



CONVENIENCE & SECURITY MOVEMENT SENSOR

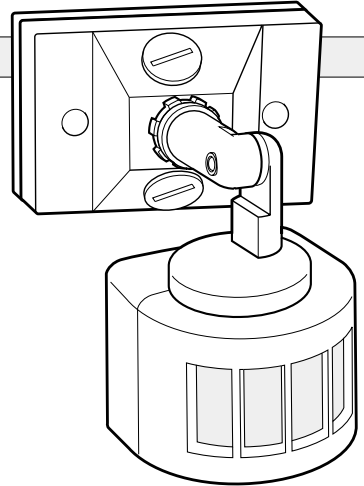
Model 98VH110

Installation and operating instructions

Please take 5 minutes to read these instructions before installation and operation

FEATURES

- Security and convenience – reacts to intruders, visitors and family by turning the lights ON and OFF automatically.
- All plastic housing – no earth wire required, ideal for replacing existing outdoor lights
- Adjustable light level (LUX) and time delay (Time) controls.
- Auto Mode only.
- Light ON time can be adjusted from 10 secs. to 5 minutes to suit the situation.
- Can be mounted on a wall or under a soffit.
- Designed to be used with standard PDL mounting boxes if required.



PRINCIPLE OF OPERATION

All PDL Passive Infrared (PIR) automatic movement sensors are an electronic ON/OFF switch for automatically switching on lighting.

When movement of a heat source (i.e. person, dog or car) across two PIR zones is detected by the sensor, it automatically switches on the lighting.

If no further movement is detected the sensor starts timing and will turn off the lighting after the preset "Time" period.

As long as there is movement in the PIR field of view the lighting will stay ON.

Any movement of a heat source could cause the sensor to switch the lighting on (including hot air movement) i.e. draughts from an open window or door, air vents close by, cars in the street or movement in the neighbours property. This depends on the angle of the sensor head and the distance from the sensor.

CHOOSING A LOCATION

The sensor can be mounted either horizontally under a soffit or vertically on a wall. Before mounting select the most suitable location which will allow the sensor to monitor intended targets without nuisance switching.

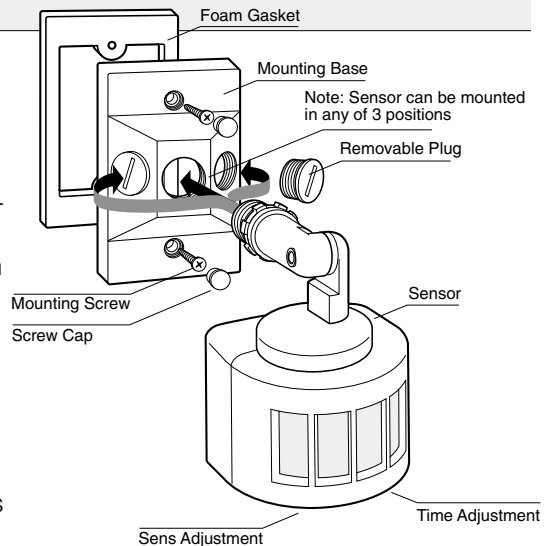
For best coverage and operating performance:

- 1 DO NOT aim the sensor directly at the target area, OFFSET the sensor to one side so you are crossing the field of view.
- 2 AVOID other heat sources i.e. air vents, strong light sources, opening windows and doors.
- 3 DO NOT aim directly at large shrubs and trees which could cause false triggering problems.
- 4 DO NOT aim directly at the sun.
- 5 DO NOT expose your sensor to the extremes of weather, if possible shelter under a soffit or in a sheltered area.
- 6 DO NOT expect the sensor to work at its maximum distance in all temperature conditions. On hot nights the detecting distance will decrease. On cold nights the distance will increase.

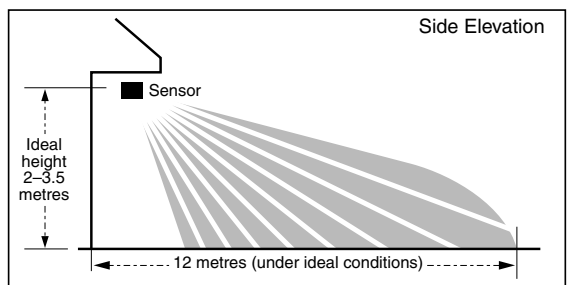
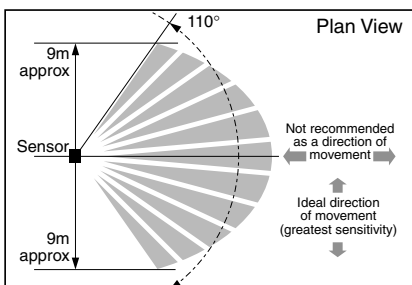
FOR FURTHER RECOMMENDATIONS SEE THE INSTALLATION HINTS PAGE.

ASSEMBLY

- 1 The sensor can be screwed into any of the three mounting positions. See diagram.
- 2 Ensure the sensor is screwed securely to the mounting surface and the foam gasket is behind the mounting base.
- 3 The mounting base can be used with a PDL surface mounting box or flush box for additional wiring room if required.
- 4 After mounting push the screw caps into the screw holes to improve the weatherseal.
- 5 Point the sensor towards the area to be covered, then tighten the locknuts and screws.

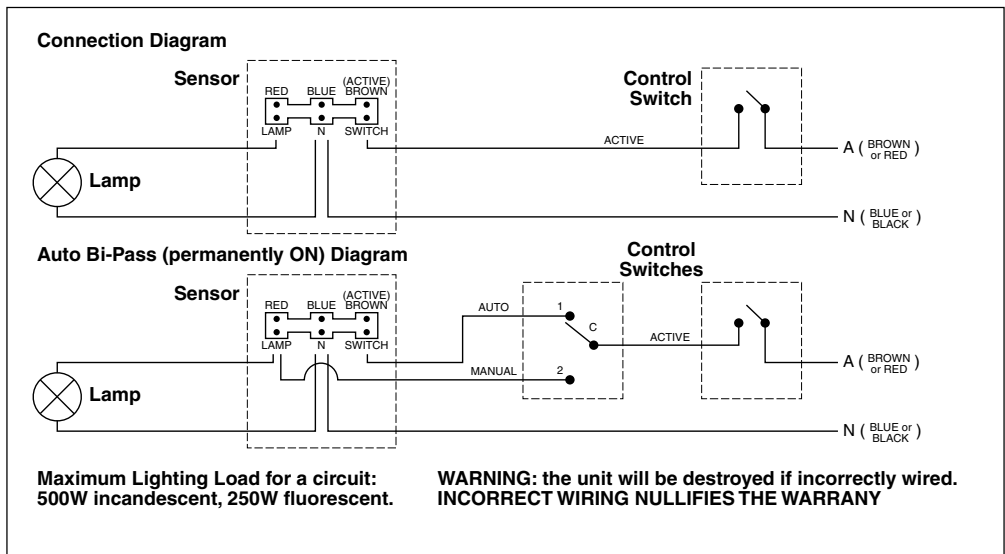


PIR FIELD OF VIEW



CONNECTION TO THE POWER SUPPLY

- Note: This sensor must be installed according to local Wiring Regulations and Code of Practice.
- Ensure the supply is disconnected at the distribution board before beginning electrical wiring.
- Study the wiring diagram below BEFORE making any electrical connections. Wiring the unit incorrectly could destroy the sensor.
- Connect Brown or Red wire from the supply circuit (incoming active/phase) to the Brown active terminal.
- Connect Blue or Black wires (Neutrals) from the supply circuit and lamp circuit to the Blue Neutral terminal.
- Connect the remaining lamp wire (Lamp Active/Phase) to the Red Lamp terminal.
- Check all electrical connections and mount the sensor on a secure surface.
- Reconnect the power supply and set the TIME and LUX controls to suit your conditions.



OPERATION

- Turn the "TIME" control to minimum (-) and the "LUX" control to maximum (+).
- Walk in front of the sensor until the light comes on. This checks the operation of the sensor and the field of view.
Once the light comes on move to a new position and stand still until the light goes out (approx. 10 secs), move again until the light comes on.
- Repeat step 2 and adjust the angle of the sensor head until the optimum field of view is achieved.
- Turn the "TIME" and "LUX" controls to the desired positions for AUTO operation (see "Adjustments" section).

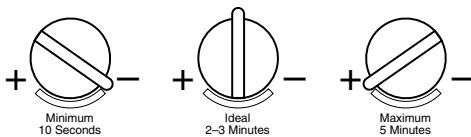
Auto Mode: Turn the control switch ON. The Sensor is now in Automatic Mode and will operate according to the preset Time and Lux adjustments.

Lights Permanently Off: Turn the control switch OFF.

Lights Permanently On: There is no in-built Test or Permanently On mode. Turning the lights Permanently On can only be achieved by the wiring method indicated in the connection diagram.

ADJUSTMENTS

TIME:



The sensor has an adjustable "Time ON" control from 10 seconds minimum to a maximum of 5 minutes (approx).

Timer starts working after the last movement is detected.

While there is movement from a heat source in the detecting area the lighting will remain on and the time will keep resetting.

Note: Ideal "ON" time is about 2-3 min.

LUX:



The Lux adjustment controls the light level at which the unit will switch on the light when movement is sensed.

If set to the "+" end it will switch during daylight.
If set to the "-" end it will operate only in total darkness.

Ideally it should be set at dusk or in the light conditions under which the sensor and lights are expected to operate.

SPECIFICATIONS

Electrical: 220 - 240V 50Hz a.c. Only

Lighting Load:

500 Watts (max) Incandescent

250 Watts (max) Fluorescent

For other lighting load consult your PDL representative.

Use for lighting loads ONLY.

Operating Temperature: -5°C to 35°C

Field of View: 110°C elliptical field.

12m forward - 9m either side, under ideal conditions

Timer: Adjustable "Light ON" timer
10 sec. to 5 min (nominal)

LUX: Adjustable light level sensing from 5 Lux upwards.

Protection: IP44 Weather Protection when correctly installed.
Double insulated.

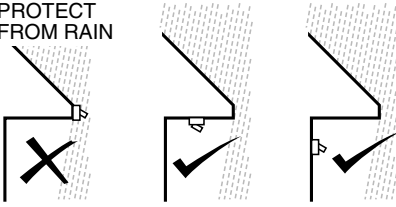
Mounting: Universal mounting either vertical or horizontal (wall or soffit).
Fits standard mounting boxes.
Made in China.

TROUBLE SHOOTING GUIDE

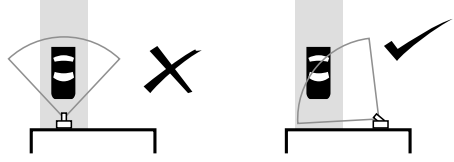
PROBLEM	CAUSE	POSSIBLE SOLUTION
Lights won't come on.	<ul style="list-style-type: none"> ● Power not on. ● Wired incorrectly. ● Bulbs blown. ● PIR not detecting your movement. ● Light conditions too bright. 	<ul style="list-style-type: none"> ● Turn on indoor switch or check fuse. ● Check wiring is the same as diagram. ● Check the bulb still functions or replace. ● Adjust the angle/direction of the PIR. For best results walk across the beam. ● Wait until light conditions are duller or adjust the LUX control up.
Lights stay on.	<ul style="list-style-type: none"> ● "Time" set to high. ● Wired incorrectly. ● Frequent changes in heat are being detected. 	<ul style="list-style-type: none"> ● Turn "Time" knob towards "-" end (10 secs to 5 min adjustable). ● Check wiring is the same as diagram. ● Check sensing area for possible heat sources i.e. air vents, moving vehicles, moving trees, and reposition/angle the sensor.
Lights keep turning on and off (cycling).	<ul style="list-style-type: none"> ● Changes in heat are being detected from a fixed heat source. ● Changes in heat are being detected from a moving object. ● Light and heat is being reflected back onto the sensor. ● Sudden temperature changes due to storms or high winds. 	<ul style="list-style-type: none"> ● Check the sensing area for air vents, light fittings or fans and either reposition the sensor or adjust the aim. ● Check the sensing area for moving vehicles, pedestrians, animals, moving trees and alter the aim of the sensor. ● Alter aim of the sensor or paint the reflecting surface with a dull finish. ● Turn sensor off until storm passes or install in a sheltered location.
Sensing angle and distance appear incorrect	<ul style="list-style-type: none"> ● Angle of sensor head pointing down too far. 	<ul style="list-style-type: none"> ● Raise the sensor head to increase the sensing distance and angle.

INSTALLATION HINTS

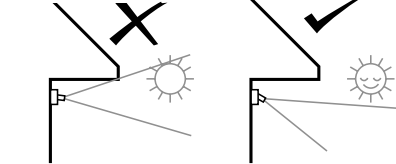
PROTECT FROM RAIN



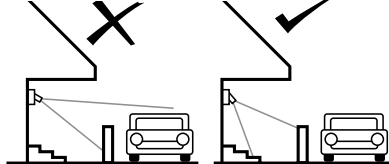
AIM SENSOR ACROSS, NOT ALONG THE PATH



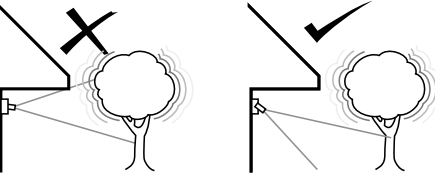
DON'T AIM AT THE SUN



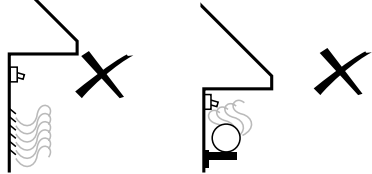
AIM SENSOR DOWN TO REDUCE DISTANCE



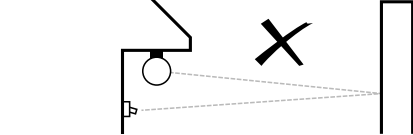
AIM AWAY FROM MOVING OBJECTS



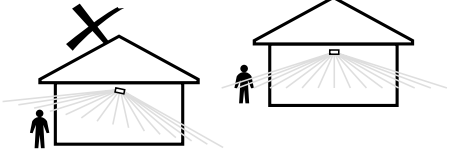
KEEP AWAY FROM AIR VENTS DON'T MOUNT ABOVE LAMPS



AVOID REFLECTED LIGHT FROM BRIGHT SURFACES (ie: mirror windows)



MOUNT THE SENSOR LEVEL



PRODUCT WARRANTY / 12 MONTHS

The PDL Cat. 98VH110 Movement Sensor has a 12 month warranty from the date of purchase providing the unit is installed according to these instructions, local wiring regulations and Codes of Practice. This warranty is void on any unit which has been tampered with, damaged by accident, improper operation or incorrect installation.

This guarantee is in addition to, and does not in any way affect the rights under the Consumer Guarantees Act 1993, if the ACT applies to the supply of this product and you are not acquiring the product for a business use. If the ACT applies and any term is inconsistent with the terms or requirements of the ACT that term shall be invalid without affecting the remaining terms of the warranty.

Note: Under the CGA 1993, Schneider Electric advises that this product does not contain user serviceable components thus spare parts and repair facilities are not available.

In the event of a warranty claim, the product must be returned to the point of purchase or direct to Australia/ New Zealand distributors together with the proof of purchase.

PDL is a brand of Schneider Electric



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