

Dual 20 Amp Relay Companion Module Installation Manual

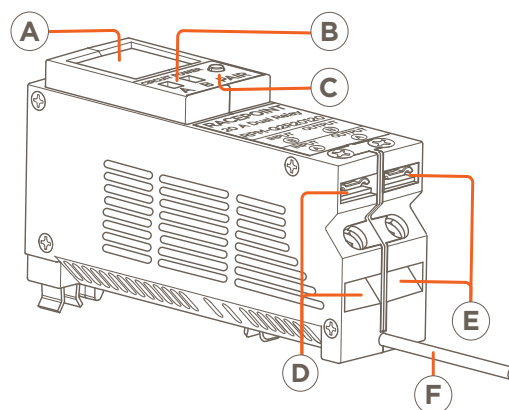
Box Contents

- (1) Dual 20 Amp Relay Companion Module
 - RPM-Q2R20120-xx QO™ Style Relay Module -or-
 - RPM-H2R20120-xx Homeline™ Style Dimmer Module
- (1) Product Information and Regulatory Insert (009-1701-xx)
- (1) Quick Reference Guide (this document)

Specifications

Environmental				
Temperature	32° to 104° F (0° to 40° C)			
Humidity	5% to 85% Relative Humidity (non-condensing)			
Location	Indoor Use Only			
Dimensions and Weights				
	Height	Width	Depth	Weight
Module (Homeline)	1.98 in. (5.03 cm)	4.87 in. (12.37 cm)	2.80 in. (7.11 cm)	.5 lbs (.23 kg)
Module (QO)	1.48 in. (3.76 cm)	5.00 in. (12.70 cm)	2.63 in. (6.68 cm)	.5 lbs (.23 kg)
Shipping	1.71 in. (4.34 cm)	7.50 in. (19.05 cm)	4.30 in. (10.92 cm)	1.0 lbs. (.45 kg)
Power				
Inputs (max)	120V AC @ 60 Hz, 20 amps (each input)			
Load Power (max)	2400VA each (20 amp resistive load)			
Features of Automatic Action	Type 1.B action			
Standards				
Wireless	Bluetooth Low Energy (BLE) 2.4 GHz radio frequency			
Regulatory				
Safety and Emissions	FCC Part 15	UL	ICES 003	
				
Contains FCC ID:	2AA9B04			
Contains IC:	12208A-04			
RoHS	Compliant			
Recommended Load Center Types				
All Homeline™ compatible modules fit into 1-inch load centers.				
All QO™ compatible modules fit into ¾ inch load centers.				
Supported Load Types				
Standard Configuration	- Non-dimmable lighting circuits. - Relay On/Off type loads (e.g. appliances)			
Terminals				
Screw Tighten Torque	1.34 Nm			
Wire / Conductor Type	Copper (Cu) only			
Minimum Supported Release				
Savant OS	da Vinci 9.0			

Descriptions



Multi-Page LCD screen can display the following:

- Power drawn at each output.
- Firmware, Mac Address, GUI version, and Regulatory Info.
- UID of the Host the module is communicating with.
- Real-time Bluetooth status connectivity icon.

PAIR Button - This is a multi-use button. How the button is pressed will determine its function:

- Press and Release** - Cycles through the various screens available on the LCD (Power > INFO 1 > INFO 2).

Press and hold - Press and hold for 2 seconds to put module into pairing mode. Press and hold for 3 seconds to reset.

- Manual Load Switches** - Toggle switch to ON position to switch the load on. Toggle switch to AUTO for normal operation. Switch A controls output A and Switch B controls output B.

- Input Power Connections** - Connect 120V AC from a companion breaker to each input. A separate breaker is used to feed each input connection. See the [Wiring](#) section (page 2).

- Output Power Connections** - Connections are labeled OUTPUT A and OUTPUT B. Connect each output to a separate load. See the [Wiring](#) section (page 2).

- Neutral Wire** - Connect to the neutral bar in breaker panel. See the [Wiring](#) section (page 2).

Features

- Control capability for loads up to 2400 VA (volt-ampere).
- All QO™ and Homeline™ lighting modules are compatible with Schneider Electric Square D™, QO™, and Homeline™ load centers.
- Dynamic management of loads.
- Built-in energy monitoring; +/- 3% accuracy / 1 sec sample time.
- Communicates with Panel Bridge Controller using Bluetooth Low Energy (BLE) technology.
- Manual load switches to toggle power to the outputs On and Off.
- Color LCD display for easy identification and load status.

Additional Documentation

The documents listed below are available via the **Savant Customer Community**.

- Panel Bridge Controller Quick Reference Guide (009-1740-xx)
- Panel Bridge Controller and Dimming Relay Module Deployment Guide (009-1823-xx).
- Dual 30A 240V AC 2-Pole Relay Companion Module Installation Manual (009-1483-xx)
- Dual 300W Forward Phase Companion Dimmer Installation Manual (009-1485-xx).
- Dual 500W Adaptive Phase Companion Dimmer Installation Manual (009-1486-xx)

Important Information

- Do not exceed the current rating of the breaker feeding the 120V AC to the Companion Relay Modules.
- Each output on the relay module can switch up to 20 amps. The breaker feeding the module should not be larger than 20 amps.
- Sum up the number of spaces needed for breaker and the relay modules. Each breaker requires one space and each relay module requires two spaces.
- Maximum number of modules that can communicate with the Panel Bridge Controller is 40.
- Do not add MLV and ELV type loads to the same breaker/ Companion Module circuit. MLV and ELV type loads should be connected to separate breakers circuits. Doing so can cause damage to the dimming module.

Installation into Breaker Panel

ELECTRIC SHOCK! The 120V AC, 60 Hz source poses an electrical shock hazard that has the potential to cause serious injury to installers and end users.

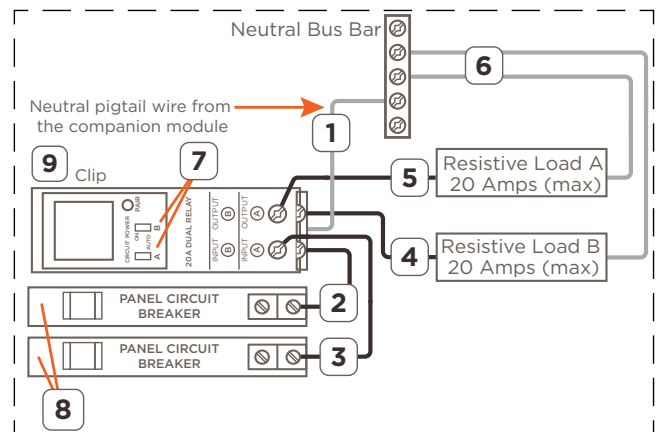
IMPORTANT! A licensed electrician is required to install Savant Lighting Companion Modules.

1. At the breaker panel, switch off the main breaker so there is no power supplied to the panel.
2. Position and install a breaker into one of the slots in the breaker panel. Press firmly until the breaker is fully seated onto the appropriate bus bars.
3. Install a second breaker alongside the first.
4. Position and install the Relay Module into the slot where it will be installed. Press firmly until the module is fully seated onto the appropriate bus bars. Typically the Companion Module is installed alongside the breakers.
5. Use the wiring diagram below to complete the wiring.

Circuit Test Instructions

The instructions below can be used to test that the Relay Companion Breakers are functioning correctly. The setup requires:

- 20 Amp Relay Companion Module.
 - (2) resistive loads with maximum amperage of 20 amps each.
 - (2) 20 amp circuit breakers.
 - Neutral Bus Bar
 - 120V AC source
1. Connect the neutral wire from the module to a neutral bus bar.
 2. Connect the output of one of the circuit breakers to INPUT A on the module. Wire must be at least 4 inches (10.1 cm).
 3. Connect the output of the remaining circuit breaker to INPUT B on the module. Wire must be at least 4 inches (10.1 cm).
 4. Connect a resistive load to Output A.
 5. Connect a second resistive load to Output B.
 6. Connect the unused side of each load to the neutral bus bar.
 7. Toggle the CIRCUIT POWER switches A and B to ON.
 8. Apply power to the 30 amp breakers.
 9. Connect 120V AC to the hot connection on the bottom of the module (not shown in diagram).
 10. To test, apply 120V AC to the HOT (Clip) connection on the bottom of the module and verify the loads switch on. Toggle the CIRCUIT POWER switches to AUTO and verify the loads switch Off.



IMPORTANT! Use minimum #12 AWG wire when the source voltage connected to either INPUT A or B is fed from a 20A circuit breaker. When source voltage is fed from a 15A circuit breaker, #14 AWG wire can be used.

Wiring

Use the diagram below when making connections between the Companion Module, associated breaker, and load(s). Additional diagrams are available in the Savant Panelized Lighting Deployment Guide. When making connections, common electrical practices should be followed.

