

iMatrix

18Gbps 8x8 HDMI Matrix with ARC Function

Datasheet V1.0

Model: iMatrix H88A



1. Introduction

The 18Gbps 8x8 HDMI Matrix supports the transmission of video (up to 4K2K@60Hz YUV 4:4:4) and multi-channel high resolution digital audio from 8 HDMI sources to 8 HDMI displays. Audio de-embedded to analog and coaxial audio is supported from 8 HDMI output ports. While HDMI output ARC function is enabled, the ARC audio from HDMI display devices will be extracted to coaxial audio output. Each HDMI output of this 8x8 HDMI Matrix supports 4K2K to 1080P downscaler independently. Control is via front panel buttons, IR remote, RS-232, LAN and Web GUI.

2. Features

- ☆ HDMI 2.0b, HDCP 2.2 and HDCP 1.4 compliant
- ☆ Video resolution up to 4K2K@60Hz (YUV 4:4:4) on all HDMI ports
- ☆ Support 18Gbps video bandwidth
- ☆ Dolby Vision, HDR10+ and HLG are supported.
- ☆ Support 4K->1080P Down Scaler for each output port
- ☆ HDMI audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD and DTS-HD Master Audio)
- ☆ Audio de-embedded is supported via analog and coax ports
- ☆ ARC, CEC and smart EDID management are supported
- ☆ 1U rack mounted design with front panel OLED display
- ☆ Control via front panel buttons, IR remote, RS-232, LAN and Web GUI

3. Specs

Models	iMatrix H44A	iMatrix H88A	iMatrix H1616A
Input Ports	4×HDMI Type A [19-pin female]	8×HDMI Type A [19-pin female]	16×HDMI Type A [19-pin female]
Output Ports	4×HDMI Type A [19-pin female] 4×L/R audio out [3.5mm Stereo Mini-jack] 4×COAX audio out [RCA]	8×HDMI Type A [19-pin female] 8×L/R Audio [3.5mm Stereo Mini-jack] 8×Coax Audio (RCA)	16×HDMI Type A [19-pin female] 16×Coax Audio (RCA)
HDMI Audio Formats (Pass-through)	PCM2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD	LPCM 2/5.1/7.1, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X	
L/R Audio Formats	PCM 2.0		No
Coax Audio Formats	LPCM 2.0, Dolby Digital / Plus, DTS 5.1		
HDMI Compliance	HDMI 2.0b		
HDCP Compliance	HDCP 2.2/1.x		
Video Bandwidth	18Gbps		
Video Resolution	Up to 4K2K@60Hz (4:4:4)		
Control Ports	1x TCP/IP [RJ45] 1x RS-232[3-pin phoenix connector] 1x IR EXT [3.5mm Stereo Mini-jack]		
Color Space	RGB, YCbCr 4:4:4/4:2:2/4:2:0		
Color Depth	8-bit, 10-bit, 12-bit		
HDR formats	HDR10, HDR10+, Dolby Vision, HLG		
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)		
Housing	Metal Enclosure		
Color	Black		
Dimensions	220mm (W)×105mm (D)×44mm (H)	440mm (W)×200mm (D)×44.5mm (H)	440mm (W)×200mm (D)×44mm (H)
Weight	792g	2.8kg	3.1kg

Power Supply	Input: AC100~240V 50/60Hz Output: DC12V/2.5A (Locking connector)	Input: AC 100 - 240V 50/60Hz Output: DC 12V/5A (US/EU standard, CE/FCC/ULcertified)	Input: AC 100 - 240V 50/60Hz, Output: DC 24V/3.75A (US/EU standard, CE/FCC/ULcertified)
Power Consumption	10W (max), 1.56W (Standby)	43W	76.8W
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F	-10°C ~ 45°C / 14°F ~ 113°F	
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F		
Relative Humidity	20~90% RH (non-condensing)		
Resolution/ Cable length	4K60 - 10ft / 3M; 4K30 - 32ft / 10M ; 1080P60 - 50ft / 15M The use of "Premium High Speed HDMI" cable is highly recommended.	4K60 - 16ft / 5M; 4K30 - 32ft / 10M ; 1080P60 - 50ft / 15M The use of "Premium High Speed HDMI" cable is highly recommended.	