

# SW USB Series

## TWO AND FOUR INPUT USB SWITCHERS

- ▶ USB 2.0 compatible
- ▶ Four port output hub with 5V, 500mA available on each output
- ▶ Port Status LEDs
- ▶ Multiple control points
- ▶ RS-232 pass-through
- ▶ Front panel security lockout
- ▶ Host and Peripheral Emulation Mode - SW4 USB Plus model
- ▶ Rack-mountable, 1U half rack width metal enclosure



SW2 USB



SW4 USB

The Extron SW USB Series of two- and four-input USB switchers allows switching between multiple host devices and multiple USB peripherals. Integration-oriented features include: port status indication, RS-232 pass-through, front panel security lockout, and multiple control points. The SW USB Series is ideal for applications such as KVM, interactive whiteboard, and annotator-based applications in education, judicial, or corporate settings, or wherever reliable USB switching is needed.



**Extron® Electronics**  
INTERFACING, SWITCHING AND CONTROL

## DESCRIPTION

The **SW USB Series** are two- and four-input USB switchers that provide integrator-friendly solutions for implementing USB 2.0 compatible switching in professional AV environments. A number of specialized features help further streamline integration, such as: port status indication, RS-232 pass-through, front panel security lockout, and multiple control points.

All of the SW USB Series switchers act as active USB hubs, supplying 5V, 500mA to attached devices, per USB specification. In addition, the switchers are USB 2.0 compatible, and are backwardly-compatible with all previous USB data rate specifications, including low speed 1.5 Mbps, full speed 12 Mbps, and hi-speed 480 Mbps.

RS-232 pass-through reduces control port requirements by processing SIS commands within the SW USB while also passing them through to other controllable Extron audio and video switchers.

The SW4 USB Plus model features Host and Peripheral Emulation Mode, which provides "keep alive" functionality by continuously mimicking host and keyboard/mouse device communications within the switcher. This emulation eliminates the need for enumeration, and reduces the chance of failed device communications throughout the switching process.

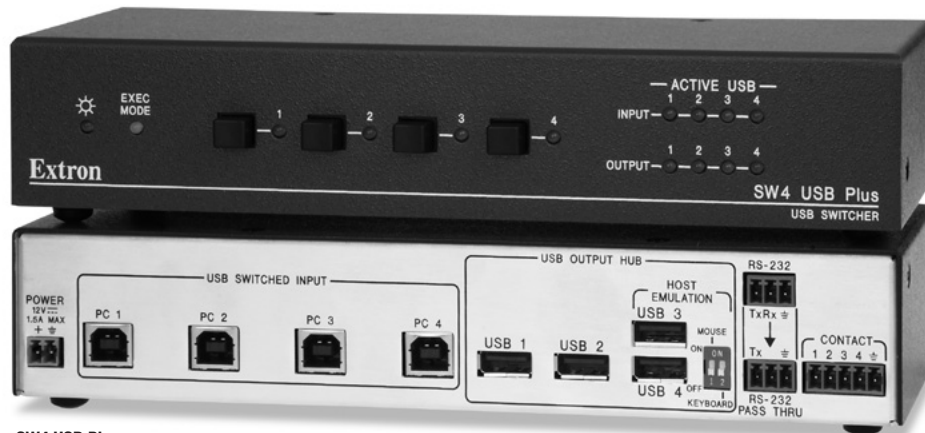
The SW USB Series incorporates rack mountable, 1U, half rack width enclosures for simplified integration. All models include an external, universal power supply for worldwide power compatibility.

## FEATURES

- ▶ **USB 2.0 compatible** – Supports 480 Mbps high speed communications and is backwards compatible with all prior USB versions.
- ▶ **Four port output hub with 5V, 500mA available on each output** – Allows simultaneous connection to multiple peripheral devices such as mass storage devices, keyboards, mice, or other HID – Human Interface Devices. Attached devices can be powered via the 5V, 500mA current provided on each output.
- ▶ **Port Status LEDs** – Provides visual indication of port activity for enumerated peripherals and all connected and active host devices.
- ▶ **Multiple control points** – Operation via front panel, RS-232, and contact closure offers integration flexibility into a variety of control environments.
- ▶ **RS-232 pass-through** – Reduces RS-232 control port requirements by processing SIS commands within the SW USB while also passing them through to other controllable Extron video switchers.
- ▶ **Front panel security lockout** – Prevents unauthorized use in non-secure environments. In lockout mode, a special button combination is required to operate the switcher from the front panel.
- ▶ **Rack-mountable 1U, half rack width metal enclosure**
- ▶ **Energy-efficient external universal power supply included** – Provides worldwide compatibility, low power consumption, and reduced operating costs.

## SW4 USB PLUS - UNIQUE FEATURE

**Host and Peripheral Emulation** - Offers increased system reliability by emulating uninterrupted connection between host and keyboard/mouse devices. This selectable feature enables devices to "keep alive" when switching between inputs.

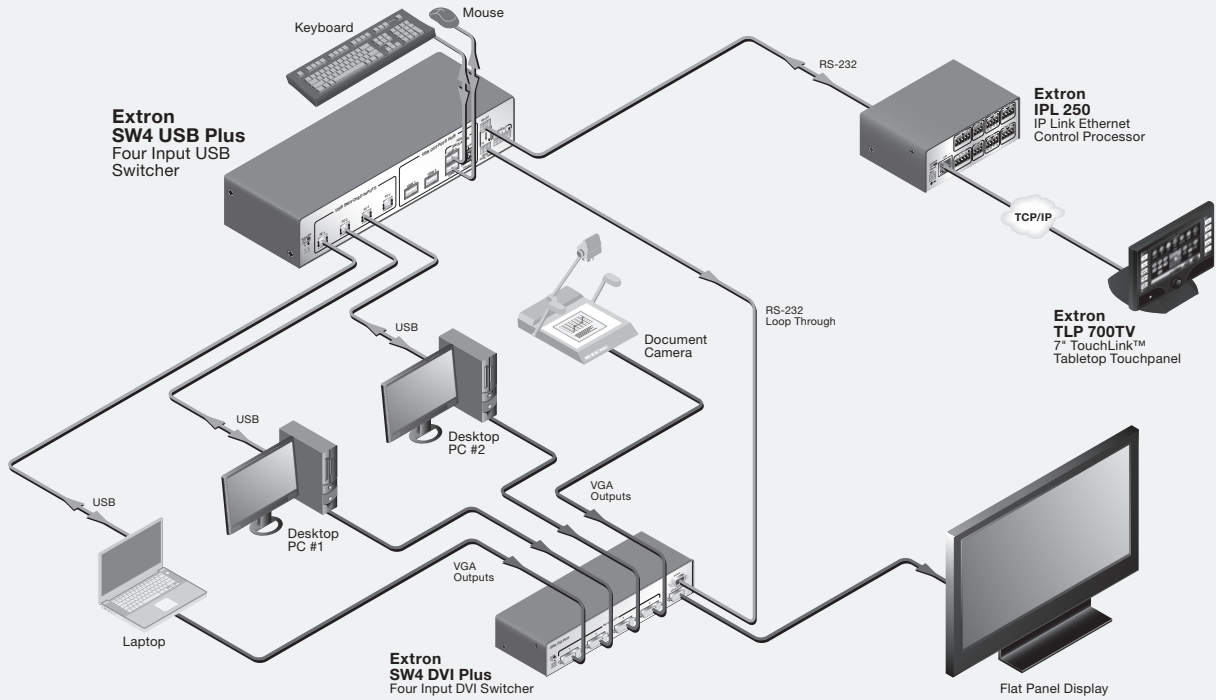


SW4 USB Plus

# APPLICATIONS

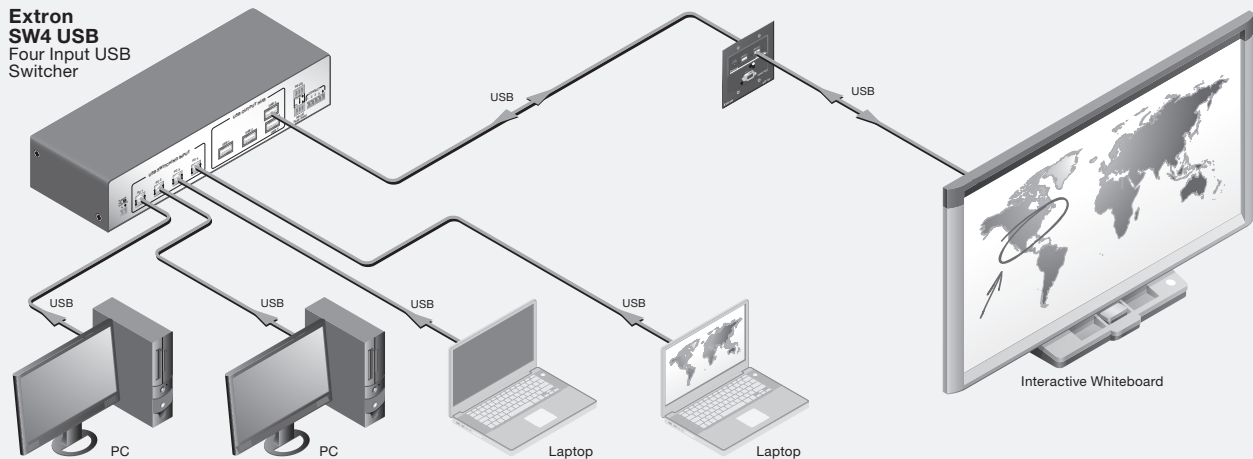
## SW USB for Switching and Control

Extron SW USB switchers provide high performance switching and centralized control for KVM - Keyboard/Video/Mouse applications. A single keyboard and mouse connected to the SW USB switcher allow access, monitoring, and control of multiple USB-enabled devices from a remote location. Control centers, help desks, and equipment rooms often incorporate this approach for efficient AV system management, enhanced security, energy savings, and to address space availability constraints within an area. The SW USB provides integration flexibility for control of various peripheral devices in a wide variety of KVM environments.



## SW USB with Interactive Whiteboards

Extron SW USB switchers are well suited for implementation in interactive whiteboard or smartboard applications for both corporate and education environments. Classrooms and corporate training facilities often incorporate multiple computers in association with video projection onto the board. Information written onto the whiteboard can be electronically communicated to the host computer via USB connection for future use. SW USB Series switchers ensure that materials from laptops, desktop computers, servers, and various other USB sources are readily available for whiteboard presentation.

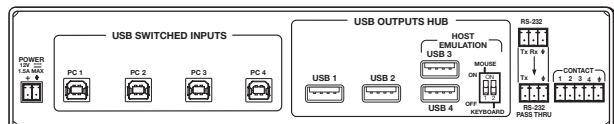
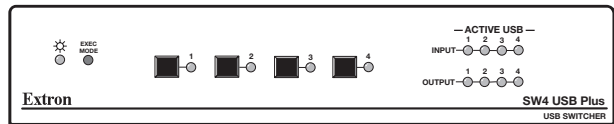
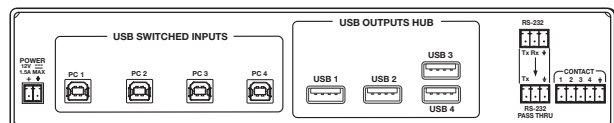
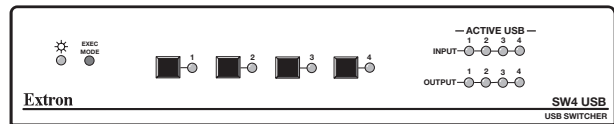
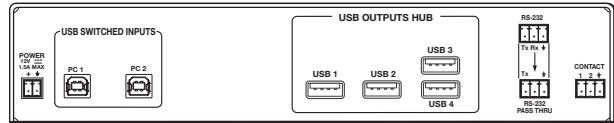
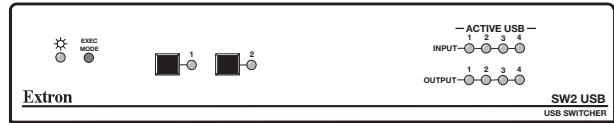


# SPECIFICATIONS

USB		
USB specification	USB 2.0 compatible	
USB data rates	Low speed (1.5 Mbps), full speed (12 Mbps), high speed (480 Mbps)	
USB INPUT		
Connectors	2 female USB type B	
SW2 USB	2 female USB type B	
SW4 USB, SW4 USB Plus	4 female USB type B	
USB OUTPUT		
Connectors	4 female USB type A	
CONTROL/REMOTE – SWITCHER		
Serial control port	(1) RS-232, 3.5 mm captive screw connector, 3 pole (1) RS-232 pass-through, 3.5 mm captive screw connector, 3 pole	
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity	
Contact closure	SW2 USB (1) 3.5 mm captive screw connector, 3 pole SW4 USB, SW4 USB Plus (1) 3.5 mm captive screw connector, 5 pole	
Program control	Extron Simple Instruction Set (SIS™)	
GENERAL		
Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A, 12 watts	
Power input requirements	12 VDC, 0.70 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 rack shelf Furniture mount: Yes, with optional under-desk mounting kit	
Enclosure type	Metal	
Enclosure dimensions	1.6" H x 8.6" W x 3.0" D (1U high, half rack wide) (4.1 cm H x 21.8 cm W x 7.6 cm D) (Depth excludes connectors.)	
Product weight	2.0 lbs (0.9 kg)	
Shipping weight	3 lbs (2 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	
<b>NOTE:</b> All nominal levels are at ±10%.		
<b>Model</b>	<b>Version Description</b>	<b>Part number</b>
SW2 USB	Two Input USB	60-952-02
SW4 USB	Four Input USB	60-953-02
SW4 USB Plus	Four Input USB with Emulation	60-954-02

For complete specifications, please go to [www.extron.com](http://www.extron.com)  
Specifications are subject to change without notice.

# PANEL DRAWINGS



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