

HB-R-HDMI

The HB-T-HDMI and HB-R-HDMI offer an easy solution for extending UltraHD or HD HDMI signals up to 100 meters over Cat 5 (or better) cable, utilizing the industry standard HDBaseT protocol. Bi-directional IR and RS-232 for device control is also supported, making these Mini-Converters ideal in a variety of scenarios including: fixed installation AV, digital signage, live events, postproduction/network/studio environments and on-set.

$ US MSRP

https://www.aja.com/index.php/products/hb-r-hdmi

Video Formats

- (4K) 4096 x 2160p 50, 59.94, 60 (8-bit 4:2:0)
- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30
- (UltraHD) 3840 x 2160p 50, 59.94, 60 (8-bit 4:2:0)
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1080p 23.98, 24, 25, 29.97, 50, 59.94, 60
- (HD) 1080i 25, 29.97
- (HD) 720p 25, 29.97, 50, 59.94, 60
- (SD) 625i
- (SD) 525i

Note: Wide range of VESA formats supported for pass through see associated chart on VESA formats

Video Input

- HDBaseT (RJ-45)

Video Output

- HDMI 1.4b

Video Displays

- HDBaseT cable run performance for 4K/UltraHD/HD

W x H	Frame Rate	Color Sampling	Max. Cable Length Cat 5e/6	Max. Cable Length Cat 6a/7	Max. Bit Depth
1920 x 1080	< 30 fps	4:2:2	100 meters	100 meters	16-bit
	> 30 fps	4:2:2	100 meters	100 meters	12-bit
		4:2:2	70 meters	100 meters	16-bit
2048 x 1080	< 30 fps	4:2:2	100 meters	100 meters	16-bit
	> 30 fps	4:2:2	100 meters	100 meters	12-bit
		4:2:2	70 meters	100 meters	16-bit
3840 x 2160	< 30 fps	4:4:4	70 meters	100 meters	8-bit
	> 30 fps	4:2:0	70 meters	100 meters	8-bit
4096 x 2160	< 30 fps	4:4:4	70 meters	100 meters	8-bit
	> 30 fps	4:2:0	70 meters	100 meters	8-bit

VESA Displays

- VESA display resolutions and performance

W x H	Frame Rate	Color Sampling	Max. Cable Length Cat 5e/6	Max. Cable Length Cat 6a/7	Bits Per Pixel
640 x 480	to 85 fps	4:4:4	100 meters	100 meters	24-bits
800 x 600	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1024 x 768	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1152 x 768	-	4:4:4	100 meters	100 meters	24-bits
1280 x 768	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1280 x 800	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1280 x 1024	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1360 x 768	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1366 x 768	to 120 fps	4:4:4	100 meters	100 meters	24-bits

W x H	Frame Rate	Color Sampling	Max. Cable Length		Bits Per Pixel
			Cat 5e/6	Cat 6a/7	
1400 x 1050	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1440 x 900	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1600 x 1200	to 75 fps	4:4:4	100 meters	100 meters	24-bits
	85 to 120 fps	4:2:0	70 meters	100 meters	24-bits
1680 x 1050	to 85 fps	4:4:4	100 meters	100 meters	24-bits
	120 fps	4:4:4	70 meters	100 meters	24-bits
1920 x 1200	to 120 fps	4:4:4	100 meters	100 meters	24-bits
1920 x 1440	to 60 fps	4:4:4	70 meters	100 meters	24-bits
2560 x 1600	60_RB	4:4:4	70 meters	100 meters	24-bits

RS-232

- 1 x 3.5mm TRS Input for RS-232/VISCA bidirectional signals

IR

- 1 x 3.5mm TRS Input for IR Input
- 1 x 3.5mm TRS Input for IR Output

Size (w x d x h)

- 4.25" x 3.125" x 1.0" (108mm x 79.4mm x 25mm)

Weight

- 0.4 lbs (0.2 kg)

Power

- +5 to 20V DC regulated, 6 watts max., AJA external power supply model DWP-U-R1, 100-240V, 50/60 Hz universal input

Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)