HDMI HDBaseT CAT5e/6/7 Repeater - ID# 15112

Operation Manual

CONVERTERS.TV

Introduction

This HDBaseT™ 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, PoE and Ethernet, complete HDBaseT 5Play™ convergence with just a simple connection over a single CAT5e/6/7 cable.

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 transmitter and receiver, with a single repeater
- 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
- 5Play™ Convergence: Full uncompressed HD Video, Audio, Ethernet, Power and Controls (IR and RS-232) over a single CAT5e/6/7 cable
- Powered by transmitter without power supply connection (PoE)
- Installation friendly

Note: *The PoE function can power this repeater so it requires no external power supply connection. When the repeater has its own external power supply connection, the power from the transmitter unit can be used to power a receiver unit connected to the repeater, but that receiver has to be PoE-enabled and compatible with both the transmitter and the repeater.*

Applications

- HDBaseT signal extension up to 200m (300m with additional Repeater unit)
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- Cascading HDBaseT Matrixes
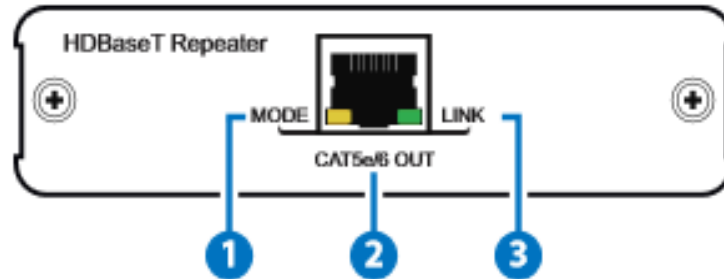- Cascading HDBaseT equipment

System Requirements

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

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Front Panel

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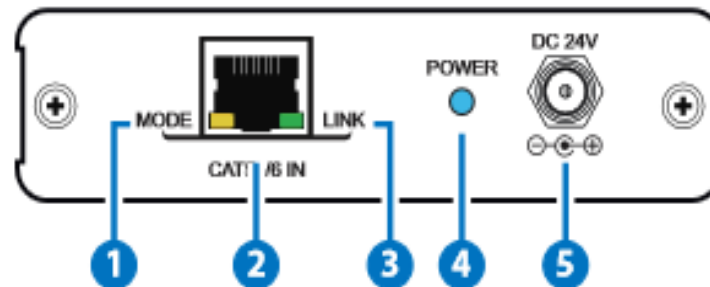The yellow LED will flash when the unit is powered or when an active receiver is connected.

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.

Back 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.

Note: This device can be powered without the power adaptor when a PoE (Power over Ethernet) enabled active transmitter connected to the
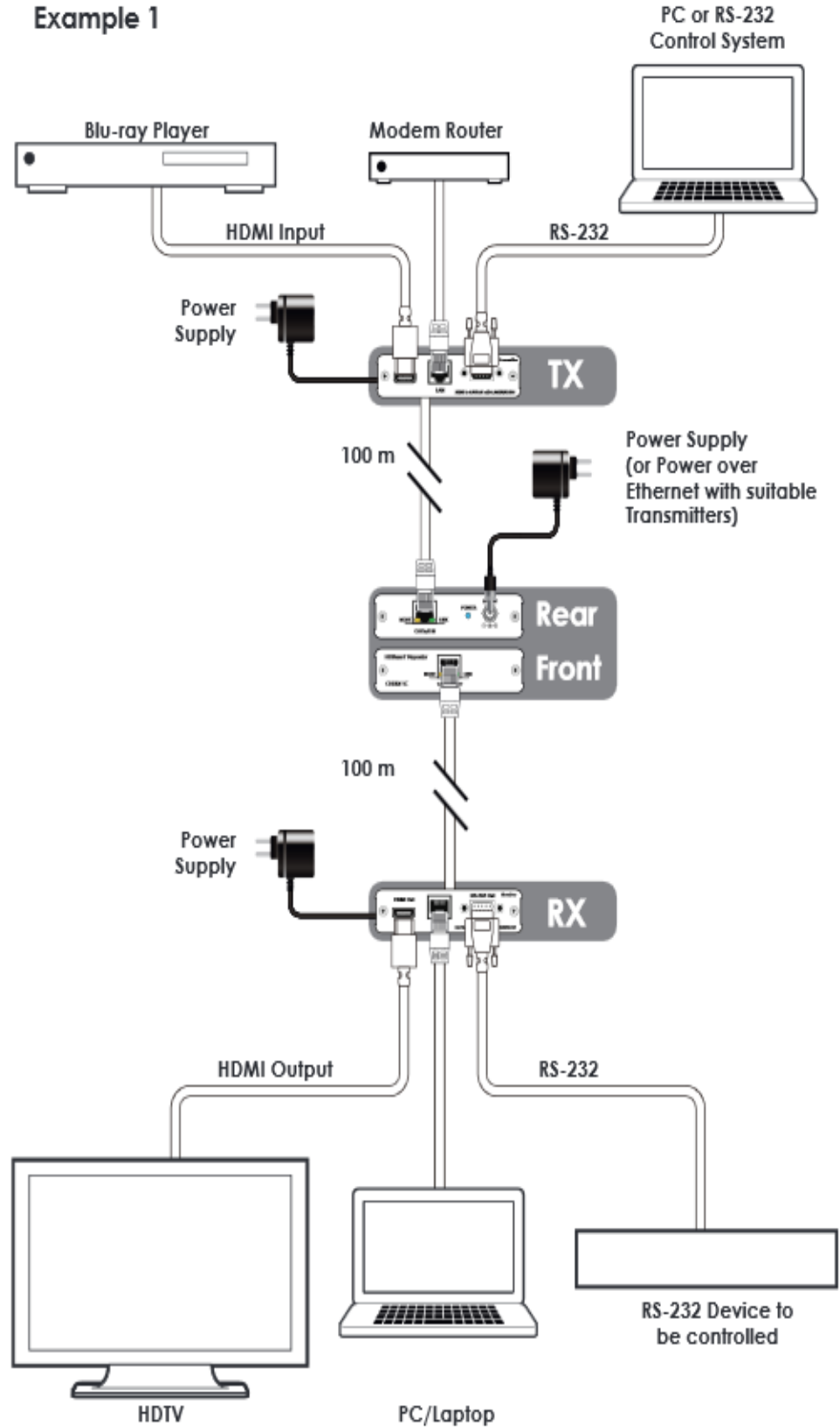
'CAT5e/6 IN' port.However, in a cascading scenario when multiple repeaters are in connection, only one single repeater can be powered by PoE while the others require their own power supply connection.

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 100/100 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 °C ~ 40 °C/32 °C~104 °C
Storage Temperature	-20℃ ~ 60℃ / -4℉ ~ 140℉
Relative Humidity	20~90 % RH (non-condensing)
Power Consumption	9 W (PoE) or 16.2 W (Not PoE

Connection Diagram

Example 1

Blu-ray Player

Modem Router

PC or RS-232
Control System

HDMI Input

RS-232

Power
Supply

TX

100 m

Power Supply
(or Power over
Ethernet with suitable
Transmitters)

Rear

Front

100 m

Power
Supply

RX

HDMI Output

RS-232

RS-232 Device to
be controlled

HDTV

PC/Laptop

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Example 2

Blu-ray Player

Modem Router

PC or RS-232 Control System

HDMI Input

RS-232

Power Supply

TX

100 m

Power Supply (or Power over Ethernet with suitable Transmitters)

Rear

Front

100 m

Power Supply

Rear

Front

Optional 2nd Repeater extends the operating distance by another 100 m

100 m

Power Supply

RX

HDMI Output

RS-232

RS-232 Device to be controlled

HDTV

PC/Laptop