

## **TP-580RA**

4K60 4:2:0 HDMI Receiver with RS-232, IR & Stereo Audio De-embedding over Long-Reach HDBaseT

| HDCP Compliant | HDBaseT



TP-580RA is a high-performance, long-reach HDBaseT receiver for 4K@60Hz (4:2:0) HDMI, RS-232, IR and stereo audio signals over twisted pair that de-embeds the stereo audio signal on its digital and analog audio ports. It extends video signals to up to 40m (130ft) over CAT copper cables at up to 4K@60Hz (4:2:0) 24bpp video resolution and provides even further reach for lower HD video resolutions

## **FEATURES**

High Performance Standard Extender - Professional HDBaseT extender for providing long-reach signals over twisted-pair copper infrastructures. TP-580RA 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

HDMI Signal Extension - HDCP 1.4 compliant. 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 handling, processing and pass-through algorithm that ensure 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

Audio De-embedding (Extraction) - According to auto-sensed signal attributes and per user selection, the transmitted digital audio signal is de-embedded or the Audio Return Channel (ARC) signal is extracted from the AV signal. This signal is transmitted to a stereo, digital audio output, and concurrently converted to an analog signal for transmission to balanced stereo analog audio output, in parallel to being transmitted to the HDMI AV output. This enables high-quality audio playback by routing the audio to external speakers in parallel to routing the audio to the local speakers found on the connected AV acceptor device (such as a TV or laptop)

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 facilitate easy local maintenance and troubleshooting. Local firmware upgrade via RS-232 connection ensures lasting, field-proven deployment

Easy Installation - 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 an RJ-45 female connector

Outputs 1 HDMI On a female HDMI connector

1 Unbalanced Stereo Audio On a 3.5mm mini jack

1 S/PDIF On an RCA connector

Ports 1 IR On a 3.5mm mini jack for IR link extension

1 RS-232 On a 3-pin terminal block connector for serial link extension and device

firmware upgrade

Extension Line Compliance HDBaseT 1.0

Up to 40m (130ft) At 4K@60Hz (4:2:0) (When using Kramer HDBaseT cables)

Up to 70m (230ft) At full HD (1080p@60Hz 36bpp) (When using Kramer HDBaseT

cables)

Video Max. Data Rate 10.2Gbps (3.4Gbps per graphic channel)

Max. Supported Resolution 4K@60Hz (4:2:0) 24bpp

Standards Compliance HDCP 1.4

HDMI Support Deep color, x.v.Color<sup>™</sup>, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS-HD, 2K, 4K, and 3D as specified in HDMI 2.0

Analog Audio Level Up to 1 Vrms

THD + NOISE 0.03% @ 1 KHz at nominal level

Extended RS-232 Baud Rate 300 to 115200

Control RS-232 Baud Rate 115200

Enclosure Size DigiTools

Type Aluminum

Cooling Convection ventilation

Power Source 12V DC

Consumption 570mA

Environmental Conditions

Operating Temperature 0° to 40°C (32° to 104°F)

Storage Temperature  $-40^{\circ}$  to  $+70^{\circ}$ C ( $-40^{\circ}$  to  $158^{\circ}$ F)

Humidity 10% to 90%, RHL non-condensing

Accessories Included Power supply unit

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

Product Weight 0.3kg (0.6lbs) approx

Shipping Dimensions 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



