

MATRIX SWITCHER - ALF-MUH44TP-N 4K HDBaseT 4x4 Matrix Switcher



DESCRIPTION

MUH44TP-N is a professional 4x4 HDBaseT Matrix Switcher that accommodates 4 HDMI IN (4K signal at max), 4 auxiliary audio IN, 4 IR IN.

Select HDMI input by front panel buttons, IR, RS232, or GUI. The selected source is delivered to HDMI Output 1 ~ 2 (for HDMI input 1 ~ 2) & HDBaseT outputs 1 ~ 4 (easy extension to 70m at 1080p and 35m at 4Kx2K on a single CAT5e/6 connection with HDBaseT receivers, with PoC) simultaneously. The unit also supports EDID management and HDCP.

Except for embedded HDMI audio, MUH44TP-N provides 4 auxiliary audio outputs. The audio source is selectable via RS232 command. Selected audio is output via HDMI outputs & HDBaseT outputs and the audio output sockets.

The unit also supports bi-directional RS232 & IR control.

FEATURES

- Support HDMI 1.4, support 4K x 2K & 1080p 3D
- HDCP 1.4 compatible, support manual HDCP management and auto-detecting.
- Transmit 4K x 2K signal for 8m via HDMI port, 35m via HDBT port
- Audio source selectable via RS232 command
- 4 HDBaseT outputs, for easy extension to 70m at 1080p and 35m at 4K x 2K on a single CAT5e/6 cable
- Support PoC
- LCD screen shows real-time I/O connection status, switching status, HDCP status and output resolution.
- Controllable via the front panel, RS232, IR and TCP/IP
- Support bi-directional IR & RS232 control
- Built-in GUL for TCP/IP control
- Powerful EDID management
- Support off memory for reliable operation
- Support firmware upgrade through Micro USB port
- Easy installation with the rack-mounting design.

TECHNICAL SPECIFICATIONS

4K HDBaseT 4x4 Matrix Switcher

Video Input

Input	: 4 HDMI
Input connector	: Female HDMI
Input Level	: T.M.D.S. 2.9V ~ 3.3V
Input Impedance	: 100Ω (Differential)

Video Output

Output	: 2 HDMI, 4 HDBaseT
Output connector	: Female HDMI, Female RJ45 (with LED indicators)
Output Level	: T.M.D.S. 2.9V ~ 3.3V
Output Impedance	: 100Ω (Differential)

Video General

Gain	: 0 dB
Bandwidth	: 10.2 Gbit/s
Video Signal	: HDMI (or DVI-D)
Resolution Range	: Up to 4K x 2K@30Hz
Transmission Distance	: 1080p@60Hz≤70m; 4Kx2K@30Hz ≤35m
Switching speed	: 200ns (Max.)
EDID Management	: In-built EDID data and manual EDID management
HDCP	: Supports HDCP 1.4, auto and manual HDCP management.

Audio General

Output Signal	: Stereo audio, Digital audio
Output Connector	: 4 3-pin pluggable terminal blocks 4 Coax (RCA)
Stereo Output	: Earphone output: distortion 0.1%32Ω/70mW@1KHz, 0.1%16Ω/105mW@1KHz, support PCM
Coax Output	: Supports PCM, Dolby Digital, DTS, DTS-HD
Frequency Response	: 20Hz ~ 20KHz

TECHNICAL SPECIFICATIONS CONTINUED

4K HDBaseT 4x4 Matrix Switcher

Control Parts

Control Ports	: 4 IR UT (green), 4 IR IN (black), 1 IR EYE (black), 1 TCP/IP (female RJ45), 1 RS232 (9 pin female D), 4 RS232 (3-pin pluggable terminal blocks)
Panel Control	: Front panel buttons
RS232 Control	: 9-pin female RS232 connector
IR	: Built-in IR sensor Extended IR receiver
TCP/IP Control	: Web-based GUI

General

Power Supply	: DC 24V 2.71A
Power Consumption	: 48W (MAX)
Temperature	: -10 ~ +40°C
Reference Humidity	: 10% ~ 90%
Dimension (W*H*D)	: 437 x 44 x 235mm (1 U high, full rack wide)
Weight	: 2 kg

SYSTEM DESIGN

Design Key

- VGA
- HDMI
- Audio
- Control
- Internet
- HDBaseT

