## **Owner's Manual**

# 4K/60 HDMI over Cat6 Extenders and Extender/Splitters

Extender Kit Models: B127-1A1-HH, B127-002-2H2

and B127-004-H4H

Local Unit Models: B127-002-H, B127-004-H Remote Unit Models: B127-100-H, B127-100-H-SR

> Este manual esta disponible en español en la página de Tripp Lite : www.tripplite.com/support

> Ce manuel est disponible en français sur le site Web de Tripp Lite : www.tripplite.com/support

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## **Package Contents**

	В127-1А1-НН	В127-002-2Н2	В127-004-Н4Н	В127-002-Н	В127-004-Н	В127-100-Н	B127-100-H-SR
Local Unit (L), Remote Unit (R) or Both (B)	В	В	В	L	L	R	R
External Power Supplies (0 or 1)	1	1	1	1	1	0	0
Mounting Hardware	Υ	Υ	Υ	Υ	Υ	Υ	N

## **Product Features**

### AII

- Support a maximum video resolution of 4K (3840 x 2160) @ 60 Hz with 4:4:4 Chroma Subsampling
- Support up to 7.1-channel surround sound audio
- HDMI 2.0, HDCP 2.2 and HDR compatible
- · Plug and play—no software or drivers required

#### B127-1A1-HH

- HDMI over Cat6 Power-over-Cable (PoC) Extender Kit
- Extends a 4K (3840 x 2160) @ 60 Hz signal up to 125 ft. (38 m) from the source

## **Product Features**

- Additional HDMI port on the local transmitter unit allows connection of local monitor
- Remote receiver unit features built-in equalization (EQ) control and auto EDID image adjustment
- Includes mounting hardware that allows both the local transmitter and remote receiver units to be wall-mounted, rack-mounted or polemounted

#### B127-002-2H2

- HDMI over Cat6 Power-over-Cable (PoC) 2-Port Splitter/Extender Kit
- Extends a 4K (3840 x 2160) @ 60 Hz signal up to 125 ft. (38 m) from the source
- Remote receiver unit features built-in equalization (EQ) control and auto EDID image adjustment
- Kit includes a 2-Port Splitter Extender and two Remove Receivers
- Includes mounting hardware that allows unit to be wall-mounted, rack-mounted or pole-mounted

#### B127-004-H4H

- HDMI over Cat6 Power-over-Cable (PoC) 4-Port Splitter/Extender Kit
- Extends a 4K (3840 x 2160) @ 60 Hz signal up to 125 ft. (38 m) from the source
- Remote receiver unit features built-in equalization (EQ) control and auto EDID image adjustment
- · Kit includes a 4-Port Splitter Extender and four Remote Receivers
- Includes mounting hardware that allows unit to be wall-mounted, rack-mounted or pole-mounted
- Additional HDMI port on the local transmitter unit allows connection of local monitor

## **Product Features**

#### B127-002-H

- · 2-Port HDMI over Cat6 Extender/Splitter Local Transmitter Unit
- · Splits an HDMI signal into two
- Works with remote receiver units to extend an HDMI signal past the 15 ft. (4.5 m) distance limitation
- Includes mounting hardware that allows unit to be wall-mounted, rack-mounted or pole-mounted

#### B127-004-H

- 4-Port HDMI over Cat6 Extender/Splitter Local Transmitter Unit
- · Splits an HDMI signal into four
- Includes an additional HDMI port, which can be used to connect a local monitor or to daisy-chain additional B127-004-H units (up to three units can be daisy-chained together)
- Works with remote receiver units to extend an HDMI signal past the 15 ft. (4.5 m) distance limitation
- Includes mounting hardware that allows unit to be wall-mounted, rack-mounted or pole-mounted
- Additional HDMI port on the local transmitter unit allows connection of local monitor

### B127-100-H

- · HDMI over Cat6 Power-over-Cable (PoC) Remote Receiver Unit
- Works with B127-002-H and B127-004-H extender/splitters to extend a 4K/60 Hz signal up to 125 ft. (38 m) from the source
- Built-in equalization (EQ) and EDID allows control for auto image adjustment
- Includes mounting hardware that allows unit to be wall-mounted, rack-mounted or pole-mounted

## **Product Features**

#### **B127-100-H-SR**

- HDMI over Cat6 Power-over-Cable (PoC) Short Distance Remote Receiver Unit
- Works with B127-002-H and B127-004-H extender/splitters to extend a 4K/60 Hz signal up to 50 ft. (15 m) from the source
- Built-in equalization (EQ) and EDID allows control for auto image adjustment

### **Optional Accessories:**

- N202-Series Cat6 24 AWG Solid-Wire Patch Cables
- P569-XXX-CERT or P568-XXX-2A Series High-Speed HDMI 2.0 Cables

### **Disclaimer**

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

- Set to display 60 Hz. Double-check factory settings, as default can be set to a lower frequency (Hz) than advertised.
- Ensure the input setting of your monitor is set at HDMI 2.0. Some displays may have default setting at HDMI 1.4
- Verify your monitor has the HDR feature enabled. Some displays may have this feature disabled as a factory setting.
- 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.

**Note:** If wishing to connect a local monitor to your installation, depending on your TV/monitor make/model, the UHD Deep Color setting may need to be disabled on your local TV/monitor to achieve 4K 60 Hz resolution.

## Mounting Instructions (select models only)

The B127-1A1-HH, B127-002-2H2, B127-004-H4H, B127-002-H, B127-004-H and B127-100H include includes 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** 

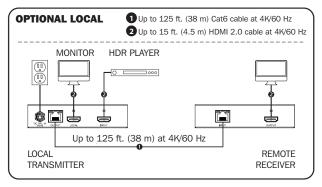




## **Standard Extender Kit Installation**

#### Notes:

- Test to ensure the entire installation works properly before pulling cables through ceilings/walls.
- 2) To achieve maximum distance and performance, use 24 AWG solid-wire Cat6 cable. Using stranded-wire Cat6 cable, or cable with a gauge (AWG) size higher than 24 AWG, will result in shorter extension distance. Higher gauge cabling, such as 26 AWG, has a more limited transmission capability than lower gauge cabling. All Tripp Lite N202-Series Cat6 cables are made with 24 AWG solid-wire cabling.
- 3) The installation diagram shows a B127-1A1-HH unit.
- External power is not required for remote receiver units due to Power-over-Cable (PoC) technology incorporated in the transmitter units.



- Make sure all equipment in the installation—such as TVs, Blu-ray players and the transmitter—is powered OFF.
- Using an HDMI 2.0 cable (such as Tripp Lite P569-XXX-CERT or P568-XXX-2A Series cables), connect the HDMI source to the INPUT port on the local transmitter unit.

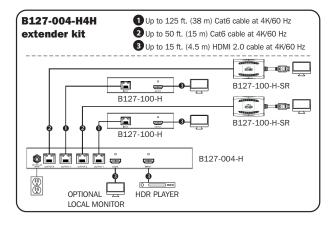
## **Standard Extender Kit Installation**

- **3. Optional for B127-1A1-HH:** 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 LOCALOUT port on the B127-1A1-HH local transmitter unit.
- **4.** Using Cat6 cable, connect the RJ45 port on the local transmitter unit to the RJ45 port on the remote receiver unit.
- Using an HDMI 2.0 cable (such as Tripp Lite P569-XXX-CERT or P568-XXX-2A Series cables), connect the remote receiver unit's HDMI port to a monitor.
- **6.** Turn the power on to your connected TVs/monitors. The LOCAL (orange) LED will illuminate to indicate local port has been connected to a display.
- 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 unit is receiving power from the local transmitter unit through PoC technology.
- **8.** Turn on the power to the HDMI source. The OUTPUT (orange) LED on the local transmitter unit illuminates to indicate a signal is being received from the source.
- The (orange) RJ45 LED will illuminate on both local transmitter and remote receiver units to indicate a signal is being received from source to display. The screen should now display on the connected monitor.

## **Standard Extender/Splitter Installation**

#### Notes:

- Test to ensure the entire installation works properly before pulling cables through ceilings/walls.
- 2) To achieve maximum distance and performance, use 24 AWG solid-wire Cat6 cable. Using stranded-wire Cat6 cable, or cable with a gauge (AWG) size higher than 24 AWG, will result in shorter extension distance. Higher gauge cabling, such as 26 AWG, has a more limited transmission capability than lower gauge cabling. All Tripp Lite N202-Series cables are made with 24 AWG solid-wire cabling.
- The installation diagram shows the B127-004-H local transmitter unit. The B127-002-H installation is the same, except there are only two remote ports and no local monitor port.
- 4) External power is not required for the B127-100-H and B127-100-H-SR units.
- 5) These installation instructions can be used for the B127-002-2H2 and B127-004-H4H extender kits.



## **Standard Extender/Splitter Installation**

- Make sure all equipment in the installation—such as TVs, Blu-ray players and the transmitter—is powered OFF.
- Using an HDMI 2.0 cable (such as Tripp Lite P569-XXX-CERT or P568-XXX-2A Series cables), connect the HDMI source to the INPUT port on the B127-002-H or B217-004-H units.
- Optional for B127-004-H: Using an HDMI 2.0 cable (such as Tripp Lite P569-XXX-CERT or P568-XXX-2A Series cables), connect an HDMI monitor to the LOCAL port on the B127-004-H unit.
- 4. Using Cat6 cable, connect one of the RJ45 output ports on the local transmitter unit to the RJ45 input port on a B127-100-H (up to 125 ft./38 m) or B127-100-H-SR (up to 50 ft./15 m) remote receiver unit.
- **5.** Repeat step 5 for each additional remote unit being connected.
- 6. Using an HDMI 2.0 cable (such as Tripp Lite P569-XXX-CERT or P568-XXX-2A Series cables), connect the B127-100-H-SR or B127-100-H to a display.
- Turn on the power to all your connected TVs or monitors. The LOCAL (orange) LED will illuminate to indicate the port has been connected to a display.
- 8. 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 will illuminate to indicate the unit is receiving power from the external power supply. On the B127-100-H, the POWER (green) LED will illuminate to indicate the unit is receiving power from the extender/splitter. On the B127-100-H-SR, the (green) LED next to the RJ45 port will illuminate to indicate the unit is receiving power from the extender/splitter.

## **Standard Extender/Splitter Installation**

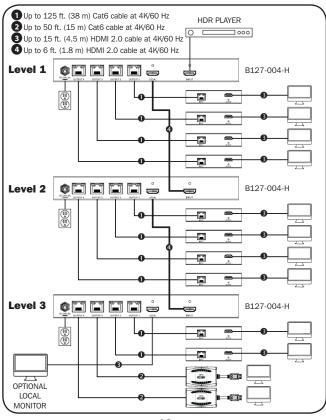
- 9. Turn on the power to the HDMI source. The (orange) RJ45 LEDs will illuminate on the B127-002-H and B127-004-H to indicate the unit is receiving a signal from the source. Additionally, the OUTPUT (orange) LED will illuminate for each port signal connection.
- 10. The RJ45 (orange) LEDs on the B127-100-H and orange LED on the B127-100-H-SR will illuminate to indicate a signal is being received from the extender/splitter. The screen should now display on the connected monitors.

## Splitter Daisy-Chain Installation (B127-004-H only)

#### Notes:

- Test to ensure the entire installation works properly before pulling cables through ceilings/walls.
- 2) To achieve maximum distance and performance, use 24 AWG solid-wire Cat6 cable. Using stranded-wire Cat6 cable, or cable with a gauge (AWG) size higher than 24 AWG, will result in shorter extension distance. Higher gauge cabling, such as 26 AWG, has a more limited transmission capability than lower gauge cabling. All Tripp Lite N202-Series cables are made with 24 AWG solid-wire cabling.
- 3) Using the B127-100-H, a 4K/60 Hz signal can be extended up to 125 ft. (38 m) from the source. Using a B127-100-H-SR, a 4K/60 Hz signal can be extended up to 50 ft. (15 m) from the source.

## Splitter Daisy-Chain Installation (B127-004-H only)



## Splitter Daisy-Chain Installation (B127-004-H only)

- Make sure all equipment in the installation—such as TVs, Blu-ray players and the transmitter—is powered OFF.
- Using an HDMI 2.0 cable (such as Tripp Lite P569-XXX-CERT or P568-XXX-2A Series cables), connect the HDMI source to the INPUT port on the B127-004-H unit.
- 3. Using a 6 ft./1.83 m HDMI 2.0 cable (such as Tripp Lite P569-006-CERT or P568-006-2A cables), connect the LOCAL port on the B127-004-H to the INPUT port on a second B127-004-H unit.
- Repeat step 3 if connecting a third B127-004-H unit.
  Note: Only three levels of splitters can be cascaded.
- 5. 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 HDMI port of the last B127-004-H unit in the installation.
- 6. Using Cat6 cable, connect one of the RJ45 output ports on the local transmitter units to the RJ45 input port on a B127-100-H or B127-100-H-SR remote receiver unit.
- **7.** Repeat step 6 for each additional remote unit being connected.
- Using an HDMI 2.0 cable (such as Tripp Lite P569-XXX-CERT or P568-XXX-2A Series cables), connect the B127-100-H or B127-100-H-SR to a display.
- Repeat step 8 for each additional monitor you are connecting to a remote receiver unit.
- **10.** Turn on the power to all your connected displays.
- 11. 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 will illuminate to indicate the unit is receiving power from the external power supply.

## **Splitter Daisy-Chain Installation**

(B127-004-H only)

- 12. Repeat step 11 for each additional B127-004-H unit in the daisy chain.
- 13. B127-100-H and B127-100-H-SR: The green and orange LEDs will illuminate, with the green LED indicating the unit is receiving power from the extender/splitter, and the orange LED indicating the unit is connected to a powered ON local unit via Cat6 cable.
- 14. Turn on the power to the HDMI source. The orange RJ45 LEDs will illuminate on the B127-004-H to indicate the unit is receiving a signal from the source. The screen should now display on the connected monitors.

## **Warranty and Product Registration**

#### 1-Year Limited Warranty

TRIPP LITE warrants its products to be free from defects in materials and workmanship for a period of one (1) year from the date of initial purchase. TRIPP LITE's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from TRIPP LITE or an authorized TRIPP LITE service center. Products must be returned to TRIPP LITE or an authorized TRIPP LITE service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. 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.

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#### PRODUCT REGISTRATION

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

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

## **Warranty and Product Registration**

#### WEEE Compliance Information for Tripp Lite 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 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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