Kramer TP-590TXR HDBaseT 2.0 5-Play 4K HDMI Transmitter
The TP-590TXR is a high-performance, extended range, HDBaseT 2.0 transmitter for
HDMI, USB2.0, audio, bidirectional RS-232 and IR signals. The TP-590TXR converts
the HDMI, USB2.0, audio, RS-232 and IR input signals into an HDBaseT twisted pair
signal that it sends to the TP-590RXR for decoding.

FEATURES

- **Maximum Data Rate** - 10.2Gbps (3.4Gbps per graphic channel).
- **HDTV Compliant.**
- **HDCP Compliant.**
- **HDBaseT V2 Support.**
- **USB Support** - USB1.1 & USB2.0 (up to 127Mbps).
- **Supports Isochronous USB Cameras.**
- **HDMI Support** - Deep color, x.v.Color™, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS-HD, CEC, 2K, 4K, 3D.
- **System Range** - Up to 130m (430ft) at normal mode (2K), up to 100m at normal mode (4K); up to 180m (590ft) ultra mode (1080p @60Hz @24bpp) when using BC-HDKat6a cables.
- **Cables** - For optimum range and performance, use Kramer’s BC-HDKat6a cable. Note that the transmission range depends on the signal resolution, source and display used. The distance using non-Kramer CAT 6 cable may not reach these ranges.
- **EDID Pass Through** - Passes EDID signals from the source to the display.
- **USB Pass-Through** - For connecting a peripheral device, such as, a mouse or a keyboard.
- **Bidirectional RS-232 Interface** - Data flows in both directions via the RS-232 interface, allowing status requests and device control.
- **Bidirectional Infrared Interface** - For remote control of peripheral devices.
- **USB Pass-Through** - For connecting a peripheral device, such as, a mouse or a keyboard.
- **Power over Ethernet (PoE)** - The transmitter can provide power over the TP cable to a PoE-compatible receiver.
- **Audio Support** - Embedded and unbalanced stereo audio transmission.
- **Indicators** - LED status indicators for input, output, HDBT link and power.
**TECHNICAL SPECIFICATIONS**

**INPUTS:**
1 HDMI on an HDMI connector, 1 stereo analog audio on a 3.5mm mini jack.

**OUTPUTS:**
1 HDBT on a RJ-45 connector, 1 USB2.0 on a USB connector.

**PORTS:**
1 IR on a 3.5mm mini jack, 1 RS-232 on a 3-pin terminal block for the serial link, 1 RS-232 on a 3-pin terminal block for transmitter control, 1 Ethernet on an RJ-45 connector for transmitter control.

**MAX. DATA RATE:**
10.2Gbps (3.4Gbps per graphic channel) in normal mode, up to 4.95Gbps (1.65Gbps per graphic channel) in ultra mode.

**RS-232 BAUD RATE:**
115200.

**COMPLIANCE WITH HDMI STANDARD:**
Supports HDMI and HDCP.

**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.

**POWER CONSUMPTION:**
12V DC, 720mA.

**DIMENSIONS:**
18.8cm x 11.3cm x 2.6cm (7.4” x 4.45” x 1.0”) W, D, H.

**WEIGHT:**
0.6kg (1.32lbs).

**ACCESSORIES:**
Power supply (48V, 0.5A).

**OPTIONS:**
RK-T2B 19” rack mount; Kramer external IR sensor (P/N: 95-0104050), Kramer IR emitter cable (P/N: C-A35/IRE-10), Kramer BC-HDKat6a cable; 2 IR Emitter Extension Cables are also available: a 15m cable and a 20m cable.

![Diagram of TP-590TXR connection diagram.](image)