

MC054V RC & MH01 Remote Control Microwave Sensor / Dimming Function



Introduction

- Sensor parameters can be conveniently set by a remote control.
- Mounting height up to 15m max., suitable for warehouse use.
- Water proof sensor with IP65 rating.
- Automatic dimming when used in combination with 1-10V dimmable control gears.
- Built-in adjustable daylight sensor

The MC054V RC sensor is innovative and active motion detectors with HF system 5.8GHz. Motion can be detected through plastic, glass and thin non-metal materials. except the higher mounting height 15m Max.

The sensors allow energy saving without compromising comfort. When used in combination with 1-10V dimmable LED drivers or ballasts, they can achieve 3-step dimming function, which is perfect for use in some areas that requires a light change notice before totally switch off.

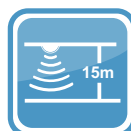
Also, the infrared remote controller design makes the customer to adjust the parameters of the sensors easily.



Max.8M



Hold Time
5s~30min



Mounting Height
15m Max.



Automatic
Dimming

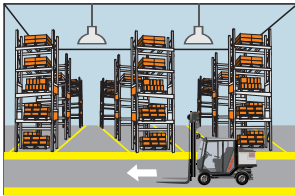


5 Years
Guarantee

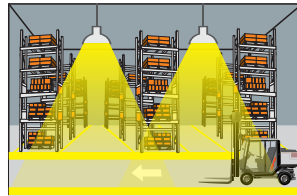
Dimming Function

3-step dimming function

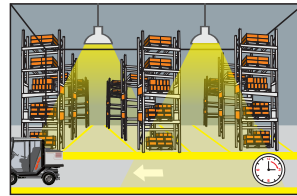
When used in combination with 1-10V dimmable LED drivers and ballasts, the sensors can achieve 3-step dimming function, 100%—> low light—>off. And the sensors build in adjustable daylight sensors, very easy to install and cost-effective.



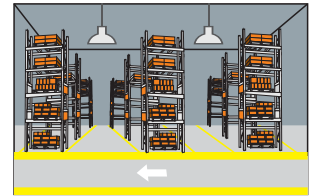
With sufficient ambient light, the sensor does not switch on the lamp.



With insufficient ambient light, the sensor switches on the lamp when motion is detected.

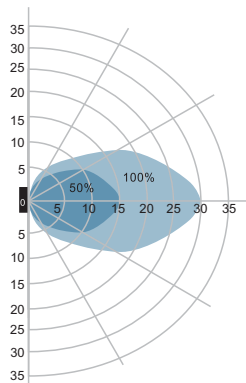


After hold time, the sensor dims the lamp at a low light level if no new motion trigger.

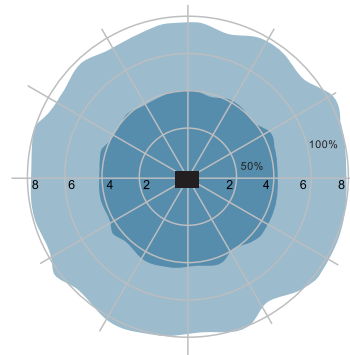


After stand-by period, the sensor switches off the lamp if no motion is detected in its detection zone.

Detection Pattern

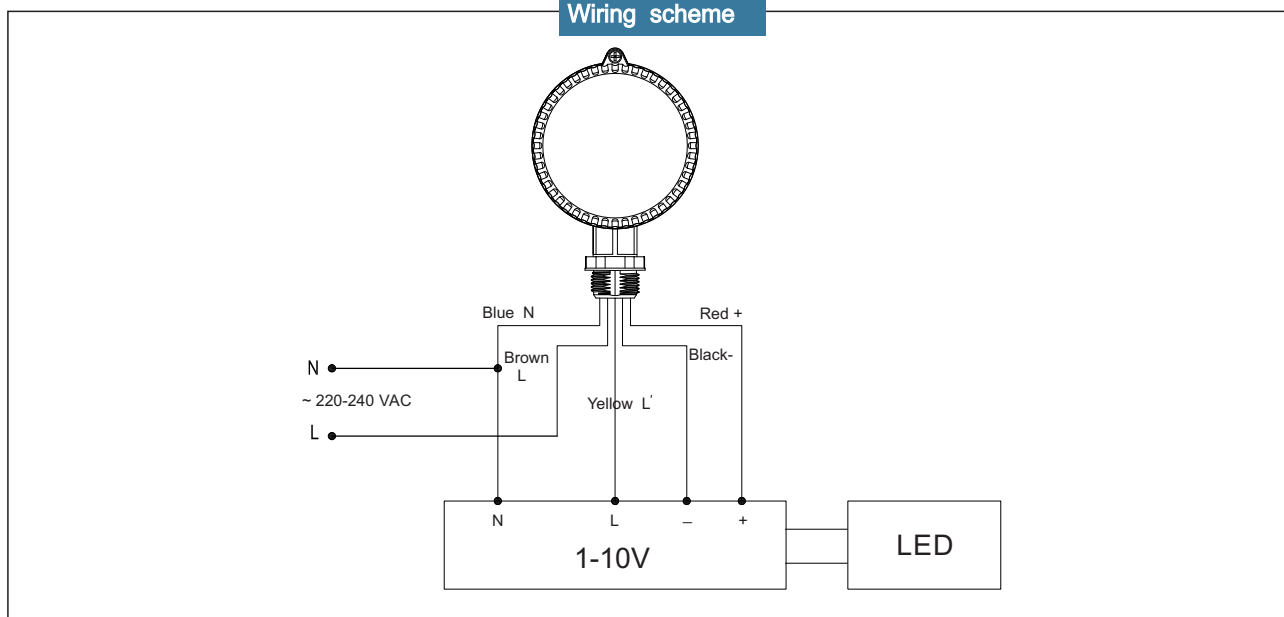


Wall mounting pattern (Unit: m)









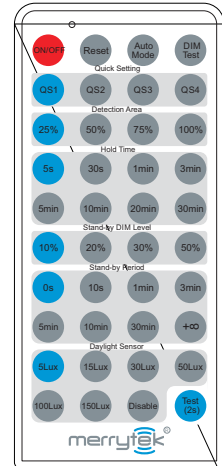
Ceiling mounting pattern (Unit: m)

Wiring scheme




Settings (Remote Control MH01)

| Button | Function | Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------------|--|-----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----|------|-----|------|-----|------|-----|------|------|------|-----|-------|-----|------|------|-------|-----|-------|-----|------|-------|-------|-----|---------|
|  | constant ON/OFF | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Reset | Press "Reset" button, all parameters can be set via DIP switch. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Sensor Mode | 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. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Dim test | Press "DIM Test" button, the 1-10Vdc dimming interface will be dimming automatically according to the dimming level you want, after 2s, the parameters of the sensor will be returned to the latest settings. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Test Mode | The button "Test(2s)" is for testing purpose only. The sensor will go to test mode: Detection sensitivity: 100% Hold time: 2sec Stand-by period: 0s Daylight sensor: Disable *This mode can be quit by pressing "reset" or any button on the remote control. The sensor setting is changed accordingly. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Scene Mode | <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 |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |




Setting

By selecting the combination on the DIP switch, sensor data can be precisely set for each specific application.

| | | 1 | |
|--|----|----|------|
| ON ↑  | I | ON | 100% |
| | II | - | 50% |

Detection area

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

| | | 2 | 3 | 4 | |
|--|-----|----|----|----|-------|
| ON ↑  | I | ON | ON | ON | 5S |
| | II | - | ON | ON | 30S |
| | III | ON | - | ON | 1min |
| | IV | - | - | ON | 3min |
| | V | ON | ON | - | 20min |
| | VI | - | - | - | 30min |

Hold time

Refers to the time period the lamp remains at 100% illumination after no motion detected.

| | | | | | |
|---------------------|-----|----|----|----|-------|
| ON ↑ [Slider] | | 1 | 2 | 3 | |
| | I | ON | ON | ON | 0S |
| | II | - | ON | ON | 1min |
| | III | ON | - | ON | 3min |
| | IV | - | - | ON | 10min |
| | V | ON | ON | - | 30min |
| VI | - | - | - | +∞ | |

Stand-by period

Refers to the time period the lamp remains at a low light level before it completely switches off in the long absence of people. When set to “ +∞ mode, the low light is maintained until motion is detected.

| | | | | |
|---------------------|-----|----|-----|-----|
| ON ↑ [Slider] | | 4 | 5 | |
| | I | ON | ON | 10% |
| | II | ON | - | 20% |
| | III | - | ON | 30% |
| IV | - | - | 50% | |

Stand-by dimming level

The low light level you would like to have after the hold time in the long absence of people.

| | | | | | | |
|---------------------|-----|----|----|----|---------|--------|
| ON ↑ [Slider] | | 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 | - | 150Lux |
| VII | - | - | - | - | Disable | |

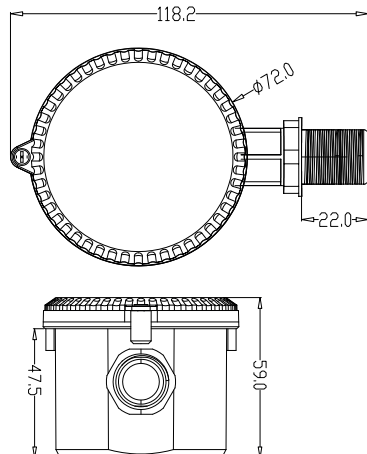
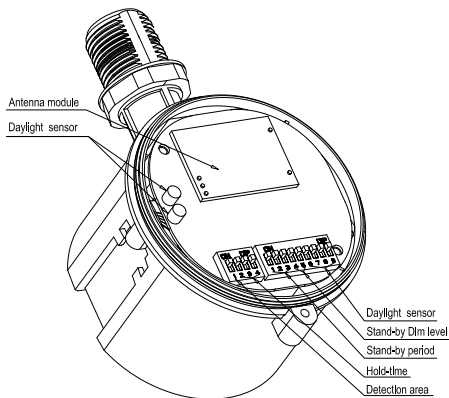
Daylight sensor

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

When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.

Note that daylight sensor is active only when lamp totally switches off.

Technical Parameters



MC054V RC

| | |
|-----------------------|---|
| Operating voltage | 120~277Vac, 50/60Hz |
| Rated load | 400W@120vAC, 800W@220~277Vac (Inductive) 800W@120Vac, 1200W@220~277Vac (Resistive) |
| Power consumption | < 1W |
| HF system | 5.8GHz ±75MHz, ISM wave band |
| Transmitting power | < 0.5mW |
| Detection area | 5-8m(@mounting height 6m) |
| Detection sensitivity | 25%/50%/75%/100% |
| Hold time | 5s/30s/1min/3min/5min/10min/20min/30min |
| Daylight sensor | 5lux/15lux/30lux/50lux/100lux/150lux/disable |
| Stand-by period | 0s/10s/1min/3min/5min/10min/30min/+∞ |
| Stand-by DIM level | 10%/20%/30%/50% |
| Mounting height | 6-15m |
| Motion detection | 0.5~3m/s |
| Detection angle | 150 °(wall installation) 360 °(ceiling installation) |
| Operating temperature | -25°C ~ 55°C |
| IP rating | IP65 |