

HDMI 2.0 HDBT Matrix 8x8 CAT6 70M 4K@60Hz

Switch and Distribute 8 HDMI Sources to 8 HDMI Displays and 8 Mirrored Display over HDBT

MPN: MMX-8X8CAT-70M

The **MMX-8X8CAT-70M** is an 8x8 matrix switcher designed by KanexPro, which allows for the routing of HDMI signals over long distances using CAT5e or CAT6 cables. This switcher is ideal for environments that need to distribute HDMI signals over long distances while maintaining high-quality video and audio, all with robust control options.

This device is typically used in professional AV environments, such as conference rooms, control centers, digital signage applications, and home theaters, where multiple HDMI sources need to be managed and routed to different displays.

Industry Standard HDCP 2.2 & 4K/60

HDCP 2.2 authentication is present always on this matrix ensuring proper handshake of the protected content. It also maintains resolutions up to 4K4096x2160@24, 30, 50 or 60Hz, 3840x2160@24, 25,30, 50 or 60Hz and 2560x1080@60Hz displaying 21:9 aspect ratios. 1920 x 1200 or full HD 1080p/60 is a standard for all our matrix switchers.

Applications:

- Conference Rooms & Meeting Spaces
- Educational Facilities
- Digital Signage Systems
- Home Theater Systems
- Corporate Offices
- Broadcasting and Production Studios



Key Benefits of Using an MMX-8x8CAT-70M Matrix Switcher:

- Seamless 8x8 Switching:** Supports switching of up to 8 HDMI sources to 16 displays or projectors without signal degradation, providing flexibility in AV setups.
- Extended Transmission Distance:** Allows HDMI signal transmission up to 70 meters (230 feet) over a single CAT5e/6 cable using HDBT technology, ideal for larger spaces like conference rooms or classrooms.
- Support for High-Quality Video:** Delivers 4K UHD resolution (up to 4K@60Hz 4:2:0) and supports 3D video, providing high-quality visual experiences even at long distances.
- IR and RS-232 Control:** Enables remote control on the receiver side of the matrix and connected devices (e.g., displays or projectors) via IR or RS-232, streamlining operations in complex AV environments.
- Power over Ethernet (PoE):** Transmits power along with the AV signal to compatible receivers, reducing the need for additional power supplies at the receiver end.
- EDID Management:** Provides EDID (Extended Display Identification Data) management, ensuring optimal resolution and audio settings for connected displays, minimizing compatibility issues.
- Audio De-Embedding:** Extracts audio from the HDMI signal, allowing you to send it separately to an audio system, useful for setups that require independent audio distribution.
- Reliable and Cost-Effective Installation:** Reduces the need for expensive HDMI cables over long distances, as CAT cables are generally more cost-effective and easier to install in structured cabling environments.
- Future-Proof Design:** With support for 4K video and HDCP 2.2 compliance, the MMX-8X8CAT-70M ensures compatibility with current and future video formats and content protection standards.

FEATURES

- 8x8 Matrix Switching
- 8 HDMI inputs, 8 HDMI & 8 CAT mirrored outputs
- Video resolution up to 4K2K@60Hz (YUV 4:4:4) on all HDMI & CAT ports
- Signal Extension Over CATx up to 230ft/70m
- Support one-way IR matrix function
- HDBT Technology
- Smart EDID Management
- HDCP Compliance
- Audio De-embedding
- RS-232 and IR Pass-Through
- Control via front panel buttons, IR remote, RS-232, LAN and Web GUI

SPECIFICATIONS

TECHNICAL			
HDMI Compliance	HDMI 2.0b		
HDCP Compliance	HDCP 2.2 / 1x		
Video Bandwidth	18Gbps		
Video Resolution	Up to 4K2K@50/60Hz (4:4:4)		
Color Space	RGB 4:4:4, YCbCr 4:4:4/4:2:2/4:2:0		
Color Depth	8-bit, 10-bit, 12-bit (1080p@60Hz)		
	8-bit (4K2K@60Hz YUV4:4:4)		
	8-bit,10-bit,12-bit (4K2K@60Hz YCbCr 4:2:2/4:2:0)		
HDR	HDR10, HDR10+, Dolby Vision, HLG		
HDMI Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus (DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X		
Transmission Distance	230ft / 70m (via a single CAT6 cable)		
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)		
Resolution / Cable length			
	4K60 – Feet / Meters	4K30 – Feet / Meters	1080P60 – Feet / Meters
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M
The use of "Premium High Speed HDMI" cable is highly recommended.			
Mechanical			
Housing	Metal enclosure		
Color	Black		

Dimensions	Matrix: 440mm (W) × 250mm (D) × 44.5mm (H) Receiver: 61mm (W) × 88mm (D) x 18mm (H)
Weight	Matrix: 3.2Kg, Receiver: 155g
Power supply	Input: AC 90 - 260V 50/60Hz Output: DC 12V/5A (US/EU standards, CE/FCC/UL certified)
Power consumption	50W (Max)
Operating temperature	32 - 104°F / 0 - 40°C
Storage temperature	-4 - 140°F / -20 - 60°C
Relative humidity	20 - 90% RH (Non-condensing)
Connection	
Matrix	Inputs: 8 x HDMI Type A [19-pin female] Outputs: 8 x HDMI Type A [19-pin female] 8 x CAT port [RJ45] Controls: 1 x TCP/IP [RJ45] 1 x RS-232 [3-pin phoenix connector] 8 x IR OUT [3.5mm Stereo Mini-jack] 1xIR EXT [3.5mm Stereo Mini-jack]
CAT Receiver	Inputs: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x CAT port [RJ45] Output: 1 x HDMI Type A [19-pin female] Control: 1 x SERVICE [Micro USB, Update port]

APPLICATION DIAGRAM

