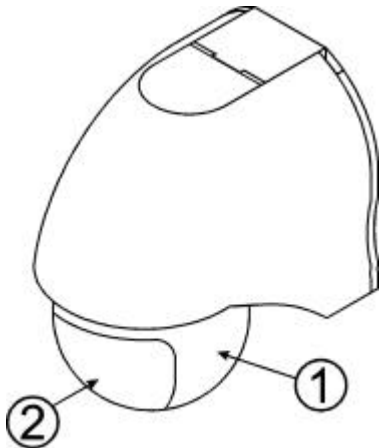


# ES052

## SECURITY MOTION SENSOR



- ① PIR Motion Sensor
- ② PIR Lens

### INTRODUCTION

Your EVERSPRING security motion sensor is a fully automatic indoor and outdoor security/courtesy light controller capable of controlling up to 1000W incandescent or 10 x 40W fluorescent of lighting. At night, the built-in passive infrared (PIR) motion sensor turns on the connected lighting system when it detects motion in its coverage area. During the day, the built-in photocell sensor saves electricity by deactivating the lights.

An adjustable timer lets you select how long the light stays on after activation. The LITE adjustment determines at what light level the lighting system will start operating when you set the motion sensor to automatic mode.

**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.
- The unit can be installed only horizontally (see the FIGURE 1a), not vertically (see the FIGURE 1b) as shown in the below drawing.

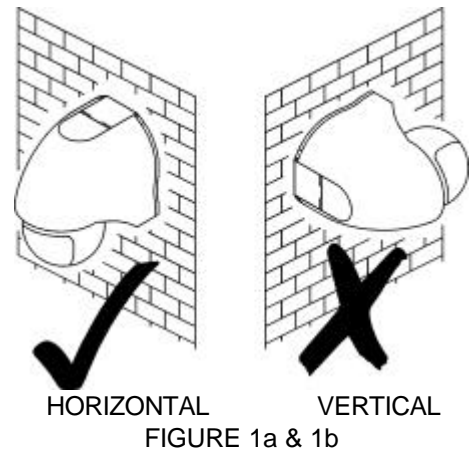


FIGURE 1a & 1b

### IMPORTANT

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

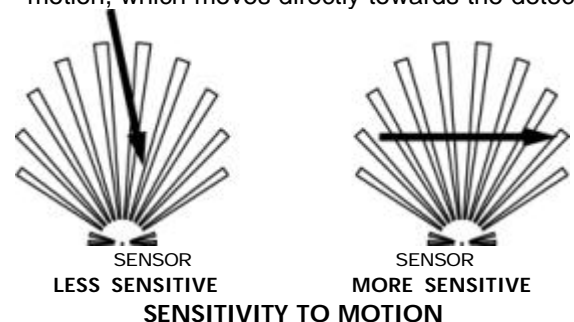
Check your local codes as they apply to your situation. If the house wiring is of aluminum, consult with an electrician about proper wiring methods.

Maintenance or repairing work such as replacing current fuse shall be done by a qualified electrician or technician.

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 motion sensor on a solid surface. For wall mounting, 1.8~2.0m above the ground is needed. For ceiling mounting, 2.5~4.0m above the ground is required.
- 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 more sensitive to the motion, which is across the detection field and less sensitive to the motion, which moves directly towards the detector.

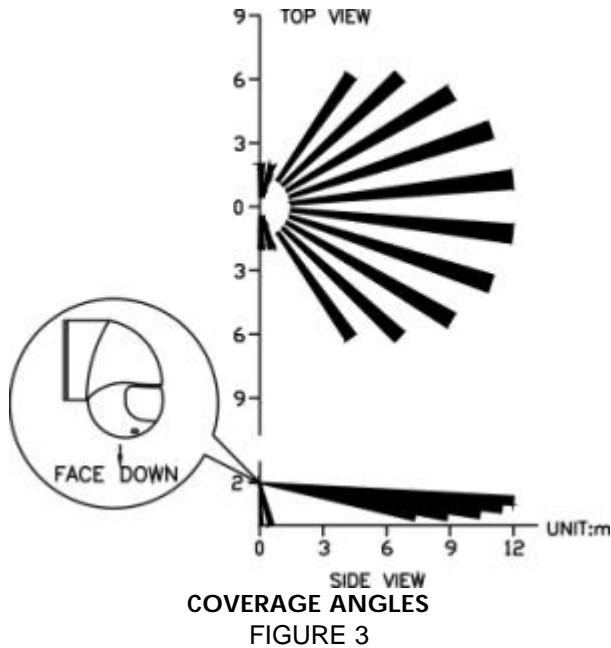


SENSITIVITY TO MOTION

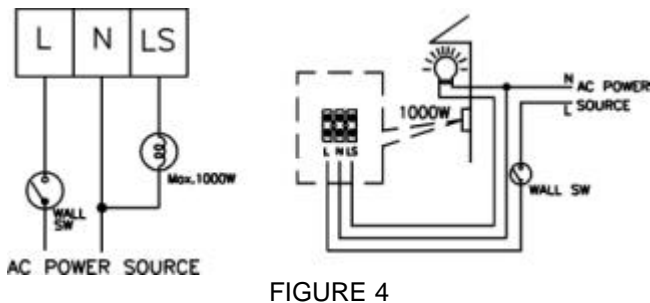
FIGURE 2

## 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 3.



Install a wall switch adjacent to the power source. (FIGURE 4) This helps you operate AUTOMATIC OPERATION with ease. See OPERATION section for more information.



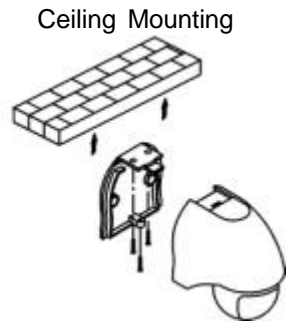
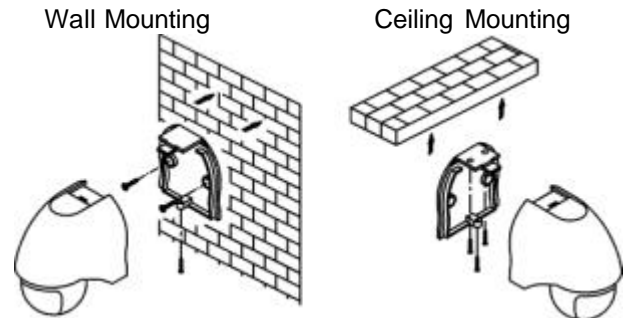
## WIRING INSTRUCTION

- (1) Switch off the power source or wall switch.
- (2) Unscrew one screw from the bottom housing. By using a flat blade screwdriver to detach the base cover from the unit. (FIGURE 5)



FIGURE 5

- (3) Make use of the base cover as a template to mark the position of two screw holes on the wall or on the ceiling. Drill the wall and screw the base cover onto the wall or ceiling using suitable plastic wall plugs and screws provided (FIGURE 6 & 7).



- (4) Strip approximately 6-8mm insulating part of the wires from the power cord. Before connection, run the wires through the rubber seal provided.

Note: The power cord must meet H05RN-F, 1.0mm<sup>2</sup> requirement.

- (5) For power wire connection, connect the BROWN wire (Live wire) to the terminal block "L" mark. Connect the BLUE wire (Neutral wire) to the terminal block "N" mark (FIGURE 8).

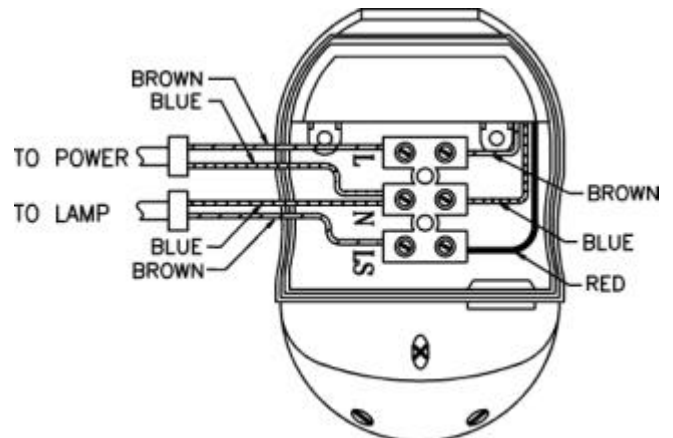


FIGURE 8

- (6) For lamp wire connection, connect the 'BLUE' wire to the terminal block 'N' mark. Connect the 'BROWN' wire to the terminal block 'LS' mark.
- (7) Fix the pre-wired terminal block to the boss of unit tightly.
- (8) Refit and screw the unit to the base cover.

## SETTING THE LIGHTING SYSTEM

- (1) TEST MODE

- Turn the LITE control and the TIME control counter clockwise to the edge – the TEST position:

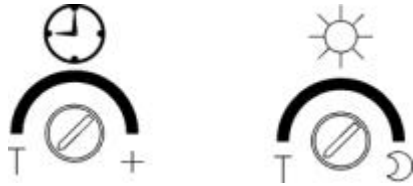


FIGURE 9

- Turn on the wall switch. The light will turn on for about 1 minute to warm up. Then it turns off.
- Walk through the detection area. The light turns on when you move and turns off when you stop. Wait for the light to turn off before moving again to test the sensor.
- Adjust the motion sensor to cover the desired detection area. For a smaller coverage area, point the sensor down; for a larger coverage area, point the sensor up.

### (2) TIME ADJUSTMENT

The TIME adjustment controls how long the light will stay on after the motion has been detected.

Turn the TIME control knob clockwise to increase (up to about 12 minutes) how long the lights stay on or counter clockwise to decrease (down to about 5 seconds) the time delay (FIGURE 10).

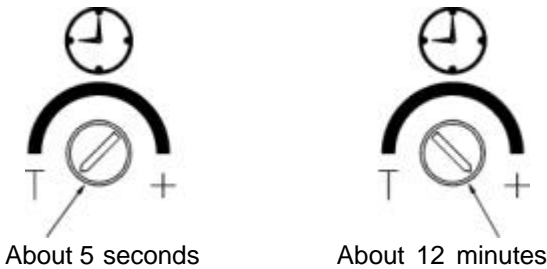


FIGURE 10

### (3) LITE ADJUSTMENT

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

Provisionally turn the LITE control knob clockwise to the edge at the moon (dusk) position (FIGURE 11). Turn the LITE control knob slowly in reverse until the light comes on. 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 LITE control knob to the position which becomes active as daylight declines.

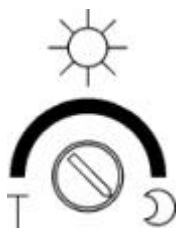


FIGURE 11

## OPERATION

By using wall switch to your ES052, you can easily operate Automatic Operation.

### AUTOMATIC OPERATION

Turn on the wall switch. When the sensor detects motion, the light automatically turns on. The built-in photocell sensor turns the sensor off and on according to the light level selected by the LITE adjustment.

## TROUBLESHOOTING

### Light does not turn on:

- Confirm that you have made a correct "wiring connection".
- Check if you have already turned on the connected wall switch.
- Examine if the bulb of the lighting system is in good condition or loose. If necessary, replace it.
- Check if the total load of the lighting system exceeds the lighting capacity. If necessary, re-arrange the whole lighting system
- Adjust the LITE control knob by turning it counter clockwise.

### Light remains on:

- Make sure the wiring connection is correct.
- Adjust the TIME control knob by turning it counter clockwise

## SPECIFICATIONS

Power Requirement	AC 220 ~ 240V / 50Hz
Power Cord Requirement	H05RN-F, 1.0mm <sup>2</sup>
Lighting Load	Max. 1,000W Incandescent or 10 x Max. 40W Fluorescent
Detection Angle	Up to 110° or 180° at 20°C
Detection Range	Min. 12m (39.4ft) at 20°C
Swiveling Angle	Vertical 35° Horizontal 70°
Mounting Height	Recommended 1.8 ~ 2.0m (5.9 ~ 6.6ft) Wall Mount or 2.5 ~ 4.0m (8.2 ~ 13.1ft) Ceiling Mount
Wall Switch Control	On / Off
Sensor Operation	Auto
Time Adjustment	5 ± 3 sec ~ 12 ± 3 min
Lux Adjustment	Approx. 0 ~ 1,000 Lux
Operating Temperature	-20°C ~ +40°C
Warm Up Time	About 1 min.
Protection Class	II
Protection Degree	IP44
Safety	CE, GS