

geratech[®]



EGE-SCA-HD-HD

HDMI to HDMI Scaler



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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
VR0	28/04/16	Preliminary Release

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1. INTRODUCTION

This is a compact yet versatile HDMI to HDMI Scaler Box. It accepts HDMI input with a separate Toslink or analog audio and scale it to HDMI output (at a number of selectable resolutions) with additional Toslink and analog audio output.

This Scaler Box has a comprehensive OSD menu that allows user to select a variety of output resolutions and adjust for best picture quality. It is ideal for using between incompatible HDMI source and display by changing picture resolution and frame rate of HDMI source to match the native resolution of the HDMI display.

2. APPLICATIONS

- Displaying HDMI contents on to HDMI display
- Household HDMI signal enlargement on to HDTV and audio equipment
- Lecture room/Showroom/Meeting room/Classroom signal display

3. PACKAGE CONTENTS

- 1 x HDMI to HDMI Scaler
- 1 x 5 V/2.6 A DC Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

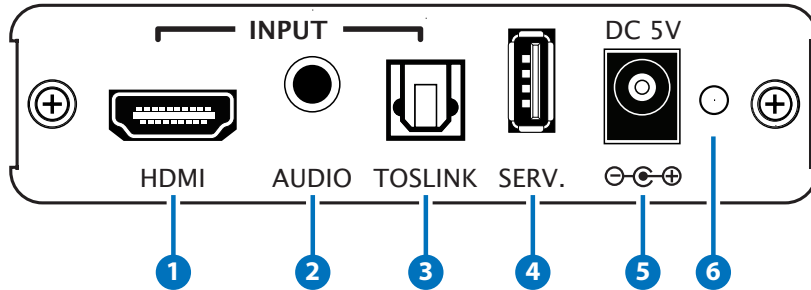
Input source equipment such as DVD/Blu-ray player and output display with HDMI input jack and audio amplifier.

5. FEATURES

- HDMI, HDCP and DVI compliant
- Supports full range of PC resolution from VGA ~ WUXGA (RB) and HD resolution from 480i~1080p
- Automatically detect the factory setting of the connected display and output the corresponding resolution and refresh rate, when the NATIVE output is selected
- Supports 50/60Hz frame rate conversion
- Supports 3-D motion video adaptive, 3-D de-interlacing, and 3:2/2:2 pull-down detection and recovery
- Provides output picture adjustment on contrast, brightness, hue, saturation, sharpness, RGB (color tone) level and aspect ratio size
- Supports stereo LPCM analog/digital audio input and stereo LPCM analog/digital output by selecting among the audio input sources in the OSD menu and simultaneously output to HDMI, Optical and phone jack

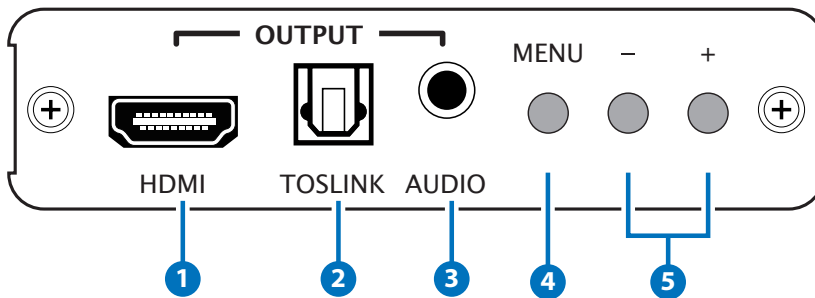
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



- ❶ **HDMI INPUT:** Connect from source equipment such as PS3/Blu-ray player with HDMI cable.
- ❷ **AUDIO INPUT:** Connect from the audio source equipment such as PC/Laptop with 3.5mm phone jack for analog audio signal input.
- ❸ **TOSLINK INPUT:** Connect from the audio source equipment such as DVD/Blu-ray player with optical cable for digital audio signal input.
- ❹ **SERV.:** This port is reserved for firmware update only.
- ❺ **DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.
- ❻ **Power LED:** This LED will illuminate once the device is connected with power supply.

6.2 Rear Panel

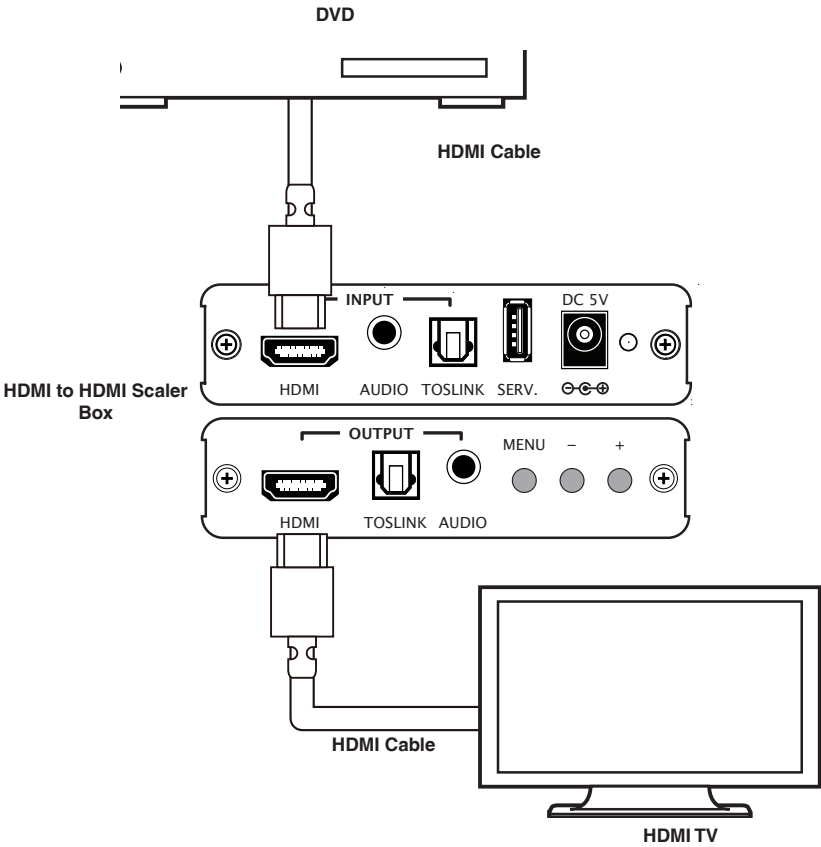


- ❶ **HDMI OUTPUT:** This slot is to connect with HDMI TV/Monitor for output image display.
- ❷ **TOSLINK OUTPUT:** Connect to an amplifier or active speaker with optical cable for audio output.
- ❸ **AUDIO OUTPUT:** Connect to an amplifier or active speaker with 3.5mm phone jack for audio output.
- ❹ **MENU:** Press this button to enter into the OSD menu and press it again to enter into the selection.
- ❺ **+/- button:** Press these buttons to
 - a. move up/down the OSD selection,
 - b. to adjust the value,
 Under normal operation (outside of OSD selection)
 - c. Press “-” together with “MENU” to switch output resolution to 720P@60 instantly,
 - d. Press “+” together with “MENU” to switch output resolution to XGA@60 (1024x768) instantly
 - e. Press both “+” together with “-” to set the device back to factory reset setting.

6.3 OSD Menu

Main Menu	1 st layer	2 nd layer
PICTURE SETTING	CONTRAST	0~100 (50)
	BRIGHTNESS	0~100 (50)
	EXIT	
FINETUEN	HUE	0~100 (50)
	SATURATION	0~100 (50)
	SHARPNESS	0~100 (50)
	NR	OFF/LOW/MIDDLE/HIGH (OFF)
	EXIT	
COLOR SETTING	RED	0~100 (50)
	GREEN	0~100 (50)
	BLUE	0~100 (50)
	EXIT	
OUTPUT SETTING	SIZE	FULL/OVERSCAN/ UNDERSCAN/LETTER BOX/ PANSKAN/ASPECT (FULL)
	RESOLUTION	640x480@60 / 800x600@60 / 1024x768@60 / 1280x1024@60 /1400X1050@60 / 1600x1200@60 / 1280X800@60 / 1440x900@60 /1680x1050@60 / 1920x1200@60RB / 1600X900 / 480P / 576P / 720P@50/ 720P@60 / 1080I@50 / 1080I@60 / 1080P@50 / 1080P@60
	MIRROR	ON/OFF
	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		

7. CONNECTION DIAGRAM



8. SPECIFICATIONS

Video Bandwidth	225MHz / 6.75Gbps
Input ports	1 x HDMI, 1 x 3.5mm Phone Jack, 1 x TOSLINK (Optical), 1 x USB (service only)
Output ports	1x HDMI, 1 x TOSLINK (Optical), 1 x 3.5mm Phone Jack
HDMI output Resolution	Up to 1080p & WUXGA@60 (RB)
Audio Sampling Rate	Up to 48 kHz / TOSLINK & HDMI
ESD Protection	Human body model: ±8kV (air-gap discharge) ±6kV (contact discharge)
Power Supply	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
Dimensions (mm)	102 (W) x 147 (D) x 25(H)/Jack Excluded 102 (W) x 155.75 (D) x 25(H)/Jack Included
Weight (g)	338
Chassis Material	Aluminum
Silkscreen Color	Black
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	5.5W

8.1 Supporting Timing Chart

	INPUT	OUTPUT
640x480@60/72/75/85	V	V@60
800x600@56/60/72/75/85	V	V@60
1024x768@60/70/75/85	V	V@60
1280x1024@60/75/85	V	V@60
1400x1050@60	V	V
1600x1200@60	V	V
1280x800@60	V	V
1440x900@60	V	V
1600x900@60RB	V	V
1680x1050@60	V	V@60
1920x1200@60RB	V	V
480I/576I	V	
480P/576P	V	V
720P@50/60	V	V
1080I@50/60	V	V
1080P@50/60	V	V

9. ACRONYMS

ACRONYM	COMPLETE TERM
HDMI	High-Definition Multimedia Interface
WUXGA (RB)	Widescreen Ultra Extended Graphics Array (Reduce blanking)



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