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KIT-400 Quick Start Guide

This guide helps you install and use your KIT-400 for the first time.

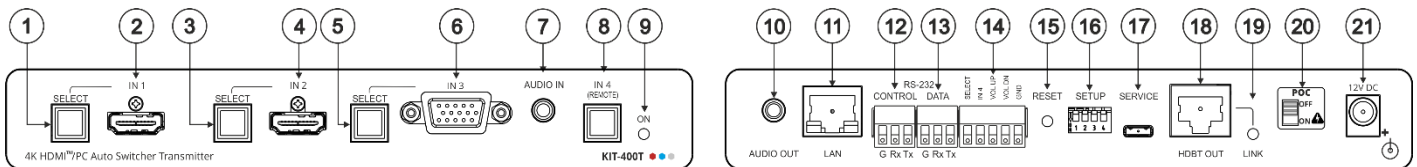
Go to www.kramerav.com/downloads/KIT-400 to download the latest user manual and check if firmware upgrades are available.

Step 1: Check what's in the box

- ✓ KIT-400, including:
KIT-400T 4K HDMI/PC Auto Switcher Transmitter
and KIT-400R 4K HDBT/HDMI Receiver/Scaler
- ✓ 2 Bracket sets
 - ✓ 1 Power adapter and cord
- ✓ 8 Rubber feet
 - ✓ 1 Quick start guide

Step 2: Get to know your KIT-400

KIT-400T



| # | Feature | Function |
|----|---|---|
| 1 | IN 1 SELECT Button | Press to select the IN 1 input. Lights red when the analog audio is selected; lights green when the embedded audio is selected. |
| 2 | HDMI Connector | Connect to an HDMI source. |
| 3 | IN 2 SELECT Button | Press to select the IN 2 input. Lights red when the analog audio is selected; lights green when the embedded audio is selected. |
| 4 | HDMI Connector | Connect to an HDMI source. |
| 5 | IN 3 SELECT Button | Press to select the IN 3 input. Lights red when the analog audio is selected; lights green when embedded audio from embedded HDMI is selected, see Step 4: Connect inputs and outputs . |
| 6 | 15-pin HD Connector | Connect to a PC graphics source. |
| 7 | AUDIO IN 3.5mm Mini Jack | Connect to an unbalanced, stereo audio source (for example, the audio output of the laptop). |
| 8 | IN 4 (REMOTE) Button | Press to select the inputs on KIT-400R: <ul style="list-style-type: none"> Button lights – HDMI INPUT on KIT-400R is selected as the input. Button off – The selected input on KIT-400T is routed via HDBT. |
| 9 | ON LED | Lights green when the device is powered by a power adapter; lights red when power is provided via PoC. |
| 10 | AUDIO OUT 3.5mm Mini Jack | Connect to the unbalanced, stereo audio acceptor (for example, active speakers). |
| 11 | LAN RJ-45 Connector | Connect to the LAN (Ethernet traffic or PC controller). |
| 12 | RS-232 CONTROL 3-pin Terminal Block Connector | Connect to a serial controller or PC. |
| 13 | DATA 3-pin Terminal Block Connector | Connect to a serial data source or acceptor. |
| 14 | Remote Contact-closure 4-pin Terminal Block Connector | Connect to contact closure switches (by momentary contact between the desired pin and GND pin) to select an input, the remote IN 4 and audio volume (up or down), see Step 6: Operate KIT-400 . |
| 15 | RESET Button | Short press: sends a reset command to KIT-400R and then reboots KIT-400T. Long press: resets KIT-400R to its factory default parameters and then resets KIT-400T to its factory default parameters. |

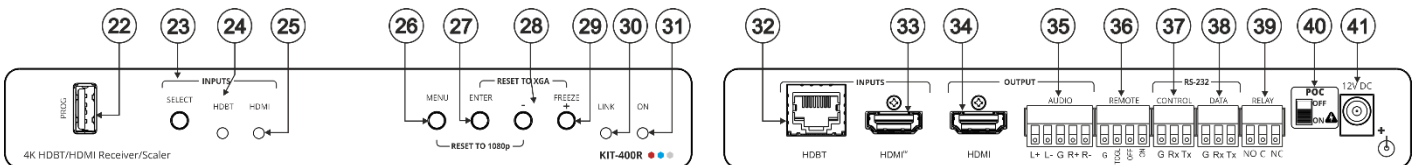
| # | Feature | Function |
|----|----------------------------|---|
| 16 | SETUP 4-way DIP-switch | Set the device behavior, see Step 4: Connect inputs and outputs . |
| 17 | SERVICE Mini USB Connector | Connect to a PC to perform a firmware upgrade. |
| 18 | HDBT OUT RJ-45 Connector | Connect to KIT-400R . |
| 19 | LINK LED | Lights blue when a link is established with the receiver. |



Follow powering instructions in [Step 5: Connect power](#).
Failure to use PoC and power connector correctly may destroy the devices!

| | | |
|----|-------------------------------|---|
| 20 | PoC (Power over Cable) Switch | Set the PoC switch to ON on both KIT-400T and KIT-400R . |
| 21 | 12V DC Connector | Connect to the supplied power adapter, unless the power adapter is connected to KIT-400R . |

KIT-400R



| # | Feature | Function |
|----|---|---|
| 22 | PROG USB Connector | Connect to a USB stick to perform firmware upgrades. |
| 23 | INPUTS | SELECT Button Press to select the input (HDBT or HDMI). By default, the SELECT button is locked. You can unlock it via the ADVANCED menu in the OSD. |
| 24 | | HDBT LED Lights blue when the HDBT input is selected. |
| 25 | | HDMI LED Lights blue when the HDMI input is selected. |
| 26 | MENU Button | Press to enter/exit the on-screen display (OSD) menu. Press together with the – button to reset to 1080p. |
| 27 | ENTER Button | In OSD, press to choose the highlighted menu item. Press together with the FREEZE/+ button to reset to XGA. |
| 28 | – | In OSD, press to move back through menus or decrement parameter values. |
| 29 | FREEZE/+ Button | In OSD, press to move forward through menus or increment parameter values. When not in OSD, press to freeze the display. |
| 30 | LINK LED | Lights blue when a link is established with the transmitter. |
| 31 | ON LED | Lights green when device is powered. |
| 32 | INPUTS | HDBT RJ-45 Connector Connect to KIT-400T . |
| 33 | | HDMI™ Connector Connect to an HDMI source. |
| 34 | OUTPUT | HDMI Connector Connect to an HDMI acceptor. |
| 35 | | AUDIO 5-pin Terminal Block Connector Connect to a balanced stereo audio acceptor. |
| 36 | REMOTE Contact-Closure 4-pin Terminal Block Connector | Connect to contact closure switches, an occupancy sensor and/or toggle switches (contact between the desired pin and GND pin), to turn display on or off. See Step 6: Operate KIT-400 . |
| 37 | RS-232 | CONTROL 3-pin Terminal Block Connector Connect to a serial controller or PC. |
| 38 | | DATA 3-pin Terminal Block Connector Connect to a serial data source or acceptor. |
| 39 | RELAY 3-pin Terminal Block Connector | Connections to the internal relay: Normally open (NO), normally closed (NC), and common (C). Connect to devices to be controlled by relay (for example, a motorized projection screen). |



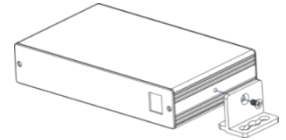
Follow powering instructions in [Step 5: Connect power](#).
Failure to use PoC and power connector correctly may destroy the devices!

| | | |
|----|-------------------------------|---|
| 40 | PoC (Power Over Cable) Switch | Set the PoC switch to ON on both KIT-400T and KIT-400R . |
| 41 | 12V DC Connector | Connect to the supplied power adapter, unless the power adapter is connected to KIT-400T . |

Step 3: Mount KIT-400

Install **KIT-400** using one of the following methods:

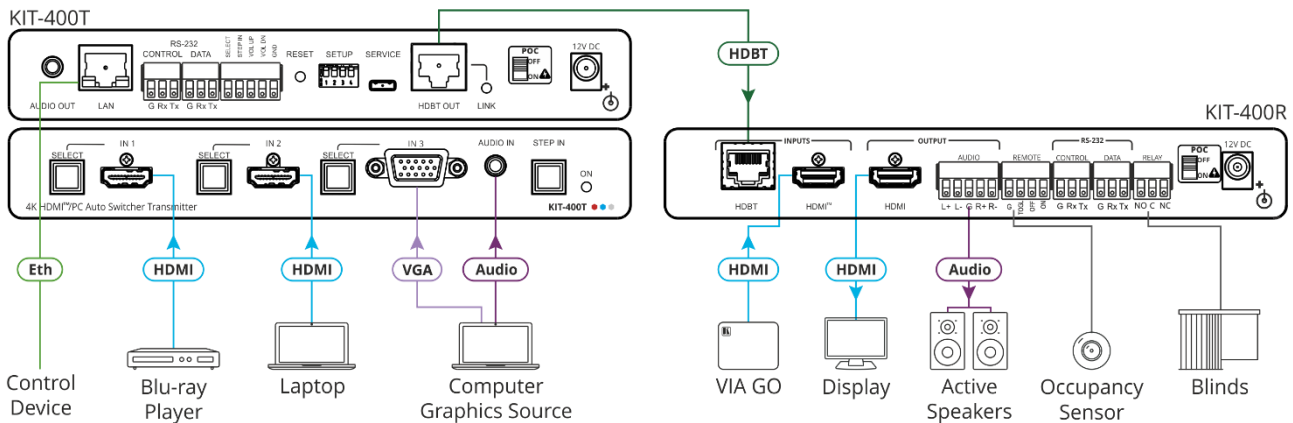
- Attach the rubber feet and place the unit on a flat surface.
- Fasten a bracket (included) on each side of the unit and attach it to a flat surface (see www.kramerav.com/downloads/KIT-400).
- Mount the unit in a rack using the recommended rack adapter (see www.kramerav.com/product/KIT-400).



- Ensure that the environment (e.g., maximum ambient temperature & air flow) is compatible for the device.
- Avoid uneven mechanical loading.
- Appropriate consideration of equipment nameplate ratings should be used for avoiding overloading of the circuits.
- Reliable earthing of rack-mounted equipment should be maintained.
- Maximum mounting height for the device is 2 meters.

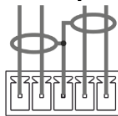
Step 4: Connect inputs and outputs

Always switch OFF the power on each device before connecting it to your **KIT-400**.



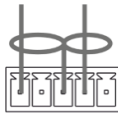
Connecting the audio output

To a balanced stereo audio acceptor:



L+ L- G R+ R-

To an unbalanced stereo audio acceptor:



L+ L- G R+ R-

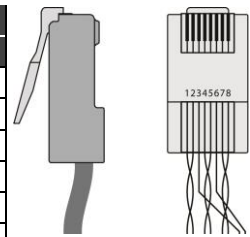
Wiring the RJ-45 connectors

This section defines the TP pinout, using a straight pin-to-pin cable with RJ-45 connectors.



For HDBT cables, it is recommended that the cable ground shielding be connected/soldered to the connector shield.

| EIA / TIA 568B | |
|----------------|----------------|
| PIN | Wire Color |
| 1 | Orange / White |
| 2 | Orange |
| 3 | Green / White |
| 4 | Blue |
| 5 | Blue / White |
| 6 | Green |
| 7 | Brown / White |
| 8 | Brown |



To achieve specified extension distances, use the recommended Kramer cables available at www.kramerav.com/product/KIT-400.

Using third-party cables may cause damage!

Setting the KIT-400T DIP-switches

A switch that is down is on; a switch that is up is off. By default, all the switches are up (off). After changing a DIP-switch you must power cycle the device to implement the change.

DIP-switch 1 set to off (up).

DIP-switch 2 set to off (up).

Audio Switching Selection

| DIP-switch 3 | DIP-switch 4 | Audio Input Selection |
|--------------|--------------|---|
| Off (up) | Off (up) | Automatic – Priority selection: Embedded HDMI → analog Audio In (high to low priority). |
| Off (up) | On (down) | Automatic – Priority selection: Analog Audio In → embedded HDMI (high to low priority). |
| On (down) | Off (up) | Embedded HDMI. |
| On (down) | On (down) | Analog Audio In |

Step 5: Connect power

To power the devices:

1. Set the PoC switches to **ON** on both devices.
2. Connect the power adapter to one of the devices (**KIT-400T** or **KIT-400R**).



Safety Instructions (See www.kramerav.com for updated safety information)

Caution:

- For products with relay terminals and GPIO ports, please refer to the permitted rating for an external connection, located next to the terminal or in the User Manual.
- There are no operator serviceable parts inside the unit.

Warning:

- Failure to use PoC and power connector correctly may destroy the devices!
- Use only the power cord that is supplied with the unit.

Disconnect the power and unplug the unit from the wall before installing.

Step 6: Operate KIT-400

Operate **KIT-400** via:

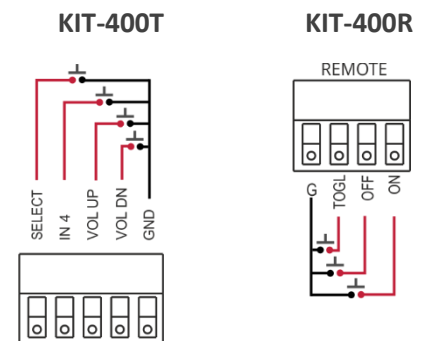
- Front panel buttons
- Remotely, by RS-232 serial commands transmitted by a touch screen system, PC, or other serial controller
- Embedded web pages via the Ethernet
- Remote control switches.
- Room Automation Panel.

| RS-232 Control / Protocol 3000 | | | |
|--|--------------|-----------------|-------|
| Baud Rate: | 115,200 | Parity: | None |
| Data Bits: | 8 | Command Format: | ASCII |
| Stop Bits: | 1 | | |
| Example: (Set the Audio out volume level to 75): #AUD-LVL 1, 1, 75 | | | |
| Default Ethernet Parameters | | | |
| IP Address: | 192.168.1.39 | UDP Port #: | 50000 |
| Subnet mask: | 255.255.0.0 | TCP Port #: | 5000 |
| Gateway: | 0.0.0.0. | | |

Operating via the remote control switches

Momentarily connect the desired pin to the GND pin to select an input:

| Pin Name | Function |
|-----------------|--|
| KIT-400T | |
| SELECT | Short press – Select the input. Long press – Adjust the VGA phase shift. |
| IN 4 | Select the IN 4 input on KIT-400R . |
| VOL UP | Increase the analog audio output level. Short press – Increase volume by one step. Long Press – Increase the volume from 0 to 100% in 10 seconds. |
| VOL DN | Decrease the analog audio output level. Short press – Decrease volume by one step. Long Press – Decrease the volume from 100% to 0 in 10 seconds. |
| KIT-400R | |
| TOGL | One button toggles between display on and display off (instead of using two separate buttons for on and off). Alternatively, using the KIT-400R OSD, configure turning the DISPLAY on or off according to whether a switch is open or closed (for example, when using an occupancy sensor). |
| OFF | Turn off the display. |
| ON | Turn on the display. |



Operating via Room Automation Panel

Control **KIT-400** via any of Kramer's touch panels which include the **Kramer Aware** app (for example, **KT-1010**).

To operate **KIT-400** via room automation panel:

1. Open Kramer Aware app on your touch panel.
2. Enter **KIT-400R** IP address. The **KIT-400** default control screen appears.

You can change the default control screen configuration via the **KIT-400** embedded web pages.

- i** Kramer Aware App can be connected to **KIT-400** only if password protection (Authentication) is disabled. You can disable authentication via the **KIT-400** web page.



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