KIT-401 is a high-performance auto-switcher/scaler kit for 4K HDMI™ and VGA over long-reach HDBaseT. The kit includes the KIT-401T wall-plate transmitter/switcher and the KIT-400R receiver/scaler. The KIT-401T transmitter converts the user-selected input signal into the transmitted HDBaseT signal. The KIT-400R receiver receives the HDBaseT signal, converts it to HDMI and up- or down-scales the picture to match the resolution of the HDMI monitor. KIT-401 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

Simple and Powerful Maestro Room Automation - Intuitive user interface enables you to fully automate your meeting room elements. Configure lights, shades, devices and more to be activated by an extensive range of triggers, including scheduling, input/output connectivity, routing, and button pressing. By minimizing user intervention, Maestro room automation saves meeting prep time and minimizes human error before presentations.

HDMI Support - HDCP 1.4 / 2.2, 4K60, CEC, xvYCC color (on input)

PoC (Power over Cable) Enabled - Power only one of the units. The other unit of the receiver/transmitter pair is powered via the HDBaseT extension.

2 Local and 1 Remote Source - With auto-switching of the live source to the HDMI display on the output at the receiver. The transmitter has an HDMI and a VGA input, with a dedicated audio jack, and there is an additional HDMI input on the receiver side.

Audio De-embedding - Output the HDMI audio to a balanced stereo output on the receiver side, and an unbalanced stereo output on the transmitter side.

Bidirectional RS-232 Extension - Serial interface data flows in both directions, allowing data transmission and device control.

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

Easy Remote Device Control - Control devices connected to KIT-401 from the user-friendly Kramer Aware interface on the KIT-401 embedded webpages. You can also access the interface using the Kramer Aware app on a compatible Kramer touch panel.

Convenient Unit Control and Configuration Options - Local control via front panel source and output switching buttons, DIP-switches for configuring connection priority, and OSD menu. Distance control via user-friendly embedded web pages via Ethernet, Protocol 3000 API, RS-232 serial commands transmitted by a PC, touch screen system or other serial controller and relay switches.

Easy, Cost-effective Maintenance - Local firmware upgrade via USB connector.

Easy and Elegant Installation - Installation is fast and cost-effective via a single CAT cable, providing both video signal and power (PoC) connections. The transmitter compactly fits into standard US, EU and UK 2-gang in-wall box size, supporting decorative integration with room deployed user interfaces such as electrical switches. The compact MegaTOOLS™ fan-less receiver 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

### TRANSMITTER

**Inputs/Outputs**

**INPUTS**
- 1 HDMI: On A female HDMI connector
- 1 VGA: On a 15-pin HD connector
- 1 Unbalanced Audio: On a 3.5mm mini jack

**OUTPUTS**
- 1 HDBaseT: On an RJ−45 connector
- 1 Unbalanced Audio: On a 3-pin terminal block connector

**PORTS**
- 1 Ethernet: On an RJ−45 connector
- 1 Control RS−232: On a 3-pin terminal block connector
- 1 Data RS−232: On a 3-pin terminal block connector
- 1 Remote Contact−Closure: On a 5 pin terminal block connector

### RECEIVER

**Inputs/Outputs**

**INPUTS**
- 1 HDBaseT: On an RJ−45 connector
- 1 HDMI: On female HDMI connectors

**OUTPUTS**
- 1 HDMI: On female HDMI connectors
- 1 Balanced Audio: On a 5-pin terminal block connector

**PORTS**
- 1 Control RS−232: On a 3-pin terminal block connector
- 1 Data RS−232: On a 3-pin terminal block connector
- 1 Remote Contact−Closure: On a 4 pin terminal block connector
- 1 Relay: On a 3-pin terminal block connector
- 1 Program USB: On a USB−A connector for firmware upgrade

### Video

Max Data Rate (on the HDMI ports) KIT−400R: 18Gbps, KIT−400T: 10.2Gbps

Max Resolution (on HDMI ports) KIT−400R: 4K@60Hz (4:4:4), KIT−400T: 4K@60Hz (4:2:0)

HDMI Support: 4K60, CEC, xvYCC color

Content Protection: HDCP 1.4 and 2.2 (KIT−400R)

KIT−400R 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, 720x576p@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

### Extension Line

Up to 40m (130ft): At 4K@60Hz (4:2:0)

Up to 70m (230ft) At full HD (1080p@60Hz)

### Extended RS-232

Baud Rate 300 to 115200

### Power

Source: 12V DC

Combined Consumption of Both Units 2A (1 unit connected to 12V DC + 1 unit powered by PoC)

### User Interface

Control Input selection buttons, DIP−switches, remote contact−closure switches, relay switches. Kramer API via RS−232 serial commands transmitted by a PC, touch screen system or other serial controller, embedded web pages via LAN for configuration and control

Indicators Power, link, input selection LEDs

### 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
<table>
<thead>
<tr>
<th>Enclosure</th>
<th>Size: Transmitter – 2-Gang wall-plate; Receiver – MegaTOOLS®</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type: Aluminum</td>
</tr>
<tr>
<td></td>
<td>Cooling: Convection ventilation</td>
</tr>
<tr>
<td>STANDARDS COMPLIANCE</td>
<td>Safety CE</td>
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<tr>
<td></td>
<td>Environmental FCC, UL</td>
</tr>
<tr>
<td>Accessories</td>
<td>Included: 1 Power adapter, 4 rubber feet, 1 bracket sets, 1 white US-D size frame or 1 white EU + 1 UK size frame</td>
</tr>
</tbody>
</table>
KIT-401/US-D(W)  4K Auto-Switcher/Scaler Kit over Long-Reach HDBaseT - with white US-D size wall-plate frame

KIT-401/EU-80/86(W)  4K Auto-Switcher/Scaler Kit over Long-Reach HDBaseT - with white EU (80mm) and UK (86mm) size wall-plate frame