

# WYRESTORM EXPRESS™ DOLBY DIGITAL DOWN-MIXER WITH UHD 4K DOWNSCALE AND HD UPSCALE

EXP-CON-4K-DD



## KEY FEATURES:

- Downmix incoming Dolby Digital to stereo PCM audio where required through HDMI output
- Audio breakout of stereo audio
- 4K/30p > 1080/24p Downscale - to enable 1080p screens to view 4K sources through a 4K matrix system
- 1080/24p > 4K/30p Upscale - for connection to 4K screens

UltraHD may have arrived but not every client will ditch their existing HD screens overnight so ability to support a combination of 4K and 1080p HD displays within the same distribution is an important consideration, especially given the resolution conflicts that effect systems including screens of different capabilities.

Placed between a display and a source device, this EXP-CON-4K-DD video scaler and digital audio converter (DAC) is designed to adjust resolution and audio from an incoming HDMI source and scale output to a level compatible with display capabilities.

The EXP-CON-4K-DD represents the ideal solution to the growing challenge of how to simply and reliably accommodate both HD and 4K sources and displays within a multi-zone residential or commercial distribution.

## ADDITIONAL FEATURES & BENEFITS:

- Affordable in-line scaling solution for installations including 4K and HD displays without compromising source resolution
- Supports resolutions up to 4096x2160p @24/25/30Hz
- Full 3D support up to 1080p/24hz
- Supports up to 6 channels (up to 5.1 surround) of audio encoded in Dolby Digital
- Low-latency digital filtering
- Manufactured under license from Dolby Laboratories
- Accepts uncompressed digital audio input signals
- Includes digital interpolation filter
- Auto-samples at frequencies of 32, 44.1 and 48KHz
- Supports audio signals up to 24bit with sampling rates up to 192KHz
- THD+N (Total harmonic distortion plus noise) rating: a-93db
- Switchable input selection for video/audio scaling or signal pass-through
- Equalizes and boosts HDMI signal for longer distance transmissions
- Compact design
- LED power indication

## IN THE BOX

- 1 x EXP-CON-4K-DD WyreStorm Express™ Dolby Digital down-mixer with UHD 4K downscale and HD upscale
- 1 x Manual Insert (Manual Insert and full manual downloadable from wyrestorm.com)
- 1 x 5v DC 1A power adapter

HDMI Cable Performance Guide											EXP-CON-4K-DD
0m	10m	20m	30m	40m	50m	60m	70m	80m	90m	100m	
0ft	32ft	65ft	98ft	131ft	164ft	197ft	230ft	262ft	295ft	328ft	
<span style="color: green;">■</span> 4K Transmission <span style="color: red;">■</span> HD Transmission											

**NOTE: Maximum HDMI transmission distance**  
 Input - 7m/22ft (4K), 10m/33ft (1080p)  
 Output - 7m/22ft (4K), 10m/33ft (1080p)

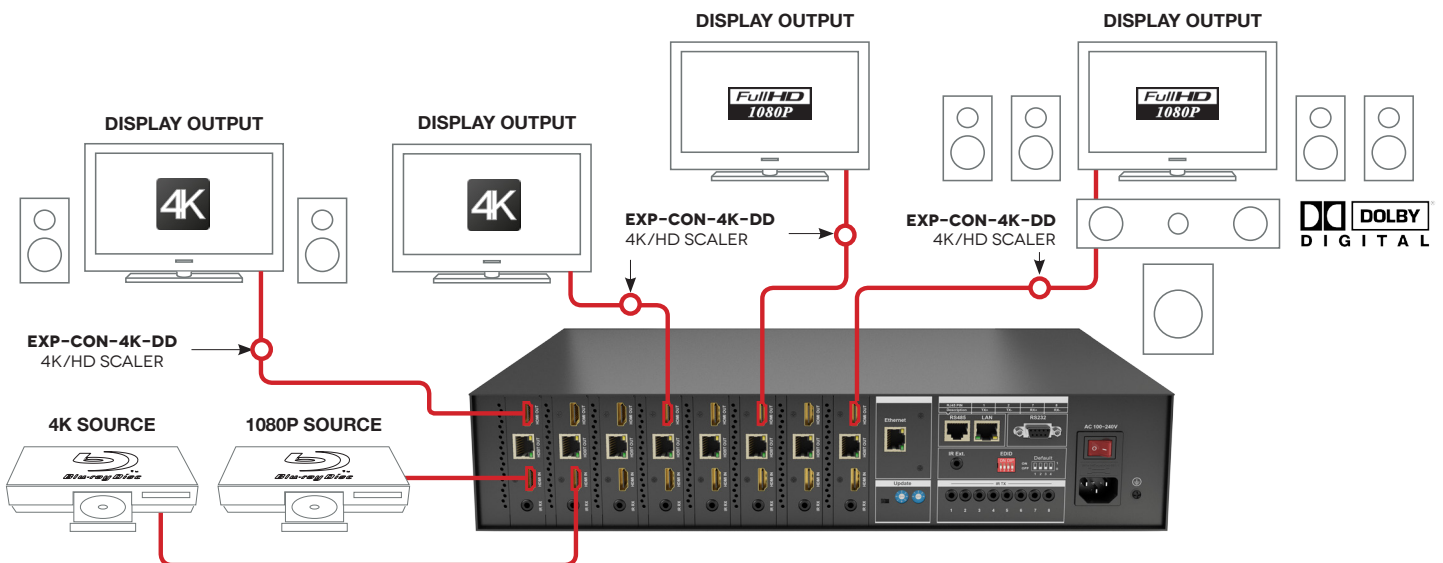


US OFFICE:  
 TEL: +1 901 384 3575  
 FAX: +1 901 384 3574

EMEA OFFICE:  
 TEL: + 44 (0) 1793 230 343  
 FAX: + 44 (0) 1793 230 583

## SPECIFICATIONS

<b>Dimensions (WxHxD):</b>	65mm/2.55" x 23mm/0.9" x 77mm/3.03"
<b>Weight:</b>	105g
<b>Operating Temperature Range:</b>	0 to +35°C (32 to +95°F)
<b>Operating Humidity Range:</b>	5 to 90 % RH (no condensation)
<b>Power Supply:</b>	5v DC / 5W power supply (CE/FCC certified)
<b>Power Consumption:</b>	Max 1Amp @ 5V 5 Watts
<b>Input:</b>	HDMI V1.4a
<b>Max Video Clock Speed:</b>	Input: 300Mhz, Output: 300Mhz
<b>Output:</b>	HDMI V1.4a
<b>Max Video Output Clock Speed:</b>	300Mhz
<b>Video Amplifier Bandwidth:</b>	10.2Gbps
<b>Video Impedance:</b>	100Ω
<b>Input Video Signal:</b>	0.5 - 1.2V p-p
<b>Input DDC Signal:</b>	5 volts p-p (TTL)
<b>Maximum Single Link Range:</b>	2160/30 @ 24bit True Color - 1080/24p @ 36bit Deep Color
<b>Transmission Distance:</b>	Input - 7m/22ft (4K), 10m/33ft (1080p), Output - 7m/22ft (4K), 10m/33ft (1080p)
<b>Max In/Out Resolution Supported:</b>	Up to 4096 x 2160p @ 24/25/30Hz
<b>Color Supported:</b>	4K/24bit, 1080p/36bit
<b>3D Supported:</b>	Up to 1080/24p - Frame packing/sequential (Blu-ray), Interlaced stereoscopic (satellite/cable broadcasts)
<b>Scale Video Up from:</b>	1920x1080p @ 24/25/30Hz to 3840x2160p @ 24/25/30Hz
<b>Scale Video Down from:</b>	4096x2160p @24/25/30Hz to 1920x1080p @ 24/25/30Hz
<b>Additional:</b>	HDMI 2.0 4096 x 2160p 60Hz YCC 4:2:0 format pass-through
<b>Audio Input Format:</b>	5.1 Dolby Digital or 2ch Stereo PCM
<b>Audio Output Format:</b>	Passthrough or 2ch PCM with Downmix selected
<b>ESD Protection:</b>	±8 kV (Air-gap discharge) ±4 kV (Contact discharge)
<b>Surge Protection:</b>	IEC 61000-4-4 (EFT) 40A (5/50ns) IEC 61000-4-5 (Lightning) 25A (8/20μs)
<b>Electrical Fast Transient/Burst:</b>	Data communication cord:1 kV Power cord : 2 kV
<b>Certification:</b>	CE, FCC, RoHS, Dolby Digital



For product installation assistance and troubleshooting, find additional WyreStorm Express product information at [wyrestorm.com](http://wyrestorm.com)

For technical support contact: US: +1 901 384 3575 EMEA: +44 (0) 1793 230 343 EMAIL: [support@wyrestorm.com](mailto:support@wyrestorm.com)