

AMX 4x2 4K60 HDMI Switcher

PR-0402 (FG# AMX-PR-0402)



Overview

The AMX Precis 4x2 4K60 HDMI Switcher is an extremely affordable yet fully featured HDMI video routing solution for small to medium installations. Featuring 4 HDMI inputs and 2 HDMI outputs, it includes best-in-class capabilities like pixel-for-pixel video reproduction, comprehensive EDID management, automatic or manual switching modes, and extreme control flexibility with an open control API and a simple-to-manage web interface.

The PR-0402 supports high quality HDMI 2.0, HDCP 2.2, High Dynamic Range (HDR), and 36-bit per pixel Deep Color. Automatic and manual switching modes plus onboard dynamic audio de-embedding offer maximum configuration flexibility. Combining a robust matrix switcher and a highly affordable price point backed by over 30 years of industry-leading matrix switching experience, the AMX Precis PR-0402 can be trusted to deliver an exceptional switching solution.

Common Applications

The Precis PR-0402 4K60 HDMI Switcher is the ideal choice for beautiful, cost effective 4K60 4:4:4 matrix switching in meeting spaces, classrooms, lecture halls, houses of worship and more.

Features

Perfect 4K60 4:4:4 Video - Ideal for users that can benefit from processing the full fidelity of their displays

HDMI 2.0 & HDCP 2.2 - Supports the latest video standards to realize the full capabilities of HDMI interfaces

High Dynamic Range (HDR) and Deep Color Support – Support HDR10, HDR10+, Dolby Vision and 36-bit per pixel deep color.

Automatic and Manual Switching Modes – Automatic switching can be leveraged to create a touch-free experience

EDID Management - Provides comprehensive management of EDID to ensure that every source is displayed at the optimal resolution and format

Audio De-Embedding – Includes the convenience of analog audio de-embedding from each HDMI output separately

Multiple Audio Format Support – PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby Atmos, Dolby TrueHD, DTS, DTS HD MA

H-Control Upgradable – Ready to support H-control in the future by firmware re-writing via USB.

Multiple Control Options – Multiple control options are available including: Open API Control over IP and Serial, full Web GUI console, and front panel buttons

Specifications

General	
Dimensions	8.07 in (20.5cm) depth 8.4 in (21.35cm) width 1.73 in (4.4cm) height
Weight	Approx. 2.9 lbs (1.3 kg)
Shipping Weight	Approx. 4.9 lbs (2.2 kg)
Mounting Options	V-Style surface mount brackets (AVB-VSTYLE-SURFACE-MNT) V Style Single Module Pole Mounting Kit (AVB-VSTYLE-POLE-MNT) V-Style Rack Shelf (NMX-VRK)
MTBF	583,424 hrs
Regulatory Compliance	FCC Part 15 Class B EN 55032 EN 55035 CB IEC/EN 60950 CB IEC/EN 62368-1 UL 62368-1 RoHS/REACH EMC (Australia) EMC (Canada) EMC (UKCA) Prop65
Included Accessories	1x 12V/3A DC Power Adapter 1x US Pins 1x EU Pins 1x UK Pins 1x AU Pins 3x 3-Pin Terminal Blocks 4x Shockproof Feet
Active Power Requirements	
AC Power	12 VDC 3A Max Output; 100-240V 50/60Hz AC Input
Power Consumption	9.8 Watts max 2.5 Watts idle
Power Connector	2.5 mm Screw Down Locking Power Connector
Power Supply	
External, Included	Yes
Environmental	
Temperature (Operating)	32°F (0°C) to 122°F (50°C)
Temperature (Storage)	-4°F (-20°C) to 140°F (60°C)
Humidity (Operating)	10% to 90% RH (non-condensing)
Humidity (Storage)	10% to 90% RH (non-condensing)
Thermal Dissipation (Max)	33.4 BTU/hr
Back Connectors	
DC Power	2.5 mm Screw Down Locking Power Connector
HDMI Input	(4) HDMI Type A Port
HDMI Output	(2) HDMI Type A Port
LAN10/100 Ethernet Port	RJ-45 Connector, TCP/IP Port
Analog Stereo Output	(4) 3 Position 3.5mm pluggable Phoenix Terminal Block
RS-232 Port	(1) 3 Position 3.5 mm pluggable Phoenix Terminal Blocks

Front Indicator	
Power Indicator	(1) LED, Solid ON (green) when power is applied
Output Indicator	(2) LED, Solid ON (green) when selecting output from front panel
Input Indicator	(4) LED, Solid ON (green) when selecting input from front panel
Auto Indicator	(1) LED, Solid ON (green) when enable auto switching mode
Controls and Indicators	
Power Indicator	LED (Green) On: Indicates when the unit is powered on
Ethernet Link/Act Indicator	(1) Link/Activity LED (yellow) blinks when receiving Ethernet data packets, one on Ethernet RJ-45
Ethernet Speed Indicator	(1) Speed LED (green) light is ON when the connection speed is 100 Mbps Ethernet connection and OFF when the speed is 10 Mbps
Output Selection Buttons	(2) Key Buttons, (2) LED Indicator, press to select an output
Input Selection Buttons	(4) Key Buttons, (4) LED Indicator for inputs, press to select an input
Matrix Switcher	
Video Switching	4x2 audio and video matrix switching
Video Inputs	(4) HDMI; supports HDMI/HDCP
Video Outputs	(2) HDMI; supports HDMI/HDCP
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
HDMI Supported Input Resolutions	VESA 640 x 480 @ 60, 72, 75, 85 Hz 720 x 400 @ 70, 85 Hz 800 x 600 @ 56, 60, 72, 75, 85 Hz 848 x 480 @ 60 Hz 1024 x 768 @ 60, 70, 75, 85 Hz 1152 x 864 @ 75 Hz 1280 x 768 @ 60 Hz, 75 Hz 1280 x 800 @ 60 Hz (Reduce Blanking) 1280 x 960 @ 60, 85 Hz 1280 x 1024 @ 60, 75, 85 Hz 1360 x 768 @ 60 Hz 1366 x 768 @ 60 Hz (Reduce Blanking) 1400 x 1050 @ 60 Hz (Reduce Blanking), 75 Hz 1440 x 900 @ 60 Hz (Reduce Blanking), 75, 85 Hz 1600 x 900 @ 60 Hz (Reduce Blanking) 1600 x 1200 @ 60 Hz 1680 x 1050 @ 60 Hz (Reduce Blanking) 1920 x 1200 @ 60 Hz (Reduce Blanking) 1920 x 1200 @ 60 Hz 1920 x 1440 @ 60 Hz 2048 x 1080 @ 50, 60 Hz 2560 x 1440 @ 60 Hz (Reduce Blanking) 2560 x 1600 @ 60 Hz (Reduce Blanking) 3840 x 2160 @ 60 Hz (Reduce Blanking) CEA Information Code (VIC) Formats 720 x 480i @ 59.94, 60 Hz 720 x 576i @ 50 Hz 720 x 480p @ 59.94, 60 Hz 720 x 576p @ 50 Hz 1280 x 720p @ 50, 59.94, 60 Hz 1920 x 1080i @ 50, 59.94, 60 Hz 1920 x 1080p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz 2560 x 1080p @ 50, 60 Hz 3840 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz 4096 x 2160p @ 24, 25, 29.97, 30, 50, 59.94, 60 Hz
Output Signal Type	HDMI, HDCP
Output Connector	HDMI Type A Port
Output Resolutions	Matched to Input

Input Video Level	0.8 - 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
Audio Format Support	PCM 2-Channel, PCM Multi-Channel, Dolby Digital, Dolby Digital Plus, Dolby Atmos, Dolby TrueHD, DTS, DTS HD MA
Local Audio Support	Output Extraction
HDCP Support	Yes, HDCP 1.4, 2.2
CEC Support	Yes, Automatic or programmable

Stereo Audio Output	
Output Signal Types	Unbalanced stereo analog
Analog Audio Output Level (Max)	+1.6 dBu, unbalanced; $\geq 2\text{kohm}$ load
Analog Audio Output Frequency Response	< -0.5 dB to +0.2 dB, 30 Hz to 20 kHz or < -0.8 dB to +0.2 dB, 20 Hz to 20 kHz
Analog Audio Output THD+N	<0.008%, 1 kHz, -10 dBu to +2 dBu
Analog Audio Output SNR	>99 dB, 20 Hz to 20 kHz $V_{in}=+2\text{ dBu}$

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.