

4K@60hz 4:4:4 HDMI HDBaseT 150m Matrices with Audio de-embedding and ARC

Model: MA-HB-HD0404L



INTRODUCTION

MA-HB 18Gbps 4x4 HDBaseT(150M) Matrix can connect four HDMI sources to eight displays. Each HDMI output supports 4K2K to 1080P downscaler independently.

The product provides an intuitive set of front panel with OLED screen and supports control via front panel buttons, IR remote, RS-232, LAN, and Web GUI.

I/O INTERFACE

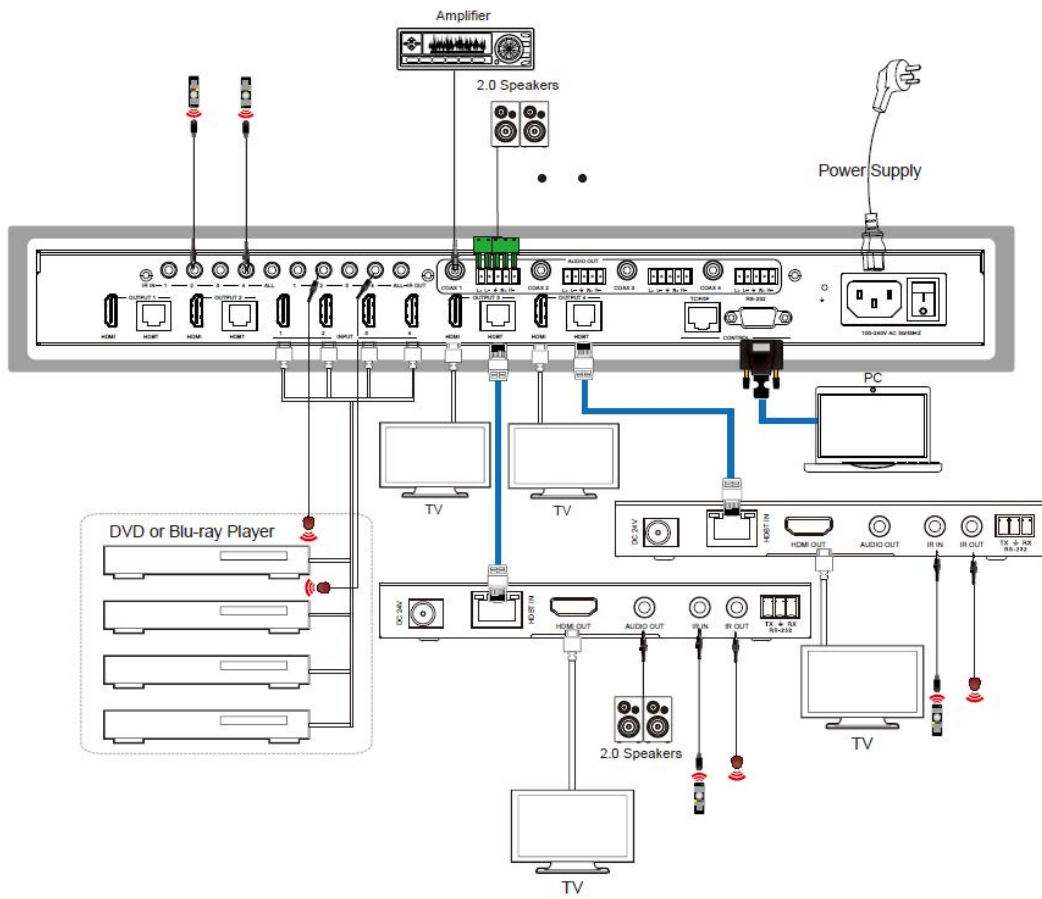
Inputs: 4 x HDMI Type A
Outputs: 4 x HDMI Type A, 4 x HDBaseT port, 4 x Coaxial audio, 4 x balanced analog audio
Controls: 5 x IR IN, 5 x IR OUT, 1 x TCP/IP, 1 x RS-232
HDBaseT Receiver
Input: 1 x HDBT IN
Outputs: 1 x HDMI Type A, 1 x AUDIO OUT
Controls: 1 x IR IN, 1 x IR OUT, 1 x RS-232, 1 x SERVICE

FEATURES

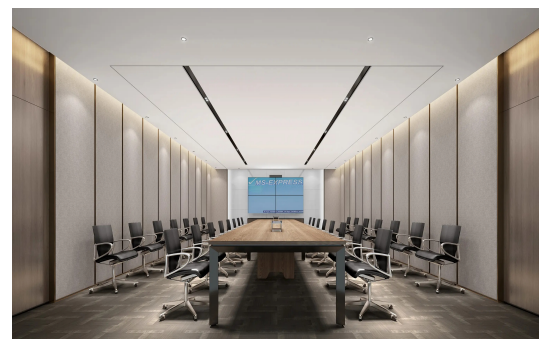
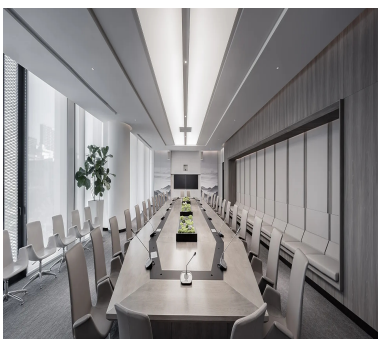
- HDMI 2.0b, HDCP 2.2 and HDCP 1.x compliant;
- Video resolution up to 4K2K@60Hz (YUV 4:4:4) on all HDMI & HDBaseT ports;
- 4 HDMI inputs, 4 HDMI & HDBaseT mirrored outputs;
- HDMI ports transmit 18Gbps lossless uncompressed video bandwidth;
- Support 18Gbps lossless compressed HDBaseT signal transmission;
- Support 4K->1080P Down Scaler for each output port;
- HDR, HDR10, HDR10+, Dolby Vision, HLG are supported;
- HDBaseT output can extend video transmission distance up to 492ft / 150m for 1080P or 394ft / 120m for 4K2K via a single Cat 5e/6/7 cable;
- HDMI audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD and DTS-HD Master Audio);
- Support IR matrix;
- Audio de-embedded is supported via analog and coax ports
- 24V POC on all HDBaseT ports.



DIAGRAM



APPLICATION





SPECIFICATIONS

Technical			
HDMI Compliance	HDMI 2.0b		
HDCP Compliance	HDCP 2.2 and HDCP 1.x		
Video Bandwidth	18Gbps		
Video Resolution	Up to 4K2K@50/60Hz (4:4:4)		
Color Space	RGB 4:4:4, YCbCr 4:4:4/4:2:2/4:2:0		
Color Depth	8-bit, 10-bit, 12-bit (1080p@60Hz)		
	8-bit (4K2K@60Hz YUV4:4:4)		
	8-bit, 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:2/4:2:0)		
HDR	HDR10, HDR10+, Dolby Vision, HLG		
HDMI Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus(DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X		
Coax Audio Formats	PCM 2.0, Dolby Digital / Plus, DTS 2.0/5.1		
Analog Balanced Audio Formats	PCM2.0CH		
Vmax	2Vrms		
SNR	>90dB		
THD+N Ratio	<0.1% (V_max) 0.001%~0.01% (V_best)		
Crosstalk	>80dB		
Frequency Response	20Hz~20kHz ±0.5dB		
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)		
Connection			
Matrix	Inputs:4 x HDMI Type A [19-pin female]		
	Outputs: 4 x HDMI Type A [19-pin female] 4 x HDBaseT port [RJ45] 4 x Coaxial audio [3.5mm Stereo Mini-jack] 4 x balanced analog audio [5-pin Phoenix connector] Controls: 5 x IR IN [3.5mm Stereo Mini-jack] 5 x IR OUT [3.5mm Stereo Mini-jack] 1 x TCP/IP [RJ45] 1 x RS-232 [D-Sub 9]		
HDBaseT Receiver	Input:1 x HDBT IN [RJ45, 8-pin female] Outputs: 1 x HDMI Type A [19-pin female] 1 x AUDIO OUT [3.5mm Stereo Mini-jack] Controls: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x RS-232 [3-pin Phoenix connector] 1 x SERVICE [Mini-USB, Update port]		
Mechanical			
Housing	Metal Enclosure		
Color	Black		
Dimensions	Matrix: 440mm (W) × 200mm (D) × 44.5mm (H) Receiver: 140mm (W) x 65mm (W) x 18mm (W)		
Weight	Matrix: 3.1Kg, Receiver: 155g		
Power Supply	AC 100 - 240V 50/60Hz		
Power Consumption	60W (Max)		
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 / Distance	4K60 - Feet / Meters		
CAT5e/6/7	492ft / 150M		
Resolution / Cable length	4K60 - Feet / Meters	4K30 - Feet / Meters	1080P60 - Feet / Meters
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M

The use of "Premium High Speed HDMI" cable is highly recommended.