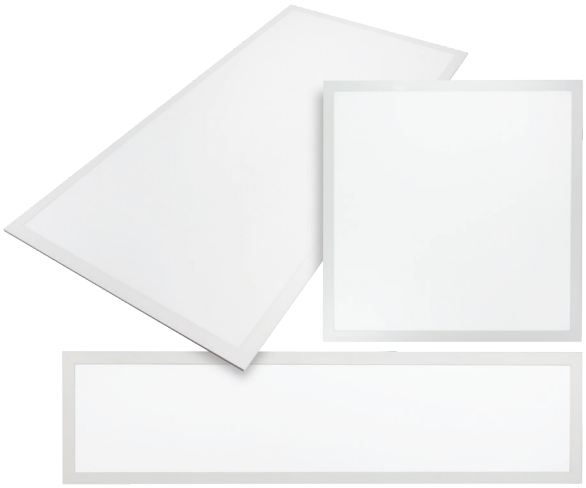
LPX-CP5-CR Series

Installation Instructions



IMPORTANT SAFEGUARDS
READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

When using electrical equipment, basic safety precautions should always be followed including the following:

- **DISCONNECT AC POWER SUPPLY BEFORE SERVICING.**
- Installation and servicing of this equipment should be performed by qualified service personnel only.
- Ensure that the electrical wiring conforms to the National Electrical Code NEC® and local regulations if applicable.
- Do not mount near gas or electrical heaters.
- Equipment should be mounted 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.
- Any modification or use of non-original components will void the warranty and product liability.
- Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS!

Technical Support ■ (623) 580-8943 ■ technicalsupport@barronltg.com

Installation

Recessed Grid Ceiling Installation

1. Place the LED panel on the T-bar of the ceiling suspension system in the desired location. (Fig. 1)

2. Locate both earthquake clips on the back of the LED panel. Twist each tab away from the panel and test them on the T-bar. For added stability, clips can be wired to the grid. (Fig. 2)

3. Open the fixture J-box by removing the access plate and make electrical connections. (Fig. 3 and **Electrical Connections** section). Make sure to firmly secure conduit to the access plate before replacing the access plate to the fixture J-box when complete.

4. Select the CCT and wattage you need by adjusting the switches on the side of the connection box. (Fig. 4)

Fig. 1

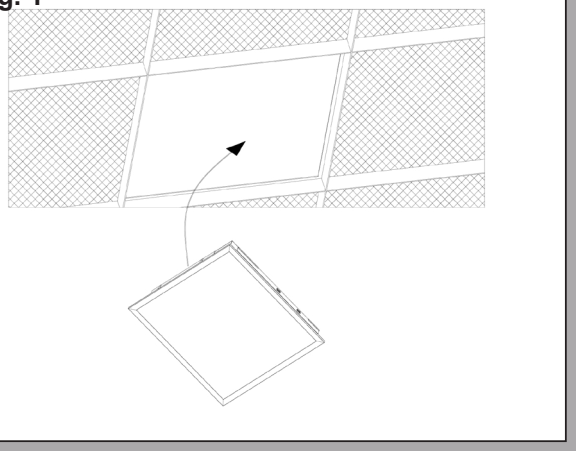


Fig. 2

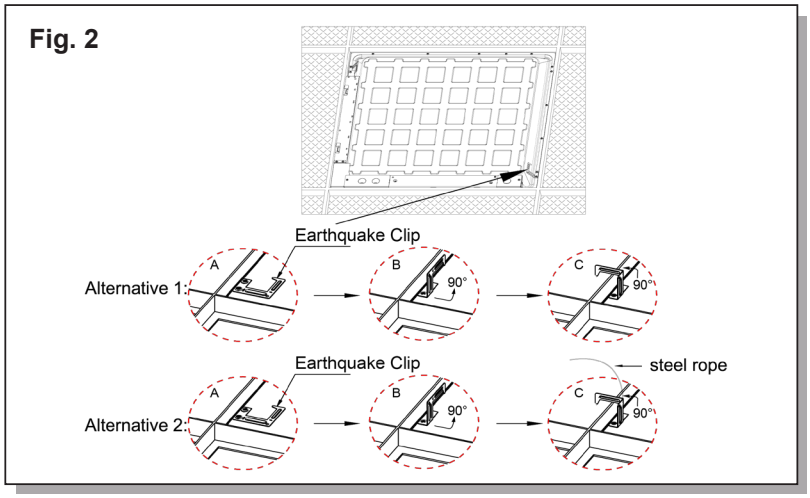


Fig. 3

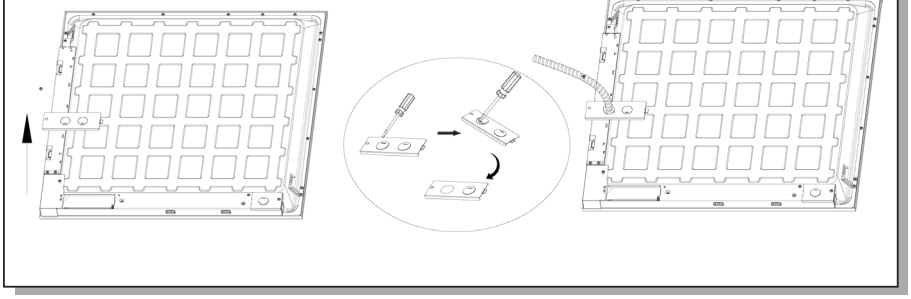
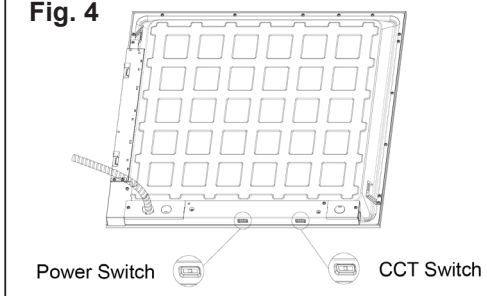


Fig. 4



Cable Mount Installation (Optional)

1. Drill two holes. Use appropriate hardware for the application. A 7⁄32” hole is needed if anchors and screws included with the LPX-CMK kit are used. The spacing between each hole can be:
   2x2 = 23-11⁄16”
   1x4 = 43-5⁄16”
   2x4 = 435⁄16”

2. Insert anchors into drilled holes. Insert screws through the ceiling bracket into the anchors. Screw the threaded cable brackets on each cable into the ceiling brackets. (Fig. 5)

3. Attach clips to panel. (Fig. 6)

4. Adjust the height by pulling cable through the cable clamps. (Fig. 7)

Fig. 5

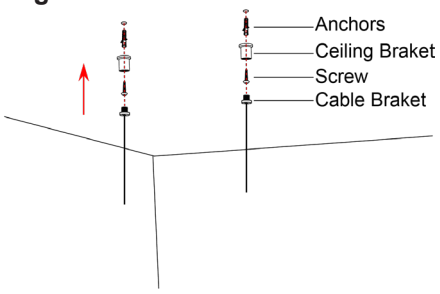


Fig. 6

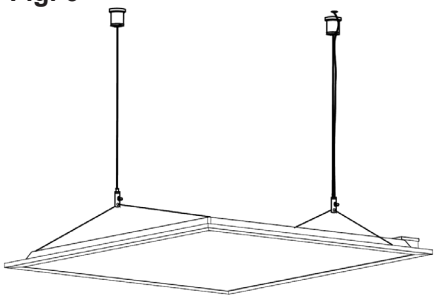
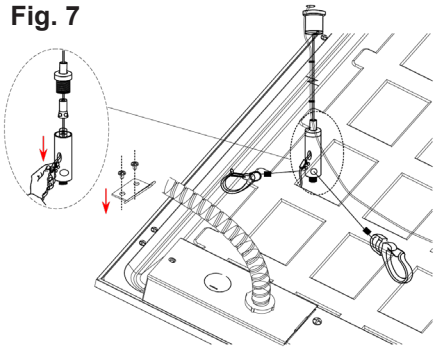


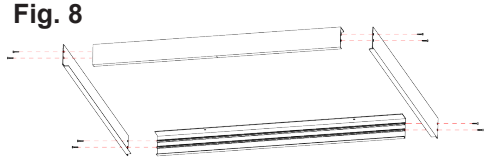
Fig. 7



Surface Mount Kit Installation (Optional)

1. Assemble (4) sides of LPX-SMK, using (8) self-tapping screws (included) to join sides. (Fig. 8)

Fig. 8



2. Drill (4) holes in the ceiling, following spacing according to the diagram. 7⁄32” holes are needed if anchors and screws included with the LPX-SMK kit are used. (Fig. 9)

3. Attach the frame to the ceiling structure. (Fig. 10)

4. Remove one non-mounting frame side and slide in the LED panel. Make all electrical connections using the appropriate fittings. See **Electrical Connections** section. (Fig. 11)

5. Re-install frame side to complete. (Fig. 12)

Fig. 9

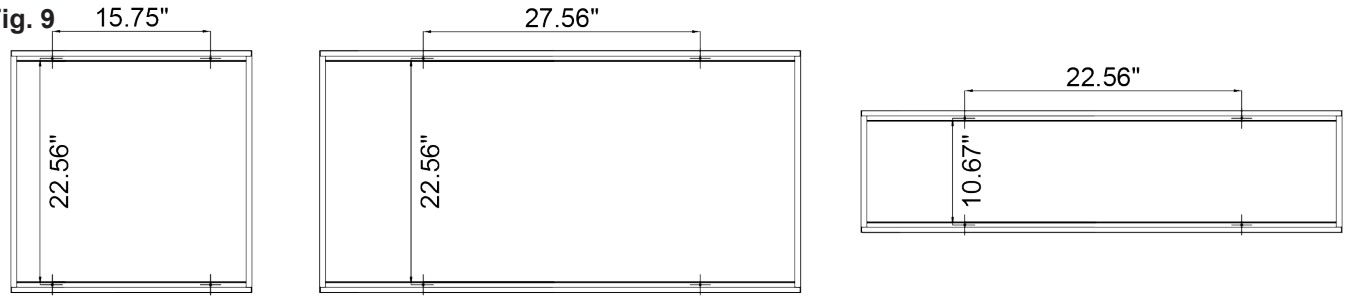


Fig. 10

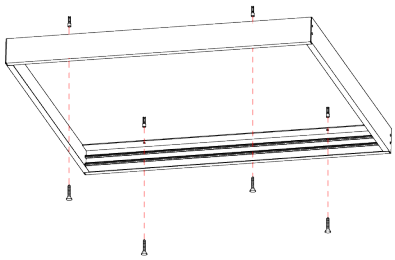


Fig. 11

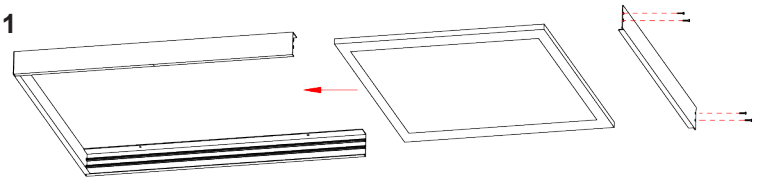
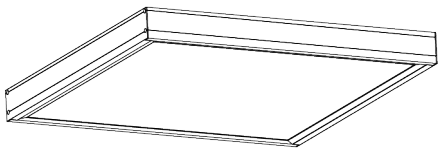


Fig. 12



Installation Continued

Flange Mount Kit Installation (Optional)

1. Assemble (4) sides of LPX-FMK, insert (8) small screws into holes and tighten (Fig. 13).

2. Check squareness of Flange Mount and trial insert LED panel into assembled flange mount to check fit. Remove LED panel from Flange Mount after test fitting.

3. Locate the area where light fixture will be installed. Make sure there is adequate room to make the rough opening corresponding to the Flange Mount Kit (Table 1).

4. Cut rough opening if necessary.

5. Position Flange Mount in rough opening and secure with provided hardware. (Fig. 14)

6. Install LED panel in Flange Mount and make electrical connections. See **Electrical Connections** section. (Fig. 15)

Table 1 - Opening Size	
Configuration	**Rough Opening Size**
2’ x 2’	24.61” x 24.61”
1’ x 4’	48.66” x 12.75”
2’ x 4’	48.66” x 24.41”

Fig. 13

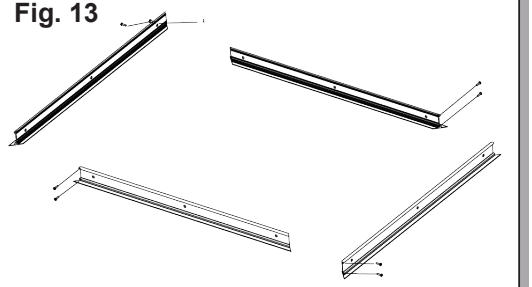


Fig. 14

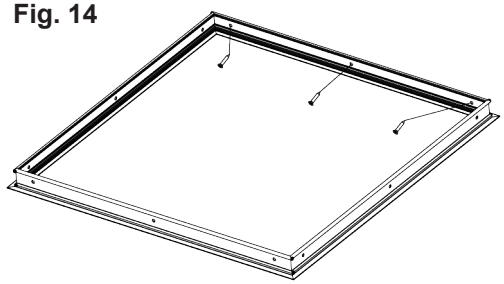
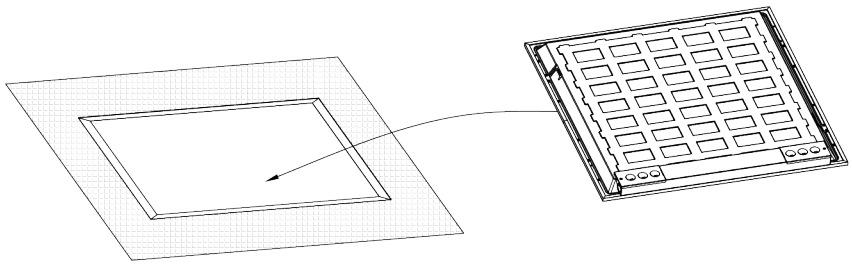


Fig. 15



Emergency Power Installation (Optional)

1. Remove the access plates of the J-box. (Fig. 16)

2. Remove the two screws attaching the J-box to the fixture and disconnect the LED board by removing quick the connect from the driver. (Fig. 17)

3. Find the quick connect terminal wires included in battery backup kit. The male quick connect plugs into the driver, the female quick connect extends the LED board connection. (Fig. 18)

Fig. 16

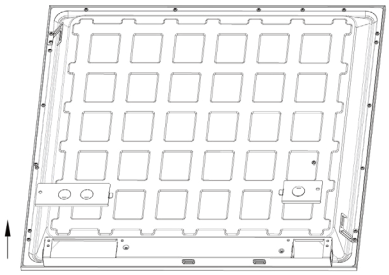


Fig. 17

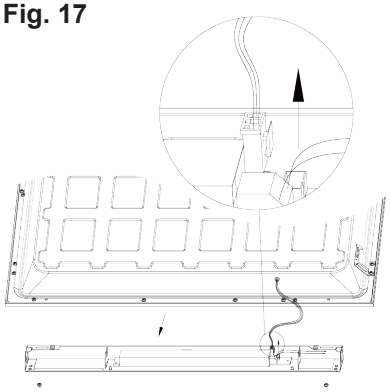
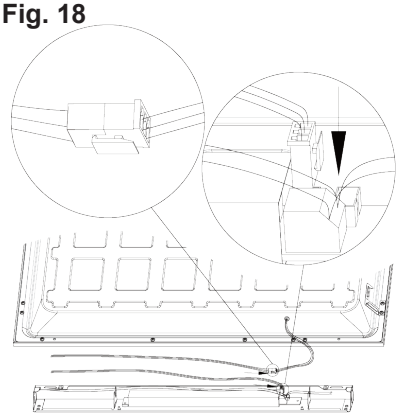


Fig. 18



4. Reinstall J-box and smaller access plate. (Fig. 19)

5. Remove the appropriate screw of the panel based on image below. Use position A for 1' x 4' and 2' x 4' configurations, and position B for 2' x 2' configurations. (Fig. 20)

Fig. 19

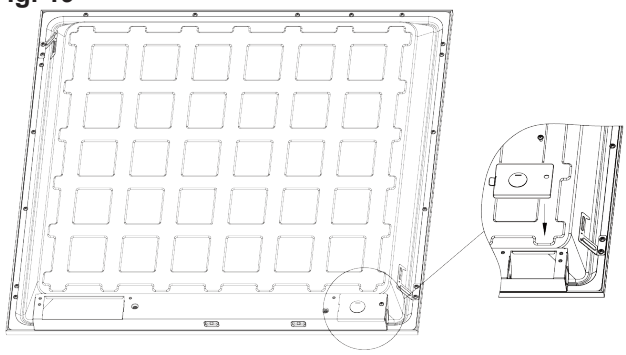
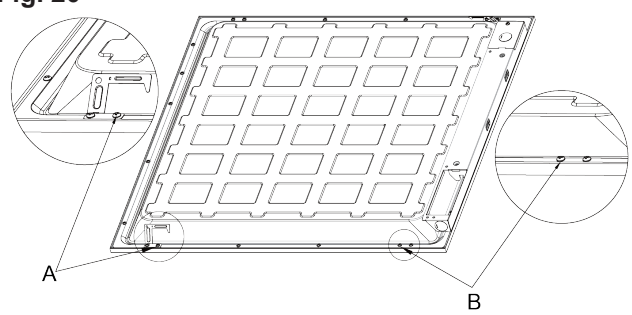


Fig. 20



6. Install the emergency driver using the position where the screw was removed in step 5. (Fig. 21)

7. Remove the knockout of the J-box, install the grommet, and run the emergency driver wires into the J-box. (Fig. 22)

Fig. 21

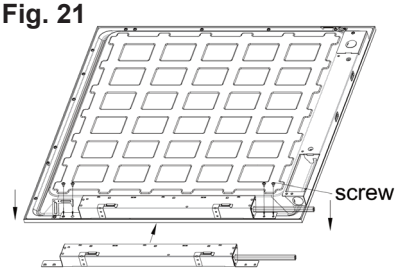
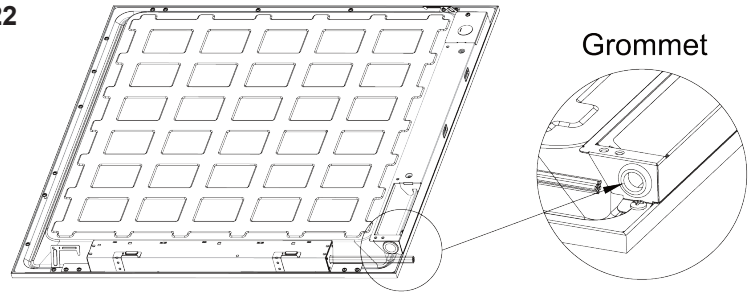


Fig. 22



8. Install the test button and indicator light, as well as the corner J-box extension bracket. (Fig. 23)

10. Complete electrical connections; see **Electrical Connections** section.

11. Reinstall the access plates of the J-box and fasten with screws. (Fig. 24)

Fig. 23

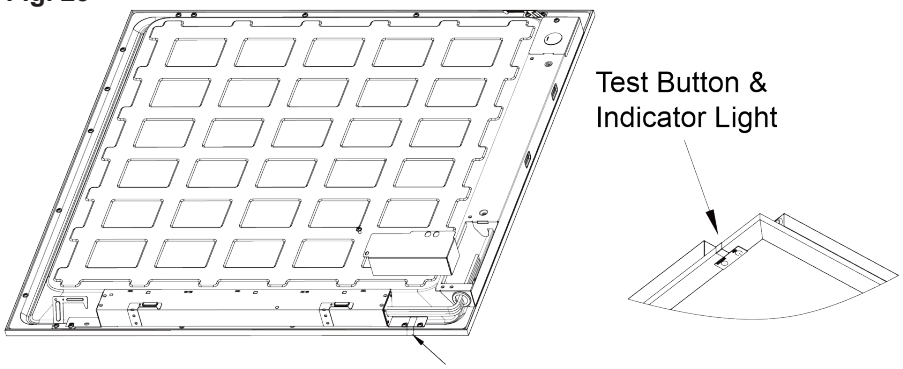
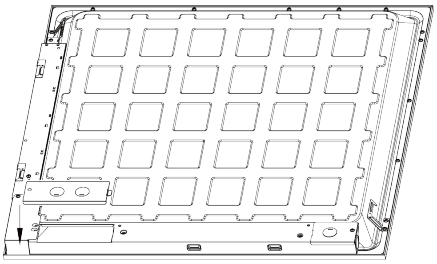


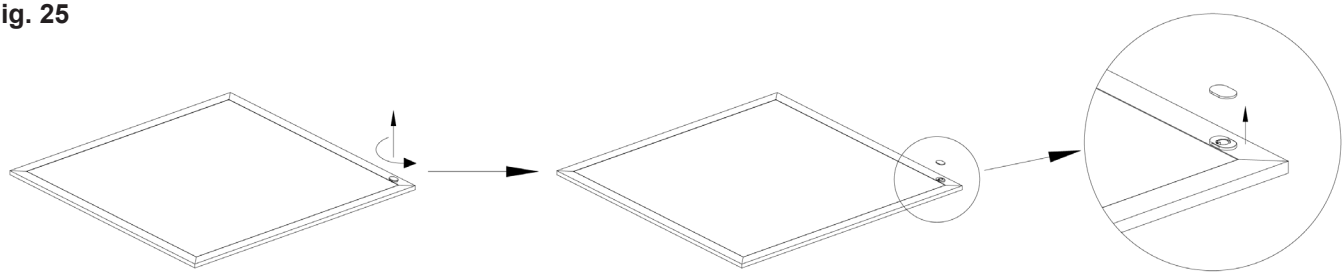
Fig. 24



Sensor Installation (Optional)

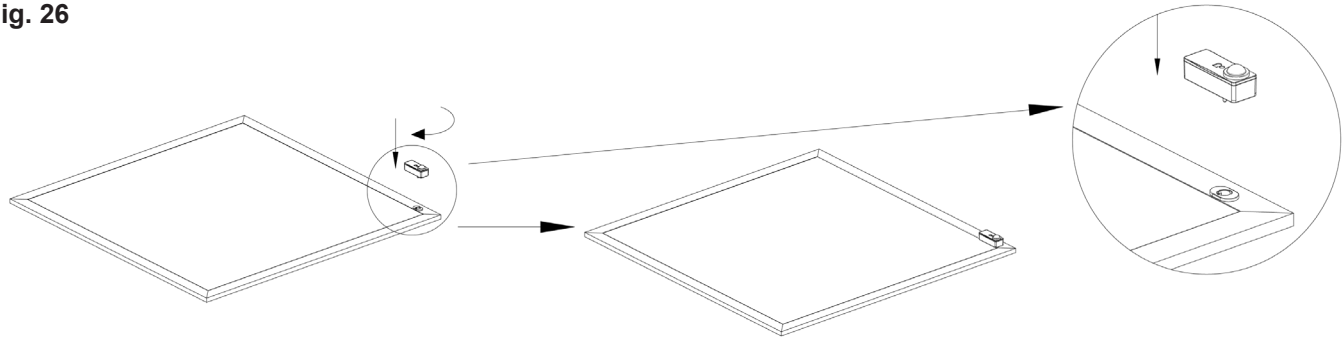
1. Rotate the cap of the sensor receptacle to access receptacle. (Fig. 25)

Fig. 25



2. Insert sensor into sensor receptacle and twist to lock in place. (Fig 26)

Fig. 26



Electrical Connections (Fig. 27-28)

Fig. 27 - Standard Wiring Diagram 120-277VAC

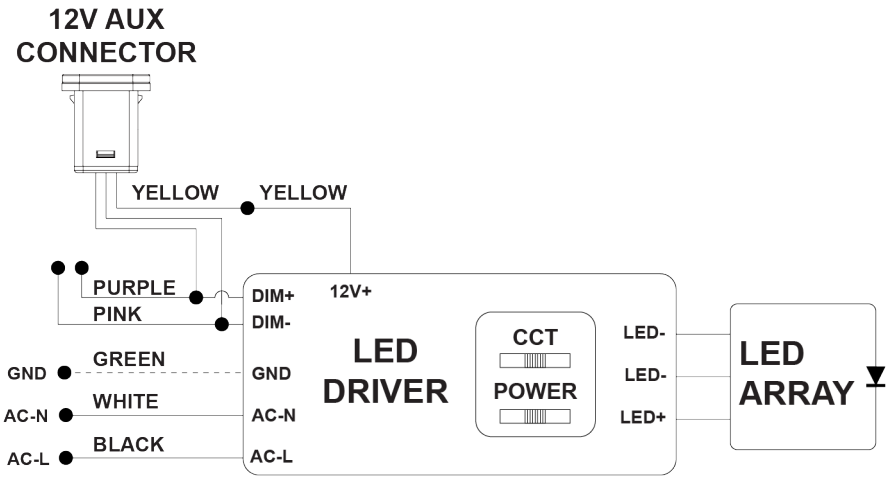
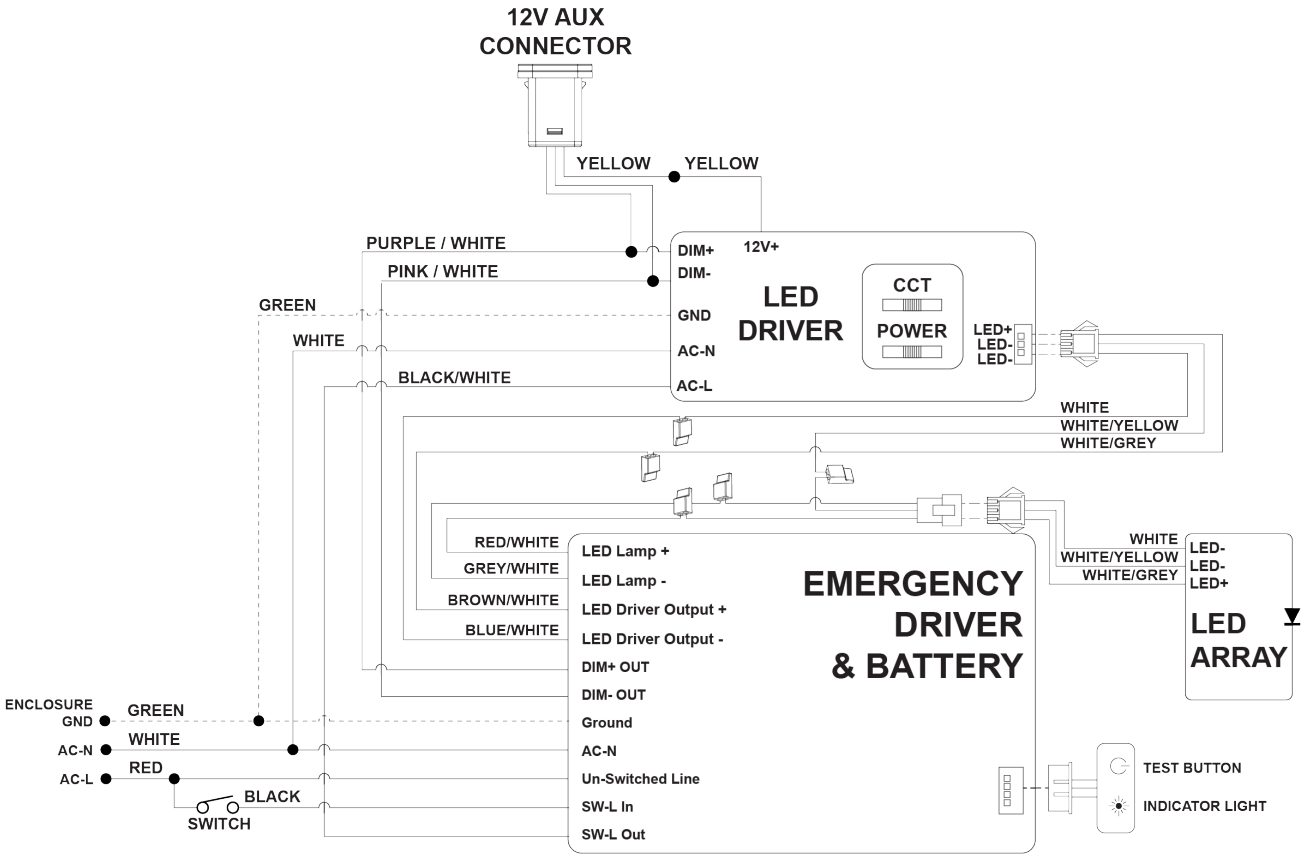


Fig. 28 - Battery Backup Wiring Diagram 120-277VAC



Battery Backup Information and Operation

Note: The battery in this unit may not be fully charged. After electricity is connected to the unit for at least 1 hour, system can be tested. Please wait at least 24 hours, then normal operation of this unit should take effect.

Test Switch Indicator Status:

▬	Steady On (Red)		Battery Charging Mode
○	Light Off		In Emergency Mode
●	Flash (Red)	(Red 2 times/2 Seconds)	Battery Failure
●	Flash (Red)	(Red 3 times/2 Seconds)	Battery Charging Error
●	Flash (Red)	(0.5s on /0.5s off)	LED Load Abnormality
●	Flash (Red)	(0.1s on /0.1s off)	Monthly Test in Progress
●	Flash (Red)	(0.1s on /0.1s off)	180 Day Test in Progress

Testing Instructions

1. EM Test:
   - Press the test button while main power is on to enter EM mode (30 second test) with normal AC mode.
   - Press and hold the test button for three seconds to disconnect the battery and turn off the light in emergency mode.

2. Manual Self-Diagnostics: (When battery is fully charged)
   - Press and hold the test button for ten seconds to reset the Self-Diagnostic timer in normal AC mode.
   - To quit the self-diagnostic cycle after cycle has started, press and hold the test button for two seconds.

3. Clear fault:
   - In case of a fault, press the test button in EM mode to clear the fault.

Self-Testing Operation

This unit automatically performs a 30 second discharge test every month, and a full 90 minute discharge test every 180 days. During routine testing, the self-testing emergency driver simulates an AC power failure causing the unit to automatically switch to emergency mode. The unit will monitor the operation of the lighting fixture, internal battery voltage, and emergency duration. If the emergency system functions properly, then the unit will return to normal mode. Should the unit detect any problems, the indicator light will flash continually until the condition has been corrected and the unit passes the next test. Please refer to **Test Switch Indicator Status**.

Sensor Information and Operation

Bluetooth Sensor LE-MS6-AUX and LiteLogic

1. Download LiteLogic app

2. Commission fixtures with sensors installed.

Get it from the App Store

Get it from Google Play

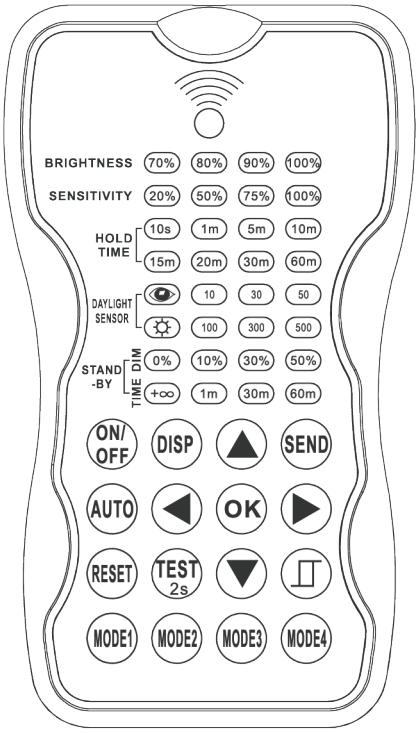
PIR Sensor SC-MS6-AUX and Remote

1. Default operation of the motion sensor is:
   - Motion sensor has a 40 second warm up at 100% power on initial power up.
   - Motion sensitivity is set to 100%
   - Hold time is set to 5 minutes
   - Daylight sensor is ☼
   - Dimming time before unit turns off is 60 minutes.
   - Dimming level is set to 30%

2. By default, this sensor offers 3 levels of light: 100%, dimmed light when natural light is insufficient, off; and 2 periods selectable waiting time: motion hold-time and stand-by period. Daylight threshold and freedom of detection area are also selectable. Daylight sensor function, where light comes on regardless of natural light levels, is only available with the selection on the remote.

3. Optional remote control provides additional features and overrides default motion sensor operation. Remote control sends motion sensor commands via infrared (IR) signal. The motion sensor will beep on receipt of commands from the remote. The motion sensor has an internal memory that remembers the last programming from the remote, even after power loss. Remote control part #TL-MSSW-REMOTE. Remote control not required if default settings are acceptable.

TL-MSSW-REMOTE Remote Functions



BRIGHTNESS
- High end trim turning function (to set the output level of connected lighting during occupancy).

SENSITIVITY
- To set the occupancy sensing sensitivity of the sensor.

HOLD TIME
- The time that the sensor will turn off (if you choose stand-by; level is 0) or dim the light to a low level after area is vacated.

DAYLIGHT SENSOR
- Represents various thresholds of natural light level for the sensor.
  - • To select the current surrounding lux value as the daylight threshold. This feature enables the fixture to function well in any real application circumstances.
  - • The daylight sensor stops working, and all motion detected could turn on the lighting fixture, no matter how bright the natural light is.

STAND-BY DIM
- To set the output level of connected lighting during vacancy. The sensor will regulate the lighting output at the set level. Setting the STAND-BY DIM level at 0 means light is fully off during vacancy.

STAND-BY TIME
- Represents the time that the sensor will keep the light at a low dim level after the HOLD TIME has elapsed.

BUTTON OPERATION

ON/OFF	Press this button and the light goes to permanent on or permanent off mode and the sensor is disabled. (MUST press AUTO button to quit this mode for setting)
DISP	Display the current/latest setting parameters in LED indicators (the LED indicators will be on to show the setting parameters).
RESET	Press this button and all settings go back to settings of dip switch in sensor.
▲ ▼	Enter in the setting condition, the parameter LEDs of the remote will flash to be selected. Navigate UP and DOWN to choose selected parameters using LED indicators.
OK	Confirm the selected parameters.
SEND	Press this button to upload the current parameters to the sensor(s). The LED light will flash on/off to confirm sensor connection successful.
MODE1 MODE2 MODE3 MODE4	4 Scene modes with preset parameters which are available to be changed and saved in modes.

AUTO	Press this button and the sensor will begin to function. All settings will remain the same as the latest status before the light is switched on/off.
TEST 2s	This button is for testing sensitivity levels only. After you choose the sensitivity threshold, press this button and the sensor will go into test mode automatically (hold time is only 2s). Meanwhile the stand-by period and daylight sensor are disabled. (Press AUTO button to quit from this mode.)
◀ ▶	Navigate to LEFT and RIGHT for choose selected parameters using LED indicators.
	Press this button to open and close the smart daylight sensor. Press ▲ or ▼ and select the setting condition. The LEDs of the chosen parameter will flash on the remote.

Settings

The settings content contains all available settings and parameters for the remote sensors. It allows you to change the available control, parameters and operation of the sensor from the factory defaults or current parameters.

Changing multiple settings of sensor(s)

1. Press the (DISP) button, the remote control LEDs will show the latest parameters that are set.
   NOTE: If you push the (ON/OFF) button before, you must push the (AUTO) button to unlock the sensor.
2. Press (▲) or (▼) to enter in the setting condition, the parameter LEDs of the remote will flash to be selected. Navigate to the desired setting by pressing (▲)(▼)(◀)(▶) to select the new parameters.
3. Press (OK) to confirm all settings and to save.
4. Aim at the target sensor and press (SEND) to upload the new parameters. When the sensor connects the light will flash on/off to confirm.
   NOTE: If you push the (DISP) button, the remote LED indicators will show the latest parameters which were sent to the sensors.

Changing multiple settings of sensor(s) with smart photocell sensor

1. Press the (DISP) button, the remote control LEDs will show the latest parameters that are set.
   NOTE: If you push the (ON/OFF) button before, you must push the (AUTO) button to unlock the sensor.
2. Press (▲) or (▼) to enter in the setting condition, the parameter LEDs of the remote will flash to be selected. Navigate to the desired setting by pressing (▲)(▼)(◀)(▶) to select the new parameters.
3. Press the (⎍) button, 2 LED indicators will flash in daylight sensor settings, select daylight (10) (30) (50) as a setpoint for turning on lights automatically. Select daylight (100) (300) (500) as setpoint for turning off lights automatically.
4. Press (OK) to confirm all settings and to save.
5. Aim at the target sensor and press (SEND) to upload the new parameters. When the sensor connects the light will flash on/off to confirm.
   NOTE: If you push the (DISP) button, the remote LED indicators will show the latest parameters which were sent to the sensors.

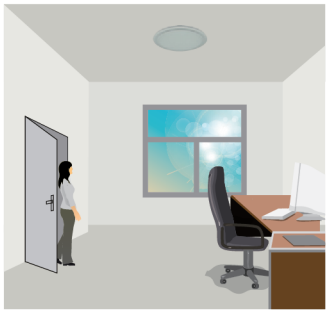
NOTE: (⎍) is disabled by default

1. Open or close the smart daylight sensor by pushing the (⎍) button when the remote control is in the setting condition.
2. When the smart daylight sensor is open, 2 LED indicators will flash in the daylight sensor setting. Select daylight (10) (30) (50) as the setpoint for turning on lights automatically. Select daylight (100) (300) (500) as setpoint for turning off lights automatically. When the smart daylight sensor is closed, 1 LED indicator will flash in the daylight sensor setting for the chosen daylight sensor threshold.
3. When the smart daylight sensor is open, the standby time is only (+∞) .
4. See **Daylight Sensor Function.**

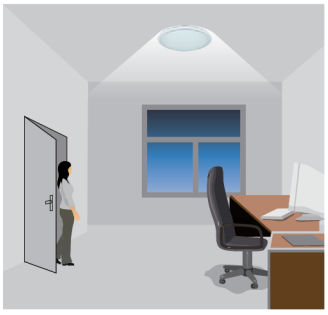
Corridor Function

This function inside the motion sensor achieves tri-level control for some areas which require a light change notice before switching off. The sensor offers three levels of light (100% to dimmed light, when natural light is insufficient, to off), two periods of selectable waiting time (motion hold-time and stand-by period), selectable daylight threshold and freedom of detection area.

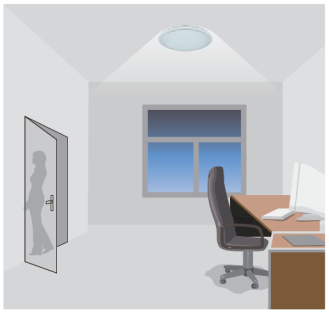
Corridor Function, Cont'd.



With sufficient natural light, the light does not switch on when presence is detected.



With insufficient natural light, the sensor switches on the light automatically when presence is detected.



After hold-time, the light dims to stand-by level if the surrounding natural light is below the daylight threshold.



Light switches off automatically after the stand-by period elapses.

Daylight Sensor Function

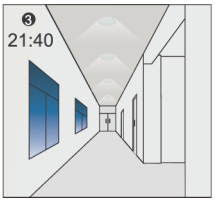
Open the daylight sensor by pushing the ⎍ button when the remote control is in setting condition.



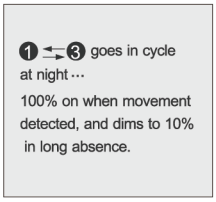
The light switches on at 100% when there is movement detected.



The light dims to stand-by level after the hold-time.

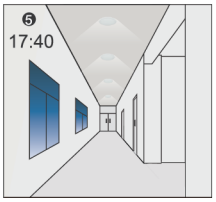


The light remains in dimming level at night.





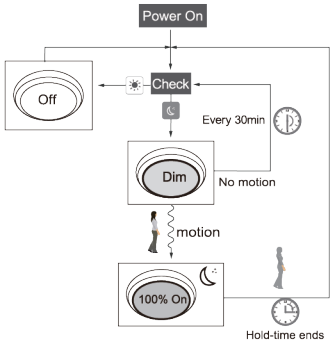
When the natural light level exceeds setpoint off, the light will turn off even if the space is occupied.



The light automatically turns on at 10% when natural light is insufficient (no motion).

Settings in this demonstration:

Hold-time: 30 min
Setpoint to light on: 50 lux
Setpoint to light off: 300 lux
Stand-by Dim: 10%
Stand-by period: +∞
(When the smart photocell sensor is open, the stand-by time is only +∞



Corridor Function VS Daylight Sensor Function

1. In the corridor function, the light turns on if the natural light level is lower than the daylight sensor setting and there is occupancy. In smart daylight sensor function, the lights turn on if the natural light level is lower than the daylight setpoint even if vacant.
2. In corridor function, the lights turn off after the room is vacant and the hold-time has elapsed. In smart daylight sensor function, the lights turn off if the natural light level is higher than the daylight setpoint even if there is occupancy.
3. In smart daylight sensor function, the natural light level must be higher or lower than the daylight setpoint for at least 1 minute to turn off/on the lights automatically.

About Reset and Mode (1, 2, 3, 4)

The remote control comes with 4 scene MODES which are not default. You may make desired parameters and save as the new MODE (1, 2, 3, 4) to configure the installed sensors.

RESET:

- All settings go back to the settings of the DIP switch in the sensor.

Scene MODES (1, 2, 3, 4)

Application	Scene Options	Brightness	Detection Area	Hold Time	Stand-by Time	Stand-by Dim Level	Daylight Sensor
Indoor	Mode 1	100%	75%	5min	30min	30%	☼
Indoor	Mode 2	100%	75%	1min	+∞	30%	☼
Indoor	Mode 3	100%	75%	5min	30min	30%	30LUX
Outdoor	Mode 4	100%	75%	1min	+∞	30%	(30LUX/300LUX)

Change the MODES:

1. Press the MODE1 / MODE2 / MODE3 / MODE4 buttons and the remote control LED indicators will show the existing parameters.
2. Press the ▲ ▼ ◀ ▶ buttons to select the new parameters.
3. Press OK to confirm all parameters and save in that mode.

UPLOAD

The upload function allows you to configure the sensor with all parameter in one operation. You may select the current setting parameters or the MODE for uploading. Current setting parameters or the MODE are displayed on the remote control.

Upload the current parameters to sensor(s) and duplicate the sensor parameters from one to another:

1. Press the DISP button or MODE1 / MODE2 / MODE3 / MODE4 buttons, all parameters will be displayed on the remote control.
   NOTE: Check if all parameters are correct, if not, change them to the correct ones.
2. Aim at the sensor and press the SEND button, the light that the sensor is connect to will flash on/off to confirm.
   NOTE: If another sensor needs the same parameters, aim at the next sensor and press the SEND button.