

MC609V RC



MICROWAVE MOTION SENSOR USER'S MANUAL

Model No.: MC609V RC



Instruction
MI171024

FEATURE

- Wide input voltage range: 120/277/347Vac
- Sensor parameters can be conveniently set by a remote control.
- Mounting height up to 49.2 ft (15m)max. , suitable for warehouse use.
- Water proof sensor with IP65 rating.
- Automatic dimming when used in combination with 0-10V dimmable control gears.
- Built-in adjustable daylight sensor.
- 0-10V interface can match up with Merrytek stand-alone daylight sensor MS01 and achieve daylight harvesting.
- Optional mounting brackets for different application.

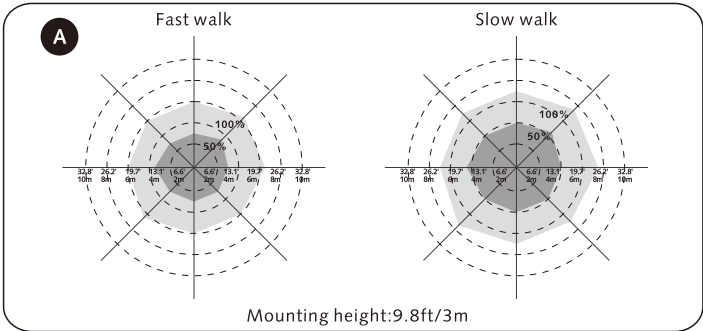
SPECIFICATIONS

Input voltage	120/277/347Vac, 50/60Hz
Rated load	120Vac 50/60Hz 3.6A Ballast 277Vac 50/60Hz 3.4A Ballast 347Vac 50/60Hz 3.3A Ballast
Detection Range(Diameter)	52.5 ft (16m)Max. adjustable
Hold time	5s/ 30s/ 1min/ 3min/ 20min/ 30min
Daylight sensor	5lux/ 15lux/ 30lux/ 50lux/ 100lux/ 150lux/ Disable
Stand-by period	0s/ 1min/ 3min/ 10min/ 30min/ +∞
Stand-by dimming level	10% / 20% / 30% / 50%
Sensor principle	Microwave motion detector
Microwave frequency	5.8GHz±75MHz, ISM wave band
Mounting height	9.8-49.2 ft(3-15m)
Detection angle	150°(Wall installation), 360°(Ceiling installation)
Motion detection	1.6~9.8 ft/s(0.5~3 m/s)
Operating temperature	-35°C~55°C
IP rating	IP65
UL file number	E489677

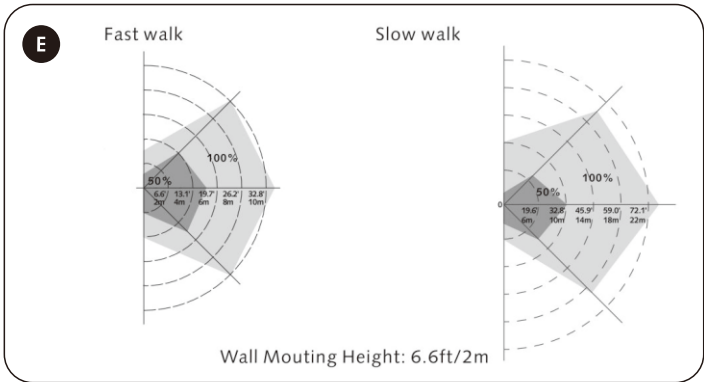
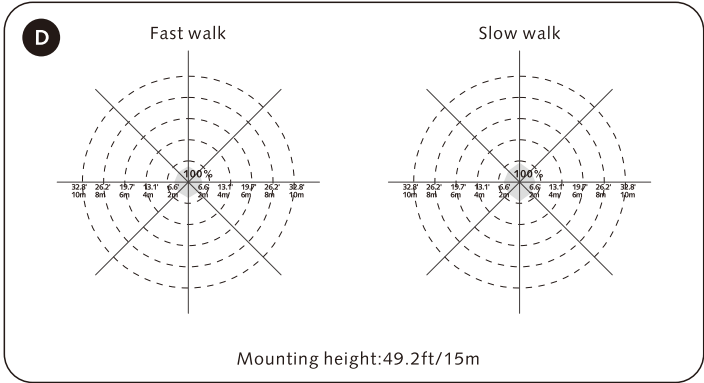
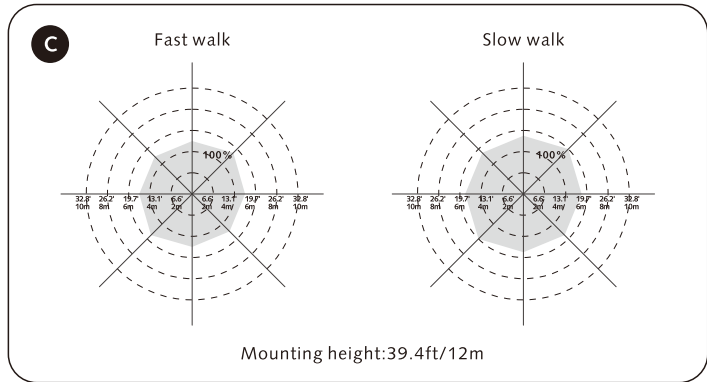
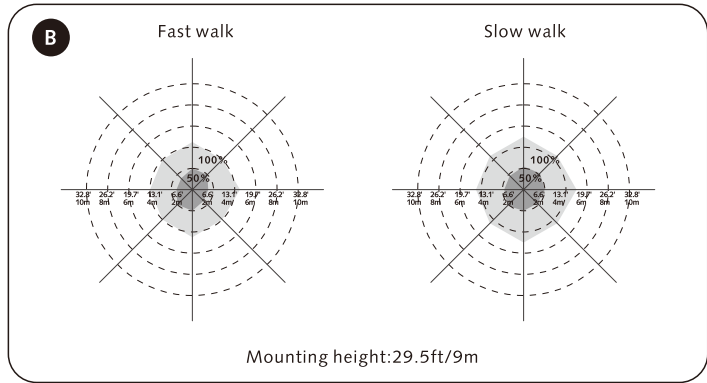
GENERAL GUIDELINES FOR INSTALLATION

- 1, Please read the entire instruction manual before using the product and then save it for future reference. We reserve the right for any errors in text or images and any necessary changes made to technical data.
- 2, The sensor should be installed by a qualified electrician. And ensure that the electricity supply is switched off before installing or servicing the product.
- 3, The sensor should not be modified in any way. Any modifications made to this product will immediately invalidate any warranties issued.
- 4, The company does not accept responsibility for any consequences resulting from unauthorized modification of the product.
- 5, Microwaves cannot pass through metal or brick walls if thicker than 7.9 inches (20cm). They will pass through thinner walls but there will be some attenuation.
- 6, The raining or wind blowing may trigger the microwave motion sensor even if without human motion when outdoor use.
- 7, The sensor should be connected to a stable power supply of 120/277/347Vac, 50/ 60Hz.
- 8, Detection area will be affected by speed of motion, height of installation and volume of moving object.
- 9, Daylight sensor was tested on sunny environment with no lampshade.
- 10, CAUTION-Rish of Electric shock-More that one disconnect switch may be required to de-energize the equipment before servicing

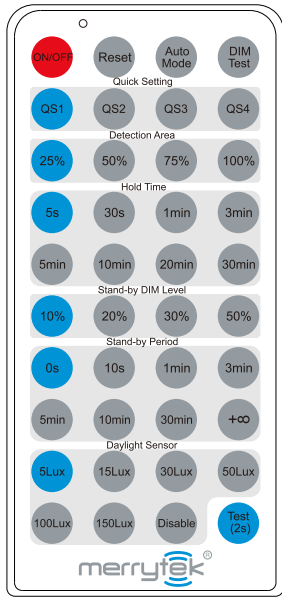
DETECTION PATTERN












DETECTION PATTERN



SETTINGS (REMOTE CONTROL MH01)

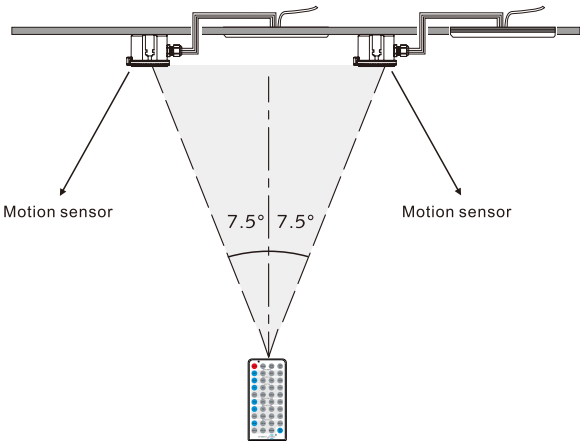


The green work light of microwave sensor will flash 3 times if set successfully by remote control.

Button	Remarks																														
	Press the "ON/OFF" button, the light goes to constant on or constant off mode, sensor is disabled. Press " Reset " or " Auto Mode " button to quit from this mode.																														
	Press "Reset" button, all parameters are same as setting of DIP switch.																														
	Press "Auto Mode" button, the sensor starts to work and all parameter setting will be remained the same as the previous status before the light was switched on/off.																														
	Press "DIM Test" button to test dimming function. Sensor will dim automatically and return to normal work mode.																														
	The button "Test(2s)" is for factory testing purpose only. The sensor will go to test mode, Detection sensitivity: 100% Hold time: 2sec stand-by dim level:10% Stand-by period: 0s Daylight sensor: Disable Test mode can be quit by pressing any button.																														
   	<table border="1"><thead><tr><th>scene Options</th><th>Detection Area</th><th>Hold Time</th><th>Stand-by period</th><th>Stand-by dim level</th><th>Daylight Sensor</th></tr></thead><tbody><tr><td>QS1</td><td>100%</td><td>30s</td><td>1min</td><td>10%</td><td>5Lux</td></tr><tr><td>QS2</td><td>100%</td><td>1min</td><td>3min</td><td>10%</td><td>10Lux</td></tr><tr><td>QS3</td><td>100%</td><td>5min</td><td>10min</td><td>10%</td><td>30Lux</td></tr><tr><td>QS4</td><td>100%</td><td>10min</td><td>30min</td><td>10%</td><td>Disable</td></tr></tbody></table> <p>Note: Detection area / Hold time /Stand-by period / Stand-by dim level / Daylight sensor can be adjust by pressing corresponding button. The latest setting stays in validity.</p>	scene Options	Detection Area	Hold Time	Stand-by period	Stand-by dim level	Daylight Sensor	QS1	100%	30s	1min	10%	5Lux	QS2	100%	1min	3min	10%	10Lux	QS3	100%	5min	10min	10%	30Lux	QS4	100%	10min	30min	10%	Disable
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As the control angle of the Infrared Remote Control is fixed (15°), if sensors are installed too close to each other, settings of both sensors will be configured. Please refer to the below chart for the distance of the installation of the sensor:

Mounting height	Distance between sensors
49.2ft/15m	13.1ft/4m
39.4ft/12m	11.2ft/3.4m
29.5ft/9m	7.9ft/2.4m
19.7ft/6m	5.2ft/1.6m
9.8ft/3m	2.6ft/0.8m



[illegible]

MC609V RC A

MC609V RC A

MC609V RC C

MC609V RC C

The diagram illustrates the application and wiring of two dimmer switches, MC609V RC A and MC609V RC C. On the left, a forklift is shown with a light fixture (MC609V RC A) and a light fixture on a wall (MC609V RC C). On the right, the wiring diagrams for each switch are shown. The MC609V RC A wiring diagram shows a 0-10V dimmable control gear connected to a load. The MC609V RC C wiring diagram shows a 0-10V dimmable control gear connected to a load.

This diagram shows the exploded view of the antenna module assembly. The components are labeled as follows:

- Antenna module
- Daylight sensor
- Daylight sensor
- Stand-by Dim level
- Stand-by period
- Hold-time
- Detection area

					Detection area				
					I: 100%				
					II: 50%				
					Hold time				
					Refers to the time period the lamp remains at 100% illumination after no motion detected.				
					I: 5s				
					II: 30s				
					III: 90s				
					IV: 3min				
					V: 20min				
					VI: 30min				
					Stand-by period				
					Refers to the time period the lamp remains at a pre-setting dimming level before it completely switches off in the long absence of people				
					I: +∞				
					II: 1h				
					III: 30 min				
					IV: 10 min				
					V: 5min				
					VI: 5S				
					<p>*When set to 0s, the lamp will work as on/off function</p> <p>*When set daylight sensor to “Disable” and stand-by period to “+∞”, the lamp will work as 2-step dimming control (Motion detected, 100% lumens, no motion, remains at pre-setting level lumens)</p>				

4	5	daylight		Output constant voltage
I	ON	ON	5-10%	1.5 ± 0.2V
II	ON	-	15-20%	2V ± 0.2V
III	-	ON	25-30%	3V ± 0.2V
IV	-	-	45-50%	3V ± 0.2V

Stand-by dimming level

This is the pre-setting dimming level you would like to have after the hold time in the long absence of people.

I: 10%
II: 20%
III: 30%
IV: 50%

6	7	8	9		
I	ON	ON	ON	ON	5lux
II	-	ON	ON	ON	15lux
III	ON	-	ON	ON	30lux
IV	-	-	ON	ON	50lux
V	ON	ON	-	ON	100lux
VI	ON	ON	ON	-	100lux
VII	-	-	-	-	Disable

Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold.

The settings are as follows:

I: 5lux, darkness operation only
II: 15lux, darkness operation only
III: 30lux, twilight operation
IV: 50lux, twilight operation
V: 100lux, twilight operation
VI: 150lux, twilight operation
VII: Disable *

* When set to Disable Mode, the sensor will switch on the lamp when motion is detected regardless of ambient light levels.

Question	Cause	Remedy
The load will not illuminate.	Incorrect daylight sensor setting selected.	Adjust setting.
	Load has failed.	Replace load.
	Power is switched off.	Switch on.
The load is permanently illuminated.	Continuous movement in the detection area.	Check detection area setting.
	The lamp (containing sensor) is installed in an area too close to reflective surfaces, i.e. metal, glass or concrete walls.	1, Make sure installation area suitable with at least 11.8inches(30cm) space between lamp and surrounding reflective surfaces. 2, Reduce sensitivity (detection area).
The load will not illuminate despite movement.	Speed of moving object is not in the range of 1.6~9.8ft/s(0.5~3m/s) or the detection radius is too small.	Check detection area setting.
The remote control is not working.	The battery on the remote control is run out.	Change the battery.
	The remote control is not aligned with sensor.	Change the remote angle.

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