



# 4K@60hz 4:4:4 HDMI HDR Matrices with Audio de-embedding

Model: MA-HD-HD1616AD



## INTRODUCTION

MA-HD HDMI Matrix supports the transmission of video (resolution up to 4K2K@60Hz YUV 4:4:4) and multi-channel high resolution digital audio from 16 HDMI sources to 16 HDMI displays. Audio de-embedded to coaxial audio is supported from 16 HDMI output ports. Each HDMI output of this 16x16 HDMI Matrix supports 4K2K to 1080P downscaler independently. Control via front panel buttons, IR remote, RS-232, LAN and Web GUI.

## I/O INTERFACE

Input Ports: 16×HDMI Type A

Output Ports: 16×HDMI Type A 、 16×Coax Audio

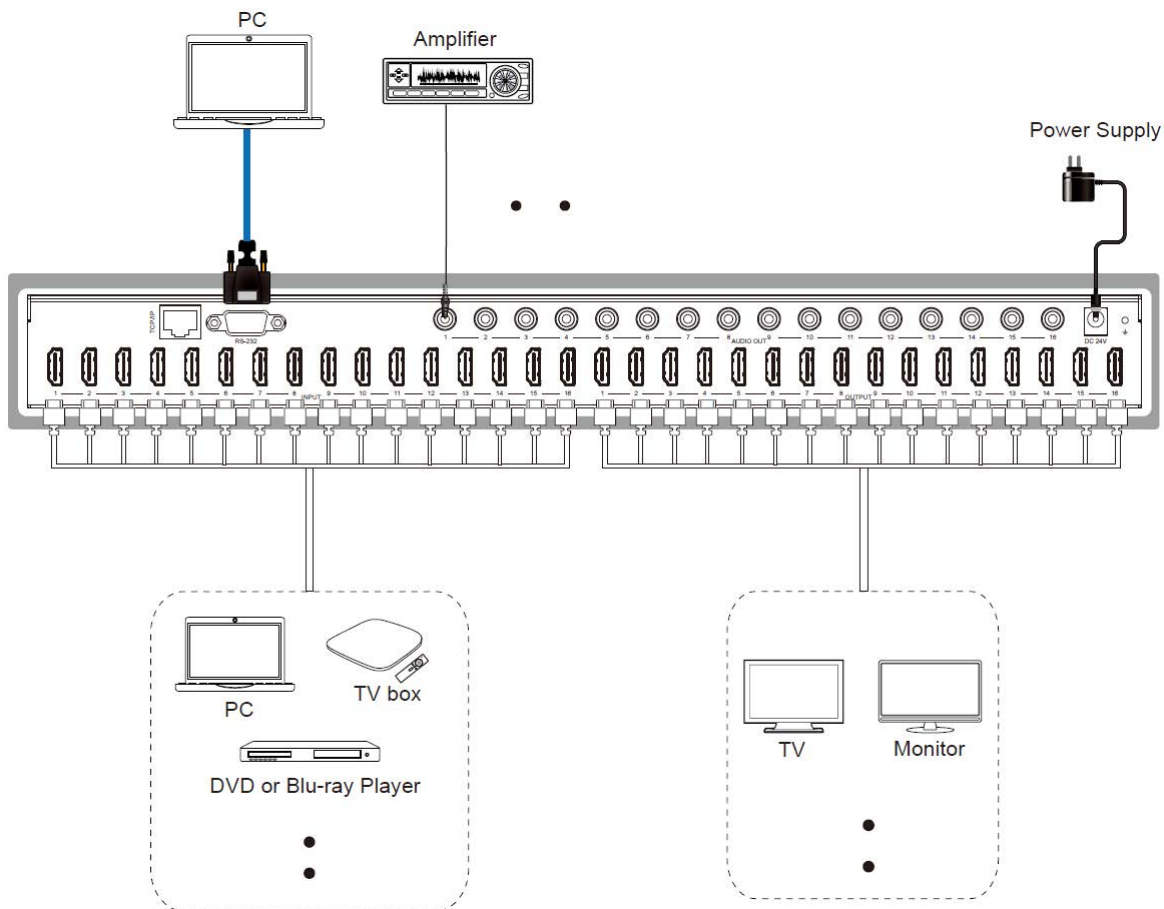
Control Ports: 1×TCP/IP 、 1×RS-232

## FEATURES

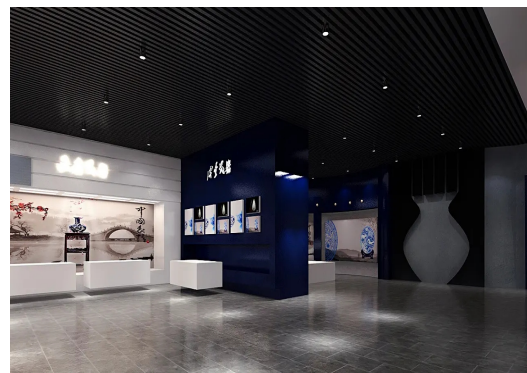
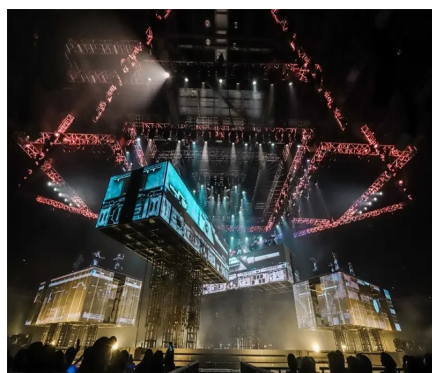
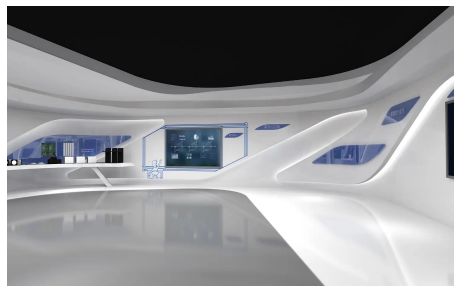
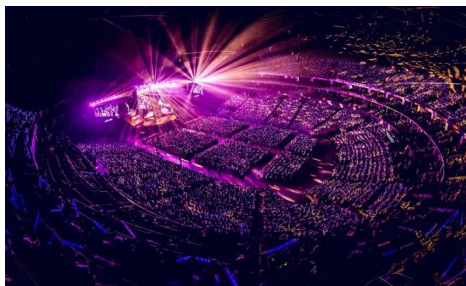
- HDMI 2.0b, HDCP 2.2/1.x and DVI 1.0 compliant;
- Video resolution up to 4K2K@60Hz (YUV 4:4:4) on all HDMI ports;
- Support 18Gbps video bandwidth;
- HDR, HDR10, HDR10+, Dolby Vision and HLG are supported;
- Support 4K->1080P Down Scaler for each output port;
- Audio de-embedded is supported via coax ports;
- HDMI audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD and DTS-HD Master Audio);
- 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.



## DIAGRAM



## APPLICATION





## SPECIFICATIONS

<b>Technical</b>			
HDMI Compliance	HDMI 2.0b		
HDCP Compliance	HDCP 2.2/1.x		
Video Bandwidth	18Gbps		
Video Resolution	Up to 4K2K@60Hz (4:4:4)		
Color Space	RGB, YCbCr 4:4:4/4:2:2/4:2:0		
Color Depth	8-bit, 10-bit, 12-bit		
HDMI Audio Formats (Pass-through)	LPCM 2/5.1/7.1, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X		
Coax Audio Formats	LPCM 2.0, Dolby Digital / Plus, DTS 5.1		
HDR formats	HDR10,HDR10+,Dolby Vision, HLG		
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)		
<b>Connection</b>			
Input Ports	16×HDMI Type A [19-pin female]		
Output Ports	16×HDMI Type A [19-pin female] 16×Coax Audio (RCA)		
Control Ports	1×TCP/IP [RJ45] 1×RS-232 [D-Sub 9]		
<b>Mechanical</b>			
Housing	Metal Enclosure		
Color	Black		
Dimensions	440mm (W)×200mm (D)×44mm (H)		
Weight	3.1kg		
Power Supply	Input: AC 100 - 240V 50/60Hz, Output: DC 24V/3.75A(US/EU standard, CE/FCC/ULcertified)		
Power Consumption	76.8W		
Operating Temperature	-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)		
<b>Resolution / Cable length</b>	<b>4K60 - Feet / Meters</b>	<b>4K30 - Feet / Meters</b>	<b>1080P60 - Feet / Meters</b>
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M
The use of "Premium High Speed HDMI" cable is highly recommended.			