



# MSW-H614A-HDBT

## 6x4+2 18G HDMI 2.0 MATRIX SWITCHER WITH HDBT

Looking for a cost-effective yet modern solution for your auditorium, lecture hall, worship hall, lobby, or corporate venue? Look no further than the MSW-H614A-HDBT.

This professional-grade 6x4+2 HDMI 2.0 and HDBaseT matrix switcher is designed to deliver optimal performance. Boasting a 2-input HDBaseT and four-input HDMI matrix with HDCP 2.3 and up to 4K60 4:4:4 video support, this matrix switcher is capable of transmitting 4K video up to 40 meters and 1080p video up to 70 meters over a single CAT6A cable.

In addition, the MSW-H614A-HDBT features four HDMI 2.0 with two mirrored simultaneous HDBaseT outputs which support 24V Power over Cable (PoC), enabling compatible TiGHT AV HDBaseT receivers to draw power from the matrix over the CAT6A cable. The matrix switcher is equipped with a 6x4 audio matrix that possesses de-embedding capabilities with individual volume, mute, and delay control per analog output channel.

The matrix switcher features comprehensive EDID management and advanced HDCP handling to ensure maximum functionality with a wide range of video sources and displays. The matrix switcher also offers multiple control options by front panel, IR, RS232 commands, WEB UI and TCP/IP commands.

Don't settle for anything less than the best - choose MSW-H614A-HDBT for your next installation!

MSW-H614A-HDBT (FRONT)



MSW-H614A-HDBT (BACK)



## KEY FEATURES

- Supports HDMI 2.0b, 4K@60Hz 4:4:4, HDR 10, Dolby Vision and HDCP 2.3.
- Equipped with HDBaseT inputs and outputs for signal extension. Compatible with TiGHT AV EXT-H101L2-TX/RX-HDBT and EXT-H211L2-SRX-HDBT.
- Max transmission is up to 4K 40m and 1080p@70m over HDBT.
- Audio matrix, audio out can de-embedded from arbitrary input or output.
- Individual volume adjustment and delay on each analog audio output.
- Supports 4K to 1080p auto-downscaling without frame rate change on all HDMI and HDBaseT outputs.
- Provides 24V PoC for compatible TiGHT AV HDBaseT transmitters and receivers.
- Each of the HDMI outputs supports up to 5V@500mA for AoC cables.
- Advanced WEB-UI for control and configuration.
- Comprehensive HDCP and EDID management.
- Controllable by front panel, IR, RS232 and TCP/IP.
- Open TiGHT AV API for third-party control.

## TiGHT POLICY

**Faulty product - minimal down time.**

Up until six months after purchase, TiGHT AV will replace your product in advance of return of faulty product.

**Your investment - built to last.**

All TiGHT AV products come with a five year limited warranty.



# SPECIFICATIONS

## VIDEO

|                            |  |
|----------------------------|--|
| Video Input:               | (4) HDMI, (2) HDBT   |
| Input Connector:           | (4) Type-A female HDMI, (2) RJ45   |
| HDMI Input Resolution:     | Up to 4K@60Hz 4:4:4, HDR10, Dolby Vision                                     |
| Video Output:              | (4) HDMI, (2) mirrored HDBT  |
| Output Connector:          | (4) Type-A female HDMI, (2) RJ45   |
| HDMI Output Resolution:    | Up to 4K@60Hz 4:4:4, HDR10, 1080p 3D. Supports 4K to 1080p auto-downscaling. |
| HDBaseT Output Resolution: | Up to 4K@60Hz 4:4:4 (using compatible receivers)                             |
| HDMI Standard:             | HDMI 2.0b  |
| HDCP Version:              | HDCP 2.x/1.x   |

## AUDIO

|                             |   |
|-----------------------------|---|
| HDMI Embedded Audio Format: | LPCM 7.1 audio, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, and DTS-HD® Master Audio™ pass-through.   |
| Audio Output:               | (4) Stereo analog L+R audio, (4) Digital SPDIF audio  |
| Output Connector:           | (4) 5-pin terminal blocks, (4) Toslink connectors   |
| Analog L+R Audio Format:    | Supports PCM  |
| Digital SPDIF Audio Format: | Supports PCM, Dolby Digital, DTS, DTS-HD  |
| Local Audio Sampling Rate:  | Supports 44.1KHz, 48KHz, 96KHz  |
| Frequency Response:         | 20Hz – 20KHz, ±3dB  |
| Audio Output Impedance:     | 70Ω   |
| Max Input Level:            | <b>L±R:</b> 2.0Vrms ± 0.5dB. 2V = 16dB headroom above -10dBV (316mV) nominal consumer line level signal.<br><b>SPDIF:</b> ±0.05dBFS.                                  |
| THD+N:                      | < 0.05% (-80dB), 20Hz – 20KHz bandwidth, 1KHz sine at 0dBFS level (or max level).   |
| SNR:                        | <b>L±R:</b> > 80dB, 20Hz - 20KHz bandwidth.<br><b>SPDIF:</b> > 90dB, 20Hz - 20 kHz bandwidth.   |
| Crosstalk Isolation:        | <b>SPDIF:</b> < -120 dB, 10KHz sine at 0dBFS level (or max level before clipping).<br><b>L±R:</b> < -60 dB, 10KHz sine at 0dBFS level (or max level before clipping). |

|                               |   |
|-------------------------------|---|
| L-R Level Deviation:          | <b>L±R:</b> < 0.3dB, 1KHz sine at 0dBFS level (or max level before clipping). |
| Frequency Response Deviation: | < ± 0.5dB 20Hz - 20KHz.   |
| Output Load Capability:       | <b>L±R:</b> 1KΩ and higher (Supports 10x paralleled 10KΩ loads).              |

## CONTROL

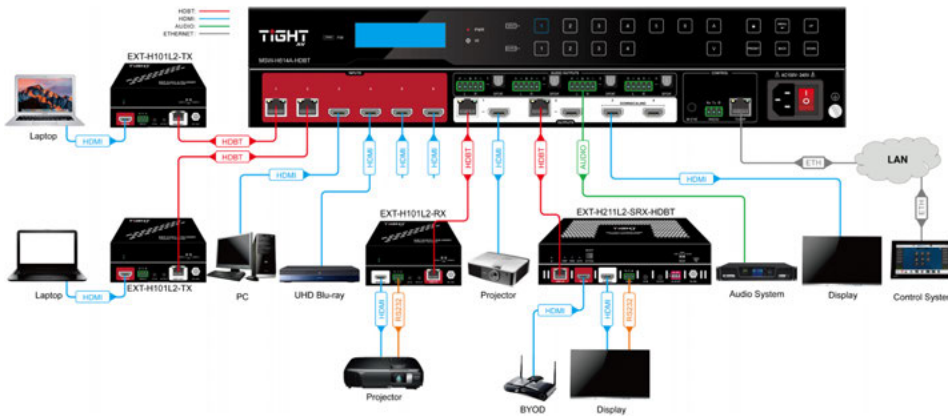
|                    |  |
|--------------------|--|
| Control port:      | (1) IR EYE, (1) RS232, (1) TCP/IP                    |
| Control Connector: | (1) 3.5mm jacks, (1) 3-pin terminal blocks, (1) RJ45 |

## GENERAL

|                              |  |
|------------------------------|--|
| Extension Transmission Mode: | HDBaseT  |
| Transmission Distance:       | 1080p ≤ 230 feet (70 meters), 4K@60Hz ≤ 131 feet (40 meters) |
| Bandwidth:                   | Up to 18Gbps   |
| Operation Temperature:       | -5° ~ +55°   |
| Storage Temperature:         | -25° ~ +70°  |
| Relative Humidity:           | 10% ~ 90%  |
| Power Consumption:           | 115W Max (Fully loaded and powering TX and RX)               |
| External Power Supply:       | 100V~240V AC, 50/60Hz  |
| Dimension (WxHxD):           | 435 mm x 43 mm x 300mm                                       |
| Net Weight:                  | 3.40kg   |
| Shipping Dimension (WxHxD):  | 505 mm x 140 mm x 365 mm                                     |
| Shipping Weight:             | 5.30kg   |
| Compliance:                  | FCC, CE  |
| Environmental:               | RoHS, REACH, WEEE  |

## PACKAGE LIST

|                                   |                               |
|-----------------------------------|-------------------------------|
| 1x MSW-H614A-HDBT Matrix Switcher | 1x RS232 Cable (3-pin to DB9) |
| 2x Mounting Ears with 6 Screws    | 4x 5-pin Terminal Blocks      |
| 4x Plastic Cushions               | 1x EU Power Cord              |
| 1x IR Receiver                    | 1x UK Power Cord              |
| 1x IR Remote                      | 1x User Manual                |



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- Advanced WEB-UI for control and configuration.
- Comprehensive HDCP and EDID management.
- Controllable by front panel, IR, RS232 and TCP/IP.
- Open TIGHT AV API for third-party control.

# TIGHT POLICY

**5**  
YEAR  
LIMITED  
WARRANTY

+

**6**  
MONTH  
ADVANCE  
REPLACEMENT

## Faulty product - minimal down time.

Up until six months after purchase, TIGHT AV will replace your product in advance of return of faulty product.

## Your investment - built to last.

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