

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 Dimension 12.00cm x 7.15cm x 2.44cm (4.72" x 2.81" x 0.96") W, D, H

Product Weight 0.2kg (0.5lbs) approx

Shipping Dimension 15.70cm x 12.00cm x 8.70cm (6.18" x 4.72" x 3.43") W, D, H

Shipping Weight 0.7kg (1.5lbs) approx

