HDBT®

5-Play™

PU-1H2HBTE

1 HDMI to 2 HDBaseT™ Splitter (100m) including HDMI output bypass

/// **OPERATIONS MANUAL**

www.cie-group.com

DISCLAIMERS

The information in this manual has been carefully checked and is believed to be accurate. CYP (UK) Ltd assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

CYP (UK) Ltd assumes no responsibility for any inaccuracies that may be contained in this document. CYP (UK) Ltd also makes no commitment to update or to keep current the information contained in this document.

CYP (UK) Ltd reserves the right to make improvements to this document and/or product at any time and without notice.

COPYRIGHT NOTICE

Version 1.1 August 2011

TRADEMARK ACKNOWLEDGMENTS

All products or service names mentioned in this document may be trademarks of the companies with which they are associated.

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	SUMMARY OF CHANGE
v1.00	29/01/13	First Release

CONTENTS

1. INTRODUCTION

The PU-1H2BTE splitter accepts 1x HDMI input and distributes to 2 HDBaseT™ outputs, plus 1 HDMI bypass output. The HDBaseT™ outputs allow uncompressed HDMI, LAN, PoE, IR, and RS-232 signals to be transmitted over a Single CAT5e/6/7 cable up to 100m. Installers can confidently distribute HDMI signals to 3 displays, and if required, use the HDMI bypass output to cascade the HDMI signal up to 5 times with additional HDBaseT™ splitters.

PU-507RX Receivers are recommended to utilise the full 5-Play™ functionality of the HDBaseT™ outputs of this device.

2. APPLICATIONS

/// Household entertainment sharing and control

/// Lecture room display and control

/// Showroom display and control

/// Meeting room presentation and control

/// Classroom display and control

3. PACKAGE CONTENTS

/// 1 x HDMI over HDMI & CAT5e/6/7 Transmitter

/// 2 x IR Extender

/// 1×IR Emitter 'Y' Cable

/// 2 x 3.5mm phone jack to D-Sub 9-pin adaptor cable

/// 24V/2.7A DC Power Adaptor

/// Power Cord

/// Operation Manual

4. SYSTEM REQUIREMENTS

Source equipment with HDMI output connector

Display TV/monitor with HDMI input connector

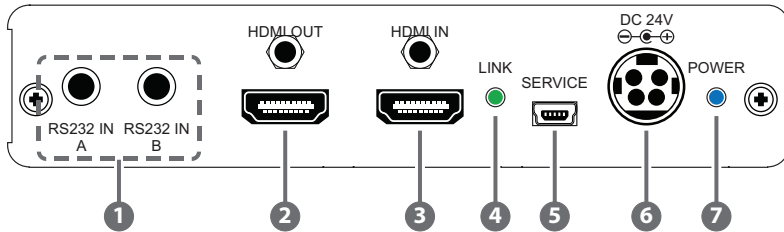HDMI over CAT5e/6/7 receivers with industry CAT5e/6/7 cables

www.cie-group.com

5. FEATURES

▰▰ Supports all v1.4 HDMI resolutions plus 4k.

▰▰ HDMI, HDCP, & DVI compliant

▰▰ Supports uncompressed video/audio up to 10.2Gbps

▰▰ Common supported resolutions: HDTV: 480p, 576p, 720p, 1080i, 1080p, 1080p24, 4K2K; PC: VGA, SVGA, XGA, WXGA, SXGA, UXGA, WUXGA.

▰▰ Supports HDCP repeating and CEC functions

▰▰ Uncompressed data transfer over single CAT cable (100m - CAT6/7; 80m - CAT5e)

▰▰ Audio support up to 7.1CH & Dolby TrueHD, DTS-HD

▰▰ Supports full 5-Play™ Convergence : HDMI / LAN / PoE (Power over Ethernet) / IR / RS-232

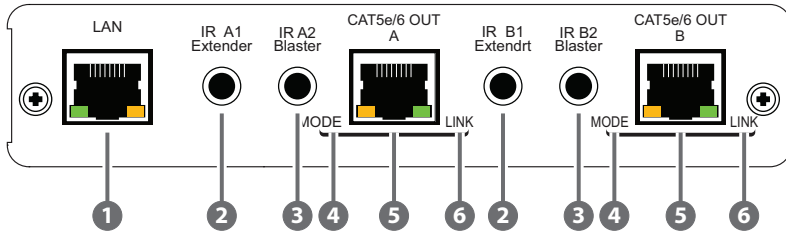▰▰ Supports 3D signals

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel

1 **RS232 IN A/B:** Connect to a PC/laptop or RS-232 control system (with supplied 3.5mm phone jack to D-Sub 9 pin adaptor) for the transmission of RS-232 commands.

2 **HDMI OUT:** Connect to a HDMI equipped TV/monitor for display of the HDMI input source signal.

3 **HDMI IN:** Connect to HDMI source equipment such as a DVD or Blu-ray player.

4 **LINK LED**: The yellow LED will illuminate when both the input and output signals are connected.

5 **SERVICE:** Reserved for service only.

6 **DC 24V:** Connect the 24 V DC power supply to the unit and plug the adaptor into an AC outlet.

7 **POWER LED:** The LED will illuminate when the device is connected to a power supply.
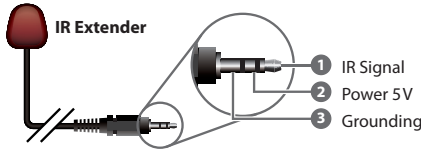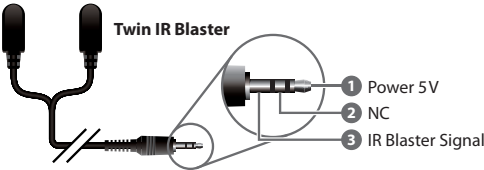
www.cie-group.com

6.2 Rear Panel

① **LAN:** Connect to an active network for LAN serving. When any compatible LAN equipped receivers are connected, this allows the network access (including internet access if available) to be shared between any connected LAN equipped receivers. Connect any Ethernet equipped device e.g. a Smart TV or games console to the LAN port of a receiver for that device to share the network/internet access.

② **IR A1/B1 IR Extender:** Connect the IR extenders for IR signal reception . Ensure that the remote being used is within the direct line-of-sight of the IR extender.

③ **IR A2/B2 IR Blaster:** Connect to the IR blasters for IR signal transmission. Place the IR blaster in direct line-of-sight of the equipment to be controlled. Use the supplied IR 'Y' Cable to ensure control from each HDBaseT zone.

④ **MODE LED:** When the device is powered the LED will flash.

⑤ **CAT5e/6 OUT A & B:** Connect to HDMI to CAT5e/6/7 receivers (with or without PoE function) with CAT5e/6/7 cable to extend the signal up to 100m.
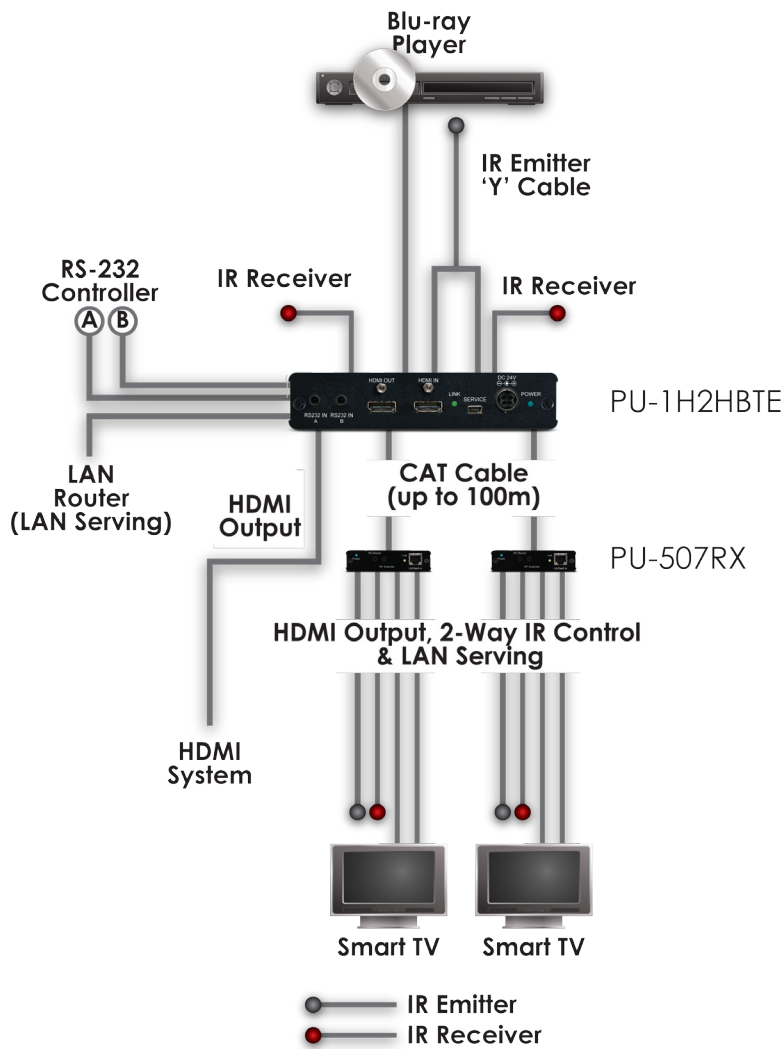
NOTE: Non PoE receivers will require their own power supply

⑥ **LINK LED:** When the device is powered on and this slot is connected to a compatible receiver device with CAT5e/6/7 cable the LED will illuminate.

6.3 IR Pin Assignment

Twin IR Blaster

1. Power 5V
2. NC
3. IR Blaster Signal

IR Extender

1. IR Signal
2. Power 5V
3. Grounding

www.cie-group.com

7. CONNECTION DIAGRAM

Blu-ray Player

IR Emitter 'Y' Cable

RS-232 Controller A B

IR Receiver

IR Receiver

PU-1H2HBTE

LAN Router LAN Serving

HDMI Output

CAT Cable up to 100m

PU-507RX

HDMI Output, 2-Way IR Control & LAN Serving

HDMI System

Smart TV   Smart TV

IR Emitter

IR Receiver

8. SPECIFICATIONS

Video Bandwidth	300Mbps/10.2Gbps
Input port	1 x Female HDMI type A, 2 x 3.5mm RS232, 2 x IR Receivers, 1 x LAN (Ethernet),1 x USB (Service Only)
Output port	1 x HDMI, 2 x CAT5e/6/7, 2 x IR Emitters
Resolution	Up to 4Kx2K
Power Supply	24V/2.7A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	145mm x 178mm x 30mm
Weight	528g
Chassis Material	Aluminum
Silkscreen Color	Black
ESD Protection	Human body model:
	±8kV (air-gap discharge)
	±4kV (contact discharge)
Operating Temperature	0˚C ~ 40˚C / 32 ˚F ~ 104 ˚F
Storage Temperature	-20˚C ~ 60˚C / -4 ˚F ~ 140 ˚F
Relative Humidity	20 ~ 90% RH (non-condensing)

www.cie-group.com

9. ACRONYMS

ACRONYM	COMPLETE TERM
DTS	Digital Theater System
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface
HDTV	High-Definition Television