

AMX VPX Series 4x1+1 4K60 Presentation Switcher

4x1 4K60 4:4:4 presentation switcher with HDCP 2.2, automatic scaling and four inputs
VPX-1401 (FG1010-354)

Front



Rear



Overview

The AMX VPX-1401 is a cost effective 4x1+1 presentation switcher which supports resolutions up to 4K60 4:4:4 and offers HDCP 2.2 compatibility to support the most current sources and displays. The VPX-1401 includes 3 HDMI inputs and 1 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 such as a camera mounted near the display.

There are a variety of options to control the VPX-1401 as well. Front panel controls are available, as is contact closure for use with source selector buttons. The VPX-1401 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 (W x H x D)	240mm x 30mm x 200.2mm (9.45" x 1.18" x 7.88")
Weight	1.35 kg / 2.97 lbs
Mounting Options	Includes V-Style surface mount brackets
AMX Products Compatible with HDBaseT Inputs	Incite, DXLite RX, DVX
Airflow Approvals	Convection (openings on sides of case)
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	1xUS AC Cable 1xEU AC Cable 1xUK AC Cable 1x 12V/5APower Adapter 4x 5P-3.5MM Phoenix Connectors 1x 6P-3.5MM Phoenix Connectors 2x mounting ear 4x M2.5 screw (for mounting ears)

Active Power Requirements	
AC Power	12 VDC 2A Max Output; 100-240V 50/60Hz AC Input
Power Consumption (Max)	42W
Power Connector	Screw Down Locking Power Connector
HDBaseT Power	Supplies Power to a HDBaseT RX when used in point-to-point applications

Power Supply	
External, Included	12V / 5A Power Supply

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

Back Connectors	
DC Power	Screw Down Locking Power Connector
HDMI Output	(1) HDMI Type A Port
LAN10/100 Ethernet Port	RJ-45 Connector, TCP/IP Port (ICS LAN 10/100)
HDBaseT Input	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	(1) 5 Position 3.5 mm pluggable Phoenix Terminal Blocks
Remote Button LED Indication	(1) 5 Position 3.5 mm pluggable Phoenix Terminal Blocks
RS-232 and IR HDBaseT Pass-through 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 Connectors	
HDMI Input	(3) HDMI Type A Port
VGA Inputs	(1) HD-15 Connectors
Analog Stereo Inputs	(1) 5-pin 3.5 mm Screw Terminal Connector

Front Indicators	
Power Indicator	Green LED, Solid ON when power is applied
Scaler	Blue LED, Solid ON when scaling
Status	Green LED, blinking

Control and Indicators	
Ethernet Link/Act Indicator	(2) Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ - 45
Ethernet Speed Indicator	(2) Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbps
HDBaseT Link	(1) On HDBaseT RJ-45 (green) On indicates link to HDBaseT Rx
HDBaseT HDCP Status	(1) On HDBaseT RJ-45 (yellow) On indicates HDCP, flashing indicates non-HDCP
Power Indicator	(1) Power LED (green) indicates the unit is powered on
Input Selection Indicators	(4) LED (green) Solid ON when selected
Input Selection Buttons	(4) Selects active input
Reset Button	Recessed Pin Push

Integrated Switcher	
Video Switching	4x1 audio and video switching, any of 7 inputs can be routed to the HDMI and DXLink output simultaneously
Video Inputs	(1) HD-15; supports RGBHV (3) HDMI; supports HDMI/HDCP
Video Outputs	(1) HDMI; supports HDMI/HDCP (1) HDBaseT; supports digital video, audio, bidirectional control, USB 2.0 extension and power
HDCP Support	Yes; HDCP 1.4 and 2.2 Key Management System for Fast Switching
EDID Management	A preferred EDID can be selected for each input or any display EDID can be mirrored to any input independently

HDMI	
Compatible Formats	HDMI, HDCP
Signal Type Support	HDMI, DisplayPort++ (input only with HDMI cable adapter)
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

	<p>1920x1200 @ 60 Hz 2048x1152 @ 60 Hz 3840x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz 4096x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz</p> <p>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</p> <p>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</p> <p>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</p>
Output Signal Type	HDMI, HDCP
Output Connector	HDMI Type A Port
Output Scaling	Yes, Auto or Manual; selected scaled image presented to HDMI and HDBaseT outputs simultaneously
Output Scaling Resolutions	<p>800x600 @ 60 Hz 1280x720 p @ 50 Hz, 59.95 Hz, 60 Hz 1024x768 @ 60 Hz 1280x768, @ 60 Hz 1280x800 @ 60 Hz</p>

	1280x960 @ 60 Hz 1280x1024 @ 60 Hz 1360x768 @ 60 Hz 1366x768 @ 60 Hz 1440x900 @ 60 Hz 1600x900 @ 60 Hz 1600x1200 @ 60 Hz 1680x1050 @ 60 Hz 1920x1080 p @ 50 Hz, 59.94 Hz, 60 Hz 1920x1200 @ 60 Hz 3840x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz 4096x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz
Input Video Level	.5 - 1.2 V p-p
Data Rate (Max)	18 Gbps
Pixel Clock (Max)	Up to 600 Mhz
Resolution Support	Various up to 4096 x 2160@ 60 Hz - Reference User Manual For Specific Resolution Support
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	RX Extraction
HDCP Support	Yes HDCP 1.4, 2.2
CEC Support	Yes, Automatic or NetLinx programmable

Analog Video	
Compatible Formats	RGBHV
Input Connector	HD-15
Resolution Support	Up to 1920x1200@60Hz Reduced Blanking
Auto-Adjust Input	Supported
Digital Processing	24-bit, 165 Mhz

Signal Transport - HDBaseT	
Connector	(1) RJ-45
Supported Signal Styles	Digital video, audio, bidirectional control, USB 2.0 and power
Transport Layer Throughput (Max)	10.2 Gbps
Output Formats	Supports 4K60 4:4:4 HDMI 2.0, HDCP 2.2., audio, power, bidirectional control and USB 2.0 pass-through
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	
Output Signal Types	Balanced Stereo analog
Volume Control	-100 db to +0 db in 1 dB steps

About AMX by HARMAN

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

Revised: 2021-08-23