HDMI to HDMI Scaler Box

- # 15405

Operation Manual

CONVERTERS.TV

Introduction

The HDMI to HDMI Scaler is designed to upscale an HDMI video signal from an HDMI source device and output in a wide range of HDTV and PC resolutions up to 1080p/WUXGA. Additionally this unit can also convert a digital/analog audio signal and then simultaneously output to an HDMI, Optical and 3.5mm Mini-jack (L/R audio) connections.

This unit has a comprehensive OSD menu that allows the user to select a variety of output resolutions, allowing the conversion of the video signal to maximize compatibility, and make adjustments to optimize the image quality.

Applications

- Display an otherwise incompatible HDMI signal on an HDMI display
- Upscale a standard definition video signal for display on a High Definition display
- Lecture room/Showroom/Meeting room/Classroom signal display

Features

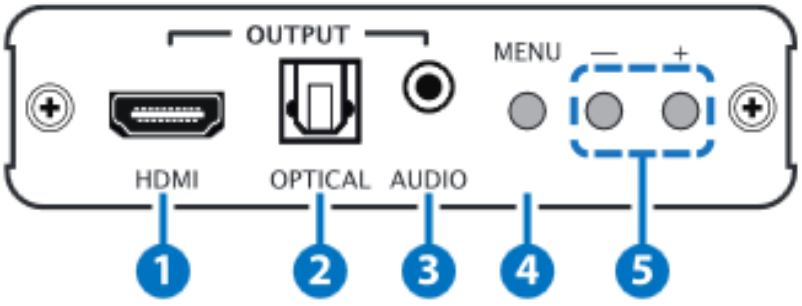
- HDMI, HDCP and DVI compliant
- Supports full range of PC resolution from VGA to WUXGA (RB)and HD resolution from 480i to 1080p
- Automatically detects the display settings of the connected display and outputs the correct resolution and refresh rate when the NATIVE output option is selected
- Supports 50/60Hz frame rate conversion
- Supports 3D motion video adaptive, 3D de-interlacing, and 3:2/2:2 pull-down detection and recovery
- Provides adjustment of contrast, brightness, hue, saturation, sharpness, RGB (color tone) level and aspect ratio size of the video output
- Supports OSD selectable stereo analog and digital audio inputs and simultaneous stereo analog and digital audio outputs to HDMI, Optical digital audio and analog mini-jack connections

System Requirements

HDMI source equipment such as a DVD player or set-top box and an HDMI equipped display and audio amplifier.

Operation Controls and Functions

Front Panel



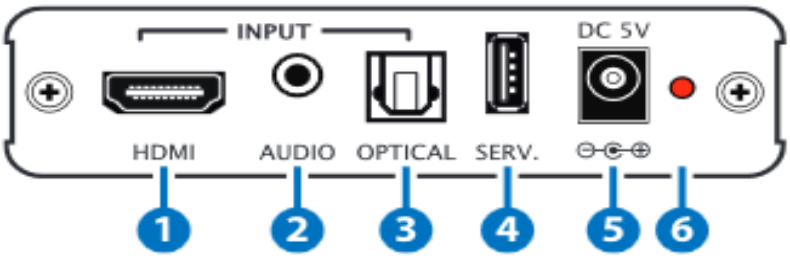
1. HDMI OUTPUT:
Connect to a HDMI equipped display or AV receiver for video and audio output.
2. OPTICAL OUTPUT:
Connect to an amplifier or active speakers with an optical cable for LPCM 2 channel digital audio output.
3. AUDIO OUTPUT:
Connect to an amplifier or active speakers with a 3.5mm mini-jack cable for analog audio output.
4. MENU:
Press this button to enter the OSD (On-screen Display) menu and press it again to make a selection.
5. Plus (+)/Minus (−):
Press these buttons to:
When in the OSD menu

- Navigate up/down the OSD menu.
- To adjust the value of a menu selection.

Under normal operation (outside of OSD menu)

- Press the "+" button together with the "MENU" button to switch the output resolution to XGA@60 (1024×768).
- Press the "-" button together with "MENU" button to switch the output resolution to 720p@60.
- Press both the "+" and "-" buttons at the same time to reset the device to the default settings.

Rear Panel



1. HDMI INPUT:
Connect to an HDMI source device such as a Blu-ray player or set-top box with an HDMI cable or to a DVI source device such as a PC/Laptop with a DVI to HDMI adaptor.
2. AUDIO INPUT:
Connect to the analog audio output of the source device such as a PC/Laptop with a 3.5mm mini-jack cable.
3. OPTICAL INPUT:
Connect to the optical digital audio output of the source device such as DVD/Blu-ray player with an optical cable.
4. SERV.:
Reserved for firmware update only.

5. DC 5V:
Connect the 5V DC power supply to the unit and plug the adaptor into an AC outlet.

6. Power LED:
This LED will illuminate once the unit is connected to an active power supply.

OSD Menu

Main Menu	1st Layer	2nd Layer
Picture Setting	Contrast	0~100 (50)
	Brightness	0~100 (50)
	Exit	
FineTune	Hue	0~100 (50)
	Saturation	0~100 (50)
	Sharpness	0~100 (50)
	NR	OFF, LOW, MIDDLE, HIGH (OFF)
	Exit	
Colour Setting	Red	0~100 (50)
	Geen	0~100 (50)
	Blue	0~100 (50)
	Exit	
Output Setting	Size	FULL, OVERSCAN, UNDERSCAN, LETTER BOX, PANSCAN, ASPECT (FULL)
	Resolution	640×480@60, 800×600@60, 1024×768@60, 1280×1024@60, 1400×1050@60, 1600×1200@60, 1280×800@60, 1440×900@60, 1680×1050@60, 1920×1200@60RB, 1600×900, 480p, 576p, 720p@50, 720p@60, 1080i@50, 1080i@60, 1080p@50, 1080p@60, NATIVE
	Exit	
Audio Setting	Delay	OFF, 40ms, 110ms, 150ms (OFF)
	Input	EMBEDDED, ANALOG, OPTICAL (EMBEDDED)
	Sound	ON, MUTE (ON)

	Exit	
OSD Setting	H-Position	0~100 (10)
	V-Position	0~100 (90)
	Timer	0~100 (50)
	Background	0~100 (50)
	Display	INFO, ON, OFF (INFO)
	Exit	
Factory Reset		
Information		
Exit		

Note: Values in brackets are default for that setting.

Supported Resolutions

Resolution	Input	Output
640×480@60/72/75/85Hz	√	60Hz
800×600@56/60/72/75/85Hz	√	60Hz
1024×768@60/70/75/85Hz	√	60Hz
1280×1024@60/75/85Hz	√	60Hz
1400×1050@60Hz	√	√
1600×1200@60Hz	√	√
1280×800@60Hz	√	√
1440×900@60Hz	√	√
1600×900@60Hz	√	√
1680×1050@60Hz	√	√
1920×1200@60Hz (RB)	√	√
480i/576i	√	√
480p/576p	√	√
720p@50/60Hz	√	√
1080i@50/60Hz	√	√
1080p@50/60Hz	√	√

Specifications

Video Bandwidth	225MHz/6.75Gbps
Input Ports	1×HDMI, 1×3.5mm Mini-jack, 1×Optical (TOSLINK), 1×USB (Service only)
Output Ports	1×HDMI, 1×3.5mm Mini-jack, 1×Optical (TOSLINK)
HDMI Output Resolutions	Up to 1080p & WUXGA@60 (RB)
HDMI and Optical Audio Sampling Rates	Up to 48kHz
Power Supply	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ±8kV (air-gap discharge) ±6kV (contact discharge)
Dimensions	102mm(W)×155.75mm(D)×25mm(H)
Weight	338g
Chassis Material	Aluminum
Color	Black
Operating Temperature	0℃~40℃/32℉~104℉
Storage Temperature	−20℃~60℃/−4℉~140℉
Relative Humidity	20~90% RH (non-condensing)
Power Consumption	5.5W

Connection Diagram