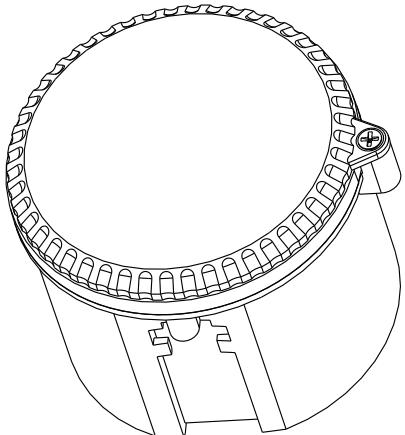




## LIGHTING CONTROL SWITCH (MOTION SENSOR)

Model No.: MC031V



### FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference,
- (2) this device must accept any interference received, including interference that may cause undesired operation.

### IC RSS warning

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada licenciables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

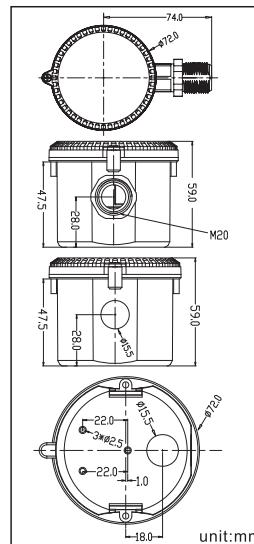


English

### Introduction

- Automatic dimming when used in combination with 1-10V dimmable LED drivers or ballasts.
- Built-in adjustable daylight sensor.
- 1-10V interface can match up with Merrytek stand-alone daylight sensor MS01 and achieve daylight harvesting.
- Detection area, time delay and daylight threshold can be precisely set via DIP switch.
- Wide detection area, range up to 16m in diameter and mounting height 15M Max. suitable for warehouse use.
- Optional mounting brackets for different application.

### Specifications



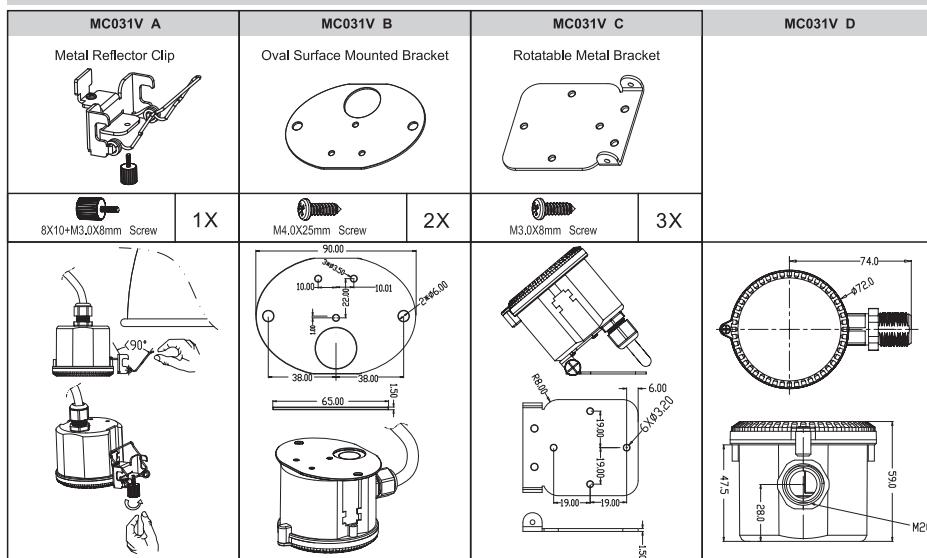
|                        |  |
|------------------------|--|
| Input voltage          | 120-277Vac 50/60Hz   |
| Rated load             | 400W@120-220Vac, 800W@220-277Vac(Inductive load)<br>800W@120-220Vac, 1200W@220-277Vac (Resistive load) |
| Detection area         | 8m Max, adjustable   |
| Hold time              | 5s / 30s / 90s / 3min / 20min / 30min  |
| Daylight sensor        | 50lux / 100lux / 200lux / Disable  |
| Stand-by period        | 5s / 5min / 10min / 30min / 60min / +∞   |
| Stand-by dimming level | 10% / 20% / 30% / 50%  |
| Sensor principle       | Microwave motion detector  |
| Transmitting power     | <0.5mW (1% of transmitting power for cell phone)   |
| Detection range        | Max. (φxh): 16m x 15m  |
| Detection angle        | 150°(Wall installation),<br>360°(Ceiling installation)   |
| Motion detection       | 0.5~3m/s   |
| Operating temperature  | -35°C~55°C   |
| IP rating              | IP65   |

### General Guidelines for Installation

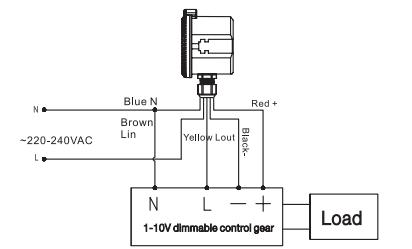
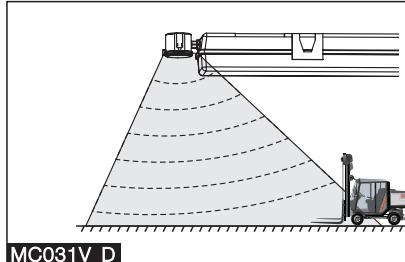
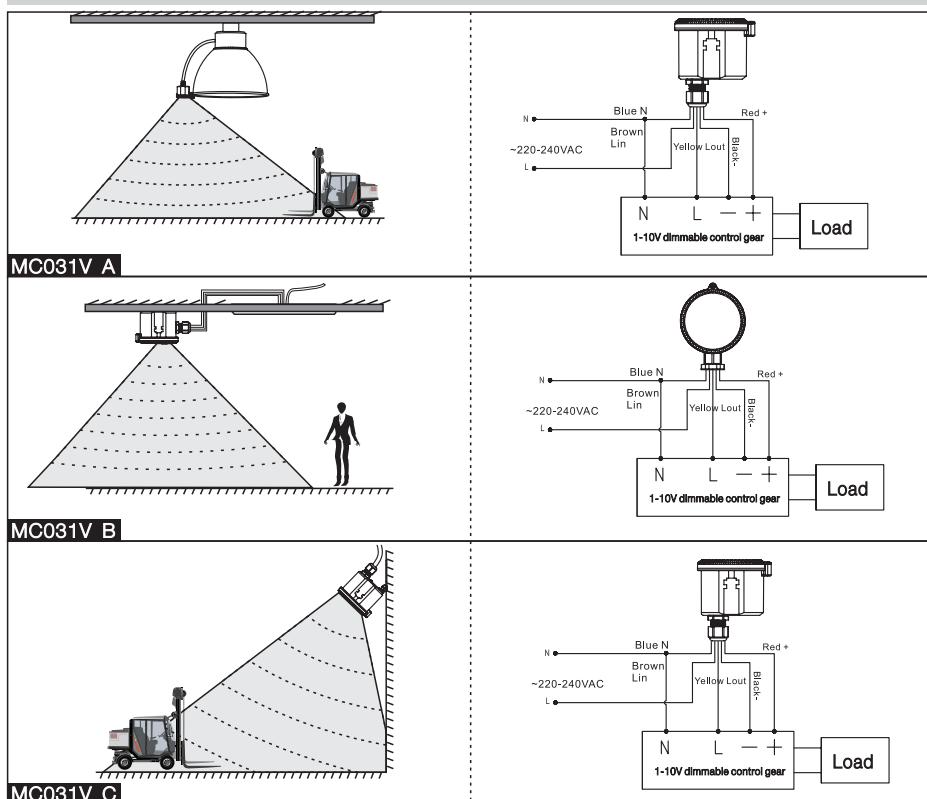


- 1, Please read the entire instruction manual before using the product and then save it for future reference. We reserve the right for any errors in text or images and any necessary changes made to technical data.
- 2, The power supply cord shall be connected to junction box. The sensor should be installed 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 20cm. They will pass through thinner walls but there will be some attenuation.
- 6, The sensor is designed for indoor use only.

## Installation



## Wiring



NOTE: If only need ON/OFF function, please ignore red and black wire

## Settings

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

### Detection area

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

|    |            |          |   |   |
|----|------------|----------|---|---|
| ON | 1          | 2        | 3 | 4 |
|    | I ON 100%  | II - 50% |   |   |
|    | III - 30s  |          |   |   |
|    | IV - 90s   |          |   |   |
|    | V - 3min   |          |   |   |
|    | VI - 20min |          |   |   |
|    | VI - 30min |          |   |   |

### 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  $+\infty$  the low light is maintained until motion is detected.

|    |                      |                  |                   |                  |
|----|----------------------|------------------|-------------------|------------------|
| ON | 5                    | 6                | 7                 |                  |
|    | I ON ON ON $+\infty$ | II - ON ON 60min | III - ON ON 30min | IV - ON ON 10min |
|    | V ON ON 5min         | VI - - 5s        |                   |                  |

### Stand-by dimming level

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

|    |             |             |
|----|-------------|-------------|
| ON | 8           | 9           |
|    | I ON ON 50% | II - ON 30% |
|    | III ON 20%  | IV - - 10%  |

### 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.

## FAQ

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