



## KIT-500

5x2 4K60 USB-C/HDMI Extender/Scaler  
Matrix Kit

| HDMI | Ethernet - RJ-45 | HDBaseT  
| 4K/60 UHD (4:2:0)



KIT 500 is a high-performance integrated matrix scaler kit, consisting of the KIT 500T matrix transmitter with two USB-C and two HDMI/USB inputs independently routable to HDMI and HDBT outputs, and the KIT 500R auto-switcher scaler receiver with an HDMI input for routing a local signal and an HDBT input for routing a remote signal (from the KIT 500T transmitter). The remote USB peripherals (such as a room camera) are extended for use of local USB host for convenient hybrid meeting operation with both room and online participants

## FEATURES

**Hybrid Meetings** - Designed to support switching of both AV inputs and USB host ports, for concurrent connection to AV outputs and room USB devices. The product facilitates collaborative hybrid meetings where participants can switch to share their content with both room and online meeting participants

**High-Performance Scaling for Valuable End-user Presentation Experience** - Built-in ProcAmp high-resolution scaling technology for optimal image display, and advanced video processing with clean, glitch-free source switching

**Powerful Audio Handling** - Integrated DSP for intelligent microphone talk-over, audio signal equalization, mixing, and delay processing, together with flexible audio insertion and extraction capabilities, ensure unsurpassed experience for the presenter and end-user

**HDMI Signal Switching** - HDCP 2.2 compliant, supporting deep color, x.v.Color™, CEC, HDMI uncompressed audio channels, Dolby TrueHD, DTS-HD, 2K, 4K, and 3D as specified in HDMI 2.0

**I-EDIDPro™ Kramer Intelligent EDID Processing™** - Intelligent EDID handling, processing, locking and pass-through algorithm ensures plug & play operation for HDMI source and display systems

**BYOD Ease and Convenience** - Connect any DP-Alt-Mode-capable USB-C device as an AV presentation source, while providing the connected device with USB 2.0 and Ethernet connection, and up to 60 watts of power, via a single USB-C cable connection only

**Wired and Wireless Auto Switcher** - When the receiver is connected to a wireless connectivity device such as Kramer VIA, can automatically select between a wired source at the transmitter or the wireless source at the receiver

**Simple Control** - Remote IP-controller connection, browser operation webpage, local panel buttons, or remotely connected contact-closure buttons, for easy and fully flexible user ports selection, signals routing, and matrix control

**Built-in Intelligent Control Gateway** - Remote IP-driven intelligent control of connected AV and motorized devices via relay, RS-232 and CEC, eliminating the need for an external control gateway and reducing installation complexity and costs to enable easy integration with control systems such as Kramer Control

**I-EDIDPro™ Kramer Intelligent EDID Processing™** - Intelligent EDID handling, processing and pass-through algorithm that ensures Plug and Play operation

**Audio De-embedding** - The digital audio signal passing-through to the output is also available on the stereo balanced analog audio output. This enables playing the audio on a locally connected professional audio system (such as DSP) and speakers, in parallel to playing it on the speakers connected to the AV acceptor device (such as TVs with speakers)

**USB 2.0 Extension** - USB 2.0 signals are extended between the transmitter and the receiver, enabling connection of the active USB host to both local and remote USB devices, such as a camera and audio devices, or HID (Human Interface Devices) mouse or keyboard devices

**Bi-directional RS-232 Extension** - Serial interface data flows in both directions, allowing data transmission and device control

**Comprehensive Management** - Flexible service options – including local panel status LED indicators and OSD menu operation, remote IP-driven firmware upgrade and management via user-friendly embedded web pages, and remote IP or local serial service and management via API commands – ensure lasting, field-proven deployment

**Easy and Elegant Installation** - Single cable connectivity for both HDBaseT signals and PoC power distribution with only a single power mains connection. Compact fan-less enclosures for flexible under-table or podium, dropped-ceiling, and display-adjacent mounting



# kramer

## TECHNICAL SPECIFICATIONS

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TRANSMITTER	<p><b>INPUTS</b></p> <ul style="list-style-type: none"><li>2 HDMI: On female HDMI connectors</li><li>2 USB-C: On USB-C female connectors</li><li>1 Mic/Unbalanced Stereo Audio: On a 3-pin terminal block connector</li><li>1 AUX Unbalanced Stereo Audio: On a 3.5mm mini jack</li></ul> <p><b>OUTPUTS</b></p> <ul style="list-style-type: none"><li>1 HDMI: On a female HDMI connector</li><li>1 HDBaseT: On an RJ-45 connector</li><li>1 Balanced Stereo Audio: On a 5-pin terminal block connector</li></ul> <p><b>PORTS</b></p> <ul style="list-style-type: none"><li>1 Ethernet: On an RJ-45 connector</li><li>1 Control RS-232: On a 3-pin terminal block connector</li><li>1 Data RS-232: On a 3-pin terminal block connector</li><li>1 Program USB: On a USB type A connector for firmware upgrade</li><li>3 USB (HUB): On USB type A connectors</li><li>2 USB (Host): On USB type B connectors</li><li>Integrated USB Hubs: 2</li></ul> <p><b>ANALOG AUDIO</b></p> <ul style="list-style-type: none"><li>Input Coupling: AC</li><li>Output Coupling: DC</li><li>Max Input Signal Level: 5.5Vp-p/8dBu</li><li>Max Output Signal Level: 6Vp-p/8.7dBu</li><li>Frequency Response: 20Hz to 20kHz <math>\pm 0.1</math>dB</li><li>THD+N (A-weighted): 76dB</li><li>Input Impedance: 14K<math>\Omega</math></li><li>Output Impedance: 500<math>\Omega</math></li><li>For Embedded Audio – Number of Supported Channels: Up to 8CH</li><li>Supported Audio Formats: Dolby, DTS</li></ul>
RECEIVER	<p><b>INPUTS</b></p> <ul style="list-style-type: none"><li>1 HDBaseT: On an RJ-45 connector</li><li>1 HDMI: On a female HDMI connector</li></ul> <p><b>OUTPUTS</b></p> <ul style="list-style-type: none"><li>1 HDMI: On a female HDMI connector</li><li>1 Balanced Stereo Audio: On a 5-pin terminal block connector</li></ul> <p><b>PORTS</b></p> <ul style="list-style-type: none"><li>1 Control RS-232: On a 3-pin terminal block connector</li><li>1 Data RS-232: On a 3-pin terminal block connector</li><li>3 Remote Contact-Closure: On a 4 pin terminal block connector</li><li>1 Relay: On a 3-pin terminal block connector</li><li>2 USB (DEVICE): On USB 2.0 type A connectors</li><li>1 Program USB: On a USB-A connector for firmware upgrade</li><li>Integrated USB Hubs: 1</li></ul> <p><b>ANALOG AUDIO</b></p> <ul style="list-style-type: none"><li>Output Coupling: DC</li><li>Max Input Signal Level: 3.5Vp-p/4.2dBu</li><li>Max Output Signal Level: 10Vp-p/13dBu</li><li>Frequency Response: 20Hz to 20kHz <math>\pm 0.1</math>dB</li><li>THD+N (A-weighted): 76dB</li><li>Output Impedance: 500<math>\Omega</math></li><li>For Embedded Audio – Number of Supported Channels: 2CH</li><li>Supported Audio Formats: LPCM</li></ul>
Video	<p>Max Data Rate (on the HDMI ports) USB-C and HDMI ports: 18Gbps HDBT ports: 10.2Gbps</p> <p>Max Resolution (on HDMI ports) USB-C and HDMI ports: 4K@60Hz (4:4:4) HDBT ports: 4K@60Hz (4:2:0)</p> <p>HDMI Support: 4K60, CEC, xvYCC color</p> <p>Content Protection: HDCP 1.4 and 2.2 (KIT-500R)</p>

KIT-500R Output Resolutions 640x480@60Hz, 800x600@60Hz, 1024x768@60Hz, 1280x768@60Hz, 1280x800@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1200@60Hz RB, 2560x1600@60Hz RB, 1920x1080@60Hz, 1280x720@60Hz, 2048x1080@50/60Hz, 2560x1440@60Hz RB, 720x480p@60Hz, 720x576p@50Hz, 1280x720p@50/60Hz, 1920x1080p@24/25/30/50/60Hz, 2560x1080p@50/60Hz, 2K@24/25/30/50/60Hz, 4K@24/25/30/50/60Hz

USB Features Data Rate: USB 3.0 Ports: 5Gbps  
 USB 2.0 over HDBT: Up to 127Mbps (out of max 480Mbps)

Extension Line Up to 40m (130ft): At 4K@60Hz (4:2:0)  
 Up to 70m (230ft) At full HD (1080p@60Hz)  
 Compliance: HDBaseT 2.0

Extended RS-232 Baud Rate 300 to 115200

Power Source: 24V DC, 5A  
 Combined Consumption of Both Units 24V DC, 3.7A

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

Enclosure Size: MegaTOOLS®  
 Type: Aluminum  
 Cooling: Convection ventilation

STANDARDS COMPLIANCE Safety CE  
 Environmental FCC, UCKA

Accessories Included: 1 Power adapter, 2 power cords (EU and US), 8 rubber feet, 1 bracket set

Product Dimensions 21.40cm x 17.40cm x 4.00cm (8.43" x 6.85" x 1.57" ) W, D, H

Product Weight 1.7kg (3.8lbs) approx

Shipping Dimensions 45.40cm x 48.00cm x 7.50cm (17.87" x 18.90" x 2.95" ) W, D, H

Shipping Weight 2.8kg (6.3lbs) approx

