



# CLUX-11SA

HDMI Audio Repeater



## Operation Manual





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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
VS1	03/04/13	First Release



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## 1. INTRODUCTION

This is the most advanced solution for HDMI to HDMI repeater with Audio decoder. This is compatible with HDMI specifications, a cutting edge technology which defines to transfer Deep Color (12-bit/color) video with a high bandwidth up to 225 MHz. The HDMI Distribution Amplifier also does signal amplification and equalization output that can be connected with other HDMI to HDMI units for repeater function. The HDMI output supports digital audio formats LPCM 2CH to 7.1CH, Dolby TrueHD, Dolby Digital Plus, and DTS-HD Master Audio. The Optical output supports digital audio formats LPCM 2CH, Dolby Digital 2CH to 5.1CH, and DTS 2CH to 5.1CH. The multi-channel phone jack outputs support analog audio from 2CH to 7.1CH converted from the input LPCM signal.

## 2. APPLICATIONS

- De-embedded HDMI digital audio to optical digital or analog outputs
- De-embed HDMI multi-channel audio for use with non-HDMI equipped devices such as an AV Receiver
- Extend the operating distance of an HDMI connection

## 3. PACKAGE CONTENTS

- HDMI Audio Repeater
- 5 V/2.6 A DC Power Adaptor
- Operation Manual

## 4. SYSTEM REQUIREMENTS

Input source devices such as DVD or Blu-ray players with HDMI cables and output displays such as HDTVs and monitors with HDMI ports.

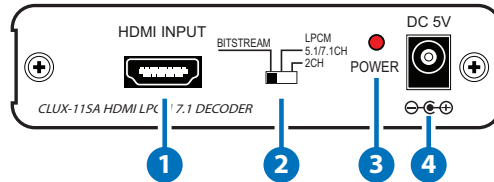
## 5. FEATURES

- HDMI, HDCP 1.1 and DVI 1.0 compliant
- Supports digital video formats in Deep Color Mode from 25 MHz to 225 MHz for 36-bit (12-bit/color)
- Supports high definition input up to 1080p@60 Hz/24-bit, output resolution follows input
- Supports HDMI signal amplification and equalization output for repeater function
- Supports uncompressed digital LPCM 2/5.1/7.1 channels and compressed digital Bitstream (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) through HDMI input and output ports
- Supports digital Dolby 2/5.1 and LPCM 2 channels output through optical audio output port
- Supports LPCM 2/5.1/7.1 signal converted to analog signal and output through multi-channel output ports
- Integrated HDCP encryption for transmitting protected audio and video content
- Supports CEC bypass
- Supports HDMI cable distances up to 20 meters at 1080p (8-bit) and 15 meters at 1080p (12-bit) resolution for the input and 15 meters at 1080p (8-bit) or 10 meters at 1080p (12-bit) resolution for the output



## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



**1 HDMI INPUT:** Connect the HDMI input port to the HDMI output port of your source equipment such as a DVD player or Set-top Box.

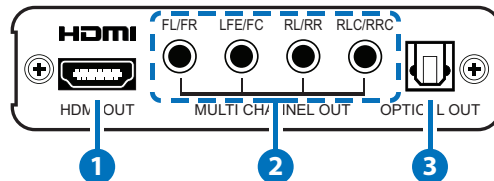
**2 AUDIO Output Switch:** Switch among Bitstream/LPCM 7.1/5.1 or LPCM 2 channels.

*Note: When switch to other audio mode, the display will disappear for a few seconds. This is normal phenomenon for the system.*

**3 POWER LED:** The LED will illuminate when the power is connected.

**4 DC 5V:** Plug the 5VDC power supply into the unit and connect the adaptor to AC wall outlet.

### 6.2 Rear Panel



**1 HDMI OUT:** Connect the HDMI output port to the HDMI input port of your display or AV receiver.

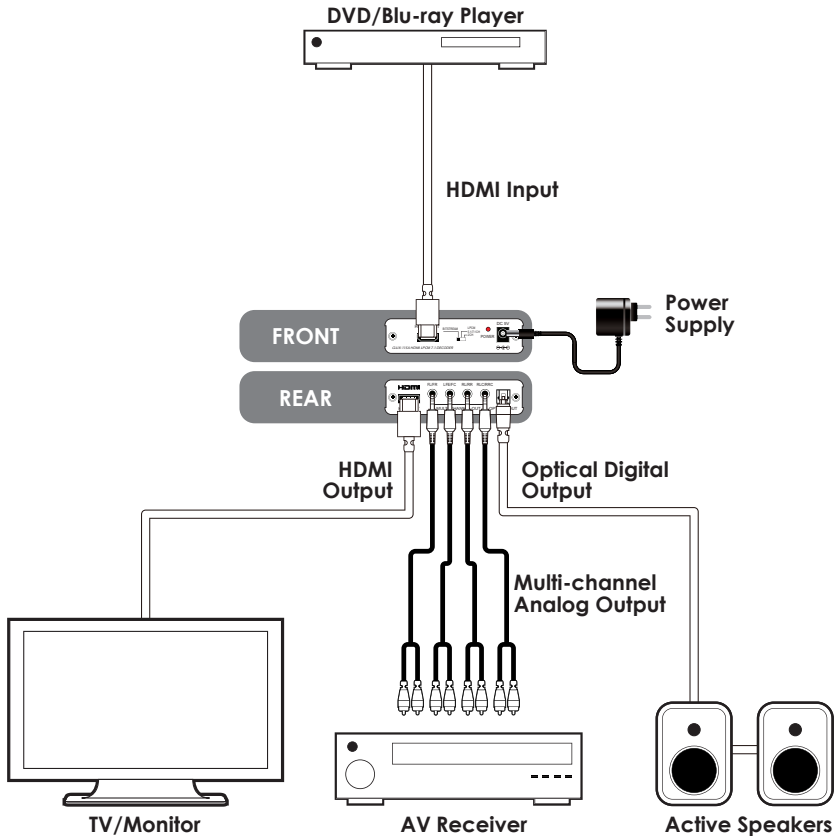
**2 MULTI CHANNEL OUT:** Connect the audio channel output to the input of your amplifier equipment or surround sound speakers, following below channel configuration.

- **FL/FR:** Front Left and Front Right
- **LFE/FC:** Low Frequency Effect and Front Center
- **RL/RR:** Rear Left and Rear Right
- **RLC/RRC:** Rear Left Center and Rear Right Center

**3 OPTICAL OUT:** Connect Optical output to the display audio input or audio equipment.



## 7. CONNECTION DIAGRAM





## 8. SPECIFICATIONS

<b>Input Port</b>	1×HDMI
<b>Output Ports</b>	1×HDMI, 4×3.5 mm Mini-jack, 1×Optical
<b>HDMI Audio Format</b>	LPCM 2/5.1/7.1 CH & Bitstream (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio)
<b>Multi-channel Audio Format</b>	Analog audio of 2/5.1/7.1 channels
<b>Optical Audio Format</b>	Dolby 2/5.1 CH & LPCM 2 CH
<b>Power Supply</b>	5 V/2.6 A DC (US/EU standards, CE/FCC/UL certified)
<b>Dimensions</b>	100 mm (W)×147 mm (D)×25 mm (H)
<b>Weight</b>	300 g
<b>Chassis Material</b>	Aluminum
<b>Silkscreen Color</b>	Black
<b>Operating Temperature</b>	0 °C~40 °C / 32 °F ~ 104 °F
<b>Storage temperature</b>	-20 °C~60 °C / -4 °F ~ 140 °F
<b>Relative Humidity</b>	20~90 % RH (no condensation)
<b>Power Consumption</b>	6 W

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
CEC	Consumer Electronics Control
DVI	Digital Visual Interface
HDCP	High-bandwidth Digital content protection
HDMI	High-Definition Multimedia Interface
LPCM	Linear pulse-code modulation





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