

# 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



# MUH44T-H2

## 79244 Technical Specifications

### Matrix Switcher

Video	
<b>Video Inputs</b>	4 HDMI (Type-A, Female)
<b>Input Resolution</b>	Up to 4Kx2K@60Hz 4:4:4, HDR10, 1080p 3D
<b>Video Outputs</b>	4 HDBaseT (RJ45) 4 HDMI (Type-A, Female)
<b>Output Resolution</b>	<b>HDMI:</b> Up to 4Kx2K@60Hz 4:4:4, HDR10, 1080p 3D (supports 4K to 1080p downscaling) <b>HDBaseT:</b> Up to 4Kx2K@60Hz 4:2:0
<b>HDMI Audio Formats</b>	LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, DTS-HD® Master Audio™ passthrough
Audio	
<b>Audio Outputs</b>	4 Stereo Analog L+R (3-pin terminal block) 4 Digital SPDIF audio (Toslink)
<b>Analog L+R Audio Format</b>	PCM
<b>Digital SPDIF Audio Format</b>	PCM, Dolby Digital, DTS, DTS-HD
<b>Local Audio Sampling Rate</b>	44.1 / 48 / 96kHz
<b>ARC Audio Sampling Rate</b>	48 / 96kHz
<b>Frequency Response</b>	20Hz ~ 20kHz, ±3dB
<b>Audio Output Impedance</b>	200Ω
<b>Max Input Level</b>	<b>L+R:</b> 2.0VRMS ± 0.5dB; 2V=16dB headroom above -10dBV (316mV) nominal consumer line level signal <b>SPDIF:</b> ±0.05dBFS
<b>Total Harmonic Distortion + Noise (THD+N)</b>	< 0.05% (-80dB), 20Hz ~ 20kHz bandwidth, 1kHz sine wave at 0dBFS (or max level)
<b>Signal-to-Noise Ratio (SNR)</b>	<b>L+R:</b> > 80dB, 20Hz ~ 20kHz bandwidth <b>SPDIF:</b> >90dB, 20Hz ~ 20kHz bandwidth
<b>Crosstalk Isolation</b>	<b>L+R:</b> <-80dB, 10kHz sine at 0dBFS (or max level before clipping) <b>SPDIF:</b> <-70dB, 10kHz sine at 0dBFS (or max level before clipping)
<b>L-R Level Deviation</b>	< 0.3dB, 1kHz sine at 0dBFS (or max level before clipping)
<b>Frequency Response Deviation</b>	< ±0.5dB, 20Hz ~ 20kHz
<b>Output Load Capability</b>	<b>L+R:</b> 1kΩ or higher (supports 10x parallel 10kΩ loads)
<b>Stereo Channel Separation</b>	>70dB@1kHz
<b>Noise Level</b>	<b>L+R:</b> -80dB <b>SPDIF:</b> -90dB
General	
<b>Control Ports</b>	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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## 79244 Technical Specifications

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

## HDBaseT Receiver

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

Specifications are subject to change without notice