Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

SW HDMI Series • Setup Guide

The Extron SW HDMI Series are two and four input, one output, High-definition Multimedia Interface (HDMI) switchers that allow multiple HDMI signals, including digital video, 3D signals, and embedded multi-channel digital audio to be switched to one compatible display. These switchers support all standard single link HDMI (up to 225 MHz) and DVI 1.0 signal formats and are compatible, at 60 Hz, with all HDTV resolutions up to 1080p and PC resolutions up to 1920x1200, with 12-bit color. They are fully HDCP compliant. This guide provides basic instructions for an experienced installer to set up and operate these switchers.

> **NOTE:** For full installation, configuration, and operation details, see the *SW HDMI Series User Guide*, available at **www.extron.com**.

Rear Panel Features and Connections
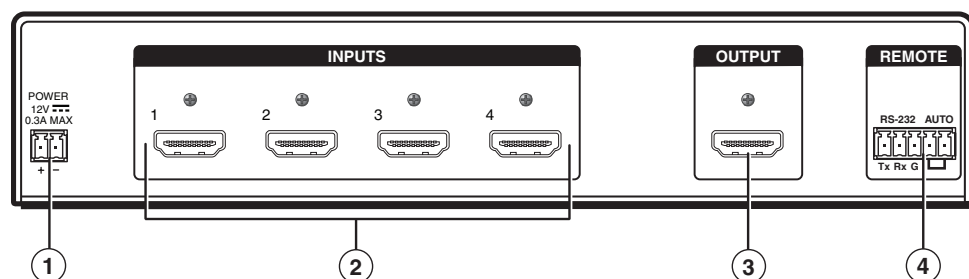
① Power connector for 12 VDC, 1 A power supply
③ HDMI output connector

② HDMI input connectors
④ Remote and auto-input switching connector

Installation Steps

1. **Turn off all of the equipment** and disconnect it from the power source.

2. (Optional) **Mount the switcher** on a rack shelf or furniture.

3. **Connect HDMI input sources** to one or more of the SW HDMI input connectors (② on the rear panel diagram above).

> **NOTE:** LockIt® cable lacing brackets, one for each HDMI input and output connector, are provided with the SW HDMI. 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 on the Extron website at **www.extron.com**.
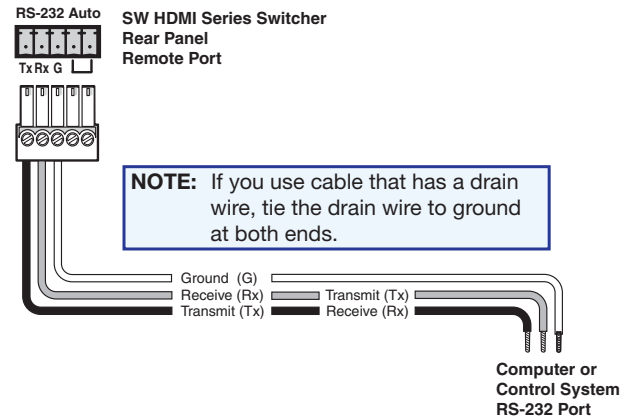

HDMI
Type A Receptacle

HDMI
Type A Plug
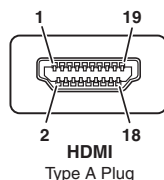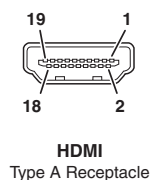
Pin	Signal	Pin	Signal	Pin	Signal
1	TMDS data 2+	7	TMDS data 0+	13	CEC*
2	TMDS data 2 shield	8	TMDS data 0 shield	14	Reserved (NC)
3	TMDS data 2–	9	TMDS data 0–	15	SCL
4	TMDS data 1+	10	TMDS clock+	16	SDA
5	TMDS data 1 shield	11	TMDS clock shield	17	DDC/CEC ground
6	TMDS data 1–	12	TMDS clock–	18	+5 V power
*Not supported				19	Hot plug detect

4. **Connect an HDMI output device** to the output connector (③).

5. **Connect control devices:** Connect your computer to one of the following SW HDMI communication ports to configure and control the switcher via SIS commands or the Universal Switcher Control Program:

- **RS-232 port** — Connect the unterminated transmit, receive, and ground wires of the RS-232 cable to the first three pins on the provided 5-pole captive screw plug, as shown in the illustration at right. Connect the plug to the rear panel Remote shared connector (④ on the rear panel diagram 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** — USB mini-B connector (⑥ on the front panel diagram, below) for USB control.

RS-232 Auto

SW HDMI Series Switcher Rear Panel Remote Port

Tx Rx G

NOTE: If you use cable that has a drain wire, tie the drain wire to ground at both ends.

Ground (G)
Receive (Rx)   Transmit (Tx)
Transmit (Tx)   Receive (Rx)

Computer or Control System RS-232 Port

6. (Optional) **Enable auto-input switching.** Use a jumper wire to connect pins 4 and 5 of the shared 5-pole captive screw plug. Attach the plug to the Remote connector (④ on the rear panel diagram) if this was not done in step **5** for the RS-232 connection (see the illustrations at right).

7. If necessary, wire a 2-pole captive screw connector (provided) to your Extron power supply as shown below.
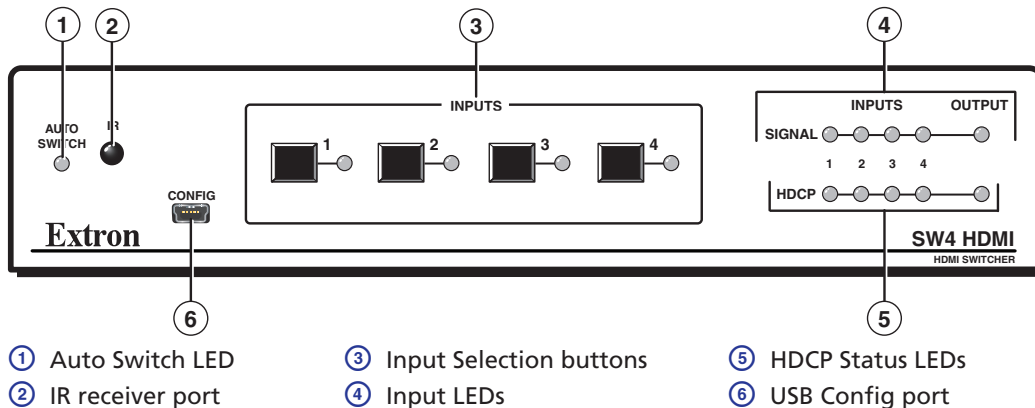
Heat Shrink

7/8" (22 mm)
1/8" (3 mm)
3/16" (5 mm) Max.
Tie Wrap

Captive Screw Connector
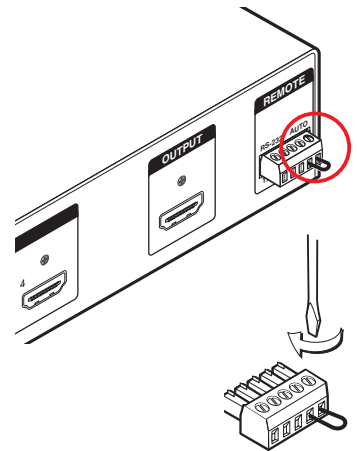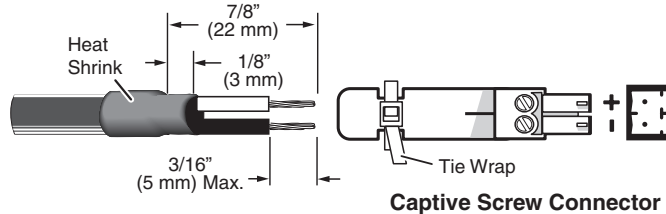
CAUTIONS:
- The power supply must not be permanently fixed to the building structure or similar structures.
- The power supply must not be located within environmental air handling spaces or the wall cavity.

8. Power on the output display.
9. Connect power to the switcher.
10. Power on the source devices.

Front Panel Features

AUTO SWITCH   IR   CONFIG   INPUTS   1   2   3   4

INPUTS   OUTPUT
SIGNAL   1 2 3 4
HDCP

Extron   **SW4 HDMI**
                    HDMI SWITCHER

① Auto Switch LED
② IR receiver port
③ Input Selection buttons
④ Input LEDs
⑤ HDCP Status LEDs
⑥ USB Config port