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MICROWAVE MOTION SENSOR

DRM-07

WARRANTY. The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us. More information how to make a compliant can be found on the website: www.fifcom.pl/reklamacje





Do not dispose of this device in the trash along with other wastel According to the Law on Waste, electro coming from households free of charge and an give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of del-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a otherat to the environment and human health.

Purpose

The motion sensor is designed for automatic, scheduled lighting activation if a person or other object appears in places such as corridors, courtyards, approaches and driveways, garages, etc.

The specific of operation allows to use the DRM-07 as a presence sensor. The sensor allows to detect movement through wooden boards, plaster-board panels, glass and plastics.



- 1 -

Settings

Detection range (SENS)



Radius of the sensor detection can be adjusted in the range from 5 m to 15 m (the parameters for the sensor mounted at a height 1÷1.8 m). Rotate the knob to the right [+] increases the area of a field of detection, rotate left [–] reduces the area of the field detection.

Actuation time (TIME)



Receiver's actuation time can be adjusted between 10±3sec for 12±1 min. Rotate knob to the right increases 30s ON time, rotate left reduces the attached time

TIME

Sensitivity of light dependant relay (LUX)



Sensitivity of light dependant relay can be adjusted in range from 3Lx to 2000Lx. Rotate the knob to "3" - attached later; rotation to the "sun" sign - attached earlier.

In order to sensor was active throughout the day, set the knob maximally toward the "sun".

Operation modes: (ON/OFF/AUTO)

AUTO - automatic ON and OFF

ON - switch on sensor contact permanently (closed output)

- 3 -

 ${\sf OFF-switch\,off\,sensor\,contact\,permanently\,(opened\,output)}$

Functioning

The DRM sensor emits and receives 5.8 GHz high frequency electromagnetic waves. The sensor detects changes in wave reflection caused by the movement of the object in the detection area. The sensor detects movement of the object to and from the sensor. Movement in the detection area automatically switches on the lighting. From the moment of switching on, continuous movement causes the lighting to stay on permanently. Only lack of movement in the detection area triggers the lighting back-up time. Another movement in the detection area and its disappearance during the countdown will start the back-up time from the beginning. The nature of the operation allows the DRM to be used as presence sensor.

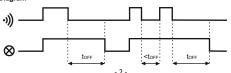
After the preset time, the lighting will be switched off automatically. The motion sensor is equipped with a twilight sensor that prevents the controlled lighting from being switched on during the day. The detection status and the readiness to switch on the lights are activated only after dark. Activation time of the sensor can be adjusted by the user through a potentiometer. In addition, it is possible to adjust the detection area in the radius range of 5÷15 m (for h=1÷1,8 m) and to adjust the time of the receiver in the range of 10sec+12min. The motion sensor can work indoors. The sensor allows to detect movement through wooden boards, plasterboard panels, glass and plastics. Temperature changes do not affect motion detection. The sensor has a switch for setting the operating mode: permanently on, permanently shutdown and automatic operation.

WARNING!

The power of microwave radiation is relatively low and is completely safe for humans and animals. Its value is less than 0.2 mW.

By comparison, microwaves and cell phones radiate about 1000mW of power (100 times harder).

Diagram

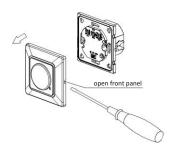


Assembly

- 1. Disconnect the power supply.
- 2. Do mounting hole in the ground / place flush-mounted box \emptyset 60.
- 3. Lift up the hook by screwdriver and remove sensor external cover.
- ${\tt 4. Connect \, the \, power \, supply \, wires \, according \, to \, the \, scheme.}$
- Place body in the mounting hole / flush-mounted box and mount to the ground with screws.
- Set detection range, sensitivity of light dependant relay and actuation time.
- 7. Assemble the outer casing of the sensor.
- 8. Connect the power supply.

WARNING!

DRM is inactive for the first 10 seconds after powering up.



Wiring diagram

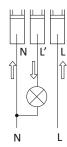


Table of power

∜	# ()	=====	=	=
incandescent	halogen	fluorescent	energy-saving	LED
1200W	1200W	200W	200W	200W

- 5 -

Technical data

 power supply
 230V AC

 current load
 <6A</td>

 microwave radiation frequency
 5.8GHz

 power radiation
 <0.2mW</td>

 motion detection
 0.6÷1.5m/sec

 detection radius - adjustable (for h=1±1.8m)
 5.550m

 activation threshold - adjustable
 3÷2000Lx

 switch-on time of receiver - adjustable
 10±3sec÷12±1min

 activation delay
 <1sec</td>

 power consumption
 1mm² screw terminals

 working temperature
 -25+50°C

 dimensions
 external
 80×80×48mm

 groove
 Ø55mm, h=33mm

 mounting hole
 Ø60mm

 spacing screw
 58mm

 mounting
 flush-mounted box Ø60

 protection level
 IP20

- 6 -