

TP-583R

4K HDR HDMI Receiver with RS-232 & IR over Long-Reach HDBaseT

| HDMI | HDBaseT | 4K/60 UHD (4:4:4)



TP-583R is a high-performance, long-reach HDBaseT receiver for 4K HDR HDMI, RS-232 and IR signals over twisted pair. TP-583R converts the HDBaseT signal and outputs it to its HDMI and control ports. It enables extending video signals to up to 70m (230ft) over Kramer copper cables at up to 4K@60Hz (4:4:4) video resolutions. It is compatible with standard HDBaseT-compliant extenders at 4K@30Hz and HD video resolutions

FEATURES

High Performance Standard Extender - Professional HDBaseT extender for providing long-reach signals over twisted-pair copper infrastructures. It employs low-level video compression technology that delivers visually lossless performance for 4K@60 (4:4:4) and HDR signals with near-zero latency. This high-quality compressed signal is extended to almost double the extension reach of the uncompressed signal

Future-proof, Standard Extender - TP-583R is a standard HDBaseT extender, backwards compatible with other standard HDBT extenders. It extends either compressed or uncompressed HDBaseT signal, by auto-adapting to the compression capabilities of its connected extender. This enables it to be connected to any market-available HDBaseT-compliant extension product

Intelligent Compression Handling - Automatically detects a standard HDBaseT extender without compression and disables the compression to extend the signal in compliance with the detected extender

HDMI Signal Extension - HDR HDCP 2.2 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 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 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 connector

Outputs 1 HDMI: On a female HDMI connector

Ports 1 RS-232: On a 3-pin terminal block connector for serial link extension

1 IR: On a 3.5mm mini jack connector

Extension Line Standard Compression Up to 40m (130ft) at 4K@60Hz (4:4:4) or 4K@60Hz (4:2:0)

Up to 70m (230ft) at 4K@30Hz (4:4:4) or full HD (1080p @60Hz 36bpp)

High Compression Up to 70m (230ft) at 4K@60Hz (4:4:4), 4K@60Hz (4:2:0), or full

HD (1080p @60Hz 36bpp)

No Compression Extension Up to 40m (130ft) at 4K@60Hz (4:2:0)

Up to 70m (230ft) at full HD (1080p @60Hz 36bpp)

Standards Compliance HDBaseT 1.0

Note When using recommended Kramer cables

Video Max Data Rate: Up to 18Gbps (6Gbps per graphic channel)

Standard Compression Max Resolution: 4096x2160@60Hz (4:4:4) 24bpp

High Compression Max Resolution: 3840x2160@60Hz (4:4:4) 24bpp

No Compression Max Resolution 4096x2160@60Hz (4:2:0) 24bpp

Compliance: HDCP 2.2, HDR 10

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
BIDIRECTIONAL RS-

300 to 115200 baud rate

232:

EXTENDED BIDIRECTIONAL IR:

20kHz to 100kHz frequency

User Interface Indicators: IN, OUT, LINK and ON LEDs

Controls: DIP-switches

Power Source: 12V DC, 2A

Consumption: 680mA

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

Regulatory Compliance (Standards Compliance) Safety: CE, UL

Environmental: RoHs, WEEE

Enclosure

Size: DigiTOOLS®

Type: Aluminum

Cooling: Convection ventilation

Accessories Included: Power adapter, power cord, bracket set

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

Product Weight 0.3kg (0.6lbs) approx

Shipping Dimensions $49.00cm \times 18.60cm \times 58.80cm (19.29" \times 7.32" \times 23.15")$ W, D, H

Shipping Weight 0.7kg (1.5lbs) approx



