

# **CLUX-11HB** L/R & Optical Audio to HDMI Bridge



# **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 to 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
VRO	25/07/13	Preliminary Release
VS1	12/06/13	Updated format/diagrams



## 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 Front Panel	2
6.2 Rear Panel	3
7. Connection Diagram	4
8. Specifications	5
9. Acronyms	6



## **1. INTRODUCTION**

The L/R and Optical Audio to HDMI Bridge is designed to convert analog or digital audio signals into an HDMI output, allowing easy integration of audio only sources with HDMI distribution systems. This device adds a 'blue-screen' video feed with a simple on-screen display (OSD) that shows the current audio input so that any HDMI AV Receiver, display or matrix will accept the audio signal. It supports digital audio sampling rates up to 192 kHz and stereo analog audio sampling rates up to 48 kHz.

## 2. APPLICATIONS

- Analog or Optical Digital audio conversion to HDMI output
- Integrate an analog audio only source into a HDMI matrix or HDTV
- Audio only source to HDMI integration

## **3. PACKAGE CONTENTS**

- 1× L/R & Optical Audio to HDMI Bridge
- 1×5V DC Power Adaptor
- Operation Manual

## **4. SYSTEM REQUIREMENTS**

Audio source equipment with Analog or Optical digital audio output such as a digital radio or audio streaming device and connect to HDMI devices such as TV/Display or HDMI matrix.

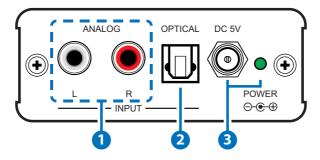
## **5. FEATURES**

- Supports Analog to Digital audio Conversion (ADC)
- Supports Optical audio sampling rate 32 kHz to 192 kHz and LPCM 2CH
- Supports analog (L/R) audio sampling rate of 48 kHz
- Plug and play, with no software required



## 6. OPERATION CONTROLS AND FUNCTIONS

#### 6.1 Front Panel



#### 1 ANALOG L/R INPUT

Connect to an audio source with analog (L/R) output with RCA cables.

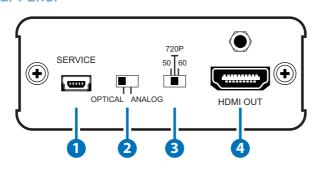
#### **2** OPTICAL INPUT

Connect from audio source equipment with optical output with an optical cable.

#### 3 DC 5V and POWER LED

Connect the 5V DC power supply to the unit and plug the adaptor into an AC outlet. The LED will illuminate when the device is connected to an active power supply.





#### **1** SERVICE

Reserved for manufacturer use only.

#### **2** OPTICAL/ANALOG Switch

Switch to select between Optical or Analog L/R inputs.

#### 3 720p 50/60 Switch

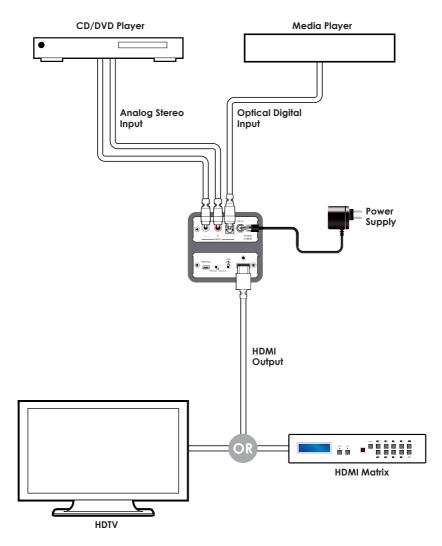
Switch to select the 'blue screen' image output at either 720p/50 or 720p/60. The OSD will display current input audio and resolution settings for 15 seconds.

#### 4 HDMI OUT

Connect to an HDMI equipped device such as an HDMI matrix, switcher or HDTV/display. Audio sampling rates supported: Optical up to 192kHz or Analog up to 48kHz.



## 7. CONNECTION DIAGRAM





## 8.1 Technical Specifications

Input Ports	1×L/R (Analog Stereo 2RCA), 1×Optical
Output Port	1×HDMI
Input Audio Sampling Rate	32~192 kHz (Optical)
Output Audio Sampling Rate	48 kHz (Analog Stereo) 32~192 kHz (Optical)
ESD Protection	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
Power Supply	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	78.5mm (W)×95.5mm (D)×30mm (H)
Weight	170g
Chassis Material	Aluminum
Color	Black
<b>Operating Temperature</b>	0 °C~40 °C/32 °F~104 °F
Storage Temperature	−20 °C~60 °C/−4 °F~140 °F
<b>Relative Humidity</b>	20 ~ 90 % RH (non-condensing)
Power Consumption	2.6W



#### 8.3 Input Audio to Output Audio Chart

AUDIO INPUT	INPUT FORMAT	HDMI AUDIO OUTPUT	
Analog L/R	Analog 2CH	LPCM 2CH	
OPTICAL	LPCM 2CH	LPCM 2CH	
	Dolby Digital/DTS	Bypass	

## 8.2 Audio Specifications

INPUT	OUTPUT	OUTPUT LEVEL	T.H.D+N	FREQUENCY RESPONSE	SNR	CROSS- TALK
OPTICAL OdBFS 1 kHz/32 kHz ~192 kHz	HDMI	2 Vrms ±10	<0.01%	±1 dBFS	>80 dB	<-80 dB
LINE 2Vrms/1 kHz	HDMI	2 Vrms ±0.1	<0.01%	±1 dBFS	>80 dB	<-80 dB

## 9. ACRONYMS

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

