

 **IMPORTANT!** In the descriptions below, **Home Network** refers to the local Wi-Fi or wired network.

Status LEDs and Buttons

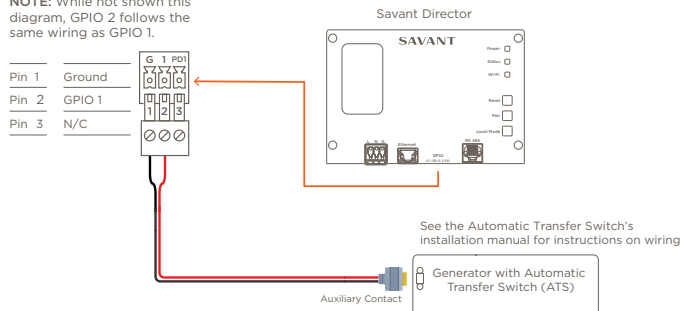
Power (LED)	Solid Green - Power is applied.
	Off - No power. Verify the power source is supplying the proper voltage.
Status (LED)	Amber - The Director is booting/rebooting.
	Amber Blinking - The Director is installing Firmware Updates, Host Software is downloading/installing, or other controllers are updating.
	Blue - The Director completed startup but doesn't have an IP Address.
	Blue Blinking - The Director is in pairing mode and scanning for Power Modules.
	Green - Normal operation mode.
	Red Blinking - The Director is unable to communicate with paired Power Modules or Controllers.
Wi-Fi Status (LED)	Red Blinking (three fast blinks) - The Pair button was pressed, but the system is already configured. See the description in the Pair (Button) fields below.
	Blue - Access Point (Local) Mode is enabled.
	Green - The Director is provisioned, and communicating with Wi-Fi. NOTE: The Savant Power & Light App configures the wireless interface.
	Red - The Director is provisioned to Wi-Fi but unable to communicate with that network.
	Red Blinking (three fast blinks) - The Local Mode button button was pressed, but the Director is already connected to a Wi-Fi network.
LTE Status (LED)	Off - The Director is not provisioned to Wi-Fi and Access Point (Local) Mode is Off.
	Green - The Director is provisioned and communicating with a cellular network.
	Red - The Director is provisioned to a cellular network, but can't communicate with that network.
	Red Blinking (fast blink) - The Reset button was pressed and held for 10 seconds. See the description in the Reset (Button) fields below.
Reset (Button)	Off - Cellular has not been configured and is off.
	Press and Release - Reboots the Director, and all settings are left intact.
	Press and hold (5 secs) - Press and hold for 5 seconds until the Status LED blinks red, then release. The Director reboots and all network settings are cleared. All other settings are preserved.
	Press and hold (10 secs) - Factory Reset. Press and hold for 10 seconds until the Status and Wi-Fi LEDs blink red, then release. After the reboot, the network settings, configuration, logs, and passwords are cleared.
Pair (Button)	NOTE: The Director will continue to be associated with a Home in the Savant Cloud. A call to Savant Support may be necessary to redeploy to a different Home.
	Press and Release - Launches On-Device Pairing. In this mode, the Director locates any power or lighting modules that are also in pairing mode, and connects with them.
	NOTE: A gear icon displayed on a power or lighting module's LCD screen indicates the module is in pairing mode.
Local Mode (Button)	Press and Hold - Press and hold for 5 seconds, then release to clear the configuration running on the Director and then initiate a reboot. Network and password settings are preserved.
	Press and Release - Press and release to put the Director into Access Point (Local) Mode. Press and release again to take it out of this mode. Local Mode is turned off after 10 hours.
	- In Local Mode the Director functions as an Access Point and can communicate directly with the Savant Power & Light App over Wi-Fi.
	- Local Mode is disabled when the Director is provisioned to Wi-Fi.
	- The password of the Director's broadcasted network is the serial number of the Director.

GPIO Wiring

Automatic Transfer Switch (ATS)

When configuring a generator power source in the Savant Power & Light App, the **ATS is Low On-Grid setting controls GPIO usage**. When enabled, a signal of less than 0.8 volts indicates the ATS is in a state where On-Grid power is feeding the electrical panel and a signal of greater than 2.4V DC indicates the ATS is in a state where Generator power is feeding the electrical panel. A wiring diagram is shown below. Refer to the installation manual for wiring diagrams on how to connect to the ATS.

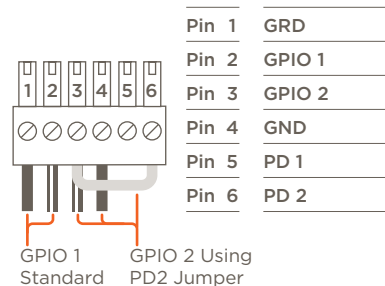
NOTE: While not shown this diagram, GPIO 2 follows the same wiring as GPIO 1.



GPIO Pull Down Resistor (PD) Usage

The GPIO pins are by default configured as inputs and pulled high to 12V while the host is booting up. To pull the GPIO signal low during a host reboot and/or power cycle, a jumper wire can be connected between a GPIO pin and its corresponding PD1 and PD2 pin. Doing this adds a 1k ohm resistor between the GPIO pin and ground which keeps the GPIO output below 0.8V while the host is rebooting.

GPIO Connector Pinout

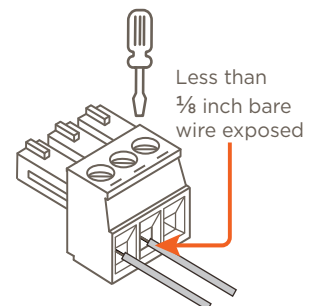


Microgrid Interconnect Device (MID)

In addition to monitoring an ATS switch, the GPIO can monitor and inform the Director the state of an inverter's Microgrid Interconnect Device (MID). As described in the previous section, a signal of less than 0.8V DC is considered a low state and a signal of greater than 2.4V DC is considered a high state. Refer to the installation manual of the inverter when making connections.

Making Connections

1. Remove power if power is applied.
2. Pull to remove the terminal block from the Director's side panel.
3. With a small flat-bladed screwdriver, turn the screws on the top of the connector counterclockwise until the silver crimps on the front open enough to slide a wire into the square slot.
4. Strip back $\frac{1}{4}$ inch of insulation from each wire. Insert the stripped wire into the proper port. Do not allow more than $\frac{1}{8}$ inch of the bare wire exposed. See image.
5. Turn the screws clockwise until the silver crimps tighten around the wire. Tug on the wire a bit to verify the wire is securely installed.
6. Continue until all wires are connected.
7. Plug the terminal block into the appropriate port.
8. Repeat steps 2-7 for any additional GPIO ports.
9. Reapply power.



Installation

The Director can be placed on a solid flat surface such as a table, cabinet, rack, or shelf or mounted onto a wall or similar structure using the supplied mounting bracket. Install the chassis in a dry, well-ventilated place that is out of direct sunlight. Both rack and wall mounting instructions are offered below.

NOTE!: When installing, place the Director within 6 $\frac{1}{2}$ feet and in direct line of sight of the power and lighting modules.

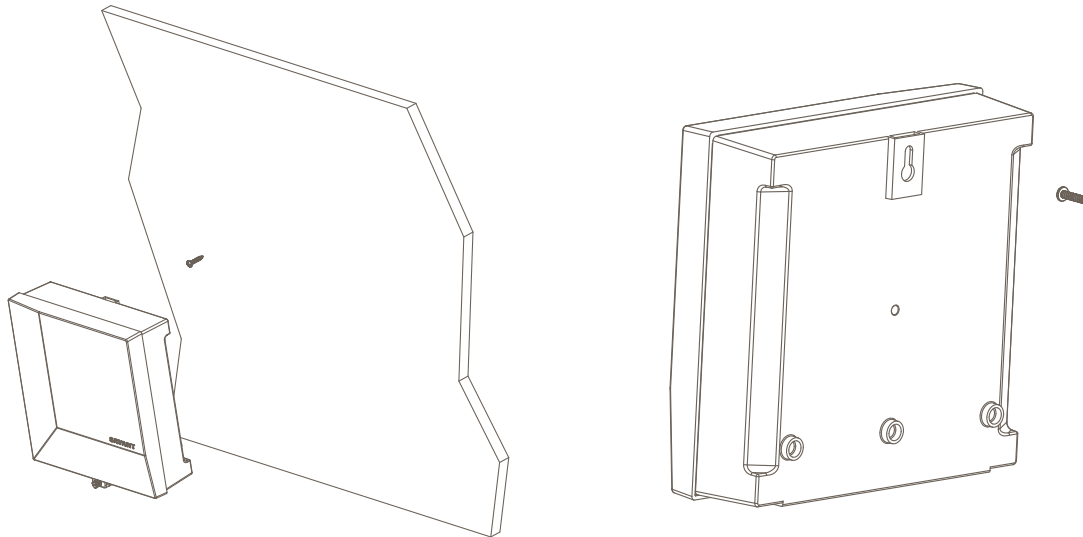
Rack Mount

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

Wall Mount

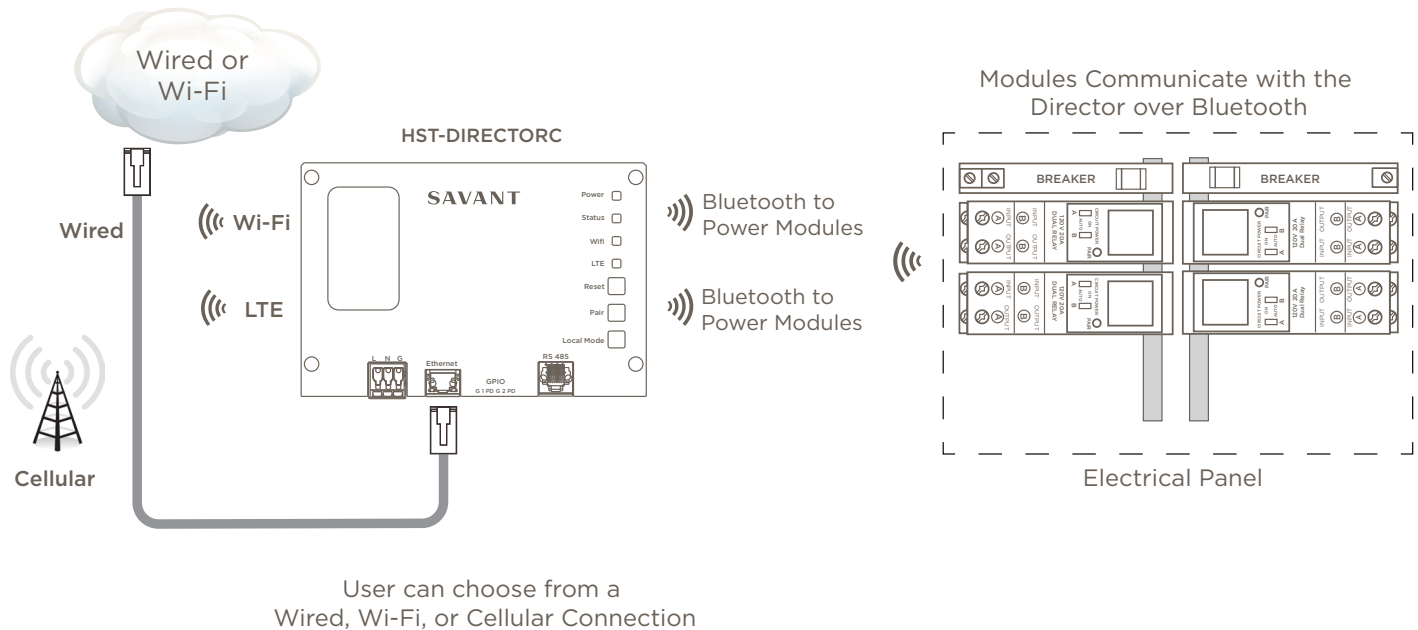
1. Remove cover by loosening the thumb screw and set aside. Determine wire entry location from bottom or rear knockout.
2. Drill the selected location to fit chosen UL knockout entry fitting (not included). If outdoors, use a UL approved cable gland fitting of desired size.
3. Install desired fitting and provided AC cord.
4. If using provided **AC cord**: terminate cable, brown to L[ine], blue to N[eutral], green/yellow stripe to G[round].
OR
If using permanent **Romex home wiring**: terminate black to L[ine], white to N[eutral], bare copper earth wire to G[round].
5. Locate the desired mounting location, install provided #6 SS pan head screw and drive in to surface leaving screw head $\frac{1}{8}$ inches protruding.

6. Hang the Director on the keyhole provided on the rear. For additional security, there are three locations in the wire gutter that can be used with the screws provided.
7. Re-install cover by hooking the top over the rear enclosure and close until tightened with the thumb screw.



System Overview

Use the diagrams below as a guide when designing a system.



Network Requirements

⚠ IMPORTANT! Savant recommends that users open and thoroughly read the **Savant Device Networking Guidelines** document on the [Savant Customer Community](#) before deploying any network-connected Savant products.

Only individual cellular, Wi-Fi, or wired Ethernet network connections are supported. Multiple simultaneous network connections, such as Wi-Fi and Cellular, are not supported.

Documentation

Savant Power & Light App - Initial Smart Panel Configuration - This guide includes wiring diagrams, power/lighting module configuration information, Savant Power & Light App setup, and other information regarding the installation and configuration of a Savant Power system.

All documentation is available on the [Savant Customer Community](#).