

ML-SENSOR | ML-REMOTE

Microwave sensor & remote suitable for use with NOX Highbays.



Easy installation with plug & play

Built-in ambient light sensor

Built-in dimming function to easily adjust the luminance of fixtures

The function can be set by IR remote controller

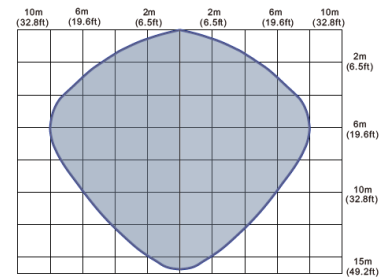
Wide detection range and 10M maximum installation height



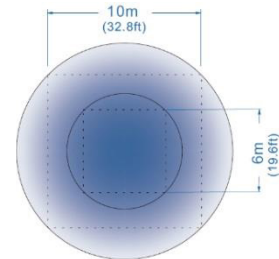
ML-SENSOR TECHNICAL INFORMATION

IP Rating	IP65
Input Voltage	12VDC
Detection Area	Max 10m Installation heights. Max 16m Coverage area
Temp Range	-35° to +60°
Sensor Type	Microwave motion detector
Microwave frequency	5.8G+75MHz, ISM wave band
Detection Angle	150° (wall installation), 360° (ceiling installation)
Detection Area	Max 10m Installation height Max 16m Coverage area
Hold Time	5s / 2min / 5min / 10min
Dimensions	Ø 58x(H)25mm
Weight	0.04kg
Warranty	5 Years

WALL MOUNTED
SIDE VIEW



CEILING MOUNTED
TOP VIEW



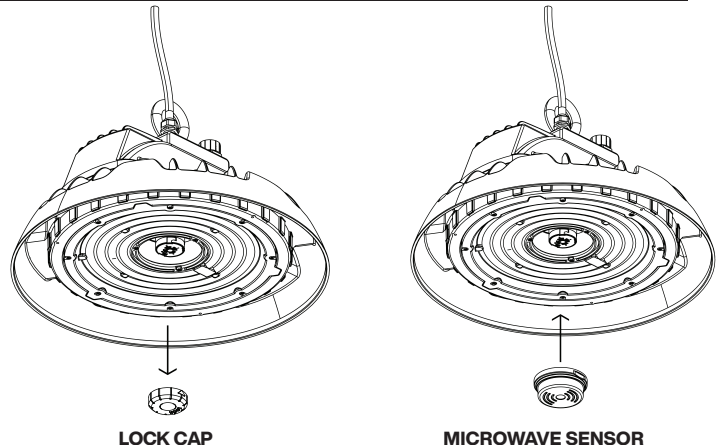
INSTALLATION

MICROWAVE SENSOR ML-SENSOR



INSTALLING MICROWAVE SENSOR

1. Unscrew the lock cap from middle of High Bay
2. Replace lock cap with microwave sensor locking it into place by turning it clockwise.



PLEASE NOTE

MUST BE INSTALLED BY A LICENSED ELECTRICIAN

- Read instructions carefully before attempting to install the fitting. Retain this guide for future reference
- All components must not be mechanically stressed
- Follow all relevant electrical and safety standards (including AS3000)
- Damage by corrosion will not be honoured as a material defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture, condensation and other harmful elements

MICROWAVE REMOTE
ML-REMOTE



<p>Hibernation - the sensor stops working and goes into hibernation.</p> <p>Press any other key to re-enter the working.</p> <p>Press any other key to realize the function of the key itself.</p>		<p>Test</p> <p>Test Button 6S</p>	<p>Reset</p> <p>Factory Reset</p>
<p>Mode1</p> <p>100%+0%/100%+2min1</p>	<p>Mode2</p> <p>00%+20%/100%+2min</p>	<p>Mode3</p> <p>50%+0%/100%+2min</p>	<p>Mode4</p> <p>50%+20%/100%+2min</p>
<p>Sensitivity setting of microwavesensor (Keys only work in microwave mode)</p>			
<p>Microwave mode /Microwave Setting</p>			
<p>Photocell threshold value setting</p>			<p>Cancel photocell mode, but invalid in timer Mode and Bucket mode</p>
<p>Duration time Setting after microwave trigger (Keys only work in microwave mode)</p>			
<p>Standby time setting of microwave mode (Keys only work in microwave mode)</p>			<p>Time Bucket mode 1,2 (Keys only work with photocell mode)</p>
<p>Fixed mode / Luminance setting</p>			
<p>Timer mode setting (Keys only work with photocell mode)</p>			<p>Cancel timer mode</p>



Sensor sensitivity:

1. Key- The Max detection distance of microwave sensor is 15M.
2. Key- The Max detection distance of microwave sensor is 11M.
3. Key- The Max detection distance of microwave sensor is 7M.
4. Key- The Max detection distance of microwave sensor is 3.5M.

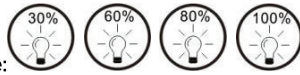
Duration time:

1. 5S 5S key-lasting time
2. 2min 2min key-lasting time
3. 5min 5min key-lasting time
4. 10min 10min key-lasting time



Microwave mode:

- 1.No Motion was detected continuously, the light will turn off after the duration time(5S/2min/5min/10min), and the light will remain 100% luminance if motion is detected.
- 2.No motion detected continuously, the light luminance will drop to 20% after the duration time (5S/2min/5min/10min), and the light will remain 100% luminance if motion is detected.
- 3.No motion detected continuously, the light luminance will drop to 30% after the duration time (5S/2min/5min/10min), and the light will remain 100% luminance if motion is detected.
- 4.No motion detected continuously, the light luminance will drop to 50% after the duration time (5S/2min/5min/10min), and the light will remain 100% luminance if motion is detected.

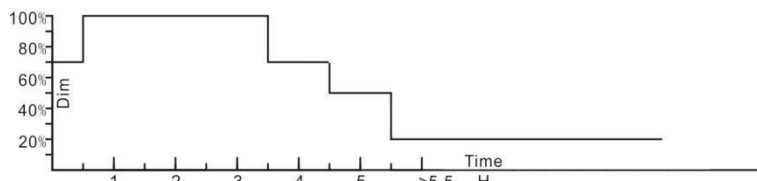


Fixed mode:

- 1.The light stays at 30% luminance
- 2.The light stays at 60% luminance
- 3.The light stays at 80% luminance
- 4.The light stays at 100% luminance



Time Bucket mode 1:

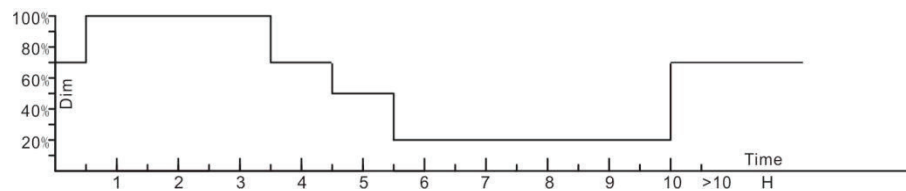


The luminance of the light changes with the time bucket. The internal timer starts timing or reset with the ambient luminance under working conditions.

The luminance is 70% in 0.5H, 0.5H-3.5H is 100%, 3.5H-4.5H is 70%, 4.5H-5.5H is 50%.Then turn off the light when the luminance is 20% until the environment is bright.



Time Bucket mode 2:



The luminance of the light changes with the time bucket. The internal timer starts timing or reset with the ambient luminance under working conditions.

The luminance is 70% in 0.5H, 0.5H-3.5H is 100%, 3.5H-4.5H is 70%, 4.5H-5.5H is 50%, 5.5H-10H is 20%.Then turn off the light when the luminance is 70% until the environment is bright.



Timing mode:

1. The internal timer starts timing or reset with the ambient luminance under working conditions, Turn off the lights after 3H
2. The internal timer starts timing or reset with the ambient luminance under working conditions, Turn off the lights after 6H
3. The internal timer starts timing or reset with the ambient luminance under working conditions, Turn off the lights after 9H



Cancel timing mode:

Timing mode 3H / 6H / 9H Failure.



Test button:

TEST-Press the button, the red indicator light is on, keep 10% brightness for 1S then entering the induction state,after sense the movement of the object,the light brightness turn to 100%. After testing for 6S,the test mode is automatically exited, and the red indicator light is off.



Photocell mode :

1. Set the photocell threshold value ambient luminance is about 50Lux.
2. Set the photocell threshold value ambient luminance is about 100Lux.
3. Set the photocell threshold value ambient luminance is about 200Lux.

When ambient luminance is below the threshold,the product enters working state,and run according to the setting mode. When ambient luminance is over the threshold, infrared ray in the environment reaches the inherent threshold of the product, the product enter non-working state, the light is off.



Turn off Photocell mode :

- 1.Photocell mode 50Lux /100Lux /200Lux is failure, The change of ambient luminance has no effect on the working state of the controller.

Stand-by time :

1. 0S 0S key-Set standby time as 0S
2. 1min 1min key-Set standby time as 1Min
3. 5min 5min key-Set standby time as 5Min
4. 10min 10min key- Set standby time as 10Min
5. 30min 30min key-Set standby time as 30Min

Standby mode only be activated in microwave mode with 20%-100% 30%-100% 50%-100%

For example, when the microwave mode is 20% - 100%, no motion state is detected continuously, and the holding time is up to (5S / 2min / 5min)The brightness of the light will be reduced to 20%, and no motion state is detected continuously. When the standby time is up (0s / 1min / 5min / 10min / 30min), the light will be turned off. If motion state is detected, the light will maintain 100% brightness.



6. Cancel the standby mode

For example microwave mode 20%-100% No motion detected continuously, the light luminance will drop to 20% after the duration time (5S/2min/5min), and the light will remain 100% luminance if motion is detected.



factory reset:

- 1.The operation of remote has memory function resume to default setting

- 1.Factory default mode is 2min 0%-100% 100% 50LUX Cancel timing mode Cancel the standby mode
- 2.Time Bucket mode/fixed mode/microwave mode can only be activated in one mode at the same time.
- 3.Time Bucket mode, Timer mode can only work in photocell mode and in outdoor environments with alternating light and dark.