

PP5 SSA Relay Pack

POWER / RELAY PACK Family Instruction

READ AND FOLLOW ALL SAFETY INSTRUCTIONS! SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION

RATINGS

Input Ratings 120-277VAC, 37.3mA @ 120VAC and 21.2mA @ 277VAC, 2.55W **Electrical**

Short circuit Current Rating (SCCR) 10kA

Maximum Load 120VAC, 800W, 6.7A Tungsten, Standard Ballast, Electronic Ballast

277VAC, 1200W, 4.3A Tungsten, Standard Ballast, Electronic Ballast

Motor Load 1/2 HP

Dimming Load Sinks 80mA; 0-10VDC dimmable ballasts or LED drivers

"D" 0-10V leads through chase nipple Class 1 or 2,

"DS" 0-10V leads side output Class 2

Minimum Load None

Mechanical Mounting 1/2" Knockout (7/8" hole)

Connection Wire Leads and Low Voltage Connector

Environmental Warrantied Operating Temperature -10°C to 50°C

Standards/ Ratings RoHS, UL 916, UL 924 (optional), FCC / IC

Contains FCC ID: 2ADCB-BMODIT Contains IC: 6715C-BMODIT **Acuity Brands Lighting Inc.**

In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the radiator shall not be less than 20cm during normal operation.

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.

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference 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. However, there is no quarantee 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:

IMPORTANT SAFEGUARDS

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED INCLUDING THE FOLLOWING:

- READ AND FOLLOW ALL SAFTEY INSTRUCTIONS
- DO NOT USE OUTDOORS
- SAVE THESE INSTRUCTIONS
- DO NOT USE THIS EQUIPMENT FOR OTHER THAN ITS INTENDED USE
- DO NOT MOUNT NEAR GAS OR ELECTRIC HEATERS
- EQUIPMENT SHOULD BE MOUNTED IN LOCATIONS AND AT HEIGHTS WHERE IT WILL NOT READILY BE SUBJECTED TO TAMPERING BY UNAUTHORIZED PERSONNEL
- THE USE OF ACCESSORY EQUIPMENT NOT RECOMMENDED BY THE MANUFACTURER MAY CAUSE AN UNSAFE CONDITION.

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Security Brands.



TITLE 20/24

WARRANTY

5-year limited warranty.

Full warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx Note: Specifications subject to change without notice.

Actual performance may differ as a result of end-user environment and application.

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- · Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- · Installation and service should be performed by a qualified licensed electrician.
- Maintenance should be performed by qualified person(s) familiar with the products' construction & operation & any hazards involved. Regular maintenance programs recommended.
- To be installed to a circuit with overvoltage control to Overvoltage category Cat.III or less, minimum suppression rating 6.0 kV for a 600 V ac rms system voltage
- DO NOT INSTALL DAMAGED PRODUCT! This product has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.



CAUTION: RISK OF PRODUCT DAMAGE

Expanding the boundaries of lighting"

- $\sqrt{}$ Electrostatic Discharge (ESD): ESD can damage product(s). Personal grounding equipment should be worn during all installation or servicing of the unit.
- Do not touch individual electrical components, as this can cause ESD and affect product performance.
- Do not stretch or use cable sets that are too short or are of insufficient length.
- Do not tamper with contacts.
- Do not modify the product.
- Do not change or alter internal wiring or installation circuitry. Do not use product for anything other than its intended use.

WARNING - RISK OF ELECTRIC SHOCK

- √ Disconnect or turn off power before installation or servicing Verify that supply voltage is correct by comparing it with the product information.
- √ Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- √ All wiring connections should be capped with UL approved recognized wire connectors.
- √ All unused connector openings must be capped

WARNING - RISK OF BURN or FIRE

- Do not exceed maximum wattage, ratings, or published operation conditions of product.
- Follow all manufacturer's warnings, recommendations and restrictions to ensure proper operation of product.

CAUTION - RISK OF INJURY

Wear gloves and safety glasses at all times when installing, servicing or performing maintenance



PP5 SSA Relay Pack

POWER/RELAY PACK **FAMILY INSTRUCTIONS**



OVERVIEW

The SensorSwitch(TM) PP5 SSA Series of devices provides on / off switching and 0-10V dimming for light luminaires. When installed as part of an SensorSwitch AIR lighting control system, the PP5 SSA will respond to wireless commands from other devices.

INSTALLATION INSTRUCTIONS

REQUIRED TOOLS & SUPPLIES

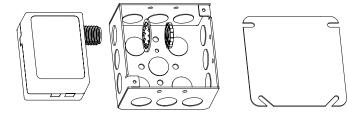
- Electical Pliers
- Screwdriver
- Wire nuts
- Electrical box
- 2mm Precision Slotted Screwdriver, used for 24V terminals only

INSTALLATION STEPS

- Turn power off at circuit breaker.
- Install electrical box in accordance with state, local and national electrical codes and requirements.
- Remove knock-out from side of electrical box. 3.
- Remove retaining nut and washer from power pack mounting nipple. **NOTE:** Standard device includes a wireless antenna internal to the device. This restricts it from being installed inside a metal enclosure.
- Feed Class 1* wires and mounting nipple through knockout hole.
- Install washer and thread retaining nut onto nipple, and hand-tighten to wall of electrical box, then apply additional quarter-turn tightening with pliers.
- Using wire nuts, connect line and low voltage wires as shown in the applicable wiring diagram in accordance to state, local and national codes and requirements.
- "24V" models only: Connect +/- DC power leads from CMS SSA sensor(s) to 24VDC terminal block on side of the enclosure, if needed. See diagrams below for additional details.
- Install electrical box cover plate before restoring power.

Warning - The PP5 SSA support app-less pairing when placed on the load side of a SSA switch. Do not use this wiring practice when connecting a motor load.





Recommended: To simplify installation, install a PP5 SSA per electrical box.

*DS option provides Class 2 low voltage dimming wires on side of enclosure opposite from chase nipple.

INITIAL OPERATION

Upon power-up, the relay closes to energize the load, and the dimming output defaults to 100% light. The device remains in this state until paired, with the LED blinking approximately every 5 to 6 seconds while unpaired.

For added convenience, based on your wiring situation, there are multiple ways to pair PP5 SSA:

- 1. When the PP5 SSA is placed on the load side of a SensorSwitch AIR wall switch, insert the tool inside the switch. Press and hold button for 6-seconds to start auto-pairing.
- 2. When the PP5 SSA is on a different circuit, it can be accepted into a group via join / accept pairing technique. Here are the steps and LED visual indicators:
 - a) Press and hold the button for approximately 6-seconds (indicated by a rapid flash) to start "active configuration mode".
 - b) Visually, the LED in active configuration mode will start with the rapid flash followed by a double blink every second. This mode will last for 10-seconds.
 - c) Before active configuration timeout, press the button 6-times to place device in join mode. Join mode will last for 10-minutes or until it is accepted into a paired group.
 - d) On an existing device within the group, place that device in accept mode. Repeat steps a and b as shown above; however, press the button 7-times to start accept mode.
 - e) WARNING: When using jin / accept pairing ensure other spaces are not being paired at the same time; otherwise cross pairing may occur.
- 3. When pairing the PP5 SSA using the Clarity+ app, use the intuitive app workflow. For more information, see Clarity+ Quick Start Guide.

Note 1 - After pairing, the LED will remain illuminated.

For Emergency Variant ER

The PP5 SSA ER is a UL924 listed device that is powered on the Emergency circuit and provides full light output (at user-defined high-trim level) in absence of AC voltage on Normal Power sense leads. Normal operation of the control device is restored when AC line voltage is restored to the normal power sensing leads.

- Note 2 During emergency operation, the LED will not be illuminated, indicating that normal power has been disrupted.
- Note 3 After normal power is restored, the LED will return to its previous illuminated state.
- Note 4 A UL 924-rated test switch, required to simulate normal interruption, is not included and must be provided separately. Please refer to wiring details as shown.

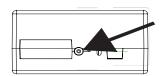
For further troubleshooting guidance, please contact the Controls Technical Support Team 1(800)-535-2465

sensorswitch PP5 SSA Relay Pack

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USER BUTTON - This button can be used for pairing purposes.



User Button, also functions as LED indicator.

Setting Codes and LED Visual Feedback

Out-of-Box: The LED will blink once every 5 to 6-seconds. This indicate the device is unpaired. Before setting code entry, the device must first be placed in active configuration

mode. Action: Press and hold the button for approximately 6-seconds (duration 10-minutes or until setting code has been entered).

• LED: Rapid flash followed by double blink every second.

Setting Code 6 = Join

Places an unpaired device into "Join" mode. This will allow the device to join an existing group or the initial formation of a new group (Duration 10-minutes). LED Visual Feedback - Constant LED blink.

Setting Code 7 = Accept

Places an unpaired device into "Accept" mode. This will allow the device to accept any SSA devices placed in "Join mode"; thereby creating a newly paired group. LED Visual Feedback - Constant LED blink.

Setting Code 10 = Remove Local Device

This option will remove the local device from the group. If it is the accepting device (configurator / GM), the entire group will dissolve.

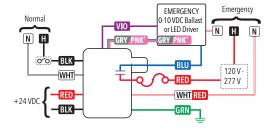
After LED blinks, press the button to choose: 1 = Do Nothing <or> 2 = Remove Device

LED Visual Feedback - After selection choice (1 or 2), the LED will blink back the selection 5-times confirming entry.

WIRING (DO NOT WIRE HOT)

PP5 SSA DS 24V EFP LOAD WHT GRN

PP5 SSA D/DS 24V ER EFP



Legend

BLK - Unswitched Hot 120-277V RED - 120-277VAC Emergency Hot** WHT/RED - Emergency Neutral

BLK - Unswitched Norm. Hot**

WHT - Norm. Neutral**

BLU - Switched Output

VIO - 0-10V Dim (+)

PNK* - 0-10V Com (-)

RED (Terminal) - +24VDC BLK (Terminal) - DC Com

GRN - Ground

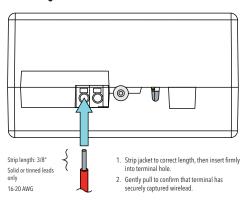
oo - Test Switch

(by others)

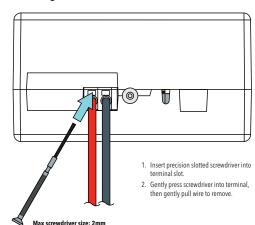
*0-10V Dimming Common from luminaire may be pink or as otherwise indica section 410.69 of the 2020 NEC

**Emergency on ER devices

USING 24 VDC TERMINALS (24V models only) Connecting Wire to 24V Terminals



Removing Wire from 24V Terminals



Do NOT wire while connected to live power, damage may occur.

State	LED Visual Feedback
Unpaired	Blink approx. every 5 to 6 seconds
Active configuration mode	Double blink every second (10-sec)
Join Mode	Blink every second until paired
Accept Mode	Blink every second until paired
Remove Local Device	Blink confirmation 5 times
Paired	LED On
During Emergency Event	LED Off
Normal Restored	
(after emergency event)	Return to unpaired or paired state