red LED lights during the transmission of IR data via the rear IR port
- IR RX Indicator: Yellow LED lights during the receipt of IR data via the rear IR port
- RS-232 TX Indicator: Red LED shows serial transmit (TX) data activity
- RS-232 RX Indicator: Yellow LED shows serial receive (RX) data activity
- LINK/ACT: Green LED lights when the Ethernet cable is connected and an active link is established. This LED also blinks when receiving Ethernet data packets
- Status: Green LED lights when the Controller is programmed and communicating properly
- CEC Indicator: Yellow LED shows CEC data activity when in point-to-point mode
- USB Indicator: Yellow LED shows USB (HID) activity

HDMI

- Compatible Formats:HDMI 1.4a, HDCP 1.3, DVI 1.0
- Input Signal Type:HDMI
- Signal Type Support:HDMI
- Input Connector:
 - HDMI Type A Female
 - DVI-D (Single Link with Cable Adapter)
 - DisplayPort ++ (Input Only, with HDMI Cable Adapter)
- Data Rate (Max):4.95 Gbps / 6.75 Gbps[^]
- Pixel Clock (Max):165 MHz / 225 MHz[^]
- Progressive Resolution Support:480p up to 1920x1200 @ 60 Hz including but not limited to those resolutions shown on Digital Video Resolution Support Appendix
- Interlaced Resolution Support:480i, 576i, 1080i
- Audio Format Support:Dolby TrueHD, Dolby Digital^{^^}, DTS-HD Master Audio, DTS^{^^}, L-PCM
- Audio Resolution:16 bit to 24 bit
- Audio Sample Rate:32 kHz, 44.1 kHz, 48 kHz, 96 kHz^{^^^}, 192kHz^{^^^}
- Local Audio Support:Yes for audio insertion
- HDCP Support:
 - Yes
 - Supports AMX HDCP InstaGate Pro Technology
 - When used with an AMX Matrix Switch the key support is up to 16 sinks per output, independent of source device
 - When used as a single point to point solution the key support is defined by the source device
- CEC Support:Pass-Through in point to point mode, not supported when passing through Matrix Switcher
- DDC/EDID Support:EDID in point to point mode is passed up from the sink device when used with an AMX Matrix Switch the EDID is provided by the TX and is user re-programmable
- Input Voltage (Nominal):1.0 Vpp Differential
- Input Re-clocking (CDR):Yes
- Input Equalization:Yes, Adaptive
- Propagation Delay (Typ):2 us
- Deep Color Support:24-bit, 30-bit[^], 36-bit[^]
- Color Space Support:TBA
- 3D Format Support:
 - Yes[^] (HDMI Primary Formats)
 - Frame Packing 1080p up to 24Hz
 - Frame Packing 720p up to 50/60Hz
 - Frame Packing 1080i up to 50/60Hz
 - Top-Bottom 1080p up to 24Hz
 - Top-Bottom 720p up to 50/60Hz
 - Side-by-Side Full 1080p up to 24Hz
 - Side-by-Side Full 720p up to 50/60Hz
 - Side-by-Side Half 1080p up to 50/60Hz
 - Side-by-Side Half 720p up to 50/60Hz

[^] Only supported when the DXLink Rx Scaler is in Bypass mode and format is 1080p60 or less.

^{^^} Dolby Digital and DTS support up to 48kHz, 5.1 channels.

^{^^^} 2 Channel L-PCM support up to 48kHz at all resolutions. 2 Channel L-PCM support up to 192kHz at 1080p (50, 59 60Hz). 2 Channel L-PCM support up to 96kHz at 720p (50, 59 60Hz), 1080p (24, 25, 30, 50, 59, 60Hz), 1080i (50, 59, 60 fields).

Note-Reminder: Interlace video supported into the Transmitter, progressive only supported out of the Receiver unless in non-scaling bypass mode

ANALOG VIDEO

- Compatible Formats:
 - RGBHV, RGBs, RGsB
 - YPbPr (HDTV)
 - Y/c (S-Video), C (Composite)
- Progressive Resolution Support:480p up to 1920x1200 @ 60 Hz
(reference Analog Table Format Appendix for extended list)
- Interlaced Resolution Support^{^^^}:480i, 576i, 1080i
(reference Analog Table Format Appendix for extended list)
- Auto-Adjust Input:Supported
- RGB Input Signal Level Range:750 mVpp
- RGB Input Impedance:75 Ω
- HV Sync Input Signal Level Range:0 to + 5 V
- HV Sync Input Impedance:TBA
- HV Sync Input Trigger Voltage:TBA
- Digital Processing:TBA
- Y/Pb/Pr Input Signal Level Range:1.0 Vpp for Y, 700 mVpp for Pb Pr
- Y/Pb/Pr Input Impedance:75 Ω
- Y/c (S-Video) Input Signal Level Range:1.0 Vpp for Y, 300 mVpp for c
- Y/c (S-Video) Input Impedance:75 Ω
- C (Composite) Input Signal Level Range:1.0 Vpp
- C (Composite) Input Impedance:75 Ω
- Input Connector:HD-15 (Breakout cable required for non RGBHV formats)

^{^^^} Interlace video supported into the Transmitter, progressive only supported out of the Receiver unless in scaler bypass mode.

AUDIO (ANALOG & DIGITAL S/PDIF)

- Input Signal Types:
 - Stereo Analog, S/PDIF
- Video signal must be present to pass Audio
- Analog Input Level (Max):+3 dBu, unbalanced
- Analog Input Impedance:10k Ω
- Analog to Digital Conversion:48 kHz Sample Rate, 24-bit
- S/PDIF Resolution:16 to 24 bit
- S/PDIF Sample Rate:32 kHz, 44.1 kHz, 48 kHz, 96 kHz^{^^^}
- S/PDIF Input Signal Level Range:200 mVpp to 600mVpp terminated
- S/PDIF Input Impedance:75 Ω
- Analog to Digital Reference Level:TBA
- Optimal Analog Audio Operating Range:TBA
- Optimal Digital Audio Operating Range:TBA
- Input Connectors:3.5mm Mini-Stereo Jack (Analog Stereo) RCA Jack (S/PDIF)

^{^^^} 96 kHz audio only available when source video resolution is 800x600 @ 60Hz(40 MHz pixel clock) or greater. Otherwise 48 kHz max

DIGITAL VIDEO RESOLUTION SUPPORT APPENDIX

CEA(RGBHV): 640x480p@59Hz, 720x480p@59Hz, 720(1440)x480i@59Hz, 720x480p@60Hz, 720x480p@119Hz, 720x480p@120Hz, 720x480p@239Hz, 720x480p@240Hz, 720x576p@50Hz, 720(1440)x576i@50Hz, 720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz, 960x576p@50Hz, 960(1920)x576i@50Hz, 1280x720p@23Hz, 1280x720p@24Hz, 1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz, 1280x720p@50Hz, 1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz, 1280x720p@119Hz, 1280x720p@120Hz, 1920x1080p@23Hz, 1920x1080p@24Hz, 1920x1080i@25Hz, 1920x1080p@25Hz, 1920x1080i@29Hz, 1920x1080p@29Hz, 1920x1080i@30Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@59Hz, 1920x1080p@60Hz

CVR (RGBHV): 768x480p@60Hz, 800x600p@60Hz, 800x600p@120Hz, 848x480p@60Hz, 960x600p@60Hz, 1024x576p@60Hz, 1024x640p@60Hz, 1024x768p@60Hz, 1024x768p@120Hz, 1064x600p@60Hz, 1152x720p@60Hz, 1152x864p@60Hz, 1224x768p@60Hz, 1280x720p@60Hz, 1280x768p@60Hz, 1280x768p@120Hz, 1280x800p@120Hz, 1280x960p@60Hz,

1280x1024p@60Hz, 1360x768p@60Hz, 1360x768p@120Hz,
1400x1050p@60Hz, 1440x900p@60Hz, 1536x960p@60Hz,
1600x1000p@60Hz, 1600x1200p@60Hz, 1680x1050p@60Hz,
1704x960p@60Hz, 1728x1080p@60Hz, 1800x1350p@60Hz,
1864x1050p@60Hz, 1920x1080p@60Hz, 1920x1200p@60Hz

CVT (RGBHV): 640x360p@85Hz, 640x400p@75Hz, 640x400p@85Hz,
640x480p@75Hz, 640x480p@85Hz, 768x480p@60Hz, 768x480p@75Hz,
768x480p@85Hz, 800x600p@50Hz, 800x600p@60Hz, 800x600p@75Hz,
800x600p@85Hz, 848x480p@50Hz, 848x480p@60Hz, 848x480p@75Hz,
848x480p@85Hz, 960x600p@50Hz, 960x600p@60Hz, 960x600p@75Hz,
960x600p@85Hz, 1024x576p@50Hz, 1024x576p@60Hz, 1024x576p@75Hz,
1024x576p@85Hz, 1024x640p@50Hz, 1024x640p@60Hz, 1024x640p@75Hz,
1024x640p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@75Hz,
1024x768p@85Hz, 1064x600p@50Hz, 1064x600p@60Hz, 1064x600p@75Hz,
1064x600p@85Hz, 1152x720p@50Hz, 1152x720p@60Hz, 1152x720p@75Hz,
1152x720p@85Hz, 1152x864p@60Hz, 1224x768p@50Hz, 1224x768p@60Hz,
1224x768p@75Hz, 1224x768p@85Hz, 1280x720p@50Hz, 1280x720p@60Hz,
1280x720p@75Hz, 1280x720p@85Hz, 1280x768p@50Hz, 1280x768p@60Hz,
1280x768p@75Hz, 1280x768p@85Hz, 1280x800p@50Hz, 1280x800p@75Hz,
1280x800p@85Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz,
1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz,
1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@50Hz, 1360x768p@60Hz,
1360x768p@75Hz, 1360x768p@85Hz, 1400x1050p@50Hz, 1400x1050p@60Hz,
1400x1050p@75Hz, 1440x900p@60Hz, 1440x900p@75Hz, 1440x900p@85Hz,
1536x960p@50Hz, 1536x960p@60Hz, 1536x960p@75Hz, 1600x1000p@50Hz,
1600x1000p@60Hz, 1600x1200p@50Hz, 1600x1200p@60Hz,
1680x1050p@50Hz, 1680x1050p@60Hz, 1704x960p@50Hz,
1704x960p@60Hz, 1728x1080p@50Hz, 1728x1080p@60Hz,
1864x1050p@50Hz, 1864x1050p@60Hz, 1920x1080p@50Hz,
1920x1200p@50Hz

DMR (RGBHV): 1280x800p@60Hz, 1366x768p@60Hz, 1600x900p@60Hz

DMT (RGBHV): 640x350p@85Hz, 640x400p@85Hz, 640x480p@60Hz,
640x480p@72Hz, 640x480p@75Hz, 640x480p@85Hz, 720x400p@85Hz,
800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz,
800x600p@85Hz, 848x480p@60Hz, 1024x768i@43Hz, 1024x768p@60Hz,
1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@70Hz,
1152x864p@75Hz, 1152x864p@85Hz, 1280x800p@60Hz, 1280x960p@60Hz,
1280x960p@75Hz, 1280x960p@85Hz, 1280x1024i@43Hz, 1280x1024p@60Hz,
1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@60Hz, 1366x768p@60Hz,
1600x1200i@48Hz, 1600x1200p@60Hz

ANALOG FORMAT SUPPORT TABLE APPENDIX

CEA (YPbPr): 720x480p@59Hz, 720x480p@60Hz, 720x480p@119Hz,
720x480p@120Hz, 720x480p@239Hz, 720x480p@240Hz, 720x576p@50Hz,
720x576i@50Hz, 720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz,
960x480p@59Hz, 960x576p@50Hz, 960x576i@50Hz, 1280x720p@23Hz,
1280x720p@24Hz, 1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz,
1280x720p@50Hz, 1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz,
1280x720p@119Hz, 1280x720p@120Hz, 1920x1080p@23Hz,
1920x1080p@24Hz, 1920x1080i@25Hz, 1920x1080p@25Hz,
1920x1080i@29Hz, 1920x1080p@29Hz, 1920x1080i@30Hz,
1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@59Hz,
1920x1080p@60Hz

CEA (RGBHV): 640x480p@59Hz, 720x480p@59Hz, 720(1440)x480i@59Hz,
720x480p@60Hz, 720x480p@119Hz, 720x480p@120Hz, 720x480p@239Hz,
720x480p@240Hz, 720x576p@50Hz, 720(1440)x576i@50Hz,

720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz, 960x576p@50Hz,
960(1920)x576i@50Hz, 1280x720p@23Hz, 1280x720p@24Hz,
1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz, 1280x720p@50Hz,
1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz, 1280x720p@119Hz,
1280x720p@120Hz, 1920x1080p@23Hz, 1920x1080p@24Hz,
1920x1080i@25Hz, 1920x1080p@25Hz, 1920x1080i@29Hz,
1920x1080p@29Hz, 1920x1080i@30Hz, 1920x1080p@30Hz,
1920x1080p@50Hz, 1920x1080p@59Hz, 1920x1080p@60Hz

CVR (RGBHV): 768x480p@60Hz, 800x600p@60Hz, 800x600p@120Hz,
848x480p@60Hz, 960x600p@60Hz, 1024x576p@60Hz, 1024x640p@60Hz,
1024x768p@60Hz, 1024x768p@120Hz, 1064x600p@60Hz, 1152x720p@60Hz,
1152x864p@60Hz, 1224x768p@60Hz, 1280x720p@60Hz, 1280x768p@60Hz,
1280x768p@120Hz, 1280x800p@120Hz, 1280x960p@60Hz,
1280x1024p@60Hz, 1360x768p@60Hz, 1360x768p@120Hz,
1400x1050p@60Hz, 1440x900p@60Hz, 1536x960p@60Hz,
1600x1000p@60Hz, 1600x1200p@60Hz, 1680x1050p@60Hz,
1704x960p@60Hz, 1728x1080p@60Hz, 1800x1350p@60Hz,
1864x1050p@60Hz, 1920x1080p@60Hz, 1920x1200p@60Hz

CVT (RGBHV): 640x360p@85Hz, 640x400p@75Hz, 640x400p@85Hz,
640x480p@75Hz, 640x480p@85Hz, 768x480p@60Hz, 768x480p@75Hz,
768x480p@85Hz, 800x600p@50Hz, 800x600p@60Hz, 800x600p@75Hz,
800x600p@85Hz, 848x480p@50Hz, 848x480p@60Hz, 848x480p@75Hz,
848x480p@85Hz, 960x600p@50Hz, 960x600p@60Hz, 960x600p@75Hz,
960x600p@85Hz, 1024x576p@50Hz, 1024x576p@60Hz, 1024x576p@75Hz,
1024x576p@85Hz, 1024x640p@50Hz, 1024x640p@60Hz, 1024x640p@75Hz,
1024x640p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@75Hz,
1024x768p@85Hz, 1064x600p@50Hz, 1064x600p@60Hz, 1064x600p@75Hz,
1064x600p@85Hz, 1152x720p@50Hz, 1152x720p@60Hz, 1152x720p@75Hz,
1152x720p@85Hz, 1152x864p@60Hz, 1224x768p@50Hz, 1224x768p@60Hz,
1224x768p@75Hz, 1224x768p@85Hz, 1280x720p@50Hz, 1280x720p@60Hz,
1280x720p@75Hz, 1280x720p@85Hz, 1280x768p@50Hz, 1280x768p@60Hz,
1280x768p@75Hz, 1280x768p@85Hz, 1280x800p@50Hz, 1280x800p@75Hz,
1280x800p@85Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz,
1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz,
1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@50Hz, 1360x768p@60Hz,
1360x768p@75Hz, 1360x768p@85Hz, 1400x1050p@50Hz, 1400x1050p@60Hz,
1400x1050p@75Hz, 1440x900p@60Hz, 1440x900p@75Hz, 1440x900p@85Hz,
1536x960p@50Hz, 1536x960p@60Hz, 1536x960p@75Hz, 1600x1000p@50Hz,
1600x1000p@60Hz, 1600x1200p@50Hz, 1600x1200p@60Hz,
1680x1050p@50Hz, 1680x1050p@60Hz, 1704x960p@50Hz,
1704x960p@60Hz, 1728x1080p@50Hz, 1728x1080p@60Hz,
1864x1050p@50Hz, 1864x1050p@60Hz, 1920x1080p@50Hz,
1920x1200p@50Hz

DMR (RGBHV): 1280x800p@60Hz, 1366x768p@60Hz, 1600x900p@60Hz

DMT (RGBHV): 640x350p@85Hz, 640x400p@85Hz, 640x480p@60Hz,
640x480p@72Hz, 640x480p@75Hz, 640x480p@85Hz, 720x400p@85Hz,
800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz,
800x600p@85Hz, 848x480p@60Hz, 1024x768i@43Hz, 1024x768p@60Hz,
1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@70Hz,
1152x864p@75Hz, 1152x864p@85Hz, 1280x800p@60Hz, 1280x960p@60Hz,
1280x960p@75Hz, 1280x960p@85Hz, 1280x1024i@43Hz, 1280x1024p@60Hz,
1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@60Hz, 1366x768p@60Hz,
1600x1200i@48Hz, 1600x1200p@60Hz

CEA (RGBs): 720x576p@50Hz, 720x576p@100Hz, 720x576p@200Hz

CVT (RGBs): 640x480p@72Hz, 640x480p@75Hz, 640x480p@80Hz, 640x480p@85Hz, 800x600p@50Hz, 800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz, 800x600p@80Hz, 800x600p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@65Hz, 1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@65Hz, 1152x864p@70Hz, 1152x864p@75Hz, 1152x864p@80Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@80Hz, 1280x1024p@85Hz, 1400x1050p@50Hz, 1400x1050p@54Hz, 1400x1050p@60Hz, 1400x1050p@65Hz, 1400x1050p@75Hz, 1400x1050p@82Hz, 1600x1200p@50Hz, 1600x1200p@60Hz

DMT (RGBs): 640x480p@60Hz, 640x480p@72Hz, 800x600p@56Hz, 800x600p@72Hz, 1024x768p@70Hz, 1152x864p@70Hz, 1152x864p@85Hz

CEA (RGsB): 720x576p@50Hz, 720x576p@100Hz, 720x576p@200Hz

CVT (RGsB): 640x480p@72Hz, 640x480p@75Hz, 640x480p@80Hz, 640x480p@85Hz, 800x600p@50Hz, 800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz, 800x600p@80Hz, 800x600p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@65Hz, 1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@65Hz, 1152x864p@70Hz, 1152x864p@75Hz, 1152x864p@80Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@80Hz, 1280x1024p@85Hz, 1400x1050p@50Hz, 1400x1050p@54Hz, 1400x1050p@60Hz, 1400x1050p@65Hz, 1400x1050p@75Hz, 1400x1050p@82Hz, 1600x1200p@50Hz, 1600x1200p@60Hz

DMT (RGsB): 640x480p@60Hz, 640x480p@72Hz, 800x600p@56Hz, 800x600p@72Hz, 1024x768p@70Hz, 1152x864p@70Hz, 1152x864p@85Hz

CEA (YPbPr): 720x480p@59Hz, 720x480p@60Hz, 720x480p@119Hz, 720x480p@120Hz, 720x480p@239Hz, 720x480p@240Hz, 720x576p@50Hz, 720x576i@50Hz, 720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz, 960x480p@59Hz, 960x576p@50Hz, 960x576i@50Hz, 1280x720p@23Hz, 1280x720p@24Hz, 1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz, 1280x720p@50Hz, 1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz, 1280x720p@119Hz, 1280x720p@120Hz, 1920x1080p@23Hz, 1920x1080p@24Hz, 1920x1080i@25Hz, 1920x1080p@25Hz, 1920x1080i@29Hz, 1920x1080p@29Hz, 1920x1080i@30Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@59Hz, 1920x1080p@60Hz

Analog & Digital

Video • Audio

AVB-WP-TX-MULTI-DXLINK

DXLink™ Multi-Format Wallplate Transmitters

- White (FG1010-320-WH)
- Black (FG1010-320-BL)



OVERVIEW

The DXLink Multi-Format Wallplate Transmitter sends analog or digital video including HDMI/HDCP, along with embedded audio or supplemental analog audio up to 100 meters to an Enova DGX Matrix Switcher. It receives power from the Enova DGX over the twisted pair cable and features both a multi-format analog port to support legacy devices and an HDMI port to support newer digital devices.

COMMON APPLICATION

Mount the DXLink Multi-Format Wallplate Transmitter in the wall or lectern to connect guest equipment and send its 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

- **Only One Cable** – Send audio and video, while passing Ethernet, USB signals and power over one twisted pair cable
- **Multi-Format Analog Port and HDMI Port** – Supports legacy analog signals - RGBHV, Component, S-Video, and Composite, and digital HDMI/HDCP, DisplayPort and DVI signals
- **Send HDMI signals up to 100 meters** – Extend the reach of the HDMI signals far beyond the capabilities of typical HDMI cabling
- **Standard Twisted Pair Cable** – Save time and effort in installation by leveraging cost effective twisted pair cable
- **USB Support** – Delivers signals from a remote keyboard and mouse to locally connected PC
- **Power Remotely** – Power is carried over twisted pair to simplify installation when used with the Enova DGX
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Surround Sound Support** – Pass through high definition surround sound including DTS-HD and Dolby TrueHD
- **Automatic Analog to Digital Conversion** – Incoming analog signals are converted to digital without any manual setup
- **HDCP Compliant**

DEALER BENEFITS

- **HDMI/HDCP With Simplicity of Analog** – Hassle-free plug-and-play operation eliminates the need for time-consuming cumbersome work-around tools to deal with HDCP key constraints and resolution incompatibilities
- **Installation Friendly** – Standard two gang size and remote powering capabilities allows the wallplate to be installed in virtually any location
- **Industry Leading Analog to Digital Conversion** – Incoming analog signals are automatically converted to digital reducing setup time and trouble shooting requirements

CUSTOMER BENEFITS

- **Interruption-Free Content** – Exclusive InstaGate Pro™ Technology allows audio and video to be switched quickly and easily to every connected display without the difficulties typically associated with HDCP
- **Easily Connect Guest Devices** – Provides a versatile solution for environments where sources are consistently changing



BULLSEYE TARGET PRODUCT

This is a Target Product as defined in the U.S. BullsEye Partnership Program. Participating AMX Dealers can be rewarded for purchasing Target Products as a % of their total annual net revenue.



TRAINING AVAILABLE

For important installation, configuration and programming techniques, AMX University training is available. Just visit www.amx.com/training



InstaGate Pro™ Technology

No tools, no delays and no key constraints. AMX's exclusive InstaGate Pro Technology allows traditionally key limited sources to be freely switched to any display without the typical HDCP delays.

SPECIFICATIONS

GENERAL

- DXLink Power: Requires power to be provided by a DXLink Power sourcing device such as an Enova DGX Matrix Switcher
- Power Consumption (Max): TBA
- Power Consumption (Typ): 12 V (+/-10%), 1.5A (18 W) per unit (Estimate)
- Thermal Dissipation (Max): TBA
- Thermal Dissipation (Typ): 61 BTU/hr (Estimate)
- Power Connector: 2.1 mm DC Power Jack
- Operational Temperature: 32° to 104° F (0° to 40° C)
- Storage Temperature: -22° to 158° F (-30° to 70° C)
- Humidity: 0 to 90% non-condensing
- Compatible AMX Products: Enova DGX 16 and Enova DGX 32 Matrix Switcher
- Advanced Configuration Interface: USB Mini-B Connector
- Transport Layer Throughput (Max): 10.2 Gbps
- Twisted Pair Cable Type: Cat5e, Cat6/6e, Cat6a, Cat7, STP, FTP
- Twisted Pair Cable Length: Up to 328 ft (100 m)*

Note: Specifications are subject to change

*Cable quality required in order to meet 100 meter distance should meet ANSI/TIA/EIA 568A-5 or better specification and be rated for 250 MHz or better.

DIMENSIONS (HWD)

5" x 6" x 1 5/16" (11.90 cm x 15.20 cm x 3.33 cm)

INSTALLATION

Mounts onto standard 2 gang US, UK, or EU back boxes

WEIGHT

- Approx. 1.1 lb (0.50 kg)
- Shipping Weight: Approx. 2.20 lb (1.00 kg)

MTBF

TBA

APPROVALS (PENDING)

CE, FCC, UL, cUL, RoHS / WEEE compliant

FRONT CONNECTORS

- HDMI Input: HDMI Type A Female
- Analog Video Input: HD-15 (Breakout cable required for non RGB formats)
- Analog Stereo Input: 3.5mm Mini-Stereo Jack
- Advanced Configuration Interface: USB Mini-B Connector
- USB (HID): Wallplate USB Mini-B Connector

SIDE CONNECTORS

- ID Pushbutton: Places system in NetLinx Device ID assignment mode
- Reset Pushbutton: Resets/reboots the CPU of the wallplate

BACK CONNECTORS

DXLink Output: RJ-45

CONTROLS & INDICATORS

- Advanced Configuration Interface: USB Mini-B Connector
- Power Indicator: Green indicates whether or not the module is powered on

HDMI

- Input Signal Type:
 - HDMI
 - DVI-D (Single Link With Cable Adapter)
 - DisplayPort ++ (Input Only, With HDMI Cable Adapter)
- Compatible Formats: HDMI 1.4a, HDCP 1.3, DVI 1.0
- Signal Type Support: HDMI
- Data Rate (Max): 4.95 Gbps / 6.75 Gbps^
- Pixel Clock (Max): 165 MHz / 225 MHz^
- Progressive Resolution Support: 480p up to 1920x1200 @ 60 Hz including but not limited to those resolutions shown on Digital Video Resolution Support Appendix

- Interlaced Resolution Support: 480i, 576i, 1080i
- Deep Color Support: 24-bit, 30-bit^, 36-bit^
- Color Space Support: TBA
- 3D Format Support:
 - Yes^ (HDMI Primary Formats)
 - Frame Packing 1080p up to 24Hz
 - Frame Packing 720p up to 50/60Hz
 - Frame Packing 1080i up to 50/60Hz
 - Top-Bottom 1080p up to 24Hz
 - Top-Bottom 720p up to 50/60Hz
 - Side-by-Side Full 1080p up to 24Hz
 - Side-by-Side Full 720p up to 50/60Hz
 - Side-by-Side Half 1080p up to 50/60Hz
 - Side-by-Side Half 720p up to 50/60Hz
- Audio Format Support: Dolby TrueHD, Dolby Digital^^, DTS-HD Master Audio, DTS^^, L-PCM
- Audio Resolution: 16 bit to 24 bit
- Audio Sample Rate: 32 kHz, 44.1 kHz, 48 kHz, 96 kHz^^^, 192kHz^^^^
- Local Audio Support: TX Insertion, Rx Extraction
- HDCP Support:
 - Yes
 - Supports AMX HDCP InstaGate Pro Technology
 - When used with an AMX Matrix Switch the key support is up to 16 sinks per output, independent of source device
- CEC Support: Not supported
- DDC/EDID Support: EDID is provided by the WallPlate TX and is user re-programmable
- Input Voltage (Nominal): 1.0 Vpp Differential
- Input Re-clocking (CDR): Yes
- Input Equalization: Yes, Adaptive
- Propagation Delay (Typ): 2 us

^ Only supported when the DXLink Rx Scaler is in Bypass mode and format is 1080p60 or less.

^^ Dolby Digital and DTS support up to 48kHz, 5.1 channels.

^^^^ 2 Channel L-PCM support up to 48kHz at all resolutions. 2 Channel L-PCM support up to 192kHz at 1080p (50, 59, 60Hz). 2 Channel L-PCM support up to 96kHz at 720p (50, 59, 60Hz), 1080p (24, 25, 30, 50, 59, 60Hz), 1080i (50, 59, 60 fields).

Note-Reminder: Interlace video supported into the Transmitter, progressive only supported out of the Receiver unless in non-scaling bypass mode

ANALOG VIDEO

- Compatible Formats:
 - RGBHV, RGBs, RGsB
 - YPbPr (HDTV)
 - Y/c (S-Video), C (Composite)
- Progressive Resolution Support:
 - 480p up to 1920x1200 @ 60 Hz (reference Analog Table Format Appendix for extended list)
 - Interlaced Resolution Support^^^^: 480i, 576i, 1080i (reference Analog Table Format Appendix for extended list)
- Auto-Adjust Input: Supported
- RGB Input Signal Level Range: 750 mVpp
- RGB Input Impedance: 75 Ω
- HV Sync Input Signal Level Range: 0 to + 5 V
- HV Sync Input Impedance: TBA
- HV Sync Input Trigger Voltage: TBA
- Digital Processing: TBA
- Y/Pb/Pr Input Signal Level Range: 1.0 Vpp for Y, 700 mVpp for Pb Pr
- Y/Pb/Pr Input Impedance: 75 Ω
- Y/c (S-Video) Input Signal Level Range: 1.0 Vpp for Y, 300 mVpp for c
- Y/c (S-Video) Input Impedance: 75 Ω
- C (Composite) Input Signal Level Range: 1.0 Vpp

• C (Composite) Input Impedance:75 Ω

^^^ Interlace video supported into the Transmitter, progressive only supported out of the Receiver unless in scaler bypass mode.

LOCAL AUDIO

• Input Signal Types:

Stereo Analog

Video signal must be present to pass Audio

- Analog Input Level (Max):-+3 dBu, unbalanced
- Analog Input Impedance:10k Ω
- Analog to Digital Conversion:48 kHz Sample Rate, 24-bit
- Analog to Digital Reference Level:TBA
- Optimal Analog Audio Operating Range:TBA

DIGITAL VIDEO RESOLUTION SUPPORT APPENDIX

CEA(RGBHV): 640x480p@59Hz, 720x480p@59Hz, 720(1440)x480i@59Hz, 720x480p@60Hz, 720x480p@119Hz, 720x480p@120Hz, 720x480p@239Hz, 720x480p@240Hz, 720x576p@50Hz, 720(1440)x576i@50Hz, 720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz, 960x576p@50Hz, 960(1920)x576i@50Hz, 1280x720p@23Hz, 1280x720p@24Hz, 1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz, 1280x720p@50Hz, 1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz, 1280x720p@119Hz, 1280x720p@120Hz, 1920x1080p@23Hz, 1920x1080p@24Hz, 1920x1080i@25Hz, 1920x1080p@25Hz, 1920x1080i@29Hz, 1920x1080p@29Hz, 1920x1080i@30Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@59Hz, 1920x1080p@60Hz

CVR (RGBHV): 768x480p@60Hz, 800x600p@60Hz, 800x600p@120Hz, 848x480p@60Hz, 960x600p@60Hz, 1024x576p@60Hz, 1024x640p@60Hz, 1024x768p@60Hz, 1024x768p@120Hz, 1064x600p@60Hz, 1152x720p@60Hz, 1152x864p@60Hz, 1224x768p@60Hz, 1280x720p@60Hz, 1280x768p@60Hz, 1280x768p@120Hz, 1280x800p@120Hz, 1280x960p@60Hz, 1280x1024p@60Hz, 1360x768p@60Hz, 1360x768p@120Hz, 1400x1050p@60Hz, 1440x900p@60Hz, 1536x960p@60Hz, 1600x1000p@60Hz, 1600x1200p@60Hz, 1680x1050p@60Hz, 1704x960p@60Hz, 1728x1080p@60Hz, 1800x1350p@60Hz, 1864x1050p@60Hz, 1920x1080p@60Hz, 1920x1200p@60Hz

CVT (RGBHV): 640x360p@85Hz, 640x400p@75Hz, 640x400p@85Hz, 640x480p@75Hz, 640x480p@85Hz, 768x480p@60Hz, 768x480p@75Hz, 768x480p@85Hz, 800x600p@50Hz, 800x600p@60Hz, 800x600p@75Hz, 800x600p@85Hz, 848x480p@50Hz, 848x480p@60Hz, 848x480p@75Hz, 848x480p@85Hz, 960x600p@50Hz, 960x600p@60Hz, 960x600p@75Hz, 960x600p@85Hz, 1024x576p@50Hz, 1024x576p@60Hz, 1024x576p@75Hz, 1024x576p@85Hz, 1024x640p@50Hz, 1024x640p@60Hz, 1024x640p@75Hz, 1024x640p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1064x600p@50Hz, 1064x600p@60Hz, 1064x600p@75Hz, 1064x600p@85Hz, 1152x720p@50Hz, 1152x720p@60Hz, 1152x720p@75Hz, 1152x720p@85Hz, 1152x864p@60Hz, 1224x768p@50Hz, 1224x768p@60Hz, 1224x768p@75Hz, 1224x768p@85Hz, 1280x720p@50Hz, 1280x720p@60Hz, 1280x720p@75Hz, 1280x720p@85Hz, 1280x768p@50Hz, 1280x768p@60Hz, 1280x768p@75Hz, 1280x768p@85Hz, 1280x800p@50Hz, 1280x800p@75Hz, 1280x800p@85Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@50Hz, 1360x768p@60Hz, 1360x768p@75Hz, 1360x768p@85Hz, 1400x1050p@50Hz, 1400x1050p@60Hz, 1400x1050p@75Hz, 1440x900p@60Hz, 1440x900p@75Hz, 1440x900p@85Hz, 1536x960p@50Hz, 1536x960p@60Hz, 1536x960p@75Hz, 1600x1000p@50Hz, 1600x1000p@60Hz, 1600x1200p@50Hz, 1600x1200p@60Hz, 1680x1050p@50Hz, 1680x1050p@60Hz, 1704x960p@50Hz, 1704x960p@60Hz, 1728x1080p@50Hz, 1728x1080p@60Hz,

1864x1050p@50Hz, 1864x1050p@60Hz, 1920x1080p@50Hz, 1920x1200p@50Hz

DMR(RGBHV): 1280x800p@60Hz, 1366x768p@60Hz, 1600x900p@60Hz

DMT(RGBHV): 640x350p@85Hz, 640x400p@85Hz, 640x480p@60Hz, 640x480p@72Hz, 640x480p@75Hz, 640x480p@85Hz, 720x400p@85Hz, 800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz, 800x600p@85Hz, 848x480p@60Hz, 1024x768i@43Hz, 1024x768p@60Hz, 1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@70Hz, 1152x864p@75Hz, 1152x864p@85Hz, 1280x800p@60Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024i@43Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@60Hz, 1366x768p@60Hz, 1600x1200i@48Hz, 1600x1200p@60Hz

ANALOG FORMAT SUPPORT TABLE APPENDIX

CEA (Y/Pb/Pr): 720x480p@59Hz, 720x480p@60Hz, 720x480p@119Hz, 720x480p@120Hz, 720x480p@239Hz, 720x480p@240Hz, 720x576p@50Hz, 720x576i@50Hz, 720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz, 960x480p@59Hz, 960x576p@50Hz, 960x576i@50Hz, 1280x720p@23Hz, 1280x720p@24Hz, 1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz, 1280x720p@50Hz, 1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz, 1280x720p@119Hz, 1280x720p@120Hz, 1920x1080p@23Hz, 1920x1080p@24Hz, 1920x1080i@25Hz, 1920x1080p@25Hz, 1920x1080i@29Hz, 1920x1080p@29Hz, 1920x1080i@30Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@59Hz, 1920x1080p@60Hz

CEA(RGBHV): 640x480p@59Hz, 720x480p@59Hz, 720(1440)x480i@59Hz, 720x480p@60Hz, 720x480p@119Hz, 720x480p@120Hz, 720x480p@239Hz, 720x480p@240Hz, 720x576p@50Hz, 720(1440)x576i@50Hz, 720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz, 960x576p@50Hz, 960(1920)x576i@50Hz, 1280x720p@23Hz, 1280x720p@24Hz, 1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz, 1280x720p@50Hz, 1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz, 1280x720p@119Hz, 1280x720p@120Hz, 1920x1080p@23Hz, 1920x1080p@24Hz, 1920x1080i@25Hz, 1920x1080p@25Hz, 1920x1080i@29Hz, 1920x1080p@29Hz, 1920x1080i@30Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@59Hz, 1920x1080p@60Hz

CVR (RGBHV): 768x480p@60Hz, 800x600p@60Hz, 800x600p@120Hz, 848x480p@60Hz, 960x600p@60Hz, 1024x576p@60Hz, 1024x640p@60Hz, 1024x768p@60Hz, 1024x768p@120Hz, 1064x600p@60Hz, 1152x720p@60Hz, 1152x864p@60Hz, 1224x768p@60Hz, 1280x720p@60Hz, 1280x768p@60Hz, 1280x768p@120Hz, 1280x800p@120Hz, 1280x960p@60Hz, 1280x1024p@60Hz, 1360x768p@60Hz, 1360x768p@120Hz, 1400x1050p@60Hz, 1440x900p@60Hz, 1536x960p@60Hz, 1600x1000p@60Hz, 1600x1200p@60Hz, 1680x1050p@60Hz, 1704x960p@60Hz, 1728x1080p@60Hz, 1800x1350p@60Hz, 1864x1050p@60Hz, 1920x1080p@60Hz, 1920x1200p@60Hz

CVT (RGBHV): 640x360p@85Hz, 640x400p@75Hz, 640x400p@85Hz, 640x480p@75Hz, 640x480p@85Hz, 768x480p@60Hz, 768x480p@75Hz, 768x480p@85Hz, 800x600p@50Hz, 800x600p@60Hz, 800x600p@75Hz, 800x600p@85Hz, 848x480p@50Hz, 848x480p@60Hz, 848x480p@75Hz, 848x480p@85Hz, 960x600p@50Hz, 960x600p@60Hz, 960x600p@75Hz, 960x600p@85Hz, 1024x576p@50Hz, 1024x576p@60Hz, 1024x576p@75Hz, 1024x576p@85Hz, 1024x640p@50Hz, 1024x640p@60Hz, 1024x640p@75Hz, 1024x640p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1064x600p@50Hz, 1064x600p@60Hz, 1064x600p@75Hz,

1064x600p@85Hz, 1152x720p@50Hz, 1152x720p@60Hz, 1152x720p@75Hz, 1152x720p@85Hz, 1152x864p@60Hz, 1224x768p@50Hz, 1224x768p@60Hz, 1224x768p@75Hz, 1224x768p@85Hz, 1280x720p@50Hz, 1280x720p@60Hz, 1280x720p@75Hz, 1280x720p@85Hz, 1280x768p@50Hz, 1280x768p@60Hz, 1280x768p@75Hz, 1280x768p@85Hz, 1280x800p@50Hz, 1280x800p@75Hz, 1280x800p@85Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@50Hz, 1360x768p@60Hz, 1360x768p@75Hz, 1360x768p@85Hz, 1400x1050p@50Hz, 1400x1050p@60Hz, 1400x1050p@75Hz, 1440x900p@60Hz, 1440x900p@75Hz, 1440x900p@85Hz, 1536x960p@50Hz, 1536x960p@60Hz, 1536x960p@75Hz, 1600x1000p@50Hz, 1600x1000p@60Hz, 1600x1200p@50Hz, 1600x1200p@60Hz, 1680x1050p@50Hz, 1680x1050p@60Hz, 1704x960p@50Hz, 1704x960p@60Hz, 1728x1080p@50Hz, 1728x1080p@60Hz, 1864x1050p@50Hz, 1864x1050p@60Hz, 1920x1080p@50Hz, 1920x1200p@50Hz

DMR(RGBHV): 1280x800p@60Hz, 1366x768p@60Hz, 1600x900p@60Hz

DMT(RGBHV): 640x350p@85Hz, 640x400p@85Hz, 640x480p@60Hz, 640x480p@72Hz, 640x480p@75Hz, 640x480p@85Hz, 720x400p@85Hz, 800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz, 800x600p@85Hz, 848x480p@60Hz, 1024x768i@43Hz, 1024x768p@60Hz, 1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@70Hz, 1152x864p@75Hz, 1152x864p@85Hz, 1280x800p@60Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024i@43Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@85Hz, 1360x768p@60Hz, 1366x768p@60Hz, 1600x1200i@48Hz, 1600x1200p@60Hz

CEA (RGBs): 720x576p@50Hz, 720x576p@100Hz, 720x576p@200Hz

CVT (RGBs): 640x480p@72Hz, 640x480p@75Hz, 640x480p@80Hz, 640x480p@85Hz, 800x600p@50Hz, 800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz, 800x600p@80Hz, 800x600p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@65Hz, 1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@65Hz, 1152x864p@70Hz, 1152x864p@75Hz, 1152x864p@80Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@80Hz, 1280x1024p@85Hz, 1400x1050p@50Hz, 1400x1050p@54Hz, 1400x1050p@60Hz, 1400x1050p@65Hz, 1400x1050p@75Hz, 1400x1050p@82Hz, 1600x1200p@50Hz, 1600x1200p@60Hz

DMT (RGBs): 640x480p@60Hz, 640x480p@72Hz, 800x600p@56Hz, 800x600p@72Hz, 1024x768p@70Hz, 1152x864p@70Hz, 1152x864p@85Hz

CEA (RGsB): 720x576p@50Hz, 720x576p@100Hz, 720x576p@200Hz

CVT (RGsB): 640x480p@72Hz, 640x480p@75Hz, 640x480p@80Hz, 640x480p@85Hz, 800x600p@50Hz, 800x600p@56Hz, 800x600p@60Hz, 800x600p@72Hz, 800x600p@75Hz, 800x600p@80Hz, 800x600p@85Hz, 1024x768p@50Hz, 1024x768p@60Hz, 1024x768p@65Hz, 1024x768p@70Hz, 1024x768p@75Hz, 1024x768p@85Hz, 1152x864p@65Hz, 1152x864p@70Hz, 1152x864p@75Hz, 1152x864p@80Hz, 1280x960p@50Hz, 1280x960p@60Hz, 1280x960p@75Hz, 1280x960p@85Hz, 1280x1024p@50Hz, 1280x1024p@60Hz, 1280x1024p@75Hz, 1280x1024p@80Hz, 1280x1024p@85Hz, 1400x1050p@50Hz, 1400x1050p@54Hz, 1400x1050p@60Hz, 1400x1050p@65Hz, 1400x1050p@75Hz, 1400x1050p@82Hz, 1600x1200p@50Hz, 1600x1200p@60Hz

DMT (RGsB): 640x480p@60Hz, 640x480p@72Hz, 800x600p@56Hz, 800x600p@72Hz, 1024x768p@70Hz, 1152x864p@70Hz, 1152x864p@85Hz

CEA (YPbPr): 720x480p@59Hz, 720x480p@60Hz, 720x480p@119Hz, 720x480p@120Hz, 720x480p@239Hz, 720x480p@240Hz, 720x576p@50Hz, 720x576i@50Hz, 720x576p@100Hz, 720x576p@200Hz, 768x576p@50Hz, 960x480p@59Hz, 960x576p@50Hz, 960x576i@50Hz, 1280x720p@23Hz, 1280x720p@24Hz, 1280x720p@25Hz, 1280x720p@29Hz, 1280x720p@30Hz, 1280x720p@50Hz, 1280x720p@59Hz, 1280x720p@60Hz, 1280x720p@100Hz, 1280x720p@119Hz, 1280x720p@120Hz, 1920x1080p@23Hz, 1920x1080p@24Hz, 1920x1080i@25Hz, 1920x1080p@25Hz, 1920x1080i@29Hz, 1920x1080p@29Hz, 1920x1080i@30Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@59Hz, 1920x1080p@60Hz

AVB-RX-DXLINK-HDMI

DXLink™ HDMI Receiver Module

(FG1010-500)



OVERVIEW

The DXLink Receiver accepts audio, video, control, Ethernet and power sent over one standard twisted pair cable up to 100 meters away from the Enova DGX Matrix Switcher, DVX-3150 or DXLink Transmitter. 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. Mount the low-profile DXLink Receiver behind a display or above a ceiling mounted projector and control it using the built in RS-232 or IR ports. Plus monitor the connected display's settings, and send IR control signals back to the head end using the same twisted pair cable. When used in conjunction with the Enova DGX 16/32, the DXLink Receiver can be powered from the matrix switcher.

COMMON APPLICATION

The DXLink HDMI Receiver Module receives HDMI and control signals from a remote transmitter. The receivers built-in control ports can be used to control a destination device and the ICS Lan port provides IP an access point with used in conjunction with the Enova DGX or Enova DVX-3150HD.

FEATURES

- **Only One Cable** – Receive audio and video while passing control, Ethernet, USB signals and power over one twisted pair cable
- **SmartScale Technology** – Automatically responds to the display's declared EDID information and scales the video to the best resolution and video parameters for that display without manual setup; this prevents inferior video quality when sources are forced to lower resolutions to support the least capable display in the system
- **Native NetLinX Control Everywhere** – Control connected destination devices using the built-in IR and RS232 ports
- **Standard Twisted Pair Cable** – Save time and effort in installation by leveraging cost effective twisted pair cable

- **Built-in Control Ports** – Control the display using the built-in IR or RS-232 control ports
- **Low Profile Design** – Easily mount behind a display or above a ceiling mounted projector
- **USB Support** – Pass keyboard and mouse USB signals to control a remote computer
- **IR Receiver** – Send IR commands back to the Enova DGX or Enova DVX-3150HD to control source equipment using an IR remote
- **Power Remotely** – Power is carried over one twisted pair cable to simplify installation when used with the Enova DGX
- **3D Support** – Pass through latest video formats including 3D and Deep Color
- **Ethernet Connectivity** – Provides ICS Lan Ethernet support at the Receiver - add Ethernet connectivity to a Touch Panel, plug in a WAP or stream IP audio/video to a Ethernet enabled display
- **HDCP Compliant**



BULLSEYE TARGET PRODUCT

This is a Target Product as defined in the U.S. BullsEye Partnership Program. Participating AMX Dealers can be rewarded for purchasing Target Products as a % of their total annual net revenue.



TRAINING AVAILABLE

For important installation, configuration and programming techniques, AMX University training is available. Just visit www.amx.com/training



InstaGate Pro™ Technology

No tools, no delays and no key constraints. AMX's exclusive InstaGate Pro Technology allows traditionally key limited sources to be freely switched to any display without the typical HDCP delays.

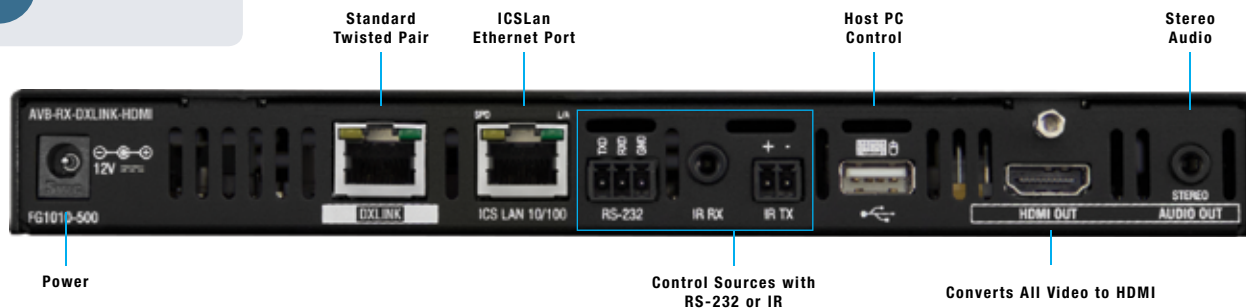


SmartScale® Technology

Enjoy crystal clear perfect resolution on every display using AMX's exclusive SmartScale Technology which automatically outputs video that is perfectly scaled to each connected display.



A CLOSER LOOK



SPECIFICATIONS

GENERAL

- AC Power:100-240 VAC single phase, 50-60 Hz 0.6 A @ 115 VAC max
- DXLink Power:RX unit can alternatively have power supplied over twisted pair cable when connected to a DXLink Power sourcing device such as an Enova DGX Matrix Switcher
- Power Consumption (Max):TBA
- Power Consumption (Typ):12 V (+/-10%), 1.5A (18 W) per unit (Estimate)
- Thermal Dissipation (Max):TBA
- Thermal Dissipation (Typ):61 BTU/hr (Estimate)
- Power Connector:2.1 mm DC Power Jack
- Operational Temperature:32° to 104° F (0° to 40° C)
- Storage Temperature:-22° to 158° F (-30° to 70° C)
- Humidity:0 to 90% non-condensing
- Compatible AMX Products:DXLink HDMI TX, DXLink Multi-format TX, Enova DGX and Enova DGX Matrix Switcher
- Advanced Configuration Interface:USB Mini-B Connector
- Transport Layer Throughput (Max):10.2 Gbps
- Twisted Pair Cable Type:Cat5e, Cat6/6e, Cat6a, Cat7, STP, FTP
- Twisted Pair Cable Length:Up to 328 ft (100 m)*

*Cable quality required in order to meet 100 meter distance should meet ANSI/TIA/EIA 568A-5 or better specification and be rated for 250 MHz or better.

DIMENSIONS (HWD)

1" x 8 3/4" x 5 3/20" (2.54 x 22.12 cm x 13.08 cm)

INSTALLATION

Compatible with all V Style versatile mounting options including rack, surface or pole

WEIGHT

- Approx. 1.1 lb (0.50 kg)
- Shipping Weight: Approx. 2.20 lb (1.00 kg)

MTBF

TBA

APPROVALS (PENDING)

CE, FCC, UL, cUL, RoHS/WEEE compliant

FRONT CONNECTORS

Advanced Configuration Interface:USB Mini-B Connector

BACK CONNECTORS

- Local Power:2.1 mm DC Power Jack
- DXLink Input:RJ-45
- ICSLAN/Ethernet Port:RJ-45 Connector, TCP/IP Port (ICSLAN 10/100)
- Serial:
 - 3.5mm Pluggable Phoenix Terminal Block
 - Bidirectional RS-232
 - Standard NetLinx Baudrate 1200-115k
 - Parity support Odd/Even/None
- 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)
- USB (HID):USB Type B Connector
- HDMI Output:HDMI Type A Female
- Analog Stereo Output:RCA Jack

CONTROLS & INDICATORS

- Power Indicator:Green indicates whether or not the module is powered on
- Video Indicator:Green LED indicates the presence of video and audio signals through the module
- Audio Indicator:Green LED indicates the presence of audio signals through the module
- Scaling Button and LEDs:1 push button and 3 green LEDs; use Scaling button to select one of the 3 Scaling options: Bypass, Auto (SmartScale), or Manual. At system start up RX defaults to Auto (SmartScale)
- IR TX Indicator:Red LED lights during the transmission of IR data via the rear IR port
- IR RX Indicator:Yellow LED lights during the receipt of IR data via the rear IR port
- RS-232 TX Indicator:Red LED shows serial transmit (TX) data activity
- RS-232 RX Indicator:Yellow LED shows serial receive (RX) data activity
- LINK/ACT:Green LED lights when the Ethernet cable is connected and an active link is established. This LED also blinks when receiving Ethernet data packets
- Status:Green LED lights when the Controller is programmed and communicating properly
- CEC Indicator:Yellow LED shows CEC data activity when in point-to-point mode
- USB Indicator:Yellow LED shows USB (HID) activity
- ID Pushbutton:Places system in NetLinx Device ID assignment mode

HDMI

- Compatible Formats:HDMI 1.4a, HDCP 1.3, DVI 1.0
- Signal Type Support:HDMI
- Input Signal Type:
 - HDMI
 - DVI-D (Single Link With Cable Adapter)
- Output Signal Type:HDMI
 - DVI-D (Single Link With Cable Adapter)
- 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
- Output Nominal Voltage:1.0 Vpp Differential
- Output Re-clocking:Yes
- Output +5V DDC Pin:50 mA
- Output Rise Time / Fall Time:TBA / TBA
- Propagation Delay (Typ):TBA
- Data Rate (Max):4.95 Gbps / 6.75 Gbps^
- Pixel Clock (Max):165 MHz / 225 MHz^
- Progressive Resolution Support:480p up to 1920x1200 @ 60 Hz
- Interlaced Resolution Support:480i, 576i, 1080i
- Deep Color Support:24-bit, 30-bit^, 36-bit^
- Color Space Support:TBA
- 3D Format Support:
 - Yes^ (HDMI Primary Formats)
 - Frame Packing 1080p up to 24Hz
 - Frame Packing 720p up to 50/60Hz
 - Frame Packing 1080i up to 50/60Hz
 - Top-Bottom 1080p up to 24Hz
 - Top-Bottom 720p up to 50/60Hz
 - Side-by-Side Full 1080p up to 24Hz
 - Side-by-Side Full 720p up to 50/60Hz
 - Side-by-Side Half 1080p up to 50/60Hz
 - Side-by-Side Half 720p up to 50/60Hz
- Audio Format Support:Dolby TrueHD, Dolby Digital*, DTS-HD Master Audio, DTS*, L-PCM
- Audio Resolution:16 bit to 24 bit
- Audio Sample Rate:32 kHz, 44.1 kHz, 48 kHz, 96 kHz**, 192kHz**
- Local Audio Support:TX Insertion, Rx Extraction
- HDCP Support:
 - Yes
 - Supports AMX HDCP InstaGate Pro Technology
 - When used with an AMX Matrix Switch the key support is up to 16 sinks per output, independent of source device
 - When used as a single point to point solution the key support is defined by the source device
- CEC Support:Pass-Through in point to point mode, not supported when passing through Matrix Switcher

^ Only supported when the DXLink Rx Scaler is in Bypass mode and format is 1080p60 or less.

* Dolby Digital and DTS support up to 48kHz, 5.1 channels.

**2 Channel L-PCM support up to 48kHz at all resolutions. 2 Channel L-PCM support up to 192kHz at 1080p (50,59 60Hz). 2 Channel L-PCM support up to 96kHz at 720p (50,59 60Hz), 1080p (24, 25, 30, 50, 59, 60Hz), 1080i (50, 59, 60 fields).

Note-Reminder: Interlace video supported into the Transmitter, progressive only supported out of the Receiver unless in non-scaling bypass mode

STEREO AUDIO

- Output Signal Types:Stereo Analog
- Analog Output Level (Max):+3 dBu, unbalanced
- Analog Output Impedance:TBA
- Analog Output Frequency Response:TBA
- Analog Audio Output THD+N:TBA
- Analog Audio Out SNR:TBA
- Optimal Analog Audio Operating Range:TBA
- Audio Synchronization:TBA
- Output Connectors:3.5mm Mini-Stereo Jack (Analog Stereo)