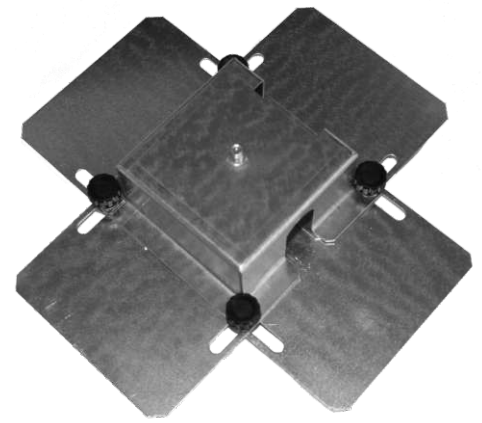


# Installation Instructions

## SpaceStation Occupancy Lighting Control System

Please Save These Instructions



## SpaceStation™



SpaceStation sensors can be configured to operate with any number of sensors and control any number of lighting circuits as one system for any sized room application.

### Index

- 1 Important Safeguards
- 2 Sensor Mounting
- 3 Sensor Adjustments
- 4 New Construction/Retrofit
- 5 Single Wiring
- 6 Multiple Wiring
- 7 Adjustable Remote Mounting (ARM)
- 8 Troubleshooting

### Limited Warranty

*All Concealite fixtures are tested and are guaranteed to be free from defective materials and workmanship for a period of three years from date of shipment under normal operations and proper use. Correction of all defects shall be by replacement or repair (at our discretion) and shall constitute fulfillment of all manufacturer's obligations. We will not allow any charge for labor, materials, etc. that does not have our written approval before the work is begun. Damage incurring in handling or in transit are not covered by this guarantee. Any other warranty, expressed or implied, is hereby void. Modifications to the product or failure to follow installation instructions will void the warranty.*



### Important Safeguards

Read and Follow All Safety Instructions

- ☑ Do not use outdoors.
- ☑ Do not let power supply cords touch hot surfaces.
- ☑ Do not mount units where they will be exposed to direct sunlight, radiators, gas or electric heaters. Prolonged exposure to temperatures exceeding 95 degrees Fahrenheit may reduce battery life and void warranty.
- ☑ Equipment should be mounted securely in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- ☑ The use of accessory equipment not recommended by the MANUFACTURER may cause an unsafe condition.
- ☑ The AC voltage rating of this equipment is specified on the product label. Do not connect equipment to any other voltage.
- ☑ Do not use this equipment for other than its intended purpose.
- ☑ Servicing of this equipment should be performed by qualified service personnel.

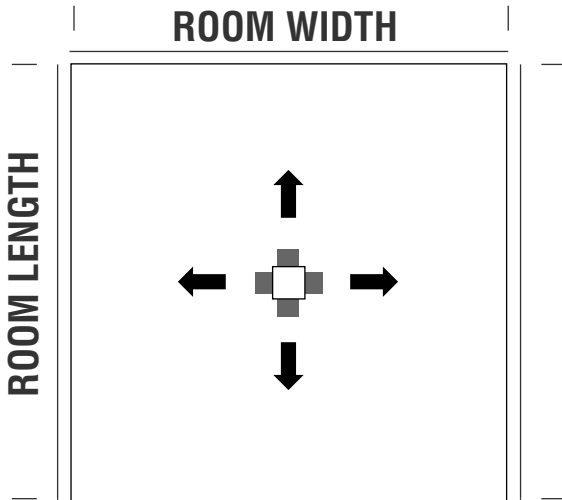
#### TECHNICAL DATA

<b>Model:</b>	SS2000
<b>Ac Supply Voltage:</b>	120/277 Volts (+/- 10%)
<b>Maximum Load:</b>	120v/400w 230v/1000w 277v/1200w Maximum Ballast Load
<b>Operating Voltage:</b>	50/60hz, 120-277v +/- 10%
<b>Switched Power:</b>	400w/1000w/1200w
<b>Standby Power:</b>	0.6w (standby), 1.2w (operation) 10 / 30 / 50 / 75 100%, Can Be Customized
<b>Hold Time:</b>	5s / 30s / 180s /300s /15min / 25min, Can Be Customized
<b>Daylight Threshold</b>	<b>OPTIONAL:</b> 20FC - 300FC Daylight / Twilight / Darkness, Can Be Customized
<b>Sensor Principle:</b>	Microwave Motion Detector
<b>Microwave Frequency:</b>	5.8 Ghz +/- 75mhz
<b>Microwave Power:</b>	<1mw
<b>Detection Range:</b>	Max. (O X H): 8m X 10m
<b>Detection Angle:</b>	02° 150°
<b>Mounting Height:</b>	0.5 - 100m
<b>Operating Temperature:</b>	-35°c ~ +70°c
<b>IP Rating:</b>	IP 20 (mounting inside a lamp); IP 65 (mounting in special box)

## INSTALLATION | Sensor Mounting



**WARNING:** to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials. Failure to follow published installation instructions or any modifications to the product may damage the unit and will void the warranty.

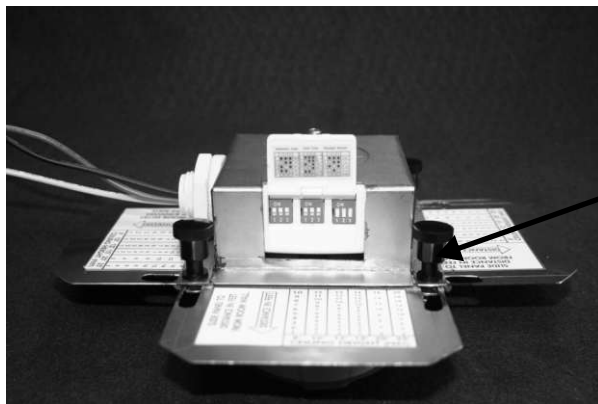


Adjustable Range Control Panels (RCP) controls exact cut off range of each room

### Area Sensitivity Adjustment (SpaceStation Centered in Room)

**Note:** Maximum 60' Height Provides Maximum Range Coverage to 50 x 50 Feet

Ceiling Height	Room Area Range Coverage at Sensitivity % Setting				
	10%	35%	50%	75%	100%
8 Feet	7'	8'	9'	12'	20'
	x	x	x	x	x
	7'	8'	9'	12'	20'
10 Feet	9'	10'	13'	17'	22'
	x	x	x	x	x
	9'	10'	13'	17'	22'
12 Feet	8'	9'	12'	20'	25'
	x	x	x	x	x
	8'	9'	12'	20'	25'

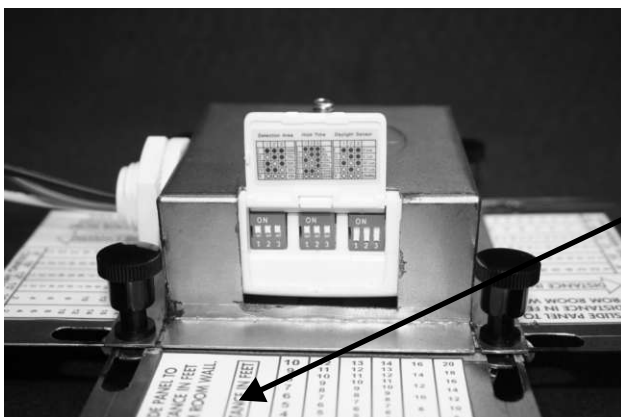


Loosen Front Knobs to Slide Panels

### Step 1: Sensor Mounting

**A.** Determine mounting location within room or area to be covered. **Center the sensor within the center of the room/area when possible.** Loosen front knobs.

**B.** Slide to adjust the four (4) room control panels to the distance indicated to match the distance in feet between the sensor and each of the room wall (to allow activation from any movement within that room area).

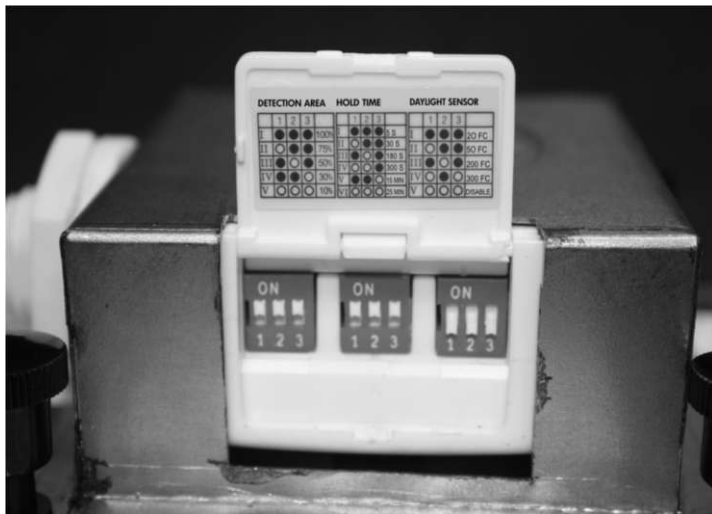


Slide All Four Panels to Match the Distance in Feet Between Sensor and Room Walls

## INSTALLATION | Sensor Adjustments



**WARNING:** to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials. Failure to follow published installation instructions or any modifications to the product may damage the unit and will void the warranty.



Sensor Adjustments

### STEP 2: SENSOR ADJUSTMENTS

#### A. Detection Area

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely for each specific application.

#### B. Hold Time

Hold-time means the time period you would like to keep the lamp on after the person has left the detected area.

#### C. Daylight Sensor

(Remote Option Only)

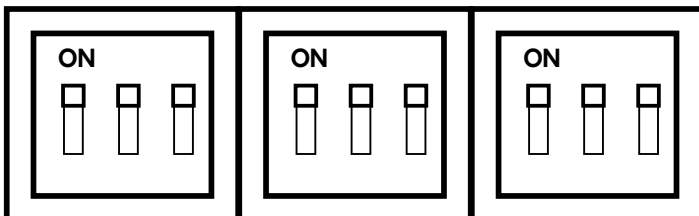
The sensor contains a daylight sensor in order to allow a function only below a defined brightness threshold.

### BRIGHTNESS THRESHOLD SETUP –

**DAYLIGHT:** The lamp works always, even during daylight.

**Note:** Three switches should be put in OFF position when remote day light sensor is not installed.

DETECTION AREA				HOLD TIME				DAYLIGHT SENSOR						
	1	2	3		1	2	3		1	2	3			
I	●	●	●	100%	I	●	●	●	5 S	I	●	●	●	20 FC
II	○	●	●	75%	II	○	●	●	30 S	II	○	●	●	50 FC
III	●	○	●	50%	III	●	○	●	180 S	III	●	○	●	200 FC
IV	●	●	○	30%	IV	○	○	●	300 S	IV	○	●	○	300 FC
V	○	○	○	10%	V	●	●	○	15 MIN	V	○	○	○	DISABLE
					VI	○	○	○	25 MIN					



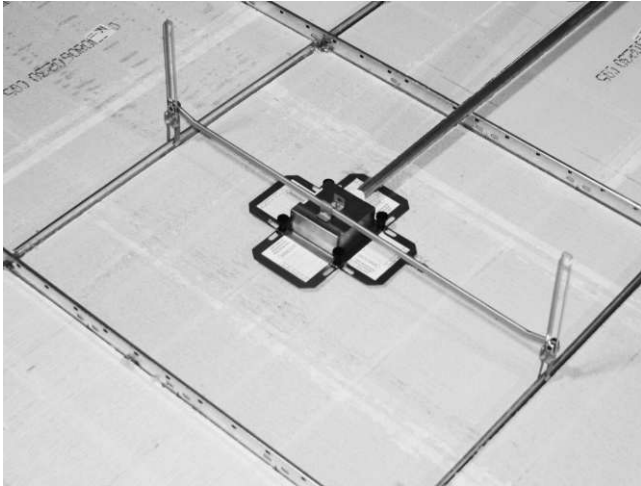
## INSTALLATION | New Construction & Retrofit



**WARNING:** to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials. Failure to follow published installation instructions or any modifications to the product may damage the unit and will void the warranty.

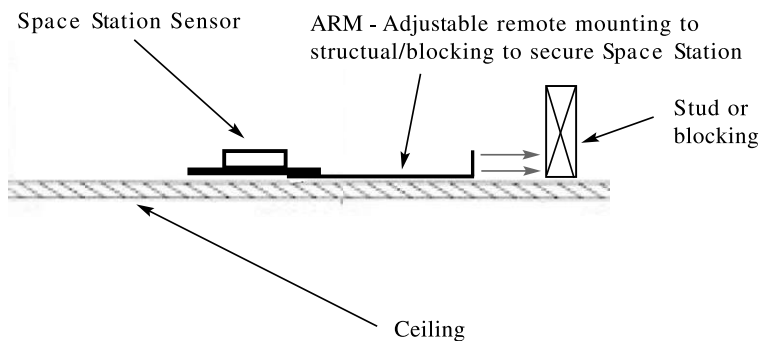
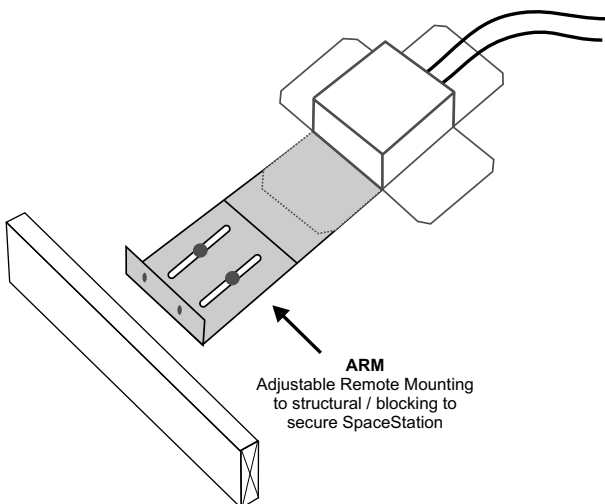
### Accessible Ceiling Installation: T-Bar Option - Suspended Accessible Ceilings

Note: Use optional T-bar bracket for support mounting to inverted T-grid lay in suspended ceilings.



### Inaccessible Ceiling Installation: ARM Option - Gypsum Board and Other Inaccessible Ceilings

Note: Use Optional arm bracket for support mounting to structural blocking or stud also for retrofit installation through existing ceiling hole (see page 8 also).



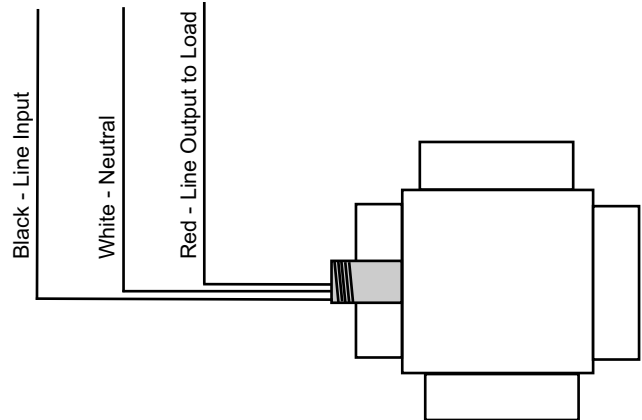
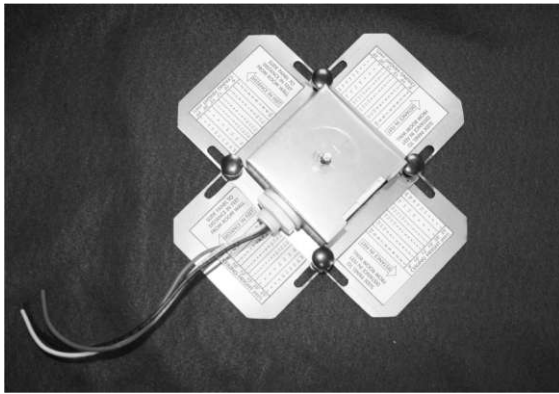
## INSTALLATION | Single Wiring Control Wiring Diagram



**WARNING:** to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials. Failure to follow published installation instructions or any modifications to the product may damage the unit and will void the warranty.

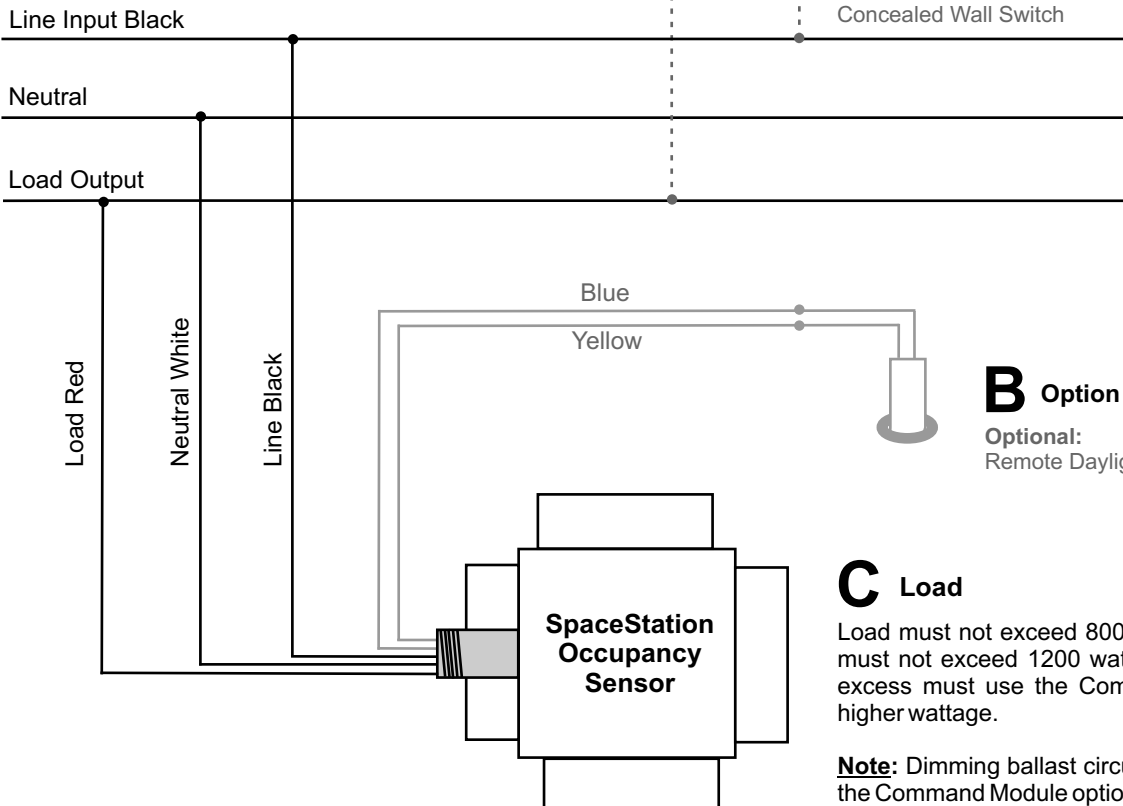
### STEP #3: Provide Power Connections

Branch circuit: building power only connections. Provide 120 VAC or 277 VAC uninterrupted power connections to terminate within the ceiling mounted bracket junction box.



### Single Lighting Circuit Control Wiring Diagram

A – Optional B – Optional C – Load Information



#### **A** Option (OR)

**Optional:**  
Override FDP  
Concealed Wall Switch

#### **B** Option (RDS)

**Optional:**  
Remote Daylight Sensor

#### **C** Load

Load must not exceed 800 watts @ 120 VAC. Load must not exceed 1200 watts @ 277 VAC. Loads in excess must use the Command Module option for higher wattage.

**Note:** Dimming ballast circuits must be controlled by the Command Module option.

## INSTALLATION | Multiple Wiring Control Wiring Diagram

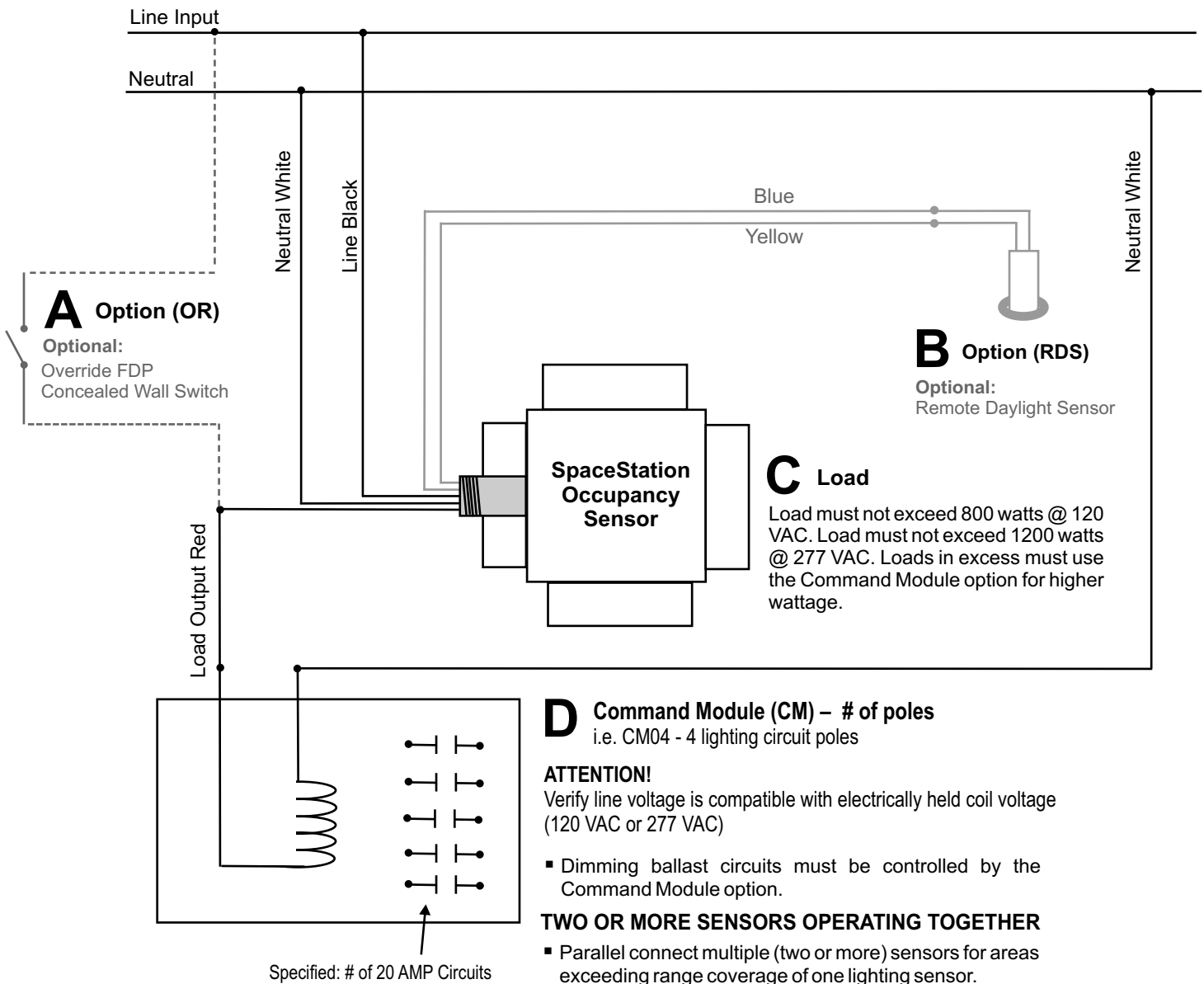


**WARNING:** to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials. Failure to follow published installation instructions or any modifications to the product may damage the unit and will void the warranty.

### Multiple Lighting Circuit Control Wiring Diagram

\*Required for two or more circuits

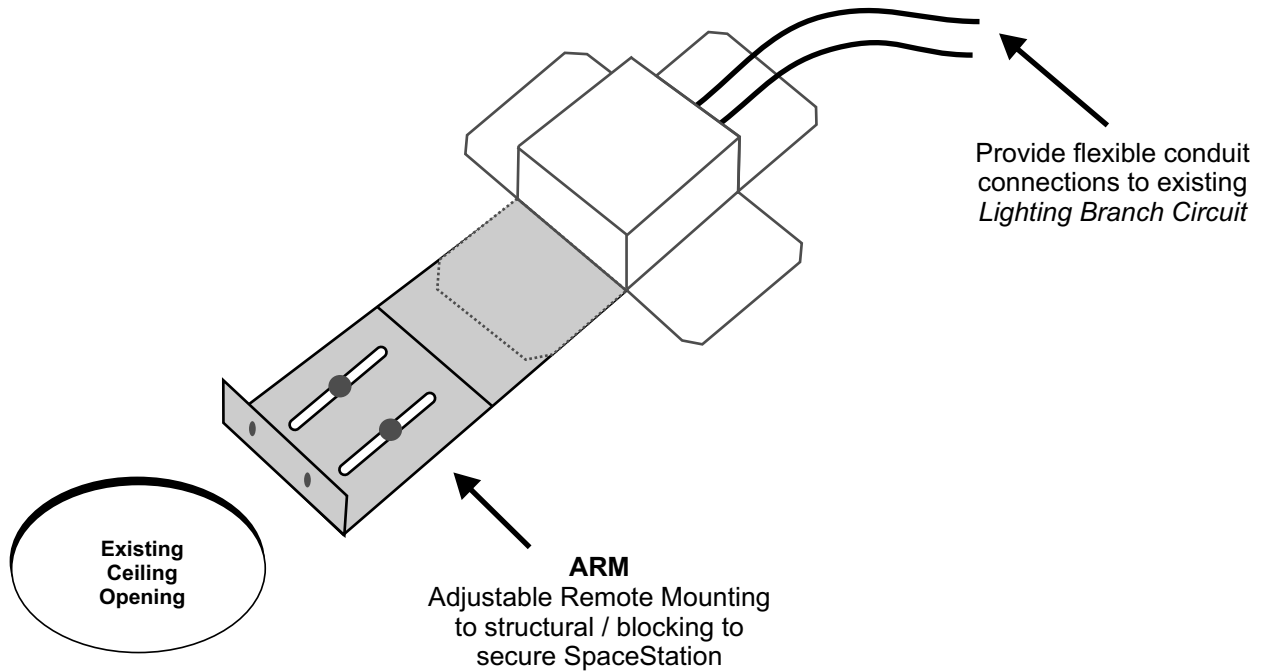
A – Optional B – Optional C – Load Information D – Command Module Information



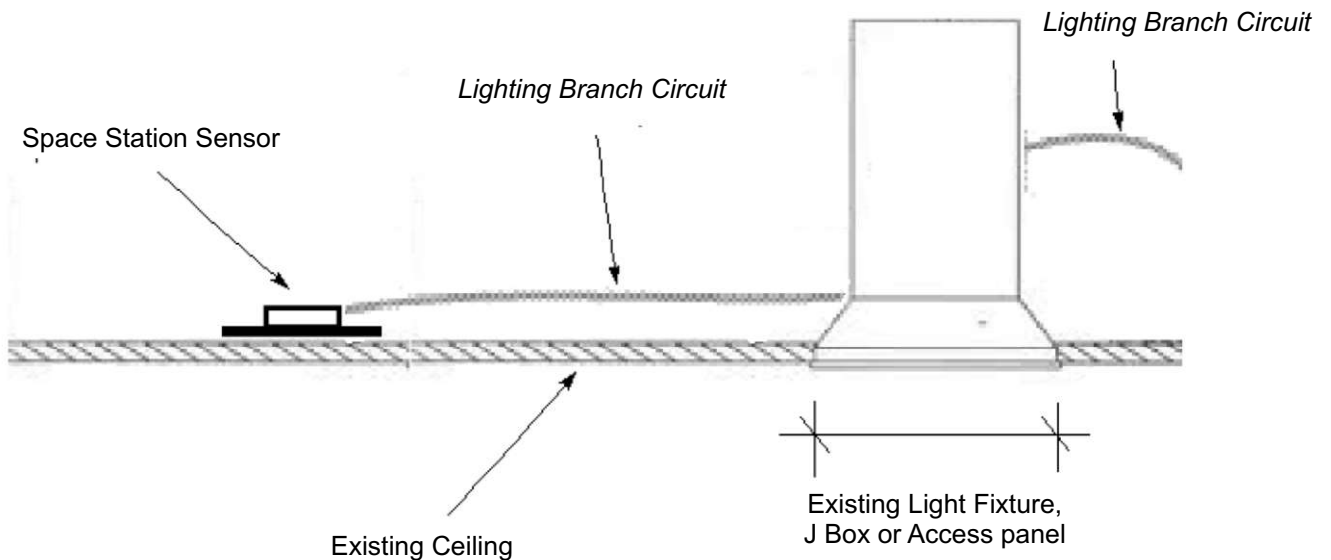
## INSTALLATION | Adjustable Remote Mounting (ARM)

**⚡ WARNING:** to avoid fire, shock/electrocution, or injury – **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials. Failure to follow published installation instructions or any modifications to the product may damage the unit and will void the warranty.

**ARM** – Adjustable Remote Mounting



The minimum size opening is 4 inches in diameter for insertion of SpaceStation into an inaccessible ceiling opening



**Note:** Dimming ballast circuits must be controlled by the Command Module option.

# Troubleshooting

## Time Delay

### IMPORTANT START-UP INFORMATION

The first time the sensor is powered-up the load will flash ON then OFF once, then there will be 10 seconds while the sensor warms-up.

The SpaceStation automatically turns OFF the load after the coverage area has been vacant for the amount of time set in the time delay. The minimum setting is 10 seconds, maximum is 30 minutes.

### TROUBLESHOOTING

Quick Test:

Turn the time delay to minimum.

Move out of the sensor's view. Lights should turn OFF after 10 seconds.

Move into the sensor's view. The lights should turn ON.

### Lights do not turn OFF:

1. If there is no motion in the set coverage area, reduce the sensitivity varying room panel adjusted positions.
2. Verify room panel adjustment positions.
3. Verify time delay and that there is no movement within the sensor's view for that time period.

### FCC NOTICE

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.

### Warranty

All Concealite fixtures are tested and are guaranteed to be free from defective materials and workmanship for a period of three years from date of shipment under normal operations and proper use. Correction of all defects shall be by replacement or repair (at our option) and shall constitute fulfillment of all manufacturer's obligations. We will not allow any charge for labor, materials, etc that does not have our written approval before the work is begun. Damage incurring in handling or in transit are not covered by this guarantee. Any other warranty, expressed or implied, is hereby void. Modifications or changes to the product or failure to follow installation instructions will void the warranty.