AMX Precis® 8x8 4K60 HDMI Matrix Switcher

Fixed matrix switching solution with 8 HDMI inputs and outputs
PR01-0808 (FG1020-800)

Front

Rear

Overview

The AMX Precis 8x8 Matrix Switcher is a cost effective 4K60 4:4:4 fixed matrix switching solution which features eight HDMI inputs and outputs. Four of the outputs also feature mirrored HDBaseT outputs as well, providing connection directly to a display or projector that supports standard HDBaseT or for use with the AMX Precis PR01-RX HDBaseT Receiver and Scaler. The addition of built-in HDBaseT mirrored outputs provides a cost-effective solution for distributing video over longer distances without degrading video quality.

The Precis supports 4K60 4:4:4 and HDCP 2.2, providing compatibility with the latest source and display resolutions in an affordable fixed matrix solution. Because the Precis includes dynamic audio de-embedding capabilities, the switcher can be used in more applications without additional complexity. With its fixed configuration, the AMX Precis provides a switching solution that is cost-effective and easy to specify, procure, and install.

Common Applications

The AMX Precis 8x8 Matrix Switcher is a cost-effective switching solution for small to mid-range applications including corporate, education and government 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 Outputs –** Connect to PR01-RX receivers or directly to a display or projector that supports standard HDBaseT
- **NetLinx Native –** Easy integration with AMX automation systems
- **Fixed configuration –** Simple design and implementation
- **Audio De-embed capabilities –** Flexible design for use in more applications

Specifications – Subject to Change

General	
Dimensions	12.7 in (32.35 cm) depth
	19 in (48.2 cm) width
	1.71 in (4.35 cm) height
Weight	Approx. 4 lbs (8.75 kg)
Shipping Weight	TBD
Mounting Options	Includes mounting brackets
AMX Products Compatible with HDBaseT Out	PR01-RX
MTBF	TBD
Airflow Approvals	Forced air cooling left to right
Regulatory Compliance	TBD
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
MTBF	TBD
Included Accessories	1x US AC Cable
	1x EU AC cable
	1x UK AC cable
	12x 3P-3.5MM Phoenix Connectors
	1x IR Receiver
	4x IR Receiver
	1x USB-DB9 Cable
	1x IR Controller
	2x 1U mounting ear
	8x M3*L7 screw (for mounting ears)

Active Power Requirements	
AC Power	AC 100~240V 50/60Hz
Power Capacity (Typ 4K)	100 Watts
Power Connector	IEC Power Connector
HDBaseT Power	None

Power Supply	
Internal, Included	Yes

Environmental	
Temperature (Operating)	32° F to 113° F (0° C to 45° C)
Temperature (Storage)	-4° to 140° F (-20° to 70° C)
Humidity (Operating)	10% to 90% RH (non-condensing)
Humidity (Storage)	10% to 90% RH (non-condensing)
Thermal Dissipation	341.2 BTU/hr

Back Connectors	
AC Power	IEC Power Cord Connector
HDMI Input	(8) HDMI Type A Female Connector
HDMI Output	(8) HDMI Type A Female Connector
LAN10/100 Ethernet Port	RJ-45 Connector, TCP/IP Port
HDBaseT Output	(4) RJ-45 Connector
IR RX	(4) 3.5mm Mini-Stereo Jack
HDMI Output	(8) HDMI Type A Female
Analog Stereo Output	(8) 3 Position 3.5mm pluggable Phoenix Terminal Block
RS-232 Pass-through	(4) 3 Position 3.5 mm pluggable Phoenix Terminal Blocks
RS-232 Matrix	(1) DB-9 Connector

Control	(1) DB-9 Connector
IR Ext.	(1) 3.5 Mini-Stereo Jack

Front Indicators	
Input Selection LCD	White LED Number Segments

Controls and Indicators	
Ethernet Link/Act Indicator	(1) Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ - 45
Ethernet Speed Indicator	(1) Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbp
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
Input Selection LCD	8 Position Front Panel Display
Input Selection Navigation	(4) Directional Buttons (1) Take Button
EDID Configuration	Dip Switch 4 Position (Rear)

Matrix Switcher	
Video Switching	8x8 audio and video matrix switching
Video Inputs	(8) HDMI; supports HDMI/HDCP
Video Outputs	(8) HDMI; supports HDMI/HDCP (4) HDBaseT (mirrors HDMI Outputs 1-4); supports digital video, audio, bidirectional control
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 1920x1200 @ 60 Hz 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
Output Signal Type	HDMI, HDCP
Output Connector	HDMI Type A Female
Output Resolution	Matched to Input (Scaled by PR01-RX)
Input Video Level	.5 - 1.2 V p-p
Data Rate (Max)	18 Gbp
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 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.
CEC Support	Yes Automatic or NetLinx programmable

Signal Transport - HDBaseT	
Connector	(4) RJ-45
Supported Signal Styles	Digital video, audio, bidirectional control
Transport Layer Throughput (Max)	10.2 Gbps
Output Formats	supports 4K60 4:2:0 HDMI 1.0, 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	Unbalanced stereo analog