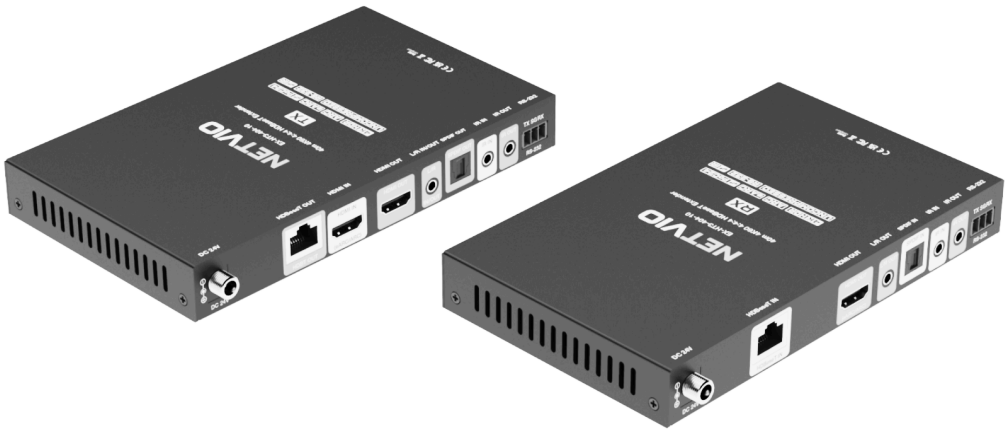
EX-HT3-4001-10

NETVIO

40M (131FT) HDMI EXTENDER OVER HDBASET3.0

UNCOMPRESSED 4K60 (4:4:4), EARC, CONTROL, 2-WAY POC



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.

The Netvio EX-HT3-4001-10 is a premium HDBaseT 3.0 HDMI extender, delivering full uncompressed 18Gbps 4K60 HDR video over a single category cable. It supports up to 40m for 4K and 70m for 1080p, ensuring pristine video quality for demanding AV installations.

With full eARC support, it handles immersive formats like Dolby Atmos and DTS:X with ease. Added features include HDMI loop-out, bidirectional IR, RS-232 pass-through, and Power over Cable (PoC) for simplified integration.

Ideal for high-performance AV environments, the EX-HT3-4001-10 is perfect for home theaters, corporate systems, and commercial applications where maximum quality and flexibility are essential.

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

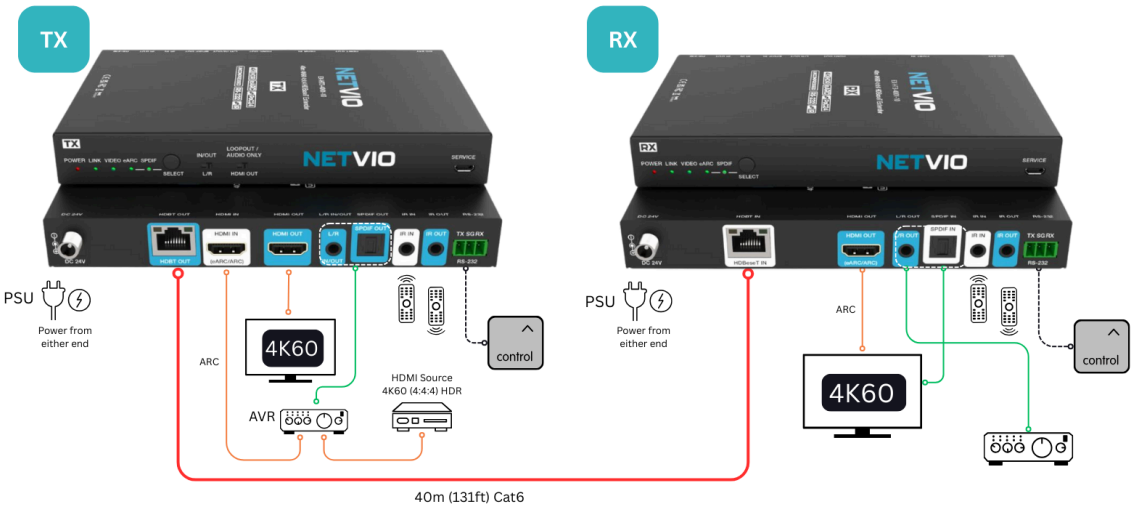
IN-THE-BOX

- EX-HT3 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.

EX WIRING

Control Cat6 HDMI AUDIO



EX FUNCTIONS



1	Link & Video	**Link:** Light On [Good Connection Status] **Video:** Light On [Video encrypted]	5	Service	Firmware Update (Support only)
2	Selector	Switching between ARC mode and SPDIF	6	Link & Video	Link: Light On [Good Connection Status] Video: Light On [Video encrypted]
3	L/R Audio	Left: Port used as audio embed (input) Right: Ported used as audio de-embed (output)	7	Selector	Switching between ARC mode and SPDIF
4	Loop Out	Left: HDMI Loop out Right: Audio only (for AVR connection)	8	Service	Firmware Update (Support only)

FEATURES

- **Video Transmission:**
  - Supports uncompressed 4K60Hz (3840x2160p) 4:4:4 10-bit video
  - HDBaseT 3.0 technology enabling 18Gbps bandwidth
  - Maximum transmission distance:
    - Up to 40 meters (131 feet) for 4K HDR
    - Up to 70 meters (231 feet) for 1080p
  - Compatible with HDMI 2.0b and backward compatible
  - HDR and HDCP Support:
  - Supports HDR formats including HDR10, HDR10+, HLG, and Dolby Vision
  - Compliant with HDCP up to version 2.3
- **Audio Capabilities:**
  - Standard & Enhanced Audio Return Channel (eARC) support for high-bitrate audio formats
  - Supports up to 32 audio channels, including uncompressed 5.1, 7.1, and 24-bit/192kHz streams
  - Audio output options:
    - Optical S/PDIF output (TOSLink)
    - 3.5mm analog line-level output
- **Control and Connectivity:**
  - Bi-directional IR control via 3.5mm jacks
  - RS-232 pass-through for integration with control systems
  - HDMI CEC support for device control

MECHANICAL

- **Weights & Dimensions (each device)**
  - **H:22mm | W:170mm | D: 102mm**
  - **430g**
- **Power Supply**
  - **DC 24V/1A (US/EU/UK standard, CE/FCC/UL/C-Tick certified)**
- **Power Consumption**
  - **15.366W (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**

When using IR extension kits to control your AV sources and displays, proper setup and environmental factors can significantly affect performance. Here are some key tips and common issues to check:

- **Emitter Placement (IR Emitter on Source Device):**
  - Ensure the IR emitter is securely placed directly over the IR sensor window of the source device (e.g., Blu-ray player, set-top box). This window is often near the front panel and may be difficult to see. If unsure, refer to the device's manual or test positioning while pressing remote buttons.

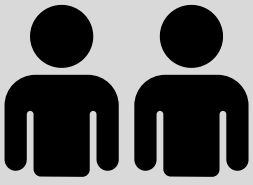
- **Receiver Position (IR Receiver or Transmitter Facing Remote):**
  - The IR receiver must be positioned in a location that has clear line-of-sight to the remote control. Avoid placing it behind TV bezels, inside cabinets, or near dark glass that might block or reflect IR signals.

- **Sunlight and Bright Lighting:**
  - Direct sunlight or strong fluorescent lighting can interfere with IR signals. Try to position the IR receiver away from windows or bright light sources. In rooms with excessive natural light, consider using a receiver with better shielding or IR filtering.

- **Signal Distance and Interference:**
  - IR extension kits typically work best within the recommended cable length. Excessive cable runs or using low-quality extension cables can degrade the signal. Also, avoid running IR cables alongside high-voltage power lines or network cables to reduce potential interference.

- **Double Check Input/Output:**
  - IR kits have specific ports for "IR IN" (receiver) and "IR OUT" (emitter). Connecting these incorrectly can prevent the system from working.

- **Test with Direct Remote Access:**
  - Before troubleshooting the IR extension, confirm the source device responds to the remote when used directly. If not, the issue may be with the remote or the device itself.



Much Easier with two people

Have one person point the remote control at the IR receiver device. They other people can be moving the IR emitter around the front panel of the source input device.

Together, you should be able to find the most responsive area. Once found secure both the receiver and emitter devices, try to avoid any movement, as this will effect the remote performance.

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.

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.