



HDBaseT™ Lite HDMI Extender Kit



Quick Setup Guide

P8-HDBT-L-NP-EXSET

SAFETY PRECAUTIONS

Please read all instructions before attempting to install or operate this equipment.

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 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.
- 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.
- 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.

This *HDBaseT™ Lite HDMI Extender Kit* allows un-compressed HDMI and 2-way IR signals to be transmitted via a Single CAT5e/6/7 cable; over distances of up to 70 metres.

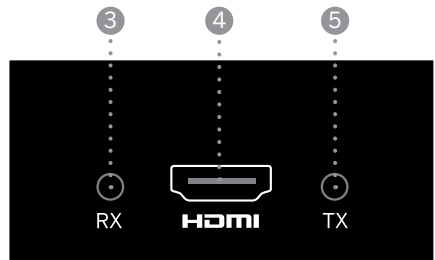
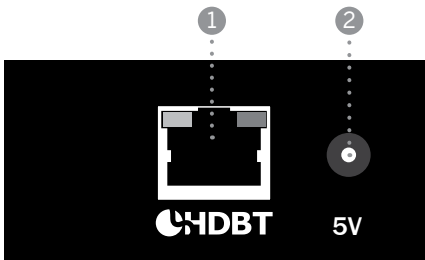
PACKAGE CONTENTS

- 1× Transmitter - HDMI to HDBaseT with IR
- 1× Receiver - HDBaseT to HDMI with IR
- 2× IR Emitter
- 2× IR Receiver
- 2× 5V/1.2A DC Power Adaptor

FEATURES

- HDMI 1.4 with 3D, 4K×2K (Ultra HD) support, HDCP and DVI compliant
- Full HDMI 1.4 (including HDCP) via a single CAT5e/6/7 cable up to 70m
- Complies with HDBaseT Class B specifications
- Full HD resolution support (1080p@60Hz/36-bit), 3D over 70m, 4K×2K (UltraHD) over 40m and PC resolution support (VGA to WUXGA)
- HDMI input up to 15m with 8-bit deep colour or 10m with 12-bit deep colour
- Supports HDMI output up to 15m with 8/12-bit deep colour
- Supports 2-way IR
- Supports High Definition LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission

RECEIVER AND TRANSMITTER PORTS



① HDBaseT

Connect with a single CAT5e/6/7 cable for data transmissions.

The *Green LED* will illuminate when the device is connected to the power supply.

The *Yellow LED* will illuminate when both devices are connected and powered.

② 5V

Connect only to the power supplies provided.

③ RX (IR Receiver)

Receives signals via the supplied IR receiver cable from your remote

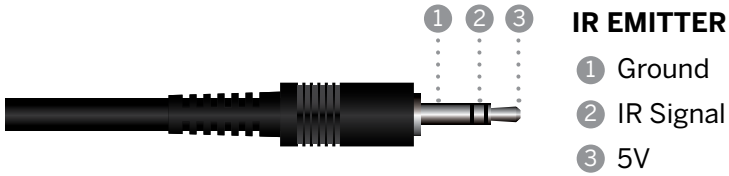
④ HDMI

Connect to your HDMI equipment.

⑤ TX (IR Emitter)

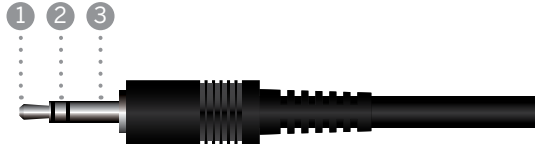
Transmits signals via the supplied IR transmitter cable from your remote

IR PIN ASSIGNMENT



IR RECEIVER

- ① 5V
- ② IR Signal
- ③ Ground



TECHNICAL SPECIFICATIONS

Transmitter

Input 1× HDMI, 1× IR Receiver
Output 1× RJ45, 1× IR Emitter

Receiver

Input 1× RJ45, 1× IR Receiver
Output 1× HDMI, 1× IR Emitter

Max Video Bandwidth 300MHz/10.2Gbps

Power Consumption 3W (TX), 5.5W (RX)

Power Supply 2×5V/1.2A DC
(US/EU standards, CE/FCC/UL certified)

Dimensions 55mm(W) ×82mm (D)×22.5mm (H)/each

Weight 245g (TX), 255g (RX)

Chassis Material Folded Steel

Colour Black

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)

TROUBLESHOOTING

Should you encounter installation difficulties or issues with device communication, the following checklist of common issues and causes should help resolve your issues.

If you still continue to experience issues, please email support@pulse-eight.com for further assistance

No or poor picture quality:

- Connected and powered? Double check all HDMI, Ethernet and power cables are firmly connected into the correct ports and all devices are correctly powered
- Cable length? Are you approaching the maximum distance of the cable (70m) if so, adjust the picture quality or try using an additional extender kit to go further distance. Cables bundled together may cause cross talk and further degrade signal quality.
- Signal strength? The use of cable joins, stranded patch panels, wall outlets and stranded patch leads as interconnects between them, can significantly reduce signal strength. Use solid core straight through connections wherever possible
- If you reduce the resolution of the source do you get a picture? If so, this suggests a conflicting resolution between source and display or a bandwidth capacity issue with your cable. Check all inputs and outputs share the same resolution capabilities.
- Picture 'snow' / HD 'hoise' signifies a failure to fully establish a signal and can often be caused by poorly terminated RJ45 connectors or excess cable lengths. Ensure your cable is correctly wired to 568B standards.
- Cable quality and condition - HDMI cable/connectors can easily be damaged and the quality of material can vary, Always use good quality leads and cables and try swapping cables that are known to be working into the solution to see if this improves your image.

IR control:

- Are the IR emitters and receivers correctly positioned to allow infrared signals to be transmitted and received through the extender kit? Emitters should be fixed firmly over infrared sensors of sources. Receivers should be attached to displays ensuring a clear line of sight to the remote control used to operate.
- Is your remote control powered and sending a signal? As IR is invisible to the naked eye, check your remote is transmitting a signal by viewing the remote handset sensor through a digital camera/camera phone. The sensor should flash when a button on the handset is held down.
- IR signal dropout can be experienced due to exterior emissions of infrared radiation. Ensure emitters and receivers are away from direct sunlight. Halogen lighting and plasma screens may also interfere with IR signals

REFERENCE CABLE DISTANCES

Cable Type	Range	Pixel Clock Rate	Video Data Rate	Supported Video
CAT5e/6/7	70 metres	<=225 MHz	<=5.3 Gbps (HD Video)	Up to 1080p, 60Hz, 36-bit, 3D (data rates lower than 5.3 Gbps or below 225 MHz TMDs clock).
	40 metres	>225 MHz	>5.3 Gbps (Ultra HD Video)	4K@60 4:2:0, 30Hz video formats

DISCLAIMERS

The information in this manual has been carefully checked and is believed to be accurate, however, Pulse-Eight Limited assumes no responsibility for any inaccuracies that may be contained in this document. Pulse-Eight Limited also makes no commitment to update or to keep current the information contained in this document.

Pulse-Eight Limited reserves the right to make improvements to this document and/or product at any time and without notice.

Pulse-Eight Limited assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

COPYRIGHT NOTICE

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or any of its part translated into any language or computer file, in any form or by any means (electronic, mechanical, magnetic, optical, chemical, manual, or otherwise) without express written permission and consent from Pulse-Eight Limited.

© Copyright 2013 Pulse-Eight Limited

All Rights Reserved.

Version 1.2 - November 2015

TRADEMARK ACKNOWLEDGMENTS

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



Pulse-Eight Limited | Poole | Dorset | BH12 4AL | UK

T: +44(0)1202 413610 | E: sales@pulse-eight.com

www.pulse-eight.com