Description

The Crestron® USB-EXT-2 enables high-speed USB signals to be extended up to 330 feet (100 meters) over one CAT5e (or better) twisted-pair cable, and power can be supplied to the USB-EXT-2 through either the local extender or the remote extender. The USB-EXT-2 is compatible with almost any USB 1.1 or USB 2.0 device, and it is compatible with host computers running Windows® software, macOS® software, and Linux® software without needing to install any additional drivers.

Additional Resources

Visit the product page on the Crestron website (www.crestron.com) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.

Mounting the Extenders

After determining the location of the local host computer and the remote USB device(s), place the USB-EXT-2 local extender on a secure, level surface near the host computer, and place the USB-EXT-2 remote extender on a secure, level surface near the USB device(s). The rubber feet on the bottom of each extender help to prevent the extenders from shifting.

Connecting the Extenders

Use the following procedure to connect the USB-EXT-2 extenders:

1. Connect the USB B end of the included USB cable into the local extender, and then connect the USB A end of the cable into a USB type A port on the host computer.

2. Connect one RJ45 connector end of a CAT5e (or better) unshielded twisted-pair (UTP) cable to the Link port on the local extender, and then connect the other RJ45 connector end to the Link port on the remote extender.

> **CAUTION**: Do not connect the Link ports of the local extender or the remote extender to an Ethernet LAN or any other network device.
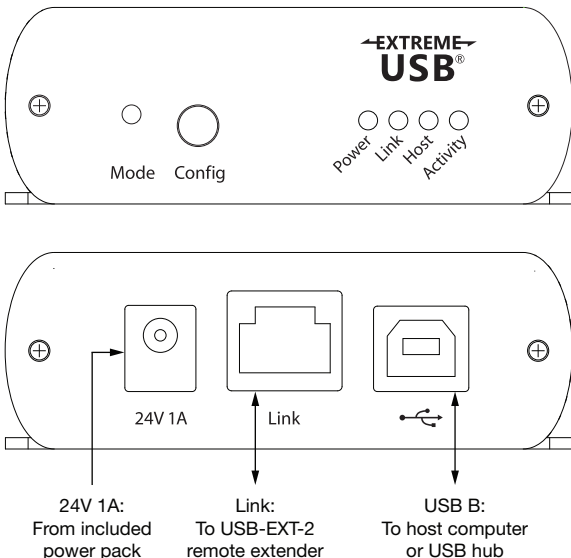
> **NOTE**: Ensure that the chosen CAT5e (or better) UTP cable does not exceed 330 feet (100 meters). The cable must have a straight-through conductor configuration with no crossovers and must be terminated with 8-conductor RJ45 connectors at both ends.

> **NOTE**: If using preinstalled in-wall CAT wiring, connect one RJ45 connector end of a CAT5e (or better) patch cable to the Link port of the local extender, and connect the other RJ45 connector end to the CAT wall outlet near the host computer. Then, connect one RJ45 connector end of a CAT5e (or better) patch cable to the Link port of the remote extender, and connect the other RJ45 connector end to the CAT wall outlet near the USB device(s). Ensure that the two patch cables and the in-wall cabling do not exceed 330 feet (100 meters) in total.
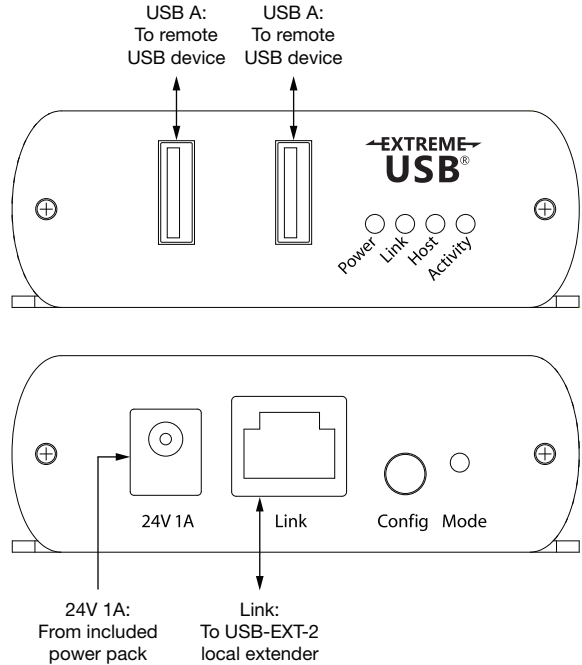
3. Connect the included ac power supply to either the local extender or the remote extender, and then plug the other end of the power supply into an ac power source.

> **CAUTION**: Supply ac power to only one of the two extenders. Never supply ac power to both extenders at the same time.

USB-EXT-2 Local Extender Connections (Front and Rear)

Mode   Config

Power Link Host Activity

EXTREME
USB®

24V 1A   Link

24V 1A:
From included
power pack

Link:
To USB-EXT-2
remote extender

USB B:
To host computer
or USB hub

USB-EXT-2 Remote Extender Connections

USB A:
To remote
USB device

USB A:
To remote
USB device

EXTREME
USB®

Power Link Host Activity

24V 1A   Link   Config Mode

24V 1A:
From included
power pack

Link:
To USB-EXT-2
local extender

Connecting the USB Devices

Use the following procedure to connect the remote USB device(s) to the USB-EXT-2:

1. Install any software on the host computer that is required to operate the USB device(s). Refer to the USB device documentation for installation instructions.

> **NOTE**: Crestron does not guarantee that the USB-EXT-2 is compatible with all USB devices.

2. Connect the USB device(s) to either USB port on the remote extender using a standard USB cable.

3. Confirm that each USB device is properly installed on the host computer and that it is detected by the operating system.

Checking the Installation

Check that the Power, Activity, Link, and Host LEDs light on both the local extender and the remote extender. If the Link or Host LEDs do not light, then the cabling between the local extender and the remote extender may be installed incorrectly or may be defective.

Additionally, check to see whether USB-EXT-2 extender system has been installed correctly on the host computer. Refer to the below instructions.

For Windows Software:

1. Open **Device Manager**.

2. Expand the **Universal Serial Bus controllers** node.

3. Check to see if the extender system appears on the list of controllers. If the extender system has been properly installed, it appears on the list as a "Generic USB Hub."

For macOS Software:

1. Open **System Profiler**.

2. In the left column under **Hardware**, select **USB**.

3. Check to see if the extender system appears in the **USB Device Tree** at the top right of the System Profiler window. If the extender system has been properly installed, it is listed as a "Hub" under the **USB High-Speed Bus/USB Bus** node.

If the USB-EXT-2 extender system does not detect correctly or fails to detect, refer to the "Troubleshooting" section on the next page.

Troubleshooting

The following table provides corrective actions for possible issues that may arise when installing and operating the USB-EXT-2. If further assistance is required, please contact a Crestron customer service representative.

USB-EXT-2 Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The USB device is attached but does not function.	The USB device requires drivers that are not installed on the host computer.	Install the required USB device driver on the host computer operating system prior to attaching the USB device to the remote extender. Refer to the USB device documentation for more information.
	The USB device does not support USB hubs.	Check in the Device Manager tool (Windows) or the System Profiler tool (macOS) that the device has enumerated.
	The USB device has malfunctioned.	Refer to the USB device documentation for more information.
	An overcurrent condition has occurred because the USB device drew more power than can be supplied per the USB specification (1 A).	Cycle the power of the remote extender by unplugging the power adapter from the remote extender. Wait approximately 30 seconds, and then plug the adapter back into the remote extender. If the overcurrent condition continues to occur, the USB device may use more power than can be supplied per the USB specification, or the USB device may be damaged. Refer to the USB device documentation for powering the USB device with the required power supply.

USB-EXT-2 Troubleshooting (continued)

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The Link LEDs on the local and the remote extenders do not light.	The remote or the local extender is not receiving power.	Ensure that the host computer is powered on and is properly connected to the local extender. Ensure that the power supply is properly connected to either the local or the remote extender.
	The CAT cable connecting the local and the remote extenders is malfunctioning.	Ensure that the CAT5e (or better) cable is properly installed. Replace the cable if necessary.
	The USB-EXT-2 is malfunctioning.	Ensure that the power supply is connected to a live source of electrical power.