Extron



SW4 12G HD-SDI • Setup Guide

The Extron SW4 12G HD-SDI is a four-input, two-output multi-rate 12G-SDI switcher that is capable of supporting multi-rate SDI. It switches SMPTE SDI video, embedded audio, and ancillary data among four source devices and delivers duplicate output signals to a pair of SDI displays or peripheral devices. The SW4 12G HD-SDI supports video resolutions up to 4K @ 60 Hz and data rates up to 11.88 Gbps, including 3G-SDI, HD-SDI, and SDI. It features automatic input cable equalization and output reclocking to ensure signal integrity over long cable runs. The SW4 12G HD-SDI has front panel, RS-232, USB, and auto-input switching control options.

NOTE: For full installation, configuration, menus, connector wiring, and operation details, see the SW4 12G HD-SDI User Guide at www.extron.com.

A C power connector a Nput connectors Figure 1. Rear Panel

Rear Panel Features

Installation

- 1. Turn off all of the equipment and disconnect it from the power source.
- (Optional) Mount the switcher on top of a flat surface using the provided rubber feet, under a table using an optional under-desk mounting kit, or to a rack shelf using an optional rack shelf-mounting kit (kits are available at www.extron.com).
- 3. Connect up to four SDI, HD-SDI, or 3G-SDI video inputs to BNC input connectors 1 through 4 (see figure 1, 1).

NOTE: Each input is equalized regardless of the rate.

Connect one or two video SDI, HD-SDI, or 3G-SDI output devices to the rear panel female BNC buffered output connectors (^O).

NOTE: Mirrored outputs 1 and 2 output identical signals.

- **5.** If the switcher will be connected to a computer or host controller for remote configuration and control, do either of the following:
 - Wire the provided 3-pole captive screw connector to an RS-232 cable. Connect the RS-232 cable to the RS-232 port on the rear panel of the switcher and to the host RS-232 port (see the illustration at right). Protocol for the RS-232 port is **9600 baud**, **8 data bits**, **1 stop bit**, **no parity**.
 - Connect a USB A to mini B cable from the computer to the front panel USB Config port (see figure 2, B), on the next page).
- 6. Power on the input and output devices, then connect power to the switcher by connecting the provided IEC power cord to the switcher power connector (see figure 1, (A)) and to an AC outlet.



For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the **Extron Safety and Regulatory Compliance Guide** on the Extron website.

Front Panel Features



Switching an Input to the Outputs

To create a tie between an input and the mirrored outputs:

- 1. Select the switch mode for the SW4 12G (see "Configuring Auto-input Switch Mode"). The default is **normal**.
 - Select auto-input switch mode to select the highest numbered active input or the lowest numbered input.
 - Select normal mode to manually select the input to switch to the outputs.
- 2. Select an input.
 - If you are using normal mode, select the desired input by pressing and releasing its input button. The LED beside the selected input button lights.
 - To switch to another input, press the desired input button.
 - If you are using auto-input switch mode, no action is necessary. The switcher automatically switches to the highest or lowest numbered active input (see "Configuring Auto-input Switch Mode" to select switching priority).
- 3. If needed, create a remote connection via USB or RS-232 (see step 5 of the Installation procedure, on the previous page).

Configuring Auto-input Switch Mode

In auto-input switch mode, the SW4 12G automatically switches to the highest or lowest numbered active input, depending on your configuration. When auto-input switch mode is enabled, the AUTO SWITCH LED (see figure 2, (A)) lights. Auto-input switch mode is configured via Extron Simple Instruction Set (SIS) commands as follows:

- 1. Connect the SW4 12G HD-SDI to your computer via the rear panel RS-232 or front panel USB connector.
- 2. To enter SIS commands, install and open a terminal emulation utility such as Extron DataViewer.
- **3.** By default, auto-input switching is disabled. To enable it and set the input selection priority, enter one of the following commands:

Esc = Escape key

- 🗲 = carriage return
- To automatically switch to the **highest** numbered active input, enter <u>Esc</u>1AUSW←.
- To automatically switch to the **lowest** numbered active input, enter <u>Esc</u>2AUSW←.

To turn off auto-input switching, enter EscØAUSW←.

To view the current auto-input switch mode, enter Esc AUSW ←.

For more information and a complete listing of SIS commands, see the *SW4 12G HD-SDI User Guide*, available at **www.extron.com**.

Application Diagram

The illustration at right shows an example of how the SW4 12G HD-SDI switcher can be connected.



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