

# SAVANT

## Savant® SmartControl RS485 – Wi-Fi Shade Controller with 1 RS485

### Quick Reference Guide



#### Box Contents

- (1) SmartControl RS485 Wi-Fi Shade Controller (SSC-W485-00)
- (1) Installation Kit (075-0198-xx)
  - (1) Mounting Plate (074-0569-xx)
  - (1) 6-pin Screw Down Plug-in Connector (028-9352-xx)
  - (1) 4-pin Screw Down Plug-in Connector (028-9395-xx)
- (1) Quick Reference Guide (this document)

#### Specifications

Environmental	
Temperature	32° to 104° F (0° to 40°C)
Humidity	10% to 90% (non-condensing)
Dimensions and Weight (Product)	
Height	0.64 in (1.62 cm)
Width	2.70 in (6.85 cm)
Depth	2.67 in (6.78 cm)
Weight	Net: 0.25 lb (0.11 kg) Shipping: 1.50 lb (0.68 kg)
Power	
Input Power	24V DC 200mA
Max Power	6 watts
Standards	
Wireless	Wi-Fi (802.11 b/g/n 2.4 GHz) <b>⚠ IMPORTANT!</b> 802.11r (fast roaming) is not supported.
Security	WPA™, WPA2™, WPA/WPA2™, WEP
Regulatory	
Safety and Emissions	FCC Part 15   CE Mark   C-Tick
Contains FCC ID:	TLZ-CU277
Contains IC:	6100A-CU277
RoHS	Compliant
Minimum Supported Release	
Savant OS	da Vinci 8.5

#### Network Requirements

Savant requires the use of a wireless network that is configured to make use of at least one of the supported wireless Standards listed in the Specifications Table.

Connect all Savant devices to the same local area network (LAN) or subnet as the Host. Savant recommends not implementing any type of traffic or packet shaping in your network topology for the Savant devices as this may interfere with performance.

#### Network Configuration

To ensure that 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.

#### Front Panel



- A** Press and hold for five seconds while powered On to clear the network settings. The **Status** LED blinks rapidly when reset is complete.

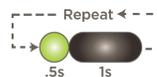
**Off:** No power applied.



**On Solid:** Provisioned to the local network and communicating with the Savant Pro System Host. Normal operation mode.



**Blinks Once:** In Provisioning Mode. Ready to be added to the local network.



**Blinks Twice:** Establishing connection with the local network.



- B** **Blinks Three Times:** Connected to the local network and trying to connect to the Savant Pro System Host.



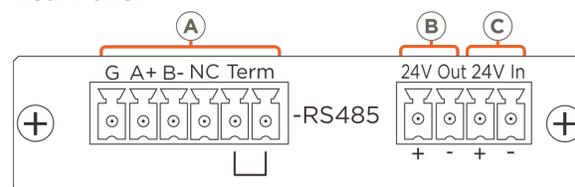
**Short Off Blink:** Firmware is updating.



**Rapid Blink:** The reset button was held down for at least five seconds and the SSC-W485 is performing a factory reset. After reset, all network settings are cleared and the factory defaults are restored.



#### Rear Panel



**G** Common or reference port for the RS-485 signal.

**A+** Data+ signaling line for the RS-485 signal.

**B-** Data- signaling line for the RS-485 signal.

- A** **NC** No Connection

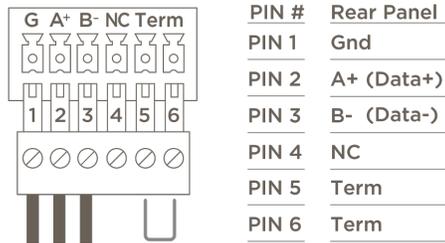
**Term** Add a jumper wire to connect a terminating resistor between the A+ and B- ports. The terminating resistor reduces problems that can occur when long cable lengths are used.

- B** **24V Out** 24V DC output. Observing polarity, can supply power to a single shade motor. See the **24V Out Port** section below for more information.

- C** **24V In** 24V DC input. Observing polarity, connect a 24V DC source between the + and - ports.

## RS-485 Wiring

RS-485 connections are made using the 6-pin screw down plug-in type connector included with each SSC-W485 controller. This connector plugs into the connection on the rear of the controller.



## Making Connections

1. Remove power if applied.
2. Pull to remove the 6-pin terminal block from the rear of the controller.
3. With a small flat bladed screwdriver, turn the screws on top of the connector counterclockwise until the silver crimps in the rear of the connector opens enough to slide the wire(s) into the square slots.
4. Strip back the insulation on each of the wires ¼ inch. Using the diagram above, insert the stripped wires into their proper ports. There should be no bare wires protruding from the rear of the connector.
5. Turn the screws clockwise until the crimp tightens around the wire. Tug on the wire a bit to verify they are installed securely.
6. Continue until all wires are installed.
7. Plug terminal block back into the rear of the controller.
8. Reapply power.



### HELPFUL INFORMATION!

- If having trouble with RS-485 communications, a terminating resistor may be needed between the Data+ and Data- signals. To add the resistor (internal to controller), follow steps 3-5 and insert a #24 AWG or larger wire between the two Term ports.
- Multi-shade installation and wiring information is available in the Shades Installation and Wiring Guide (009-1532-xx) located on the [Savant Customer Community](#).

## Connecting to a Wireless Network

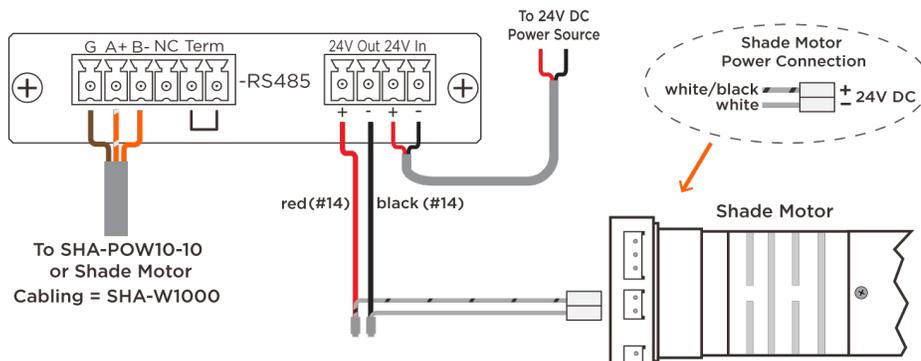
To provision the SSC-W485 controller onto a local network, one of the following methods can be used:

- SmartConnect Application - version 1.6 or later.
- Embedded Web UI.

Both methods are described in the Shades Provisioning and Programming Guide (009-1525-xx).

## Power Wiring

The SSC-W485 was designed without the need for an individual power supply to power it. Having individual 24V In and 24V Out ports allow the controller to sit inline as shown in the diagram below.



### NOTES:

- The 6-pin and 4-pin connectors that plug into the rear of SSC-W485 controller are not shown in diagram.
- If a separate power source is needed, Savant offers an optional power supply that can be used as the power source (SHA-POWSINGLE)

## Regulatory

The following statements are applicable to the SSC-W485.

### FCC Regulations:

15.19. These devices comply with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) These devices may not cause harmful interference, and (2) these devices must accept any interference received, including interferences that may cause undesired operation.

15.21. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

15.105. This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving circuit different from that to which receiver is connected.
- Increase the separation between the equipment and the receiver.
- Consult the dealer or experienced radio/TV technician for help.

### IC Regulations:

RSS-Gen 7.1.3. These devices comply with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) These devices may not cause interference, and (2) These devices must accept any interference, including interference that may cause undesired operation of the device.

RSS-21- Annexe 9: A 9.4. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Additional Documentation

Additional Documentation is available on the [Savant Customer Community](#).

- SmartConnect Software Reference Guide (009-1046-xx)
- Shade Deployment Guide (009-1525-xx)