

AT-HDR-H2H-44MA
Specification Sheet
HDR 4x4 4K Matrix Switch

Description

The Atlona AT-HDR-H2H-44MA is a 4×4 HDMI matrix switcher for high dynamic range (HDR) formats. It is HDCP 2.2 compliant and supports 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling, as well as HDMI data rates up to 18 Gbps. The AT-HDR-H2H-44MA is ideal for residential applications with the latest as well as emerging 4K/UHD and HDR sources and displays. It is compatible with all video resolutions, audio formats, and color space formats supported in the HDMI 2.0b specification, plus the ability to pass metadata for HDR content. The AT-HDR-H2H-44MA includes EDID and HDCP management features, and can send CEC display control independently to each output. An unbalanced analog audio output is paired with each HDMI input for sending de-embedded HDMI audio to a whole-house audio system. The AT-HDR-H2H-44MA can be controlled via Ethernet, RS-232, and IR.

Applications

Residential installations

- The AT-HDR-H2H-44MA is designed for AV systems with the latest UHD and HDR sources such as Ultra HD Blu-ray players, plus compatible televisions and projectors.

TV showrooms

- The AT-HDR-H2H-44MA can be used for reliable content distribution to televisions, to properly demonstrate the quality and appeal of 4K and HDR programming.

Professional AV applications

- Atlona 4K HDR products are ideal for full-motion, highly detailed 4K graphics presentations for visualization, 3D renderings, simulations, and more.

Key Features

4×4 HDMI matrix switcher

- Delivers high performance, reliable HDMI signal matrix switching.
- Easy to install and deploy in residential and commercial applications.

4K/UHD capability @ 60 Hz with 4:4:4 chroma sampling, plus support for HDR formats

- Compatibility with new and emerging 4K/UHD and HDR-capable sources and displays.
- Fully supports video resolutions, audio formats, and color space formats in the HDMI 2.0b specification.

HDCP 2.2 compliant

- Adheres to latest specification for High-bandwidth Digital Content Protection.
- Allows protected content stream to pass between devices.

Independent CEC display control to each output

- Sends display power on/off control to a specific HDMI output. CEC control can be triggered by IP or RS-232 control commands.
- Enables independent control of displays connected to the matrix switcher.

HDMI audio de-embedding for each input

- Extracts HDMI two-channel PCM audio to an unbalanced analog audio output paired with a corresponding HDMI input.
- Provides an additional integration option for whole-house as well as commercial audio systems.

TCP/IP, RS-232, and IR control

- Flexible control options for compatibility with third-party control systems.
- Reduces integration time and costs.

Specifications

Video	
Signal	Input: HDMI Output: HDMI
UHD/HD/SD	4096×2160@60/50/30/25/24Hz, 3840×2160@60/50/30/25/24Hz, 2048×1080p, 1920×1080p@60/59.94/50/30/29.97/25/24/23.98Hz, 1920×1080i@30/29.97/25Hz, 720p@60/59.94/50Hz, 576p@50Hz, 576i@25Hz, 480p@60/59.94Hz, 480i@30Hz
VESA (all resolutions are 60Hz)	2560×2048, 2560×1600, 2048×1536, 1920×1200, 1680×1050, 1600×1200, 1600×900, 1440×900, 1400×1050, 1366×768, 1360×768, 1280×1024, 1280×800, 1280×768, 1152×864, 1024×768, 800×600
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDR	Up to 4K HDR10 @ 60 Hz and 4K Dolby® Vision™ @ 60 Hz

Audio	
HDMI Pass-Through Formats	PCM 2.0, LPCM 5.1, LPCM 7.1, Dolby® Digital, Dolby Digital Plus™, Dolby TrueHD, Dolby Atmos®, DTS® Digital Surround™, DTS-HD Master Audio™, DTS:X®
Bit Depth	Up to 24-bit
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz

Distance	Feet	Meters
HDMI IN / OUT @ 4K	15	5
HDMI IN / OUT @ 1080p	30	10

Signal	
Bandwidth	18 Gbps
CEC	Yes
HDCP	2.2

Temperature	Fahrenheit	Celsius
Operating	32 to 122	0 to 50
Storage	-40 to 158	-40 to 70
Humidity (RH)	20% to 90%, non-condensing	

Power	
Consumption	34.3 W
Idle Consumption	11.1 W
BTU/h	116.96 (normal) / 37.85 (idle)
Supply	Input: 110 - 240 VAC, 50 / 60 Hz Output: 24V DC, 2.7 A

Dimensions (H × W × D)	Inches	Millimeters
Unit	1.73 × 17.24 × 10	44 × 438 × 254
Unit w/feet/ears	2.18 × 18.93 × 10.23	55.5 × 481 × 260
Power Supply	1.26 × 1.93 × 4.69	32 × 49 × 119
Unit Rack Size	1 RU	

Weight	Pounds	Kilograms
Device	6.10	2.78

Certification	
Power Supply	CE, FCC, UL, and LVD certificates Level VI compliant
Unit	CE, FCC

Compliance	
NDAA-889	Yes
TAA	Yes

Warranty	
Device	To view the product warranty, visit: hallresearch.com/warranty

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