TP-789R
4K60 4:2:0 HDMI Bidirectional PoE Receiver with RS-232 & IR over Long-Reach HDBaseT

| HDMI | HDBaseT | 4K/60 UHD (4:2:0) | HDCP 2.2 Compatible |

TP-789R is a high-performance, long-reach HDBaseT receiver for 4K60Hz (4:2:0) HDMI, RS-232 and IR signals and two-way powering over twisted pair. It extends video signals to up to 40m (130ft) over Kramer copper cables at up to 4K@60Hz (4:2:0) 24bpp video resolution and provides even further reach for lower HD video resolutions. This receiver either provides power over the copper extension cable to a POE (Power over Ethernet) acceptor device such as a POE wall-plate, or accepts POE through the extension cable from a POE provider remote device, as auto-sensed by the receiver.

FEATURES

High Performance Standard Extender - Professional HDBaseT extender for providing long-reach signals and powering over twisted-pair copper infrastructures. TP-789R is a standard extender that can be connected to any market-available HDBaseT-compliant extension product. For optimum extension reach and performance, use recommended Kramer cables.

Bidirectional PoE (Power over Ethernet) - Auto-senses the extension line PoE status and either provides power to a remote POE acceptor such as a POE wall-plate, or accepts power from a remote POE provider such as a POE matrix.

HDMI Signal Extension - Supports deep color, x.v.Color™, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS-HD, 2K, 4K, and 3D as specified in HDMI 2.0. EDID and CEC signals are passed through from the source to the display.

I-EDIDPro™ Kramer Intelligent EDID Processing™ - Intelligent EDID pass-through algorithm that ensures Plug and Play operation for HDMI source and display systems.

Multi-channel Audio Extension - Up to 32 channels of digital stereo uncompressed signals for supporting studio-grade surround sound.

Bidirectional RS-232 Extension - Serial interface data flows in both directions, allowing data transmission and device control.

Bidirectional Infrared Extension - IR interface data flows in both directions, allowing remote control of peripheral devices located at either end of the extended line.

Cost-Effective Maintenance - Status LED indicators for HDMI and HDBT ports and PoE feed status facilitate easy local maintenance and troubleshooting. Local firmware upgrade via RS-232 connection ensures lasting, field-proven deployment.

Easy Installation - Single cable connectivity for both HDBaseT signals and power. Compact DigiTOOLS® fan-less enclosure for dropped-ceiling mounting, or side-by-side mounting of 3 units in a 1U rack space with the recommended rack adapter.
### TECHNICAL SPECIFICATIONS

**Inputs**
- 1 HDBT: On a female RJ-45 connector

**Outputs**
- 1 HDMI: On a female HDMI connector

**Ports**
- 1 IR: On a 3.5mm mini jack connector for IR link extension
- 1 RS-232: On a 3-pin terminal block connector for serial link extension and device firmware upgrade

**Extension Line**
- Up to 40m (130ft) At 4k@60Hz (4:2:0)
- Up to 70m (230ft) At full HD (1080p@60Hz)

*Note: When using Kramer HDBaseT cables*

**Standards Compliance**: HDBaseT 1.0

**Video**
- Max Data Rate: 10.2Gbps (3.4Gbps per graphic channel)
- Max Resolution: 4K@60Hz (4:2:0) 24bpp resolution
- HDMI Support: Deep color, x.v.Color™, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS-HD, 2K, 4K, and 3D as specified in HDMI 2.0

**Extended RS-232**: 300 to 115200 baud rate

**Extended Bidirectional IR**: 20kHz to 100kHz frequency

**User Interface**
- Indicators: IN, OUT, LINK, PoE FEEDER and ON LED indicators
- Controls: DIP-switches

**Power**
- Source: 48V DC, 1.36A
- PoE Acceptor and Provider
- Consumption: 350mA

**Environmental Conditions**
- Operating Temperature: 0° to +40°C (32° to 104°F)
- Storage Temperature: −40° to +70°C (−40° to 158°F)
- Humidity: 10% to 90%, RHL non-condensing

**STANDARDS COMPLIANCE**
- Safety: CE
- Environmental: RoHs, WEEE

**Enclosure**
- Size: Tool
- Type: Aluminum
- Cooling: Convection ventilation

**Accessories**
- Included: Power adapter, bracket set

**Product Dimensions**
- 12.00cm x 7.15cm x 2.44cm (4.72" x 2.81" x 0.96") W, D, H
- 0.2kg (0.5lbs) approx

**Shipping Dimensions**
- 15.70cm x 12.00cm x 8.70cm (6.18" x 4.72" x 3.43") W, D, H
- 0.7kg (1.5lbs) approx