

Project		Catalog #		Type	
Prepared by		Notes		Date	



Available for 120, 277 & 347 VAC operation

# Greengate

## SP15 & SP20

### Heavy Duty Switchpacks

Provide 15 VDC operating voltage to all low voltage, 15 VDC occupancy sensors and daylighting controllers

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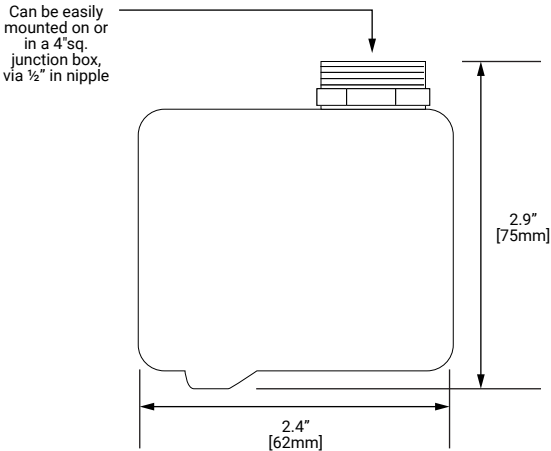
### Product Certification



### Top Product Features

- Replaces separate transformers and relays
- Zero-crossing circuit provides increased durability, especially with today’s high inrush loads
- Capable of switching up to 20 Amps
- Suitable for Plenum use
- Rated for Ballast, Tungsten and Motor Loads
- LED ready

### Dimensional and Mounting Details



 additional product diagrams

## Order Information

Catalog Number

Catalog Number	Ratings	(LED) Ballast	Tungsten	Motor (HP)	Output
SP20-MV	120/277 VAC, 50/60 Hz	20A	15A, 120V	1HP-120V, 2HP-250V	15 VDC, 125mA
SP15-347	347 VAC, 50/60 Hz	15A	NR	NR	15 VDC, 125mA

## Product Specifications

## Key Features

Switchpacks provide 15 VDC operating voltage to all low voltage, 15 VDC occupancy sensors and daylighting controllers. A single switchpack can provide power for up to five sensors. Up to ten switchpacks can be connected to one sensor for control of multiple circuits. Isolated contacts may also be used to control HVAC, contactors, motors, etc.

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## Mechanical

**Size:** 2.94"H x 2.44"W x 1.69"D (74.67mm x 61.97mm x 42.92mm)

## Environment:

- **Operating temperature:** 32°F - 104°F (0°C - 40°C)
- **Relative humidity operating:** Less than 95%, non-condensing
- For indoor use only

**Mounting:** Mounts to the side of a 4" square box via 1/2" knockout

## Housing:

- Medium impact injection molded housing.
- ABS resin complies with UL 94V-0. Plenum rated for external junction box mounting, with Teflon coated leads

## Electrical

## Input:

- (120/277 VAC-SP20-MV), (347 VAC-SP15-347), 50/60 Hz operation
- Contacts are isolated and may be used to control low voltage circuits

## Output:

- 15 VDC 125mA to operate up to five Greengate sensors

**Control:** Connecting the 22 AWG red and blue control leads to each other will close the relay contacts

**Load:** 1 HP 120-240 VAC; 2 HP 250 VAC

## Ballast compatibility:

- LED loads
- Magnetic and Electronic ballasts
- NOTE: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with the CFL and ballast manufacturer to determine effects of cycling

## Standards/Ratings

- UL Listed
- CSA Listed

## Warranty

Consult website for warranty information

## Description/Operation

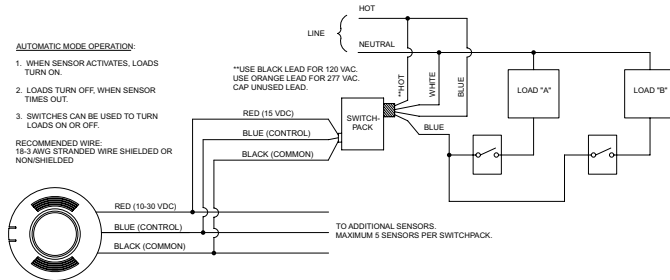
The switchpack has two main components: a transformer and one high current relay. The transformer has a primary line voltage input and a secondary low voltage output. The low voltage output, 15 VDC, provides operating power to connected low voltage Greengate occupancy sensors. When an occupancy sensor detects motion, it electrically closes an internal circuit, pulling up the control signal between the sensor and the switchpack. This signals the switchpack to close its high current relay, turning the connected load on.

## Applications

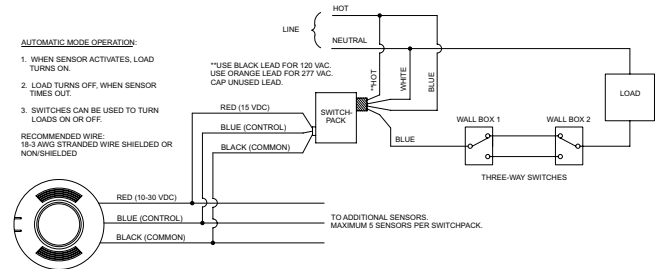
The switchpack is designed to work with low voltage sensors which require switchpacks. It cannot be used with sensors designed for use with any other low voltage relay systems. Consult sensor spec sheets for other sensor relay combinations.

## Wiring Diagrams

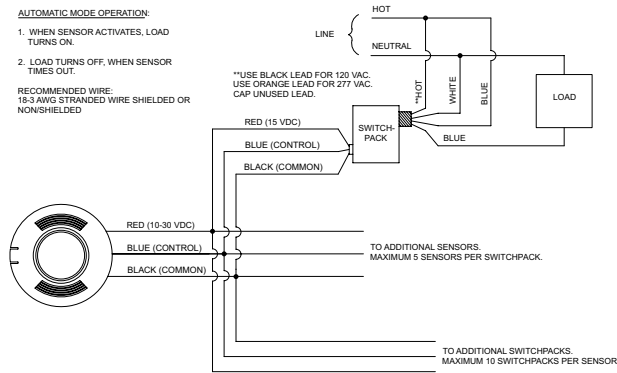
### A/B Switching



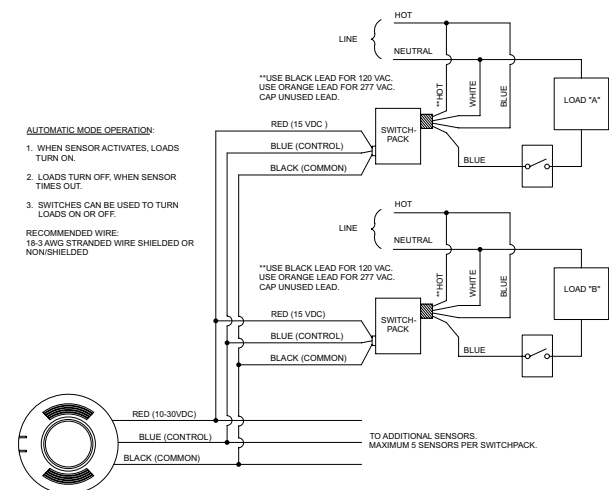
### Three Way Switching



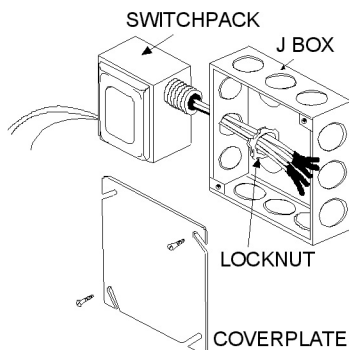
### Standard Configuration



### 2 Circuits, 1 Sensor



## Mounting



All connections are made via pigtails with twist-on wire connectors.

Connect either the orange or black supply lead to the power source, depending upon the power requirements. Cap the unused lead.