Owner's Manual

4K/60 HDMI over Cat6 Extenders and Splitters, Multi-Resolution Function Support

Local Unit Models: B127P-002-H, B127P-004-H

Remote Unit Models: B127P-100-H, B127P-100-H-SR

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Package Contents

	B127P-002-H	B127P-004-H	B127P-100-H	B127P-100-H-SR
Local (L) Unit or Remote (R) Unit	L	L	R	R
External Power Supplies (0 or 1)	1	1	0	0
Mounting Hardware	Y	Y	Y	N

Product Features

All

- 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

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Product Features

B127P-002-H

- 2-Port HDMI over Cat6 Extender/Splitter Local Transmitter Unit
- Splits an HDMI signal into two
- Works in tandem with Tripp Lite's B127P-100-H and B127P-100-H-SR receiver units to extend an HDMI signal
- Power over Cable (PoC) function to transfer power to remote receivers
- Supports 4K (3840 x 2160) @ 60 Hz and 1080 @ 60 Hz signals
- Multi-resolution function allows displays with varying resolutions to co-exist in a single application without downgrading signal quality to the lowest resolution
- Includes mounting hardware that allows unit to be wall-mounted, rack-mounted or pole-mounted

B127P-004-H

- 4-Port HDMI over Cat6 Extender/Splitter Local Transmitter Unit
- Splits an HDMI signal into four
- Works in tandem with Tripp Lite's B127P-100-H and B127P-100-H-SR receiver units to extend an HDMI signal
- Power over Cable (PoC) function to transfer power to remote receivers
- Supports 4K (3840 x 2160) @ 60 Hz and 1080 @ 60 Hz signals
- Multi-resolution function allows displays with varying resolutions to co-exist in a single application without downgrading signal quality to the lowest resolution
- Includes an additional HDMI port, which can be used to connect a local monitor or to daisy-chain additional B127P-004-H units (up to three units can be daisy-chained together)
- Includes mounting hardware that allows unit to be wall-mounted, rack-mounted or pole-mounted

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Product Features

B127P-100-H

- HDMI over Cat6 Power over Cable (PoC) Remote Receiver Unit
- Works with B127P-002-H and B127P-004-H extender/splitters to extend a 4K @ 60 Hz signal up to 125 ft. (38 m) from the source
- Built-in equalization control for video image auto-adjustment
- Supports 4K (3840 x 2160) @ 60 Hz and 1080 @ 60 Hz signals
- Multi-resolution function allows displays with varying resolutions to co-exist in a single application without downgrading signal quality to the lowest resolution
- Includes mounting hardware that allows unit to be wall-mounted, rack-mounted or pole-mounted

B127P-100-H-SR

- HDMI over Cat6 Power over Cable (PoC) Short Distance Remote Receiver Unit
- Works with B127P-002-H and B127P-004-H extender/splitters to extend a 4K @ 60 Hz signal up to 50 ft. (15 m) from the source
- Built-in equalization control for video image auto-adjustment
- Supports 4K (3840 x 2160) @ 60 Hz and 1080 @ 60 Hz signals
- Multi-resolution function allows displays with varying resolutions to co-exist in a single application without downgrading signal quality to the lowest resolution
- Built-in 6 in. HDMI pigtail cable attaches directly to HDMI port at display

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

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Disclaimer

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

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

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Mounting Instructions (select models only)

The B127P-002-H, B127P-004-H and B127P-100-H 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.
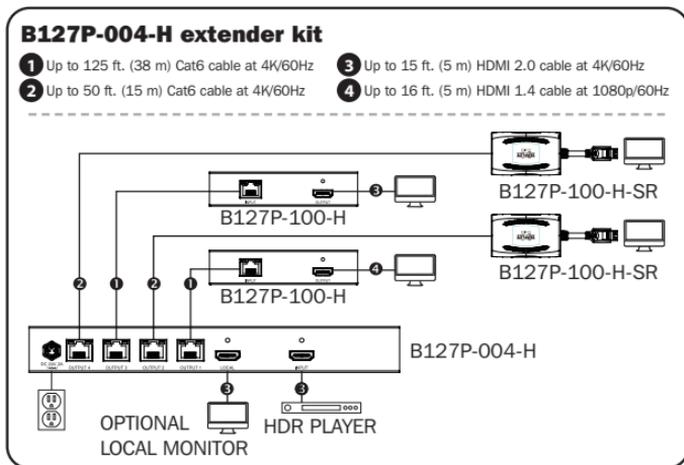
Wall-mount

19" Rack-mount   ## Pole-mount

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Standard Extender/Splitter Installation

Notes:

1) 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 higher gauge size like 26 AWG, will result in a shorter extension distance since the cable will have a more limited transmission capability. All Tripp Lite N202-Series Cat6 cables are made with 24 AWG solid-wire cabling.

3) The installation diagram shows the B127P-004-H local transmitter unit. The B127P-002-H installation is the same, except there are only two remote ports and no local port monitor.

4) External power is not required for the B127P-100-H and B127P-100-H-SR units due to Power over Cable (PoC) technology incorporated in the transmitter units.

B127P-004-H extender kit

1. Up to 125 ft. (38 m) Cat6 cable at 4K/60Hz
2. Up to 50 ft. (15 m) Cat6 cable at 4K/60Hz
3. Up to 15 ft. (5 m) HDMI 2.0 cable at 4K/60Hz
4. Up to 16 ft. (5 m) HDMI 1.4 cable at 1080p/60Hz

B127P-100-H-SR

B127P-100-H

B127P-100-H-SR

B127P-100-H

B127P-004-H

OPTIONAL LOCAL MONITOR

HDR PLAYER

Standard Extender/Splitter Installation

1. Make sure all equipment in the installation—such as TVs, Blu-ray players and the transmitter—is powered OFF.

2. 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 B127P-002-H or B127P-004-H.

3. Optional for B127P-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 B127P-004-H unit.

4. Using Cat6 cable, connect the RJ45 port on the local transmitter unit to the RJ45 port on the remote receiver unit.

5. Repeat Step 4 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 remote receiver unit's HDMI port to a monitor.

7. Turn the power on to your connected TVs/monitors. The LOCAL (orange) LED will illuminate to indicate the local 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 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.

9. 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. Additionally, the OUTPUT (orange) LED will illuminate for each port signal connection.

Standard Extender/Splitter Installation

10. 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(s).
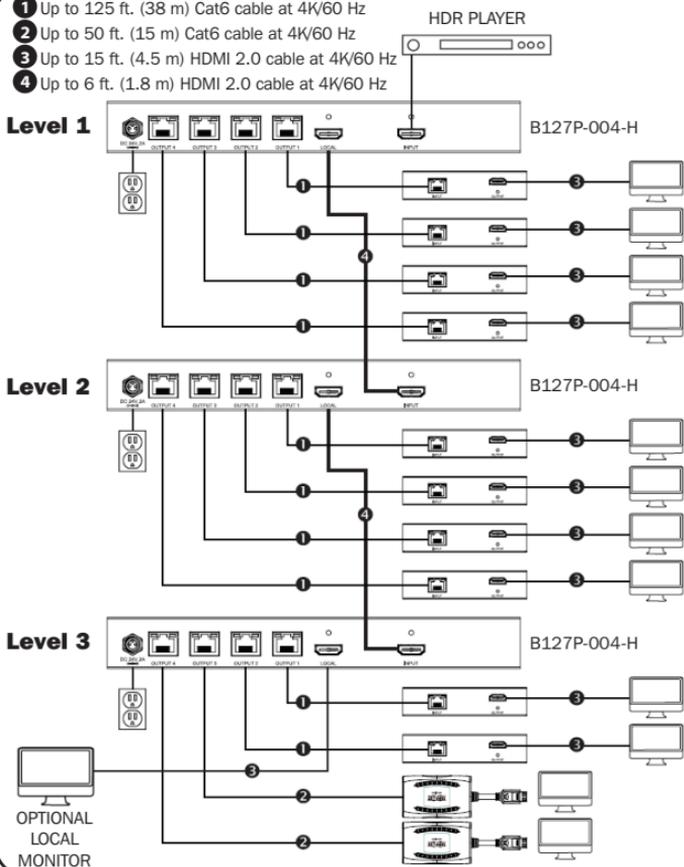
Extender/Splitter Daisy-Chain Installation

Notes:

1) 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 higher-gauge size like 26 AWG, will result in a shorter extension distance since the cable will have a more limited transmission capability. All Tripp Lite N202-Series Cat6 cables are made with 24 AWG solid-wire cabling.

3) Using the B127P-100-H, a 4K/60Hz signal can be extended up to 125 ft. (38 m) from the source. Using a B127P-100-H-SR, a 4K/60Hz signal can be extended up to 50 ft. (15 m) from the source.

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Extender/Splitter Daisy-Chain Installation

❶ Up to 125 ft. (38 m) Cat6 cable at 4K/60 Hz
❷ Up to 50 ft. (15 m) Cat6 cable at 4K/60 Hz
❸ Up to 15 ft. (4.5 m) HDMI 2.0 cable at 4K/60 Hz
❹ Up to 6 ft. (1.8 m) HDMI 2.0 cable at 4K/60 Hz

HDR PLAYER

Level 1 B127P-004-H

Level 2 B127P-004-H

Level 3 B127P-004-H

OPTIONAL LOCAL MONITOR

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Extender/Splitter Daisy-Chain Installation

1. Make sure all equipment in the installation—such as TVs, Blu-ray players and the transmitter—is powered OFF.

2. 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 B127P-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 B127P-004-H to the INPUT port on a second B127P-004-H unit.

4. Repeat step 3 if connecting a third B127P-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 B127P-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 B127P-100-H or B127P-100-H-SR remote receiver unit.

7. Repeat step 6 for each additional remote unit being connected.

8. Using an HDMI 2.0 cable (such as Tripp Lite P569-XXX-CERT or P568-XXX-2A Series cables), connect the B127P-100-H or B127P-100-H-SR to a display.

9. 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.

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Extender/Splitter Daisy-Chain Installation

12. Repeat step 11 for each additional B127P-004-H unit in the daisy chain.

13. B127P-100-H and B127P-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 B127P-004-H to indicate the unit is receiving a signal from the source. The screen should now display on the connected monitors.

Troubleshooting

1. Using a splitter, if one display's color is abnormal, set the player's deep color setting to "turn off."

2. When source is 4K/60 4:2:2 HDR, the output can't display 1080p/60Hz quality.

If unable to receive an acceptable image after following the installation instructions, try the following troubleshooting tips:

Resolution Comparison Tables

		Port	Connect TV	Real Resolution
SOURCE 4K/60Hz	Situation 1	1	4K/60Hz	4K/60Hz
		2-4	4K/60Hz	4K/60Hz
	Situation 2	1	4K/60Hz	4K/60Hz
		2-4	4K/30Hz	1080p/60Hz
	Situation 3	1	4K/60Hz	4K/60Hz
		2-4	1080p/60Hz	1080p/60Hz
	Situation 4	1	4K/30Hz	4K/30Hz
		2-4	4K/30Hz	4K/30Hz
	Situation 5	1	4K/30Hz	4K/30Hz
		2-4	1080p/60Hz	1080p/60Hz
	Situation 6	1	1080p/60Hz	1080p/60Hz
		2-4	1080p/60Hz	1080p/60Hz

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Troubleshooting

		Port	Connect TV	Real Resolution
SOURCE 4K/30Hz	Situation 1	1	4K/60Hz	4K/30Hz
		2-4	4K/60Hz	4K/30Hz
	Situation 2	1	4K/60Hz	4K/30Hz
		2-4	4K/30Hz	4K/30Hz
	Situation 3	1	4K/60Hz	4K/30Hz
		2-4	1080p/60Hz	1080p/60Hz
	Situation 4	1	4K/30Hz	4K/30Hz
		2-4	4K/30Hz	4K/30Hz
	Situation 5	1	4K/30Hz	4K/30Hz
		2-4	1080p/60Hz	1080p/30Hz
	Situation 6	1	1080p/60Hz	1080p/60Hz
		2-4	1080p/60Hz	1080p/60Hz

		Port	Connect TV	Real Resolution
SOURCE 1080P/60Hz	Situation 1	1	4K/60Hz	1080p/60Hz
		2-4	4K/60Hz	1080p/60Hz
	Situation 2	1	4K/60Hz	1080p/60Hz
		2-4	4K/30Hz	1080p/60Hz
	Situation 3	1	4K/60Hz	1080p/60Hz
		2-4	1080p/60Hz	1080p/60Hz
	Situation 4	1	4K/30Hz	1080p/60Hz
		2-4	4K/30Hz	1080p/60Hz
	Situation 5	1	4K/30Hz	1080p/60Hz
		2-4	1080p/60Hz	1080p/30Hz
	Situation 6	1	1080p/60Hz	1080p/60Hz
		2-4	1080p/60Hz	1080p/60Hz

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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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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19-05-082 93-396C_RevA

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