

# SAVANT

## Savant® Smart Host with Control Quick Reference Guide

### Box Contents

- (1) Savant® Smart Host with Control (SHC-2000-05)
- (1) 5V DC 3A Power Supply  
with Quick Change AC Adapters (025-0153-xx)
- (2) M3x6 mm Flathead Phillips Screw Black (039-0001-xx)

### Wall Bracket:

- (1) Wall Mount Frame (074-0585-xx)
- (1) Host Mount (074-0584-xx)
- (2) 6-pin Screw Down Plug-in Connector Black (028-0664-xx)
- (2) 3-pin Screw Down Plug-in Connector Black (028-0665-xx)
- (1) Product and Regulatory Insert (009-1715-00)

### 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	1.58 in (4.0 cm)			
Width	7.86 in (19.9 cm)			
Depth	7.65 in (19.4 cm)			
Weight	Net: 1.3 lb (.58 kg) Shipping 2.1 lb (.95 kg)			
Rack Space	1U			
Power				
Input Power	5V DC 3A			
Maximum Power	15 watts			
Regulatory				
Safety and Emissions	FCC Part 15 <b>FC</b>	CE <b>CE</b>	C-Tick <b>CT</b>	ICES-003
RoHS	Compliant			
Minimum Supported Release				
Savant OS	da Vinci 8.6			

### 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.

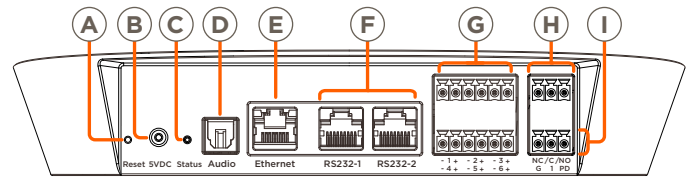
Setting DHCP reservation varies from router to router. Refer to the documentation for the router to configure DHCP reservation.

### 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

### Rear Panel



- A** Reset (hole)
  - HELPFUL!** This clears all IP addresses and reverts the network settings back to their factory defaults.
- B** Power Input 5V DC 3A - Connect to included power supply.
  - Off** - Disconnected from power supply.
  - Amber** - Host is booting/rebooting and is disconnected from the network.
- C** Status LED
  - Amber Flashing** - 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.
- D** Digital Audio Output
  - TOSLink (Optical) digital audio output. Connect to digital optical audio input on switcher for using the Audio Interrupt Service (AIS).
- E** Ethernet
  - 8-pin RJ-45 female.
  - 10/100/1000 Base-T auto negotiating port. Connecting to this port will disable Wi-Fi settings.
- F** 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.
- G** 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.
- H** 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
  - 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.
- I** GPIO

## Chassis Installation

The Smart Host can be installed on a solid, flat, level surface such as a table, cabinet, or shelf, or can be wall mounted using the included 2 piece bracket. The location should be dry, well ventilated, and out of direct sunlight. When placing the Smart Host on a shelf, the wall bracket must not be installed to allow for a flat, level installation.

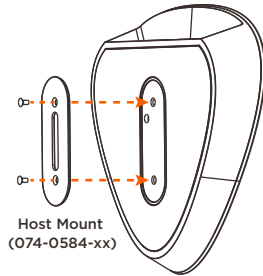
### Rack

The optional RCK-3000-xx provides a ventilated shelf for mounting up to two Smart Hosts. When rack mounting, the wall bracket must not be installed to allow for a flat, level installation.

### Wall Bracket

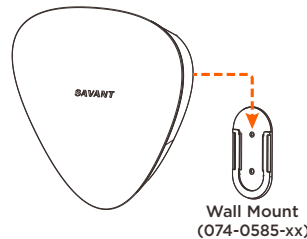
A two-piece wall mount bracket is included for installation to a wall or similar. Wall mount instructions are provided below.

1. Attach bracket that mounts to the bottom of the chassis using the included M3x6mm flat-head screws.



2. Attach the wall bracket securely to the wall. If mounting to dry-wall, a sturdy anchor such as a threaded drywall anchor should be used.

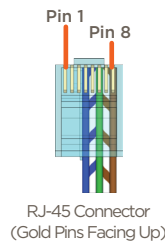
3. Position the Smart Host over the wall bracket and gently slide into place. See image to the right.



## Control Connections

### RS-232 Wiring

Pin 1: -----	Pin 5: RXD (RS232)
Pin 2: -----	Pin 6: TXD (RS232)
Pin 3: -----	Pin 7: CTS (RS232)
Pin 4: GND (RS232)	Pin 8: RTS (RS232)



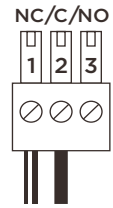
### ! IMPORTANT!

- 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.

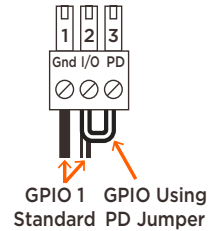
Pin 1: NC
Pin 2: Common
Pin 3: NO



## 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
Pin 2: GPIO 1
Pin 3: PD (Pull-down)

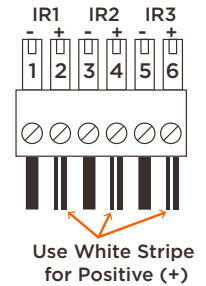


- GPIO pins configured as an input are pulled high to (+12V) during the boot process. To force the GPIO signal low during a boot-up. Connect the PD pin to the GPIO pin. This forces the GPIO output to (< 0.8V) during the processor boot times.

## IR Wiring (Infrared)

- Ensure the all IR 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: IR1 -
Pin 2: IR1 +
Pin 3: IR1 -
Pin 4: IR1 +
Pin 5: IR1 -
Pin 6: IR1 +



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

## Additional Information

Refer to the following documents located on the **Savant Customer Community** for additional information.

- Savant Smart Host (SHC-2000) Deployment Guide.

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