# **Owner's Manual**

# UHD 4K x 2K (2160p)@ 60 Hz HDMI Splitters with Multi-Resolution Support

Models: B118-002-HDR, B118-002-HDR-V2, B118-004-HDR

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

Русскоязычная версия настоящего руководства представлена на веб-сайте компании Tripp Lite по адресу: www.tripplite.com/support

#### **WARRANTY REGISTRATION**

Register your product today and be automatically entered to win an ISOBAR surge protector in our monthly drawing!

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## **Product Features**

- Simultaneously transmit Ultra High Definition video and audio from an HDMI source to multiple HDMI monitors
- Supports UHD 4K x 2K video resolutions up to 4096 x 2160 @ 60 Hz 4:4:4
- Backward compatible with 4K/30 Hz and 1080p/60 Hz resolutions via Auto DIP Switching (ideal for installations where equipment varies)
- Supports 36-bit Deep Color (12 bits per channel)
- Supports DTS-HD<sup>™</sup>, Dolby<sup>®</sup> TrueHD, Dolby Digital Plus<sup>™</sup> and LPCM 7.1 Channel Surround Sound audio
- Supports video amplifier bandwidth of 600 MHz / 6 Gbps per channel (18 Gbps total)
- . HDMI 2.0, HDCP 2.2, MHL 2.2 and HDR compatible
- · Supports Full 3D and EDID
- Supports lip sync and audio pass through
- Supports xvYCC and x.vColor
- Distributes video and audio over a maximum distance of 15 ft. (4 m) when used with standard 28 AWG HDMI 2.0 cable
- **B118-002-HDR** and **B118-004-HDR** Models: Cascade up to 3 levels of splitters to increase up to 64 connected monitors.
- · Versatile design allows for both desktop and wall-mount use
- Plug-and-play; no software or drivers required
- Includes an international power supply with compatible North American, U.K., European and Australian plug adapters

## **Package Contents**

#### B118-002-HDR & B118-004-HDR:

- External Power Supply\* (Input: 100-240V, 50/60 Hz, 0.35A; Output: 5V 2A)
- · Owner's Manual
- \* Includes NEMA 1-15P (North America), CEE 7/16 Schuko (Europe), BS 1363 (U.K.) and AS/NZS 3112 (Australia) plugs.

### **B118-002-HDR-V2:**

- USB Cable
- · Owner's Manual

## **Optional Accessories**

- P569-003-CERT Premium High-Speed HDMI Cable—3 ft. (0.91 m)
- P569-006-CERT Premium High-Speed HDMI Cable—6 ft. (1.83 m)
- P569-010-CERT Premium High-Speed HDMI Cable—10 ft. (3.05 m)
- P569-015-CERT Premium High-Speed HDMI Cable—15 ft. (4.6 m)

## Installation

**Note:** The maximum distances referenced to in these instructions have been tested using 28 AWG Premium High-Speed HDMI 3.0 cables at a 4K x 2K UHD video resolution of 4096 x 2160 @ 60 Hz with 36-bit (12 bits per channel) Deep Color.

- **1.** Make sure the power is turned off for all devices that will be connected.
- 2. Connect the HDMI source to the Input port on the splitter.

#### Notes:

- The B118-002-HDR-V2 uses a 6-inch (15.25 cm) pigtail HDMI connector.
- The length of the HDMI cable connecting the source to the splitter must not exceed 15 ft. (4 m).
- Connect an available Output port on the splitter to the HDMI Input port of the display.

**Note:** The length of the HDMI cable connecting the source to the splitter must not exceed 15 ft. (4 m).

- **4.** Repeat step 3 for the splitter's remaining Output ports.
- **5.** Connect the included power supply to the splitter, then plug it into a Tripp Lite Surge Protector, Power Distribution Unit (PDU) or Uninterruptible Power Supply (UPS).

**Note:** To power the B118-002-HDR-V2, use the included USB Micro-B cable to connect the unit to a USB wall charger or USB port from the source.

**6.** Turn on the power to the HDMI source, splitter and displays.

## Installation

#### Cascade Installation

The number of connected monitors can be expanded by cascading up to three levels of splitters together. Up to 64 displays can be connected by cascading the splitter from each port in a three-level installation. It is recommended you use Tripp Lite's P569-XXX-CERT Series Premium High-Speed HDMI cables.

Note: This feature is only available for B118-002-HDR and B118-004-HDR models.

- Make sure the power to all the devices you will be connecting is turned off.
- 2. Connect the HDMI source to the Input port on the first level splitter.

  Note: The length of the HDMI cable connecting the source to the splitter must not exceed 1.6 ft. (5 m).
- **3.** Connect an available Output port on the first-level splitter to the HDMI Input port on a second-level splitter.
  - **Note:** The length of the HDMI cable connecting the first- and second-level splitters must not exceed 10 ft. (3 m).
- **4.** Repeat Step 3 for each additional splitter you wish to add (no more than 3 levels of splitters can be cascaded).
- Connect an available Output port on your splitter(s) to the display's HDMI Input port.
  - **Note:** The length of the HDMI cable connecting the splitter to the display must not exceed 16 ft. (5 m).
- **6.** Repeat Step 5 for the remaining Output ports in the installation.
- 7. Connect the included power supply to each splitter in the installation, then plug it into a Tripp Lite Surge Protector, Power Distribution Unit (PDU) or Uninterruptible Power Supply (UPS).
- **8.** Turn on the power to the HDMI source and displays.

If you are unable to attain an acceptable image after following the installation instructions, try the troubleshooting tips below.

- 1. Is the external power supply that shipped with the product connected and plugged into a working power source? For the product to function properly, it must be connected to and receiving power from the external power supply.
- 2. Was power to the connected devices turned off prior to installation? If not, restart the devices.
- **3.** What resolution are you trying to attain? Tripp Lite's UHD 4K x 2K HDMI splitters are tested to support up to 4096 x 2160 @ 60 Hz 4:4:4 resolution at 36-bit (12 bits per channel) Deep Color.
- 4. What length HDMI cable are you using? (See the Installation section in this manual for details on the maximum cable distance.) The shorter the cable being used, the higher the resolution you will be able to attain. If you are not able to receive an acceptable image, try using a shorter cable or lowering the source's video resolution or color depth settings.
- 5. What type of cabling are you using? Inferior cabling can result in poor performance, so it is important to use cables that can support the desired video resolution. It is recommended you use Tripp Lite's P569-XXX-CERT Series Premium High-Speed HDMI cables, as they have been tested to work with the B118-Series splitters.
- 6. Test your cables to ensure they are working properly. For example, connect your HDMI cable between a source and a monitor that you know works to determine if the cable is functioning properly.
- 7. Is the unit located in an area that exposes it to higher temperatures? If the product is overheated, it will not function properly.
- 8. Does your display support HDCP 2.2? If your display does not support HDCP 2.2, you will not be able to achieve 4K video resolution using a 4K @ 60 Hz Blu-ray™ player. When a 4K @ 60 Hz Blu-ray player is connected to a 4K @ 30 Hz monitor that supports an HDCP version lower than 2.2, the video resolution will drop to 1080p.

Reference the following resolution tables when connecting displays with different resolutions.

		Port	Connected TV	Actual Resolution
Source: 4K/60 Hz	Situation 1	1	4K/60 Hz	4K/60 Hz
		2-4	4K/60 Hz	4K/60 Hz
	Situation 2	1	4K/60 Hz	4K/60 Hz
		2-4	4K/60 Hz	1080p/60 Hz
	Situation 3	1	4K/60 Hz	4K/60 Hz
		2-4	1080p/60 Hz	1080p/60 Hz
	Situation 4	1	4K/60 Hz	4K/60 Hz
		2-4	4K/60 Hz	4K/60 Hz
	Situation 5	1	4K/60 Hz	4K/60 Hz
		2-4	1080p/60 Hz	1080p/60 Hz
	Situation 6	1	1080p/60 Hz	1080p/60 Hz
		2-4	1080p/60 Hz	1080p/60 Hz

		Port	Connected TV	Actual Resolution
Source: 4K/30 Hz	Situation 1	1	4K/60 Hz	4K/30 Hz
		2-4	4K/60 Hz	4K/30 Hz
	Situation 2	1	4K/60 Hz	4K/30 Hz
		2-4	4K/30 Hz	4K/30 Hz
	Situation 3	1	4K/60 Hz	4K/30 Hz
		2-4	1080p/60 Hz	1080p/30 Hz
	Situation 4	1	4K/30 Hz	4K/30 Hz
		2-4	4K/30 Hz	4K/30 Hz
	Situation 5	1	4K/30 Hz	4K/30 Hz
		2-4	1080p/60 Hz	1080p/30 Hz
	Situation 6	1	1080p/60 Hz	1080p/60 Hz
		2-4	1080p/60 Hz	1080p/60 Hz

		Port	Connected TV	Actual Resolution
Source: 1080p/ 60 Hz	Situation 1	1	4K/60 Hz	1080p/60 Hz
		2-4	4K/60 Hz	1080p/60 Hz
	Situation 2	1	4K/60 Hz	1080p/60 Hz
		2-4	4K/30 Hz	1080p/60 Hz
	Situation 3	1	4K/60 Hz	1080p/60 Hz
		2-4	1080p/60 Hz	1080p/60 Hz
	Situation 4	1	4K/30 Hz	1080p/60 Hz
		2-4	4K/30 Hz	1080p/60 Hz
	Situation 5	1	4K/30 Hz	1080p/60 Hz
		2-4	1080p/60 Hz	1080p/30 Hz
	Situation 6	1	1080p/60 Hz	1080p/60 Hz
		2-4	1080p/60 Hz	1080p/60 Hz

## **Warranty & Product Registration**

#### 3-Year Limited Warranty

TRIPP LITE warrants its products to be free from defects in materials and workmanship for a period of three (3) years 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.

EXCEPT AS PROVIDED HEREIN, TRIPP LITE MAKES 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 TRIPP LITE 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, TRIPP LITE is 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 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.

#### 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 Tripp Lite could void the user's authority to operate this equipment.

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## **Warranty & 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

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.





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