

neo

BY PULSEEIGHT



P8-HDBT2-U-EXSET

neo:Ultra 100m HDMI Extender Set
INSTALLATION GUIDE



neo:Pro 100m HDMI Extender Set

P8-HDBT2-U-EXSET

Using HDBaseT™ and Display Stream Compression 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-HDBT2-U-RX	neo:Ultra Receiver
P8-HDBT2-U-TX	neo:Ultra Transmitter
P8-IRPACK	Infrared Blaster Cable Pack (TX/RX Pack)
P8-MODULE-000-867	48V/0.5A Power Supply

FEATURES

- Extend 4K and 1080p up to 100 meters over a single Cat6/7 cable
- Extend 1080p up to 100 meters and 4K up to 90 meters over a single Cat5e
- Wall mountable (mount sold separately)
- Audio return channel (ARC)
- DSC support - for HDR and 4K/60 4:4:4 over HDBaseT
- Supports UltraHD 4K transmission, 1080p@60Hz/36-bit, 720p and VGA-WUXGA formats
- Bi-direction infra-red transmission
- HDCP and HDCP 2.2 compliant
- PoH receiver
- Low profile design (Only 13mm high)

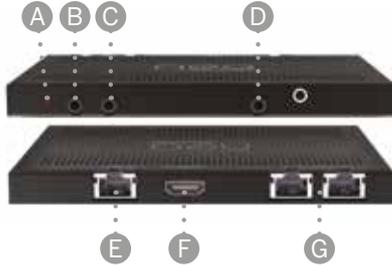
TECHNICAL SPECIFICATIONS

Video Input:	
Transmitter	1 X HDMI 2.0a
Receiver	1 X HDBaseT Class C (Ultra)
Video Output:	
Transmitter	1 X HDBaseT Class C (Ultra)
Receiver	1 X HDMI 2.0a
Dimensions (WxHxD)	14.8cm / 1.3cm / 10.5cm
Chassis Material	Aluminium
Colour	Black
Encryption	HDCP 1.4 and HDCP 2.2
Max Video Bandwidth	600MHz/18Gbps
Power Consumption	7.3W (TX), 8W (RX)
Power Supply	1 x 48V (TX only)
Operating Temperature	0 to +35°C (32 to +95°F)
Relative Humidity	20 to 90% RH (non-condensing)
ESD Protection	± 8kV (Air-gap discharge) ± 4 kV (Contact discharge)
Certification	CE, FCC, RoHS



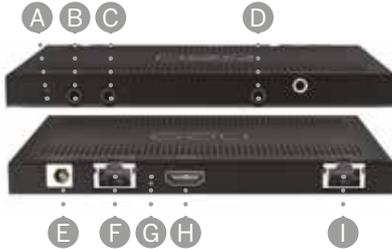
TECHNICAL

neo:Ultra Receiver



- A IR Activity Indicator
- B IR Emitter (TX)
- C IR Receiver (RX)
- D RS232 Jack Port
Adapter not included
- E HDBaseT Input
- F HDMI Output
- G Ethernet x2

neo:Ultra Transmitter



- A IR Activity Indicator
- B IR Emitter (TX)
- C IR Receiver (RX)
- D RS232 Jack Port
Adapter not included
- E 48V Power Input
- F HDBaseT Output
- G PoE Indicator
- H HDMI In
- I Ethernet

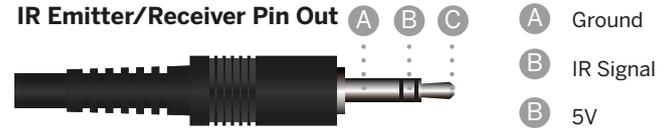
Identifying the IR Buds



** The IR Emitter is to be mounted with the sticky pad horizontal and the Receiver bud vertical.*

TECHNICAL

IR Emitter/Receiver Pin Out



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 buds to the Transmitter and the Receiver (Please refer to the diagram to identify the IR Emitter and IR Receiver) The IR Emitter is to be placed on the infrared sensor of the source device. The IR Receiver is to be placed on the TV edge using the attached sticky pad.
- 5 Connect the RS232 cable into the extender set before applying power to the extender set, connecting while powered may damage the device
- 6 Connect the supplied power supply to the Transmitter
- 7 Check the LEDs on the HDBaseT ports of 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
- 8 Check the IR activity on the IR Indicator LEDs (A):
The Receiver's LED will flash Green when IR signals are being received
The Transmitter's LED will flash Red when IR signals are being sent

** 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 (100m for 1080p, 100m for 4K over cat6/7 cable or 90m for 4K over cat5e)? 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? Emitters should be fixed firmly over infrared sensors of sources. Receivers should be attached to the bottom edge of the display source 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.

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