



CHDBX-1C

HDBaseT™ Repeater



CHDBT[®]
5-Play™

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 |
| | | |





CONTENTS

| | |
|--|----------|
| 1. Introduction | 1 |
| 2. Applications | 1 |
| 3. Package Contents | 1 |
| 4. System Requirements | 1 |
| 5. Features | 2 |
| 6. Operation Controls and Functions | 3 |
| 6.1 Front Panel..... | 3 |
| 6.2 Rear Panel | 4 |
| 7. Connection Diagram | 5 |
| 8. Specifications | 7 |
| 9. Acronyms | 7 |



1. INTRODUCTION

The HDBaseT™ Repeater allows HDBaseT 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.

2. APPLICATIONS

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

3. PACKAGE CONTENTS

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

4. SYSTEM REQUIREMENTS

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



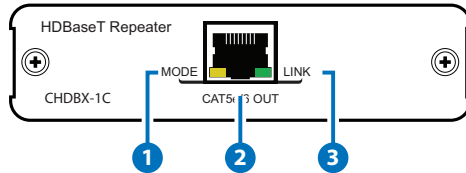
5. FEATURES

- 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 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.

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.

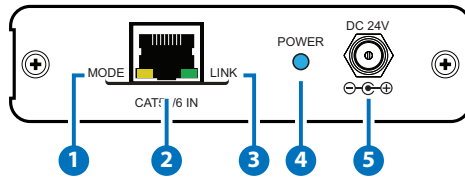
2 CAT5e/6 OUT

Connect to the receiver unit with a single CAT5e/6/7 cable (up to 100m).

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 100m).

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 powered by a power supply or a PoE transmitter.

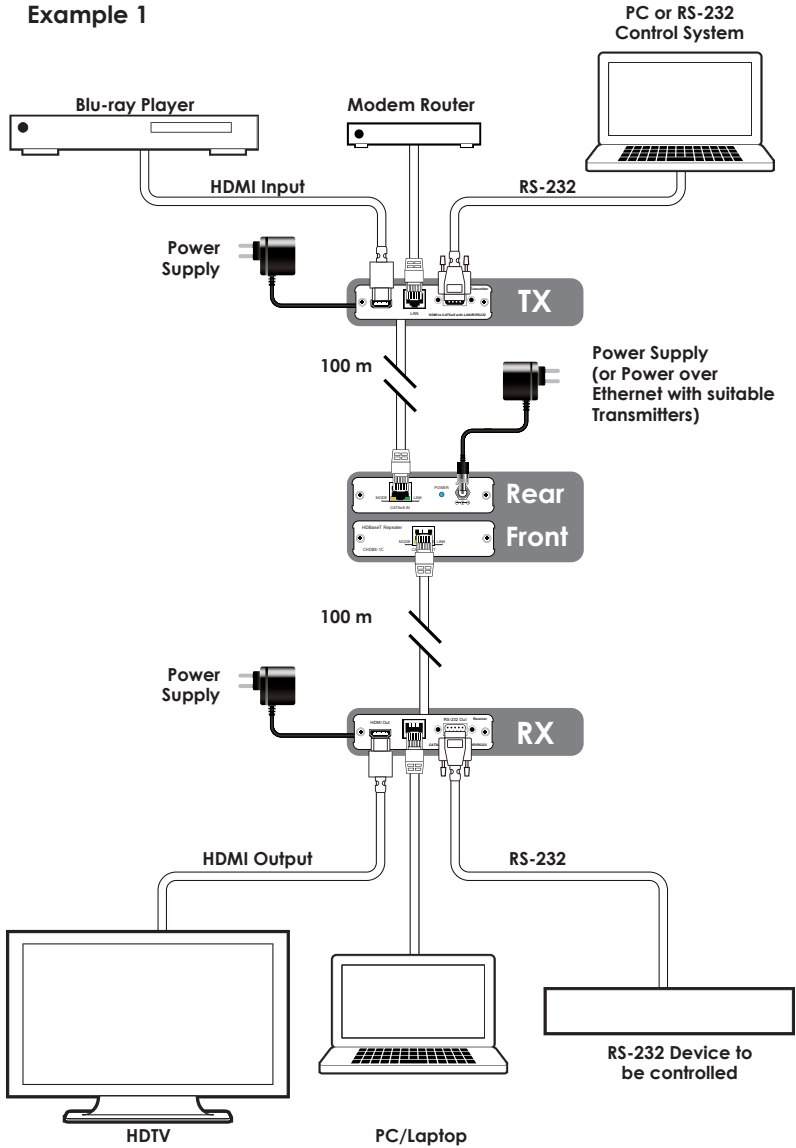
5 DC 24V

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

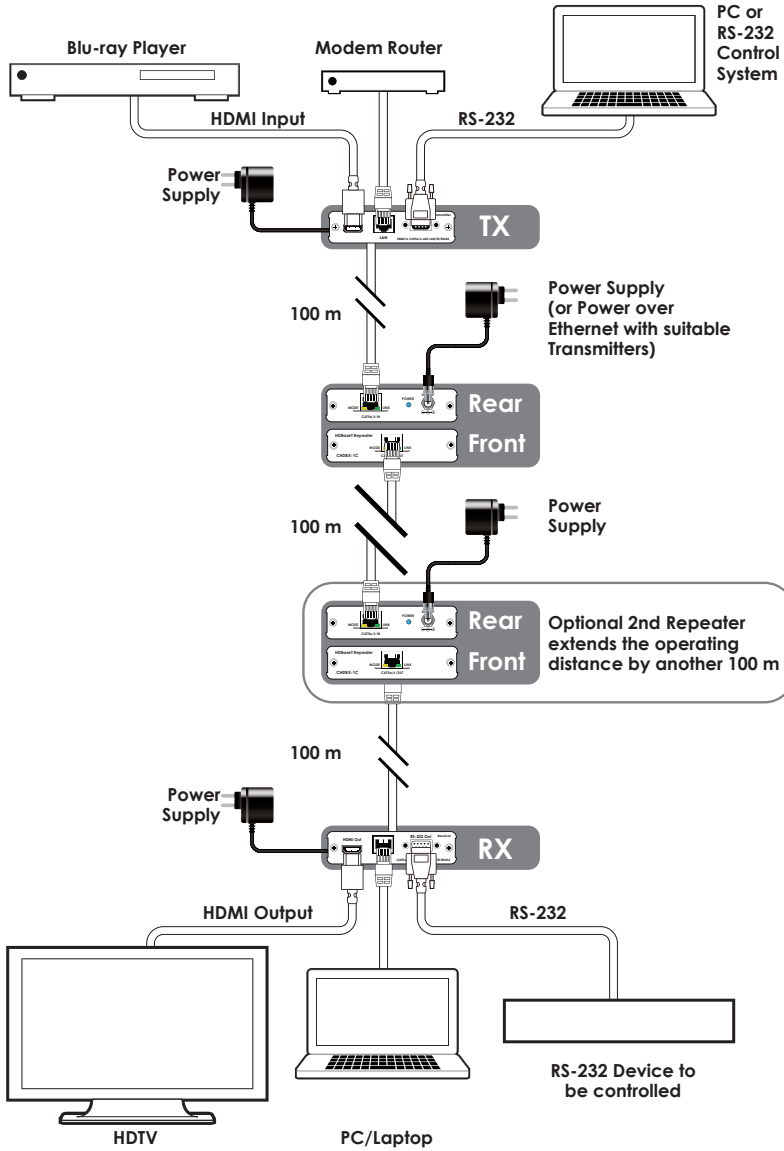
Note: This device can be powered without the power adaptor when a PoE (Power over Ethernet) enabled active transmitter connected to the 'CAT5e/6 IN' port. However, in a cascading scenario when multiple repeaters are in connection, only one single repeater can be powered by PoE while the others require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

7. CONNECTION DIAGRAM

Example 1



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 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°C ~ 60°C / -4°F ~ 140°F |
| Relative Humidity | 20~90% RH (non-condensing) |
| Power Consumption | 9 W (PoE) or 16.2 W (Not PoE) |

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 |



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