

TECHNICAL DATA SHEET



NOVA 4T (Microwave Motion Sensor)



The product is a new energy saving switch; it adopts microwave sensor with high- frequency electromagnetic wave (5.8GHz) and integrated circuit. It gathers automatism, safety, convenience, saving-energy and practical functions. The wide\ detection field depends on detectors. When one enters the detection field, it can start the load at once and identify automatically day and night. Its installation is very convenient and its using is very wide. Detection is possible to go through doors, panes of glass or thin walls. This is an ultra-reliable sensor, especially as there are no gaps in the detection zone.

TECHNICAL SPECIFICATION

Power Source:	220-240V/AC
Power Frequency:	50Hz
HF System:	5.8Ghz CW Radar, ISM Band
Transmission Power:	<0.2mW
Time Delay:	Min. 10Sec, Max. 12Min
Rated Load:	1200W (Incandescent), 300W (LED)
Detection Range:	360°
Detection Distance:	Wall: 5-15m (adjustable), Ceiling: 1-8m (radius), adjustable
Ambient Light:	3-2000LUX
No. of Wires:	4
Install Height:	1.5-3.5m
Power Consumption:	Approx 0.9W
Detection Motion Speed:	0.6-1.5m/s

INSTALLATION

- All electrical installations must be carried out by suitably qualified and registered electrician.
- Always isolate mains power prior to installation.
- Use the base to mark the drill holes on the mounting surface.
- Drill holes and insert the wall plugs if required
- Connect the power wire and the load wire to the connection terminal according to the electrical connection Fig 2. Do not exceed the max rated load.

CONNECTION WIRE DIAGRAM APPLICATION

PRODUCT SIZE DIAGRAM

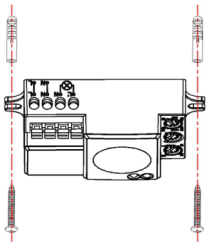


Fig 1

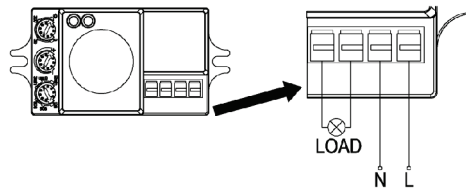
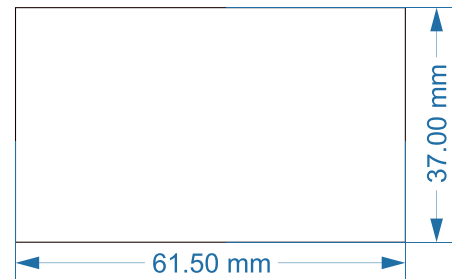


Fig 2



Note: When testing in daylight, please turn LUX knob to (SUN) position, otherwise the sensor could not work!

FUNCTIONS

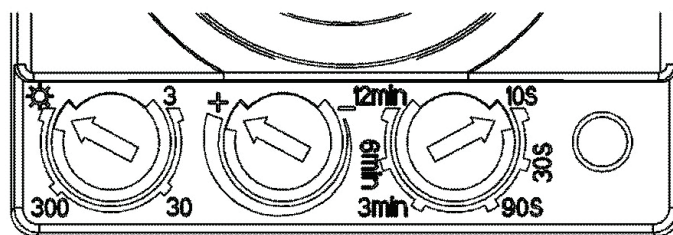
- **Day and Night Functionality:** The device operates in full capacity under daylight when set to the "sun" (max) position. It works in low light, below 3 LUX, when set to the "3" (min) position. For adjustment instructions, see the testing pattern.
- **Adjustable Sensitivity (SENS):** Sensitivity can be tailored to the location. It detects movement up to 2m away at low sensitivity and up to 16m at high sensitivity, suitable for large rooms.
- **Continuous Time-Delay:** The device resets its timer with each new motion detected within the initial detection period, ensuring continuous operation.
- **Customizable Time-Delay:** Time-delay settings can be adjusted to user preference, ranging from a minimum of 10 sec (± 3 sec) to a max of 12 min (± 1 min).

CALIBRATION

- **Sensitivity (SENS):** The term "SENS" describes the diameter of the detection zone on the ground when the sensor is mounted at a height of 2.5 to 6m. Turn the SENS control fully anti-clockwise for min sensitivity (about 2m dia) and fully clockwise for max sensitivity (about 16m dia). Adjust according to location and site requirements.
- **Time Setting:** The light can be set to stay on for any duration between approximately 10 sec (fully anticlockwise) and a max of 12 min (fully clockwise). The timer resets if movement is detected before this time elapses. It's advisable to choose the shortest time for adjusting the detection zone and conducting the walk test.
- **Light Control Setting:** Adjust the light response threshold from approximately 3 to 2000 lux. Turn fully anticlockwise for dusk-to-dawn operation at about 2 lux, or fully clockwise for continuous daylight operation. When adjusting the detection zone and conducting the walk test in daylight, ensure the knob is turned fully clockwise, then adjust settings based on site requirements.

TEST

- Turn the LUX knob clockwise on the maximum (sun). Turn the SENS knob clockwise on maximum (+). Turn the TIME knob anti-clockwise on the minimum (10s).
- When you switch on the power, the light will be on at once. And 10sec±3sec later the light will be off automatically. Then if the sensor receives induction signal again, it can work normally.
- When the sensor receives the second induction signals within the first induction, it will restart to time from the moment.
- Turn LUX knob anti-clockwise on the min (3). If the ambient light is less than 3LUX (darkness), the inductor load could work when it receives induction signal.



LUX SENS TIME

APPLICATION

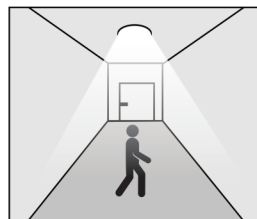
➤ Daylight Function

Hold time is set to 30 sec, Lux is set to 300 Light on when detect movement and off After people leave at leave at night.

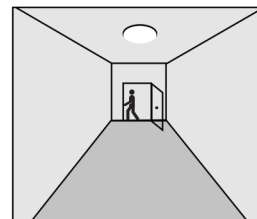
Applications: Corridor, Staircase.



With sufficient daylight, (>300Lux) even when motion detected, light remains off.



With insufficient daylight, (<300Lux) when motion detected, light ON



After the last detection and the present hold time (30sec.) elapsed. light OFF.

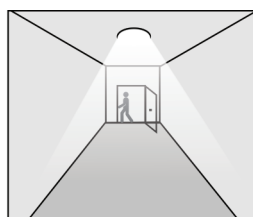
➤ No Daylight Function

The daylight threshold is set to or 2000 Disable Light on when detect movement, After people leave, Light off after hold time elapsed (30 Sec.)

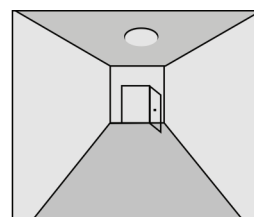
Applications: Dim places such as Basement Parking, Underpass.



When motion is detected, the sensor will switch on the light to 100% brightness.



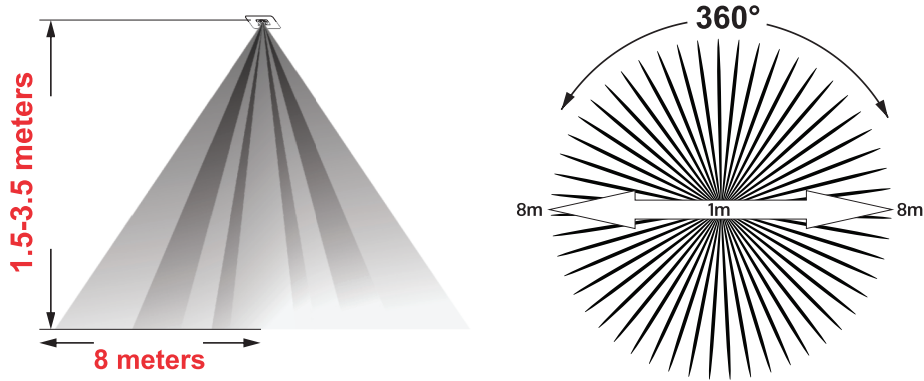
After people leave the detection area, light remains 100% brightness within hold time.



After the last detection and the present hold time (30 sec.) elapsed, light OFF.

NOTE

- Electrician or experienced human can install it.
- Can not be installed on the uneven and shaky surface
- In front of the sensor there shouldn't be obstructive object affecting detection.
- Avoid installing it near the metal and glass which may affect the sensor.
- For your safety, please don't open the case if you find hitch after installation.



TROUBLESHOOTING

Malfunction	Cause	Remedy
The load will not work	Wrong light control selected Load faulty Mains is switched OFF	Adjust Setting Change Load Switch ON
The load is always on	Continous movement in detection zone	Check zone setting
The load is ON without any identifiable movement	The sensor not mounted for detecting movement reliably Movement occurred, but not identified by the sensor (movement behind wall, movement of a small object in immediate lamp vicinity etc)	Securely mount enclosure 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.