

MC144D IR



High Bay Sensor USER'S MANUAL

Model No.: MC144D IR



EN

Instruction

MI230628A0



INITIALIZATION

Sensor turns light on at 100% brightness when first power on and turns down the brightness of light in 45±5 second. During the initialization, sensor do not detect movement signals.

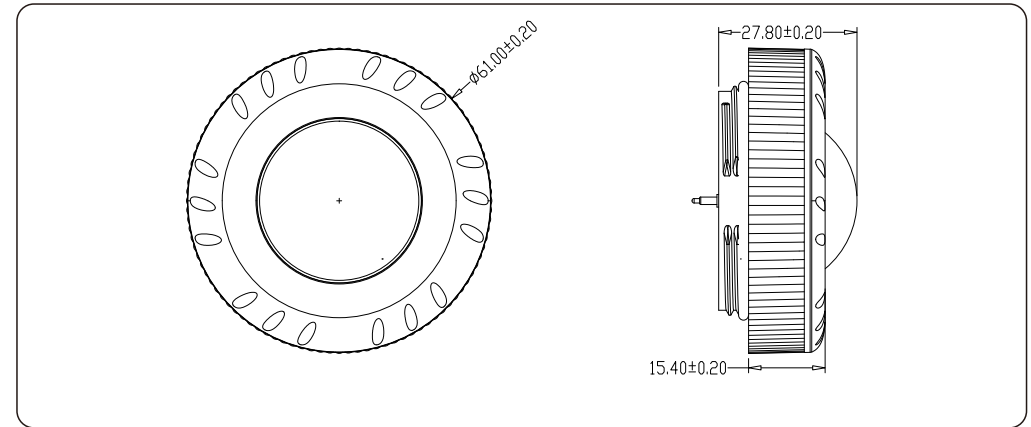
FEATURES

- (1) 12V DC input; matching DC system and LED power supply with 12V DC auxiliary supply.
- (2) Dimming port (0-10V): 2-step dimming function or 3-step dimming function.
- (3) Mounting height: 12m Max.
- (4) All parameters can be changed by infrared remote control.

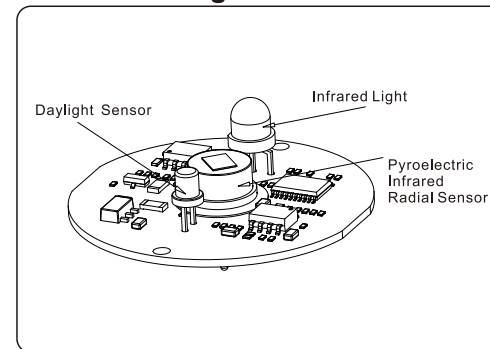
SPECIFICATIONS

DC Input Voltage	11-13VDC		
Operating Voltage	12V DC		
Operating Current	15±3mA		
0-10V Dimming	Yes		
Hold time	5s/30s/1min/3min/5min/10min/20min/30min		
Stand-by DIM Level	10%/20%/30%/50%		
Stand-by Period	0s/10s/1min/3min/5min/10min/30min/+∞		
Detection Area	100%/75%/50%/25%		
Daylight control	Daylight Sensor	5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable	
	Daylight Priority	OPEN	CLOSE
		(5Lux/15Lux/30Lux/50Lux)	150Lux
		100Lux	200Lux
		150Lux	300Lux
Mounting Height	10m (12m Max)		
Detecting Angle	360°(ceiling mounting)		
Motion detection Area	≥3m		
Operating Temperature	-20°C~+60°C		
IP Rating	IP65		
Protection Class	Class II		

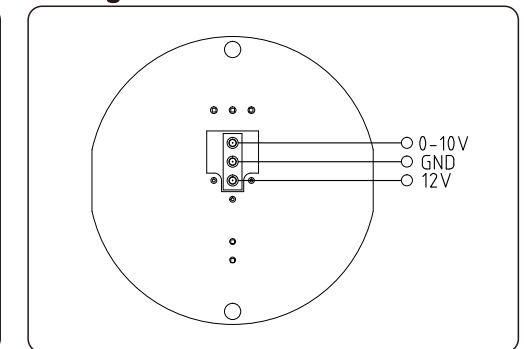
DIMENSION(MM)



Function Diagram

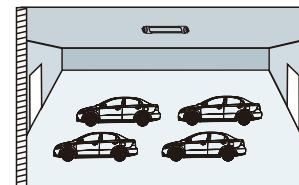


Wiring

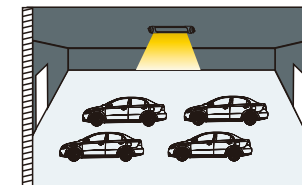


FUNCTION

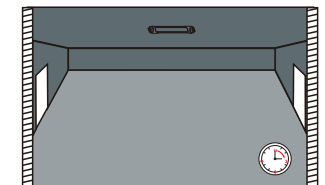
1) ON/OFF Function (stand-by period be set to "0"s)



1) With sufficient ambient light, the light will not be switched on even if with motion signal.

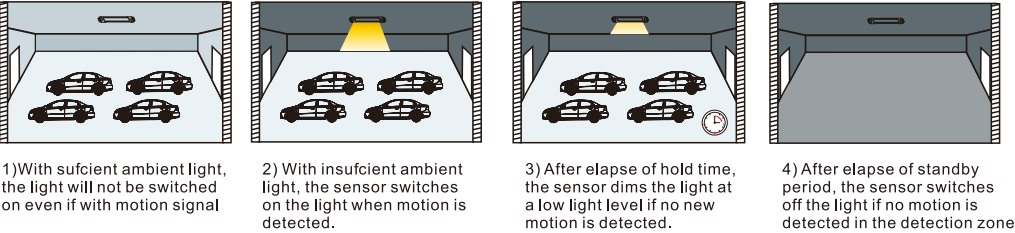


2) With insufficient ambient light, the sensor switches on the light when motion is detected.

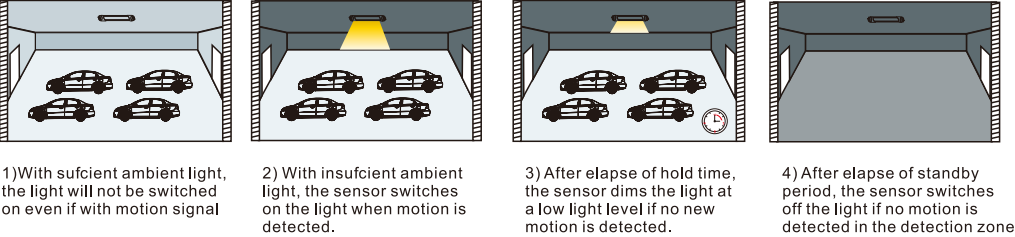


3) After elapse of hold time, the sensor switches off the light when no motion is detected.

2) 2-step dimming function (stand-by period be set to “+∞”)



3) 3-step dimming function (stand-by period be set to “10s/1min/3min/5min/10min/30min”)



4) Daylight priority function (long press DH Mode 3s start daylight priority function)

After 45s initialization period, sensor dim load to stand by dim level, and measure ambient natural light level, when ambient natural lux level is over preset OFF lux level for 6s, sensor switch off load (during this period motion can't switch load on); When ambient natural lux level is below preset ON lux level for 6s, sensor switch on load and stay in standby dim level; meanwhile, daylight sensor start self-learning function (during standby dim level sensor is forcibly blocked for 2s without function, sensor function is recovered after self-learning, the lux level is recorded as the next shut-off value), when detect motion sensor, sensor switch on load in full brightness level.

Note: Self-learning function is invalid after power off, sensor parameter return to factory setting.

5) Hold time

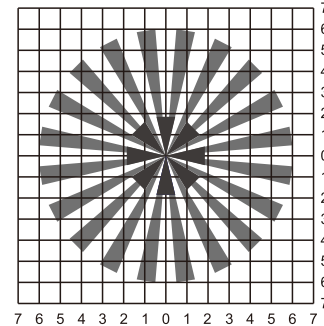
The time to keep the light fully on after the sensor detects no human activity (no motion trigger during this period, once triggered, the timer will be restarted)

6) Stand by dim level

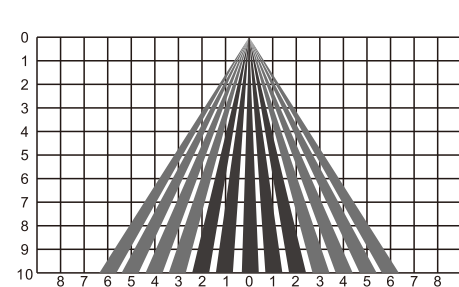
After the sensor detects no human activity, the time for the lamp to enter the light-off state from the low-brightness state (no motion trigger during the period, once triggered, it will re-enter the full-brightness state)

RADIATION PATTERN

CEILING MOUNTING



WALL MOUNTING



FACTORY SETTING

Detection area	Hold Time	Stand-by Period	Daylight Sensor	Stand-by DIM Level
100%	3min	5min	Disable	50%

APPLICATION NOTICE

- Sensor should be installed by a professional electrician. Please turn off power before installing, wiring.
- The distance distance is related to factors such as the moving speed of the moving object, the size of the moving object, the installation height, the installation angle, whether the installation environment is open, and the material of the reflector. The detection distance given in the specification is a typical value, it is 165cm/65kg people who walks in an open indoor environment
- The daylight threshold is in a sunny environment, no shadows, and ambient light diffuse reflection conditions. In different periods, climates, and environments, the daylight value detected by the light sensor may be different.
- Sensor parameters may need to be reconfigured in different installation environments, please refer to the following instructions or contact the manufacturer
- This sensor is only for indoor use, outdoor use may be false triggered by wind and rain, and surrounding moving objects.
- The installation height of the sensor product cannot exceed 12 meters, and the suitable height is 10 meters; the distance between the two sensors should be greater than 3 meters
- When the sensor is installed in a metal lamp, on a metal reflective surface, or in a narrow closed environment, the microwaves will be reflected multiple times and cause false triggering. Please reduce the sensor sensitivity or contact the manufacturer for technical support.
- Sensor is compatible with different 0-10V driver but dimming effect will be different.
- DC regulated power supply with stable output voltage and low ripple coefficient must be used. The ripple of the power supply should be less than 100mV ; the load current should be greater than 20 mA.

FAQ

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 a 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 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 0.6-1m/s or the detection radius is too small.	Check detection area setting.