

**CONTRACTOR SERIES LINEAR STRIP**

Client:  
Project:  
Type:  
Quantity:

**CONSTRUCTION**

Slim compact design channel formed from cold-rolled 22-gauge steel with matte White finish. 1/2" knockout made on end cap for sensor or surface conduit mount.

**OPTICS**

End-to-end U-shaped frosted polycarbonate (PC) lens standard.

**ELECTRICAL**

Delivered 130lm/W efficacy LEDs offer 80+ color rendering index (CRI).  
L70 >100,000 hours expected life @50°C ambient.  
L70 >130,000 hours expected life @25°C ambient.  
-40°C up to 50°C (-40°F up to 122°F) maximum operating temperature.  
Selectable lumen and CCT technology allows easy field-adjustable capability.  
Luminaire ships with maximum output and 4000K CCT setting.  
Driver operates at 120-277V input, 0-10V dimmable driver, dimmable down to 10%.  
Optional 10kV surge protector.

**MOUNTING**

Designed for direct wiring, surface mountable underneath electrical box.  
5" OD beauty ring included.

**SENSORS (OPTIONAL)**

SENSOR-819-O1 End mount on/off motion sensor with lowbay lens.  
SENSOR-819-D1 End mount on/off/dimming and photocell sensor with lowbay lens.  
SENSOR-BLE-819 End mount ALS CONTROL bluetooth on/off motion sensor lowbay lens.

**STANDARD FINISH**

Semi-gloss White finish, suitable for damp location.

**CERTIFICATION**

Damp location label standard.  
All luminaires are built to UL1598 standards and bear appropriate cULus labels.  
For Emergency application, equipment with UL924 certified battery packs.  
DLC® Standard (DesignLights Consortium Qualified).

**WARRANTY**

5 year warranty, see Limited Warranty for additional information.



**CONTRACTOR SERIES LINEAR STRIP**

**ORDER INFORMATION** **EXAMPLE: CSL 4SMC WH UD**

Fixture	Series	Size	Finish	Input
	<b>CSL</b>		<b>WH</b>	<b>UD</b>

Accessories  
Options

**A SERIES**

<b>CSL</b>	Contractor Series - Linear Strip
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**B SIZE**

Code	Size	Power	CCT
<b>4SMC</b>	4-Foot	34W / 38W / 45W	3500K / 4000K / 5000K
<b>8SMC</b>	8-Foot	65W / 75W / 90W	3500K / 4000K / 5000K

**C FINISH**

<b>WH</b>	White
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**D INPUT**

<b>UD</b>	120-277V, 0-10V Dimmable
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**E ACCESSORIES/OPTIONS**

<b>BAA</b>	Assembled in America, compliant with BAA (COTS)
<b>90CRI</b>	90CRI
<b>-C</b>	3/8" x 6FT Steel Flex 5-18AWG Solid 6' leads BLK/WH/GRN/PUR/PNK & 3/8" Die Cast Screw-In Locknut Connectors
<b>SURGE-LSP4-U</b>	10kV Inline Surge Protection for Universal Input / <b>U</b> : 120-277V
<b>MOUNT-HIGHBAY-CK</b>	Aircraft Cable Hanger Kit (Pair)
<b>WIREGUARD-CSL</b>	Wireguard for CSL
<b>SENSOR-819-O1*</b>	End mount on/off motion sensor with lowbay lens
<b>SENSOR-819-D1*</b>	End Mount On/Off/Dimming and Photocell Sensor With Lowbay Lens
<b>REMOTE-RC100</b>	Handheld Remote Commissioning Tool for SENSOR-819-D1/D2 Only
<b>SENSOR-BLE-819-L1*</b>	End Mount PIR Bluetooth Daylight Harvesting Sensor (ALS Control Mobile App) / <b>L1</b> : up to 20FT
<b>EMB-8W-B**</b>	90-Minute Self-Diagnostic Emergency Battery 8W 100-347VAC Input 170VDC Output
<b>GTD-ESRLUD***</b>	Emergency Battery Generator Transfer Device 120-277 VAC Input
<b>-CORD</b>	18-3 300V 6 Foot Cord
<b>-PLUG</b>	18-3 300V 6 Foot and 3 Prong Plug

\*see page 5 for sensor spec

\*\*see page 6 for emb spec

\*\*\*see pages 13-14 for GTD spec

**CONTRACTOR SERIES LINEAR STRIP**

**DIMENSIONS**

Model	L	W	H
CSL-4SMC	48.00" (1219mm)	2.00" (48mm)	2.50" (64mm)
CSL-8SMC	95.00" (2438mm)	2.00" (48mm)	2.50" (64mm)



**CONTRACTOR SERIES LINEAR STRIP**

**PERFORMANCE DATA**

SYSTEM WATTS	SIZE	VOLTAGE	3500K		4000K		5000K	
			LUMEN	LPW	LUMEN	LPW	LUMEN	LPW
34W	4-Foot	120-277V	4,420	130	4,454	131	4,488	132
38W	4-Foot	120-277V	4,940	130	4,978	131	5,016	132
45W	4-Foot	120-277V	5,850	130	5,895	131	5,940	132
65W	8-Foot	120-277V	8,450	130	8,515	131	8,580	132
75W	8-Foot	120-277V	9,750	130	9,825	131	9,900	132
90W	8-Foot	120-277V	11,700	130	11,790	131	11,880	132

**DLC CODE**

Part Number	DLC Product ID	DLC Class
CSL-4SMC-WHUD	S-VVJYS4	Standard
CSL-8SMC-WHUD	Linear: S-M9BM7Z / HighBay: S-7S7LBB	Standard

**CONTRACTOR SERIES LINEAR STRIP**

**SENSOR SPEC**

Model	Type	Mounting	Coverage	Input	Function	Programmable
SENSOR-819-O1	PIR	20FT	30FT radius	Universal	On/Off	-
SENSOR-819-D1	PIR	20FT	30FT radius	Universal	On/Off/Dimming	REMOTE-RC100
SENSOR-BLE-819 (see page 7 for detail)	PIR	L1 - 20FT	30FT radius	Universal	Bluetooth Mesh On/Off/Dimming Daylight Harvesting	ALS Control Bluetooth Mobile App

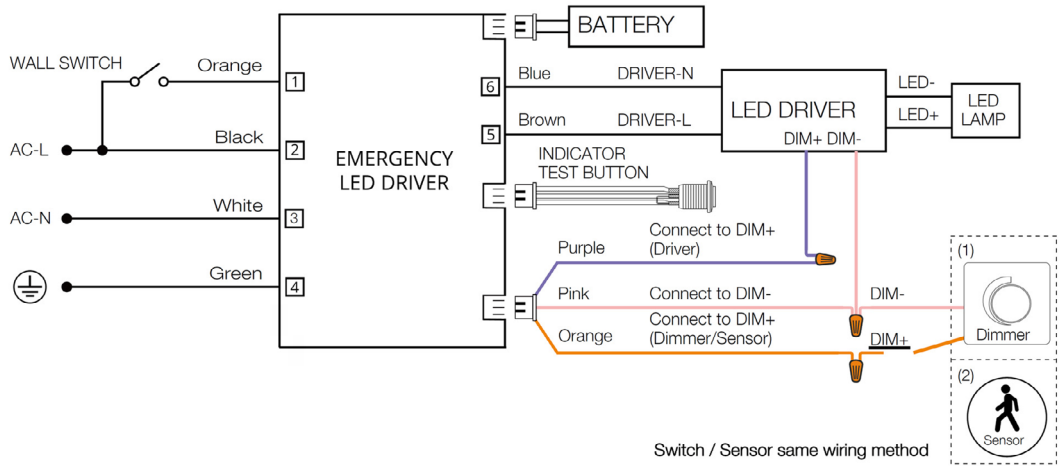


SENSOR-819-XX  
 SENSOR-BLE-819

**CONTRACTOR SERIES LINEAR STRIP**

**EMB SPEC**

Model	Battery Capacity	Input	Output	Output Power	Operating Temp	Installation
EMB-8W-B	90mins	100-347VAC	170VDC	8W	0°C ~ 50°C 32°F ~ 122°F	Factory or Field Install



**FEATURE**

- **Installation:** Factory or Field Install End Mount to Fixture
- **Commissioning:** Wirelessly through ALS Control Mobile App (iOS / Android)
- **Certification:** DLC 5.1 Networked Lighting Control System
- **Control:** Hold time, High-Low setting, continuous Bi-level dimming, Code-compliant manual-on or auto-off capability
- **Sensor:** Motion (Occupancy/Vacancy/Manual) and Daylight Harvesting
- **Room and Zone Control:** Zoning and Grouping control, Scheduling

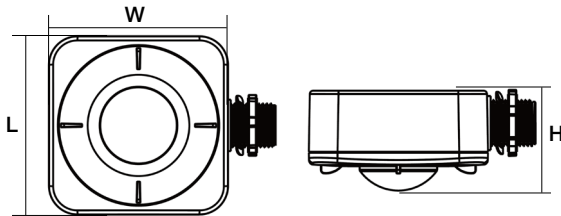


**SPECIFICATIONS**

**SENSOR TYPE:** Passive Infrared Sensor (PIR)  
**WIRELESS STANDARDS:** Bluetooth SIG Mesh  
**INPUT VOLTAGE:** 120/277VAC  
**CONTROL OUTPUT:** 0-10V  
**OPERATING TEMP:** -40°F ~ +167°F (-40°C ~ +75°C)

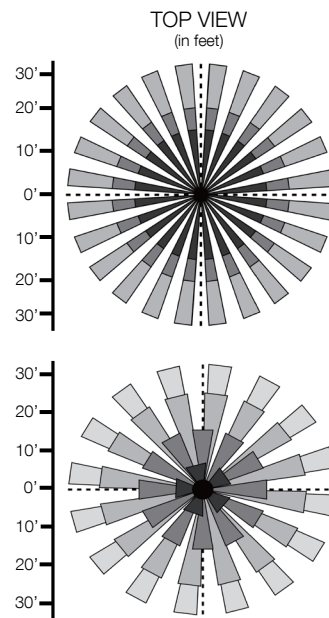
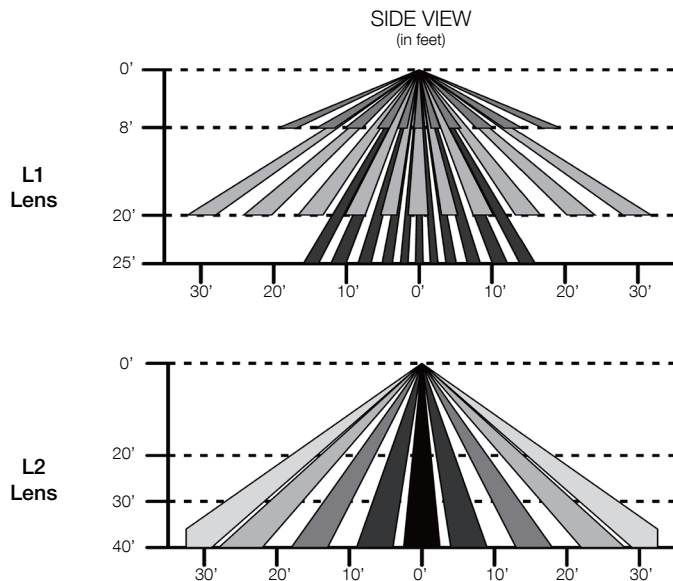
**COMMISSIONING RANGE:** 50FT  
**BLUETOOTH RANGE:** Intergral antenna up to 100FT  
**DETECTION ANGLE:** Vertical 90° x Horizontal 360°  
**MOUNTING HEIGHT:** 8 - 40FT  
**WARRANTY:** 5 years  
**IP RATING:** IP20 Damp

**DIMENSIONS**



L	W	H
3.19" (81mm)	4.02" (102mm)	1.70" (43.3mm)

**COVERAGE PATTERNS**



**FEATURE**

- **Installation:** Factory or Field Install, End Mount to Fixture
- **Commissioning:** Manually Adjusted through Dip Switch
- **Control:** Hold time, Manual/Auto - On/Off
- **Sensor:** Photocell and Motion (Occupancy/Vacancy/Manual)

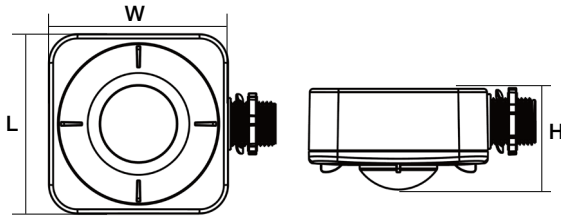


**SPECIFICATIONS**

**SENSOR TYPE:** Passive Infrared Sensor (PIR)  
**INPUT VOLTAGE:** 120/277VAC  
**LIGHT-CONTROL:** 10 ~ 300LUX  
**OPERATING TEMP:** -40°F ~ +167°F (-40°C ~ +75°C)  
 Damp Location Listed

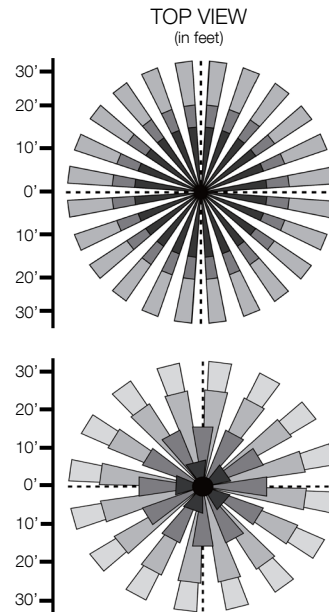
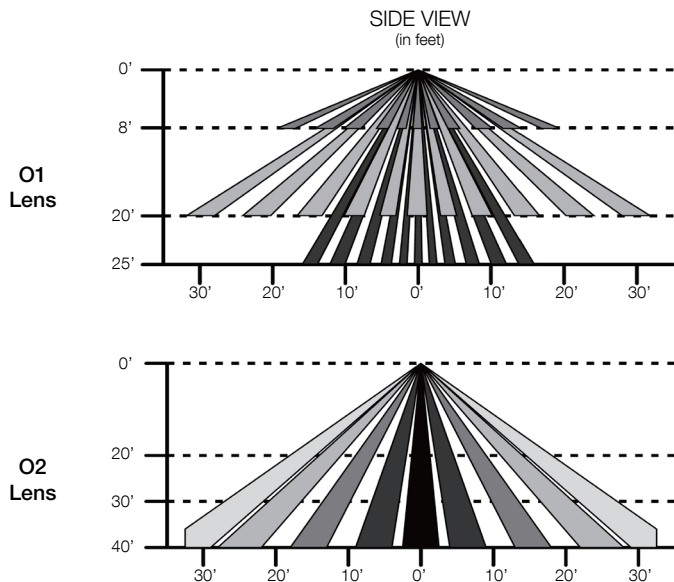
**TIME SETTING:** 10sec ~ 30min (adjustable)  
**DETECTION ANGLE:** 360°  
**MOUNTING HEIGHT:** 8 - 40FT  
**WARRANTY:** 5 years

**DIMENSIONS**

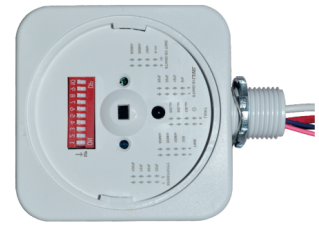
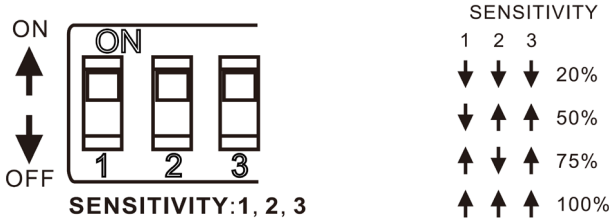


L	W	H
3.19" (81mm)	4.02" (102mm)	1.70" (43.3mm)

**COVERAGE PATTERNS**

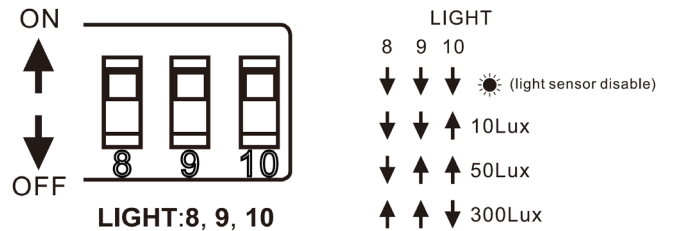
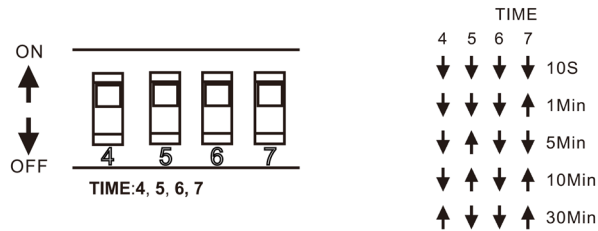


**PROGRAMMING SETTINGS**



**DETECTION RANGE**

The radius of the more or less circular detection zone produced on the ground after mounting the sensor at a height of 40FT. Pull switch to ON position "up arrow", pull switch to OFF position "down arrow" to switch location and detection range.



**HOLD TIME**

Light can be set to stay ON for any period of time between 10s to 30min. Any movement detected before this time elapse will reset. Pull switch to ON position "up arrow", pull switch to OFF position "down arrow" to switch location and hold time.

**LIGHT-CONTROL**

Chosen light response threshold can be infinitely from 10 ~ 300LUX. Pull switch to ON position "up arrow", pull switch to OFF position "down arrow" to switch location and light-control.

**ORDER CODE** **EXAMPLE: SENSOR-819-O2**

**A SERIES**

**SENSOR-819-O** End Mount PIR Occupancy Sensor 120-277V Input On/Off

**B LENS**

Code	Mounting	Coverage
1	20FT	30FT Radius
2	40FT	30FT Radius

**FEATURE**

- **Installation:** Factory or Field Install, End Mount to Fixture
- **Commissioning:** Manually Adjusted through Dip Switch or through Remote Control
- **Control:** Hold time, High-Low setting, Continuous Bi-Level Dimming, Code-Compliant Manual-On or Auto-Off Capability
- **Sensor:** Photocell and Motion (Occupancy/Vacancy/Manual)

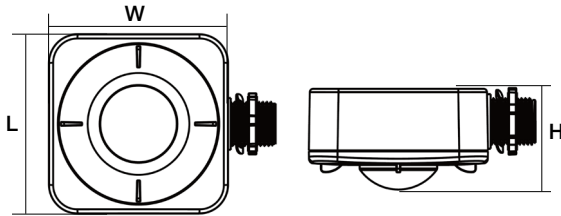


**SPECIFICATIONS**

**SENSOR TYPE:** Passive Infrared Sensor (PIR)  
**INPUT VOLTAGE:** 120/277VAC  
**LIGHT-CONTROL:** 10 ~ 50LUX  
**CONTROL OUTPUT:** 0-10V Dimming  
**OPERATING TEMP:** -40°F ~ +167°F (-40°C ~ +75°C)  
 Damp Location Listed

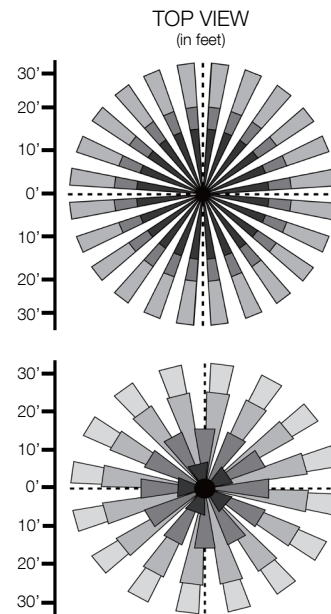
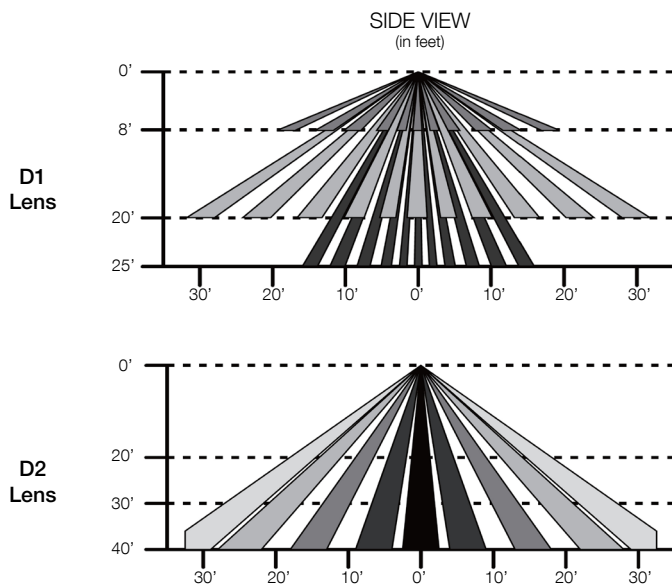
**COMMISSIONING RANGE:** 50FT from Remote Control  
**TIME SETTING:** 10sec ~ 15min (adjustable)  
**DETECTION ANGLE:** 360°  
**MOUNTING HEIGHT:** 8 - 40FT  
**WARRANTY:** 5 years

**DIMENSIONS**

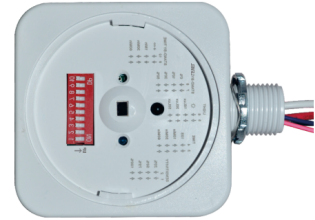


L	W	H
3.19" (81mm)	4.02" (102mm)	1.70" (43.3mm)

**COVERAGE PATTERNS**

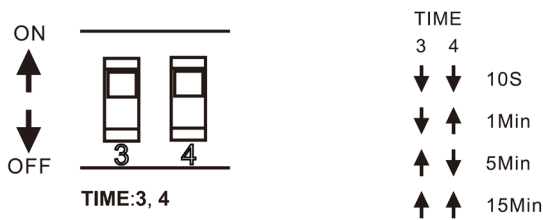


### PROGRAMMING SETTINGS



### DETECTION RANGE

Detection range can be adjusted by selecting the combination on the Dip Switch to fit coverage for each application

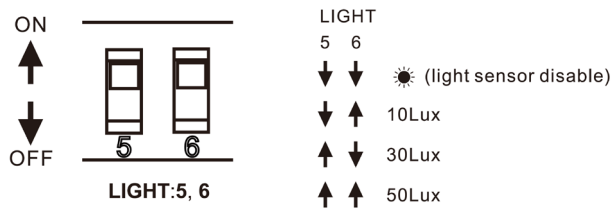


### HOLD TIME

Light can be set to stay ON for any period of time between 10s~15min. Any movement detected before this time elapse will reset.

### STAND-BY LIGHT LEVEL

The low light level selection available for the stand-by period.



### LIGHT-CONTROL

Chosen light response threshold can be infinitely from 10 ~ 50LUX.

### STAND-BY-TIME

The time period the luminaire remains at a low light level before it completely switches off if no motion is detected.

### ORDER CODE

EXAMPLE: SENSOR-819-D2

### A SERIES

**SENSOR-819-D** End Mount PIR Occupancy Sensor 120-277V Input 0-10V Dimming

### B LENS

Code	Mounting	Coverage
1	20FT	30FT Radius
2	40FT	30FT Radius

### C OPTIONS

**REMOTE-RC100\*** Sensor Remote Control Programmer

\*see page 3 for detail

**FEATURE**

The Remote control wireless IR configuration tool is a handheld tool for remote configuration of IR-enabled fixture integrated sensors. The tool enables device to modify via push button and stores up to four sensor parameter modes to speed configuration of multiple sensors.

	PROGRAMMABLE	RESET
<b>COMPATIBLE SENSORS</b>	SENSOR-ANT-6-4T SENSOR-ANT-6-4T-EM SENSOR-ANT-7 SENSOR-ANT-3C-B1 SENSOR-819-D1/D2 SENSOR-823 SENSOR-820	SENSOR-BLE-6-4T SENSOR-BLE-7 SENSOR-BLE-7D SENSOR-BLE-819 SENSOR-BLE-619 CONTROL-BLE-5-4T WALLSWITCH-BLE-101 WALLSWITCH-BLE-204



**Dimension**

L - 4.84" (123mm)  
W - 2.76" (70mm)  
H - .80" (20.3mm) Thickness

**SPECIFICATION**

**Carrying Case**

RC-100 in Carrying Case

**Commissioning Range**

Up to 50FT (15mm)

**Operating Temp**

32F ~ 122F (0°C ~ 50°C)

**Power**

2 x AAA 1.5V Alkaline batteries

**BRIGHTNESS**

Set output level (in 70%, 80%, 90%, or 100%) of connected lighting during occupancy.

**SENSITIVITY**

Set the sensitivity (in 20%, 50%, 75%, or 100%) of the occupancy sensor.

**HOLD TIME**

Set the time (in 10s, 1m, 5m, 10m, 16m, 20m, 30m, or 60m) that the fixture will hold at normal output after the space is vacant.

**DAYLIGHT SENSOR**

Set the threshold of natural light (in 10, 30, or 50) as setpoint to light on automatically for the sensor. If natural light is above the selected threshold, fixture will shut off. Set daylight (in 100, 300, 500) as setpoint to light off.

**STAND-BY DIM/TIME**

**DIM:** Set the output level (in 0%, 10%, 30%, or 50%) of the fixture during vacancy. This will only take place after Hold Time has elapsed.

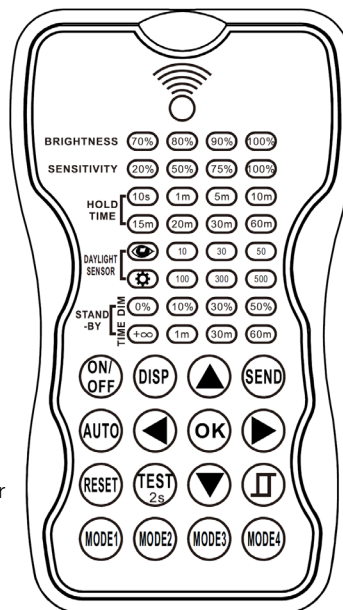
**TIME:** Set the time (+∞, 1m, 30m, or 50m) that the sensor will remain in stand-by mode before powering down.

**ON/OFF**

Use this to manually power a fixture on or off.

**AUTO**

Press Auto to engage/unlock a sensor. Press Auto, then press Display to show the sensors current setting parameters.



**DISPLAY**

Press to Display to view current setting parameters for each function. LED indicators will highlight current settings.

**DIRECTIONAL ARROWS**

Use the arrows to navigate the setting options by pressing up/down or left/right.

**SEND**

Press Send to upload displayed settings to individual sensor/fixture. The fixture will blink on and off to confirm new settings.

**SMART DAYLIGHT SENSOR**

Open and or close smart daylight sensor. Press up/down arrows buttons to enter setting condition, the parameters LEDs of remote control will flash to be selected.

**TEST**

Used to test sensitivity of occupancy sensing. Press Test, then the fixture will enter Test Mode, where Hold Time is only 2s. While Test Mode is active, Stand-By and Daylight sensing will be disabled. Press Auto to exit Test Mode.

**RESET**

Press Reset to put all parameters back to default settings.

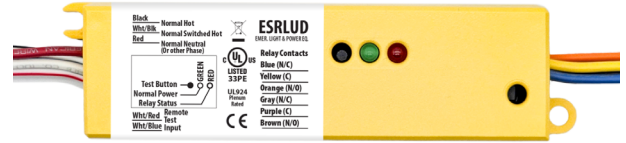
**MODE**

Press the Mode # that you want to save. Use Directional Arrows to select new parameters. Press OK to confirm.

**CONSTRUCTION**

Yellow metal casing. Integrates with dry contact systems to provide lighting during power outages. Features a slim enclosure, allowing for seamlessly integrating into existing building infrastructure.

Designed for commercial and industrial applications that require an emergency load to be switched on during a loss of normal power.



**SPECIFICATIONS**

<b>COIL CURRENT:</b>	Normal Power = 6mA MAX
<b>COIL VOLTAGE INPUT:</b>	120-277V AC (50/60 Hz)
<b>EXPECTED RELAY LIFE:</b>	10 Million Cycles Min Mechanical
<b>RELAY CONTACT RATINGS:</b>	10 Amp Resistive @ 30 V DC 10 Amp General Use @ 277 V AC
<b>OPERATING TEMP:</b>	-30°F ~ +140°F (-34°C ~ +60°C)
<b>OPERATE TIME:</b>	18ms
<b>HUMIDITY RANGE:</b>	5-95% (Noncondensing)
<b>LED:</b>	Green = Normal Power Red = Relay Status
<b>DIMENSIONS:</b>	1.40"H x 5.63"W x 1.00"D
<b>WIRES:</b>	16", 600V Rated
<b>OVERRIDE (TEST SWITCH):</b>	No
<b>APPROVALS:</b>	UL924, C-UL, CE, ROHS
<b>NOTES:</b>	Device Draws no Current From Emergency Source

**TESTING**

**INITIAL TEST FOR CORRECT WIRING:**

- Apply Normal Power To Normal Power Input
- a. Green LED (Normal Power) should be ON
  - b. Red LED (Relay Status) should be ON
  - c. Load should be OFF
  - d. Relay Contact (N/O) should be CLOSED

**LOCAL TEST BUTTON:**

1. Turn Switched Circuit OFF. Load be OFF.
2. Press and Hold "Local Test Button"
3. Load should Turn ON
4. Release "Local Test Button" and Emergency Light should Turn OFF.

**WALL SWITCH:**

1. Turn ON Wall Switch If not already ON
2. Load should Turn ON
3. Turn Wall Switch OFF
4. Load will Turn OFF

**TROUBLESHOOTING**

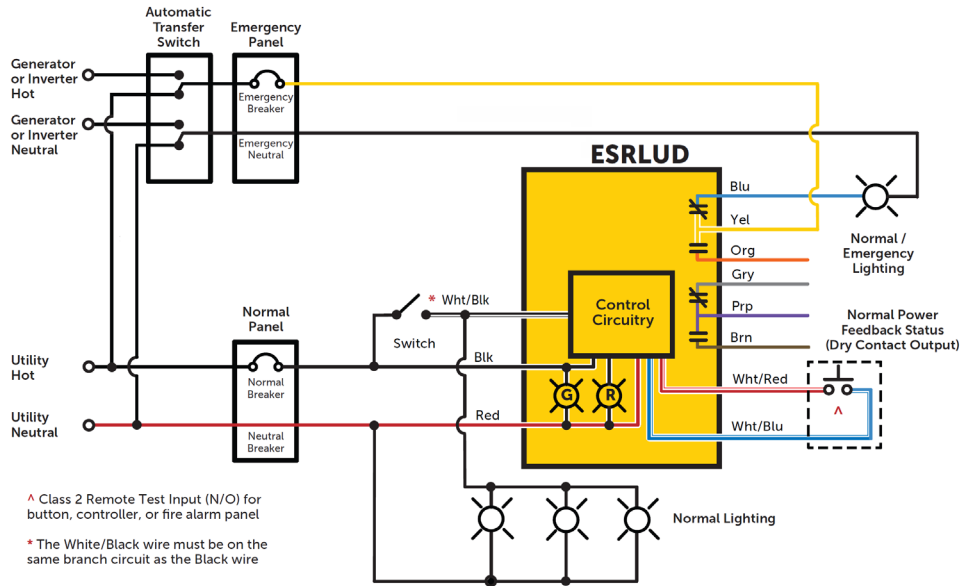
CONDITION	ACTION
Green LED is OFF	<ul style="list-style-type: none"> <li>• Check Normal Power Input Wiring (Black and Red Wires) and Voltage.</li> </ul>
Red LED is OFF but Load is OFF	<ul style="list-style-type: none"> <li>• Check Bulbs and Ballast.</li> <li>• Check Load Wiring (Blue Wire and Load's Neutral).</li> <li>• Replace Unit. (Assuming N/C Contact is Used).</li> </ul>
Load is ON but Red LED is ON	<ul style="list-style-type: none"> <li>• Replace Unit. (Assuming N/C Contact is Used).</li> </ul>
Red LED does not Turn OFF and Load does not Turn ON when being tested	<ul style="list-style-type: none"> <li>• Check Bulbs and Ballast.</li> <li>• Check Wiring Connections if Using a Remote Test Option.</li> <li>• Press Local Test Button on the Unit.</li> <li>• Replace Unit.</li> </ul>
Red LED will not Turn ON and Load will not Turn OFF	<ul style="list-style-type: none"> <li>• Verify Status of Normal Power Input.</li> <li>• Open Wall Switch Input.</li> <li>• Verify That No Test Inputs are Stuck Closed.</li> </ul>



**GTD-ESRLUD Generator Transfer Device**

**WIRING DIAGRAM**

**USING EMERGENCY LIGHTING AS NORMAL LIGHTING**



**OVERRIDING A 0-10V DIMMER**

