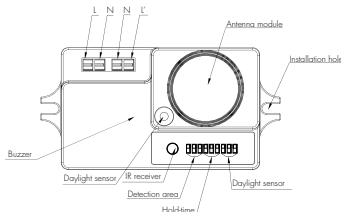


INSTRUCTION MANUAL FOR MICROWAVE MOTION SENSOR Model No.:HC401SRC/R

Technical Specifications

PRODUCT TYPE:	Microwave Motion Sensor
OPERATING VOLTAGE:	120-277VAC 50Hz/60Hz
HF SYSTEM:	5.8GHz CW radar
RATED LOAD: (capacitive load)	400W@120VAC 800W@240VAC 1000W@277VAC
DETECTION ANGLE:	30°~150°
POWER CONSUMPTION:	<0.5W
DETECTION RANGE:	Max. 16 meters in diameter, adjustable
TIME SETTING:	5s~30min.
DAYLIGHT SENSOR:	2~50Lux; disable
MOUNTING:	Indoors, ceiling & wall mounted
INSTALLATION HEIGHT:	≤15M
WORKING TEMP.:	-20 ~ +60°C



HC401SRC/R



HRC-03

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 0.2% of the transmission power of a mobile telephone or the output of a microwave oven.

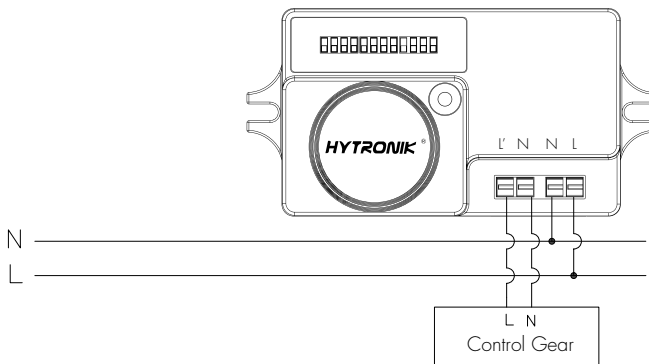
IMPORTANT

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

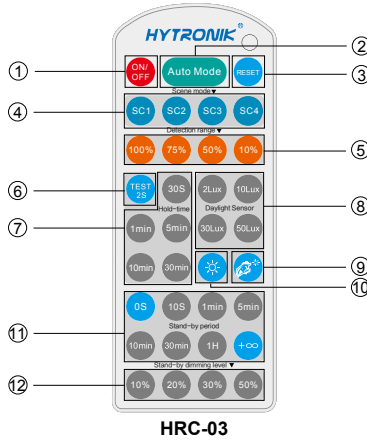
SECTION 1 INSTALLATION AND WIRING

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

1.2 Wiring diagram



SECTION 2 REMOTE CONTROL



HRC-03

Note: the buzzer beeps one time when RC receives signal successfully

Permanent ON/OFF [button ①]

1. Press button ①, the light goes to permanent ON or permanent OFF mode.
2. Press button ② ③ ④ to quit from this mode. (Please refer to explanation accordingly)

Auto Mode [button ②]

Press button ② goes to auto mode, the sensor starts working and all settings remain the same as the latest status before the light was switched ON/OFF.

RESET [button ③]

Press button ③, all settings go back to the value of DIP settings.

Test 2s function [button ⑥]

1. Press button ⑥, the sensor goes to test mode (hold time 2s), stand-by period and daylight sensor are disabled.
2. Press button ③ ④ ⑦ to quit from this mode, and the sensor setting is changed accordingly.

Ambient daylight threshold [button ⑧]

Press button ⑧, the latest surrounding lux value overwrites previous lux value learned, and is set as the daylight threshold. This feature enables the fixture to function well in any real application circumstance.

Daylight sensor disable [button ⑨]

Press button ⑨, the built-in daylight sensor stop working, and all motion detected could turn on the lighting fixture, no matter how bright the natural light is.

Detection range [zone ⑤]

Press buttons in zone ⑤ to set detection range at 100% / 75% / 50% / 10%.

Hold time [zone ⑦]

Press buttons in zone ⑦ to set hold time at 30s / 1min / 5min / 10min / 30min.

Daylight sensor setting [zone ⑩]

Press buttons in zone ⑩ to set daylight sensor at 2Lux / 10Lux / 30Lux / 50Lux.

Note: buttons ⑩ ⑪ are disabled.

Scene mode options [zone ④]

There are 4 scene modes built-in the remote control for different applications:

Scene options	Detection range	Hold time	Daylight sensor
SC1	100%	1min	2Lux
SC2	50%	5min	10Lux
SC3	100%	10min	10Lux
SC4	100%	30min	50Lux

Note: end-user can adjust the settings by pressing buttons of detection range ⑤ / hold time ⑦ / stand-by period ⑪ / stand-by dimming level ⑫ / daylight sensor ⑧, the last setting stays in validity.

SECTION 3 SETTING

Detection area

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

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

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



Hold-time

Hold-time means the time period to keep the lamp on 100%, after all motion has ceased (detection area vacated).

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

	1	2	3	
I	●	●	●	5s
II	○	●	●	30s
III	●	○	●	1min
IV	○	●	○	5min
V	●	○	○	10min
VI	○	○	○	30min



Daylight sensor

The daylight threshold can be set on DIP switches, to fit for particular application.

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

	1	2	3	
I	●	●	●	Disable
II	○	●	●	50 Lux
III	●	○	●	30 Lux
IV	●	●	○	10 Lux
V	○	○	○	2 Lux



SECTION 4 FUNCTIONS

4.1 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 lifetime of the relay.

SECTION 5 TROUBLE SHOOTING

MALFUNCTION CAUSE REMEDY	CAUSE	REMEDY
The load does 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 does not work despite movement	Rapid movements are being suppressed to minimize malfunctioning or the detection radius is too small	Check zone setting