

# MMX8x8-HT440 SKU: 91310086

## HDMI and TPS Matrix Switcher with Special Audio Inputs and Multiport Control Options

MMX8x8-HT440 is a standalone matrix switcher specifically designed for conference room environments. It has four HDMI and four TPS2 (HDBaseTTM) inputs with four HDMI outputs and four TPS2 outputs. 4K / UHD (30Hz RGB 4:4:4, 60Hz YCbCr 4:2:0), 3D capabilities and HDCP are fully supported.



Front View



Back View

### Details

MMX8x8-HT440 is a **standalone matrix switcher** specifically designed for conference room environments. It has **four HDMI and four TPS2 (HDBaseT™) inputs** with **four HDMI outputs and four TPS2 outputs**. **4K / UHD (30Hz RGB 4:4:4, 60Hz YCbCr 4:2:0), 3D capabilities and HDCP** are fully supported.

The device also has **eight balanced 5-pole Phoenix audio connectors** at four of the TPS2 and HDMI **inputs**, four of the TPS2 and HDMI **outputs**.

The **audio signal direction of the port can be changed** with the Lightware Device Controller software, so these audio ports can be either input or output ports.

**PoE 48V remote powering** is available on every I/O TPS ports for cost-effective installations.

MMX8x8-HT440 receives and transmits digital video, audio and control to a distance of up to **170m over a single CAT6 cable**. Using factory, custom or transparent EDID emulation the user can fix and lock EDID data on each input connector. **Advanced EDID Management** forces the required resolution from any video source and fixes the output format to conform to the system requirements. The unit can be controlled via RS-232, Ethernet or USB ports, but it also offers **Ethernet, RS-232, Serial and IR command injection** capabilities, allowing to send any control command directly from the LAN connection to remote end points.

The built-in Event Manager feature provides **control via RS-232, IR, Ethernet, Relay and GPIO** ports. The MMX8x8-HT440 is compatible with both HDBaseT™ extenders and HDBaseT™ compliant displays.



# MMX8x8-HT440

SKU: 91310086

## Features

- Extends DVI or HDMI 1.4 + Ethernet + RS-232 + IR over one CAT5/6/7 cable
- Built-in PoE injector\* for remote powering extenders
- Balanced analog audio output for audio de-embedding
- Command injection on RS-232 and IR ports
- Built-in Event Manager control automation feature
- 1920x1080@120Hz/4:4:4, 4096x2160@30Hz/4:4:4 or 60Hz/4:2:0 maximum resolutions (300MHz)
- Audio embedding and de-embedding
- Adjustable analog audio settings (volume, gain, balance)
- Extension distance up to 170 meters (with CAT7 S/FTP AWG23 cable, 1920x1080p60)
- Frame Detector (analyze detailed video timings)
- Compact size
- 5-pole Phoenix balanced analog audio connectors
- Mounting options for rack, furniture or truss
- External universal power adaptor
- Twist-and-lock DC power connector
- Bi-directional RS-232 and IR extension (pass-through and control)
- TPS link quality and cable length monitoring
- HDCP enable/disable function on input
- 4x2 HDMI matrix switcher with HDMI and TPS ports
- HDBaseT compatible
- Ethernet extension (100 Mbps)
- HDMI 1.4, HDCP 1.4 and DVI 1.0 compliant
- Multiple TCP/IP connections
- Advanced EDID Management
- Save and reload full crosspoint configurations as preset
- Intuitive control software for device configuration
- Front panel buttons for crosspoint control
- Device control via Ethernet (TCP/IP), RS-232 and USB
- Supports HDMI 4K signal formats (4K UHD @30Hz RGB 4:4:4 or @60Hz YUV 4:2:0, up to 9 Gbps)
- Fully non-blocking switching architecture
- Supports HDMI 3D signal formats (frame packing, side-by-side and top-bottom)
- Pixel Accurate Reclocking
- No video compression
- HDCP 1.4 compliant
- Uncompressed video up to 9 Gbps datarate (300 MHz pixel clock)
- Cross compatible with TPS series Lightware extenders and I/O boards (HDBaseT compatible)
- Firmware upgrade through Ethernet
- Supports all embedded audio formats (including PCM, Dolby Digital and DTS high bitrate audio)
- Built-in video test pattern generator
- No signal latency, zero frame delay

## Specifications

Maximum Extension Distances				
Resolution	Pixel clock rate	Cable lengths (Auto / Long reach TPS mode)		
		CAT5e AWG24	CAT7 AWG26	CAT7 AWG23
1024x768@60Hz	65 MHz	100 m / 130 m*	90 m / 120 m*	120 m / 170 m*
1280x720p@60Hz	73.8 MHz	100 m / 130 m*	90 m / 120 m*	120 m / 170 m*
1920x1080p@60Hz (24bpp)	148.5 MHz	100 m / 130 m*	90 m / 120 m*	120 m / 170 m*
1920x1200@60Hz	152.9 MHz	100 m / NA	90 m / NA	120 m / NA
1600x1200@60Hz	162 MHz	100 m / NA	90 m / NA	120 m / NA
1920x1080@60Hz (36bpp)	223 MHz	70 m / NA	70 m / NA	100 m / NA
3840x2160@30Hz UHD	297 MHz	70 m / NA	70 m / NA	100 m / NA
4096x2160@30Hz 4K	297 MHz	70 m / NA	70 m / NA	100 m / NA

\*Long reach TPS mode supports pixel clock frequencies up to 148.5 MHz.

To specify the accurate extension distances, please also check the documentation of the connected HDBaseT-compatible device. CAT7 SFTP AWG23 cable is always recommended.



# MMX8x8-HT440

SKU: 91310086

## Specifications

Features and Services	
4K / UHD (30Hz RGB 4:4:4 60Hz YCbCr 4:2:0) and 3D capabilities	Yes
HDMI input ports	4x
TPS2 (HDBaseT) input ports	4x
HDMI output ports	4x
TPS (HDBaseT) output ports	4x
Up to 170 m transmission over TPS Long Reach Mode for Full HD signals	Yes
Balanced bi-directional analog audio ports	8x
Ethernet port for device control	1x
Ethernet ports for external device control	2x
Ethernet via TPS	Yes
Bi-directional RS-232 ports	2x
Serial/IR ports for display control	2x
IR ports for display control	4x
Relay output ports	4x
GPIO port	6x GPIO + 5V + GND
PoE function to feed remote power to connected devices	Yes
Front panel LCD and jog dial button	Yes
Event Manager built-in control feature	Yes
Power consumption (max)	122W

