



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

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.

Back View

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.



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

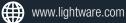
Maximum Extension Distances				
Resolution	Pixel clock rate	Cable lengths (Auto / Long reach TPS mode)		
		CAT5e AWG24	CAT7 AWG26	CAT7 AWG23
1024x768@60Hz	65 MHz	100 m / 130 m*	90 m / 120 m*	120 m / 170 m*
1280x720p@60Hz	73.8 MHz	100 m / 130 m*	90 m / 120 m*	120 m / 170 m*
1920x1080p@60Hz (24bpp)	148.5 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 SFTPAWG23 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	4χ			
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			



