

# CHDBX-1CL HDBaseT<sup>TM</sup> Lite 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
VR0	04/01/13	Preliminary Release
VS1	24/06/13	Updated Format/Diagrams



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#### 1. INTRODUCTION

This HDBaseT<sup>TM</sup> Repeater allows HDBaseT Lite systems to be extended and cascaded. The model supports the highest quality of uncompressed high-definition HD video up to 4K×2K (Ultra HD), up to 8 channels of uncompressed multi-channel audio, RS-232 and IR control systems, complete HDBaseT 3Play convergence with just a simple connection over a single CAT5e/6/7 cable.

## 2. APPLICATIONS

- HDBaseT Lite signal extension up to 60m (up to 120m with additional optional Repeater unit), 180m (1080p) in total (cascaded 3 times)
- Extending a zone's output range
- Cascading HDBaseT Lite equipment

#### 3. PACKAGE CONTENTS

- HDBaseT Lite Repeater
- 24 V/1.25 A Power Adaptor
- Operation Manual

#### 4. SYSTEM REQUIREMENTS

HDBaseT Lite Transmitter and HDBaseT Lite Receiver with CAT5e/6/7 connection cables.



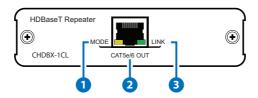
#### 5. FEATURES

- HDMI, DVI and HDCP compliant
- Supports 3D over HDMI and 4k×2k (Ultra HD) resolution
- Supports CEC bypass
- Doubles up the distance of HDBaseT transmission between HDBaseT Lite transmitter and receiver, with a single repeater. The transmission distance can be added up 60 meters for every additional repeaters up to 3 tiers
- Uncompressed video support up to 1080p@60Hz/36-bit and 4k×2K (Ultra HD)
- Audio support up to LPCM 7.1CH, Dolby TrueHD and DTS-HD Master Audio
- 3Play Convergence: Full uncompressed HD Video, Audio and Controls (IR and RS-232) over a single CAT5e/6/7 cable
- Installation friendly



# 6. OPERATION CONTROLS AND FUNCTIONS

# **6.1 Front Panel**



## 1 MODE LED

The yellow LED will flash when the unit is powered or when an active receiver is connected.

## 2 CAT5e/6 OUT

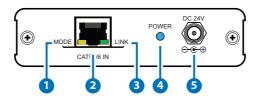
Connect to the receiver unit with a single CAT5e/6/7 cable (up to 60m).

# 3 LINK LED

The green LED will illuminate when output is connected to an active receiver. The LED will flash if there is a problem with the connection.



#### 6.2 Rear Panel



#### 1 MODE LED

The yellow LED will flash when the unit is powered or when an active transmitter is connected.

# 2 CAT5e/6 IN

Connect to the transmitter unit with a single CAT5e/6/7 cable (up to 60m).

## 3 LINK LED

The green LED will illuminate when output is connected to an active transmitter. The LED will flash if there is a problem with the connection.

#### 4 POWER

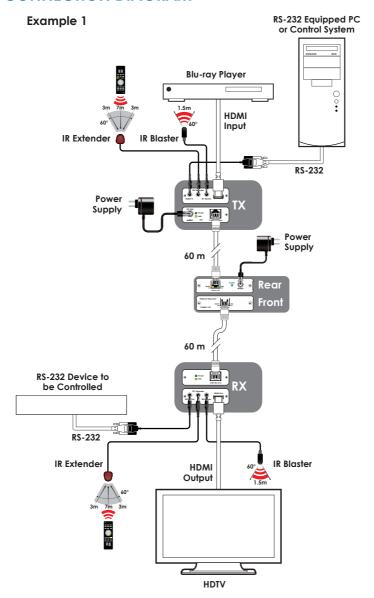
The LED will illuminate blue when the unit is connected to a power supply.

# **5** DC 24V

Connect the 24V DC power adaptor included in the package to the unit and plug it into an AC outlet.

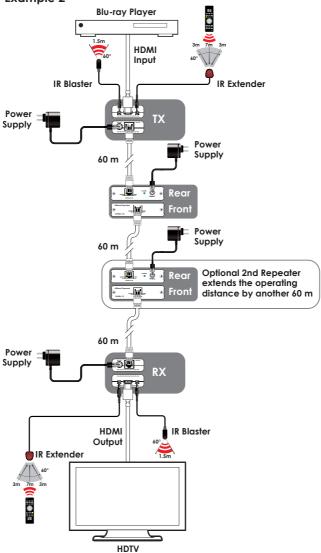


# 7. CONNECTION DIAGRAM





# Example 2





# 8. SPECIFICATIONS

**Video Bandwidth** 300 MHz/10.2 Gbps

 Input Port
 1×CAT5e/6/7

 Output Port
 1×CAT5e/6/7

**Resolution Support** 480i~1080p@50/60, 1080p@24, 4k×2K

CAT5e/6 In/Out Distance Up to 60/60 meters

**Power Supply** 24 V/1.25 A DC (US/EU Standards, CE/

FCC/UL certified)

**Dimensions** 102 mm (W)×145 mm (D)×25 mm (H)

Weight 324 g
Chassis Material Metal
Silkscreen Color Silver

Operating Temperature  $0 \, ^{\circ}\text{C} \sim 40 \, ^{\circ}\text{C}/32 \, ^{\circ}\text{C} \sim 104 \, ^{\circ}\text{C}$ Storage Temperature  $-20 \, ^{\circ}\text{C} \sim 60 \, ^{\circ}\text{C} / -4 \, ^{\circ}\text{F} \sim 140 \, ^{\circ}\text{F}$ Relative Humidity  $20 \sim 90 \, ^{\circ}\text{RH}$  (non-condensing)

Power Consumption 16.2 W

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
CAT5e	Category 5 Cable
CAT6	Category 6 Cable
CAT7	Category 7 Cable
CEC	Consumer Electronics Control
HDCP	High-bandwidth Digital Content Protection
HDMI	High Definition Multimedia Interface
PoE	Power over Ethernet

