Introduction

The Atlona **AT-HDR-H2H-44M** 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 HDR-H2H-44M is ideal for residential and commerical 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 HDR-H2H-44M includes EDID and HDCP management features, and can send CEC display control independently to each output. A TOSLINK digital audio output is paired with each HDMI output for sending de-embedded HDMI audio to an AV receiver, soundbar, audio matrix, or preamplifier. The HDR-H2H-44M can be controlled via Ethernet, RS-232, and IR. A handheld IR remote control is included.

Applications

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

- **Commerical 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.

Fast, blink-free switching

- Fast input selection switching eliminates video blinking in other zones.
- Eliminates long wait times caused by handshaking and HDCP key validation for an uninterrupted viewing experience in all zones.

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 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 output

- Extracts HDMI two-channel PCM or multi-channel bitstream audio to a TOSLINK digital audio output paired with a corresponding HDMI output.
- Provides an additional integration option for AV receivers and soundbars.
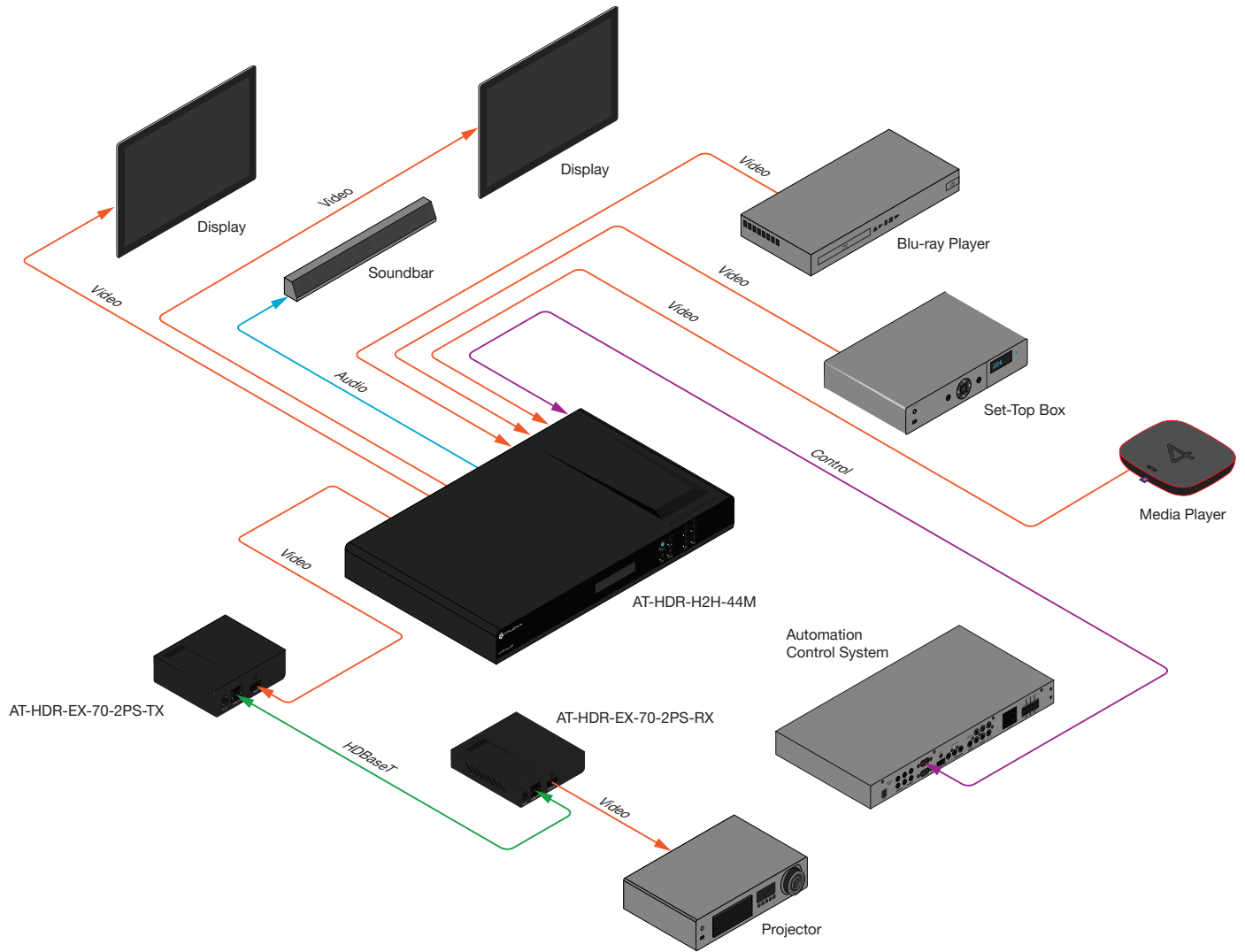
TCP/IP, RS-232, and IR control

- Flexible control options for compatibility with third-party control systems. Includes a convenient handheld IR remote control.
- Reduces integration time and costs.

Award-winning 10 year limited product warranty

- Ensures long-term product reliability and performance in residential and commercial systems.
- Specify, purchase, and install with confidence.

Connection Diagram

Display

Display

Display

Soundbar

Blu-ray Player

Set-Top Box

Media Player

Video

Video

Video

Video

Video

Video

Audio

Control

AT-HDR-H2H-44M

AT-HDR-EX-70-2PS-TX

AT-HDR-EX-70-2PS-RX

Automation
Control System

HDBaseT

Video

Projector

Specifications

Video	
UHD/HD/SD	4096×2160@24/25/30/50/60Hz, 3840×2160@24/25/30/50/60Hz, 2048x1080p, 1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@50/59.94/60Hz, 720p@50/59.94/60Hz, 576p, 576i, 480p, 480i
VESA	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, 1152×768, 1024×768, 800×600
Color Space	YUV, RGB
Chroma Sampling	4:4:4, 4:2:2, 4:2:0
Color Depth	8-bit, 10-bit, 12-bit

Audio	
HDMI IN / OUT	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, DTS® 5.1, Dolby Digital Plus™, Dolby TrueHD, DTS-HD Master Audio™, Dolby Atmos®, DTS:X®
Sample Rate	32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
Bit Rate	up to 24-bit

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	-4 to 140	-20 to 60
Humidity (RH)	20% to 90%, non-condensing	

Power		
Consumption	30 W	
Idle Consumption	2 W	
Supply	Input: 110 - 240 V AC, 50 / 60 Hz Output: 24 V DC, 2.7 A	

Dimensions	Inches	Millimeters
H x W x D	1.73 x 17.24 x 10.00	44.00 x 438.00 x 254.00
H x W x D, w/feet/ears	2.18 x 18.93 x 10.23	55.50 x 481.00 x 260.00
Rack Size	1 RU	

Weight	Pounds	Kilograms
Device	8.81	4

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