

SAVANT

Product Information and Regulatory Statement

Important Safety Information - Read First!

Before installing, configuring, or operating any equipment, all relevant technical documentation must be read, understood, and followed. Savant technical documentation may contain important product-specific installation, mounting, and safety instructions, and can be accessed through the Savant Store.

Scan the QR code or visit the URL below, enter the relevant product name or SKU in the **Search Savant** prompt, and select the product purchased to find documents, specifications and more.

https://store.savant.com/DefaultStore/ccrz__HomePage



Safety Statements

All safety instructions below must be read, understood, and carefully followed under all applicable circumstances when working with any Savant equipment.

1. **Follow all input power ratings marked on product near power input!**
2. If fuse replacement is required, replacement fuse should match fuse rating marked on the product.
3. Do not use equipment near water.
4. Clean only with dry cloth.
5. Do not block any ventilation openings or install near any heat sources such as heat registers, stoves, radiators, amplifiers, etc.
6. Refer all servicing to qualified service personnel. Servicing is required when any part of the apparatus has been damaged in any way, or fails to operate normally for any reason.
7. Use only attachments/accessories specified by the manufacturer, following all relevant safety precautions for any such attachments/accessories.
8. For applicable equipment, use the included power cord with the grounding prong intact to insure proper grounding of the device.
9. If the provided plug does not fit the desired outlet, contact a licensed electrician to replace the obsolete outlet.
10. Protect any power cord from being walked on, pinched, strained, or otherwise potentially damaged, especially at the outlet or device connections.
11. Disconnect any outlet powered apparatus from its power source during lightning storms or when unused for long periods of time.
12. To completely disconnect equipment from AC mains power, disconnect the power supply cord plug from the AC receptacle on the device.
13. For any hardwired or fixed in-wall apparatus, carefully follow all wiring diagrams and instructions. All electrical wiring and servicing should be performed by a properly licensed electrician.

Déclarations de Sécurité

Toutes les instructions de sécurité ci-dessous doivent être lues, comprises et soigneusement suivies dans toutes les circonstances applicables lorsque vous travaillez avec un équipement Savant.

1. **Suivez toutes les puissances nominales indiquées sur le produit près de la puissance absorbée!**
2. Si le remplacement du fusible est nécessaire, le fusible de remplacement doit correspondre à la valeur nominale du fusible indiquée sur le produit.
3. N'utilisez pas d'équipement près de l'eau.
4. Nettoyer uniquement avec un chiffon sec.
5. Ne bloquez pas les ouvertures de ventilation et n'installez pas à proximité de sources de chaleur telles que les registres de chaleur, les cuisinières, les radiateurs, les amplificateurs, etc.
6. Confiez toutes les réparations à un technicien qualifié. Un entretien est requis lorsqu'une partie de l'appareil a été endommagée de quelque manière que ce soit ou ne fonctionne pas normalement pour une raison quelconque.
7. Utilisez uniquement les attaches / accessoires spécifiés par le fabricant, en suivant toutes les précautions de sécurité applicables à ces attaches / accessoires.
8. Pour l'équipement applicable, utilisez le cordon d'alimentation inclus avec la broche de mise à la terre intacte pour assurer une mise à la terre correcte de l'appareil.
9. Si la fiche fournie ne correspond pas à la prise souhaitée, contactez un électricien agréé pour remplacer la prise obsolète.
10. Protégez tout cordon d'alimentation contre les piétinements, les pincements, les tensions ou autres dommages potentiels, en particulier au niveau de la prise ou des connexions de l'appareil.
11. Débranchez tout appareil alimenté par une prise de courant de sa source d'alimentation pendant les orages ou lorsqu'il n'est pas utilisé pendant de longues périodes.
12. Pour déconnecter complètement l'équipement du secteur, débranchez la fiche du cordon d'alimentation de la prise secteur de l'appareil.
13. Pour tout appareil encastré ou câblé, suivez attentivement tous les schémas de câblage et les instructions. Tout le câblage électrique et l'entretien doivent être effectués par un électricien dûment agréé.



IMPORTANT NOTES:

- For product mounting, installation, safety instructions, technical specifications, and more, refer to the product Quick Reference Guide, available via the link or QR code noted above.
- For regulatory and compliance information, see reverse of this sheet and/or product packaging.

FCC Regulations

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for CLASS B digital devices, 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 installation. 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. 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 correcting the interference with one or more of the following measures:

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

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement - Wireless and Handheld Devices Only

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. *Tests for SAR are conducted using standard operating procedure accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

FCC and IC Identifier - Devices with Integrated Screen or User Interface Only

This device electronically displays the FCC declaration of conformity logo as well as the FCC and IC identifier. This information can be found on the device by accessing:

(Service menu) > About (A propos de)



IC Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.

This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios. The Country Code Selection feature is disabled for products marketed in the US/Canada.

Déclaration IC

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. Cet appareil accepter toute interférence, y compris les interférences pouvant provoquer fonctionnement indésirable d'appareil.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux radiations de la FCC définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

Identificateur de la FCC et d'IC

Ce périphérique par voie électronique affiche le logo de déclaration de conformité FCC ainsi que l'identificateur de la FCC et d'IC. Cette information peut être trouvée sur le terminal en accédant à:

(Menu de service) > About (A propos de)





SAVANT

Dual 20 Amp Relay Companion Module (120V AC) Quick Reference and Installation Guide

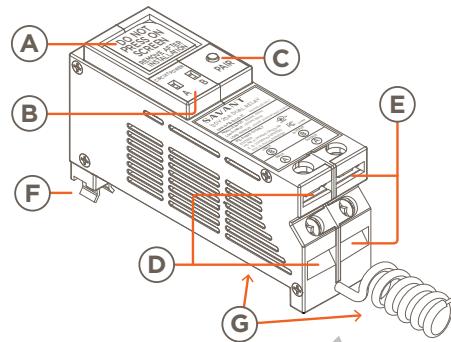
Box Contents

- (1) Dual 20 Amp Relay Companion Module
 - GPM-QP2R20120-21 QO™ w/Plug-on Neutral -or-
 - GPM-Q2R20120-21 QO™ w/Pigtail
- (1) Product Information and Regulatory Insert (009-1950)
- (1) Quick Reference and Installation 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 (QO)	1.45 in. (3.68 cm)	4.97 in. (12.63 cm)	2.60 in. (6.61 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				
Input Power (powers the module)	120V AC (+/- 10%) @ 60 Hz, 0.1A (max)			
Input Power (from feeder breaker)	120V AC per input - 20A (max)			
Load Power	2400VA each (20A resistive load / 1 HP max per channel)			
Features of Automatic Action	Type 1.B action			
Standards				
Wireless	Bluetooth 5 Low Energy (BLE) <ul style="list-style-type: none"> - 2.4 GHz radio frequency - IEEE 802.15.4 			
Regulatory				
Safety and Emissions	FCC Part 15	UL	ICES-003	
				
Contains FCC ID:	PUU-QP2R20120			
Contains IC:	10798A-QP2R20120			
RoHS	Compliant			
Recommended Load Center Types				
All QO™ compatible modules fit into 3/4 inch load centers.				
Supported Load Types				
Standard Configuration	Relay On/Off type loads (home automation)			
Electrical and Safety Characteristics				
Screw Tighten Torque	3.0 Nm			
Wire Type	Copper (Cu) only			
Pollution Degree	2			
Purpose of Control	Operating Control, Smart Relay Control Module or equivalent			
Software	Class A			
Impulse Voltage	2500V			
Construction of Control				
Open Type	Independently mounted for flush mounting			
Supported Software				
Savant OS	da Vinci 10.x			

Descriptions



Multi-Page LCD screen that can display the following:

- Power draw and energy usage at each output.
- Firmware, Mac Address, and Regulatory Info.
- UID of the Host that the module is communicating with.
- Real-time Bluetooth status connectivity icon.

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

PAIR Button - The PAIR button is a multi-use button. The duration that the button is pressed and held determines the function that gets initiated:

- C Press and Release** - Cycles through the screens available on the LCD (POWER > ENERGY > INFO 1 > INFO 2).
- Press and hold** - Press and hold for 2 second to put the module into pairing mode. Press and hold for 5 seconds to reset.

D Input Power Connections - Connect the outputs from two breakers to inputs A and B on the companion module. Each input on the companion module should be connected to a single breaker. See the [Wiring](#) section below.

E Output Power Connections - Connect output A and output B to separate loads. See the [Wiring](#) section below.

F 120V AC Connection - Plugs into the 120V AC bus bar in the breaker panel. The voltage on this connection powers the companion module.

Neutral - The model number of the module determines the type of neutral connection on the module:

- G Plug-On Neutral** - Positioned on the bottom of the module is a neutral clip that plugs directly onto the neutral bar.
- Pigtail Neutral** - A neutral wire protrudes from the module's rear and gets wired to the neutral bar in the breaker panel.

Features

- Control capability for loads up to 2400VA per channel.
- All QO™ style relay modules are compatible with Schneider/Electric Square D™ QO™ load centers.
- Dynamic management of loads.
- Built-in energy monitoring; +/- .5% revenue grade accuracy / 1 sec sample time.
- Communicates with the Panel Bridge Controller device using Bluetooth Low Energy (BLE) technology.
- Manual load switches, available on the front panel, can toggle power to the outputs On and Off.
- Color LCD display for easy identification and load status.

Important Information

- The breaker(s) feeding the companion module should not be larger than 20 amps.
- Each relay output can switch up to 20 amps.
- To determine the number breaker panel spaces needed, add the number of spaces required for the circuit breaker(s) to the number of spaces needed for the companion module.
 - Each circuit breaker requires one space.
 - Each companion module requires two spaces.
- A Panel Bridge Controller can communicate with up to 40 companion modules.
- Savant recommends not connecting any mission-critical loads such as medical devices to this relay companion module.

⚠️ 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.

⚠️ CAUTION! Risk of Electric Shock - More than one disconnect switch may be required to de-energize the device before servicing

⚠️ IMPORTANT! A licensed electrician is required to install any of Savant's Relay Companion Modules.

Branch Circuit Minimum Size of Conductors (General circuit wiring, Copper Conductors)

15A	20A	30A	40A	50A	60A
#14 AWG	#12 AWG	#10 AWG	#8 AWG	#6 AWG	#4 AWG

NOTE: This wiring requirement was based on the National Electric Code (NEC) (ANSI/NFPA70), Canadian Electric Code, Part 1 (CEC), and local codes Minimum Size of Conductors.

Installation into Breaker Panel

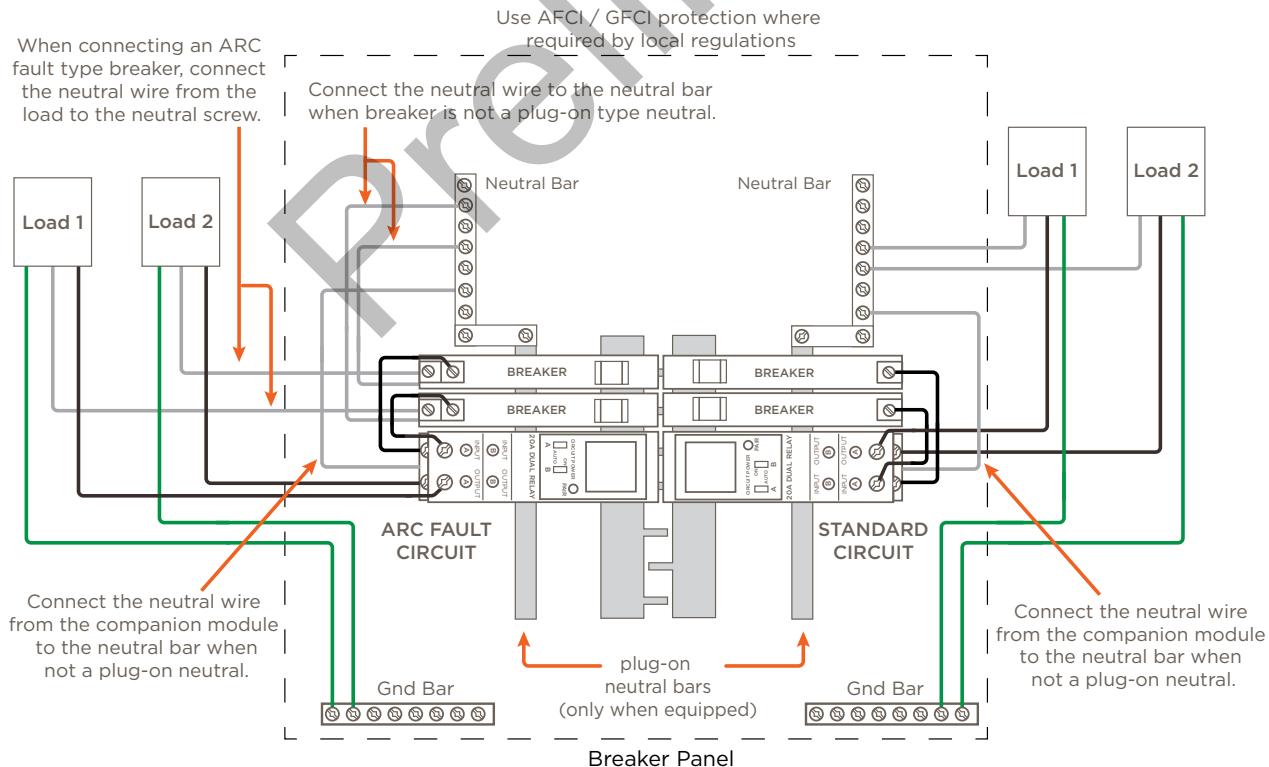
1. Remove power from the breaker panel by switching off the panel's main breaker.
2. Position and install a circuit breaker into one of the slots in the panel. Press firmly until the breaker is fully seated onto the appropriate bus bars.
3. Install a second breaker alongside the first.
4. Position and install the Companion Relay Module into the slot where it will be installed. Press firmly until the module is fully seated onto the appropriate bus bars. This companion module is typically installed alongside the breakers installed in steps 2 and 3.

📌 HELPFUL! A companion relay module fills two slots in the breaker panel but connects to only one phase (120V AC). See the diagram below.

5. Refer to the [Wiring](#) section below and make the appropriate connections.

Wiring

Use the diagram below when making connections between the companion module, associated breakers, and load(s). Additional wiring diagrams are available in the [Savant Panelized Lighting Deployment Guide](#) available on the [Savant Community](#).



Circuit Test Instructions

Use the instructions below to test the relay companion modules. The setup requires:

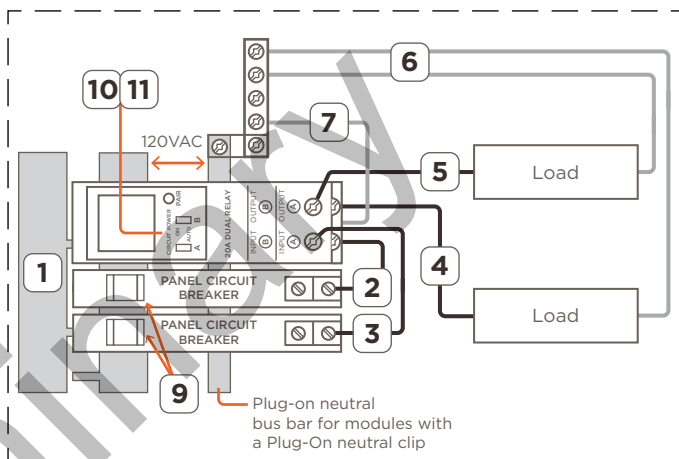
- 20 Amp Dual Relay Companion Module.
- (2) loads (20 amps max for each).
- (2) 20 amp circuit breakers.
- Breaker test panel. The type of companion module determines the type of breaker panel (plug-on neutral or not).
- 120V AC source



IMPORTANT!

- When making connections, observe all general electrical best practices including local wire sizing guidelines.
- The GPM-QP2R20120-21 and GPM-Q2R20120-21 Companion Modules can accept up to a #12 AWG wire. See the **Branch Circuit Minimum Size of Conductors** table on the previous page for wire sizing information.

1. Plug the two 20 amp feeder circuit breakers and one 20 amp Dual Relay Companion Module into the circuit breaker test panel.
2. Connect the output from one of the circuit breakers to Input A on the companion module.
3. Connect the output from the remaining circuit breaker to Input B on the companion module.
4. Connect a load to Output A.
5. Connect a second load to Output B.
6. Connect the unused side of each load to the neutral bus bar in the breaker panel.
7. On companion modules that contain a neutral wire, connect the neutral wire to the neutral bar.
8. Apply power to the breaker panel (not shown in diagram).
9. Toggle the 20 amp feeder breakers to On.
10. To test, toggle the CIRCUIT POWER switches A and B to ON and verify both loads switch On.
11. Toggle the CIRCUIT POWER switches to AUTO and verify the loads switch Off



Additional Documentation

Further information is available in the documents listed below and can be accessed via the [Savant Customer Community](#).

- Panel Bridge Controller with PoE (PBC-P1000) QRG
- Savant Panelized Lighting Deployment Guide

Preliminary