

neo

BY PULSEEIGHT



P8-HDBT-L-EXSET

neo:Lite 70m HDMI Extender Set
INSTALLATION GUIDE

HDBT[™]
ASIA

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 | 1× HDMI 2.0a, 1× IR Receiver |
| Transmitter Output | 1× HDBaseT Class B (Lite) 1× IR Emitter |
| Receiver Input | 1× HDBaseT Class B (Lite) 1× IR Receiver |
| Receiver Output | 1× HDMI 2.0a, 1× 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, 0.5A (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 Power Indicator
- 2 48V
- 3 IR Receiver (RX)
- 4 IR Indicator
- 5 HDMI Input
- 6 HDBaseT Output
- 7 PoH Indicator
- 8 Link Quality Indicator
- 9 IR Emitter (TX)

neo:Lite Receiver



- 10 HDBaseT Input
- 11 IR Receiver (RX)
- 12 IR Indicator
- 13 HDMI Output
- 14 IR Emitter (TX)

IR Emitter/Receiver Pin Out



- A Ground
- B IR Signal
- B 5V

IDENTIFY INFRARED RECEIVER/TRANSMITTER

IR Receiver



IR Emitter



INSTALLATION

- Connect a single CAT5e/6/7 cable between the Receiver and Transmitter using the HDBaseT ports
- Connect a HDMI cable* between the Transmitter's HDMI Input and the source device (e.g. a blu-ray player, Sky Box)
- Connect a HDMI cable* between the Receiver's HDMI Output and the receiving device (e.g. a LCD TV, projector)
- 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)
- The IR Emitter is to be mounted with the sticky pad **horizontally** over the source device's infrared sensor (eye) and the Receiver bud **vertically** on the underside of the TV.
- Connect the supplied power supply to the Transmitter
- Check the LED indicators as follows:
 - Power Indicator (① TX) illuminates when power supply connected
 - IR Indicator (④ TX / ⑫ RX) flashes green when IR signal is received and flashes red when IR signal is sent
 - PoH Indicator (⑦ TX) illuminates when power is being transmitted across the HDBaseT link, helps to troubleshoot
 - >40m Indicator (⑧ TX) illuminates when cable connected is over 40m (i.e. too long for 4K transmission)
 - LEDs above HDBaseT port (⑥ TX / ⑩ RX):
 - Amber = link led on both sides
 - Green on TX = video
 - Green on RX = PoE

* 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. Please check AWG of your cables. Only AWG24 or AWG23 acceptable.
- 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 if your remote is emitting IR by pointing it into the front camera of your smartphone and open your camera app. You should see a purple flashing light on your phone screen when a button is pressed on the remote.
- 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.
- You can check if an IR signal is being received by checking for a green flashing LED, and if IR is emitting by checking for red flashing LED. If the LEDs flash but IR control still doesn't work, it may be due to a faulty IR bud.

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.

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