Quick Start Guide

TRIPP LITE
SERIES

KVM Extender
Cat5 USB

Model:
B013-330-USB

Purchased product
may differ from image.

Powering Business Worldwide

PRODUCT REGISTRATION

Register your product today for a chance to win an ISOBAR® surge protector in our monthly drawing!

Tripplite.Eaton.com/warranty

1. Important Safety Instructions

- The device must only be opened by a qualified technician.
- Disconnect device from AC mains before service operation!
- Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended.

2. Product Features

- 328 ft. (100 m) CAT5 extension
- Built-in 2-port KVM switching feature on the receiver unit
- RX-PC/TX-PC KVM port selection on the RX unit by a front-panel button or keyboard hotkeys
- Remote-site (receiver) console access mode selection (Full-access/ No-access/ View-only) by local-site transmitter unit's panel button and keyboard hotkey
- USB keyboard/mouse connectivity support on both local-site (transmitter) console and remote-site (receiver) console
- OSD menu-driven control for easy system configuration
- Keyboard hotkey control for configuration and operation
- Full keyboard/mouse emulation to support compatible Microsoft/ Logitech functional keyboard/mouse products
- Transmitter unit's EDID selection support for local-site/remote-site monitors by receiver unit's OSD menu
- Analog video resolution up to 1920 x 1200
- Firmware upgradeable via dedicated USB port

3. Package Contents

- Transmitter (TX) Unit x 1
- Receiver (RX) Unit x 1
- USB KVM Combo Cable x 2
- USB-A to USB-B Upgrade cable x1
- Power Adapter (DC 5V) x 2
- Quick Start Guide x 1

4. Front/Rear Panels

The front and back panels are where the various connectors are located on the two pieces of the CAT5 USB KVM Extender Set. Before you connect these two units to any computer, cabling accessories or peripherals, locate the main connectors you are going to encounter when setting up the system.

Transmitter Unit (Local-end Connection)

Transmitter (TX) unit - Front Panel

1. POWER LED - Illuminates when power is on
2. LINK LED - Illuminates when linkage is established
3. USB keyboard connector
4. USB mouse connector
5. MODE SELECT button for receiver console (Full Access/No Access/ View Only)
6. VIDEO LED Indicator - Illuminates when receiver console monitor is allowed
7. CONTROL LED - Illuminates when receiver console keyboard/ mouse is allowed

4. Front/Rear Panels

Transmitter (TX) unit - Rear Panel

8. Power jack - DC 5V, center-positive
9. CAT5 Extension Port - RJ45, connects to the receiver unit via a CAT.X UTP cable, maximum 328 ft. (100 m)
10. COMPUTER port - HDB-15 (VGA + USB), connects to the TX-site computer using an included 3-in-1 KVM combo cable
11. UPGRADE port - USB Type-B, dedicated for firmware upgrades
12. Transmitter CONSOLE video port - HDB-15 (VGA), connects to TX unit's monitor

Receiver Unit (Remote-End Connection)

Receiver (RX) unit - Front Panel

1. POWER LED - Illuminates when power is on
2. LINK LED - Illuminates when linkage is established
3. USB keyboard connector
4. USB mouse connector
5. PC SELECT button - Toggles connection of the receiver console to remote-site (RX) / local-site (TX) computers

4. Front/Rear Panels

❻ RX LED Indicator - Illuminates when the RX console is switched to connect to the RX PC

❼ TX LED Indicator - Illuminates when the RX console is switched to connect to the TX PC

Receiver (RX) unit - Rear Panel

❽ Power jack - DC 5V, center-positive

❾ CAT5 Extension Port - RJ45, connects to the transmitter unit via a CAT.X UTP cable, maximum 328 ft. (100 m)

❿ COMPUTER port - HDB-15 (VGA + USB), connects to the RX-site computer using an included 3-in-1 KVM combo cable

⓫ UPGRADE port - USB Type-B, dedicated for firmware upgrades

⓬ Receiver CONSOLE video port - HDB-15 (VGA), connects to RX unit's monitor

5. Installation

Before you install the TX/RX units of the CAT5 USB KVM Extender B13-330-USB, ensure the following is ready:

1. The computer for extension should be one with USB interfaces.
2. Check the display mode of the computer to be within 1920 x 1200 resolution and that the refresh rate is set at 30 or 60 Hz.
3. Prepare two sets of keyboards, mice and monitors: one set for local-site transmitter console and the other set for remote-site receiver console.
4. The two monitors used (one at the TX site and the others at the RX site) should be of the same resolution, and ideally the same model.
5. Since the CAT5 USB KVM extender only supports standard 5-key mouse and keyboard, any advanced mouse/keyboard function will not be supported by the CAT5 extender.
6. Use good quality CAT.X UTP cable, maximum 328 ft. (100 m).

   Note: *a high-quality cable will ensure better video quality even over longer distances. Signal degradation increases as the cabling distance increases.*
7. The choice of path of the CAT.X UTP cable should not only consider the shortest path, but also consider any significant sources of electromagnetic interference.
8. There should be power outlets near where you locate the extenders. Take the package items out of the box and begin installation.

Take the package items out of the box and begin installation.

5. Installation

Plan the layout path and deploy the UTP cable for extension

1. Plan the path through which the CAT5 cable will be deployed across the distance between the transmitter and the receiver. You should choose the layout path not only based on shortest length consideration, but also on least electromagnetic interference.
2. Lay out the UTP cable according to your planned path.

Configuring Transmitter Console

3. Connect one end of a CAT5 cable to the CAT5 extension port (connector ❾) of the transmitter.
4. Connect the power adapter to the transmitter (connector ❽) to power it up before connecting any computer or other cables to it.
5. Connect the transmitter to the TX PC, using the USB KVM combo cable (connector ❿).
6. Connect a keyboard, mouse and monitor to the transmitter's console ports (connectors: ❸, ❹ and ⓬).
7. Power on the TX PC, and check if the keyboard, mouse and video are working well, and then go on the following steps.

Configuring the Receiver Console

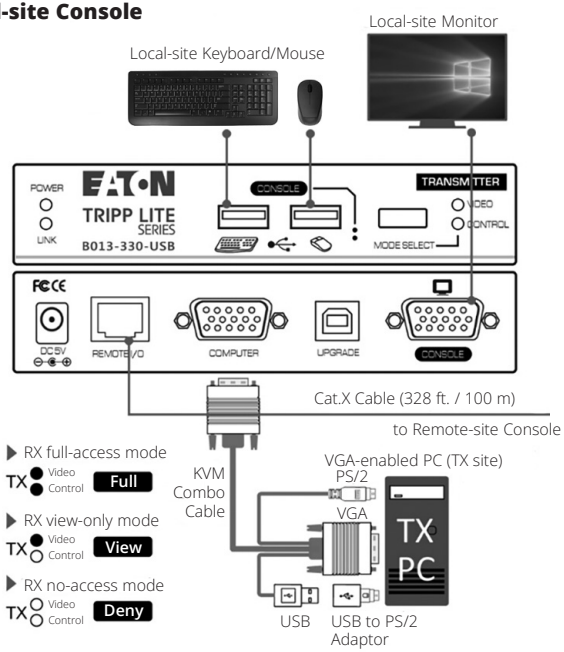
8. Connect the CAT5 cable from the transmitter to the CAT5 extension port (connector ❾) of the receiver.
9. Connect the power adapter to the receiver's power jack (connector ❽) to power it up before connecting any devices to it.
10. Connect a keyboard, mouse, and monitor to the receiver's console ports (connector ❸, ❹ and ⓬).
11. Check if the keyboard, mouse and monitor are working well. At this time, the video output of the RX unit might be blurry since it hasn't been adjusted and optimized yet.

5. Installation

12. Adjust the video parameters to optimize the video display output of the RX unit (refer to **OSD Menu\Video Setting Page** section for details).
13. Connect with the USB KVM combo cable (included) between the receiver (computer port ⑩) and the VGA and USB ports of the RX PC.

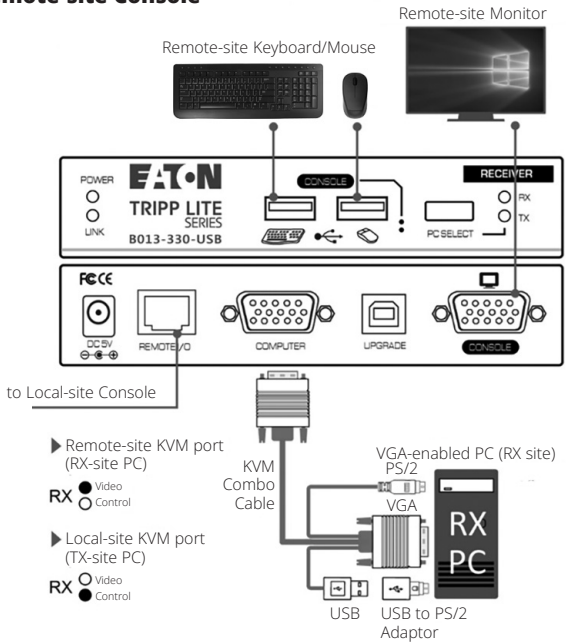
B013-330-USB CAT5 USB KVM Extender Configuration Diagram

Local-site Console



5. Installation

Remote-site Console



6. Operation

On the receiver unit, the OSD (on-screen display) Menu control is available to facilitate more intuitive operations. Users can configure various settings in the RX unit's OSD Menu:

OSD Menu

Following keys are used to operate the OSD Menu:

Esc: Exit the current page.

: Change the value in the selected option with LEFT/RIGHT keys.

: Navigate options of the current page with UP/DOWN keys.

F10: Log out of the OSD Menu manually. (Please note that the logout feature is unavailable if password protection is not enabled).

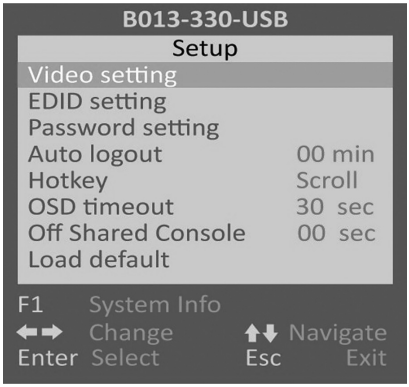
Setup Main Page

Below is the Setup Main Page of the OSD Menu when you hit the following hotkey: **[Scroll Lock], [Scroll Lock], [Space Bar]**, to bring up the OSD Menu.

Note: *The leading two same consecutive keystrokes are defined as the Hotkey Preceding Keys, such as the* ***[Scroll Lock]*** *key. There are two methods to change the Hotkey Preceding Key:*

1. *OSD Menu\Setup Main Page\Hotkey Option*
2. *Keyboard Hotkey (Hotkey Preceding Key Change is only available on receiver unit)*

6. Operation



Setup Main Page

System Information Page

Press the **[F1]** key to view the System Information Page.

System Information Page

6. Operation

Video Setting Page

On this page, you can configure various video parameters such as **Brightness** and **Sharpness** to optimize the video display result on the monitor of the RX unit located up to 328 ft. (100 m) away from the TX unit, if neccessary.

Video Setting Page

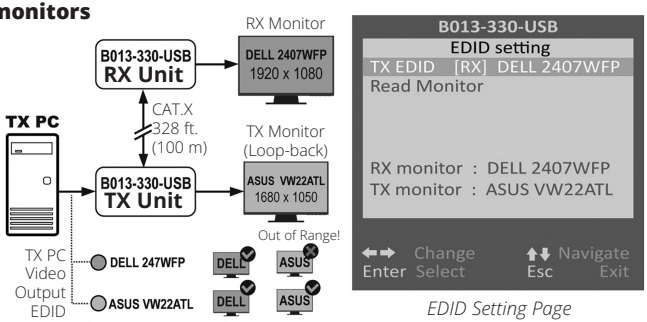
EDID Setting Page

With the **TX EDID** option on this page, users can select whether to request the TX unit to apply the TX monitor's EDID data or the RX monitor's EDID data. This helps resolve issues that might arise due to the differences in resolution between the TX and RX monitors.

6. Operation

To update the EDID data manually, select the **Read Monitor** option and then press the **[Enter]** key. The updated monitor EDID data of TX/RX units will be listed as below.

The inconsistent EDID issue of using different model monitors



EDID Setting Page

DELL and **ASUS** are trademarked brands owned by thier respective companies.

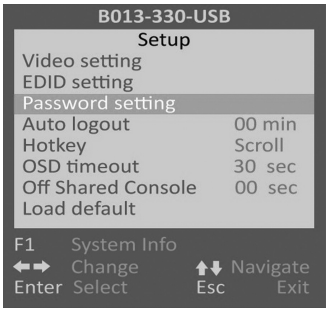
Note: *Use two monitors of the same model/resolution for both TX and RX units to avoid the issue illustrated above.*

6. Operation

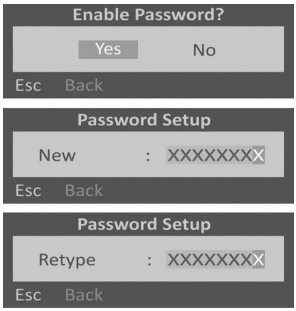
Password Setting Option/Page

Disable/Enable the **Password Protection** feature. After you manually logout or auto logout with the set timeout, you will be requested to input a password to access the receiver console again.

Note: *Keep your password secure. Failure to do so may require you to contact your local dealer for technical support.*



Password Setting Option



Password Setting Page

Auto Logout Option: [0 (Default), 1, 2, 3, 4, 5, 6, 7, 8, 9,10] Disable/Enable the OSD Logout timeout (0~10min, 0 = Disable).

The Auto logout time can be configured from 0 (Disable) up to 10 minutes. If password protection is not enabled, Auto logout will not function.

Hotkey Option: [Scroll (Default)]

To assign the Hotkey Preceding Key, press ⬅ ➡ to select among **[Scroll]**, **[Caps]**, **[Number]** and **[F12]** options to correspond **[Scroll Lock]**, **[Caps Lock]**, **[Num Lock]**, or **[F12]** keys, respectively.

OSD Timeout Option: [0, 20, 25, 30 (Default), 35, 40, 45, 50, 55, 60]

Configure the OSD timeout value, starting at 20 seconds, with an increment of 5, right up to 60 seconds (0 = Disable).

Off Shared Console Option: [0 (Default), 3, 5, 10, 20, 30]

Configure the deadlock timeout value for the Console Control (0 = Disable).

Note: *The local-site (transmitter) console and the remote-site (receiver) console switching-engaged priority offers the "**Deadlock Function**". The deadlock function is to keep the priority of the first-activated console user who is operating their keyboard/mouse to the selected PC. The other (second-activated) console user can only get to operate their keyboard/mouse once the first-activated console user has stopped operating their keyboard/mouse for the duration of the deadlock timeout set here.*

If the Deadlock Function is enabled, the transmitter unit's panel LED indicators "VIDEO" and "CONTROL" will flash, until the previous console user who operated their keyboard/mouse stops operating the keyboard/mouse for the duration of the deadlock timeout set here.

Note: *The deadlock timeout function will not work if two consoles are not connected to PCs.*

Load Default Option: Restores the receiver unit back to factory default settings.

Change the Hotkey Preceding Key (only available on receiver unit)

A keyboard hotkey includes 3 or more consecutive keystrokes. The leading two same consecutive keystrokes are defined as the Hotkey Preceding Keys. To change the Hotkey Preceding Key for your keyboard hotkeys, please hit the following hotkey:

[Scroll Lock], [Scroll Lock], [H], [y]

Note: [y] *can be either **[Caps Lock], [F12]**, or **[Num Lock]** key which serves as the new Hotkey Preceding Key to replace the default [Scroll Lock] key.*

Note: *This hotkey preceding key change only applies to the receiver console and doesn't apply to the transmitter console. In addition to changing the hotkey preceding key at the receiver console, users can bring up the RX unit's OSD menu to change the hotkey preceding key as instructed in the previous section.*

6. Operation

Select Receiver Console Connection with the Remote-site PC (Receiver-End) or the Local-Site PC (Transmitter-End)

Other than using the RX unit's panel button to select the receiver console connection with the local-site TX PC or the remote-site RX PC, use the following **RX unit exclusive hotkey**:

[Scroll Lock], [Scroll Lock], ⬅ or ➡

Using either ⬅ or ➡ both toggles the connection of the receiver console from the currently connected PC (remote-site/local-site) to the other PC (local-site/remote-site).

Remote-Site (Receiver) Console Access Mode Control on Local-Site (Transmitter) Console

At the local-site (transmitter) console, you can set up the access mode of the remote-site (receiver) console by the following **TX unit exclusive hotkey**:

[Scroll Lock], [Scroll Lock], [M], [y]

y = 1, RX unit Full-access Mode (video, keyboard and mouse control)

y = 2, RX unit Access-denied Mode (No video, keyboard or mouse control)

y = 3, RX unit View-only Mode (only video; no keyboard or mouse control)

When the receiver console access has been denied, the RX's monitor display will be black and the keyboard and mouse will lock up. Thus, the hotkey provides a security measure for the local-site (transmitter) console to block/grant access for the remote-site (receiver) console. When the receiver console is in View-Only Mode, its user can only see the screen with no access to the keyboard and mouse.

6. Operation

Optimize the Video Display Result on the Receiver Console

After transmitting the VGA signals over long distances through a twisted-pair CAT.X cable from the TX unit to the RX unit, it may be necessary to properly adjust some video parameters such as brightness and sharpness, to compensate for signal degradation and optimize the signal quality of the video input at RX unit's CAT.X extension port.

Please follow the procedure below to achieve an optimized video display result on the monitor of your remote-site receiver console:

1. Select a video display content to use as a reference for visual adjustment. This content should ideally integrate both text and graphics, enabling it to serve as a reference for achieving optimized video display result on the RX unit's output. As an alternative option, use the visual testing program provided by the graphics card vendor.
2. Adjust the brightness and sharpness: Bring up the OSD menu by hitting the keyboard hotkey: **[Scroll Lock]**, **[Scroll Lock]**, **[Space Bar]**, then go to the Video Setting Page. Next, make adjustments to the video input at the RX unit's CAT.X extension port. The brightness adjustment can help you tune the picture brightness to a lighter or darker setting. The sharpness is the edge contrast that you will perceive.

   (2a). **Brightness Adjustment:** The brighter the picture, the more luminance will be added to the picture as a whole.

   (2b). **Sharpness Adjustment:** Adding sharpness to the picture helps you distinguish more details out of the edges of a line or a shape.

7. Troubleshooting

Q. When I connect a monitor to the CAT5 USB KVM extender, the video doesn't display. What can I do?

A. If you encounter no video or aberrant display problem with a specific monitor, refer to the operation instruction of the EDID Setting Page, if the problem persists, contact your local dealer for technical support.

8. Warranty and Product Registration

3-Year Limited Warranty

We warrant our products to be free from defects in materials and workmanship for a period of three (3) years from the date of initial purchase. Our obligation under this warranty is limited to repairing or replacing (at our sole option) any such defective products. Visit Tripplite.Eaton.com/support/product-returns before sending any equipment back for repair. This warranty does not apply to equipment which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

EXCEPT AS PROVIDED HEREIN, WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

EXCEPT AS PROVIDED ABOVE, IN NO EVENT WILL WE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Specifically, we are not liable for any costs, such as lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, costs of substitutes, claims by third parties, or otherwise.

8. Warranty and Product Registration

Product Registration

Visit Tripplite.Eaton.com/warranty today to register your new product. You'll be automatically entered into a drawing for a chance to win a FREE Eaton Tripp Lite series product!*

* No purchase necessary. Void where prohibited. Some restrictions apply. See website for details.

WEEE Compliance Information for Customers and Recyclers (European Union)

Under the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations, when customers buy new electrical and electronic equipment from Eaton, they are entitled to:

- Send old equipment for recycling on a one-for-one, like-for-like basis (this varies depending on the country)
- Send the new equipment back for recycling when this ultimately becomes waste

Eaton has a policy of continuous improvement. Specifications are subject to change without notice. Photos and illustrations may differ slightly from actual products.

Powering Business Worldwide

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Publication No. 24-03-132 /
93-4A5E_RevA
April 2024