

SESCOM[®]

SES-AUDIO-N-HDMI

HDMI Audio Inserter

Operation Manual





SAFETY PRECAUTIONS



1. To prevent fire or shock hazard, do not expose this equipment to an environment of high humidity and/or dust. Do not use in an unprotected outdoor installation or any area classified as overly damp or wet.
2. The temperature for installation should be kept between 0°C ~ 60°C. Avoid direct sunlight exposure or extreme changes of temperature over a short period of time.
3. Do not disassemble the unit or put it on an unstable base
4. Do not drop it and avoid heavy impact.
5. Ventilation: Any openings in the enclosure are provided for ventilation and to ensure reliable operation of the unit and to protect it from overheating. These openings, if any, must not be blocked or covered. This unit should not be placed in a built-in installation unless proper ventilation is provided.
6. Cleaning: Unplug the unit from the mains outlet before cleaning. Do not use liquid cleaners or aerosol cleaners, only use a damp cloth.
7. Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
8. Enclosure Entry of any kind is dangerous. Never push objects of any kind, including liquids, into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
9. Service: Do not attempt to open or service this unit yourself as opening or removing covers may expose you to dangerous voltage of other hazards.
10. There are no user-serviceable parts inside the unit. If the unit requires service please contact your authorized dealer, or an authorized repair service company.

CONTENTS

1. Introduction	1
2. Applications	1
3. Package Contents	1
4. System Requirements	1
5. Features	1
6. Operation Controls and Functions	2
6.1 Top Panel	2
6.2 Right Panel	2
6.3 Left Panel	3
6.4 Front Panel	3
6.5 Rear Panel	3
7. Connection Diagram	4
8. Specifications	5
9. Acronyms	6

1. INTRODUCTION

The HDMI Audio Inserter lets you insert an external audio signal into your HDMI or DVI signal path. The unit allows you to insert stereo and multi-channel surround sound signals to give users the capability to select audio formats while extending your HDMI signal.

Please note that this unit requires that the incoming HDMI signal contain existing embedded audio to embed new audio over. It will not function properly if no audio is present on the incoming HDMI signal.

2. APPLICATIONS

- Embeds external audio into HDMI signal
- Integrates audio and DVI video to HDMI signal output
- Replaces audio in the original HDMI signal by other input sources

3. PACKAGE CONTENTS

- HDMI Audio Inserter
- 5 V/1 A Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

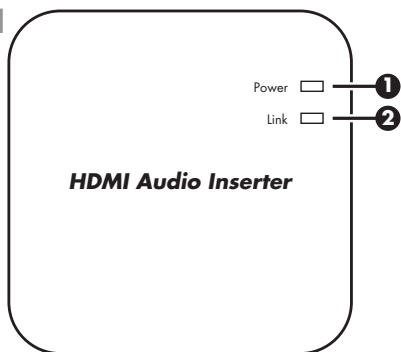
Source equipment such as PC/Laptop or DVD player with connection cables and HD monitor or LCD TV with HDMI cables.

5. FEATURES

- Compliant with HDMI, HDCP 1.2 and DVI 1.0
- Supports HDMI audio sampling rates up to 192 kHz
- Supports Optical S/PDIF audio sampling rate up to 48 kHz
- Supports TMDS clock frequency up to 225 MHz
- Supports high-bit-rate (HBR) audio
- HDMI cable distance tested with 1080p at 8-bit or 12-bit resolution, the input and output can run up to 15 meters (8-bit) or 10 meters (12-bit)
- Low power consumption
- Supports 3D signal

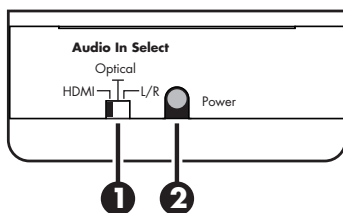
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Top Panel



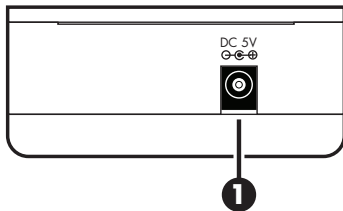
- ❶ **Power LED:** The LED will illuminate in blue when the unit is connected to the power supply and switched on.
- ❷ **Link LED:** The LED will illuminate in green when both the source and the display are connected and have established a link. This LED will also blink once while the power is turned on.

6.2 Right Panel



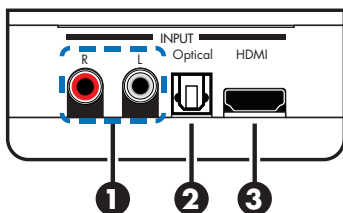
- ❶ **Audio In Select:** Allows users to select among 3 different audio input options. Switch among the original HDMI audio, Digital Audio (Optical) and Analog Stereo (L/R).
- ❷ **Power:** Switches the unit ON or puts the device into STANDBY mode.

6.3 Left Panel



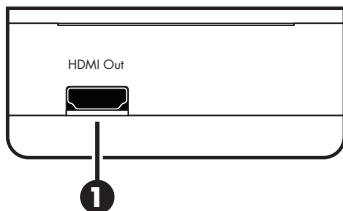
- 1 **DC 5V:** Connect the 5V DC power supply into the unit and plug the adaptor to an AC wall outlet.

6.4 Front Panel



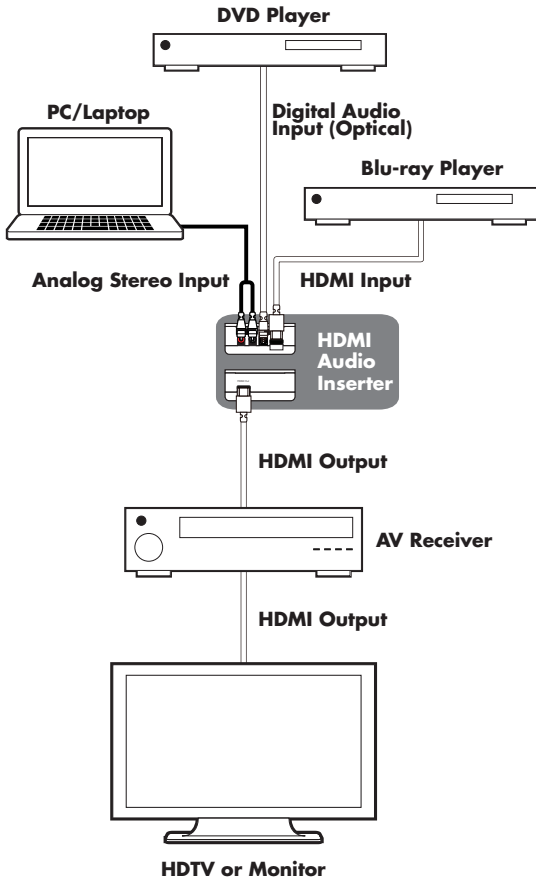
- 1 **R/L Input:** Connect to the audio source equipment such as a PC/ Laptop or an Hi-Fi equipment with RCA cables.
- 2 **Optical Input :** Connect to the audio source equipment such as a CD player or an Hi-Fi equipment with an optical cable.
- 3 **HDMI Input:** Connect to the audio/video source such as a DVD/ Blu-ray player with an HDMI cable.

6.5 Rear Panel



- 1 **HDMI Out:** Connect to an HDMI display (LCD TV or HD monitor) or AV Receiver to output both video and audio with an HDMI cable.

7. CONNECTION DIAGRAM



8. SPECIFICATIONS

Input Ports	1xHDMI, 1xOptical (Digital Audio), 1xL/R (Analog Audio)
HDMI Audio Sampling Rate	Up to 192 kHz
Optical Audio Sampling Rate	Up to 48 kHz
Output Port	1xHDMI
HDMI Cable I/O Distance	10 meter, 1080p@12-bit 15 meter, 1080p@8-bit
HDMI Audio Format	LPCM 2/5.1/7.1, Dolby 5.1, DTS 5.1, Dolby Digital+, Dolby TrueHD & DTSHD Master Audio
Optical Audio Format	LPCM 2, Dolby Digital & DTS Digital Audio 5.1
Power Supply	5 V/1 A linear power adaptor (US/EU Standards, CE/FCC/UL Certified) or 5 V/1.2 A switching power adaptor (with universal plug, CE/FCC/UL certified)
ESD Protection	Human body model: ±8kV (air-gap discharge) ±6kV (contact discharge)
Dimensions	90.7 mm (W)x85.8 mm (D)x34 mm (H)
Weight	107 g
Chassis Material	Plastic
Silkscreen Color	White Letters on 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	2.7 W

9. ACRONYMS

ACRONYM	COMPLETE TERM
DVI	Digital Visual Interface
HDCP	High-bandwidth Digital content protection
HDMI	High Definition Multimedia Interface

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