

Introduction

The Atlona **AT-HDR-M2C** is an audio converter for extracting and downmixing multi-channel PCM, Dolby, and DTS audio from HDMI sources. It features an HDMI input with pass-through, and delivers stereo downmixed audio over a separate HDMI output, as well as unbalanced analog and TOSLINK digital audio outputs. The HDR-M2C is compatible with high dynamic range (HDR) formats and is HDCP 2.2 compliant. It supports 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling, as well as HDMI data rates up to 18 Gbps. This audio converter includes EDID management features as well as audio volume and bass / treble controls, all available via Ethernet through the Atlona Management System (AMS), the web GUI, or a control system. The HDR-M2C can conveniently serve surround sound and two-channel audio systems from a multi-channel audio source.

The HDR-M2C is ideal for residential and commercial 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 2.0a specification, plus the ability to pass metadata for HDR content. The HDR-M2C includes Atlona's award-winning 10-year limited product warranty and customer support services, so that integrators can specify, purchase, and install with confidence.

Applications

- **Residential and commercial installations**
The HDR-M2C is designed for AV systems with the latest UHD and HDR sources such as Ultra HD Blu-ray players, plus compatible televisions and projectors.
- **Audio compatibility**
The HDR-M2C is ideal for applications requiring playback of multi-channel source content over displays and whole-house audio systems.

Key Features

HDMI audio de-embedding and multichannel audio downmixing

- De-embeds HDMI audio with or without connection to a display or other destination.
- Provides easy integration of HDMI audio sources into whole-house and other audio systems.

Downmixes multi-channel audio to stereo audio

- Extracts, decodes, downmixes, and converts digital multichannel bitstreams to two-channel signals.
- Provides easy integration of HDMI audio sources into whole-house and other audio systems.

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 2.0a specification.

HDCP 2.2 compliant

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

Delivers downmixed audio to HDMI, TOSLINK digital audio, and analog audio outputs

- Provides flexible options for integrating with displays and audio systems.
- Also passes through the HDMI input with no downmixing.

Volume and tone adjustments

- Adjustment of output volume, plus bass and treble settings via AMS and the webGUI.
- Avoids the need for an external DSP to set gain and tone controls.

EDID management

- Manages EDID communications with the source through a display's EDID or internally stored EDID.
- Ensures desired audio formats and video resolutions are provided to the AV system.

Easy, GUI-based configuration using integrated web server

- Offers menu-based configuration of network settings, audio, and EDID management.
- Allows fast configuration of internal product settings and troubleshooting from a mobile device or PC in the field.

Configured and managed by AMS (Atlona Management System)

- This IP-controllable product can be remotely managed by the free Atlona Management System software.
- Integrates product configuration, management, and updates to reduce installation time and enable support over a LAN, WAN, or VPN.
- Greatly streamlines installation and maintenance of several Atlona products throughout a facility or enterprise, from a standard web browser.

Front panel power and signal status LEDs

- LED indicators provide power status and audio format identification.
- Provides easy setup and troubleshooting.

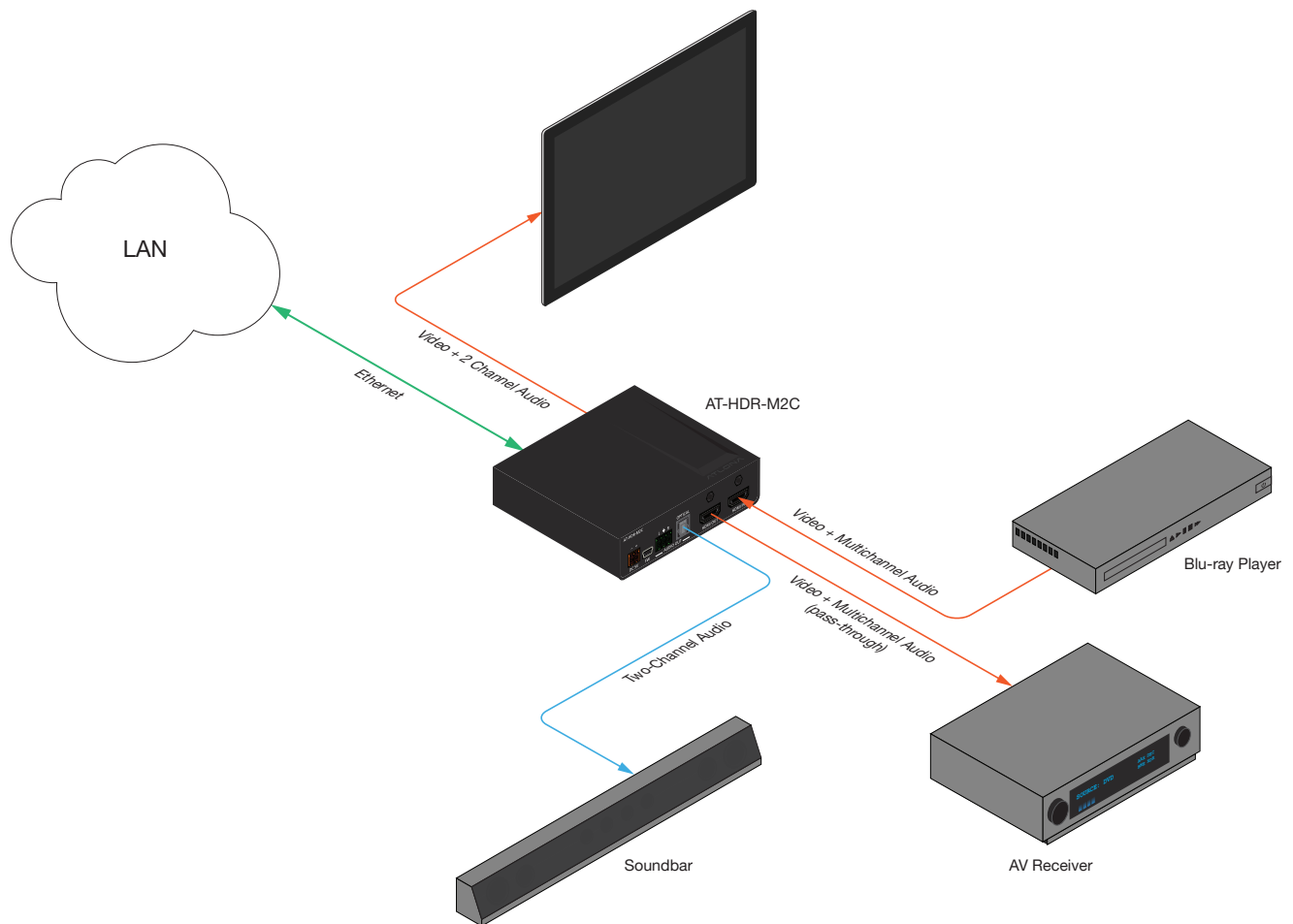
Low-profile, 1 inch (25 mm) high enclosure

- Easy installation into racks and confined spaces.
- Keeps devices out-of-sight when placed in public spaces.

Configured and managed by AMS

- This IP-controllable product is remotely managed by the Atlona Management System software.
- Integrates product configuration, management, and updates to reduce installation time and enable remote support.

Connection Diagram



Specifications

| Video | |
|--------------------|---|
| HD/SD | 4096x2160@24/25/30/50/60Hz, 3840x2160@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 | 1920x1200, 1680x1050, 1600x1200, 1440x900, 1400x1050, 1366x768, 1360x768, 1280x1024, 1280x800, 1152x768, 1024x768, 800x600, 640x480 |
| Color Space | YUV, RGB |
| Chroma Subsampling | 4:4:4, 4:2:2, 4:2:0 |
| Color Depth | 8-bit, 10-bit, 12-bit |

| Audio | |
|-----------------|---|
| Analog Output | PCM 2Ch (de-embedded) |
| Optical Output | PCM 2Ch (de-embedded) |
| HDMI Output | PCM 2Ch, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS 5.1 |
| Sample Rate | 32kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz |
| Bit Rate | up to 24-bit |
| THD+N | < 0.05% @ 1 kHz at maximum level |
| SNR | 110.009 dB |
| Frequency Range | 20 Hz to 20 kHz |
| Bass | +12 dB to -15 dB @ 20 Hz - 20 kHz |
| Treble | +15 dB to -15 dB @ 20 Hz - 20 kHz |

| Resolution / HDMI cable length | 4K / UHD - Feet / Meters | | 1080p - Feet / Meters | |
|--------------------------------|--------------------------|---|-----------------------|----|
| HDMI @ 60 Hz | 6 | 2 | 30 | 10 |
| HDMI UHD @ 24 Hz | 16 | 5 | 50 | 15 |

| Signal | |
|-----------|---------------|
| Bandwidth | 18 Gbps |
| CEC | Not supported |
| HDCP | 2.2-compliant |

| Temperature | Fahrenheit | Celsius |
|---------------|----------------------------|-----------|
| Operating | 32 to 122 | 0 to 50 |
| Storage | -20 to 60 | -4 to 140 |
| Humidity (RH) | 20% to 90%, non-condensing | |

| Power | |
|-------------|--|
| Consumption | 6.6 W |
| Supply | Input: 110 - 220 V AC, 50/60 Hz; Output: 5 V DC, 4 A |

| Dimensions | Inches | Millimeters |
|----------------------|--------------------|----------------|
| H x W x D | 1.02 x 5.00 x 4.29 | 26 x 127 x 109 |
| H x W x D (w / ears) | 1.02 x 5.39 x 4.29 | 26 x 137 x 109 |

| Weight | Pounds | Kilograms |
|--------|--------|-----------|
| Device | 0.8 | 0.36 |

| Certification | Product | Power Supply |
|---------------|---------|--------------------------------|
| Device | CE, FCC | CE, FCC, cULus, RoHS, CCC, RCM |

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