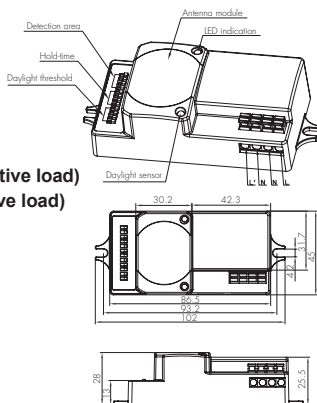


Instruction Manual for Microwave Motion Sensor On/off Version, Model No.:HC419S

Technical Specifications

PRODUCT TYPE:	Microwave Motion Sensor
OPERATING VOLTAGE:	120-277VAC 50Hz/60Hz
HF SYSTEM:	5.8GHz+/-75MHz
TRANSMISSION POWER:	<0.2mW
RATED LOAD:	120V~/3.4A/400W; 277V~/3.7A/1000W(capacitive load) 120V~/5.8A/700W; 277V~/5.8A/1600W(resistive load)
DETECTION ANGLE:	30° ~ 150°
POWER CONSUMPTION:	< 1W
DETECTION RANGE:	Max. 12 x 6m (DxH)
TIME SETTING:	5s~30min.
LIGHT CONTROL:	2~50Lux; disable
MOUNTING:	Indoors, ceiling & wall mounted
WORKING TEMP.:	-35°C ~ +70°C



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

Note: the high-frequency output of this sensor is <0.2mW; approximately just 0.2‰ of the transmission power of a mobile telephone.

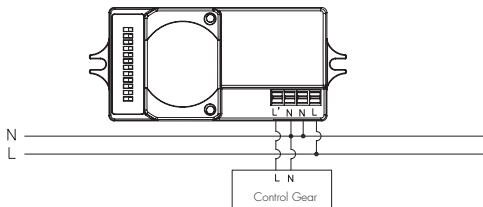
IMPORTANT

PLEASE READ THESE INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION AND RETAIN THIS LEAFLET IN A KNOWN AND SAFE PLACE FOR FUTURE REFERENCE.

SECTION 1 INSTALLATION & WIRING

1.1 Ensure that the electricity supply is switched off completely before installing or servicing this product.

1.2 Wiring diagram:

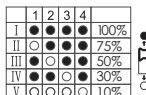


SECTION 2 SETTINGS

Detection range:

Detection range can be tuned by selecting the combination on the DIP switches to fit precisely for each specific application.

- I – 100%
- II – 75%
- III – 50%
- IV – 30%
- V – 10%

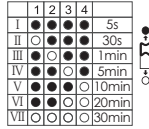


Hold time:

This setting determines the time period the lamp will remain at 100% upon detection.

Note: the timer is reset upon each motion detection.

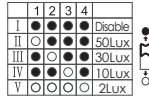
- I – 5s
- II – 30s
- III – 1min
- IV – 5min
- V – 10min
- VI – 20min
- VII – 30min



Daylight sensor:

The daylight threshold can be set on the DIP switches suit to the particular application.

- I – Disable
- II – 50Lux
- III – 30Lux
- IV – 10Lux
- V – 2Lux



SECTION 3 FUNCTIONS

3.1 Zero-cross relay operation

Designed in the software, sensor switches on/off the load right at the zero-cross point, to ensure the in-rush current is minimised, enabling the maximum life-time of the relay.

3.2 Wire loop-in and loop-out

Double L N terminal makes it easy for wire loop-in and loop-out, saves the cost of terminal block and assembly time.

SECTION 4 TROUBLE SHOOTING

MALFUNCTION CAUSE REMEDY	CAUSE	REMEDY
The load will not work	Incorrect light-control setting selected	Adjust setting
	Load faulty	Replace load
	Mains switch OFF	Switch ON
The load is always on	Continuous movement in the detection zone	Check zone setting
The load is on without any identifiable movement	The sensor is not mounted for reliably detecting movement	Securely mount enclosure
	Movement occurred, but not identified by the sensor (Movement behind wall, movement of small object in immediate lamp vicinity etc.)	1. Reduce sensitivity. 2. Check the movement behind walls to avoid facilities such as water pipe, fan, which may mis-trigger the sensor.
The load will not work despite movement	Rapid movements are being suppressed to minimize malfunctioning or the detection radius is too small.	Check zone setting