

# DOLBY DIGITAL DOWN-MIXER

## with UHD 4K downscale and HD upscale



### KEY FEATURES

- In line downmix of incoming Dolby Digital to stereo PCM audio over HDMI
- 3.5mm audio breakout
- Downscale 4K/30p > 1080/24p, to enable 1080p screens to view 4K sources through a 4K matrix system
- Upscale 1080/24p > 4K/30p, for connection to 4K screens



Although 4K UltraHD has arrived, not every client will ditch their existing HD screens overnight so the ability to support a combination of 4K and 1080p HD displays within the same distribution is vital, especially when resolution conflicts that effect systems, including screens of different capabilities, are considered.

The P8-HDMIDAC video scaler and digital audio converter (DAC) is designed to be placed between a display and a source device. It adjusts resolution and audio from an incoming HDMI source and scales the output to a level compatible with its display capabilities.

This product is the ideal solution to accommodate both HD and 4K sources and displays within a multi-zone residential or commercial distribution system.

### ADDITIONAL FEATURES

- In-line scaling solution for installations which use both 4K and HD displays without compromising source resolution
- Supports resolutions up to 3840x2160p @24/25/30Hz
- Full 3D support up to 1080p/24hz
- Up to 6 channels of input support (up to 5.1 surround) of audio encoded in Dolby Digital
- Low-latency digital filtering
- 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

# TECHNICAL DATA

<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 Colour - 1080/24p @ 36bit Deep Colour
<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 3840 x 2160p @ 24/25/30Hz
<b>Colour 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>	3840x2160p @24/25/30Hz to 1920x1080p @ 24/25/30Hz
<b>Additional:</b>	HDMI 2.0a 3840 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>	± 8kV (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

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