

PROFESSIONAL MOTION SENSOR IR DETECTION ANGLE 240°

INTRODUCTION

The motion sensor 240° degree standalone is a fully automatic indoor and outdoor security/courtesy light controller capable of controlling up to 2000W incandescent and up to 480W 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 saves electricity by deactivating the lights. An adjustable timer lets you select how long the light stays on after activation. The unit is equipped with the temperature compensation function which can compensate the sensitivity when the surrounding temperature is rising. The detection range can be set with a kit of cuttable clip-on lens covers to avoid of false trigger by cars or pedestrians. Unit with a scanning LED communicating users the status of the motion sensor. The installations can be made on the wall or ceiling. With an exquisitely design corner mounting plate, users can also install the unit on the external and internal corners.

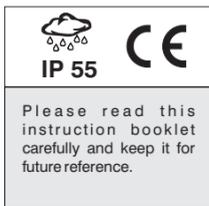


PE-DESPP002 12/07

TECHNICAL DATA

Power Requirement: 220 ÷ 240V~ 50Hz
 Power Cord Requirement: H05RN-F - 3G - 1 mm²
 Lighting Load max: max 2000W incandescent
 max 480W (10 x 48W) fluorescent

Protection Degree: IP 55
 Protection Class: Class II
 Detection Angle: Up to 240° at 20 °C - 2m Height
 Detection Distance: Up to 12 m at 20 °C - 2m Height
 Swiveling Angle: Horizontal 180°
 Time Adjustment: ± 5 sec at ± 12 min
 Lux Adjustment: Approx. 5 ÷ 1000 Lux
 Operating Temperature: -20 °C ÷ +40 °C
 Warm Up Time: About 90 sec.
 Wall Switch Control: OFF / ON (AUTOMATIC OPERATION) / MANUAL OVERRIDE
 CE marking reference standard: LVD 2006/95/CE - EMC 2004/108/CE



⚠ WARNINGS ⚠

Important: installation and electrical connections of devices and appliances must be carried out by skilled people and in compliance with current regulations. The manufacturer declines any liability in connection with the use of products subject to special environmental and/or installation standards.

- Check if the total load of the lighting system exceeds the lighting capacity.
- Install the movement detector on a fixed wall, well away from sources of heat and out of direct sunlight. Keep the detector at least 1 meter away from the controlled lighting (e.g. Lamp).
- Avoid aiming the motion sensor at pools. Try to avoid pointing the unit at trees or shrubs can trigger false switching.
- For outdoor installation, a location under eaves is preferable.
- The movement detector is not suitable for connection to anti-intruder security system since it is not fitted with any anti-tamper system.
- Prior to mounting, keep in mind that the motion sensor is more sensitive to the motion, which is across the detection field (FIG. 10) and less sensitive to the motion, which moves directly towards the detector (FIG. 11).

INSTALLATION

- Recommended ceiling mounting height: for wall mounting, internal or external corner mounting 1.8 ÷ 2.0 m above the ground; for ceiling mounting 2.5 ÷ 4.0 m above the ground.
- Remove the back plate (retained by 1 screws on the bottom) from the mounting box (FIG. 6).
- Fix the back plate on to the wall or on the ceiling with two screws (FIG. 6-7). If you need to install the movement detector in or on a corner, fix the mounting plate to the internal or external corner using the two screws (FIG. 8-9).

ELECTRICAL CONNECTION - ⚡ switch mains supply off 230V~ 50 Hz

NOTE: make sure that the power wiring comes from circuit with an external 16A miniature circuit breaker (FIG. 13). Install the switch on the wall near the electrical supply. This helps you operate AUTOMATIC OPERATION and MANUAL OVERRIDE with ease.

Insert the H05RN-F - 3G - 1 mm² power cable into the cable gasket of the back plate before drilled using a proper tool and fix it with its suitable cable block (see FIG. 4 and FIG. 5).

Electrical connection see FIG. 13:

- terminal **L** mark = connect the wire **LIVE** power
- terminal **N** mark = connect the wire **NEUTRAL** power
- terminal **LS** mark = connect the wire of lamp (Live)
- terminal **N1** mark = connect the wire of lamp (Neutral)
- terminals **⊕** mark = connect the GREEN/YELLOW wire of both power cord and lamp wire

NOTE: the 6-pole terminal block is equipped with 2 common ground terminals serving as a common point to connect the GREEN/YELLOW wire of both external Class I luminaires and exterior power source Class I luminaires refers to the product that Requires earthing protection.

INITIAL OPERATION (TESTING AND ADJUSTMENT)

- Pulling off the attachment ring from the top lens segment by pressing two concave surfaces on the ring for time, lux and sensitivity adjustment (FIG. 14). After setting, fix the cover back to its place (FIG. 22).
- Turn the Time control (**TIME**) and the Light control (**LUX**) counter-clockwise to the edge-the **TEST** position (FIG. 15 and 17).
- Switch on power with the wall switch.
- The attached device (example Lamp) lights up for approx. 90 sec. (Warm up) and then switches off.
- Walk through the detection area, the light turns on when you move and turns off with a time delay, when you stop. There should be at least 8 seconds between the test.

TIME ADJUSTMENT

- The **TIME** adjustment controls how long the lamp will stay on after motion has been detected. Adjust the **TIME** control knob clockwise to increase (up to about 12 minutes - FIG. 16) how long the light stays on or anti-clockwise to decrease (down to about 5 seconds - FIG. 15) the time delay.

LIGHTING ADJUSTMENT (LUX)

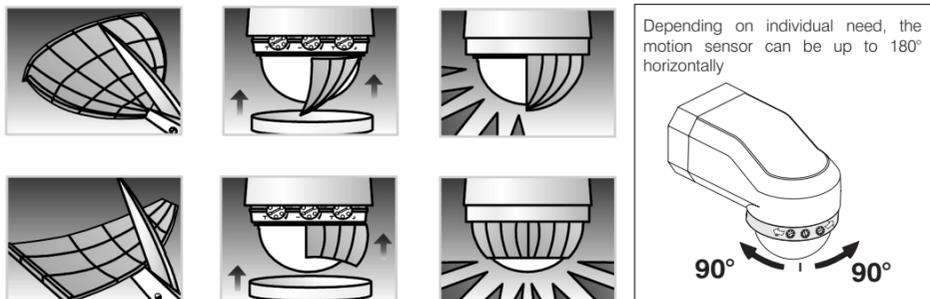
- The **LUX** adjustment determines at what light level the Light Control will start operating when you set the sensor to the AUTO MODE. Provisionally turn the **LUX** control knob to the edge clockwise at the moon (dusk) position. In this provisional setting mode, the Motion Sensor remains inactive during daylight (FIG. 18). At dusk and you find it is the LUX level you desired for operation, simply set the **LUX** control knob to the position that you tried satisfactorily (example FIG. 19).

SENS. ADJUSTMENT

- The motion sensor's sensitivity adjustment controls "detection distance". It can be adjusted to compensate for seasonal variations in temperature and to reduce unwanted triggering. The optimum sensitivity can be achieved by setting the (**SENS**) control knob initially to its mid position and then adjusting the control knob clockwise to increase (up to 12 meters - FIG. 21) the detection distance or anti-clockwise to decrease (down to 3 meters - FIG. 20) the detection distance.

DETECTION RANGE SETTING/ADJUSTMENTS

- Two kits of clip-on lens covers for limiting the detection range by blanking off lens segments is enclosed the separate accessory bag. For different requirements, the clip-on lens covers can be cut to size horizontally and vertically to set detection coverage (see figures below).
- Follow the grooves on the covers, and cut it to the suitable size to blank off the lens segment for the undesirable detection area.
- Press two concave surfaces on the attachment ring to pull off the ring.
- Place the covers onto the notches at the sensor lens top. The attachment ring is again fixed to the unit holding the covers steadily in place.



OPERATION

By using wall switch to your motion sensor, you can easily select one of two modes of operation: automatic operation and manual override.

(1) AUTOMATIC OPERATION

Turn on the wall switch. When the sensor detects motion, the lamp connected to it lights up automatically if the ambient brightness is lower than the brightness level set with the **LUX** control and it stays on for the time pre-set with the **TIME** control.

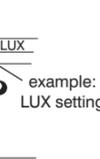
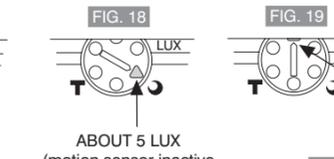
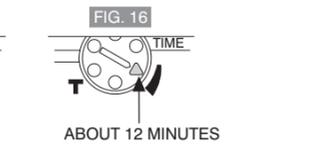
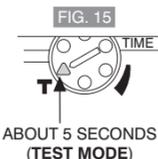
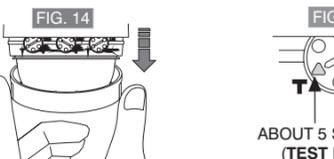
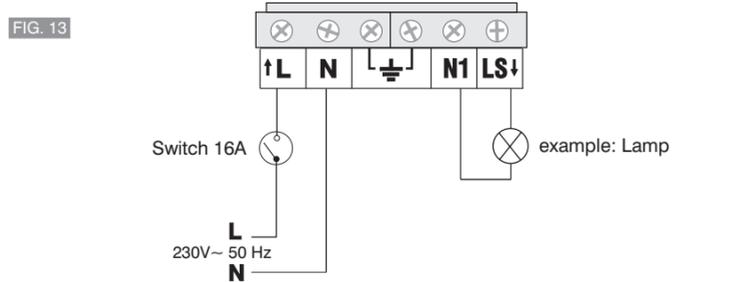
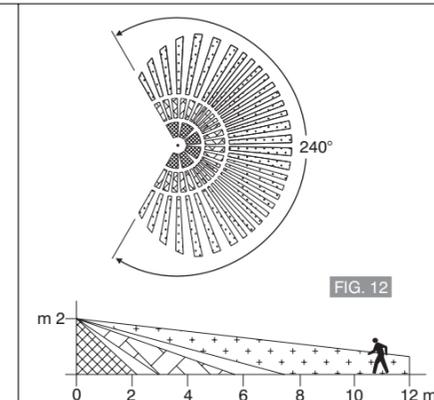
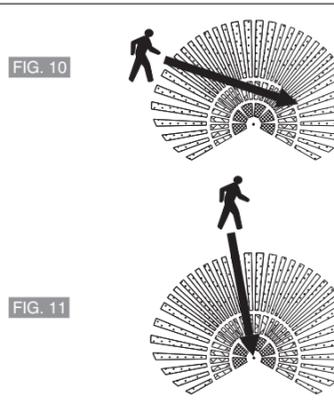
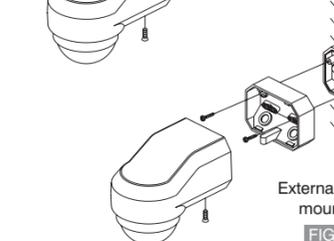
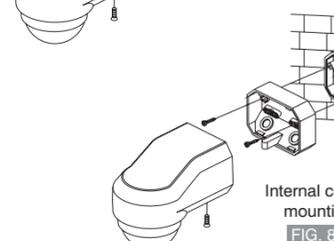
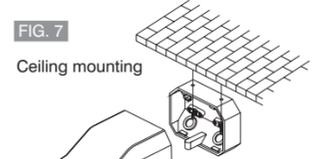
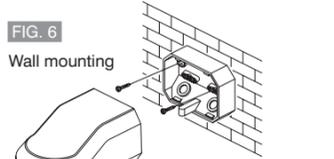
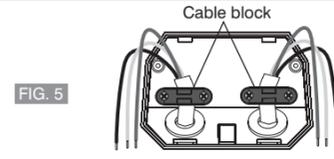
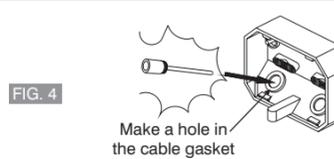
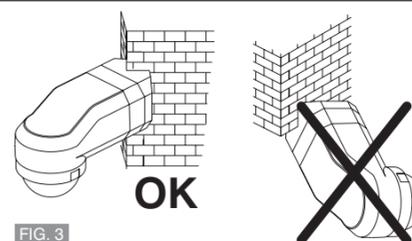
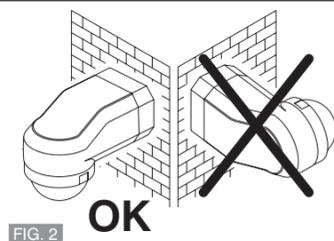
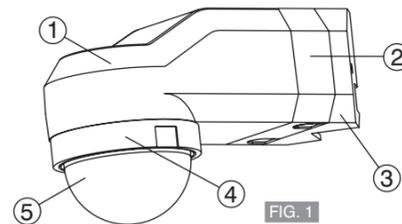
(2) MANUAL OVERRIDE

To keep the lamp on regardless of the motion, you can override the automatic operation: turn the wall switch off and on twice within 4 seconds (the interval between the first and second operation must be within 0,5 - 2 seconds). In Manual Override mode, the lamp will remain on.

In Manual Override mode, the light will remain on for around 4 hours despite no motion, then the light will turn off and the Light control will be back to Auto mode automatically.

Users can also set the motion sensor back to Auto operation (before 4 hours elapse) by turning off the wall switch for at least 10 seconds and then turn it back on.

1. Motion sensor
2. Back plate
3. Corner mounting plate
4. Attachment ring
5. Lens



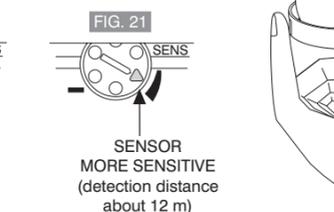
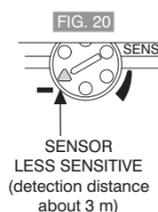
TROUBLESHOOTING

Light does not turn on

- Check that the wall switch is ON, permitting 230V ~ mains supply to the sensor.
- Confirm that you have made a correct "wiring connection".
- Make sure that the bulbs have not burned out.

Light remains on

- Make sure the wiring connection is correct.
- If you set the system to manual override, remember that you must turn the wall switch off for at least 10 seconds to switch the sensor to automatic operation and turn off the lights.
- Check if the (**TIME**) setting is correct.



DISPOSAL OF ELECTRICAL & ELECTRONIC EQUIPMENT (EU directive 2002/96/EC)

This symbol on the product or its packaging indicates that this product shall not be treated as household waste. Instead, it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment, such as for example: - sales points, in case you buy a new and similar product, - local collection points (waste collection center, local recycling center, etc.). By ensuring this product is disposed of correctly, you will help prevent potential negative consequence for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product. **Attention:** in some countries of the European Union the product is not included in the field of application of the National Law that applies the European Directive 2002/96/CE, and therefore counties have no obligation to carry out a separate collection at the "end of life" of the product.