

SW HD 4K Series • Setup Guide

IMPORTANT:
 Refer to www.extron.com for the complete user manual and installation instructions before connecting the product to the power source.

The Extron SW HD 4K Series are two and four input HDMI switchers for 4K video signals. They are designed for 4K signal switching between multiple HDMI source devices to a single display. The switchers support computer and video resolutions up to 4K and 1080p/60 with Deep Color, as well as data rates up to 10.2 Gbps, 3D, Lip Sync, and HD lossless audio formats. All models feature EDID Minder®, which maintains continuous EDID communication with connected devices and ensures that the HDMI sources power up properly and maintain correct video output. The switchers provide automatic input cable equalization up to 25 feet (7.6 meters) of Extron HDMI Pro Series cable when a 300 MHz signal input signal is applied (100 feet with 165 MHz). The SW HD 4K Series offers front panel USB and rear panel RS-232, IR, contact closure, and auto-input switching control options for integration into various environments. This guide provides instructions for an experienced installer to set up and operate these switchers.

For full installation, configuration, and operation details, see the *SW HD 4K Series User Guide*, available at www.extron.com.

Rear Panel Features and Connections

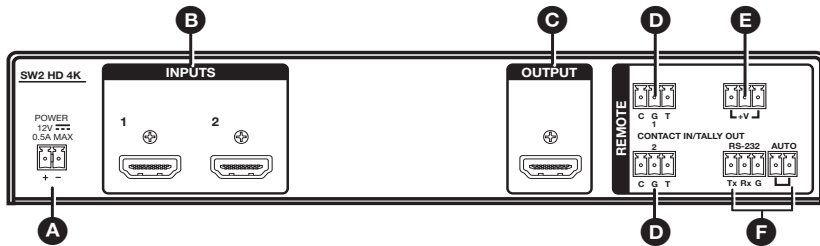


Figure 1. SW2 HD 4K Rear Panel

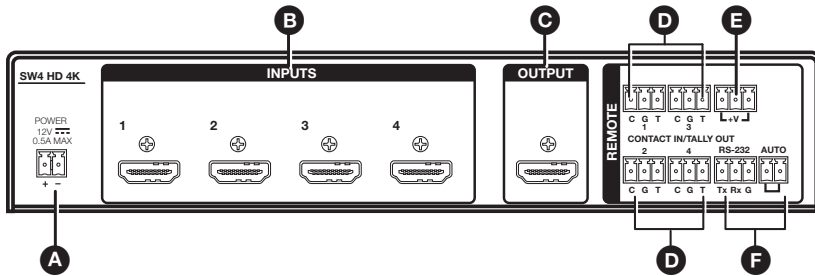


Figure 2. SW4 HD 4K Rear Panel

- A** 2-pole captive screw power connector
- B** HDMI input connectors
- C** HDMI output connector
- D** Contact closure input and tally output connectors
- E** Tally +V connectors
- F** RS-232 and auto-input switching connectors

Installation Steps

1. **Turn off all of the equipment** and disconnect it from the power source.
2. **Mount the switcher** on a rack shelf or furniture (optional).
3. **Connect HDMI input sources** to one or more of the SW HD 4K input connectors (see figures 1 and 2, **B**).

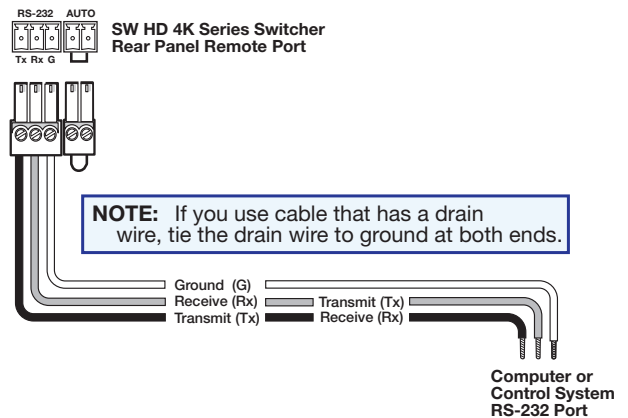
NOTE: LockIt® cable lacing brackets, one for each HDMI input and output connector, are provided with the SW HD 4K. These brackets can be used to secure the HDMI cables to the rear panel connectors to reduce stress on the HDMI connectors and prevent signal loss due to loose cable connections. For information on attaching the LockIt brackets, see the LockIt HDMI Lacing Bracket Installation Guide card, available at www.extron.com.

4. **Connect an HDMI output device** to the output connector (**C**). By default, the EDID of this device is stored at the HDMI output.

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5. **Connect control devices.** Connect your computer to one of the following SW HD 4K communication ports to configure and control the switcher via SIS commands:

- **RS-232 port** — Connect the unterminated transmit, receive, and ground wires of the RS-232 cable to the provided 3-pole captive screw plug, as shown in the illustration at right. Connect the plug to the rear panel Remote shared connector (see figures 1 and 2, **F**, on the previous page), and the other end of the cable to your computer serial port. Protocol for the RS-232 port is 9600 baud, 8 data bits, 1 stop bit, no parity.
- **Config port** — Connect a USB mini-B cable to the front panel USB connector (see figures 4 and 5, **C**, on the next page) for USB control.



6. **Enable auto-input switching** (optional). Use a jumper wire to connect the pins of the shared 2-pole captive screw plug. Attach the plug to the remote RS-232/Auto switch connector (see figures 1 and 2, **F**) if this was not done in step 5 for the RS-232 connection (see the diagram to the right).

7. **Connect a contact closure device** (optional). Connect a push-button contact closure device to a Contact connector (see figures 1 and 2, **D**, on the previous page) to enable input switching via contact closure.

- Wire and plug one of the provided 3-pole connectors into a Contact In/Tally Out connector representing the desired input number on the SW HD 4K (1 or 2 for SW2 models, 1, 2, 3, or 4 for SW4 models).
 - **Pin 1** = Contact closure input (C)
 - **Pin 2** = Contact and Tally Ground (G)
 - **Pin 3** = Tally output (T)



- Insert the ground wire of the contact device into the Ground slot of the Contact/Tally connector (pin 2).
- Press the button on the contact closure device to switch the connected input to the output.

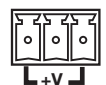
CONTACT IN/TALLY OUT

8. **Connect an indicator device to the Tally Out port** (optional). To identify the currently selected input when the front panel buttons are not visible, connect a device such as an LED to the Contact In/Tally Out connector (see figures 1 and 2, **D**, on the previous page) and +V connector (see figures 1 and 2, **E** on the previous page). When the input you are using is selected, the corresponding tally out pin shorts to ground, which activates the connected indicator.

- Wire and plug one of the provided 3-pole connectors into a Contact In/Tally Out connector.
 - **Pin 1** = Contact closure input (C)
 - **Pin 2** = Contact and Tally Ground (G)
 - **Pin 3** = Tally output (T)



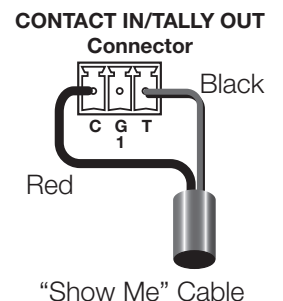
CONTACT IN/TALLY OUT Connector



+V Connector

- Insert the power wire for the contact indicator device into the +V connector.

TIP: The Contact and Tally connectors can be used with Extron “Show Me” cables. For each cable, connect the red pigtail to the associated pin of the Contact Closure input connector and the black pigtail to the associated pin on the Tally Out connector (see the diagram below).



- If necessary, wire a 2-pole captive screw connector (provided) to your power supply as shown in figure 3.

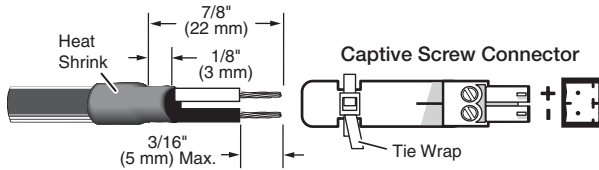


Figure 3. Wiring the Power Connector

ATTENTION:

- The power supply must not be permanently fixed to the building structure or similar structures.
- La source d'alimentation ne devra pas être fixée de façon permanente à une structure de bâtiment ou à une structure similaire.
- These power supplies are not suitable for use in air handling spaces or in wall cavities.
- Ces sources d'alimentation ne sont pas appropriées pour une utilisation dans les espaces d'aération ou dans les cavités murales.
- Do not** connect power to the switcher until you have read the CAUTION and ATTENTION notices on pages 5 and 6 of the *SW HD 4K Series User Guide*.
- Ne branchez pas l'alimentation au SW HD 4K Series avant d'avoir lu les mises en garde « CAUTION » et « ATTENTION » aux pages 5 et 6.

- Power on the output display.
- Connect power to the switcher.
- Power on the source devices.

Front Panel Features

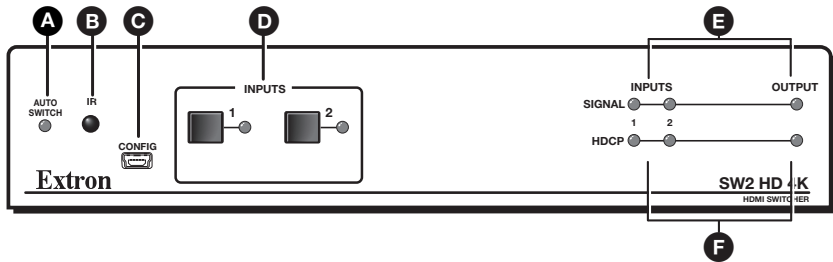


Figure 4. SW2 HD 4K Front Panel

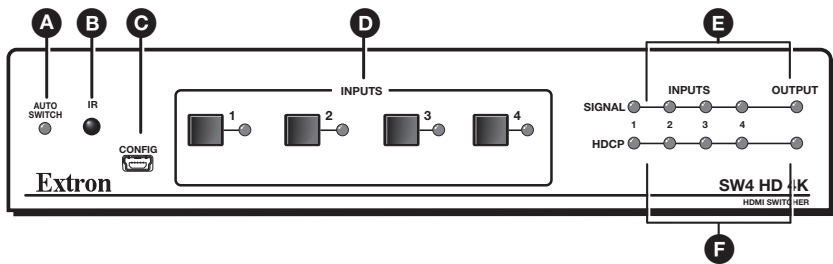


Figure 5. SW4 HD 4K Front Panel

- A** Auto Switch LED
- B** IR receiver port
- C** USB config port
- D** Input selection buttons
- E** Input and Output LEDs
- F** HDCP LEDs

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- A Auto switch LED** — Lights when auto-input switching is in effect (see [step 6](#) on page 2 for more information).
- B IR receiver port** — Detects infrared signals from the optional IR 102 remote control at a distance of up to 30 feet (9.1 meters) and within 40 degrees off the axis (see the *SW HD 4K Series User Guide* for more information).
- C USB config port** — Connect a USB cable (USB A to mini-B) between your computer and this female USB mini-B port to configure and control the switcher via SIS commands or the Universal Switcher Control Program and to update the firmware.
- D Input selection buttons** — Press one of these buttons to select an input to switch to the output. The LED at the right of each button lights when the corresponding input is selected. If auto-input switching is in effect, these buttons are disabled, but the LEDs continue to light to indicate the selected input. The input buttons are also used to initiate a system reset and to enable and disable front panel lockout (see the *SW HD 4K Series User Guide* for more information).

E Input and Output LEDs

- **Input** — Lights when a source is connected to the corresponding input connector and TMDS clock activity is detected.

NOTE: If the source device connected to the selected input is HDCP encrypted (requires HDCP authentication), the corresponding signal LED may not light unless HDCP has been authenticated.

- **Output** — Lights when an active sink (output) device is connected to the HDMI output.

F HDCP LEDs

- **Input** — Lights if the connected sources are HDCP encrypted and has been authenticated by the switcher inputs.

NOTE: If the source device connected to the selected input is HDCP encrypted (requires HDCP authentication), the corresponding signal LED may not light unless HDCP has been authenticated.

- **Output** — Lights when the currently selected input requires HDCP and the connected output device has been successfully authenticated.

NOTE: HDCP is re-authenticated on the output whenever a new input is selected.

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