

MUH44T-H2

79244 Data Sheet

TEKVOX's MUH44T-H2 is a 4x4 matrix switcher with 4 HDMI 2.0 inputs, and 4 sets of mirrored HDMI & HDBaseT Lite outputs. It is HDCP 2.2-compliant, supports resolutions up to 4Kx2K@60Hz, and can transmit HDBaseT signals up to 230 feet for 1080p, and 130 feet for 4K. It includes 4 HDBaseT receivers which can receive 24V power via PoC, allowing them to be powered by the HDBaseT connection without an external power supply.

The switcher features advanced EDID and HDCP handling, ensuring compatibility with a wide range of video sources & displays. It can be controlled via bi-directional IR, RS232, TCP/IP commands, and front panel buttons. The MUH44T-H2's flexibility makes it ideal for distributing up to 4 sources to multiple displays and video monitors.

Features:

- 4x4 HDMI/HDBaseT matrix switcher with built-in audio matrix
- Supports resolutions up to 4Kx2K@60Hz
- Comes with 4 PoC-enabled HDBaseT receivers
- Features 4 HDMI inputs, and 4 mirrored pairs of HDMI & HDBaseT outputs
- Transmits 1080p signals up to 230 feet (70m) via HDBaseT, and 4K up to 130 feet (40m)
- Supports CEC control of connected receivers and displays
- Supports breakaway audio and volume control for analog and SPDIF audio outputs
- Shipped fully functional, pre-programmed, and rigorously tested



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79244 Technical Specifications

Matrix Switcher

Video	
Video Inputs	4 HDMI (Type-A, Female)
Input Resolution	Up to 4Kx2K@60Hz 4:4:4, HDR10, 1080p 3D
Video Outputs	4 HDBaseT (RJ45) 4 HDMI (Type-A, Female)
Output Resolution	HDMI: Up to 4Kx2K@60Hz 4:4:4, HDR10, 1080p 3D (supports 4K to 1080p downscaling) HDBaseT: Up to 4Kx2K@60Hz 4:2:0
HDMI Audio Formats	LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, DTS-HD® Master Audio™ passthrough
Audio	
Audio Outputs	4 Stereo Analog L+R (3-pin terminal block) 4 Digital SPDIF audio (Toslink)
Analog L+R Audio Format	PCM
Digital SPDIF Audio Format	PCM, Dolby Digital, DTS, DTS-HD
Local Audio Sampling Rate	44.1 / 48 / 96kHz
ARC Audio Sampling Rate	48 / 96kHz
Frequency Response	20Hz ~ 20kHz, ±3dB
Audio Output Impedance	200Ω
Max Input Level	L+R: 2.0VRMS ± 0.5dB; 2V=16dB headroom above -10dBV (316mV) nominal consumer line level signal SPDIF: ±0.05dBFS
Total Harmonic Distortion + Noise (THD+N)	< 0.05% (-80dB), 20Hz ~ 20kHz bandwidth, 1kHz sine wave at 0dBFS (or max level)
Signal-to-Noise Ratio (SNR)	L+R: > 80dB, 20Hz ~ 20kHz bandwidth SPDIF: >90dB, 20Hz ~ 20kHz bandwidth
Crosstalk Isolation	L+R: <-80dB, 10kHz sine at 0dBFS (or max level before clipping) SPDIF: <-70dB, 10kHz sine at 0dBFS (or max level before clipping)
L-R Level Deviation	< 0.3dB, 1kHz sine at 0dBFS (or max level before clipping)
Frequency Response Deviation	< ±0.5dB, 20Hz ~ 20kHz
Output Load Capability	L+R: 1kΩ or higher (supports 10x parallel 10kΩ loads)
Stereo Channel Separation	>70dB@1kHz
Noise Level	L+R: -80dB SPDIF: -90dB
General	
Control Ports	4 IR IN (3.5mm mini jack) 1 IR ALL IN (3.5mm mini jack) 4 IR OUT (3.5mm mini jack) IR ALL OUT (3.5mm mini jack) 1 IR EYE (3.5mm mini jack) 5 RS232 (3-pin terminal block) 1 FIRMWARE (Type-A USB) 1 TCP/IP (RJ45)

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Maximum Transmission Distance	1080p: 230 feet (70m) 4K@60Hz: 130 feet (40m)
Bandwidth	18Gbps
Operating Temperature	23 ~ 131°F (-5 ~ 55°C)
Storage Temperature	-13 ~ 158°F (-25 ~ 70°C)
Humidity	10 ~ 90%
Power Supply	100 ~ 240 VAC, 50/60Hz
Power Consumption	65W (max)
Product Dimensions	17.2" (436.4mm) x 1.73" (44mm) x 14" (356.6mm)
Product Weight	7.28 lbs (3.3kg)

HDBaseT Receiver

Video Input	1 HDBase (RJ45)
Input Resolution	Up to 4Kx2K@60Hz 4:2:0
Video Output	1 HDMI (Type-A, Female)
Output Resolution	Up to 4Kx2K@60Hz 4:4:4 8-bit, HDR10
Audio Input	1 ARC Audio In (Toslink)
Audio Output	1 Audio Breakout (Toslink)
Audio Formats	PCM, Dolby Digital, Dolby TrueHD, DTS, DTS-HD
Frequency Response	20Hz ~ 20kHz, ±3dB
Max Output Level	2.0VRMS ±0.5dB; 2V=16dB headroom above -10dBV (316mV) nominal consumer line level signal
Total Harmonic Distortion + Noise (THD+N)	< 0.05% (-80dB), 20Hz ~ 20kHz bandwidth, 1kHz sine at 0dBFS (or max level)
Signal-to-Noise Ratio (SNR)	> 85dB, 20Hz ~ 20kHz bandwidth
Crosstalk Isolation	> 70dB, 10kHz sine at 0dBFS (or max level before clipping)
L-R Level Deviation	< 0.3dB, 1kHz sine at 0dBFS (or max level before clipping)
Frequency Response Deviation	< ±0.5dB, 20Hz ~ 20kHz
Output Load Capability	1kΩ and higher (supports 10x parallel 10kΩ loads)
Stereo Channel Separation	> 70dB @ 1kHz
Control Ports	1 ARC Mode button 1 FIRMWARE (Micro-USB) 1 IR IN (3.5mm mini jack) 1 IR OUT (3.5mm mini jack) 1 RS232 (3-pin terminal block)
Bandwidth	18Gbps
Standards	HDMI: 2.0 HDCP: 2.2 (1.4-compliant)
CEC	Passthrough
Bi-Directional PoC	Supported
Maximum Transmission Distance	1080p: 230 feet (70m) 4K@60Hz: 130 feet (40m)
Operating Temperature	23 ~ 131°F (-5 ~ 55°C)
Storage Temperature	-13 ~ 158°F (-25 ~ 70°C)
Humidity	10 ~ 90%
Power Supply	Input: 100 ~ 240 VAC Output: DC 24V, 1.25A
Power Consumption	12W (max)
Product Dimensions	1.57" (40mm) x 0.77" (19.5mm) x 3.31" (84mm)
Product Weight	0.64 lbs (290g)

Specifications are subject to change without notice