

Owner's Manual

4K/30 DisplayPort over Fiber Extender Kit

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

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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
- N520-XXM 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" 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.

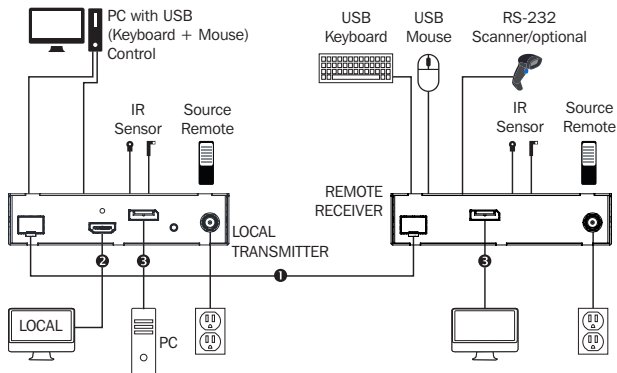
Notes:

- 1) *Test to ensure the entire installation works properly before pulling cables through ceilings/walls.*
- 2) *To achieve maximum distance and performance, use duplex fiber cable, such as Tripp Lite N520-XXM Series Duplex Multimode LC-to-LC Fiber Cable (for the B127-1A1-MM-DD model) or N370-XXM Duplex Singlemode LC-to-LC Fiber Cable (for the B127-1A1-SM-DD model).*

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 Tripp Lite 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 Tripp Lite 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 Tripp Lite N520-XXM 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 Tripp Lite 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 Tripp Lite 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) a Tripp Lite 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.

Standard Extender Kit Installation

- 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 Tripp Lite 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 and Product Registration

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

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Under the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations, when customers buy new electrical and electronic equipment from Tripp Lite 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

WARNING

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.

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



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