

■ Microwave Sensor Lamp PD-LED2034-D instruction



It can be customized in other different colors.

Summary

This is a kind of totally newly-designed, intelligent ceiling mounting Microwave sensor LED lamp, which is attached with the function of power supply in emergency. The lighting is managed by the outside power supply or the built-in battery. When AC power supplying, the LED power is 19W, the luminous flux will be more than 800 lm, equivalent to twice that of 60 watt incandescent lamp(≈400lm). When power failure, the built-in battery will automatically supply the power 12W to LED to achieve the equivalent illumination with that of 60 watt incandescent lamp(≈400lm). The battery can continuously supply power for more than 1.5 hours and in the sensor energy-saving mode for 6 hours or more. It is widely applied in the corridor, washing room, elevator lobby and so forth.

The intelligent management of the system enhances the advantages of stability and energy-saving. The MCU will auto-examine each circuit and manage the detected information in reasonable way. When there is no any signal detected, the system will start the power-saving mode and decline the power output progressively. The minimum output is one tenth of the maximum value, which, to large extend, lessens the power consumption, lowers the temperature of the heating elements and reduces the LED light loss resulted from the high temperature. Thus, it promotes the reliability of the product and extends the life span.

This product is designed with two configurations: one is the sensor lamp with the function of supplying power in emergency and the other one is the intelligent sensor lamp without the emergency function. You can make purchase according to the practical need. But in most cases, it is necessary and wise to choose the former one, for that the occasional power outage will cause trouble, or even danger.



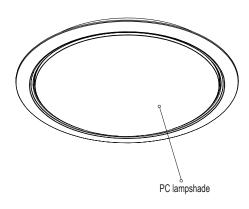
Use high quality PC lampshade. Strengthen the flexible refraction of light. And its function of anti-ultraviolet makes the shade not easy to turn yellow and be broken.

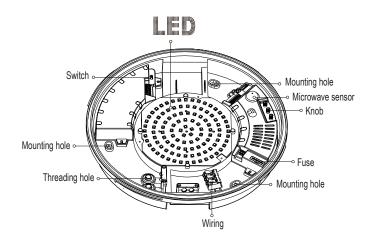
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LED lamp consumes power 80% less than incandescent lamp and 50% less than fluorescent lamp.

Packing list in	Ceiling Mount Lamp LEDS 120PCS	Φ6 Plastic expansion	4x30 Screw	Instruction
Quantity	1X	3X	3X	1X

Name of each part





Specifications

Power source: 100-240V/AC 50/60Hz

Rated LED:19W Max.(AC)

12W Max.(DC) Charging Power: 15W Max.(light off)

3.6W Max.(light on)

Protection: Class2

Material: Body:PC Lampshade:PC

HF system: 5.8GHz

Battery: 7.4V x2 / 2000mAH lithium battery Continuous illumination time: ≥150min (when the battery power supply)

Working Temperature: -20~+55°C Transmission power: <0.3mW

Time setting: 8sec to 12min (adjustable) Detection range: 1-10m (radii.) (adjustable) Light-control: 10-2000LUX(adjustable)

Luminous flux: 850lm (AC) 560lm (DC) (warm color)

660lm (AC) 420lm (DC) (cold color)

Standby power: <0.9W Detection angle: 360°

Installation height: 2.5-3.5m (ceiling mount)

LED quantity: 120PCS(T5050)



^{*} Installed in the elevator, when power fails, it still supports lighting for the trapped.

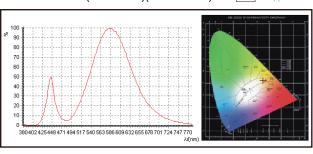
Spectrogram

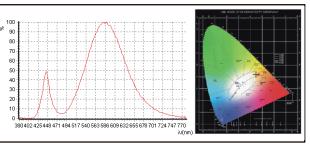
PD-LED2034-D (AC 850lm)(warm white)



PD-LED2034-D (DC 560lm)(warm white)





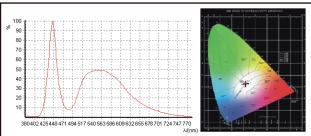


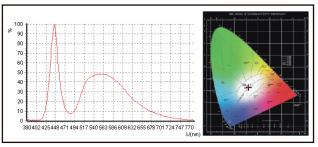
PD-LED2034-D (AC 660lm)(cold white)



PD-LED2034-D (DC 420lm)(cold white)

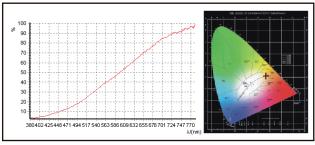






60 watt incandescent lamp(≈400lm)

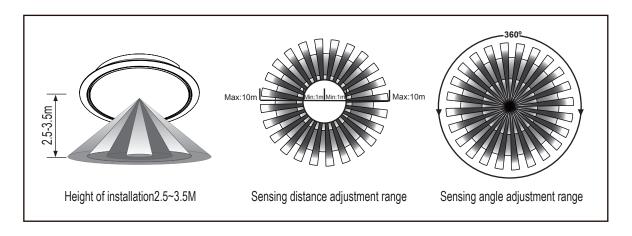




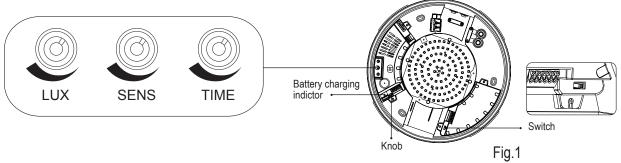
When light on (DC), the luminous flux will be more than 400 lm, equivalent to that of 60 watt incandescent lamp(≈400lm).

When light on (AC), the luminous flux will be more than 800 lm, equivalent to twice that of 60 watt incandescent lamp(≈400lm).

Sensor information



Function



Switch

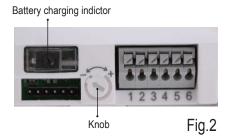
This switch is to control the battery connection. To avoid power-consumption in transit or in storage, we preset the switch to OFF, that is, the battery is not connected. Before installation, you should set the switch to ON to make sure that the battery is well connected to achieve the power-supply in emergency. This LED lamp with emergency function can be used as the common lamp, but when power failure, it will support lighting with battery automatically.

Battery charging indictor

When power connected, set the switch to ON, the battery will be charged, the indicator in red to indicate the unfull charge and in green the full charge; set the switch to OFF, the battery will not be charged and the indicator is off.

Power saving mode

When there is no signal detected, the system will start the power saving mode and auto-detect the ambient light-control. When the light-control is lower than 50lux, the lamp will enter the semi-brightness (percentage brightness) standby mode, and will light off when the ambient light-control is more than 50lux. You can turn the knob (as right-side pic. shown) to adjust the output power to control the percentage brightness (0%~40% brightness). In standby mode, when motion signal detected, the lamp will recover full brightness.



Detection range setting (sensitivity)



Detection range is the term used to describe the radii of the more or less circular detection zone produced on the ground after mounting the sensor light at a height of 2.5m, turn the detection range control fully anti-clockwise to select minimum detection range(approx.1m radii), and fully clockwise to select maximum detection range(approx.10m radii).

NOTE: the above detection range is gained in the case of a person who is between 1.6m~1.7m tall with middle figure and moves at a speed of 1.0~1.5m/sec. if person's stature, figure and moving speed change, the detection range will also change.

In different cases, the sensitivity of the lights has certain deviation.

Solutions of prevent the power network pulse interference the products:

Due to the difference of regional interference power network, the pulse of interference is uncertain, so the user are not suggested to adjust the sensitive to the maxium when using. Suggestion: Please install and adjust the sensitive in the appropriate distance using, do not set the maxium sensitivity to prevent misoperation.

ATTENTION: When use this product, please adjust the sensitivity to an appropriate position you need, please do not adjust the sensitivity to maximum, to avoid the product does not work normally caused by wrong motion. Because the sensitivity is too high easily detect the wrong motion by wind blowing leaves & curtains, small animals, and the wrong motion by interference of power grid & electrical equipment. All those lead the product does not work normally!

When the product does not work normally, please try to lower the sensitivity appropriately, and then test it.

The detection distance may multiply for the reflection on microwave electromagnetic field by the metal or glass materials. Thus, lower the sensitivity to reach the appropriate detection distance. Never turn the SENS knob to the maximum value to avoid error detection. Also the surrounding environment will lead to error action, e.g. the automobiles passing by or the wandering objects caused by the wind. Products should be installed more than 4 meters one from the other, otherwise the interference among them will cause error action.

The proper use of Sensitivity potentiometer: as the photograph show, the knob is specialized in adjusting sensitivity.when use, user can adjust the knob to the middle.of course, in the process of the practical usage, if you feel the sensitivity is ok , you don't need to adjust it. If you feel it is low, you could adjust it higher properly. Due to some environment led to wrong action, such as car passing, wind making object fly and so on(as fig.3 fig4), so we advise sensitivity hadn't be adjusted to the max.





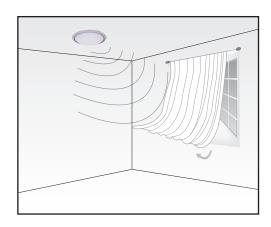


Fig.4

Time setting



The light can be set to stay ON for any period of time between approx. 8sec(turn fully anti-clockwise) and a maximum of 12min(turn fully clockwise). Any movement detected before this time elapse will re-start the timer. It is recommended to select the shortest time for adjusting the detection zone and for performing the walk test.

NOTE: After the light switches OFF, it takes approx. 1sec before it is able to start detecting movement again. The light will only switch on in response to movement once this period has elapsed.

It is mainly for the adjustment of the delay time from the moment the signal detected and light auto-on till the light auto-off. You can define the delay time to your practical need. But you'd better lower the delay time for the sake of energy saving, since the microwave sensor has the function of continuous sensing, that is, any movement detected before the delay time elapses will re-start the timer and the light will keep on only if there is human in the detection range.

Warning: in the process of installation test ,please far away from the sensor lamp,because it will turn on once detect you or test staff.



Please keep a certain distance with sensor lamp when test, otherwise, the sensor lamp will turn on once detect you in the detection range.

Fig.5

Light-control setting



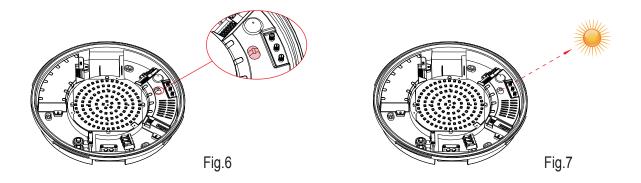
The chosen light response threshold can be infinitely from approx. 10-2000lux. Turn it fully anti-clockwise to select dusk- to-dawn operation at about 10 lux. Turn it fully clockwise to select daylight operation at about 2000lux. The knob must be turned fully clockwise when adjusting the detection zone and performing the walk test in daylight.

LUX knob is used to adjust sensor lamp where can turn on by sensor ,in addition,we can choose suitable location according to the needs of customer.

Installation location:

Due to the existence of a light transducer in sensor lamp(as fig.6), the light transducer must keep in the location where daylight is sufficient, on the other hand,we have to avoid other light source,otherwise,the light transducer will do a improper judgment for environment ray. Due to the needs of different customers, such as installation location, lux and so on ,the location of potentiometer knob is different. when used, it maybe require you to adjust many times in order to meet with your needs.

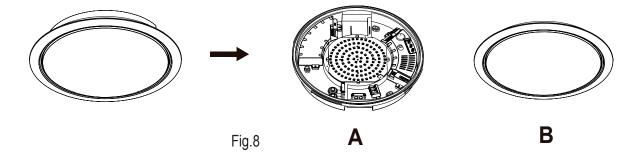
Change the location of light transduce to the location where the daylight is visible. Note: Please don't adjust the three functional buttons to excess.



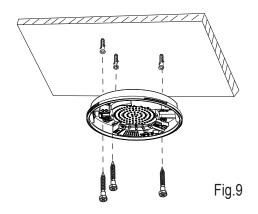
Procedure of installation

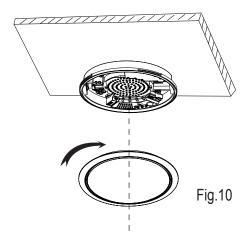


- 1. Please keep it away from the children when installation.
- 2. Please avoid to be installed where the temperature or humidity is high.
- 3. Please cut off the power before installation.
- Step1 Seperate the lamp into two parts:A and B.



- Step2 Turn the knobs to the ideal conditions (Please define the settings as per the above FUNCTION part mentioned.).
- Step3 Put the base of the product on the ceiling to make the drilling mark.
- Step4 Install the product on the place where you marked.
- Step5 Knock the plastic expansion screw into the hole which you drill.
- Step6 Put the power line through the line hole to connect on the wiring.
- Step7 Fix the base of the product on the selected place with the screws.
- Step8 Rotate the lampshade clockwise into the base. Installation finished.



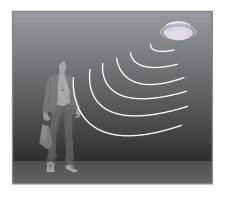


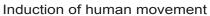
Fault and the solution

Fault	Failure cause	Solution	
	Light-illumination is set incorrectly.	Adjust the setting of the load.	
The load fails to work.	The load is broken.	Change the load.	
	The power is off.	Turn the power on.	
The load works all the time.	There is a continuous signal in the region of the detection.	Check the settings of the detection area.	
The load works when there is	The lamp isn't installed well so that sensor fails to detect reliable signals.	Re-adjust the installation place.	
no motion signal detected.	Moving signal is detected by the sensor (movement behind the wall, the movement of small objects, etc.)	Check the settings of the detection area.	
The load fails to work when there is motion signal detected.	The motion speed is too fast or the defined detection area is too small.	Check the settings of the detection area.	

Note: the high-frequency output of this sensor is<0.3mW- that is just one 3300th of the transmission power of a mobile phone or the output of a microwave oven.









Since entering lighting condition









- 1. The LEDS in serial can function when all the seals installed in place.
- 2.Please don't remove or connect with other lamp when powered on.
- 3. When the LEDS in serial are damaged ,you need experienced technician to repair using the same rating LEDS.
- •Please confirm with profession installation.
- •Please cut off power supply before installation and removal operations.
- •Make sure that you have cut off the power for safety purposes.
- •Improper operation caused losses, the manufacturer does not undertake any responsibility.

We are committed to promoting the product quality and reliability, however, all the electronic components have certain probabilities to become ineffective, which will cause some troubles. When designing, we have paid attention to redundant designs and adopted safety quota to avoid any troubles.

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