AMX VPX Series 7x1+1 4K60 Presentation Switcher

7x1+1 4K60 4:4:4 presentation switcher with HDCP 2.2, automatic scaling and seven inputs
VPX-1701 (FG1010-357)

Overview
The AMX VPX-1701 is a cost effective 7x1 presentation switcher that targets small to mid- sized conference rooms and flipped classrooms. The VPX-1401 supports resolutions up to 4K60 4:4:4 and offers HDCP 2.2 compatibility to support the most current sources and displays.

The VPX-1701 includes 5 HDMI inputs and 2 VGA input. The VPX Series switchers include built-in scaling, allowing automatic scaling of signals to match the ideal resolution of the display. In addition to the HDMI output, there is also a mirrored HDBaseT output, allowing direct connection to a standard HDBaseT output on a display or connection to an AMX DXLite receiver. USB 2.0 distribution is also available over HDBaseT, allowing simplified connection to USB peripherals near the display.

Front panel controls are available, as is contact closure for use with source selector buttons. The VPX-1701 is also NetLinx Native, allowing simplified integration with AMX automation systems.

Common Applications
Ideal for table mounting in conference rooms or for use in flipped classroom environments.

Features
- 4K60 4:4:4 Support  Experience pixel-for-pixel video reproduction of 4K60 source video with full 4:4:4 color space.
- HDCP 2.2 Support  Support the latest source devices.
- Mirrored HDBaseT Output  Provides simultaneous support to the local HDMI output and to compatible receiving devices.
- USB 2.0 Distribution over HDBaseT  Connect to USB peripherals mounted near the display.
- Front Panel Control  – Simple push-button switching.
- Audio Output Extraction  – Including volume control to feed amplified speakers.
- Contact Closure  – Use with source selector buttons to easily switch sources between connected devices.
- NetLinx Native  – Easy integration with AMX automation systems.
- Web Configuration  – Provides simple user interface for setup and configuration.
- Open Control API  IP controllable by any control system even directly by Zoom Rooms
### Specifications – Subject to Change

#### General
- Dimensions: 440 x 43.5 x 300 mm (17.32 x 1.71 x 11.81 in)
- Weight: 3.8 kg / 8.38 lbs
- Mounting Options: Includes V-Style surface mount brackets
- AMX Products Compatible with HDBaseT Out: Incite, DXLite RX, DvX
- Airflow: Convection (openings on sides of case)
- Approvals: Regulatory Compliance: CE, FCC, ETL, PSE, RCM
- Twisted Pair Cable Type: Shielded Cat6, Cat6A and Cat7 / Shielded Cat6A and Cat7
- Twisted Pair Cable Length: Up to 262 ft. (80 m) for full 4K signal support
  Up to 328 ft. (100 m) for 1080p and below
- Included Accessories:
  - 1x US AC Cable
  - 1x EU AC Cable
  - 1x UK AC Cable
  - 7x 5p-3.5mm Phoenix Connectors
  - 1x 6p-3.5mm Phoenix Connectors
  - 2x 1U mounting ear
  - 8x M3*L7 screw (for mounting ears)

#### Active Power Requirements
- AC Power: 100-240 VAC single phase, 50-60 Hz
- Power Consumption (Max): 45 W
- Power Connector: IEC Power Connector
- HDBaseT Power: Supplies Power to a HDBaseT RX when used in point-to-point applications

#### Power Supply
- Internal, Included: Yes

#### Environmental
- Temperature (Operating): 32°F to 122°F (0°C to 50°C)
- Temperature (Storage): 14°F to 140°F (-10°C to 60°C)
- Humidity (Operating): 5% to 85% RH (non-condensing)
- Humidity (Storage): 5% to 85% RH (non-condensing)

#### Back Connectors
- AC Power: IEC Power Cord Connector
- VGA Inputs: (2) HD-15 Connectors
- HDMI Input: (5) HDMI Type A Port
- HDMI Output: (1) HDMI Type A Port
- Analog Stereo Inputs: (2) 5-pin 3.5 mm Screw Terminal Connector
- LAN10/100 Ethernet Port: RJ-45 Connector, TCP/IP Port (ICS LAN 10/100)
- HDBaseT Output: RJ-45
- IR RX: 3.5mm Mini-Stereo Jack
- IR TX: 3.5mm Pluggable Phoenix Terminal Block
- HDMI Output: HDMI Type A Port
- Analog Stereo Output: 5 Position 3.5mm pluggable Phoenix Terminal Block
- Remote Button Contact In: (2) 5 Position 3.5 mm pluggable Phoenix Terminal Blocks
- Remote Button LED Indication: (2) 5 Position 3.5 mm pluggable Phoenix Terminal Blocks
- RS-232 and IR HDBaseT Pass-through: (1) 5 Position 3.5 mm pluggable Phoenix Terminal Blocks
- USB 2.0 HDBaseT Pass-through: USB 2.0 Type B Jack
### Front Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Indicator</td>
<td>Green LED, Solid ON when power is applied</td>
</tr>
<tr>
<td>Scaler</td>
<td>Blue LED, Solid ON when scaling</td>
</tr>
<tr>
<td>Status</td>
<td>Green LED, blinking</td>
</tr>
</tbody>
</table>

### Controls and Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet Link/Act Indicator</td>
<td>(2) Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ - 45</td>
</tr>
<tr>
<td>Ethernet Speed Indicator</td>
<td>(2) Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbps</td>
</tr>
<tr>
<td>HDBaseT Link</td>
<td>(1) On HDBaseT RJ-45 (green) On indicates link to HDBaseT Rx</td>
</tr>
<tr>
<td>HDBaseT HDCP Status</td>
<td>(1) On HDBaseT RJ-45 (yellow) On indicates HDCP, flashing indicates non-HDCP</td>
</tr>
<tr>
<td>Power Indicator</td>
<td>(1) Power LED (green) indicates the unit is powered on</td>
</tr>
<tr>
<td>Input Selection Indicators</td>
<td>(7) LED (green) Solid ON when selected</td>
</tr>
<tr>
<td>Input Selection Buttons</td>
<td>(7) Selects active input</td>
</tr>
<tr>
<td>Reset Button</td>
<td>Recessed Pin Push</td>
</tr>
</tbody>
</table>

### Integrated Switcher

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Switching</td>
<td>7x1 audio and video switching, any of 7 inputs can be routed to the HDMI and DXLink output simultaneously</td>
</tr>
<tr>
<td>Video Inputs</td>
<td>(2) HD-15; supports RGBHV</td>
</tr>
<tr>
<td></td>
<td>(5) HDMI; supports HDMI/HDCP</td>
</tr>
<tr>
<td>Video Outputs</td>
<td>(1) HDMI; supports HDMI/HDCP</td>
</tr>
<tr>
<td></td>
<td>(1) HDBaseT; supports digital video, audio, bidirectional control, USB2.0 extension and power</td>
</tr>
<tr>
<td>HDCP Support</td>
<td>Yes; HDCP 1.4 and 2.2 Key Management System for Fast Switching</td>
</tr>
<tr>
<td>EDID Management</td>
<td>A preferred EDID can be selected for each input or any display EDID can be mirrored to any input independently</td>
</tr>
</tbody>
</table>

### HDMI

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible Formats</td>
<td>HDMI, HDCP</td>
</tr>
<tr>
<td>Signal Type Support</td>
<td>HDMI, DisplayPort++ (input only with HDMI cable adapter)</td>
</tr>
</tbody>
</table>
| HDMI Supported Input Resolutions | VESA  
800x600 @ 60 Hz  
1024x768 @ 60 Hz  
1280x768, @ 60 Hz  
1280x800 @ 60 Hz  
1280x960 @ 60 Hz  
1280x1024 @ 60 Hz  
1360x768 @ 60 Hz  
1366x768 @ 60 Hz  
1440x900 @ 60 Hz  
1600x900 @ 60 Hz  
1600x1200 @ 60 Hz  
1680x1050 @ 60 Hz  
1920x1200 @ 60 Hz  |
<table>
<thead>
<tr>
<th>Output Signal Type</th>
<th>HDMI, HDCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Connector</td>
<td>HDMI Type A Port</td>
</tr>
<tr>
<td>Output Scaling</td>
<td>Yes, Auto or Manual; selected scaled image presented to HDMI and HDBaseT outputs simultaneously</td>
</tr>
<tr>
<td>Output Scaling Resolutions</td>
<td>800x600 @ 60 Hz, 1280x720 @ 50 Hz, 59.95 Hz, 60 Hz, 1024x768 @ 60 Hz, 1280x768 @ 60 Hz, 1280x800 @ 60 Hz</td>
</tr>
</tbody>
</table>

2048x1152 @ 60 Hz
3840x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz
4096x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz

SMPT:
720x480 @ 59.94 Hz, 60 Hz
720x576 p @ 50 Hz
1280x720 p @ 50 Hz, 59.95 Hz, 60 Hz
1920x1080 p @ 50 Hz, 59.94 Hz, 60 Hz

Established Timing
1280 x 1024 @ 75 Hz
1152 x 870 @ 75 Hz
1024 x 768 @ 60 Hz, 70 Hz, 75 Hz, 87 Hz
832 x 624 @ 75 Hz
800 x 600 @ 56 Hz, 60 Hz, 72 Hz, 75 Hz
720 x 400 @ 70 Hz, 88 Hz
640 x 480 @ 60 Hz, 67 Hz, 72 Hz, 75 Hz

CEA Information Code (VIC) Formats:
VIC = 1, 640 x 480 p 59.94/60 Hz 4:3
VIC = 2, 720 x 480 p 59.94/60 Hz 4:3
VIC = 3, 720 x 480 p 59.94/60 Hz 16:9
VIC = 4, 1280 x 720 p 59.94/60 Hz 16:9
VIC = 5, 1920 x 1080 i 59.94/60 Hz 16:9
VIC = 6, 720(1440) x 480 i 59.94/60 Hz 4:3
VIC = 7, 720(1440) x 480 i 59.94/60 Hz 16:9
VIC = 14, 1440 x 480 p 59.94/60 Hz 4:3
VIC = 15, 1440 x 480 p 59.94/60 Hz 16:9
VIC = 16, 1920 x 1080 p 59.94/60 Hz 16:9
VIC = 17, 720 x 576 p 50 Hz 4:3
VIC = 18, 720 x 576 p 50 Hz 16:9
VIC = 19, 1280 x 720 p 50 Hz 16:9
VIC = 20, 1920 x 1080 i 50 Hz 16:9
VIC = 21, 720(1440) x 576 i 50 Hz 4:3
VIC = 22, 720(1440) x 576 i 50 Hz 16:9
VIC = 29, 1440 x 576 p 50 Hz 4:3
VIC = 30, 1440 x 576 p 50 Hz 16:9
VIC = 30, 1440 x 576 p 50 Hz 16:9
VIC = 31, 1920 x 1080 p 50 Hz 16:9
VIC = 32, 1920 x 1080 p 23.97/24 Hz 16:9
VIC = 33, 1920 x 1080 p 25 Hz 16:9
VIC = 34, 1920 x 1080 p 29.97/30 Hz 16:9
VIC = 39, 1920 x 1080 i 50 Hz 16:9
VIC = 41, 1280 x 720 p 100 Hz 16:9
VIC = 42, 720 x 576 p 100 Hz 4:3
VIC = 43, 720 x 576 p 100 Hz 16:9
VIC = 44, 720(1440) x 576 i 100 Hz 4:3
VIC = 45, 720(1440) x 576 i 100 Hz 16:9
<table>
<thead>
<tr>
<th>Input Video Level</th>
<th>.5 - 1.2 V p-p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Rate (Max)</td>
<td>18 Gbps</td>
</tr>
<tr>
<td>Pixel Clock (Max)</td>
<td>Up to 600 Mhz</td>
</tr>
<tr>
<td>Resolution Support</td>
<td>Various up to 4096 x 2160@ 60 Hz - Reference User Manual For Specific Resolution Support</td>
</tr>
</tbody>
</table>
| HDBaseT 4K Format Support| 3840x2160p@24/25/30/60 Hz, 4:4:4  
4096x2160p@24/25/30 Hz, 4:4:4  
3840x2160p@50/60 Hz, 4:2:0  
4096x2160p@50/60 Hz, 4:2:0 |
| Audio Format Support   | 2 CH L-PCM              |
| Local Audio Support    | Output Extraction       |
| HDCP Support           | Yes HDCP 1.4, 2.2       |
| CEC Support            | Yes, Automatic or NetLinx programmable |

**Analog Video**

<table>
<thead>
<tr>
<th>Compatible Formats</th>
<th>RGBHV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Connector</td>
<td>HD-15</td>
</tr>
<tr>
<td>Resolution Support</td>
<td>up to 1920x1200@60 Hz Reduce Blanking</td>
</tr>
<tr>
<td>Auto-Adjust Input</td>
<td>Supported</td>
</tr>
<tr>
<td>Digital Processing</td>
<td>24-bit, 165 MHz</td>
</tr>
</tbody>
</table>

**Signal Transport - HDBaseT**

<table>
<thead>
<tr>
<th>Connector</th>
<th>(1) RJ-45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported Signal Styles</td>
<td>Digital video, audio, bidirectional control, USB 2.0 and power</td>
</tr>
<tr>
<td>Transport Layer Throughput (Max)</td>
<td>10.2 Gbps</td>
</tr>
<tr>
<td>Output Formats</td>
<td>Supports 4K60 4:4:4 HDMI 2.0, HDCP 2.2., audio, power, bi-directional control and USB 2.0 pass-through</td>
</tr>
</tbody>
</table>
| Twisted Pair Cable Type| Shielded Cat6, Cat6A and Cat7  
HDBaseT cable runs for equipment shall only be run within a common building where common building is defined as: The walls of the structure(s) are physically connected and the structure(s) share a single ground reference |

**Stereo Audio Output**

<table>
<thead>
<tr>
<th>Output Signal Types</th>
<th>Balanced Stereo analog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Control</td>
<td>-100 db to +0 db in 1 dB steps</td>
</tr>
</tbody>
</table>

**About AMX by HARMAN**

Founded in 1982 and acquired by HARMAN in 2014, AMX® is dedicated to providing AV solutions for an IT World. AMX solves the complexity of managing technology with reliable, consistent and scalable systems comprising control, video switching and distribution, digital signage and technology management. AMX systems are deployed worldwide in conference rooms, classrooms, network operation/command centers, homes, hotels, entertainment venues and broadcast facilities, among others. AMX is part of the HARMAN Professional Group, the only total audio, video, lighting, and control vendor in the professional AV market. HARMAN designs, manufactures and markets premier audio, video, information and integrated control solutions for the automotive, consumer and professional markets. ©2021 Harman. All rights reserved. Specifications subject to change.

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