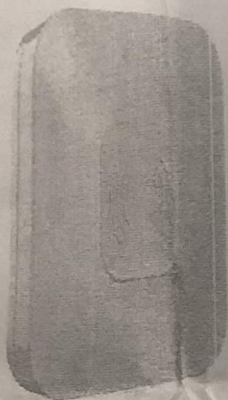




NANO 16



TECHNICAL SPECIFICATION

Power Source:	220-240V/AC
Power Frequency:	50/60Hz
HF System:	5.8GHz CW Radar, ISM Band
Transmission Power:	<0.2mW
Time Delay:	Min. 10Sec, Max. 12Min
Rated Load:	800W (Incandescent), 300W (LED Load)
Detection Range:	360°
Detection Distance:	2-16m (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

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NANO 16 MICROWAVE MOTION SENSOR

Nano 16 microwave motion sensor, a new energy-saving switch, adopts a microwave sensor with high-frequency electromagnetic waves (5.8 GHz) and an integrated circuit. It gathers automatism, convenience, safety, energy-saving, and practical functions. The wide/detection field depends upon the detectors. When one enters the detection field, it can start the load at once and automatically identifies day and night. The installation of this product is very convenient, and it can be used for a wide range of applications. It can be detected easily through doors, glass panes, or even thin walls, making it ultra-reliable as there are no gaps in the detection zone.

FUNCTIONS

Can easily identify day and night

- It can work during the daytime as well as the night when it is adjusted on the "sun" position (max). It can work in less than 3 LUX ambient light when adjusted on the "3" position (min). As for the adjustment pattern, please refer to the testing pattern.

Adjustable sensitivity

- This sensor can be easily adjusted depending on the location. The detection distance of low sensitivity could be only 2m, and high sensitivity could be 16m which fits for a larger room.

Time delay is added continually

- This sensor will restart to time from the moment it receives the second induction signals within the first induction.

Adjustable time delay

- The time delay can be set according to the customer's desire. The minimum time is 10sec \pm 3sec, and the maximum is 12min \pm 1min.

INSTALLATION

- (1) Suitably qualified and registered electricians must carry out all electrical installations.
- (2) Always isolate the main power prior to installation.
- (3) Remove the cover by checking the notch on the LDR side, as shown in Fig. 1.
- (4) Use the base to mark the drill holes on the mounting surface.
- (5) Drill holes and insert the wall plugs if required.
- (6) Feed power cable and load cable through base holes and securely affix the base.
- (7) Connect the power wire and the load wire to the connection terminals according to the electrical connection in Fig. 2 and do not exceed the max rated load.
- (8) Replace and secure the base cover. Calibrate Fig. 3 and replace the front cover.

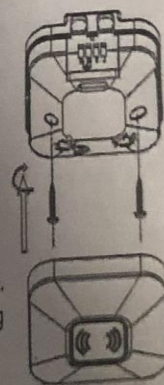


Fig 1

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CONNECTION-WIRE DIAGRAM

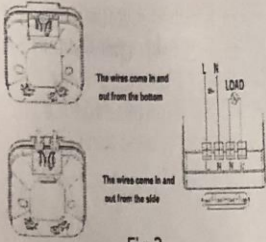


Fig 2

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

CALIBRATION:

1) Sensitivity

The term "sensitivity" is used to describe the diameter of the more or less circular detection zone produced on the ground after mounting the sensor at the height of 1.5 to 3.5. Turn the reach control fully anti-clockwise to select minimum reach (approx. 2m diameter) and fully clockwise to select maximum reach (approx. 16m diameter). You can adjust it according to locations and site requirements.

2) Time Setting:

The light can be set to stay ON for any time between approx 10 sec (turn fully anti-clockwise) and a maximum of 12 min (turn fully clockwise). Any movement detected before this time-lapse will reset the timer. It is recommended to select the shortest time to adjust the detection zone and perform the walk test.

3) Light Control Setting:

The chosen light response threshold can be adjusted from approximately 2-2000 LUX. To select the dusk-to-dawn operation at about ☾ LUX, turn it fully anti-clockwise and turn it fully clockwise to select continuous daylight operation. The knob must be turned fully clockwise when adjusting the detection zone and performing the walk test in daylight, then adjust the setting according to the site requirement.

TEST

- Turn the LUX knob clockwise to the maximum ☀ (sun). Turn the sensitivity knob to the maximum (+) and then turn the TIME knob anti-clockwise to the minimum (10s).
- As soon as you switch on the power, the light will be on at once, and 10sec ± 3sec later, the light will automatically turn off. Then if the sensor receives the induction signal again, it can start working normally.
- When the sensor receives the second induction signals within the first induction, it will restart from that moment itself.

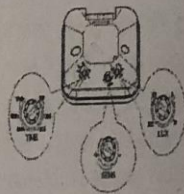


Fig 3

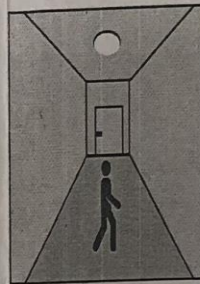
- Turn the LUX knob anti-clockwise on the minimum (3) if the ambient light is less than 3LUX (darkness). The inductor load could work when it receives the induction signal.

APPLICATION

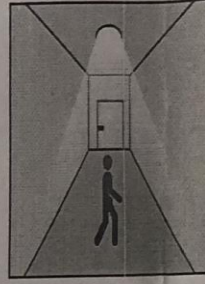
Daylight Function

The hold time is set to 30 seconds, and LUX is set to 300

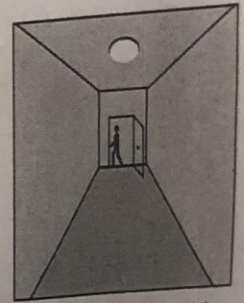
The light switches on when it detects movement, and it switches off after people leave at night
Applications: corridor, staircase



When the motion is detected with sufficient daylight (>300LUX), the light remains OFF.



When the motion is detected with insufficient daylight (<300LUX), the light switches ON.



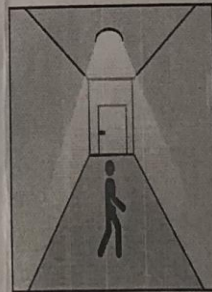
After the last detection and the present hold time-lapse (30 seconds), switch the light OFF.

No Daylight Function

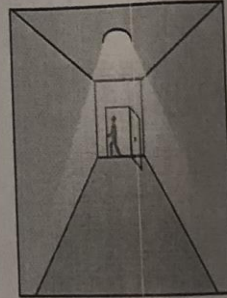
The daylight threshold is set to ☾ or 2000 disable

The light switches on when it detects movement, and when people leave, it switches off after the hold time is lapsed (30 seconds).

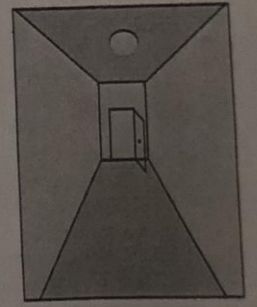
Applications: dim places such as basement parking, underpass



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



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



After the last detection and the present hold time-lapse (30 seconds), the light switches OFF.