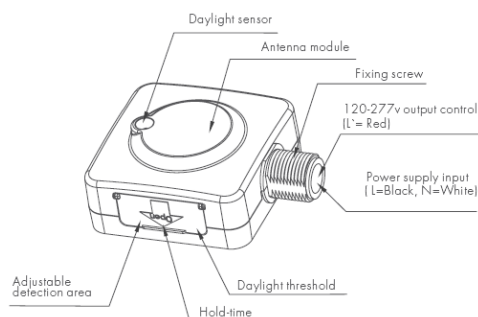


Instruction Manual for Microwave Motion Sensor Attachable Version, Model No.: HC430S

Technical Specifications

| | |
|----------------------------|---|
| PRODUCT TYPE: | Microwave Motion Sensor |
| OPERATING VOLTAGE: | 120-277VAC 60Hz |
| HF SYSTEM: | 5.8GHz CW radar |
| TRANSMISSION POWER: | <0.2mW |
| RATED LOAD: | 1000W@277VAC(capacitive load) 400W@120VAC(capacitive load) |
| DETECTION ANGLE: | 30~150° |
| POWER CONSUMPTION: | < 1W |
| DETECTION RANGE: | Max. 12 meters in diameter, adjustable |
| TIME SETTING: | 10s ~ 30min. |
| MOUNTING: | Indoors, ceiling & walling mounted |
| LIGHT CONTROL: | 5 ~ 50lux, disable |
| WORKING TEMP.: | -20°C ~ +60°C |



The sensor is an active motion detector; it emits a high-frequency electro-magnetic wave 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, panels of glasses thin walls.

NOTE: the high-frequency output of this sensor is <0.2mW; approximately just 1‰ of the transmission power of a mobile telephone or the output of a microwave oven.

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

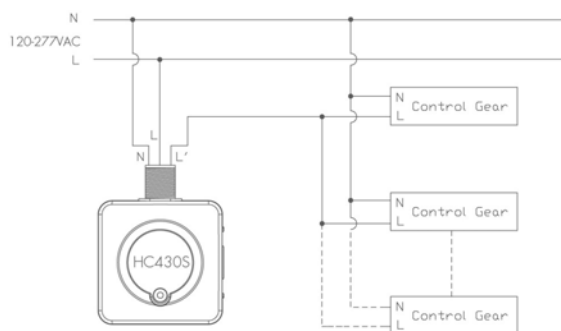
2.1 ENSURE THAT THE ELECTRICITY SUPPLY IS SWITCHED OFF COMPLETELY BEFORE INSTALLING OR SERVICING THIS PRODUCT .



The sensor works with a main voltage of 120-277VAC 60Hz, and has a 3-wire electrical interface:

- N (White) ---- neutral/120-277VAC
- L (Black) ---- phase/120-277VAC
- L' (Red) ---- switched phase/output

2.2 Wiring diagram



2.3 This sensor is suitable for indoor use, and is also designed for installation at Max. 6m in height.

SECTION 2 SETTINGS

Detection range:


This determines the effective range of the motion detector and is set by DIP switches at the sensor itself, refer to figure.

Note that reducing the sensitivity will also narrow the detection range.

The following settings are available:

- I - Detection range 100%
- II – Detection range 75%
- III – Detection range 50%
- IV – Detection range 25%
- V – Detection range 10%

| | 1 | 2 | 3 | |
|-----|---|---|---|------|
| I | ● | ● | ● | 100% |
| II | ● | ○ | ● | 75% |
| III | ○ | ○ | ● | 50% |
| IV | ○ | ● | ○ | 25% |
| V | ● | ○ | ○ | 10% |




Hold time:

This determines the time the fitting remains at 100% level on motion detection and is set with DIP switches at the sensor itself, refer to figure. The walk test setting is useful when installing the fitting to establish correct operation and range.

The following settings are available:

- I – 10s
- II – 30s
- III – 90s
- IV – 6min
- V – 20min
- VI – 30min

| | 1 | 2 | 3 | 4 | |
|-----|---|---|---|---|-------|
| I | ○ | ○ | ○ | ○ | 10s |
| II | ● | ○ | ○ | ○ | 30s |
| III | ○ | ● | ○ | ○ | 90s |
| IV | ○ | ○ | ● | ○ | 6min |
| V | ○ | ○ | ○ | ● | 20min |
| VI | ● | ● | ● | ● | 30min |




Daylight sensor:

This setting holds off the 100% light output should there sufficient daylight and is set using DIP switches at the sensor, refer to figure. The following settings are available:

- I – 5 lux
- II – 10 lux
- III – 30 lux
- IV – 50 lux
- V – Disable

| | 1 | 2 | 3 | 4 | |
|-----|---|---|---|---|---------|
| I | ○ | ○ | ○ | ○ | 5Lux |
| II | ● | ○ | ○ | ○ | 10Lux |
| III | ○ | ● | ○ | ○ | 30Lux |
| IV | ○ | ○ | ● | ○ | 50Lux |
| V | ● | ● | ● | ● | Disable |



*In disable mode the lamp(s) will always be on with motion detected and operate at 100% light output, even in bright daylight.

SECTION 3 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.) | Check zone setting |
| 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 |