

MC003V/C Dimming Function / Cluster-control Version



Introduction

- Particularly suitable for cluster-control.
- Built-in daylight sensor.
- 1-10V interface can match up with Merrytek stand-alone daylight sensor MS01 and achieve daylight harvesting.
- Compact size makes it suitable to fix within most luminaires.
- Detection area, time delay and daylight threshold can be precisely set via DIP switch.
- Wide detection area, range up to 16m in diameter.

MC003V/C is an innovative and active motion detector with HF system 5.8GHz. Motion can be detected through plastic, glass and thin non-metal materials.

Basically, MC003V/C has the same technical parameters and function as MC003V, with an extra function, cluster-control.

In many lighting places, several sensors are connected to a group of lamps. People need functions that trigger one of sensors to make the group of lamps to switch on / off or dim simultaneously. This is called 'cluster control'. MC003V/C is specially designed for the function. The SYNC interface in the sensor can transmit motion signal to other sensors connected together, and then achieve cluster control function.



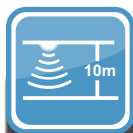
Max.8M



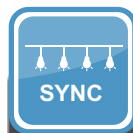
Light Sensor



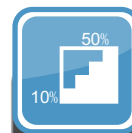
Hold Time
5s-30min



Mounting Height
10 m Max.



Cluster-control
Version



Automatic
Dimming

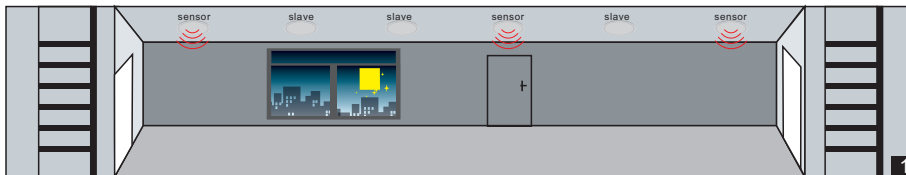


5 Years
Guarantee

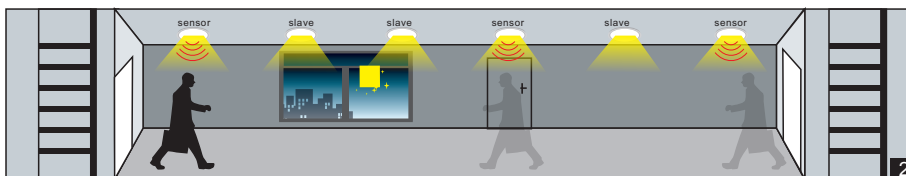
Dimming Function

3-step dimming function

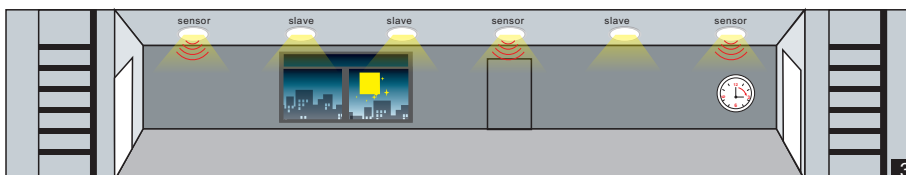
Lamps in corridor are controlled by several sensors. Once any motion is detected by one of sensors, the motion signal will be transmitted to other sensors connected together. Then, all lamps switch on at the same time, instead of switching on the lamps in the area where motion is detected.



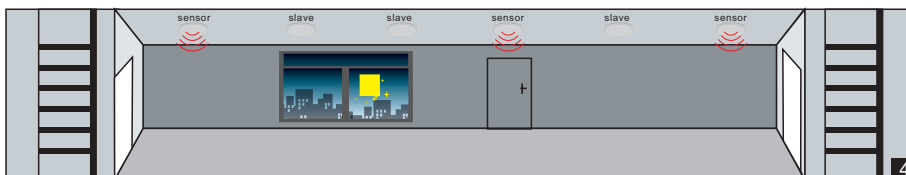
- 1 No motion detected, all lamps switch off.



- 2 Any movement is detected from any direction, all lamps synchronously switch on.

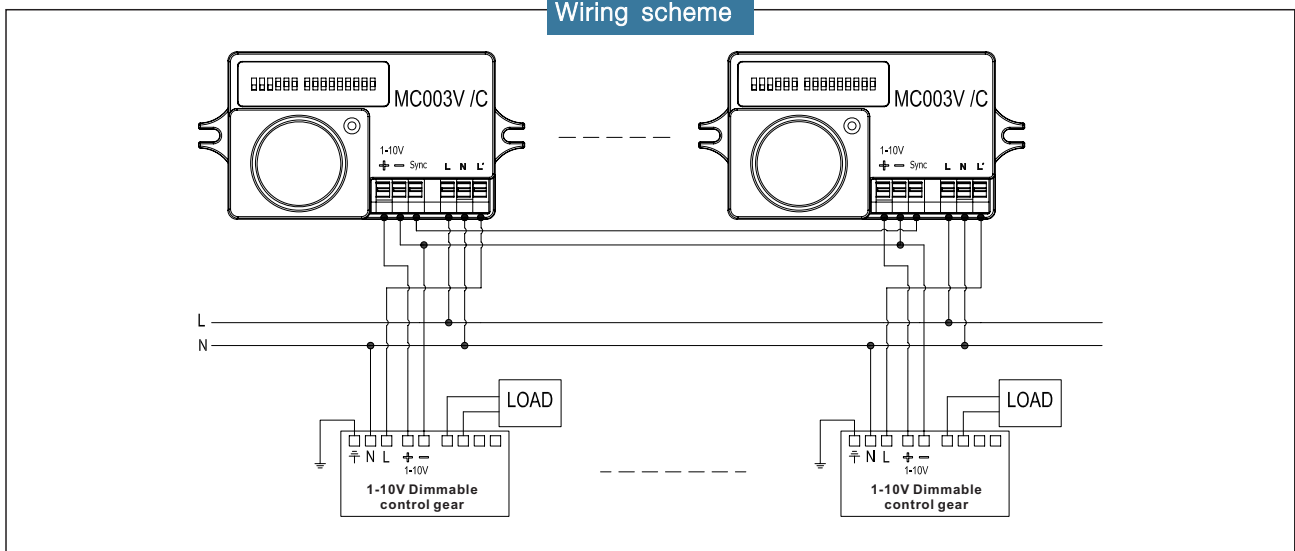


- 3 No motion is detected in detection area, all lamps synchronously dim to a low light level after hold time.



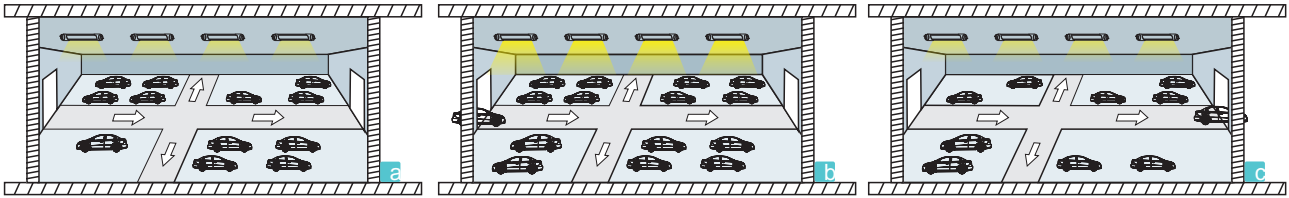
- 4 After stand-by period, the lamps switch off if no movement is detected in the detection zone.

Wiring scheme



2-step dimming function

There are several lamps (Containing the sensor) in the park, any sensor is triggered by motion, all lamps in the same channel will light up.

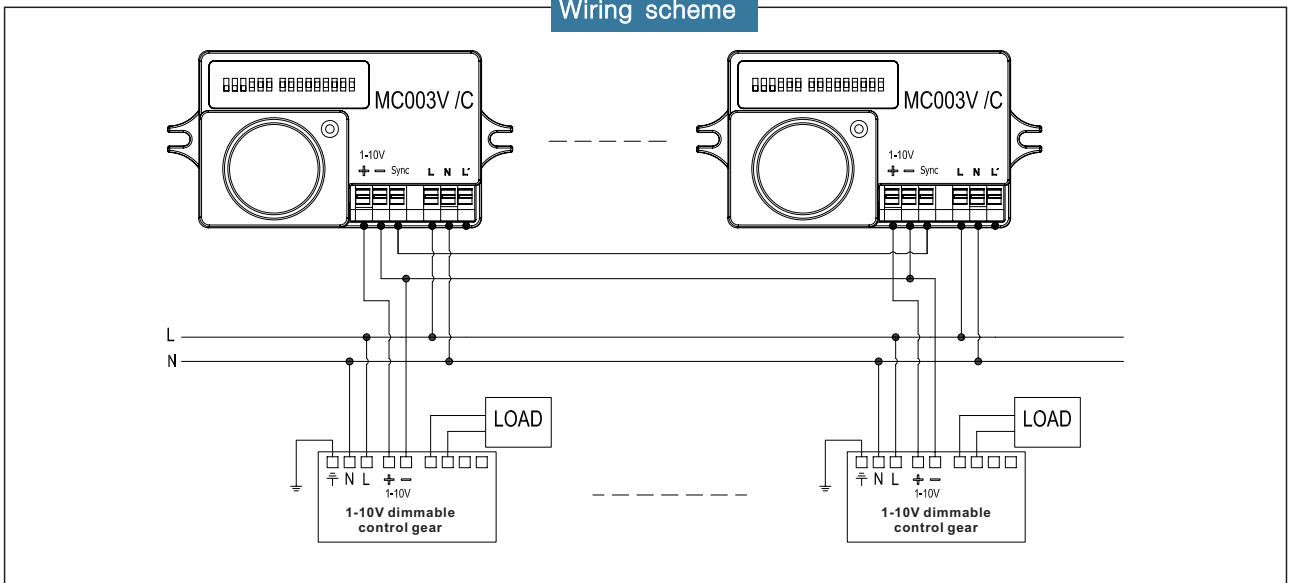


The lamps remain on at a low light level when no motion detected.

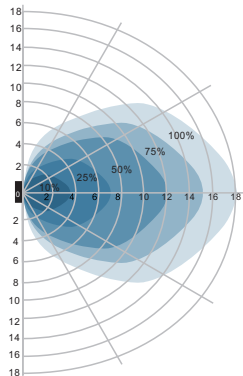
Any motion is detected in any direction, the lamps brighten at full light.

After hold time, the lamps dim to the low light level when no movement detected.

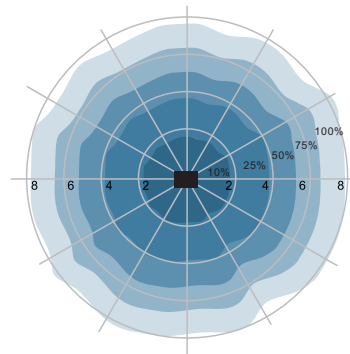
Wiring scheme



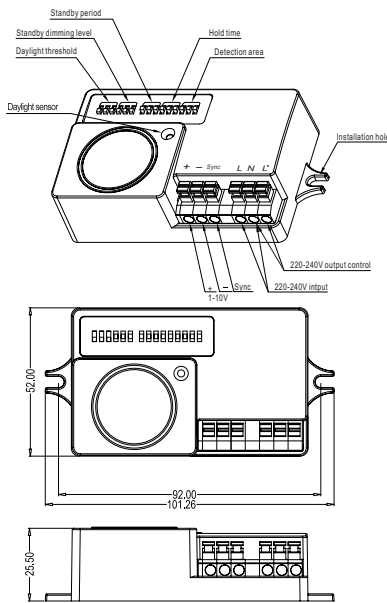
Detection Pattern



Wall mounting pattern (Unit: m)
Suggested installation height: 1-1.8m



Ceiling mounting pattern (Unit: m)
Suggested installation height: 2.5-10m



MC003V/C	
Operating voltage	220~240Vac, 50Hz/60Hz
Rated load	800W(inductive), 1200W(resistive)
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW
Power consumption	≤0.5W(standby), <1W(operation)
Detection zone	Max.(D x H): 16m x 10m
Detection sensitivity	10% / 25% / 50% / 75% / 100%
Hold time	5s / 30s / 90s / 3min / 20min / 30min
Daylight sensor	5lux / 10lux / 30lux / 50lux / Disable
Stand-by period	5s / 5min / 10min / 30min / 1h / Disable
Stand-by dimming level	10% / 20% / 30% / 40% / 50%
Mounting height	10m Max.
Motion detection	0.5~3m/s
Detection angle	150°(wall installation), 360°(ceiling installation)
Operating temperature	-35℃ ~70℃
IP rating	IP20

Setting

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

	1	2	3	
I	ON	ON	ON	100%
II	-	ON	ON	75%
III	ON	-	ON	50%
IV	-	-	ON	25%
V	-	-	-	10%

Detection area

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

	1	2	3	
I	ON	ON	ON	5S
II	-	ON	ON	30S
III	ON	-	ON	90S
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.

	1	2	3	
I	ON	ON	ON	Disable
II	-	ON	ON	1h
III	ON	-	ON	30min
IV	-	-	ON	10min
V	ON	ON	-	5min
VI	-	-	-	5S

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 Disable mode, the low light is maintained until motion is detected.

	1	2	3	
I	ON	ON	ON	50%
II	-	ON	ON	40%
III	ON	-	ON	30%
IV	ON	ON	-	20%
V	-	-	-	10%

Stand-by dimming level

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

	1	2	3	
I	ON	ON	ON	Disable
II	ON	ON	-	50Lux
III	-	ON	-	30Lux
IV	ON	-	-	10Lux
V	-	-	-	5Lux

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.
50lux, 30lux: twilight operation, 10lux, 5lux: darkness operation only.
Note that daylight sensor is active only when lamp totally switches off.