Presto

16 to 1 3G/HD/SD-SDI Video Source Selector

User Guide

Part Number 821037, Revision B





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This document is intended to be printed on a duplex printer, such that the copy appears on both sides of each page. This ensures that all new chapters start on a right-facing page.

This document looks best when printed on a color printer since some images may be indistinct when printed on a black and white printer.

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Presto User Guide

Introduction

Overview

The Presto video source selector can switch any one of 16 3G/HD/SD-SDI inputs to a pair of re-clocked outputs for use downstream. Each of the input switch buttons displays the content of that signal for accurate source selection.

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Safety Instructions

1.

	2. Do not use this equipment near water or moisture.	
	3. Use only a dry cloth to clean the equipment.	
	4. Do not block any ventilation openings. Install only in accordance with the instructions in the section entitled, "Installation Recommendations" on page 3.	
	5. Do not install near any heat source such as a radiator, heat register, amplifier, or stove.	
	6. Do not attempt to plug the unit into a two-blade outlet (with only two prongs of equal width).	
IMPORTANT:	By design, these monitors will only plug into a three-prong outlet for your safety. If the plug does not fit into your outlet, contact an electrician to replace the obsolete outlet.	
	7. Protect the power cord from being walked on or pinched, particularly at plug's source on the equipment and at the socket.	
	8. Use only the attachments/accessories specified by the manufacturer.	
	9. Unplug the equipment during lightning storms or when unused for long periods of time.	
	10. Refer all servicing to qualified service personnel. Servicing will be required under all of the following conditions:	
	• The equipment has been damaged in any way, such as when the power-supply cord or plug is damaged.	
	 Liquid had been spilled or objects have fallen onto the equipment. 	
	• The equipment has been exposed to rain or moisture.	
	• The equipment does not operate normally.	
	• The equipment has been dropped.	
Important	f an OLED panel is broken, avoid touching the contents. Wash off any contact from the skin or clothing.	

Read, keep, and follow all of these instructions; heed all warnings.

Installation Recommendations

Mounting

The unit is designed to install into a standard 19" rack mounted at eye level for best visual observation of the monitor screens.

Heat Dissipation

The ambient temperature inside the mounting enclosure should not exceed 40° Celsius (104° Fahrenheit). Adjacent devices can be rack mounted (or stacked) in proximity to the unit if the above temperature is not exceeded. Allow a 1RU (1.75″/45mm) space above and below the unit for air circulation if other products may expose the Presto to excessive heat.

Important: The heat dissipated by the internal components is vented by slots in the side of the unit. Therefore, as a safety precaution, we advise you to be sure to allow proper ventilation on both sides of the unit.

Power

The unit an external 5VDC 3A external power supply that connects to an AC mains power source (45W, 100 to 240 VAC 50/60 Hz) using an IEC connector on the external power supply unit.

Compliance

All components comply with UL, CE, and RoHs specifications.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Installation and Operation

- 1. Carefully mount the Presto unit into a standard 19" rack.
- 2. Connect up to 16 3G/HD/SD-SDI video signal inputs to the rear panel.
- 3. Two identical 3G/HD/SD SDI outputs are provided. One may be connected to any Wohler video monitor to show the selected video in detail. The other may be used to supply video to any downstream device.
- 4. Insert the external power supply cord into the power connector and connect the other end to A/C mains power.
- 5. Simply press the button showing the video source you want to select. The green LED indicator will display your choice and the signal will immediately be routed to the two outputs.

Front Panel Controls

Figure 1–1

Front Panel of the Presto

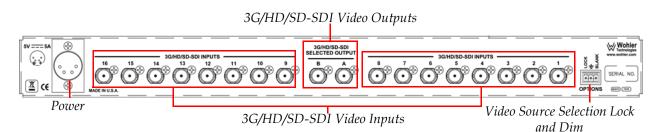


Video Display Push Buttons

The front panel contains 16 push-button switches that also display the video content of the corresponding 3G/HD/SDI-SDI input. The associated LED indicates the signal currently selected to be routed to the output. In the unlikely event that one of the buttons fails to properly synchronize, hold the button in for several seconds to reset it.

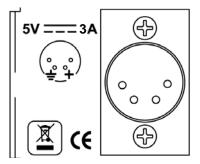
Rear Panel Connectors





• **Power**: Comes with an external power cord/unit for the 100 to 240 VAC power connection. The polarity of the power connector is enlarged in Figure 1–3 below.





- **16 3G/HD/SD-SDI Video Inputs (BNC)**: These BNC connectors receive standard 3G/HD/SD-SDI input signals.
- **2 3G/HD/SD-SDI Video A/B Outputs (BNC)**: These BNC connector outputs are a re-clocked replica of the selected 3G/HD/ SD-SDI input signal.
- Video Source Selection Lock: A contact closure from this pin to the pin 2 ground will lock the video selection to the currently selected source.
- **Dim**: A contact closure from this pin to the pin 2 ground will dim the video display and the LED indicators for use in darkened environments.

Presto User Guide Specifications

Specifications

Table 1–1 lists the specifications for the Presto source selector.

Table 1–1 Specifications

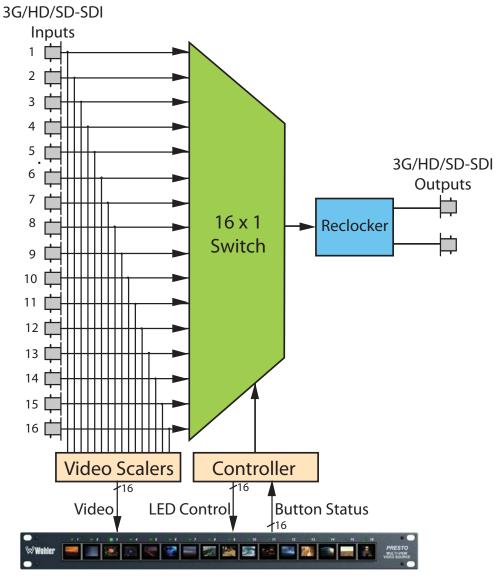
Specification	Values/Domains
Power requirements	100 V to 240 V AC ± 10%, 50/60Hz
Power consumption	45 Watts
Dimensions	1.75" x 19" x 6.3"
$(H \times W \times D)$	(45mm x 483mm x 160mm)
Weight	2.5 lbs.
Space Required	1 RU (rack unit)
Supplied Accessories	External power supply and IEC power cord (North America)
Display Type	OLED, 65k colors
Display Life	30,000 hours
Switch Life	3,000,000 operations minimum
Viewing Angle	180°
Native Aspect Ratio	4:3
Number of Displays	16
Active Viewing Area	0.76" diagonal per screen
Screen Native Resolution	64 x 48
Inputs	16 3G/HD/SD-SDI (BNC)
Outputs	2 reclocked 3G/HD/SD-SDI (BNC)
Magnetic Shielding	<0.5 gauss any adjacent surface

Technical Functional Overview

Figure 1–4 on page 7 illustrates the overall functionality of the Presto source selector.



Presto Block Diagram



Panel Display Buttons