SAVANT

Savant® S2 Host Rack Mountable

Quick Reference Guide

Box Contents

- (1) Savant® S2 Host Rack Mountable (SHR-S2-xx)
- (1) Install Kit (075-0221-xx)
 - (1) Mounting Plate (074-0577-xx)
 - (1) 5V DC 3A Power Supply with Quick Change AC Adapters (025-0223-xx)
 - (2) 6-pin Screw Down Plug-in Connector (028-9352-xx)
 - (2) 3-pin Screw Down Plug-in Connector (028-9351-xx)
 - (1) 4 inch Cable Tie (014-0071-xx)
- (1) Product and Regulatory Insert (009-1950-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	Width	Depth	Weight	
Device	1.40 in (3.5 cm)	6.00 in (15.2 cm)	3.20 in (8.1 cm)	0.5 lb (0.22 kg)	
Shipping	2.75 in (6.98 cm)	9.50 in (24.1 cm)	9.75 in (24.7 cm)	2.1 lb (0.95 kg)	
Rack Space	1U				
Power					
Input Power	5V DC 3A				
Maximum Power	15 watts				
Wireless Standar	ds				
SHR-S2-00	Wi-Fi (802.11 a/b/g/n 2.4/5 GHz)				
SHR-S2-01	Wi-Fi (802.11 a/b/g 2.4 GHz)				



IMPORTANT! 802.11r (fast roaming) is not supported

Security	WPA™, WPA2™, WPA/WPA2™			
Regulatory				
Safety and Emissions	FCC Part 15 CE	C-Tick	UKCA UK CA	ICES- 003
Contains FCC ID	Z64-WL18SBMOD			
Contains IC	451I-WL18SBMOD			
RoHS	Compliant			
Supported Releas	ses			
SHR-S2-00	da Vinci 9.1.3 and higher Studio 3.0.2 and higher			
SHR-S2-01	da Vinci 9.2 and higher HR-S2-01 Studio 3.0.2 and higher			

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.

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.

B Status LED

Green: Connected to the local network and is assigned an IP Address.

Green Blinking: Host is in AP Mode and will begin broadcasting it's own network. If Host AP Mode is configured, it should be noted that the local network and Host AP Mode network are entirely separate.

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.

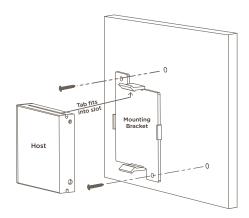
Rack

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.

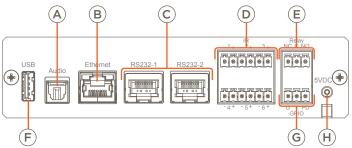
Mounting Plate

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.

- 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.



Rear Panel



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A	Audio	Digital optical audio (TOSLink) output. Sends Audio Interrupt Service (AIS) to distribution chassis. Supports up to 192kHz/24-bit digital audio out; PCM stereo format only.
		8-pin RJ-45 female.
(B)	Ethernet	100 Base-T auto negotiating port. Connecting to this port will disable Wi-Fi settings.
		8-pin RJ-45 female.
		Used to transmit and receive serial binary data to and from serial controllable devices.
(C)	RS-232	Ports 1-2 RS-232 - CTS/RTS handshaking. CTS RTS handshaking availability is based on the component profile.
		See the 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 the IR Wiring section for important precautions regarding IR functionality before making connections.
		3-pin Screw Down Plug-in Connector. See the Relay Wiring section for pin-outs.
(E)	Relay	Normally Open (NO) / Normally Closed (NC) to control devices requiring basic on/off operation. DC Voltage Max: 30V DC 1A
F	USB	Not Used
		3-pin Screw Down Plug-in Connector. See the GPIO Wiring section for pin-outs.
G	GPIO	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 OV DC / Maximum 12V DC.
		GPIO Output - When configured as an output, the port provides a binary output of 0-12V DC 150mA max.
	5)/ 50	5V DC 3A - Connect included wall wart power

Network Requirements

5V DC

For more information, see the Savant Device Networking Guidelines on the Savant Customer Community.

240V AC surge protected outlet.

supply between the 5V DC connection and a 115-

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.

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)



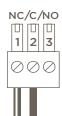
IMPORTANT!

- Wire colors are included to identify the pins used for this connection. Colors shown do not represent any wiring standard.
- 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 DB-9 and RS-422/485 Pinout Reference Guide 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.

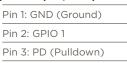
Pin 1: NC (Normally Closed)
Pin 2: Common
Pin 3: NO (Normally Open)

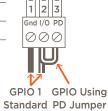


GPIO - General Purpose Input/Output

 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.



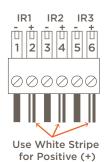


GPIO pins configured as an input are pulled high to (+12V) during the boot process. To force the GPIO signal low during a boot-up. Connect the PD pin to the GPIO pin. This forces the GPIO output to (< 0.8V) during the processor boot times.

IR Wiring (Infrared)

- Ensure that the all IP emitters are within 15 feet (4.6 meters) from the controller's 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 +



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