

4K/30 DisplayPort over Fiber Extender Kit

Models:
B127F-1A1-MM-DD
(Multimode),
B127F-1A1-SM-DD
(Singlemode)



Purchased product
may differ from image.

Este manual está disponible en español en la página de Eaton:
Tripplite.Eaton.com/support

Ce manuel est disponible en français sur le site Web de Eaton :
Tripplite.Eaton.com/support

Dieses Handbuch ist in deutscher Sprache auf der Eaton-Website verfügbar:
Tripplite.Eaton.com/support

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Powering Business Worldwide

Package Contents

B127F-1A1-MM-DD

(DisplayPort over Duplex LC Multimode Fiber Extender Kit)

- Transmitter Unit
- Receiver Unit
- Mounting Hardware
- External Power Supply (x2)

B127F-1A1-SM-DD

(DisplayPort over Duplex LC Singlemode Fiber Extender Kit)

- Transmitter Unit
- Receiver Unit
- Mounting Hardware
- External Power Supply (x2)

Product Features

- DisplayPort over Duplex LC Fiber Extender Kits extend a 4K (3840x2160) @ 30 Hz signal:
 - B127F-1A1-MM-DD** – Up to 1000 ft. (305 m) from the source
 - B127F-1A1-SM-DD** – Up to 6.2 mi. (10 km) from the source
- Supports 4K (3840x2160) @ 30 Hz 4:4:4 maximum video resolution
- Supports 8-channel LPCM, AC-3 and DTS digital audio
- DisplayPort 1.2a compatible
- Plug and play—no software or drivers required
- Additional DisplayPort on the transmitter unit allows connection of a local display, enabling users to monitor the remote display's content
- Remote receiver unit features built-in equalization (EQ) control and auto-EDID image adjustment

Product Features

- Transmitter and receiver units feature built-in:
 - B127F-1A1-MM-DD** – 10G Multimode LC, 850nm, 300M, DDM transceivers
 - B127F-1A1-SM-DD** – 10G Singlemode LC, 1310nm, 10KM, DDM transceivers
- Local port at transmitter with built-in multi-resolution technology connects any display without affecting 4K/30 Hz signal transmission
- Includes mounting hardware that allows both the local transmitter and remote receiver units to be wall-mounted, rack-mounted or pole-mounted

Optional Accessories

- P569-XXX-CERT or P568-XXX-2A Series High-Speed HDMI 2.0 Cable
- P580-XXX DisplayPort Cable
- N820-Series 10 Gb Duplex Multimode LC-to-LC Fiber Patch Cable
- N370-XXM Duplex Singlemode LC-to-LC Fiber Patch Cable

Mounting Instructions

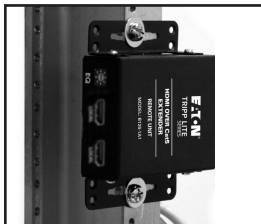
Both extender kit models include mounting hardware that allows for a variety of mounting methods. The following images illustrate how the included mounting brackets can be attached for different installations.

Note: The model shown in the below images is for illustrative purposes only. Your product may vary by model number, size or port orientation. The mounting options for all over IP units are the same.

Wall-Mount



19-Inch Rack-Mount



Pole-Mount



Standard Extender Kit Installation



Before installation, check the following settings of your source(s) and TV/monitor(s):

1. Set the display to 30 Hz. Double-check the factory settings, as the default can be set to a lower frequency (Hz) than advertised.
2. Verify your monitor has the HDR feature enabled. Some displays may have this feature disabled as a factory setting.
3. Check if the Ultra HD (UHD) Deep Color setting is enabled on your TV/monitor. Confirm with your TV/monitor manufacturer which HDMI ports support UHD Deep Color.

Notes:

- 1) Test to ensure the entire installation works properly before pulling cables through ceilings/walls.
- 2) To achieve maximum distance and performance, use 10 Gb duplex fiber cabling, such as the N820-Series 10 Gb Duplex Multimode LC-to-LC Fiber Cable (for B127-1A1-MM-DD) or N370-Series Duplex Singlemode LC-to-LC Fiber Cable (for B127-1A1-SM-DD). Preinstalled 10 Gb transceivers are intended to work with 10 Gb fiber cables. Using lower-rated fiber cables can result in signal loss or no image.

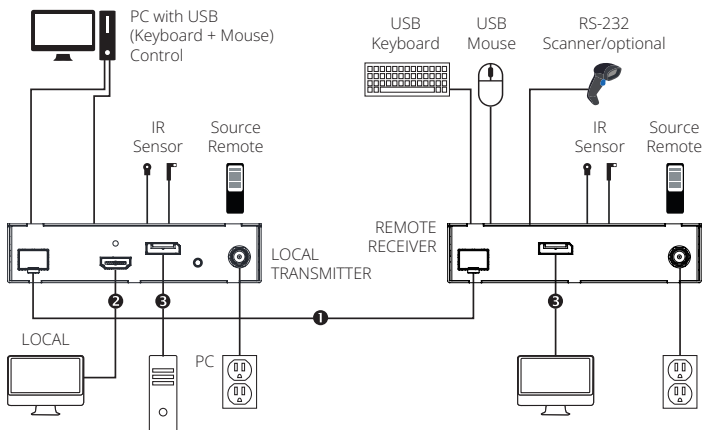
Standard Extender Kit Installation

B127F-1A1-XX-DD Extender Kits

- 1 **B127-1A1-MM-DD:** Up to 1000 ft. (300 m) multimode fiber cable

B127-1A1-SM-DD: Up to 2.6 mi. (10 km) singlemode fiber cable

- 2 Up to 15 ft. (4.5 m) HDMI 2.0 cable at 4K/30 Hz
- 3 Up to 15 ft. (4.5 m) DisplayPort cable at 4K/30 Hz



Standard Extender Kit Installation

- 1 Make sure all equipment in the installation is powered OFF.
- 2 Using a DisplayPort cable (such as P580-XXX DisplayPort cables), connect the DisplayPort source to the INPUT port on the local transmitter unit.
- 3 **(Optional)** Using an HDMI 2.0 cable (such as P569-XXX-CERT or P568-XXX-2A Series cables), connect a local monitor to the LOCAL port on the local transmitter unit. The LOCAL (orange) LED will illuminate to indicate the port is connected to a display.
- 4 **B127F-1A1-MM-DD** – Using duplex LC multimode (850 nm) fiber cable (such as the N820-Series cable), connect the LC fiber port on the local transmitter unit to the LC fiber port on the remote receiver unit.
B127F-1A1-SM-DD – Using duplex LC singlemode (1310 nm) fiber cable (such as the N370-XXM Series cable), connect the LC fiber port on the local transmitter unit to the LC fiber port on the remote receiver unit.
- 5 Using a DisplayPort cable (such as P580-XXX Series cables), connect the remote receiver unit's DisplayPort to a monitor.
- 6 Turn on the power to all of your connected displays (local and remote).
- 7 Connect the external power supply to the local transmitter unit and plug it into an available wall outlet or (optional) an Eaton Tripp Lite series Surge Protector, Power Distribution Unit (PDU) or Uninterruptible Power Supply (UPS). The POWER (green) LED on the local transmitter unit will illuminate to indicate the unit is receiving power from the external power supply. The POWER (green) LED on the remote receiver unit will illuminate to indicate the units are receiving power from the external power supply.
- 8 Turn on the power to the DisplayPort source. The OUTPUT (orange) LED on the local unit will illuminate to indicate a signal has been received from the source.
- 9 The (orange) LED will illuminate on both local transmitter and remote receiver units to indicate a signal has been received from source to display. The screen should now display on the connected monitor.

DIP Switch Settings

Note: This section applies to both B127-1A1-MM-DD and B127-1A1-SM-DD extender kits.

The extender kits provide one of the following functions via DIP switch settings:

- USB 1.1 – One Micro-USB input at transmitter, dual USB-A outputs at receiver
- Bi-Directional IR –Dual 3.5 mm jacks at both the transmitter and receiver
- RS-232 – One 3-pin phoenix connector at both the transmitter and receiver

DIP Switch Positions	Function Selection
1 (Up), 2 (Up)	IR Function
1 (Up), 2 (Down)	USB Function
1 (Down), 2 (Down)	RS-232 Function

(Optional) Connect the computer's DB9 port to the transmitter unit's RS-232 serial port. The serial port is a 3-position phoenix connector for RS-232 (DB connector) pin 2, 3 and 7 connection. Connect your RS-232 device (e.g. barcode scanner) to the 3-position phoenix connector on the receiver unit.

(Optional) Connect the included IR-OUT cable to the transmitter unit's IR-OUT port. Place the sensor on the IR-OUT cable in an unobstructed area within clear view of the device being controlled. Then connect the included IR-IN cable to the receiver unit's IR-IN port. The IR-IN cable will communicate the desired command via the transmitter's IR-OUT cable.

Note: The IR-OUT cable receives the signal from the remote control and sends it to the device being controlled (e.g. Blu-ray™ player, etc.).

(Optional) With a user-supplied USB Micro-B cable (such as the U050-XXX Series USB cable), connect to the transmitter's Micro-B port. Then connect a keyboard and mouse to the available USB-A ports on the receiver unit.

Warranty & Product Registration

1-Year Limited Warranty

We warrant our products to be free from defects in materials and workmanship for a period of one (1) year from the date of initial purchase. Our obligation under this warranty is limited to repairing or replacing (at its 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.

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.

Warranty & Product Registration

FCC Notice, Class B

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications to this equipment not expressly approved by Eaton could void the user's authority to operate this equipment.

Warranty & Product Registration

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

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.

Eaton has a policy of continuous improvement. Specifications are subject to change without notice.



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