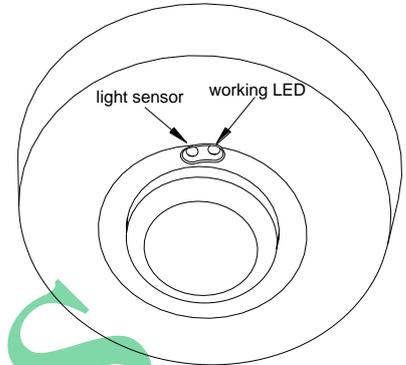


EL-M01 Microwave sensor

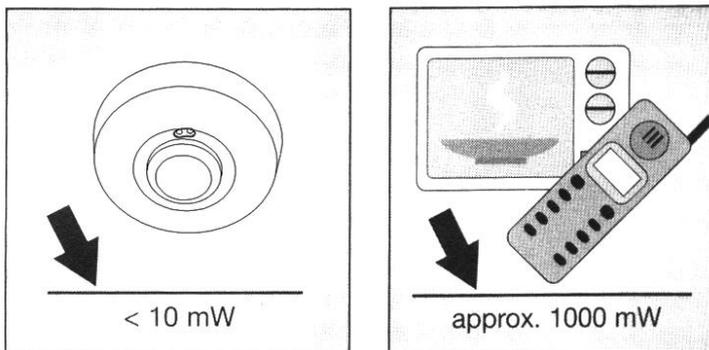
Instruction

The sensor is an active motion detector, it emits high-frequency electro-magnetic wave (5.8GHz) and receives their echo. The sensor detects the change in echo from even the slightest movement in its detection zone. A microprocessor then triggers the “switch light ON” command. Detection is possible through doors, panes of glass or thin walls.



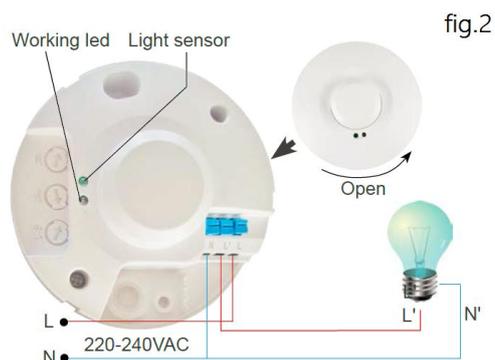
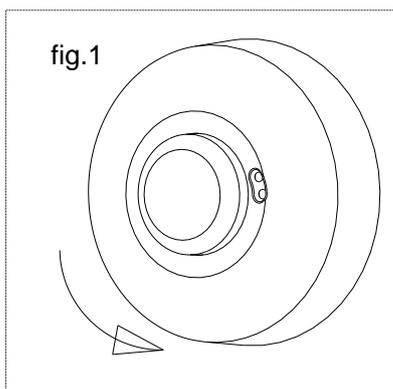
Important: persons or objects moving towards the sensor are detected best !

NOTE: the high-frequency output of this sensor is <math><10\text{mW}</math>- that is just one 100th of the transmission power of a mobile phone or the output of a microwave oven.



Installation procedures

1. Take down the top cover by turning it anti-clockwise(see fig.1)
2. Hold base against the wall and mark drill holes, paying attention to any existing wiring in the wall;
3. Drill the holes, insert wall plugs (6mm dia);
4. Put the power wire and load wire through the base holes;
5. Screw the base into place;
6. Connect the mains power supply and the load wire to the connection terminal according to connection-wire mark.(see fig.2)



Technical specifications

power supply: 220-240VAC

power frequency: 50/60Hz

Installation sit: Ceiling mounting

HF system: 5.8GHz CW radar, ISM band

transmission power: <10mW

rated load: 1200W (220-240VAC)

detection angle: 360°

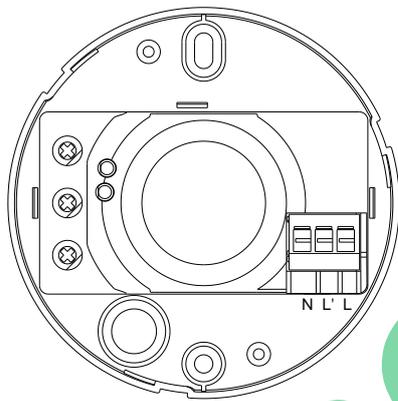
reach: 1-8m (radii.) , adjustable

time setting: 8sec to 12min

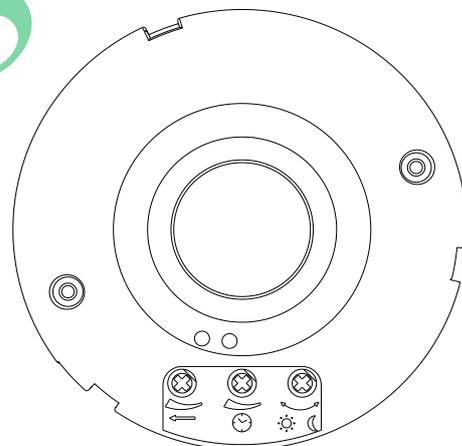
light control: 2~2000LUX

power consumption: approx.0.9W

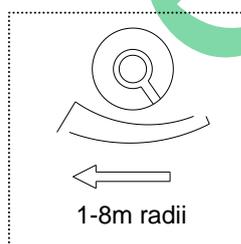
Connection illumination



Connect N, L with power;
Connect N, L' with load



Reach setting (sensitivity)

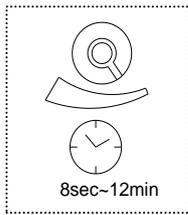


Reach is the term used to describe the radii of the more or less

circular detection zone produced on the ground after mounting the sensor light at a height of 2.5m, turn the reach control fully anticlockwise to select minimum reach (approx.1m radii), and fully clockwise to select maximum reach (approx. 8m radii).

NOTE: the above detection distance is gained in the case of a person who is between 1.6m~1.7m tall with middle figure and moves at a speed of 1.0~1.5m/sec. if person's stature, figure and moving speed change, the detection distance will also change.

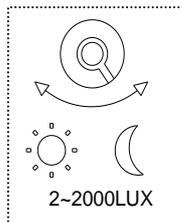
Time setting



The light can be set to stay ON for any period of time between approx. 8sec(turn fully anticlockwise) and a maximum of 12min(turn fully clockwise). Any movement detected before this time elapse will re-start the timer. It is recommended to select the shortest time for adjusting the detection zone and for performing the walk test.

NOTE: after the light switches OFF, it takes approx. 1sec before it is able to start detecting movement again. The light will only switch on in response to movement once this period has elapsed.

Light-control setting



The chosen light response threshold can be infinitely from approx. 2-2000lux. Turn it fully anti-clockwise to select dusk- to-dawn operation at about 2 lux. Turn it fully clockwise to select daylight operation at about 2000lux. The knob must be turned fully clockwise when adjusting the detection zone and performing the walk test in daylight.

Troubleshooting

Malfunction	Cause	Remedy
The load will not work	• wrong light-control setting selected	• Adjust setting
	• load faulty	• Change load
	• mains switch OFF	• Switch ON
The load work always	• continuous movement in the detection zone	• check zone setting
The load work without any identifiable movement	• the sensor not mounted for detecting movement reliably	• securely mount enclosure
	• movement occurred, but not identified by the sensor(movement behind wall, movement of a small object in immediate lamp vicinity etc.)	• Check zone setting
The load will not work despite movement	• rapid movements are being suppressed to minimize malfunctioning or the detection zone you have set is too small	• Check zone setting