

# GUIDE

Signal Management



## **HDMI Scaler & Audio Manager**

Product code: SIGNALMANAGER

**SKU** 2.50.795



A versatile HDMI signal management tool offering video downscaling and audio downmixing. Useful in distributed video environments containing a range of differing display resolution capabilities. The downscaling function of the device can be used to always ensure optimal performance of each display. HDMI video scaler: Input supports 18Gbps, 4K, HDR, HDMI 2.0 and HDCP 2.2 content, downscalable to 4K/10G for use on HDMI 1.4 equipment, or 4K/18G to 1080p with matched frame rates. The two HDMI output ports act as follows: HDMI Output 1 = always passes through the unaltered original signal. HDMl Output 2 = can be set to pass through same as HDMl Output 1, or scale down to 4K/1080p @10G and can have downmixed 2ch stereo audio re embedded. Audio connectivity: 5.1 multi channel audio can also be downmixed to 2ch stereo via RCA or TOSLINK optical ports (or re embedded onto HDMI Output 2).

#### **Features**

HDMI splitting, scaling and audio management features.
HDMI® 2.0 (a/b) HDCP 2.2 compliant
18Gbps data rate throughout
Supports all resolutions up to and inc. Ultra HD 4K 60 4:4:4
Supports all current High Dynamic Range (HDR) formats
Supports up to Dolby Atmos passthrough and 5.1 downmixing

Form factor	Lightweight slender aluminium enclosure
Inputs / outputs	1 HDMI to 2 HDMI, 1 L/R RCA, 1 TOSLINK
Transmission tech.	Native HDMI
Video bandwidth	594MHz
ESD protection	± 8kV (air-gap discharge) ± 4kV (contact discharge)
Device / Package weight	125 / 1100 g
Dimensions (W/D/H)	100 / 56 / 16mm
Power	Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Operating temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative humidity	20~90 % RH (non-condensing)
Power consumption	2W
Guarantee	2-year guarantee















# Switcher MAX (4x1)

Product code: SWITCHERMAX41

**SKU** 2.50.816



The 4x1 Switcher MAX is an Ultra HD Premium  $^{TM}$  4x1 HDMI 2.0 switcher with maximum bandwidth capabilities, the ultimate switch option for cinema purists, it supports the full HDMI 2.0 (a/b) 18Gbps max data rate, capable of carrying the most premium UHD/4K 60 4:4:4 content, with all HDR formats (10 & 12-bit), Dolby Vision®, HDR10+ and HLG.

#### **Features**

HDMI® 2.0 (a/b) HDCP 2.2 compliant
18Gbps data rate throughout
Supports all resolutions up to and inc. Ultra HD 4K 60 4:4:4
Supports all current High Dynamic Range (HDR) formats
Supports all current audio formats up to Dolby Atmos® and DTSX®
Built-in equalizer and re-timer

Form factor	Lightweight slender aluminium enclosure
Inputs / outputs	4 HDMI / 1 HDMI
Transmission tech	Native HDMI
Video bandwidth	18GBPS
ESD protection	± 8kV (air-gap discharge) ± 4kV (contact discharge)
Device / Package weight	195g
TX/RX Dimensions (W/D/H)	120.97 / 79.17 / 16mm
Power supply output	DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Operating temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative humidity	20~90 % RH (non-condensing)
Power consumption	1 W
Guarantee	2-year guarantee











# **HDMI Splitter MAX (1x2)**

Product code: SPLITTERMAX12

**SKU** 2.50.793



The 1x2 Splitter MAX is an Ultra HD Premium <sup>™</sup> 1x2 HDMI 2.0 splitter with maximum bandwidth capabilities, the ultimate splitter option for cinema purists, it supports the full HDMI 2.0 (a/b) 18Gbps max data rate, capable of carrying the most premium UHD/4K 60 4:4:4 content, with all HDR formats (10 & 12-bit), Dolby Vision®, HDR10+ and HLG.

#### **Features**

HDMI® 2.0 (a/b) HDCP 2.2 compliant
18Gbps data rate throughout
Advanced EDID management
Supports all resolutions up to and inc. Ultra HD 4K 60 4:4:4
Supports all current High Dynamic Range (HDR) formats
Supports all current audio formats up to Dolby Atmos® and DTS:X®
Bullt-in equalizer and re-timer

Form factor	Lightweight slender aluminium enclosure
Inputs / outputs	1 HDMI / 2 HDMI
Transmission tech.	Native HDMI
Video bandwidth	594MHz
ESD protection	± 8kV (air-gap discharge) ± 4kV (contact discharge)
Device / Package weight	165g
Dimensions (W/D/H)	100 / 56 / 16mm
Power	Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Operating temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative humidity	20~90 % RH (non-condensing)
Power consumption	2 W
Guarantee	2-year guarantee













# **HDMI Splitter MAX (1x4)**

Product code: SPLITTERMAX14

**SKU** 2.50.794



The 1x4 Splitter MAX is an Ultra HD Premium  $^{TM}$  1x4 HDMI 2.0 splitter with maximum bandwidth capabilities, the ultimate splitter option for cinema purists, it supports the full HDMI 2.0 (a/b) 18Gbps max data rate, capable of carrying the most premium UHD/4K 60 4:4:4 content, with all HDR formats (10 & 12-bit), Dolby Vision®, HDR10+ and HLG.

#### **Features**

HDMI® 2.0 (a/b) HDCP 2.2 compliant
18Gbps data rate throughout
Advanced EDID management
Supports all resolutions up to and inc. Ultra HD 4K 60 4:4:4
Supports all current High Dynamic Range (HDR) formats
Supports all current audio formats up to Dolby Atmos® and DTSX®
Bullt-in equaliser and re-timer

Form factor	Lightweight slender aluminium enclosure
Inputs / outputs	1 HDMI / 4 HDMI
Transmission tech.	Native HDMI
Video bandwidth	594MHz
ESD protection	± 8kV (air-gap discharge) ± 4kV (contact discharge)
Device / Package weight	165g
Dimensions (W/D/H)	163 / 63 / 16mm
Power	Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Operating temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative humidity	20~90 % RH (non-condensing)
Power consumption	2 W
Guarantee	2-year guarantee











# ADC - Analog to Digital Converter

**SKU:** 2.50.797



The ADC is a small and simple device that converts 2-channel analog stereo RCA L/R audio to an LPCM digital audio output, on either an S/PDIF optical TOSLINK or coaxial RCA connection.

The ADC enables utilisation of audio devices that don't incorporate a digital audio output with the MHUB AUDIO, via it's two digital auxiliary inputs.

#### **Features**

Plug and play device	
Analog to Digital Converter	
Analog stereo RCA L/R audio input	
S/PDIF optical TOSLINK or coaxial RCA output	
Supports uncompressed 2-channel LPCM digital audio output	
Supports sampling rate at 32, 44.1, 48 and 96 KHz	
Provides electromagnetic noise free transmission	
2-year guarantee	
UK / EU / AU / US multi-territory adapters included	

Form factor	Compact metal enclosure
Inputs / outputs	R/L RCA to TOSLINK and COAX
Transmission	LPCM
Sample rate	32, 44.1, 48 and 96 KHz
ESD protection	± 8kV (air-gap discharge) ± 4kV (contact discharge)
Operating temperature	32°F to 104°F (0°C to 40°C)
Storage temperature	-4°F to 140°F (-20°C to 60°C)
Relative humidity	10~85% RH (non-condensing)
Power consumption	0.5W
Power supply	DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Device weight	65g
Package weight	195g
Dimensions (W/D/H)	50 x 40 x 26 mm
Guarantee	2-year guarantee

# **DAC - Digital to Analog Converter**

**SKU:** 2.50.796



The DAC is a small and simple device that converts a digital audio input via S/PDIF optical TOSLINK or coaxial RCA connection to 2-channel analog stereo RCA L/R audio.

The DAC enables utilisation of audio devices that incorporate a digital audio output with the MHUB AUDIO, via its four stereo analog inputs.

### **Features**

Plug and play device
Digital to Analog Converter
S/PDIF optical TOSLINK or coaxial RCA inputs
Analog stereo RCA L/R audio output
Supports sampling rate at 32, 44.1, 48 and 96 KHz
Provides electromagnetic noise free transmission
2-year guarantee
UK / EU / AU / US multi-territory adapters included

Form factor	Compact metal enclosure
Inputs / outputs	TOSLINK and COAX to R/L RCA
Transmission	LPCM
Sample rate	32, 44.1, 48 and 96 KHz
ESD protection	± 8kV (air-gap discharge) ± 4kV (contact discharge)
Operating temperature	32°F to 104°F (0°C to 40°C)
Storage temperature	-4°F to 140°F (-20°C to 60°C)
Relative humidity	10~85% RH (non-condensing)
Power consumption	0.5W
Power supply	DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Device weight	65g
Package weight	195g
Dimensions (W/D/H)	50 x 40 x 26 mm
Guarantee	2-year guarantee

