

PS-212 | PS-224

Operation and Specification

SUREN

Multi-Functional Power Pack

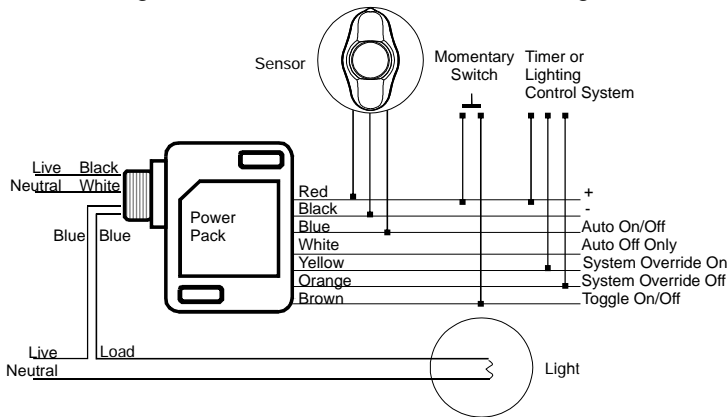
The PS-212 / PS-224 power pack supplies DC power to low voltage occupancy sensors and receives input from sensors, switches, timers, control panels or building management systems to control a wide range of load types, including lighting or HVAC devices.

It is rich in feature and provides scalability in lighting control by enabling many sensors and/or switches to be connected with one or more power packs to control lighting over a wider area.

The power pack can be mounted inside or external to the junction box.

Operation

The PS-212 / PS-224 can be controlled by applying the voltage from the red wire to the following wires:



[Blue] Automatically turn light on/off based upon presence detected by an occupancy sensor.

[White] Automatically turn light off only when presence is no longer detected.

[Yellow] Holds light on. Automatic switching by the occupancy sensor is resumed when control is released.

[Orange] Holds light off. Automatic switching by the occupancy sensor is resumed when control is released.

[Brown] Toggles light on/off using one or many momentary switches. This feature can be used with/without an occupancy sensor. When used with an occupancy sensor, the light remains in the selected state (on/off) while presence is detected. The power pack reverts to automatic mode after the room becomes vacant. The power pack can be used to provide multi-location manual switching.



Specification

Power Input:
85 – 277 V AC

Power Output:
85 – 277 V AC

Maximum Load:
20 A: LED, Ballast, Incandescent
4 A: Electronic Ballast
6 A: Motor

Power Supply to the Sensor:
PS-212: 12 V DC, 250 mA max
PS-224: 24 V DC, 110 mA max

Control Signal Input:
PS-212: 10~15 V DC
PS-224: 18~28 V DC

Housing Material:
Flame-retardant ABS

Operating Temperature:
-40° to 55° C

Relative Humidity:
0 – 95% non-condensing

Dimension:
79mm x 76mm x 38.5mm

Approvals: 

SUREN LIMITED WARRANTY

SUREN Systems, Ltd., of Fo Tan, Shatin, Hong Kong, warrants its products to be in conformance with its own plans and specifications and to be free from defects in materials and workmanship under normal use and service for twelve months from the date of original purchase. Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor, any part which is proved not in compliance with Seller's specifications or proves defective in materials or workmanship under normal use and service. Seller shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than Seller. For warranty service, return transportation prepaid, to SUREN Systems, Ltd., Unit 15, 12/F, Block B, Wah Sang Industrial Building, 14-18 Wong Chuk Yeung Street, Fo Tan, Shatin, Hong Kong. Seller has no obligation to attend the buyer's location to retrieve the goods or make repairs on site.

There are no warranties, expressed or implied, of merchantability, or fitness for a particular purpose or otherwise, which extend beyond the description on the face hereof. In no case shall seller be liable to anyone for any consequential or incidental damages for breach of this or any other warranty, express or implied, or upon any other basis of liability whatsoever, even if the loss or damage is caused by its own negligence or

fault.

Seller does not represent that the products it sells may not be compromised or circumvented; that the products will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the products will in all cases provide adequate warning or protection. Customer understands that a properly installed and maintained alarm system may only reduce the risk of a burglary, robbery, or fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result.

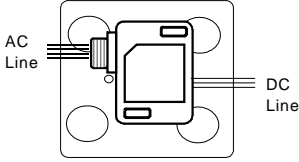
Consequently, seller shall have no liability for any personal injury; property damage or other loss based on a claim the product failed to give any warning. However, if seller is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, seller's maximum liability shall not in any case exceed the purchase price of the product, which shall be the complete and exclusive remedy against seller.

This warranty replaces any previous warranties and is the only warranty made by Seller on this product. No increase or alteration, written or verbal, of the obligations of this Limited Warranty is authorized.

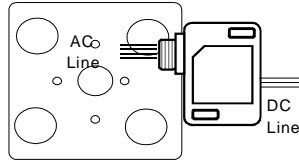
Caution: This product must be installed by a qualified electrician. Use approved wiring connectors. Ensure power supply has been turned off before installation.

Mounting Option:

Inside a Junction Box



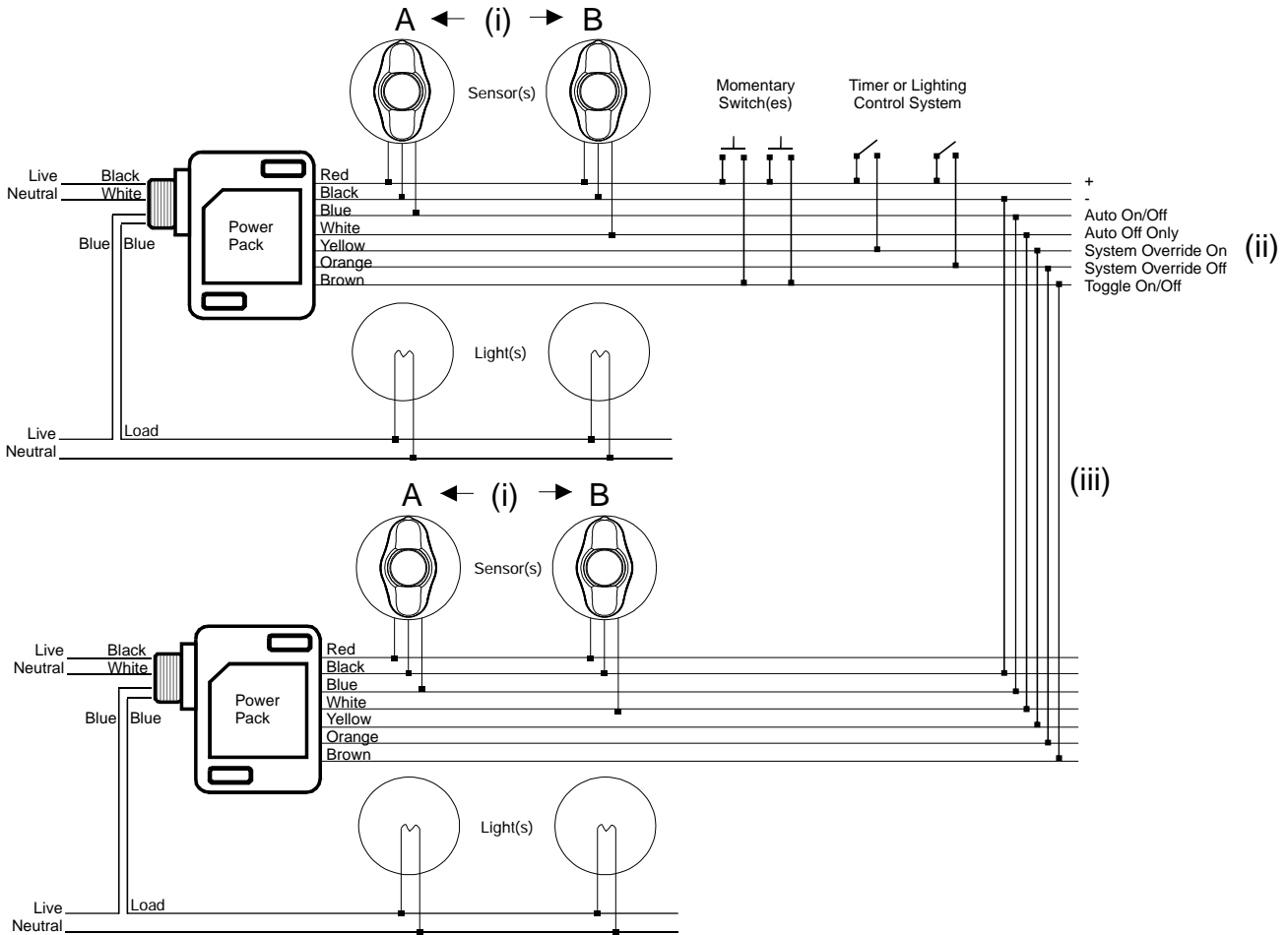
Outside a Junction Box



Note: A 5cm EMT nipple could be used for the external mount. Ensure the wires are tightly fastened to the connectors and the wiring is not exposed.

Wiring:

The wiring diagram shows two power packs connected together to control lighting. Adjust the number of in device according to your requirement. Refer to Maximum Load and Power Supply to the Sensor in the Specification section to determine the number of lights and sensors that a power pack could support.



- Note:
- Occupancy sensors should only be implemented based upon Auto On/Off function [Blue Wire] or Auto Off Only function [White Wire], not both
 - Where there are conflicts in the controls, the order of priority applied (high to low) include: Toggle On/Off [Brown Wire] >> System Override Off [Orange Wire] >> System Override On [Yellow Wire] >> Auto Off Only [White Wire] or Auto On/Off [Blue Wire]
 - Power packs can be added by connecting the control and black (-) wires of each power pack together. Do not connect the red (+) wires

Implementation Options:

Automatic Switching On/Off: Connect occupancy sensor A to the power pack as shown in the wiring diagram

Automatic Switching with Manual Override: Connect occupancy sensor A and momentary switch to the power pack. This function may be required to turn light off when the room is occupied during presentations. The light will remain in the selected state while presence is detected. The power pack reverts to automatic mode when presence is no longer detected

Manual Switching with Automatic Off Only: Connect occupancy sensor B and momentary switch to the power pack

System Override On/Off: Connect the Normal Open relay from a timer or a lighting control system to the power pack. Closing the relay enforces the override.

Multi-Location Switching: Connect the momentary switch to the power pack. Connection of an occupancy sensor is not mandatory