

### HDMI 2.0 Switcher with breakout Audio, Occupancy Sensor input and various control features

Lightware's HDMI2.0 switcher allows users to switch between in-room computers and BYOD devices with video and audio signals up to 4k@60Hz 4:4:4.



### Bring Collaboration Spaces to the Next Level

**MMX2-4x1-H20** and **MMX-4x3-H20** are unique, compact size matrix switchers. They have **four HDMI inputs** and either one or three independent HDMI outputs. **Audio can be de-embedded** from the HDMI signal to a balanced **5-pole Phoenix (Euroblock) port**. The volume of the audio signal can be modified at the output. The devices are capable to transfer video **signal with resolutions up to 4K60** and are HDCP2.2 compliant.

Occupancy sensor input, **GPIO** and **RS-232 ports** can be used to integrate other devices into the system. The device is configurable via the Lightware Device Controller software.

**Automated room control features** are also included through GPIO ports, besides of RS-232 and occupancy sensor connectivity. The switcher also thrives when it comes to audio capabilities, offering analog audio de-embedding feature.

### Additional Features and Capabilities

Security is always a key concern in the corporate world, therefore our engineers ensured that the MMX2-4x1-H20 & MMX-4x3-H20 adheres to the strictest security standards. A secure corporate Ethernet interface ensures secure device control and configuration **under the SSL and HTTPS standards**.

### Features

- Dedicated secure control
- Occupancy sensor connection (with 24V power supply)
- Configurable Autoselect on video inputs
- RS-232 port for device control
- Passive, noiseless cooling
- Supports HDMI 4K signal formats (4K UHD @60Hz RGB 4:4:4, up to 18 Gbps)
- SSL, HTTPS for IT security
- Audio de-embedding
- GPIO control ports
- Device control via Ethernet (TCP/IP)
- Uncompressed video up to 18 Gbps datarate (600 MHz pixel clock)

### Specifications

<b>Video</b>	Resolution		Up to UHD/4k@60Hz 4:4:4
	Signal Type		HDMI 2.0, HDMI 1.x, DVI
	Maximum data rate		18 Gbps
	Maximum pixel clock		600 MHz
	Content protections		HDCP 1.x, HDCP 2.2
	Connector type (IN)		4x HDMI receptacle type A with screw locking option
	Connector type (OUT)		1x HDMI receptacle type A with screw locking option
	Video processing		Signal parameter measurement
<b>Audio</b>	Audio mode		Simultaneous pass-through and de-embedding to the Audio layer
	Supported audio formats for pass-through		All HDMI 2.0 audio formats
	Supported audio formats for de-embedding	Uncompressed	LPCM (up to 2 channels, 192 kHz, 24 bits per sample)
<b>Control</b>	Ethernet	Control	1x 100Base-T via RJ-45 for Secure Control
	RS232	Connector	1x 3Pol Phoenix
		Symbol rate	between 9600 and 115200 baud
		Configuration	Parity: none, odd or even Stopbits: 1 or 2
	USB	Connectors	1x mini USB Type B (reserved for service) 1x USB Type A (reserved for future developments)
	Room Occupancy Sensor	Connector	3Pol Phoenix
	GPIO	Connector	8Pol Phoenix
<b>General</b>	Powering		External 5V/3A wall adaptor
	Dimensions	Width	221 mm
		Height	26 mm
		Depth	68 mm
	Operating conditions	Ambient temperature	0-50°C
		Relative humidity	0-90% (non-condensing)
	Transportation conditions	Ambient temperature	-20-70°C
		Relative humidity	0-95% (non-condensing)
	Compliance		EN 55032:2015 IEC 61000-3-3:2013+AMD1:2017 FCC CFR Title 47, Part 15, Subpart B
	Warranty		3 years