

neo

BY PULSEEIGHT



P8-HDBT-L-EXSET

neo:Lite 70m HDMI Extender Set
INSTALLATION GUIDE



neo:Lite 70m HDMI Extender Set

P8-HDBT-L-EXSET

Using HDBaseT™ technology, this HDMI extension solution offers an ideal solution for custom A/V installers and Home Theatre enthusiasts to project content over long distances without compromising audio or video quality.

IN THE BOX

P8-HDBT-L-RX-S	neo:Lite Receiver
P8-HDBT-L-TX-S	neo:Lite Transmitter
P8-IRPACK	Infrared Blaster Cable Pack (TX/RX Pack)
P8-MODULE-000-867	48V/0.5A UK/EU/US 'Plug Top' power supply

FEATURES

- Extend 4K up to 40 Meters and 1080p to 70 Meters over Cat5e/6/7
- Wall Mountable
- Low Power
- Supports UltraHD 4K Transmission, 1080p@60Hz/36-bit, 720p and VGA-WUXGA formats.
- Bi-Direction Infra-Red Transmission
- Full HDMI Audio support
- HDCP and HDCP 2.2 Compliant
- PoH Receiver

TECHNICAL SPECIFICATIONS

Transmitter Input	1x HDMI 2.0a, 1x IR Receiver
Transmitter Output	1x HDBaseT Class B (Lite) 1x IR Emitter
Receiver Input	1x HDBaseT Class B (Lite) 1x IR Receiver
Receiver Output	1x HDMI 2.0a, 1x IR Emitter
Dimensions (WxHxD)	11 / 8.2 / 1.8 cm each
Weight	140g each
Chassis Material	Extruded Aluminium
Colour	Black
Encryption	HDCP 1.4 and HDCP 2.2
Max Video Bandwidth	300MHz/10.2Gbps
Power Consumption	3W (TX), 5.5W (RX)
Power Supply	1 x 48V (TX only)
Operating Temperature	0 to +40°C (32 to +104°F)
Relative Humidity	20 to 90% RH (non-condensing)
ESD Protection	± 8kV (Air-gap discharge) ± 4 kV (Contact discharge)
Certification	CE, FCC, RoHS



TECHNICAL

neo:Lite Transmitter



- 1 48V
- 2 HDBaseT Output
- 3 IR Receiver (RX)
- 4 HDMI Input
- 5 IR Emitter (TX)

neo:Lite Receiver



- 6 HDBaseT Input
- 7 IR Receiver (RX)
- 8 HDMI Output
- 9 IR Emitter (TX)

IR Emitter/Receiver Pin Out



- A Ground
- B IR Signal
- C 5V

IDENTIFY INFRARED RECEIVER/TRANSMITTER

IR Receiver



IR Emitter

INSTALLATION

- 1 Connect a single CAT5e/6/7 cable between the Receiver and Transmitter using the HDBaseT ports
- 2 Connect a HDMI cable* between the Transmitter's HDMI Input and the source device (i.e. a blu-ray player)
- 3 Connect a HDMI cable* between the Receiver's HDMI Output and the receiving device (i.e. a LCD TV)
- 4 Connect the supplied IR Transmitter over the source's IR sensor (Please refer to the above images to identify the IR Emitter and IR Receiver)
- 5 The IR Emitter is to be mounted with the sticky pad horizontally over the source device's infrared sensor and the Receiver bud vertically on the underside of the TV.
- 6 Connect the supplied power supply to the Transmitter
- 7 Check the LEDs on the Receiver and Transmitter to ensure correct installation and connection:

The Yellow LED will illuminate when connected to a video link

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

* HDMI cables are not supplied with this extender set

TROUBLESHOOTING

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

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 for 1080p or 40m for 4K UltraHD)? 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 'noise' 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 signal.

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.

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 2018 Pulse-Eight Limited. All Rights Reserved.

TRADEMARK ACKNOWLEDGEMENTS

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



8-12 Alder Hills . Poole . Dorset . BH12 4AL . UK
sales@pulse-eight.com | +44 (0)1202 413610
www.pulse-eight.com