NETVIO

EXTENDER

EX-HT2-402-10

HDMI 18Gbps HDBaseT Extender Kit with Bi-Directional IR, RS-232 & PoC (40m/131ft)



> Product Description

The Netvio EX-HT2-402-10 is a professional HDMI over HDBaseT extender designed for reliable signal distribution.

Supporting 4K60 4:4:4 video with HDR10+, Dolby Vision, and HLG up to 40m, or 1080p up to 70m, it delivers exceptional clarity over a single Cat6/6a cable. The transmitter includes an HDMI loop output for local monitoring, while the receiver offers de-embedded stereo audio output for direct connection to amplifiers or powered speakers.

With bi-directional IR, RS-232, CEC pass-through, PoC power sharing, and compact metal enclosures, the EX-HT2-402-10 is a versatile, installer-friendly solution for both residential and commercial AV projects.

> Product Features

- HDMI 2.0b, HDCP 2.2 / 1.4 and DVI 1.0 compliant
- 18Gbps bandwidth, supports resolutions up to 4K60Hz 4:4:4
- Transmission up to 40m at 4K or 70m at 1080p
- HDMI loop output on transmitter for local display/monitoring
- De-embedded stereo audio output on receiver (3.5mm)
- Bi-directional IR, RS-232, and CEC pass-through for complete control integration
- HDR formats supported: HDR10, HDR10+, Dolby Vision, HLG
- PoC (Power over Cable) – one power supply powers both units

> Specifications

Video
- Compliance: HDMI 2.0b, HDCP 2.2 / 1.4, DVI 1.0
- Bandwidth: 18Gbps
- Resolutions: 4K@60Hz 4:4:4, 4K@30Hz 4:4:4, 1080p, 1080i, 720p, 480p, PC up to 1920×1200
- Color Depth: 8/10/12-bit (varies by resolution)
- Color Space: RGB, YCbCr 4:4:4 / 4:2:2 / 4:2:0
- HDR Support: HDR10, HDR10+, Dolby Vision, HLG

Audio
- HDMI: LPCM 2.0–7.1, Dolby Digital/TrueHD/Plus, DTS-HD, DTS:X
- Analog L/R: PCM 2.0 (receiver output)

Extension Distance
- 40m (131ft): 4K@60Hz 4:4:4 over Cat6/6a
- 70m (230ft): 1080p60 over Cat6/6a

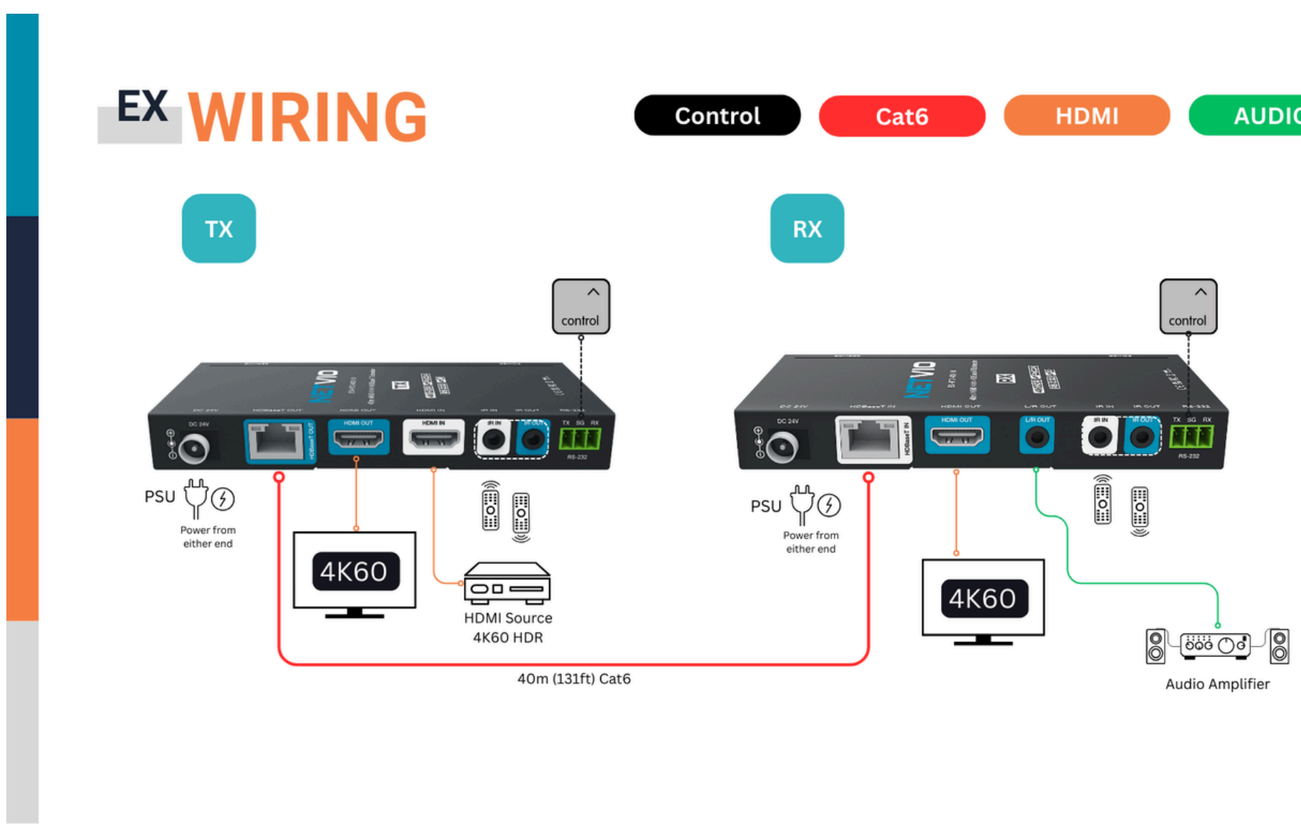
Connectivity
- **Transmitter (TX):**
  - 1× HDMI In (Type A, 19-pin)
  - 1× HDMI Loop Out (Type A, 19-pin)
  - 1× HDBT Out (RJ45)
  - Control: 1× IR In, 1× IR Out, 1× RS-232 (Phoenix), 1× Mini-USB (Service)
- **Receiver (RX):**
  - 1× HDBT In (RJ45)
  - 1× HDMI Out (Type A, 19-pin)
  - 1× L/R Out (3.5mm stereo mini-jack)
  - Control: 1× IR In, 1× IR Out, 1× RS-232 (Phoenix), 1× Mini-USB (Service)

General
- PoC (Power over Cable): Yes, only one unit requires DC 24V/1A supply
- LED Indicators: Power, link and signal status
- Power Supply: AC 100–240V, 50/60Hz input → DC 24V/1A output (locking connector)
- Power Consumption: 9.36W (typical)

Mechanical
- Enclosure: Metal with mounting ears, black finish
- Dimensions (W × D × H):
  - 140 × 65 × 18 mm
  - 5.51" × 2.56" × 0.71"
- Weight:
  - Transmitter: 160 g / 0.35 lbs
  - Receiver: 155 g / 0.34 lbs

Environmental
- Operating Temperature: 0–40°C / 32–104°F
- Storage Temperature: –20–60°C / –4–140°F
- Humidity: 20–90% RH (non-condensing)
- ESD Protection: ±8kV air, ±4kV contact

> Wiring Diagram



> What's Included

- 1 × HDMI over HDBaseT Transmitter
- 1 × HDMI over HDBaseT Receiver
- 1 × IR Blaster Cable (1.5 m)
- 1 × IR Receiver Cable (1.5 m)
- 1 × 24V / 1A Locking Power Adapter
- 2 × 3-pin Phoenix Connectors
- 4 × Mounting Ears + Screws
- 1 × User Information

> A&E Description

Architects & Engineers Specification — Netvio EX-HT2-402-10
The HDMI extender shall transmit digital video up to 4K60 4:4:4 with HDR10+, Dolby Vision, and HLG, together with multi-channel HDMI audio, stereo audio extraction, bi-directional IR, RS-232, and CEC control over a single Cat6/6a cable. Maximum extension distance shall be 40 meters at 4K60 and 70 meters at 1080p60.

The system shall consist of a transmitter with HDMI loop output and a receiver with analog stereo audio output, both housed in compact metal enclosures with mounting ears. The extender shall support PoC (Power over Cable) requiring only one 24V/1A supply. LED indicators shall provide clear status of power and link integrity for easy installation and troubleshooting.