TP-590R

4K60 4:2:0 HDMI Receiver with USB, RS–232, & IR over Long–Reach HDBaseT 2.0

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

TP–590R is a high–performance, long–reach HDBaseT 2.0 receiver for 4K60Hz (4:2:0) HDMI, USB, RS–232, and IR signals over twisted pair. TP–590R receives the HDBaseT 2.0 signal and converts it back into the original input signals. It extends video signals to up 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–590R 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 2.3, EDID and CEC signals are passed through from the source to the display. 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
- **Flexible USB 2.0 Extension** - An active USB host is connected at either the transmitter or receiver side. USB 2.0 signals are extended between the transmitter and receiver, enabling connection of the active USB host to both local and remote USB devices, such as camera and audio devices, or HID (Human Interface Devices) mouse or keyboard devices
- **I–EDIDPro™ Kramer Intelligent EDID Processing™** - Intelligent EDID handling, processing, and pass–through algorithm that ensures Plug and Play operation for HDMI source and display systems
- **Multi–channel Audio Transmission** - 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, HDBT, and USB active host ports, facilitate easy local maintenance and troubleshooting
- **Easy and Elegant Installation** - Compact DemiTOOLS™ fan–less enclosure for dropped–ceiling mounting, or side–by–side mounting of 2 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 an HDMI connector
Ports	1 USB 2.0 Host: On a USB–B connector
	3 USB 2.0 Device: On USB type−A connectors
	1 IR: On a 3.5mm mini jack for IR link extension,
	1 RS–232: On a 3–pin terminal block for serial link extension
USB Features	Integrated USB Hubs 1
Extension Line	Up to 40m (130ft): At 4K @60Hz (4:2:0):
	Up to 70m (230ft): At full HD (1080p @60Hz 36bpp)
	Note: When using Kramer HDBaseT cables
	Standards Compliance: HDBaseT 2.0
Video	Max Data Rate: 10.2Gbps bandwidth (3.4Gbps per graphic channel)
	Max Resolution: 4K UHD @60Hz (4:2:0) 24bpp resolution
	Content Protection: HDCP 2.3
	HDMI Support: 4K as specified in HDMI 2.0
Extended USB	Host Compliance: 1.1 and 2.0
	Extended Line Rate Bandwidth: Up to 127Mbps (out of max 480 USB)
Extended RS-232	Baud Rate: 300 to 115200
Power	Source: 5V DC, 4A
	Consumption: 3.6A
	USB Device Charging Max Total Current: 2A
Enclosure	Size: DemiTools
	Type: Aluminum
	Cooling: Convection ventilation
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
	Vibration: ISTA 1A in carton (International Safe Transit Association)
Regulatory Compliance (Standards Compliance)	Safety: CE
	Environmental: RoHs and WEEE
Accessories	Included: Power adapter, bracket, rubber feet

Product Dimensions	19.05cm x 5.96cm x 2.74cm (7.50" x 2.35" x 1.08") W, D, H
Product Weight	0.5kg (1.1lbs) approx
Shipping Dimensions	34.50cm x 16.50cm x 5.20cm (13.58" x 6.50" x 2.05") W, D, H
Shipping Weight	1.0kg (2.2lbs) approx