

# TECHNICAL DATA SHEET



## NOVA DC NONC (Dry Contact Sensor)

IP65

2-8m

360°

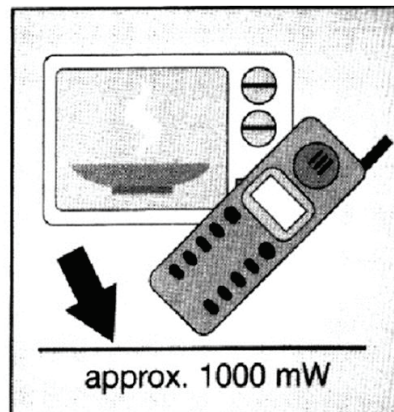
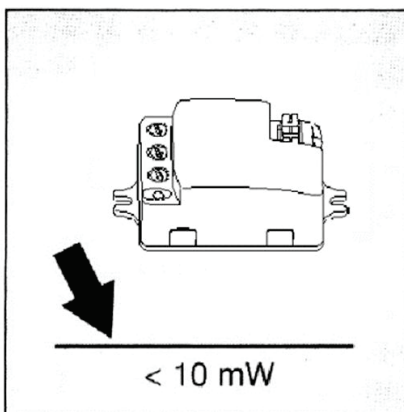


The sensor is an active motion detector, it emits high-frequency electro-magnetic wave (5.8GHz) and receives their echo. The sensor detects the change in echo from even the slightest movement in its detection zone. A microprocessor then triggers the "switch light ON" command. Detection is possible through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

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

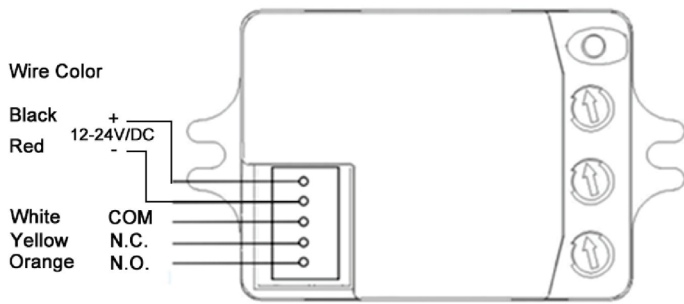
### TECHNICAL SPECIFICATION

Power supply:	12-24V/DC
Installation site:	Indoors, Ceiling mounting
HF system:	5.8GHz CW radar,ISM band
Transmission power:	<10mW
Current:	MAX.5A
Detection angle:	360°
Reach:	2-8m (radii.), adjustable
Time setting:	8sec to 12min
Light Control:	2~2000LUX
Output:	Dry contact

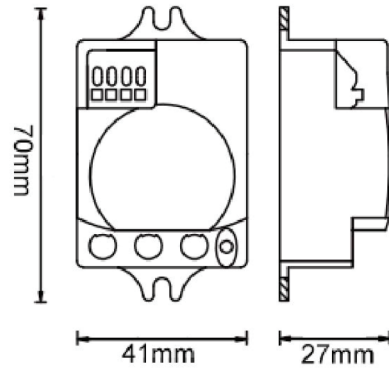


**NOTE:** The high-frequency output of this sensor is <10Mw- that is just one 100th of the transmission power of a mobile phone or the output of a microwave oven.

## CONNECTION WIRE DIAGRAM APPLICATION



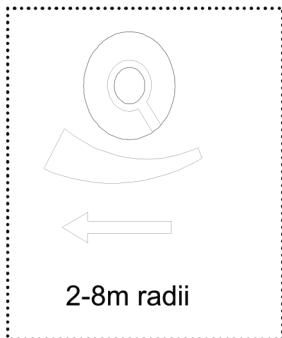
## PRODUCT CUT-OUT DIAGRAM



**Important: Connection must be done by an electrician or a specialist.**

- This product is using microwave motion detection function to give dry closing contact signal for the controlled system (this signal is passive dry closing contact signal only.)
- This product has a built-in daylight function, and different detection rang, hold time, daylight threshold options for customer to choose by potentiometer switches.
- When connecting the application unit to N.C. and COM, the unit is on when there is no motion detected; and goes off when motion is detected.
- When connecting the application unit to N.O. and COM, the unit is off when there is no motion detected; and goes on when motion is detected.

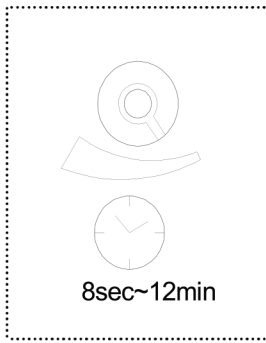
## CALIBRATION



1) **Reach setting (sensitivity):** Reach is the term used to describe the radius of the circular detection zone produced on the ground. After mounting the sensor light at a height of 2.5m, turn the reach control completely in anti-clockwise direction to select minimum reach (approx. 2 m radius), and turn the reach control completely in a clockwise direction to select the maximum reach (approx. 8m radius).

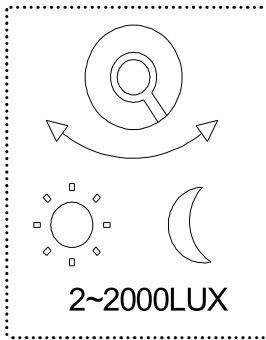
**NOTE:** the above detection distance is gained in the case of a person who is between 1.6m~1.7m tall with middle figure and moves at a speed of 1.0~1.5m/sec. if person's stature,

figure and moving speed change, the detection distance will also change.



**1) Time Setting:** The light can be set to stay ON for any period of time between approx. 8sec (turn fully anti-clockwise) 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.



**2) 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 Load faulty Mains switch OFF	Adjust setting Change load Switch ON
The load is always on	Continuous 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.

