SAVANT

Savant® S2 Host Rack Mountable

Quick Reference Guide

Box Contents

(1) Savant® S2 Host Rack Mountable - (SHR-S2-00)
(1) Install Kit (075-0221-xx)
  (1) Mounting Plate (074-0577-xx)
  (1) 5V DC 3A Power Supply with Quick Change AC Adapters (025-0216-xx)
  (2) 6-pin Screw Down Plug-in Connector Black (028-9352-xx)
  (2) 3-pin Screw Down Plug-in Connector Black (028-9351-xx)
  (1) 4 inch Cable Tie (014-0071-xx)
(1) Product and Regulatory Insert (009-1782-xx)

Specifications

Environmental	
Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 90% Relative Humidity (non-condensing)
Cooling	10 CFM
Maximum BTU	51.5 BTU/hr
Dimensions and Weights	
Height	1.4 in (3.5 cm)
Width	6.00 in (15.2 cm)
Depth	3.20 in (8.1 cm)
Weight	Net: 0.5 lb (0.22 kg)
	Shipping 1.5 lb (0.68 kg)
Rack Space	1U
Power	
Input Power	5V DC 3A
Maximum Power	15 watts
Standards	
Wireless	Wi-Fi (802.11 a/b/g/n 2.4/5.0 GHz) **IMPORTANT!** 802.11r (fast roaming) is not supported
Security	WPA™, WPA2™, WPA/WPA2™
Regulatory	
Safety and Emissions	FCC Part 15 CE C-Tick ICES-003
Contains FCC ID	Z64-WL18DBMOD
Contains IC	451I-WL18DBMOD
RoHS	Compliant
Minimum Supported Release	
Savant Software	da Vinci 9.1.3 Studio 3.0.2

Further Product Information

To view available documentation, detailed product specs, and more:

- Visit the Savant Knowledge tab via the Savant Customer Community to search all Savant documentation.

Front Panel

(A) Reset Button	To clear all Ethernet settings and revert them back to their factory defaults, press and hold the reset button for five seconds until the LED blinks red rapidly; then release.
(B) Status LED	**Off**: Disconnected from power supply. **Amber**: Host is booting/rebooting and is disconnected from the network. **Amber Blinking**: Host is in provisioning mode and ready to be added to a network. Host is not assigned an IP Address. **Green**: Connected to the local network and is assigned an IP Address.

Chassis Installation

The S2 Host can be installed on a solid, flat, level surface such as a table, cabinet, or shelf. The location should be dry, well ventilated, and out of direct sunlight.

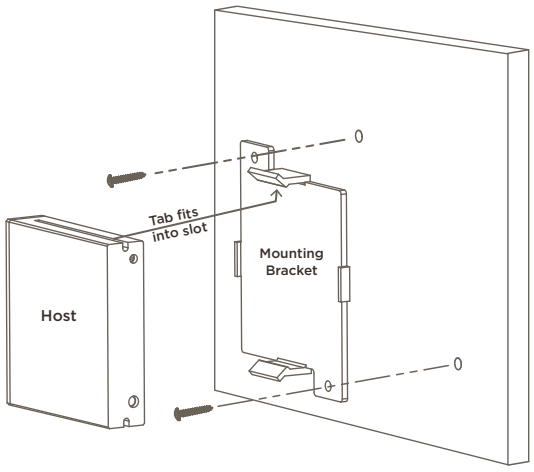
Rack

The optional RCK-3000-xx provides a ventilated shelf for mounting S2 Hosts. This rack is compatible with all standard 19-inch National Electrical Manufacturers Association (NEMA) rack mounts.

Mounting Plate

A mounting plate (074-0577-xx) is supplied with the SHR-S2. This mounting plate is used to mount the Host to a wall or existing structure. To mount the Host, follow the instructions below.

1. Position the mounting plate onto the wall where the Host will be located. Position the bracket so the tabs that hold the Host are positioned horizontally.
2. Mark the two mounting holes on the wall.
3. Install wall anchors and screw mounting plate to the wall.
4. Snap the SHR-S2 Host into the bracket so the tabs on the mounting bracket seat into the slots on the side of the Host.



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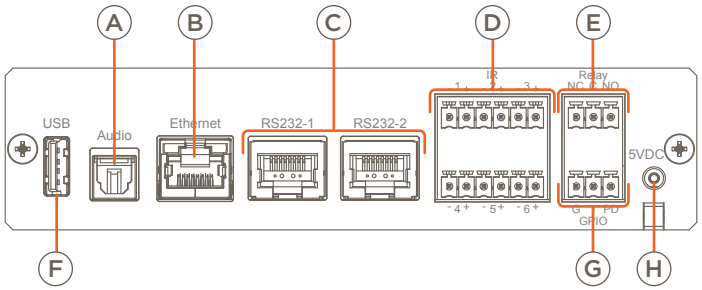
Rear Panel



A	Audio	96k / 24 bit fixed volume TOSLink (Optical) digital audio output. Connect to digital optical audio input on switcher for using the Audio Interrupt Service (AIS).
B	Ethernet	8-pin RJ-45 female. 10/100/1000 Base-T auto negotiating port. Connecting to this port will disable Wi-Fi settings.
C	RS-232	8-pin RJ-45 female. Used to transmit and receive serial binary data to and from serial controllable devices. Ports 1-2 RS-232 - CTS/RTS handshaking. CTS RTS handshaking availability is based on the component profile. See RS-232 Wiring section for pin-outs.
D	IR	6-pin Screw Down Plug-in Connector. Used to send IR signals to control devices with an IR input or IR receiver via an IR flasher (5V tolerant only). See IR Wiring section for important precautions regarding IR functionality before making connections.
E	Relay	3-pin Screw Down Plug-in Connector. See Relay Wiring section for pin-outs. Normally Open (NO) / Normally Closed (NC) to control devices requiring basic on/off operation. DC Voltage Max: 30V DC 1A
F	USB	Not Used
G	GPIO	3-pin Screw Down Plug-in Connector. See GPIO Wiring section for pin-outs. **GPIO Input** - When configured as an input, the processor will look for a low (<0.8V DC) or a high (>2.4V DC) state. Minimum 0V DC / Maximum 12V DC. **GPIO Output** - When configured as an output, the port provides a binary output of 0-12V DC 150mA max.
H	5V DC	5V DC 3A - Connect included wall wart power supply between the 5V DC connection and a 115-240V AC surge protected outlet.

Network Configuration

To ensure the IP Address will not change due to a power outage, a static IP Address or DHCP reservation should be configured. Savant recommends using DHCP reservation within the router. By using this method, static IP Addresses for all devices can be managed from a single UI, avoiding the need to access devices individually.

Setting DHCP reservation varies from router to router. Refer to the documentation for the router to configure DHCP reservation.

Refreshing the IP Connection

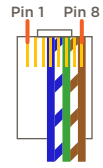
After connecting to a new network, changing routers, or if the IP Address range in the router was changed, the IP connection should be refreshed. To refresh the IP connection, do one of the following:

- Hot Plug the Ethernet (LAN) Connection
- Cycle power

Control Connections

RS-232 Wiring

Pin 1: No Connection	Pin 5: RXD (Receive)
Pin 2: No Connection	Pin 6: TXD (Transmit)
Pin 3: No Connection	Pin 7: CTS (Flow Control)
Pin 4: GND (Ground)	Pin 8: RTS (Flow Control)



RJ-45 Connector
(Gold pins facing up)

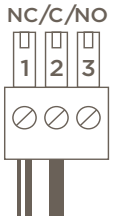
IMPORTANT!

- Wire colors are included to identify the pins used for this connection. Colors shown do not represent any wiring standard.
- When wiring, DO NOT connect any wires within the cable that are not required for communications.
- Pins 7 & 8 are only required for CTS/RTS handshaking.
- CTS/RTS handshaking is supported for flow control based on the profile used in the Blueprint configuration.
- RS-422/485 is not supported
- Refer to the **RS-232 Conversion to DB9 and RS-422/485 Pin-out Application Note** on the **Savant Customer Community** for more information on RJ-45 to DB9 adapters offered by Savant.

Relay Wiring

Both Normally Open and Normally Closed outputs are available.

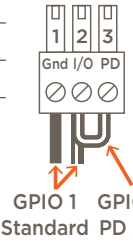
Pin 1: NC (Normally Closed)
Pin 2: Common
Pin 3: NO (Normally Open)



GPIO - General Purpose Input/Output

- GPIO's configured as an output can be used to trigger an action within the system such as switching a device.
- GPIO configured as an input can detect a state change and trigger a workflow.

Pin 1: GND (Ground)
Pin 2: GPIO 1
Pin 3: PD (Pulldown)



GPIO 1 Standard

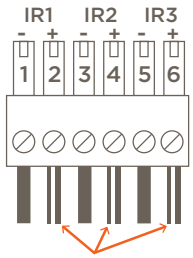
GPIO Using PD Jumper

- GPIO pins configured as an input are pulled high to (+12V) during the boot process. To force the GPIO signal low during a boot-up. Connect the PD pin to the GPIO pin. This forces the GPIO output to (< 0.8V) during the processor boot times.

IR Wiring (Infrared)

- Ensure the all IP emitters are within 15 feet (4.6 meters) from the controllers location.
- Use of 3rd party flashing IR emitters with Talk Back is not recommended. These types of emitters can draw voltage away from the IR signal that can degrade IR performance.

Pin 1: IR 1 -
Pin 2: IR 1 +
Pin 3: IR 2 -
Pin 4: IR 2 +
Pin 5: IR 3 -
Pin 6: IR 3 +



Use White Stripe for Positive (+)

- IR connections IR4 to IR6 (not shown in diagram) follow the same wiring as connections IR1 to IR3.

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