NETVIO

EX-HT2-401-10

40M (131FT) HDMI EXTENDER OVER HDBASET, 4K60 (4:2:0), HDR, CONTROL





Netvio Ltd
www.netvio.co.uk

support@netvio.co.uk

UK +44 (0) 800 464 7445
US +1-833 720 0637

Safety Information



Do not attempt to remove the product casing, as this may result in electrical shock. Repairs should not be attempted by anyone other than qualified personnel. For any service or repair needs, please contact Netvio Ltd or an authorized reseller to follow the proper service procedures. Any unauthorized repairs or the use of non-approved components will void the product warranty. For complete warranty terms and conditions, please visit: www.netvio.co.uk.

TThe Netvio EX-HT2-401-10 is a reliable entry-level HDBaseT extender designed to deliver high-quality 4K60 (4:2:0) HDR video transmission over long distances.

Engineered for simplicity, compact size, and performance, it extends HDMI signals up to 40 meters (131 feet) over a single Cat6 cable. With 2-way Power over Cable (PoC), bi-directional IR, and RS-232 control support, it's an ideal solution for space-conscious AV installations requiring dependable 4K distribution and control.

CABLE & CONNECTIONS

- **Important Notice on Cable Installation and Performance**
- Advertised cable distances are for reference only. Transmission distances can be influenced by various factors, including cable construction, quality, installation standards, patch panels, faceplates, and external elements such as electromagnetic interference (EMI).
- This product is designed to operate over unshielded twisted pair (UTP) Cat5e, Cat6, and Cat7 cables. When using shielded (STP) category cables, ensure that all drain wires and shielding are properly grounded.
- **RJ45 Termination Standards:**
- Follow the EIA/TIA-568-B termination standard. Do not simply wire pin-to-pin (e.g., Pin 1-1, Pin 2-2). The 568-B standard requires splitting the green pair between Pins 3 and 6.
- Maintain the twists in the Cat5e/Cat6/Cat7 cable pairs as close as possible to the point of termination.
- **Cable Installation Guidelines:**
- Avoid sharp bends or twists. Use gradual bends, with a minimum bend radius of 25mm wherever possible.
- Ensure that cables are not pulled too tightly or stretched. Excess tension can damage the cable. The maximum pulling force should not exceed 11kgf.
- Dress the cable with moderate to low pressure, ensuring the cable jacket is not pinched.
- Never splice, join, or bridge the cable, as this can cause significant transmission issues.
- **Electromagnetic Interference (EMI):**
- Keep category cables at least 300mm away from sources of EMI, such as electrical cables, transformers, and light fixtures. If necessary, cross electrical cables at right angles to minimize interference.
- **Testing and Certification:**
- After installation, ensure that the cable is thoroughly tested. A basic continuity check may not be sufficient to identify issues or certify performance.
- Finally, always verify compliance with local building and fire codes before installation.

WARRANTY

- Standard 5-Year warranty. Details available at www.netvio.co.uk/warranty

IN-THE-BOX

- EX-HT2 Series Extender
- Regionalized PSU
- IR Emitter Cable (1.5m)
- IR Receiver Cable (1.5m)
- Wall mount brackets
- 3-Pin (RS-232) connectors

The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

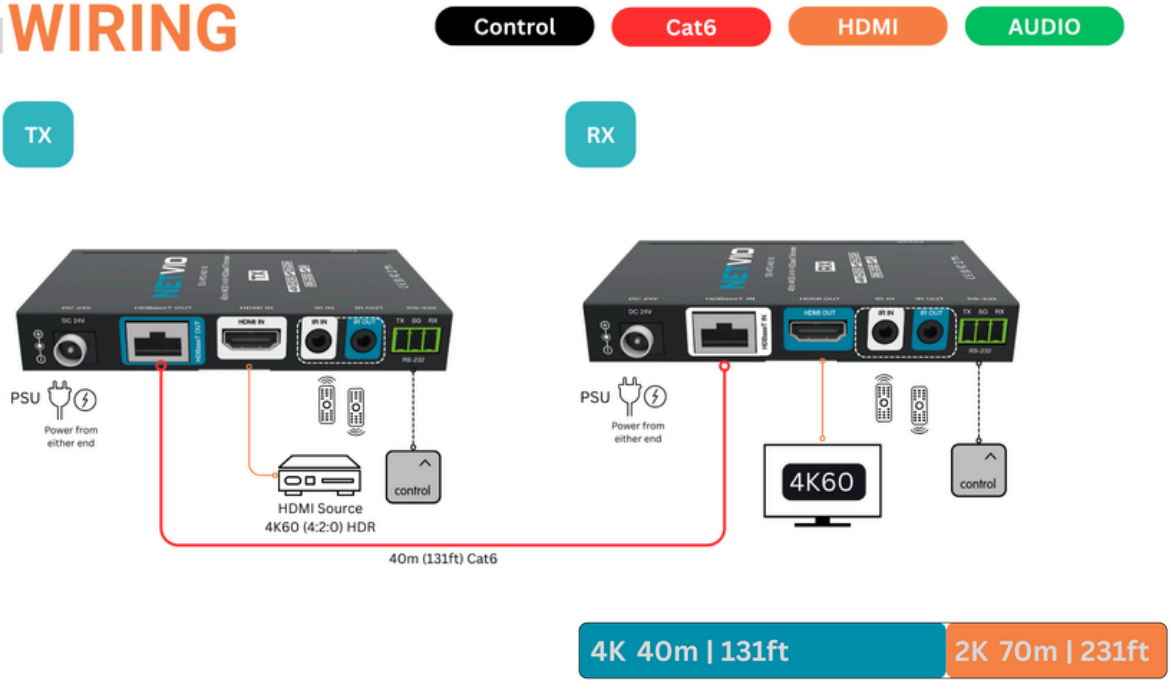
FEATURES

- Extends 4K60 (4:2:0) HDR video up to 40m (131ft) over Cat6
- Compact, space-saving design – easy to mount and conceal
- 2-Way Power over Cable (PoC) – flexible powering from either end
- Bi-directional IR and RS-232 passthrough for control system integration
- HDCP 2.2 and HDMI 2.0 compatible
- Supports multichannel audio including Dolby and DTS formats
- Ultra-low latency, visually lossless video transmission
- Plug-and-play setup for fast, hassle-free installation
- 5-Year Warranty (2-Year Advanced Replacement)

MECHANICAL

- **Weights & Dimensions (each device)**
  - H:18mm | W:115mm | D: 65mm
  - 140g
- **Power Supply**
  - DC 24V/1A (US/EU/UK standard, CE/FCC/UL/C-Tick certified)
- **Power Consumption**
  - 9.36W (max)
- **Operating Temperature**
  - 32 - 104°F / 0 - 40°C
- **Storage Temperature**
  - -4 - 140°F / -20 - 60°C
- **Relative Humidity**
  - 20 - 90% RH (no condensation)
- **Product Certifications**
  - CE, UKCA, FCC

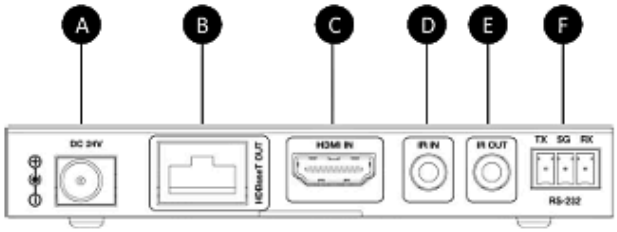
EX WIRING



The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



1	Power Status LED
A	DC 24V Power In
B	HDBaseT Output (from source)

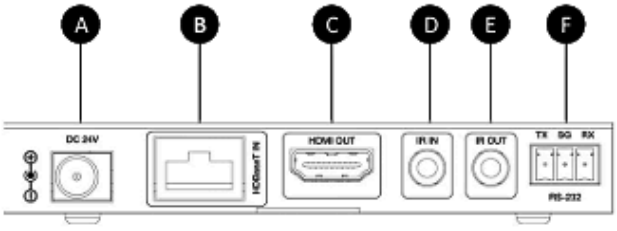


C	HDMI (Source) Input
D	IR Capture Port
E	IR Sender Port
F	RS-232 Pass Through

Receiver Overview



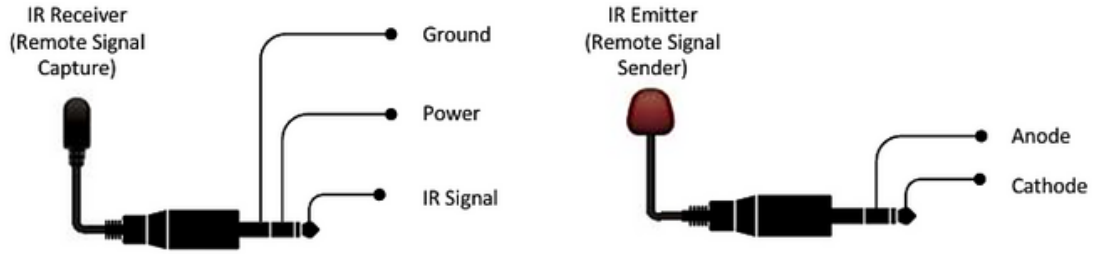
1	Power Status LED
A	DC 24V Power In
B	HDBaseT Input (from display)



C	HDMI Display) Output
D	IR Capture Port
E	IR Sender Port
F	RS-232 Pass Through

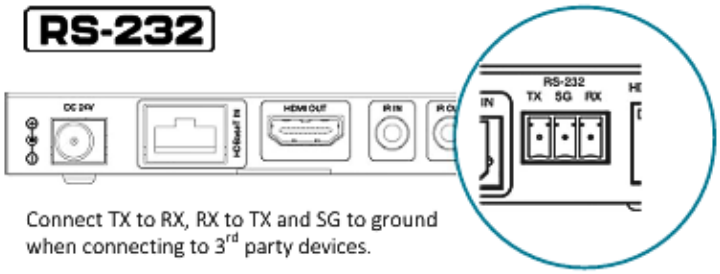
IR Pin Outs

Each Netvio extender kit comes complete with all required accessories to fully maximise product features and functionality. We recommend the use of Netvio approved IR accessories to ensure guaranteed performance and compatibility. In perfect conditions, IR performance is rated at 8m from display to remote control, but understanding this will vary in differing light conditions. It may be necessary to adjust both the capture, sender device positions to achieve best performance, ensuring that remote batteries are in good condition. Should IR ports require connections to a 3rd party device, the following wiring diagrams are provided to ensure successful signal transfer.



The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

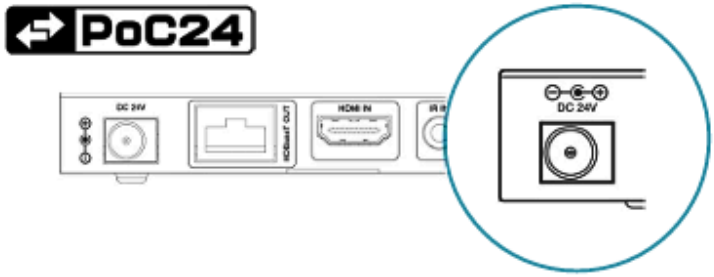
RS-232



Connect TX to RX, RX to TX and SG to ground when connecting to 3rd party devices.

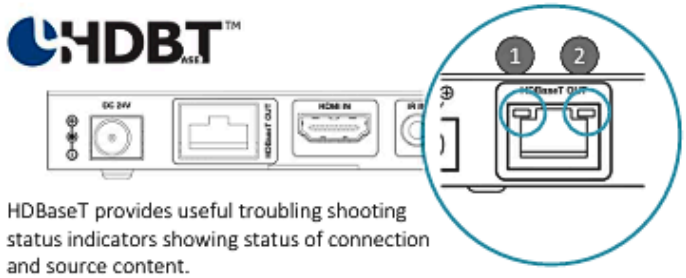
Secure hardwired bi-directional serial control between source and display. Extender kit comes complete with 3-Pin screw type connectors for ease of install.

PoC24



Ability to connect a single PSU to either transmitter or receiver adding extra convenience to your install. 24V PoC is standardardised accross all Netvio HDBaseT products.

HDBT™



HDBaseT provides useful troubling shooting status indicators showing status of connection and source content.

1
Solid | Good Connection
Flashing | Poor Connection
Dark | No Connection

2
Solid | HDMI with HDCP
Flashing | HDMI no HDCP
Dark | No Connection

The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

TOUBLESHOOTING

- **1. Check Power and Connections**
  - Ensure both transmitter (TX) and receiver (RX) units have power (check LEDs).
  - Confirm the HDMI cables are securely connected and not damaged.
  - Use CAT6 or better cable—avoid flat or low-quality patch cables.
  - Verify that the CAT cable is connected to the correct ports (TX → RX).

- **2. Confirm Power over Cable (PoC) Behavior**
  - If using PoC, only one side should be powered—adding power to both can cause damage.
  - Swap power supply to other side if unsure which unit is the PoC provider.

- **3. Test Signal Chain**
  - Bypass other equipment (AVRs, switchers) and test with a direct source-to-display setup.
  - Try a known working source (like a Blu-ray player) and display.
  - Use short HDMI cables first to eliminate cable length as a problem.

- **4. Reset Devices**
  - Power-cycle both extender units and connected devices.
  - If available, press the reset button on the HDBaseT units.

- **5. Check Cable Specifications and Distance**
  - Ensure CAT cable length is within supported distance:
  - Up to 100m/330ft for 1080p
  - Typically 70m/230ft for 4K (varies by model)
  - Check for sharp bends, kinks, or termination issues on the cable.

- **6. Audio Issues**
  - Confirm audio format compatibility (Dolby, DTS, LPCM).
  - Check if the source is set to output supported audio over HDMI.

- 7.**Interference and Environmental Factors**
  - Keep CAT cables away from high-voltage power lines, fluorescent lights, or large motors.
  - Shielded CAT6a cable (STP) is recommended in electrically noisy environments.

The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

TERMS OF USE

FCC Statement (U.S. Only – If Device Emits RF)

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
  - (1) This device may not cause harmful interference.
  - (2) This device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Compliance Statement (EU Market)

- This product complies with the essential requirements and other relevant provisions of the Radio Equipment Directive (2014/53/EU), EMC Directive (2014/30/EU), and Low Voltage Directive (2014/35/EU), where applicable."

WEEE Directive (EU Market)

- Do not dispose of this product as unsorted municipal waste. Return it to a designated collection facility for the recycling of electrical and electronic equipment."

RoHS Compliance Statement

- This product complies with the Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU, as amended by Directive (EU) 2015/863."

Data Privacy / Network Disclaimer (For IP/Networked Devices)

- This device may store or transmit data over IP networks. It is the user's responsibility to ensure the network environment is secured and configured in accordance with IT policies."

Product Liability Disclaimer

- The manufacturer is not responsible for any loss of data, revenue, or property resulting from the use or misuse of this product. Installation should be performed by qualified personnel."

Environmental and Safety Use Conditions

- This device is intended for use in a pollution degree 2 environment. Operating temperature: 0°C to 40°C. Relative humidity: 10% to 90%, non-condensing."

Limitation of Warranty

- Warranty does not cover damage resulting from accident, misuse, unauthorized modification, or operation outside the product's intended use and environmental conditions. Go to www.netvio.co.uk for full warranty conditions.

The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.