

# LFL2M Floodlight Installation and Wiring Instructions

#### INTERIOR • OUTDOOR



WARNING: To avoid electrical shock. Do not attempt to install the fixture in wet or rainy conditions. Always turn off electrical power at the circuit breaker or by disconnecting the fuse. Only use bulbs in compliance with manufactures specifications.

DO NOT ATTEMPT TO EXCEED MAXIMUM WATTAGE RATING.

#### TOOLS AND MATERIALS REQUIRED

Blade and or Phillips Head screw driver

Step Ladder (if needed)

Wiring supplires as required by electrical code:

Wire connectors Electrical tape

### UNPACK THE FIXTURE

Check the contents of the box. You should receive:

Outdoor fixture

Mounting Hardware package.

### CAUTION

WARNING: Risk of fire.

Before installing your lighting fixture, thoroughly review the section titled wiring connections.

If you do not have sufficient electrical wiring experience, please refer to a do-it-yourself wiring handbook or have your fixture installed by a qualified licensed electrician.

All electrical connections must be in accordance with local and National Electrical Code (NEC) standards.

If you are unfamiliar with proper electrical wiring connections obtain the services of a qualified electrician.

### **GENERAL**

Remove the fixture and the mounting hardware package from the box and make sure that no parts are missing by referencing the illustrations on the installation instructions.

To ensure success of the installation, read these instructions and review the diagrams thoroughly.

Save these instructions for future reference.

This fixture is intended to be mounted to a 4" x4" x2-1/8" deep metal outlet box.

The building structure must directly support the outlet box.

Before starting the installation, disconnect the power by turning off the circuit breaker or by removing the fuse at the box. Turning the power off using the light switch is not sufficient to prevent electrical shock.

### WIRING CONNECTIONS

Required supply circuit: 120V, 60Hz.

Connect the white wire from the fixture to the white wire of the supply circuit.

Connect the black wire from the fixture to the black wire of the supply circuit.

Connect the green(or bare copper) colored wire to the grounding conductor of the supply circuit.

Use  $\mbox{UL/CSA}$  listed wire connectors suitable for the size, type, and number or conductors.

No loose strands or loose connections should be present. Secure wire connectors with Use UL/CSA listed electrical tape.

# Motion Sensor Light Control

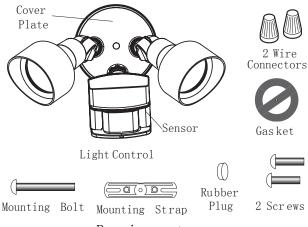
#### Model: LFL2WHM/LFL2ABZM

Questions or problems? Before returning to your retailer, refer to the troubleshooting guide in this manual

#### Features

- Turns on lighting when motion is detected.
- · Automatically turns lighting off.
- Photocell keeps the lighting off during daylight hours.

#### This package includes:



#### Requirements

- •The light control requires 120-volts AC.
- If you want to use Manual Mode, the control must be wired through a switch.
- Some codes require installation by a qualified electrician.
- This product is intended for use with the enclosed gasket and with a junction box marked for use in wet locations.

#### Operation

Mode:	On-Time	Works:	Day	Night
Test	10 Seconds		X	X
Auto	1 or 5 Min			X
Manual	To Dawn*			X

\* resets to Auto Mode at dawn.

Note: When first turned on wait about 40 seconds for the circuitry to calibrate.

#### **TEST**

Set the switch on the bottom of the sensor to TEST.	TEST 1 5 MIN
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#### AUTO

Set switch to 1 or 5 minutes.	
1 of 5 minutes.	TEST 1 5 MIN

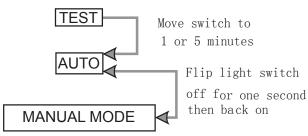
#### MANUAL MODE

Manual mode only works at night because daylight returns the sensor to AUTO.

Flip the light switch off for one second then back on to toggle between AUTO and MANUAL MODE.

Manual mode works only with the ON-TIME switch in the 1, or 5 position.

#### Mode Switch Summary

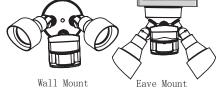


If you get confused while switching modes, turn the power off for one minute, then back on. After the calibration time the control will be in the AUTO mode.

#### Installation

For easy installation, select an existing light with a wall switch for replacement.

For best performance, mount the fixture about 8 ft(2.4m) above the ground. NOTE: If fixture is mounted higher than 8 ft.(2.4m), aiming the sensor down will reduce coverage distance.



For under eave installation, the sensor head must be rotated as shown in the next two steps for proper operation and to avoid the risk of electrical shock.

For eave mount only:

1. Swing the sensor head towards the clamp screw joint. Clamp Screw Controls



2. Then rotate the sensor head clockwise  $180\,^\circ$  so the controls face down.

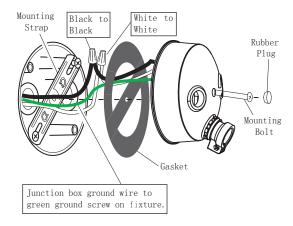


If the sensor pops out of the ball joint, loosen the clamp screw and push the sensor back into the ball joint. Tighten the clamp screw when done.

### Wire the Light Control

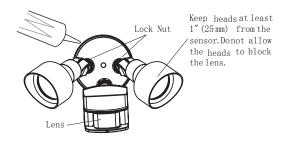
A WARNING: Turn power off at circuit breaker or fuse.

- 1. Remove the existing light fixture.
- 2. Install the mounting strap as shown using two screws that fit your junction box.
- 3. Route the light control's wires through the large gasket holes.
- 4. Twist the junction box wires and fixture wires together as shown. Secure with wire connectors.



### Install the Light

- 1. Align the light control cover plate and cover plate gasket. Secure with the mounting bolt.
- 2. Push the rubber plug firmly into place.
- 3. If a wet location junction box was not used, caulk the wall plate mounting surface with silicone sealant.



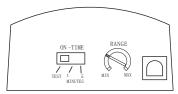
- 4 To avoid water damage and electrical shock, keep heads holders below horizontal.
- 5. Adjust the heads by loosening the lock nuts but do not rotate the heads more than 180° from the factory setting. When screwing in the heads, do not overtighten.

### Test and Adjustment

1. Turn on the circuit breaker and light switch.

NOTE: Sensor has a 40 second warm up period before it will detect motion. When first turned on, wait 1 minute.

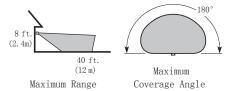
2. Turn the RANGE control to the medium position (halfway between MIN and MAX), and the ON-TIME control to the TEST position.



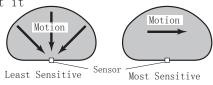
Bottom of Sensor

#### Avoid aiming the control at:

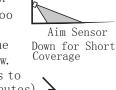
- Objects that change temperature rapidly, such as heating vents and air conditioners. These heat sources could cause false triggering.
- Areas where pets or traffic may trigger the control.
- .Nearby large, light-colored objects reflecting light may trigger the shut-off feature.Do not point other lights at the sensor



NOTE: If fixture is mounted higher than 8 ft. (2.4m). aiming the sensor down will reduce coverage distance The detector is less sensitive to motion coming directly at it



- 3. Loosen the clamp screw in the sensor ball jointand gently rotate the sensor.
- 4. Walk through the coverage area noting where you are when the lights turn on (also, the LED will flash several times when motion is detected). Move the sensor head up down, or sideways to change the coverage area. Keep the sensor at least 1" (25 mm) away from the bulbs.
- 5. Adjust the RANGE as needed. RANGE set too high may increase false triggering.
- 6. Secure the sensor head by tightening the clamp screw. Do not overtighten the screw.
- 7. Set the amount of TIME you want the lights to stay on after motion is detected (1 or 5 minutes).



Clamp

Screw

Ball

Joint

MARNING - Risk of fire. Do not aim the heads at a combustible surface within 3 ft. (1 m).



## **SPECIFICATIONS**

Range ...... Up to 40 ft.(12 m)

[varies with surrounding temperature]

Sensing Angle..... Up to 180°

Electrical Load... Up to 24 Watt Maximum LED

Power Requirements . 120 VAC, 60 Hz

Operating Modes ... TEST, AUTO and MANUAL MODE

Time Delay ..... 1 5 minutes

# TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Lights will not come on.	1. Light switch is turned off. 2. Fuse is blown or circuit breaker is turned off 3. Daylight turn-off is in effect 4. Incorrect circuit wiring, if this is a new installation 5. Light control aimed in wrong direction	1. Turn switch on. 2. Replace fuse or turn circuit breaker on. 3. Recheck after dark. 4. Verify wiring is correct. 5. Re-aim light control to cover desired area
Lights come on in day - light.	1.Light control may be installed in a relatively dark location. 2.Light control is in TEST.	1. The fixture is operating normally under these conditions. 2. Set control switch to 1 or 5 minutes
Lights come on for no apparent reason.	Light control may be sensing small animals or auto-mobile traffic.     Range is set too high.	Re-aim light control     Reduce range.     The fixture is operating normally under these conditions.
Lights stay on continuously.	1. A flood lamp is positioned too close to the light control or pointed at nearby objects that cause heat to trigger the light control.  2. The light control may be picking up a heat source like an air vent, dryer vent, or brightly painted, heatreflective surface.  3. Light control is in manual mode.	1. Reposition the flood lamp away from the light control or nearby objects. 2. Reduce range. 3. Switch light control to AUTO
Lights flash on and off.	1. Heat or light from the flood lamp may be turning the light control on and off. 2. Heat being reflected from other objects may be turning the light control on and off. 3. Light control is in the TEST mode and warming up.	Reposition the flood lamp away from the light control     Reposition light control     Reposition light control     Reposition light control
Lights flash once, then stay off in manual mode.	Light control is detecting its own lights.	Reposition fliid lamp to keep area below the light control relatively dark.