

iMatrix

4x4 HDMI 2.0 18Gbps Matrix Switcher with Audio

Datasheet V1.0

Model: iMatrix H44A



1. Introduction

This high-performance HDMI Matrix Switcher can switch any of these four HDMI 2.0 sources to four HDMI 2.0 displays. Each input and output support up to 4K60 444 resolution and HDCP 2.2. The outputs can be individually scaled for 1080p. De-embedded audio as analog L/R and coaxial is available for both outputs. The ARC function can return display device audio to coaxial port output only. Advanced EDID management is supported. With its 18Gbps bandwidth and the additional features with latest HDMI standards. This switcher can be controlled from the front panel, RS-232, IR remote, or TCP/IP.

2. Features

- ☆ HDMI 2.0, HDCP 2.2 / HDCP 1.4 and DVI 1.0 compliant
- ☆ Four 18G HDMI 2.0 video inputs support up to 4K60 444 resolution
- ☆ Four 18G HDMI 2.0 video outputs support up to 4K60 444 resolution
- ☆ Four outputs can be individually scaled for 4K→1080p
- ☆ De-embedded audio to analog L/R and Coaxial ports output
- ☆ ARC audio return to the coaxial ports output only
- ☆ Built-in Web GUI for TCP/IP control
- ☆ Advanced EDID management supported
- ☆ Four methods of control: Front panel, RS-232, IR remote and TCP/IP
- ☆ Compact design for easy and flexible installation

3. Specifications



Technical	
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18 Gbps
Video Resolution	4K2K 50/60Hz 4:4:4 4K2K 50/60Hz 4:2:0 4K2K 30Hz 4:4:4 1080p, 1080i, 720p, 720i, 480p, 480i All HDMI 3D TV formats All PC resolutions including 1920 x 1200
Output Scaling	4K to 1080p
3D Support	Yes
Color Space	RGB, YCbCr4:4:4, YCbCr4:2:2, YCbCr 4:2:0
Color Depth	8-bit, 10-bit, 12-bit [1080P, 4K30Hz, 4K60Hz (YCbCr 4:2:0)] 8-bit [4K60Hz (YCbCr 4:4:4)]
HDMI Audio Formats	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
Coaxial Audio Formats	PCM2.0, Dolby Digital / Plus, DTS 2.0/5.1
L/R Audio Formats	PCM2.0CH
HDR Support	HDR10, HDR10+. Dolby Vision, HLG
ESD Protection	Human-body Model: $\pm 8\text{kV}$ (Air-gap discharge), $\pm 4\text{kV}$ (Contact discharge)
Connections	
Input Ports	4×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]
Control ports	1x TCP/IP [RJ45] 1x RS-232 [3-pin phoenix connector] 1x IR EXT [3.5mm Stereo Mini-jack]



Mechanical			
Housing	Metal Enclosure		
Color	Black		
Dimensions	220mm (W)×105mm (D)×44mm (H)		
Weight	792g		
Power Supply	Input: AC100~240V 50/60Hz Output: DC12V/2.5A (Locking connector)		
Power Consumption	10W (max), 1.56W (Standby)		
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F		
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F		
Relative Humidity	20~90% RH (non-condensing)		
Resolution / Cable Length	4K60 - Feet / Meters	4K30 - Feet / Meters	1080P60 - Feet / Meters
HDMI IN / OUT	10ft / 3M	30ft / 10M	42ft / 15M
The use of "Premium High Speed HDMI" cable is highly recommended.			