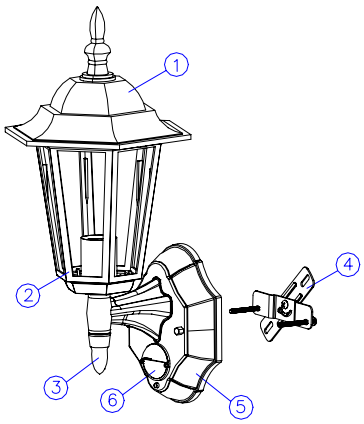
ED101

PIR SENSOR LANTERN TRANSMITTER



ED101

① Top Cover
② Glass
③ TX module
④ Mounting Bracket
⑤ Front Cover
⑥ PIR (Motion Sensor)

INTRODUCTION

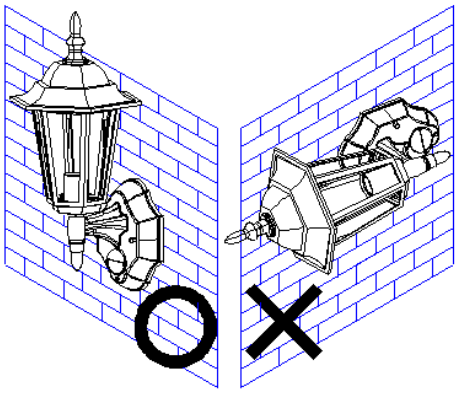
Your EVERSPRING PIR SENSOR LANTERN TRANSMITTER is a unique indoor or outdoor lighting system for your home or business. At night, the built-in passive infrared (PIR) motion sensor turns on the LANTERN when it detects motion in its coverage area. During the day, the built-in photocell sensor saves electricity by deactivating the lantern.

This LANTERN TRANSMITTER is compatible with a full series of our O-NET products, serving as a transmitter. Upon motion being detected, it will illuminate for the length of preset interval and send a "Start" radio signal to the associated receiver (refer to **IMPORTANT**) simultaneously. After expiry of preset interval, it will emit a "Stop" radio signal to the receiver for execution.

Note: Read this entire manual before you start to install the system.

SAFETY PRECAUTIONS

- Do not install when it is raining.
- Be sure to switch off power source before installing.
- Make sure that the power wiring comes from circuit with an external 16A miniature circuit breaker for the short circuit protection or a suitable fuse.
- Keep minimum 0.5m away from the lighted objects.
- The unit can be installed only vertically (FIGURE 1a), not horizontally (FIGURE 1b) as shown in the below drawing.



VERTICAL HORIZONTAL

FIGURE 1a & 1b

IMPORTANT

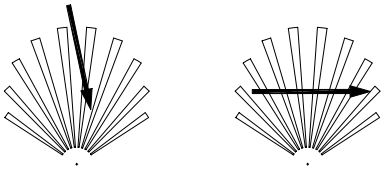
Some local building codes may require installation of this product by a qualified electrician.

Check your local codes as they apply to your situation. If the house wiring is of aluminum, consult with an electrician about proper wiring methods.

Before proceeding with the installation, TURN OFF THE POWER TO THE LIGHTING CIRCUIT AT THE CIRCUIT BREAKER OR FUSE BOX TO AVOID ELECTRICAL SHOCK.

CHOOSING A MOUNTING LOCATION

- For the best results, fix your lantern on a solid surface, 1.8~2.4m above the ground.
- For outdoor installation, a location under eaves is preferable.
- Avoid aiming the motion sensor at pools, heating vents, air conditioners or objects which may change temperature rapidly.
- Do not allow sunlight to fall directly on the front of unit.
- Try to avoid pointing the unit at trees or shrubs or where the motion of pets may be detected.
- Prior to mounting, keep in mind that the motion sensor is most sensitive to the motion, which is across the detection field and less sensitive to the motion, which moves directly towards the detector (FIGURE 2).



SENSOR LESS SENSITIVE SENSOR MORE SENSITIVE

FIGURE 2

LANTERN ASSEMBLY

(1) Fit the lantern compartment onto the base. (FIGURE 3)

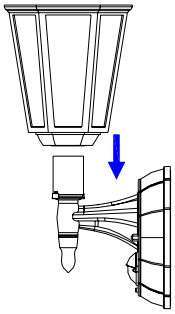


FIGURE 3

(2) Secure the lantern compartment with the two screws provided. (FIGURE 4)

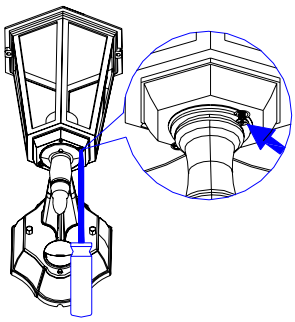


FIGURE 4

BULB INSTALLATION

(1) Do not touch the bulb while it is in use or still hot. Allow it to cool off (about 5 minutes) before touching it.
(2) Do not use the bulb rated higher than 100 watts.
(3) Switch off the power source. Unscrew retaining screw from the top cover (FIGURE 5).

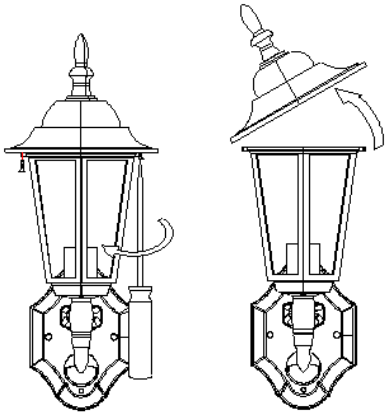


FIGURE 5

(4) Replace the new bulb and screw back the top cover (FIGURE 6).

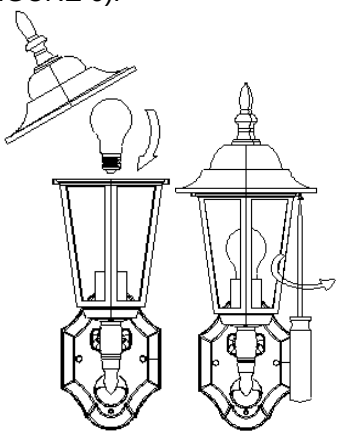


FIGURE 6

INSTALLATION

To facilitate installation, it is essential to get a drill and a screwdriver ready. Select a location for the unit based on the coverage angles shown in FIGURE 7a, 7b, 7c.

- For farther detection area, hinge the PIR cover upward (the first shift).

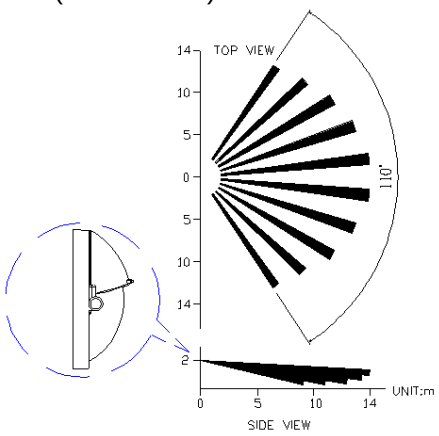


FIGURE 7a

- For far detection area, hinge the PIR cover to the second shift.

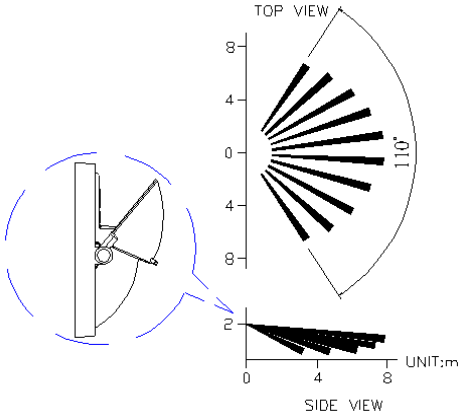


FIGURE 7b

- For near detection area, hinge the PIR cover to the third shift.

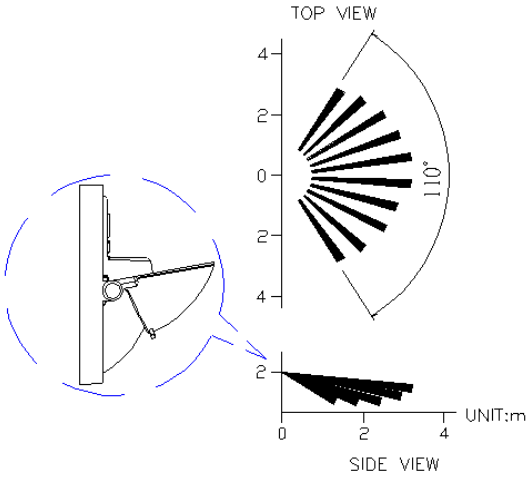


FIGURE 7c

Install a wall switch adjacent to the power source (FIGURE 8). This helps you operate the lantern with

ease. See OPERATION for further information.

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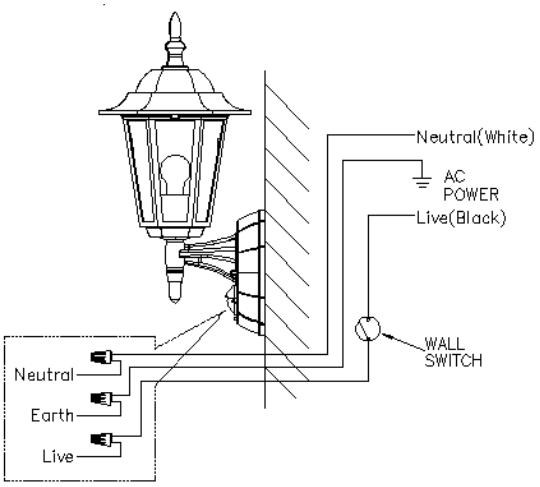

FIGURE 8

WIRING INSTRUCTION

(1) Switch off the power source.
(2) Line up the holes on the mounting bracket with the holes on your junction box. Using fitting screws (depending on size of the holes in your junction box), attach the mounting bracket to your junction box. (FIGURE 9).

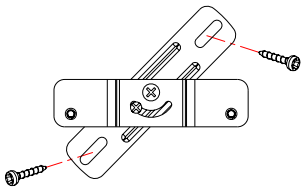

FIGURE 9

(3) Place the gasket in position before wiring.
(4) Connect the black wire from the fixture to the black (Live) power supply wire from your power source using the wire nuts provided. Connect the white wire from the fixture to the white (Neutral) power supply wire using the wire nuts provided. Connect the copper colored ground wire from the fixture to house ground wire using the wire nuts provided. (FIGURE 10)

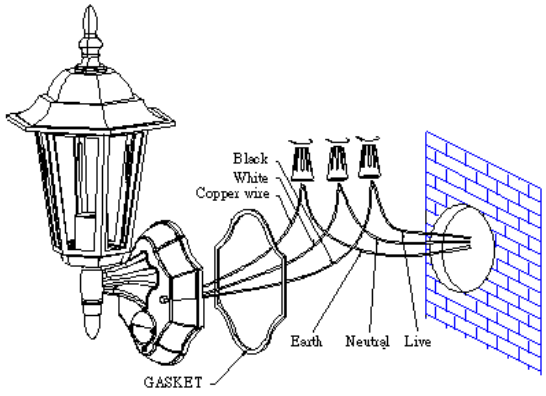

FIGURE 10

(5) Place the front cover and secure it with the two screws provided (FIGURE 11).

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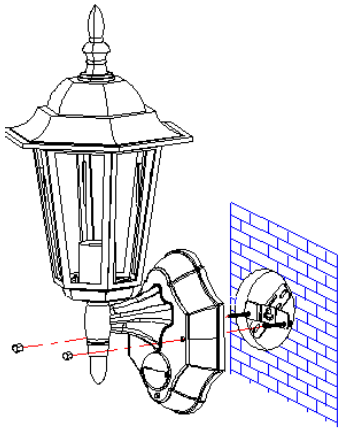

FIGURE 11

SETTING THE LIGHTING SYSTEM

(1) CODE LEARNING

Note: Prior to going ahead with code learning procedure, ensure that the associated receiver has entered code learning mode. For more details, please refer to receiver's operating manual. Any number of TX lanterns can be used with the associated receivers, providing they have implemented code learning process within effective radio range (min. 70 meters).

a. Upon completion of wiring installation as mentioned above, start "code learning" setting.
b. Pressing LED button at least 3 seconds will emit "learning command" radio signal to the associated receiver.(FIGURE 12) During 3 seconds transmission period, the LED button will illuminate for about 1.5 seconds.

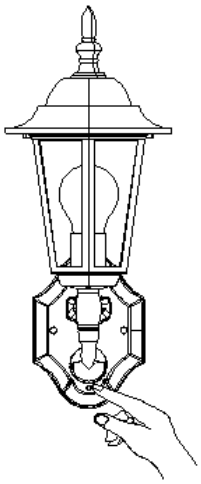

FIGURE 12

c. Confirm if the associated receiver had learned the code successfully.
d. If code learning is successful, start operating the lantern.
e. If not, check if the code learning duration for the associated receiver is overdue. If code learning duration does not expire, resume "b" step as mentioned above.
f. If code learning duration for the associated receiver is overdue, it implies that code learning is failure. Start from "a" step and afterward for retry.

Prior to adjusting the PIR, hinge the PIR cover downward. (FIGURE 13)

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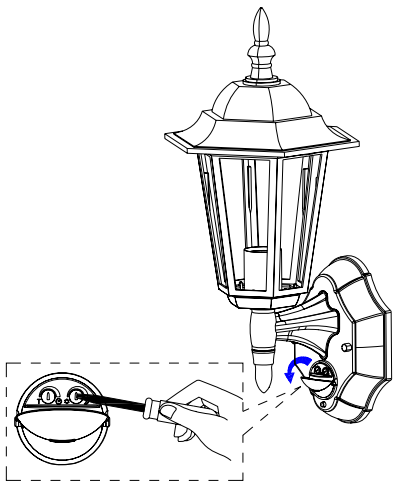

FIGURE 13

(2) TEST MODE

- Turn the LUX control and the TIME control anti-clockwise to the edge – the TEST position. (FIGURE 14)

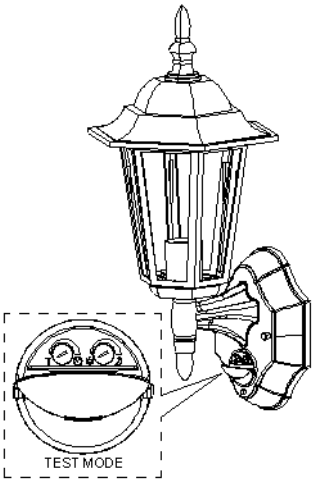

FIGURE 14

- Turn on the wall switch. The lantern will turn on for about 1 minute to warm up. Then it turns off.
- Walk through the detection area. The lantern turns on when you move and turns off after 5 seconds. Wait for the lantern to turn off before moving again to test the sensor.
- Adjust the motion sensor to cover the desired detection area. See Installation for details.

(3) TIME ADJUSTMENT

Default setting: 5 seconds

The interval between “Start” and “Stop” radio signal can be adjusted. After motion is detected, it will start counting and emitting a “Start” radio signal. After expiry of preset interval, a “Stop” radio signal will be sent to the associated receiver for execution. If another motion has been detected before the preset interval expires, it will resume counting and emitting a “Start” radio signal again.

Turn the TIME control knob clockwise to increase (up to about 12 minutes) how long the interval will be or anti-clockwise to decrease (down to about 5 seconds) the interval (FIGURE 15).

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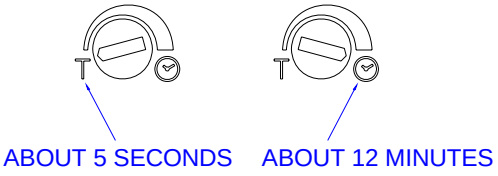


FIGURE 15

(4) LUX ADJUSTMENT

Default setting: 1,000 Lux

The LUX adjustment determines at what light level the lighting system will start operating when you set the sensor to automatic operation.

Provisionally turn the Motion Sensor LUX control knob to the edge counter-clockwise at the moon (dusk) position (FIGURE 16). In this provisional setting mode, the Motion Sensor remains inactive during daylight. At dusk when you find it is the LUX level desired for operation, simply set the LUX control knob to the position which will become active as daylight declines.

FIGURE 16

OPERATION

By using the connected wall switch, you can easily operate the lantern.

(1) AUTOMATIC OPERATION

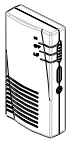
Turn on the wall switch. The lantern will be on when the sensor detects motion and will be off after expiry of preset interval. The built-in photocell turns the sensor off and on according to the light level selected by the LUX adjustment.

(2) MANUAL OVERRIDE

In Manual Override mode, the lantern will remain on for around 4 ~ 6 hours and will be off automatically. Pressing LED button will enter the manual override mode, while pressing LED button again will be set back to automatic operation mode.

IMPORTANT: This lantern transmitter is compatible with the following receivers of O-NET series:

Portable RF 2-tone Sounder (SE101)



On/Off Receiver (B410N)

Dimmer Receiver (B410D)

RX Lantern (ED102)

EZ Alarm (SE131) 

The member of O-NET series is on the increase. Visit our website www.everspring.com for update information.

TROUBLE SHOOTING

Cannot proceed code learning setting: ● Check if wall switch is turned on. ● Make sure the wiring connection is correct.
Light does not turn on: ● Confirm that you have made a correct “wiring connection”. ● Make sure that the bulb has not burned out.
PIR detection not working ● Check if wall switch is turned on. ● Make sure that the PIR cover does not block the PIR detection coverage. ● Ensure that PIR detector is not mounted above a radiator or heater or relocate the PIR detector.
Others: ● Consult with your local service agent or a qualified electrician.

SPECIFICATIONS

Power Requirement	AC 120V / 60Hz
Lighting Load	Max. 100W Incandescent
Frequency	315MHz
Transmission Range	Min. 70m (in open space)
Detection Angle	Up to 110° at 25° C
Detection Distance	Up to 14m (45.9ft) at 25° C
Mounting Height	Recommended 1.8-2.4m (5.9-7.8ft) Wall Mount
Wall Switch Control	On /Off
LED Button	Code learning & manual override setting
Time Adjustment	5sec. - 12 min.
Lux Adjustment	5-1000 lux
Warm Up Time	About 1 min.
Protection Class	I
Protection Degree	IP44
Safety	UL, cUL

Specifications subject to change without notice.

INED101EVSP0E2A

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed

to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:
FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.