Overview
The DXLink Multi-Format Wallplate TX and DXLink Multi-Format Decor Style Wallplate TX are used in conjunction with switchers that support DXLink Technology for transmission of HDMI or analog video over twisted pair cable. Both TXs are compatible with the DXLink HDMI RX and support InstaGate Pro® Technology. The Hardware Reference Manual – DXLink Twisted Pair Transmitters/Receiver contains complete documentation (including full specifications and supported input and output resolutions); for details, see www.amx.com.

Installation
System Setup
These Transmitters receive an HDMI signal (or DVI via a cable adapter) or an analog video signal plus an audio signal from the source device. The audio can be either digital audio embedded with the HDMI signal or an analog stereo audio. Both the video and audio are transmitted over twisted pair cable to a DXLink Input Board in a switcher that supports DXLink Technology (see the example in FIG. 2). From the Input Board, the signal can be routed through an output board. If the output board is a DXLink Output Board, a DXLink HDMI RX is required between the board and the destination.

DIP Switch #3 Toggle
Before mounting the Transmitter – If a network connection is required, DIP switch #3 Toggle must be set to ON. #3 Toggle is shipped in the OFF position. When flipped ON (up), the Transmitter will attempt a DHCP connection. Flipping the #3 Toggle ON is the only way to access the Wallplate TX and Decor TX in NetLinx Studio. For both types of Transmitters, #1, #2, and #4 Toggles are non-functional (must remain OFF). For Auto-setup with an Enova DGX 100 Digital Media Switcher or Enova DVX Solution, adding a ground wire from the TX/RX to the switcher may improve performance (see FIG. 7).

IP Addressing Modes
DHCP Mode (enabled when #3 Toggle is flipped ON)
In DHCP Mode, the Transmitter attempts to get a DHCP lease (consisting of an IP address, gateway, and other network parameters). If the attempt fails, the Transmitter configures itself for a link-local address, but periodically re-tries DHCP and re-assigns the IP to a valid DHCP grant if successful. At any time, if the Transmitter determines that its IP address has changed, it will disconnect and reconnect to the Master.

Static IP Mode (set with ID button or Telnet command)
With #3 Toggle set to ON, press ID for 10 seconds to assign an address of 192.168.1.2 or use a Telnet command to set unit to Static IP Mode (see the Hardware Reference Manual).

Mounting the Wallplate TX and Decor Wallplate TX
Wallplate TX – The holes in the Wallplate TX mounting bracket are designed to accommodate a variety of gang boxes using 2 or 4 screws (standard and metric are provided). Be sure to orient mounting bracket as shown in FIG. 4.

Use screw holes indicated with “X” below:
- US flush mount inside wall
- EU flush mount inside wall
- UK surface mount exterior wall or
- UK flush mount inside wall
Attaching Signal and Control Cables

**IMPORTANT:** Transmitters must be securely mounted and connected to the switcher before attaching the remaining cables.

To attach cables to the Transmitter:

1. **HDMI input** – Attach an HDMI cable from source to HDMI In connector.
2. **Analog video input** – Attach HD-15 cable from source to analog video connector.
3. **Stereo jack (optional)** – Insert analog audio cable from source into Stereo jack.
4. **USB Host (optional)** – Attach USB cable from PC to USB (mini-B) port.
5. **If necessary, set the video and audio formats using SEND_COMMANDS** (see the Hardware Reference Manual).
6. **Check LEDs for normal display** (see table in right-hand column).

**NOTE:** Use DVI cable via an adapter (advanced HDMI audio support is not available).

**USB Host Port Provides HID Support**

The USB Host (mini-B) port on the front enables USB keyboard and mouse signals from a DXLink RX to be sent to a connected PC.

**Powering the Wallplate TX and the Decor Wallplate TX**

The switcher provides power for the TXs over twisted pair cable. Approved DXLink power sourcing devices are:

- Enova DGX 8/16/32/64
- Enova DGX 800/1600/3200/6400
- Compatible Enova DVX (3155HD or 21555HD)
- PXDL-2 (FG1090-170)*
- PS-POE-AT-TC (FG423-84)*

* Use of PXDL-2 or PS-POE-AT-TC with wallplates requires firmware v1.2.40 or later.

**IMPORTANT:** AMX does not support the use of any other PoE injectors as these may potentially damage the DXLink equipment.

This table shows LED states on initial power up. If not normal, check connections.

<table>
<thead>
<tr>
<th>INDICATOR LEDS</th>
<th>NORMAL POWER UP</th>
<th>INDICATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Video*</td>
<td>Green</td>
<td>Configured to pass HDMI with embedded audio</td>
</tr>
<tr>
<td>Analog Video*</td>
<td>One of the three LEDs is Green**</td>
<td>Configured to pass analog video:</td>
</tr>
<tr>
<td>Audio*</td>
<td>Green (coupled with digital or analog video path)</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>Green</td>
<td>Power is applied</td>
</tr>
</tbody>
</table>

**Wallplate TX LEDs (on bottom edge) and Decor Wallplate TX LEDs (front center)**

- **NetLink - L, Link/Act**
- **NetLink - S, Status**
- **DXLink - Yellow, HDCP**
- **DXLink - Green**

* The LEDs for Digital Video, Analog Video, and Audio each indicate the configured state of the connectors, not necessarily the presence of signals through the Transmitter.

** When an analog video signal is being received from the source device, only one of the three analog video LEDs will be green at any time.

**TIP:** If the Wallplate TX’s location makes the bottom edge difficult to see, slide a white piece of paper or a small mirror under the edge to view LED status.

**Signal Precedence**

With cables attached to each input on the Transmitters (see FIG. 8), the default precedence for signal transmission is for HDMI with embedded digital audio. To transmit either analog video or analog audio without detaching the HDMI connector, the Transmitter’s precedence settings must be changed using SEND_COMMANDS. For information, see the Hardware Reference Manual.

**Troubleshooting**

Try the following and check the Hardware Reference Manual before calling technical support.

- Check all power connections in the system.
- Check the RJ-45 (DXLink) cable connection between the Transmitter and the switcher.
- Check the source and destination devices to ensure that they function correctly.

**Additional Information Covered in Instruction Manual**

For information on the following, see the Hardware Reference Manual – DXLink Twisted Pair Transmitters/Receiver at www.amx.com:

- Pinouts for VGA, component, S-Video, and composite
- NetLink control and programming commands, Telnet commands
- IR file transfers, upgrading firmware image, restoring factory default settings

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The AMX Warranty and Return Policy and related documents can be viewed/downloaded at www.amx.com.

3000 RESEARCH DRIVE, RICHARDSON, TX 75082 AMX | 800.222.0193 | 469.624.8000 | +1.469.624.7400 | fax 469.624.7153

AMX (UK) LTD, AMX by HARMAN - Unit C, Auster Road, Clifton Moor, York, YO30 4GD United Kingdom • +44 1904-343-100 • www.amx.com/eu/