

Specifications

Environment	HDMI 2.0b
Devices	DVD/Blu-Ray, plasma, projectors, monitors, TV, PC, laptops, etc.,
Transmission	Transparent to the user
Bandwidth	18 Gbps
Signals	HDMI 2.0b (Up to 4K/60 4:4:4) protocol
Connectors	Two (2) HDMI Type A 19-pin female One (1) RS232 3-Pin Phoenix connector One (1) Mini USB (for firmware updates) One (1) Optical Output S/PDIF One (1) 3.5mm Stereo Mini-jack One (1) 2.1mm locking power connector
Resolutions	Input: from 640x480p @ 60 Hz to 4096x2160@60Hz Output: from 1024x768@60Hz to 3840x2160@60Hz
Color	8, 10 & 12 bit
Audio	<i>HDMI Audio (Pass-through):</i> LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X <i>Optical Audio:</i> LPCM 2CH, LPCM 5.1, Dolby Digital 2/5.1CH, DTS 2/5.1CH <i>L/R Audio:</i> Analog Stereo 2CH
HDCP	HDCP 1.4 & 2.2 compliant
Cable	HDMI cable of appropriate quality and length for video resolution selected
Temperature	Operating: 0° to 40°C Storage: -20 to 60°C Humidity: up to 90% non-condensing
Enclosure	Metal enclosure
Dimensions	4.52" x 3.93" x 0.98 (115mm x 100mm x 25mm)
Weight	1.0 lbs. (0.45 Kg)
Power Supply	12VDC @ 1A with interchangeable blade for US, UK and Euro
Compliance	Regulatory: FCC, CE, RoHS, UL
Warranty	2 years
Order Information	500438 HDMI Video Scaler, 4K/60



HDMI Video Scaler, 4K/60 500438 Installation Guide

Overview

The HDMI Video Scaler, 4K/60 (500438) allows one (1) HDMI source to be distributed to one (1) HDMI display. The scaler supports video sources up to 4096 x 2160 @ 60 Hz, 12 bit color and HD audio. The scaler is able to upscale up to 3840 x 2160 @ 60Hz and downscale to 1024 x 768 @ 60Hz. It is HDCP 2.2 compliant, has audio extraction capability, OSD (On Screen Display) configuration menu, and may be controlled via RS232.

Applications

Applications include; commercial and residential AV systems, classroom projector systems, digital signage, boardroom systems, collaborative PC systems, and medical information systems.

Installation

1. Identify the connectors as indicated in the product. Please refer to the above picture for details.
2. Connect the HDMI video source to the input connector of the HDMI Video Scaler.
3. Connect the HDMI display equipment to the scaled HDMI output connector of the HDMI Video Scaler.
4. Connect the audio output from the unit to the audio system.



2321 Cohen St. Saint-Laurent, QC, Canada. H4R 2N7

Tel: (514) 905-0588 Fax: (514) 905-0589

Toll Free (North America): (877) 689-5228

E-mail: info@muxlab.com URL: www.muxlab.com

5. Connect the 5 VDC power supply to the product first, and then plug the power supply into an AC power outlet. LED must light solid blue.
6. Select the appropriate mode using the front “Resolution” button, options will be displayed on the screen:
 - Auto: Video capability supported by the television.
 - Upscaling: Press the button several times to select the desired upscaled resolution. Then, press the “Enter” button to save it.
 - Downscaling: Press the button several times to select the desired downscaled resolution. Then, press the “Enter” button to save it.

Note: Ensure the selected resolution and frame rate are supported by the monitor display.
7. Configure the EDID and audio mode by selecting the front “EDID” button multiples times to select the desired configuration. Then, press the “Enter” button to save it.
8. Power on the HDMI equipment and verify the image quality.
9. To validate the configuration press the front “Enter” button to activate the OSD. Source, Input and Output information will be displayed on the screen.
10. The following diagram shows the final configuration:



Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions in respect to the installation of the HDMI Video Scaler:

Symptom	Probable Cause	Possible Solutions
No Image	Incorrect wiring No power	Check power connections Validate wiring
No Image	Synchronization	Power off the source and the display Power on these devices
No Image	Resolution not supported	The input signal is out of spec or the display does not support the selected resolution. Try different settings.
Flickering Image	Synchronization	Check HDMI cable length and quality
Choppy sound	Synchronization	Check HDMI cable length
Noise in image	Weak signal	Check HDMI cable length
Green or pink hue	Cable	Check HDMI cable and replace it
Multichannel not working	Display equipment not supporting Multi Channel configuration	Verify that the sink device connected to the HDMI output is supporting Multi-Channel sound configuration.

If you still cannot diagnose the problem, please call MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).