Extron

USB Extenders Plus T/R • Setup Guide

This guide provides basic instructions for an experienced technician to install and operate the Extron USB Extender Plus Series. The series includes the USB Extender Plus T/R, AAP™ T/R, and Decorator-Style T/R. These transmitter and receiver pairs extend signals from USB peripheral devices located up to 330 feet (100 meters) away from the host computer using a single CATx twisted pair cable. They are compatible with USB 3.0, 2.0, 1.1, and 1.0 devices with transfer data rates up to 480 Mbps. The transmitters include USB peripheral emulation to enable trouble-free booting of a host computer that is not connected to a keyboard or mouse. The receivers feature built-in active four-port hubs that supply 5 V, 500 mA on each port to power attached devices. The USB Extender Plus T/R series support a variety of USB peripherals in many environments.

The USB Extender Plus HID Only models allow only the use of keyboards, mice, and smart card readers. See the *USB Extender Plus T/R User Guide*, available at **www.extron.com**, for more information.

Installation

> **ATTENTION:**
> - Installation and service must be performed by authorized personnel only.
> - L'installation et l'entretien doivent être effectués uniquement par un technicien qualifié.

Mounting

Install the USB Extender Plus T/R transmitter and receiver following the instructions supplied with the mounting kit (see **www.extron.com** for a list of suitable kits). If the rear panel connectors will be covered after mounting, make all connections and perform pairing prior to permanently mounting the unit. The installation must conform to national and local electrical codes and to the wall plate size requirements.

- USB Extender Plus T/R can be rack or furniture mounted, or placed on a tabletop with the provided rubber feet attached.
- USB Extender Plus T/R AAP models fit in double-space Architectural Adapter Plate frames (available at **www.extron.com**).
- USB Extender Plus T/R D models fit a one-gang decorator-style trim for mounting in a one-gang junction box or mud ring.
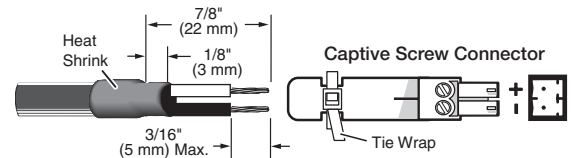
Connecting Cables

The illustration below shows connections for the USB Extenders Plus T/R. The connectors are the same for the AAP and decorator-style models except that the USB Hub inputs are on the receiver front panels and are accessible after wall mounting.
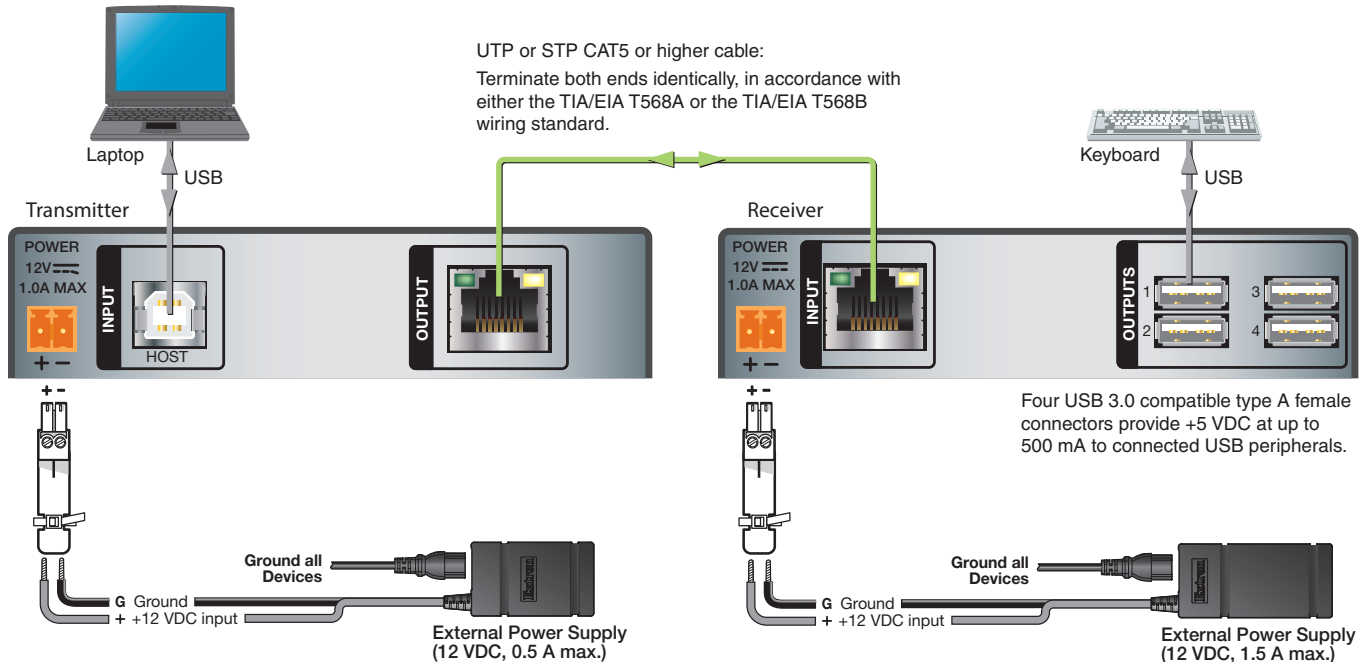
> **NOTE:** Some USB devices may cause an inrush current that exceeds the USB limit of 500 mA to the receiver of the extenders. In this case, you may need to connect the USB device to two of the receiver hub ports using a USB Y cable to ensure that the peripheral device operates properly.

Connecting Power

Each unit is provided with a 12 VDC power supply. Connect a power supply to the 2-pole captive screw connector on the rear panels of the transmitter and receiver (see the illustration at right for wiring instructions). For the AAP and decorator-style models, do this **before** mounting the unit. The front panel Power LED (Ⓐ) lights.


Connecting the Host (Transmitter)

1. Connect a USB cable from a USB port on the PC or laptop computer to the transmitter Host port as shown in the **Connecting Cables** diagram on the previous page.

2. Pair the transmitter with the receiver (see **Pairing and Unpairing the Transmitter and Receiver**).

3. Mount the extenders, if appropriate.

4. Power on the computer. On the transmitter, the Host LED (Ⓒ) on the front panel and the green Activity LED on the rear panel RJ-45 LAN connector light when the computer recognizes the transmitter. When the transmitter and receiver are paired with each other, the front panel Link LEDs (Ⓔ) light on both the transmitter and receiver.

USB Extender Plus Transmitters

USB Extender Plus Tx D
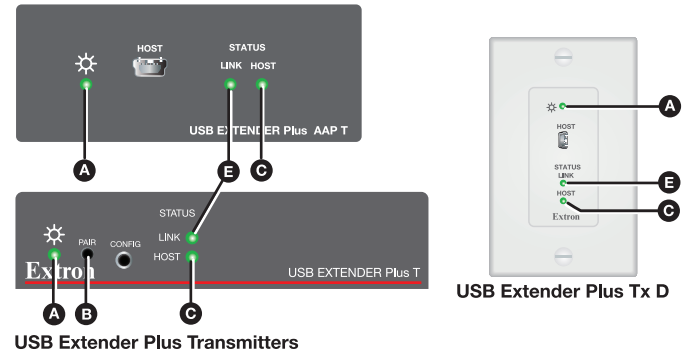
Connecting the Hub (Receiver)

1. Connect up to four USB cables from peripheral devices to the receiver Hub ports. The order of connection does not matter. The Host LED on the receiver (Ⓒ) lights as communication between the USB transmitter and host is established.

2. As each peripheral device is connected, the LED for its Hub port (Ⓓ) lights when the host PC has detected the device.

The USB Extender Plus receiver supplies up to 0.5 A to each connected peripheral device.

USB Extender Plus Receivers

USB Extender Plus Rx D
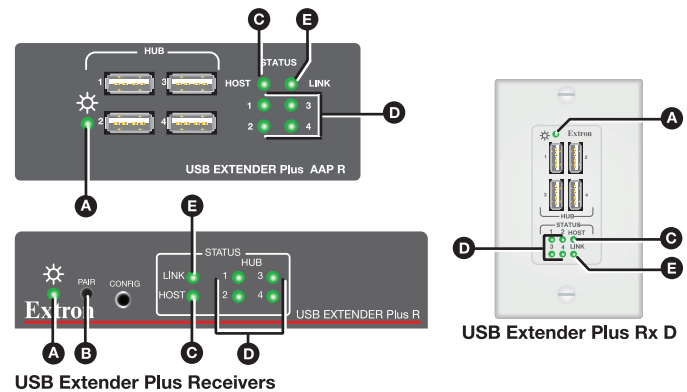
Pairing and Unpairing the Transmitter and Receiver

In order to function together, the transmitter and receiver must be paired the first time they are used together. After they have been paired initially, they do not need to be paired again, even after a power cycle. However, if connecting either unit to a different transmitter or receiver, you must perform the pairing operation again.

> **NOTE:** **Before** pairing a transmitter and a receiver, Extron recommends that you **unpair** and **cycle power** to each unit to clear any previous pairing or to resolve any pairing issues that might occur (see **Unpairing the transmitter and receiver**).

Unpairing the transmitter and receiver

1. Using a small screwdriver or stylus, press and hold the **Pair** button (Ⓑ) on either the transmitter or the receiver until the transmitter Link LED turns off and the Link LED on the receiver begins to blink (approximately 10 seconds).

2. Release the **Pair** button and proceed with pairing the units (see **Pairing the transmitter and receiver**).

> **NOTES:**
> - For the AAP and decorator-style models, be sure to perform this procedure **before** mounting the unit.
> - The **Pair** buttons of the decorator-style models are on the **rear** panels.

Pairing the transmitter and receiver

1. Connect both units together via their RJ-45 connectors.

2. Using a stylus or small screwdriver, press the recessed transmitter **Pair** button (Ⓑ in the USB Extender Plus T/R illustration above right or on the rear panel of the AAP and decorator-style models) and hold it for 1 second. The front panel Link LED on the transmitter (Ⓔ) blinks as pairing begins.

3. Within 10 minutes of pressing the transmitter **Pair** button, press the receiver **Pair** button and hold it for 1 second. The Link LED on the receiver front panel (Ⓔ) blinks.

When the LEDs of both units have stopped blinking and remain lit steadily, the pairing is complete.

> For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the **Extron Safety and Regulatory Compliance Guide** on the Extron website.