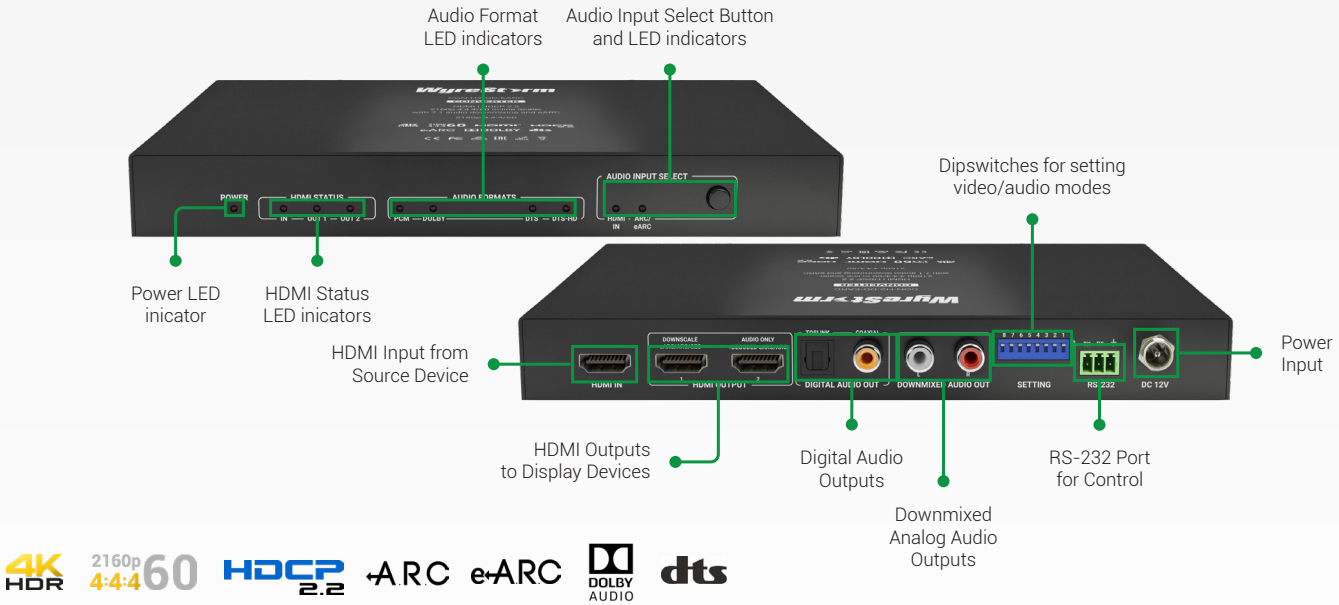
4K/60 In-line HDMI Scaler with DSP-Controlled Audio Breakout, Dolby TrueHD™ & DTS-HD™ Downmixing and eARC Output

CON-H2-DD-EARC

WyreStorm

Specification Sheet



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Introduction

Bringing the latest technology currently only seen on the latest HDMI 2.1 devices the CON-H2-DD-EARC tackles the demands of today's technology head-on and provides a multi-pronged approach to the challenges of the modern residential AV system. It combines a powerful set of features that can both down-mix Dolby TrueHD or DTS-HD audio to stereo and scale incoming 4K UHD content to 1080p. The DSP-controlled stereo audio output allows adjustment of both volume and EQ via a control system and the unit can be customised further by manually controlling the down-mixing to the S/PDIF and HDMI outputs. ARC/eARC breakout of audio from a connected smart TV completes the formidable line-up of this trail-blazing device.

Key Features

- 18Gbps HDMI input supports video content up to 4K/60 4:4:4 and the latest 4K specifications such as HDR10 and Dolby Vision.
- Powerful audio capabilies allows 7.1 Dolby True HD and DTS-HD signals to be downmixed to stereo RCA.
- A built-in DSP allows for the audio level and EQ to be adjusted for the stereo RCA output
- Simultaneous downmixing and audio de-embedding via digital audio outs and stereo RCA.
- Supports audio sampling rates up to 192 KHz
- HDMI Output 1 supports 4K to 2K video scaling with HDR conversion
- Dedicated second audio-only HDMI output for connecting a multi-channel Audio Video Receiver
- Support for ARC (Audio Return Channel) and eARC (Enhanced Audio Return Channel) through HDMI to de-embed or downmix audio from smart display apps such as Netflix, Amazon Prime, etc...
- Manual EDID dipswitches for easy manipulation of audio and video settings
- Manufactured under license from Dolby Laboratories
- RS-232 control port for integration with 3rd-party control systems
- Supports rack mounting up to 12 converters with the NHD-000-RACK4 or mount 2 side-by-side using the NHD-140-RACK-1U
- Front panel audio decoding LEDs for easy signal identification
- Manufactured under license from Dolby Laboratories

In the Box

1x CON-H2-DD-EARC Downmixer/scaler
1x 3-pin Phoenix connector
2x Rack mounting brackets (for NHD-000-RACK4)
1x 12V DC 1A Power Supply with wall adaptors (US/UK/EU/AU)
1x Quickstart guide (this document)

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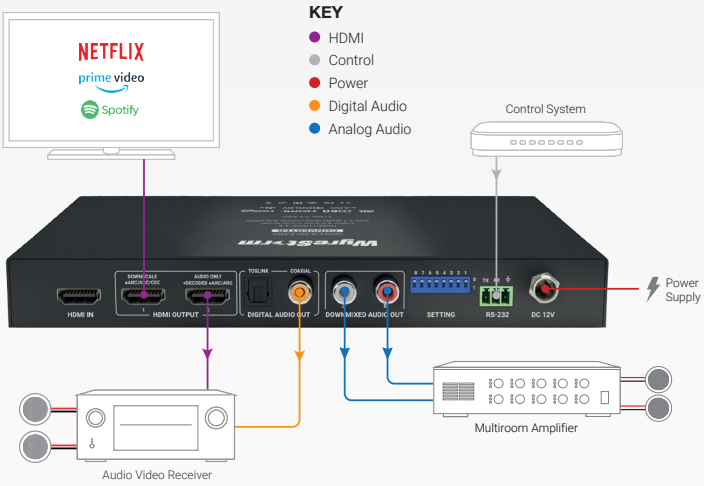
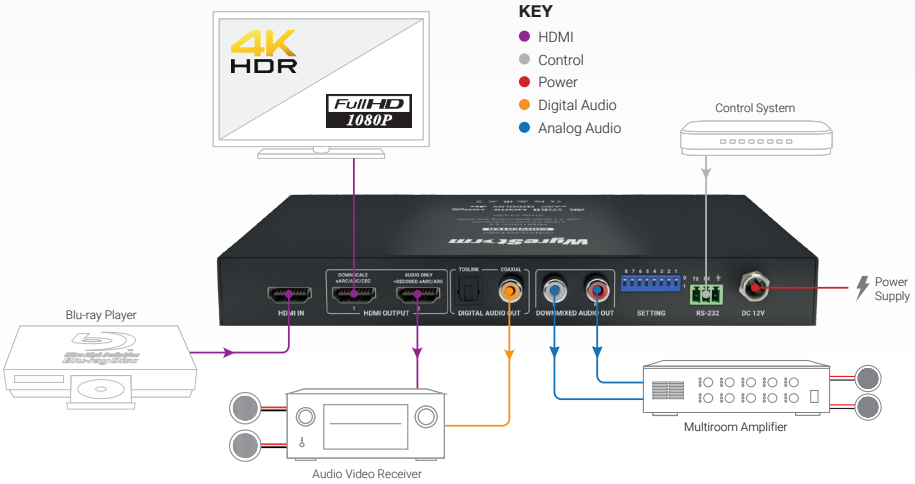
Specifications

Video		
HDMI	v2.0b TMDS	
Inputs	1x HDMI In: 19-pin type A	
Output 1	1x HDMI Out: 19-pin type A Scaling output | 3840x2160p > 1920x1080p only	
Ouput 2 (Audio Only)	1x HDMI Out: 19-pin type A	
Maximum Transmission Bit Rate	17.8Gbps	
Maximum Pixel Clock	HDMI: 600MHz	
Video Resolutions (Max)	**Resolution**	**HDMI**
	1920x1080p @60Hz	15m/49ft
	3840x2160p @60Hz 8bit 4:4:4	3m/10ft
	3840x2160p @60Hz 10bit 4:2:0 HDR	3m/10ft
	3840x2160p @60Hz 12bit 4:2:2 HDR	3m/10ft
Supported Standards	DCI | RGB | HDR | HDR10 | Dolby Vision up to 60Hz | HLG | BT.2020 | BT.2100	
Audio		
Outputs	1x HDMI Out (1): Pass-through or 2ch re-embed 1x HDMI Out (2): Audio Only | eARC to AVR or audio system 1x Audio Out: RCA Stereo | DSP controlled | Volume & EQ adjustment 2x Audio Out: Mirrored S/PDIF (Coaxial & Toslink) | 5.1 bitstream or 2ch downmix	
Audio Formats (Passthrough)	HDMI: 8ch LPCM | Multichannel bitstream up to Dolby Atmos and DTS-X	
Audio Formats (Downmix)	8ch LPCM | Dolby TrueHD™ | DTS Master HD	
Maximum Sampling Rate	192KHz	
Maximum Audio Channels	**Inputs** HDMI 1: 7.1Ch PCM | Dolby True HD | DTS-HD eARC: 7.1Ch PCM | Dolby True HD | DTS-HD	**Outputs** HDMI 2 eARC: 7.1Ch PCM | Dolby True HD | DTS-HD Stereo RCA: 2ch analog Digital S/PDIF: 5.1ch PCM | Dolby Digital | DTS
Enhanced Audio Return Channel (eARC)	Supported From Output 1 only | To Output 2 HDMI, S/PDIF out (maximum 5.1) or stereo RCA downmixed	
Communication and Control		
RS-232	1x RS-232: 3-pin Phoenix | API control	
HDCP	Pass-through, 2.2 Supported	
EDID	Managed	
Consumer Electronics Control (CEC)	ARC/eARC Trigger Only	
Auto Low Latency Mode (ALLM)	Not Supported	
Variable Refresh Rate (VRR)	Not Supported	
Power		
Power Supply	12V DC 1A supplied	
Max Power Consumption	8W	
Environmental		
Operating Temperature	32°F ~ 110°F (0°C ~ 40°C) | 10% ~ 90%, non-condensing	
Storage Temperature	-4°F to ~ 140°F (-20°C ~ +60°C) | 10% ~ 90%, non-condensing	
Maximum BTU	27.2 BTU/hr	
Dimensions and Weight		
Installation	<1UWall mounted | Free standing	
Height	25mm/0.98in	
Width	215mm/8.46in	
Depth	118mm/4.64in	
Weight	0.42kg/0.92lbs	
Regulatory		
Safety and Emission	CE | FCC | RoHS | RCM | EAC	

Right Product for the Right Application.



ARC & eARC mode



Video scaling and audio de-embed/downmix mode

Note: WyreStorm reserves the right to change product specification, appearance or dimensions of this product at any time without prior notice.