

SW HDMI Series

HDMI SWITCHERS WITH EDID MINDER™

- HDMI video and embedded multi-channel digital audio switching
- Supports HDTV 1080p/60 and PC resolutions up to 1920x1200
- HDMI 1.3 compatible
- HDCP compliant
- HDCP authentication and signal presence confirmation
- EDID Minder™
- Selectable input cable equalization for each input
- Auto-input switching
- RS-232 control
- IR remote control with optional Extron IR 102 handheld remote control
- Rack-mountable 1U metal enclosure
- External universal ENERGY STAR® qualified power supply included



SW4 HDMI



SW8 HDMI

The Extron SW HDMI Series are two, four, six, and eight input HDMI switchers. They feature EDID Minder, an Extron exclusive technology that ensures the reliable display of digital video. These switchers are ideal for use anywhere multiple HDMI sources need to be switched to one digital display device.



Extron. Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron **SW HDMI Series** are two, four, six, and eight input HDMI switchers. They support HDMI 1.3 specification features including data rates up to 6.75 Gbps, Deep Color, Lip Sync, and HD lossless audio formats. HDCP compliance ensures interoperability with all other HDCP-compliant devices. These switchers support all HDTV rates including 1080p/60 12-bit Deep Color and PC resolutions up to 1920x1200. The SW HDMI Series switchers are ideal for routing HDMI video and embedded multi-channel digital audio to a single display.

To enhance and simplify integration, all models feature EDID Minder, an Extron exclusive technology that automatically manages the EDID information between the digital display device connected to the output and all input sources. By maintaining continuous EDID communication with the sources, EDID Minder ensures that all HDMI sources power up properly and maintain their video outputs, whether or not they are actively connected to the digital display device through the switcher's output.

Extron SW HDMI Series switchers provide confirmation of HDCP authentication and signal presence, indicated visually by front panel LED lights.

Selectable input cable equalization reduces the need for additional signal conditioning equipment. Input equalization corrects for signal loss due to lengthy input cables, compensating for up to 50 feet of Extron HDMI Pro Series cable at 1080P/60 with 8-bit color. The switchers also provide +5 VDC, 250mA on the HDMI output for powering peripheral devices such as extenders.

Convenient control options allow for easy integration into a variety of environments. Options include front panel control, auto-input switching, IR, and RS-232 control. All SW HDMI Series switchers are housed in rack-mountable 1U enclosures.

EDID MINDER

EDID - Extended Display Identification Data is a data structure used to communicate video display information, including native resolution and vertical interval refresh rate requirements, to a source device. A source device will output the optimal video format for the display based on the provided EDID data, ensuring proper video image quality.

Extron SW HDMI Series switchers offer an enhanced EDID functionality known as EDID Minder. EDID Minder enables the switcher to emulate the display, providing EDID information to the connected source devices. Therefore, source devices connected to the switcher will continuously output video, even when there is no display connection. The switcher's EDID data can either be automatically generated or manually selected by a user.

- **Automatic EDID mode** – The switcher will automatically capture and store the display's EDID information upon active connection, overriding the default 720p @ 60Hz resolution.

- **User-defined mode** – The switcher will utilize a specific EDID data structure selected by the user. There are 20 factory preset EDID data options to choose from, including the option to upload user-defined EDID.

FEATURES

- **HDMI video and embedded multi-channel digital audio switching**
- **Supports HDTV 1080p/60 and PC resolutions up to 1920x1200**
- **HDMI 1.3 compatible** — Supports HDMI 1.3 specification features including data rates up to 6.75 Gbps, Deep Color, Lip Sync, and HD lossless audio formats.
- **HDCP compliant** — Ensures display of content-protected media and interoperability with other HDCP-compliant devices.
- **HDCP authentication and signal presence confirmation** — Front panel LED indicators provide real-time verification of signal status.
- **EDID Minder™** — Automatically manages EDID – Extended Display Identification Data communication between the display and connected input sources. EDID Minder ensures that all sources power up correctly, whether or not they are actively connected to the display device through the switcher's output.
- **Selectable input cable equalization for each input** — Conditions incoming digital signals to compensate for signal loss from long cables, low quality cables, or source devices with poor HDMI signal output. Equalization is independently selectable for each input.
- **Auto-input switching** — Automatically switches to the highest-numbered input with an active video signal.
- **RS-232 control** — A rear panel RS-232 port enables control via a control system. Extron's SIS™ - Simple Instruction Set command protocol allows for quick and easy programming.
- **IR remote control with optional Extron IR 102 handheld remote control**
- **Rack-mountable 1U metal enclosure** — SW HDMI two and four input models feature a half rack width enclosure. Six and eight input models feature a full rack width enclosure.
- **External universal ENERGY STAR® qualified power supply included, replacement part # 70-775-01** — Provides worldwide compatibility, low power consumption, and reduced operating costs.

FACTORY PRESET EDID OPTIONS

Preset	Native Resolution	Refresh Rate
1	800x600	60 Hz
2	1024x768	60 Hz
3	1280x1024	60 Hz
4	1280x800	60 Hz
5	1360x768	60 Hz
6	1366x768	60 Hz
7	1440x900	60 Hz
8	1400x1050	60 Hz
9	1680x1050	60 Hz
10	1600x1200	60 Hz
11	1920x1200	60 Hz
12	720p, Basic Audio	50 Hz
13	720p, Basic Audio (default)	60 Hz
14	720p, Full Audio	50 Hz
15	720p, Full Audio	60 Hz
16	1080p, Basic Audio	50 Hz
17	1080p, Basic Audio	60 Hz
18	1080p, Full Audio	50 Hz
19	1080p, Full Audio	60 Hz
20	User Loaded	

NOTE: *Appropriate HDMI to DVI-D cables or adapters are required for DVI signal input/output.

VIDEO

Maximum data rate.....	6.75 Gbps (2.25 Gbps per color)
Maximum pixel clock.....	225 MHz
Resolution.....	Up to 1080p @ 60 Hz or 720p/1080i @ 120 Hz, 12-bit color
Formats.....	RGB and YCbCr digital video
Standards.....	DVI 1.0, HDMI 1.3, HDCP 1.1

VIDEO INPUT

Number/signal type	2, 4, 6, or 8 (depending on model) single link HDMI (or DVI-D*)
Connectors	2, 4, 6, or 8 female HDMI type A

VIDEO OUTPUT

Number/signal type	1 single link HDMI (or DVI-D*)
Connectors	1 female HDMI type A

CONTROL/REMOTE — SWITCHER

Serial control port	(1) RS-232, 3.5 mm captive screw connector, 5 pole (shared with autoswitching control)
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configurations..	1 = Tx, 2 = Rx, 3 = GND
Contact closure.....	(1) 3.5 mm captive screw connector, 5 pole (shared with RS-232)
Contact closure pin configurations..	Pins 4 and 5 shorted together turn autoswitch mode on.
IR controller module.....	IR 102 remote control (optional) 30' maximum, 40 degrees off axis
Program control	Extron control/configuration program for Windows® Extron Simple Instruction Set™ (SIS™)

GENERAL

External power supply.....	100 VAC to 240 VAC, 50-60 Hz, external; to 12 VDC, 1 A, regulated
Power input requirements	
SW2 HDMI, SW4 HDMI.....	12 VDC, 0.5 A
SW6 HDMI, SW8 HDMI.....	12 VDC, 1.0 A
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, no vents
Mounting	
Rack mount.....	Yes, with optional 1U rack shelf
Furniture mount.....	Yes, with optional under-desk mounting kit or through-desk mounting kit
Enclosure type	Metal

Enclosure dimensions

SW2 HDMI, SW4 HDMI.....	1.75" H x 8.75" W x 3.0" D (1U high, half rack wide) (4.4 cm H x 22.2 cm W x 7.6 cm D) (Depth excludes connectors.)
SW6 HDMI, SW8 HDMI.....	1.75" H x 17.5" W x 12.0" D (1U high, full rack wide) (4.4 cm H x 44.4 cm W x 30.5 cm D) (Depth excludes connectors.)

Product weight

SW2 HDMI, SW4 HDMI.....	0.5 lb (0.3 kg)
SW6 HDMI, SW8 HDMI.....	2.5 lbs (1.1 kg)

Shipping weight

SW2 HDMI, SW4 HDMI.....	2 lbs (1 kg)
SW6 HDMI, SW8 HDMI.....	5 lbs (3 kg)

Vibration	ISTA 1A in carton (International Safe Transit Association)
-----------------	--

Regulatory compliance

Safety.....	CE, c-UL, UL
EMI/EMC.....	CE, C-tick, FCC Class A, ICES, VCCI

MTBF.....	30,000 hours
-----------	--------------

Warranty	3 years parts and labor
----------------	-------------------------

NOTE: All nominal levels are at ±10%.

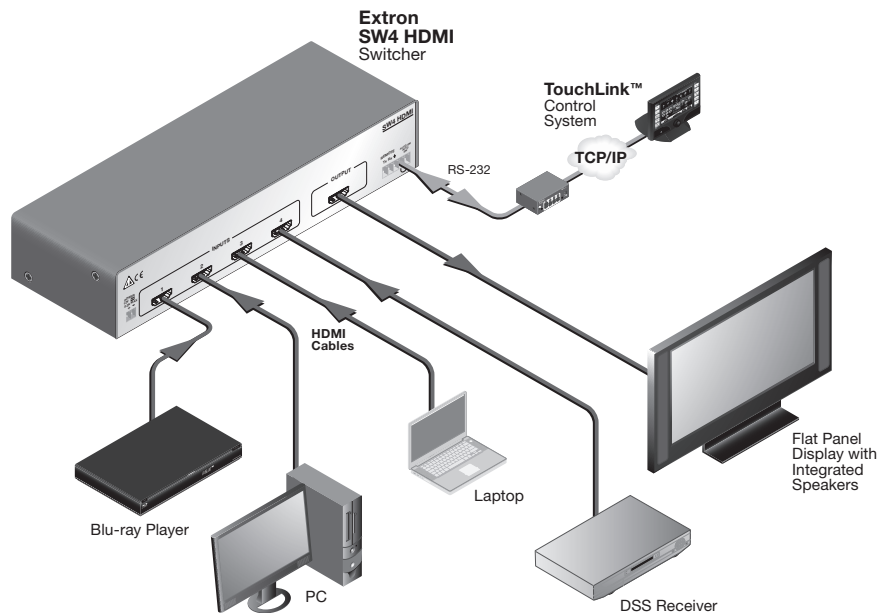
NOTE: Specifications are subject to change without notice.

Model	Version Description	Part number
SW2 HDMI	Two Input HDMI Switcher.....	60-841-01
SW4 HDMI	Four Input HDMI Switcher	60-841-02
SW6 HDMI	Six Input HDMI Switcher.....	60-841-03
SW8 HDMI	Eight Input HDMI Switcher	60-841-04

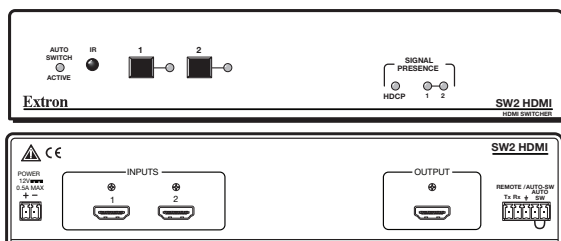
Optional Accessories

IR 102	Replacement Handheld Remote	70-224-10
HDMI Pro/3	3' (90 cm) High Speed	26-650-03
HDMI Pro/6	6' (1.8 m) High Speed	26-650-06
HDMI Pro/12	12' (3.6 m) High Speed.....	26-650-12
HDMI Pro/25	25' (7.6 m) Standard Speed	26-650-25
HDMI Pro/35	35' (10.6 m) Standard Speed	26-650-35
HDMI Pro/50	50' (15.2 m) Standard Speed	26-650-50
HDMI Pro/75	75' (22.8 m) Standard Speed	26-650-75
HDMI Pro/100	100' (30.4 m) Standard Speed	26-650-100
HDMI Pro/125	125' (38 m) Standard Speed	26-650-125
HDMI Pro/150	150' (45.7 m) Standard Speed	26-650-150
HDMI Pro/175	175' (53.2 m) Standard Speed	26-650-175
HDMI Pro/200	200' (60.9 m) Standard Speed	26-650-200
MDC 3 HDMI	3' (90 cm) High Speed	26-667-03
MDC 6 HDMI	6' (1.8 m) Standard Speed	26-667-06

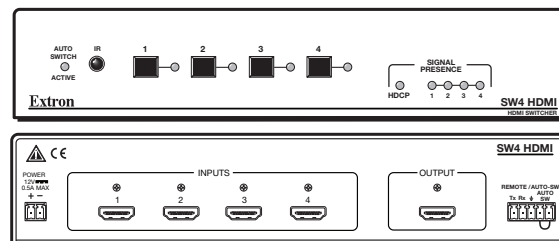
APPLICATION DRAWING



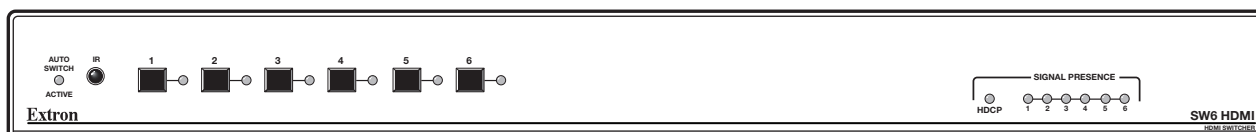
PANEL DRAWINGS



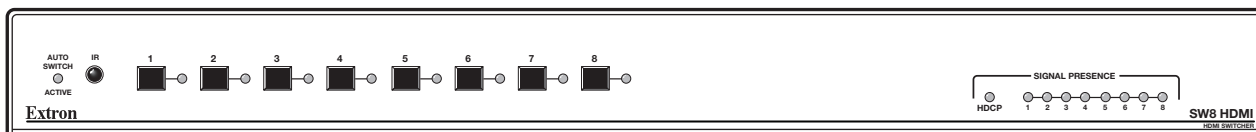
SW2 HDMI



SW4 HDMI



SW6 HDMI



SW8 HDMI



Extron USA - West
Headquarters
+800.633.9876
Inside USA / Canada Only
+1.714.491.1500
+1.714.491.1517 FAX

Extron USA - East
+800.633.9876
Inside USA / Canada Only
+1.919.863.1794
+1.919.863.1797 FAX

Extron Europe
+800.3987.6673
Inside Europe Only
+31.33.453.4040
+31.33.453.4050 FAX

Extron Middle East
+971.4.2991800
+971.4.2991880 FAX

Extron Asia
+800.7339.8766
Inside Asia Only
+65.6383.4400
+65.6383.4664 FAX

Extron Japan
+81.3.3511.7655
+81.3.3511.7656 FAX

Extron China
+400.883.1568
Inside China Only
+86.21.3760.1568
+86.21.3760.1566 FAX