ENSA™

Energy Saving Devices

ENSA-PS2

INFRARED SENSOR SWITCH

INSTRUCTION MANUAL

www.ensalife.com

Thanks for choosing the ENSA-PS2 Passive Infrared Sensor Switch.

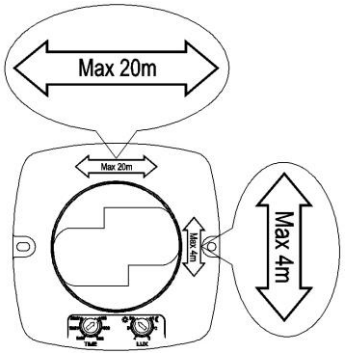
This product is an automated motion activated switch. It is based around a high sensitivity pyroelectric detector, light sensor and control electronics. The switch will turn on when it detects movement inside the detection area and will remain on until a preset time has elapsed. The sensor will only switch the load on when the measured LUX level is below a set threshold.

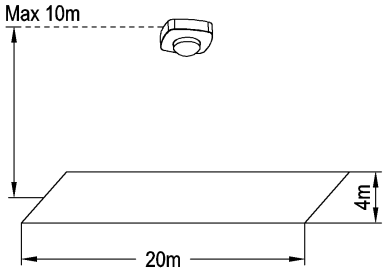
For installation by a qualified electrician only.

SPECIFICATIONS			
AC Input Voltage	220 ~ 240VAC	**Sensor Type**	Pyroelectric
AC Input Frequency	50Hz	**Motion Detect Shape**	360° (rectangular)
Light Sensing	<3 ~ 2000lx (adjust.)	**Motion Detect Range**	4 x 20m (maximum)
On-time Delay	10s ~ 30min (adjust.)	**Motion Detect Speed**	0.6 ~ 1.5m/s
Rated Load	2000W (R) / 1000W (I)	**Rec. Install Height**	4 ~ 10m
Power Consumption	0.5W	**Working Conditions**	-20 ~ 40°C / 93%RH (max.)

FUNCTION:

- Adjustable light sensor can be set to 3 to 2000lx via dials. Configure your own dusk to dawn settings to automatically control light activation.
- Recommended mounting height of 4~10m. Max. detection range is a 4m by 20m rectangle, ideal for long corridors and large areas.
- Time delay before load switch off is adjustable between 10 seconds and 30 minutes.
- Time delay before switch off is automatically reset when the sensor detects movement, even if the light is still on. This means that intermittent movement will keep the light on.
- Lux sensing is disabled while the load is on to prevent false trigger of the light sensor.

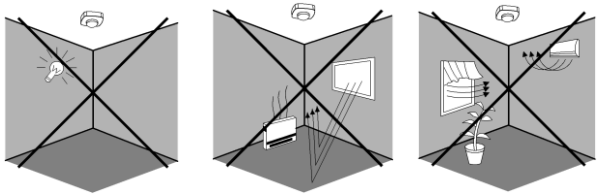




INSTALLATION ADVICE:

As the detector responds to changes in temperature, avoid the following situations:

- Avoid pointing the detector towards objects with highly reflective surfaces, such as mirrors.
- Avoid mounting the detector near heat sources, such as vents, air conditioning, lights etc.
- Avoid pointing the detector towards objects that may move in the wind, such as curtains, tall plants etc.



CONNECTION:

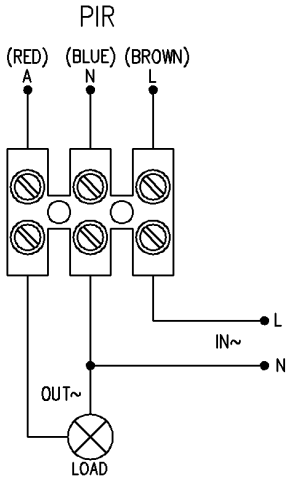
WARNING

WARNING Danger of death through electric shock!

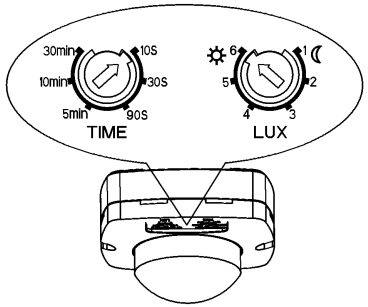
- Must only be installed by professional electrician.
- Ensure all AC power is switched off.
- Cover or shield any adjacent live components.
- Ensure device cannot be switched on.

- Detach the front cover directly.
- Connect the power and the load to the sensor switch according to connection-wire diagram shown below.
- Screw the sensor switch to the desired location.
- Reattach the front cover and test.

CONNECTION-WIRE DIAGRAM:



TESTING THE INSTALLATION:



- Set the LUX selector to the maximum (sun) setting; set the TIME selector to the minimum (10s) setting.
- Switch on AC power; during the first 30 seconds the sensor is in warm up mode and its connected load will not turn on. After this period is complete, if movement is detected by the sensor, the load will be switched on. After the detected movement stops, the load will switch off in approximately 10 seconds.
- Turn LUX selector anti-clockwise to the minimum setting (moon). If the ambient light is more than three lux, the load will not turn back on after the sensed movement has stopped.

Please note that when testing in daylight, turn the LUX selector to the ☼ (SUN) position, otherwise the sensor will not turn on the load. Also ensure that any lamp connected as a load is pointed away from, and is mounted no closer than 60cm from the sensor.

TROUBLESHOOTING:

- The load does not turn on:
  - a. Double check all wiring to the sensor and the load.
  - b. Try bypassing the sensor to ensure that the load is working correctly.
  - c. Try increasing the LUX setting to reject any ambient light.
- The motion detection sensitivity is poor:
  - a. Ensure that the lens is clean with no obstructions between the moving object and the sensor.
  - b. Test at a lower ambient temperature – All PIRs have reduced sensitivity at elevated temperatures.
  - c. Ensure that the sensor is mounted so that the detected object moves across the detection field, rather than towards it.
  - d. Ensure that installation height is between 4m and 10m
  - e. Try tilting the sensor to move the detection field toward the moving object.
- The sensor does not turn off the load:
  - a. Ensure that there are no moving objects or thermal drafts in the detection area.
  - b. Try reducing the TIME setting on the detector.
  - c. Ensure power drawn by the load is less than 2000W (resistive) or 1000W (inductive)