# **Owner's Manual**

# 7-Port 4K 60 Hz Multi-Format Presentation Switch

#### Model: B310-701-4K

Este manual esta disponible en español en la página de Tripp Lite: tripplite.com

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

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## **Package Contents**

- B310-701-4K Multi-Format Presentation Switch
- IR Remote Control
- IR Receiver Head Cable
- International Power Supply (Input: 100-240V) with North America, Europe, U.K. and Australia Plug Adapters
- Mounting Hardware

### **Product Features**

- Seamlessly switch between multiple video sources to an HDMI-compliant display using the front-panel pushbuttons or the IR remote control.
- Supports HDMI resolutions up to 4096 x 2160 @ 60 Hz 4:4:4; DisplayPort resolutions up to 3840 x 2160 @ 60 Hz; VGA resolutions up to 1280 x 768 @ 60 Hz; YPbPr resolutions up to 1920 x 1080 @ 60 Hz; AV resolutions up to 1280 x 720 @ 60 Hz.
- Both digital, Toslink and coaxial, and analog, R/L, audio outputs work simultaneously.
- Front-panel USB port supports the connection of U-disk for audio (MP3), video (MP4, WMA), picture (JPG, BMP) / text (English Text).
- Sends analog video signals to the HD display using the scaler function.
- Memory function stores the last output source and displays it once the unit is powered on again.
- HDCP 2.2 compliant.

#### **Optional Accessories**

- P569-XXX-CERT Series High-Speed HDMI Cables
- P580-Series DisplayPort Cables
- P502-Series VGA Coaxial Cables
- A008-Series Component Video Gold Cables
- P312-Series 3.5mm Audio Cables
- A102-Series Toslink Cables

# **Panel Description**

#### **Front Panel:**



- **1** Power Button: Turns the unit on/off
- **2** Power LED: Illuminates red to indicate the unit is powered on
- **3 Manual Pushbuttons:** Refer to the **Operation** section for pushbutton functions
- 4 IR Receiver: Receives information from the IR remote control
- **5 IR Port:** Connector for the IR Receiver Head Cable (included)
- 6 USB-A Port: Connector for a USB peripheral device

#### **Rear Panel:**



- 7 DisplayPort In: Connect a DisplayPort source
- 8 HDMI In: Connect up to three HDMI sources
- 9 VGA In: Connect a VGA source
- 10 YPbPr In: Connect a component source
- **11** AV In: Connect a AV source
- **12** Audio In: Connect the audio input from the analog video input source
- 13 Toslink/Coaxial: Connect either port to a digital audio output device
- 14 R/L: Connect to an analog audio output device
- **15 HDMI Out:** Connect an HDMI-compliant display
- **16 DC In:** Connect the included external power supply

### Installation

**Note:** Before installation, please make sure all devices you wish to connect are powered off.



**1.** Connect all multi-format source devices to their respective ports (cables sold separately).

Note: Make sure to connect the audio input for the analog video source.

- **2.** Connect an HDMI-compliant display to the unit with user-supplied cables.
- **3.** Connect speakers, amplifiers or sound bars to either the Toslink or coaxial digital or R & L analog audio output ports.
- **4.** (Optional) If using the remote control at a distance of more than 10 ft. (3 m), attach the included IR Receiver Head Cable for increased range.
- **5.** (Optional) Connect a USB peripheral to the available USB-A port on the front of the unit.
- 6. Plug in the power adapter and turn on the unit using the Power button.

## Operation

#### **IR Remote Control and Manual Front-Panel Pushbuttons**

The B310-701-4K has two methods of control:

1. IR Remote Control

Multi-Format 4K/60Hz Presentation Switch
Model: B310-701-4K

2. Manual Front-Panel Pushbuttons



There are seven manual pushbuttons on the unit (excluding the power button).

Source: Input source selection menu/exit from current menu

This menu appears when the Source button is pressed. In this menu, use the "Up" or "Down" arrows to select any input source, then press the "OK" button.

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## Operation

Input source
USB
DP
HDMI1
HDM12
HDMI3
VGA
YPbPr
AV

If there is no signal from the selected source, the below message will display:

# NO SIGNAL

Up: Move up/Play button (when U-disk is connected)

Down: Move down

Left: Move left (decrease)

Right: Move right (increase)

OK: Confirm current operation

Menu: Main OSD menu/Return to previous menu screen

### **Introduction of Menus**

Press the "Menu" button to bring up the OSD menu. The functions in this menu are used to adjust picture and sound settings.

Under the OSD Menu, there are three first-tier menus:

#### 1. Picture

PICTURE

Picture Mode

Color Temperature

Aspect Ratio

**OverScan** 

Screen

2. Sound

SOUND Sound Mode

Balance

3. Option

OPTION Mirror Enable Output Mode

### **Introduction of Menus**

Of the three menus, only the Picture menu will appear. To access the Sound or Option menu, press the "Left" arrow button. Exit the OSD Menu by pressing the "Source" button.

#### **1. Picture Menu:**

The Picture Menu has 5 sub-menus:

- a. Picture Mode
- **b.** Color Temperature
- c. Aspect Ratio
- d. OverScan
- e. Screen

Select the desired sub-menu by pressing the "Up/Down" arrow buttons. Invalid menu items will appear gray.

**Note:** The OverScan menu is only available when a VGA source is connected. The Screen menu is not available for the VGA source.

#### **Picture Mode:**

The Picture Mode menu includes five options/settings:

- i. Contrast
- ii. Brightness
- iii. Color
- iv. Sharpness
- v. Tint

The corresponding values can be adjusted by pressing the "Left" or "Right" arrow button.

**Note:** Tint is only available to NTSC signal under AV.

# **Picture Mode**

Picture Mode	Picture Mode
- Contrast 50 +	Contrast 50
Brightness 30	- Brightness 30 +
Color 50	Color 50
sharpness 50	sharpness 50
Tint 50	Tint 50
Picture Mode	Picture Mode
Picture Mode Contrast 50	Picture Mode Contrast 50
Picture Mode Contrast 50 Brightness 30	Picture Mode Contrast 50 Brightness 30
Picture Mode Contrast 50 Brightness 30 - Color 50 +	Picture Mode Contrast 50 Brightness 30 Color 50
Picture Mode Contrast 50 Brightness 30 - Color 50 + sharpness 50	Picture Mode Contrast 50 Brightness 30 Color 50 - sharpness 50 +
Picture Mode Contrast 50 Brightness 30 - Color 50 + sharpness 50 Tint 50	Picture Mode Contrast 50 Brightness 30 Color 50 - sharpness 50 + Tint 50



### **Color Temperature**

The Color Temperature menu includes three options/settings:

- I. Red
- II. Green
- III. Blue

The corresponding values can be adjusted by pressing the "Left" or "Right" arrow button.



### **Aspect Ratio**

The Aspect Ratio menu includes five options/settings:

- I. Auto
- **II.** 4:3
- **III.** 16:9
- IV. Just Scan
- V. Point To Point





The corresponding values can be adjusted by pressing the "Left" or "Right" arrow button.

HDMI and DisplayPort support all five Aspect Ratio modes, while VGA supports all but Auto and AV & YPbPr support only Auto, 4:3 and 16:9 Aspect Ratio modes.

## **OverScan / Screen**

The OverScan menu includes two options/settings:

- I. OverScan-Hsize
- II. Overscan-VSize

The corresponding values can be adjusted by pressing the "Left" or "Right" arrow button.

	OverScan		
_	OverScan-Hsize	0	+
	Overscan-Vsize	0	
	OverSeen		
	overscan		
	OverScan-Hsize	0	
_	Overscan-Vsize	0	+

#### Screen:

The Screen menu includes five options/settings:

- I. Auto-Adjust
- II. Horizontal Pos.
- III. Vertical Pos.
- IV. Size
- V. Phase

The corresponding values can be adjusted by pressing the "Left" or "Right" arrow button.

### **Sound Menu**

The Sound Menu has two sub-menus: Sound Mode and Balance. Select the desired menu options by using the "Up" or "Down" arrow button, then press "OK".

#### Sound Mode:

The Sound Mode menu includes two options/settings:

a. Treble

#### b. Bass

The corresponding values can be adjusted by pressing the "Left" or "Right" arrow button.

	SOUND Mode	
-	Treble 50	+
	Bass 50	
	SOUND Mode	
	Treble 50	
—	Bass 50	+

#### **Balance:**

The Balance menu has one option/setting:

#### a. Balance

The corresponding value can be adjusted by pressing the "Left" or "Right" arrow button.

### **Options Menu**

The Options Menu has two sub-menus: Mirror and Output Mode. Select the desired menu options using the "Up" or "Down" arrow button, then press "OK".

#### Mirror:

Select "Mirror" when you want the display to mirror the input source.



#### **Output Mode:**

The Output mode menu includes the following resolutions:

3840 x 2160 @ 60 Hz 1920 x 1080 @ 60 Hz (1080p) 1920 x 1080 @ 30 Hz (1080i) 1680 x 1050 @ 60 Hz 1600 x 1200 @ 60 Hz 1440 x 900 @ 60 Hz 1400 x 1050 @ 60 Hz 1360 x 768 @ 60 Hz 1280 x 1024 @ 60 Hz 1280 x 720 @ 60 Hz (720p) 1280 x 720 @ 50 Hz 1024 x 768 @ 60 Hz 800 x 600 @ 60 Hz 852 x 480 @ 60 Hz 720 x 576 @ 60 Hz

Select the desired resolution options by using the "Up" or "Down" arrow button, then press "OK".

#### Note:

**1.** The default mode of the Output mode is the selected resolution. If the connected TV/monitor does not support the default mode (selected resolution), no image/video will appear. Press the Menu button for 3-5 seconds to get an image to appear.

### **Options Menu**

- 2. This product does not support 3840 x 2160 (4K x 2K) @ 60 Hz 4:2:0.
- **3.** USB Input Signal:

When the input source is a USB signal, there are four available options: Photo, Music, Movie or Text.



Scroll through the options using the "Left" and "Right" arrow buttons or exit the menu using the "Source" button.

Based on the option chosen (for example, Movie), a corresponding screen will pop up. Press the "Up" arrow button to play the target file.



You can also select the connected U-disk to view the content of the disk.

## **Specifications**

Model	В310-701-4К
Input Connectors	(x3) HDMI, DisplayPort, VGA, YPbPr, AV, USB, 3.5 mm (Audio)
Output Connectors	HDMI, Toslink, Coaxial, R/L Audio
Operating Temperature Range	32°F to 113°F (0°C to 45°C)
Storage Temperature Range	14°F to 176°F (-10°C to 80°C)
Unit Dimensions (H x W x D)	0.8 x 11.8 x 3 in. (20.6 x 299.7 x 74.9 mm)
Unit Weight	1.12 lb. (5 kg)
Max Supported Resolutions	3840 x 2160 @ 60 Hz
DisplayPort Specification	1.2
HDCP Specification	2.2
Chroma Subsampling	4:4:4
Max Support Color Depth	36-bit Deep Color
Audio Specification	DTS Digital, Dolby Digital (including DTS-HD and Dolby True HD)

## **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.

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\* 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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- 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-on-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 life support equipment or to significantly affect its safety or effectiveness is not recommended.

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