

### Summary

Packing list in	Quantity
Ceiling Mount Lamp LEDS 98PCS	1X
$\Phi 6$ Plastic expansion	4X
3x30 Screw	4X
<b>Instruction</b>	1X
4x12 Y type Stainless Screw	3X

This is a microwave sensor switches controlled LED lights.,the microwave sensor was built into the lamp ,it has 98pcs high brightness LEDs inside ,with total power of 16 watts. When light on, the luminous flux will be more than 800 lm, equivalent to twice that of 60 watt incandescent lamp( $\approx 400lm$ ).The microwave sensor switch is a new type automatic switch that comes after voice switch ,and infrared sensor switch .The detection way has the below advantages compared with other as follows: 1. non-contact detection, 2. Suitable for bad environment, immune to temperature, humidity, noise, air, dust, light...3.RF interference ability, 4. Transmission power only 0.2 mW, It will not harm the human body. Simple installation+ easy wiring.

We adopt this sensitive advanced sensor switches in lighting control, enabling the light to turn on automatically when one comes , automatically turn off when one goes out In addition to the widely usage in the aisle stairs ,living room and bedrooms , it also can be installed in the bathroom.

The built-in microwave sensor switch can penetrate plastic, glass, wood . So it can be installed in glass or plastic shell lamp This allows the application of microwave sensor switch in different styles of lights for energy control. Now, we can provide a variety of microwave sensor LED lamps to meet the needs of different people with different preferences.

## IP 44

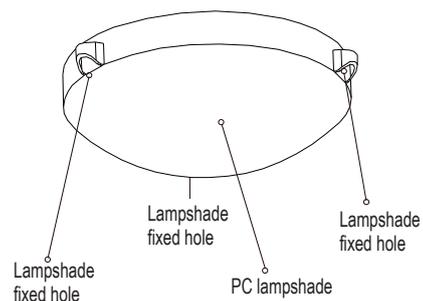
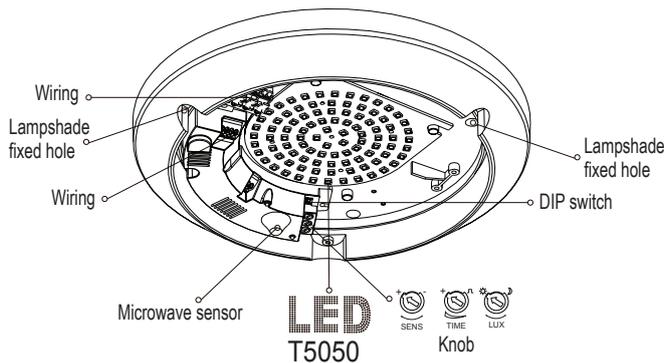


Use high quality PC lampshade.Strengthen the flexible refraction of light.And its function of anti-ultraviolet makes the shade not easy to turn yellow and be broken.



LED lamps than incandescent bulbs  
provinces electricity 80%;fluorescent  
lamps province electricity than 50%

### Name of each part

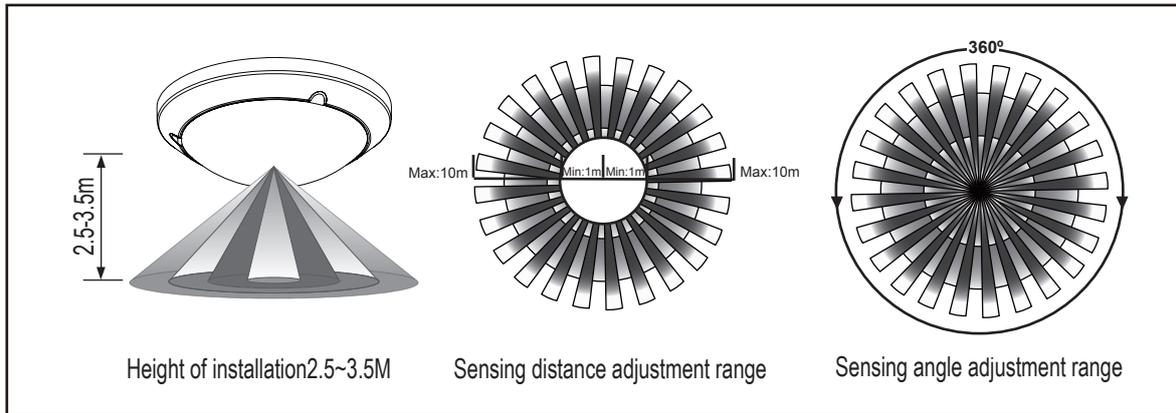


### Specifications

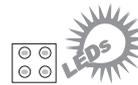
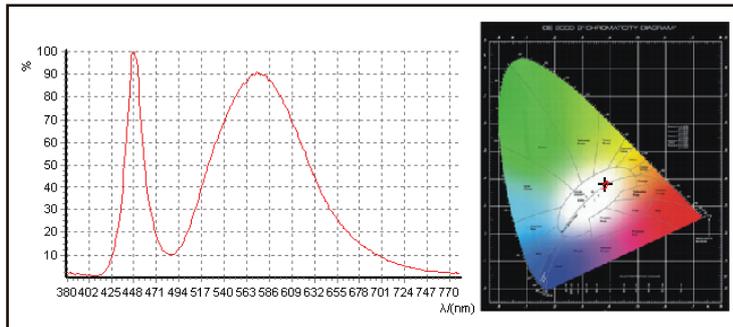
Power source: 100-240V/AC  
 Power frequency: 50/60Hz  
 Rated load: 16W Max.(230V/AC 50Hz)  
 HF system: 5.8GHz CW electric wave, ISM wave band  
 Transmission power: <0.2mW  
 Time setting: 14sec (S2=OFF) to 12min (S1=ON) (adjustable)  
 14sec (S2=OFF) to 30min (S1=OFF) (adjustable)  
 20sec (S2=ON) to 12min (S1=ON) (adjustable)  
 20sec (S2=ON) to 30min (S1=OFF) (adjustable)  
 Detection range: 1-10m (radii.) (adjustable)

Light-control: 10-2000LUX (adjustable)  
 Standby power: <0.9W  
 Detection angle: 360°  
 Luminous flux: 800lm(warm white)   
 830lm(cold white)   
 Installation height: 2.5-3.5m (ceiling mount)  
 Weight: about 1.43 kg  
 Lamp part  
 LED quantity:98PCS  
 LED specifications:T5050

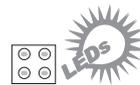
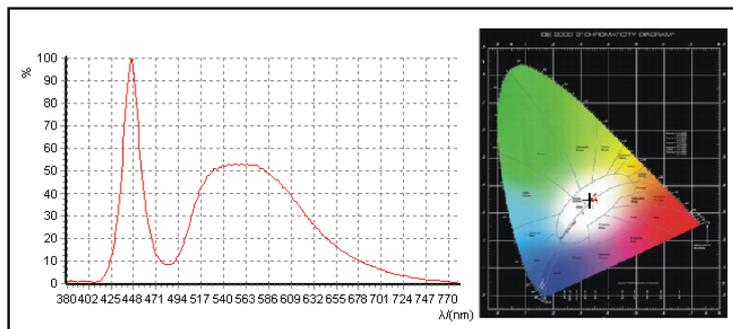
## Sensor information



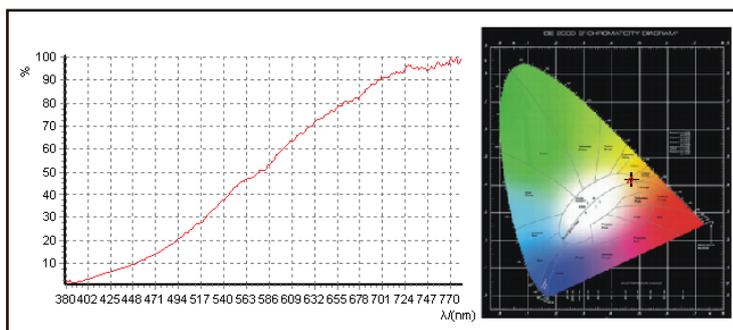
## Spectrogram



PD-LED2004-G 800lm(warm white )



PD-LED2004-G 830lm(cold white )



60 watt incandescent lamp(≈400lm)

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

## Procedure of installation



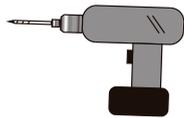
### Warning!

1. Please keep it away from the children.
2. Please avoid fire/high temperature/damp places for installation.
3. Please confirm when shut off the power cord access.

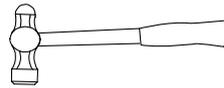
**Note:** Please bring the following tools



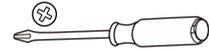
Pencil



Electric drill



Hammer



Screwdriver

- Step1 Turn off the screw to take down the lampshade (as follow: the product should be separated into two parts as A and B)

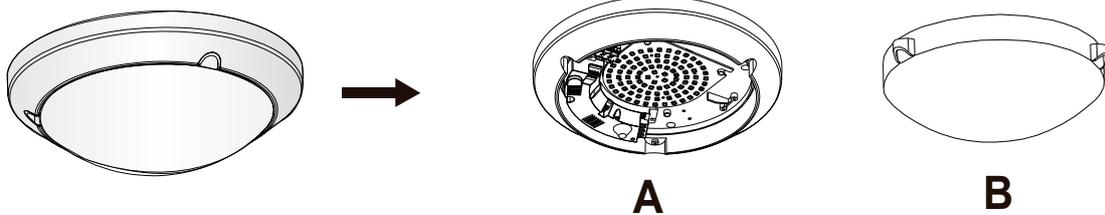


Fig.1

- Step2 Turn the knobs to the ideal conditions (as Fig.2)

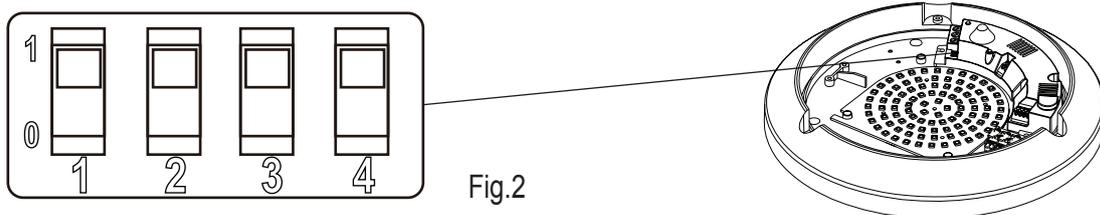


Fig.2

The circuit has four bit code switch, can choose the following.

S1	The maximum delay time
1	12min
0	30min

S2	Slowly on and slowly off fuction
1	ON
0	OFF

S3	10% brightness mode
on	ON
3	OFF

When the ambient brightness is less than about 100LUX (cold light source), the device triggers the light, if no detection after the preset delay time, the light will enter the 10% brightness state and keeps this situation until there is detection in the half way, and then the light will get brighter.

S4	Normally on
on	ON
4	OFF

You can pre-set Constantly ON mode(effective only when power on),that is,it is the mains switch that controls the light to be on or off. If you turn on or turn off the switch in short time,it will work as the common lightings.If you turn on the switch for long time,the light will be constantly on about 6 hours and then enter the sensing state.To turn off the switch and then turn on,you can restart the Constantly ON mode.

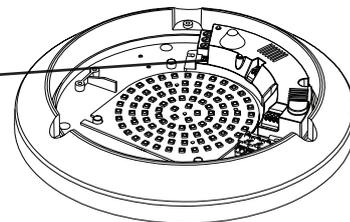
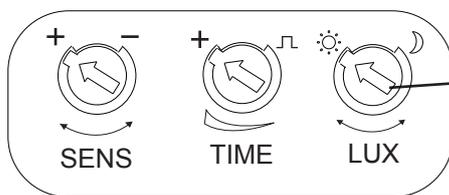
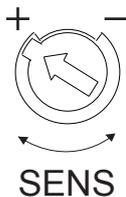


Fig.3

### Detection range setting (sensitivity)



Reach 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 reach control fully anticlockwise to select minimum reach (approx. 1m radii), and fully clockwise to select maximum reach (approx. 10m radii).

**NOTE:** the above detection distance 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 distance will also change.

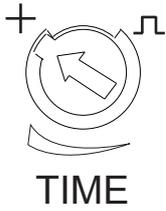
In different cases, the sensitivity of the lights has certain deviation.

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.

## Time setting



The light can be set to stay ON for any period of time between approx. 14sec(turn fully anticlockwise) and a maximum of 12min(30min) (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.**

## 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.

**Note: Please don't adjust the three functional buttons to excess. That is because the three functional buttons were connected to the components directly, there is a small stopper in each of the three components, when you adjust the buttons from start to end, the excessive turn will damage the stopper, and lead to the 360°non-stop turn around. Theadjust range limit is 270°, please do pay attention to this.**

- Step3 Put the base of the product on the ceiling to make the drilling mark (as Fig.4)
- Step4 Install the product on the place where you marked (as Fig.5)

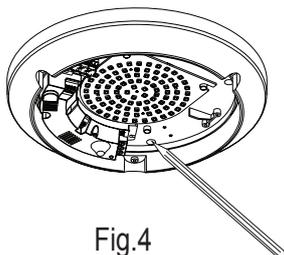


Fig.4

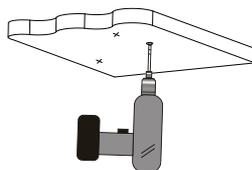


Fig.5



### Warning!

When you are drilling ,please make sure you wear glasses and dust masks to prevent the dust fly into the nose and throat causing unnecessary trouble

- Step5 Knock the plastic expansion screw into the hole which you drill (as Fig.6)
- Step6 Put the power line through the line hole to connect on the wiring (as Fig.7)

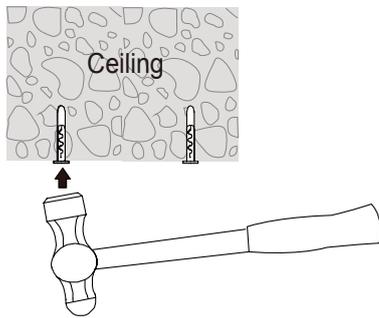


Fig.6

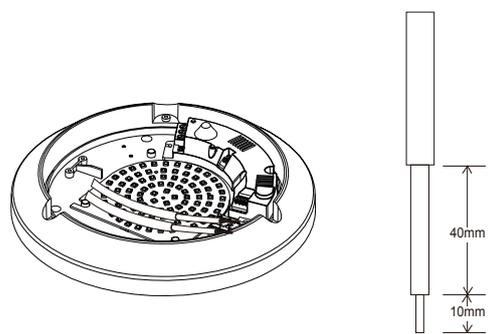
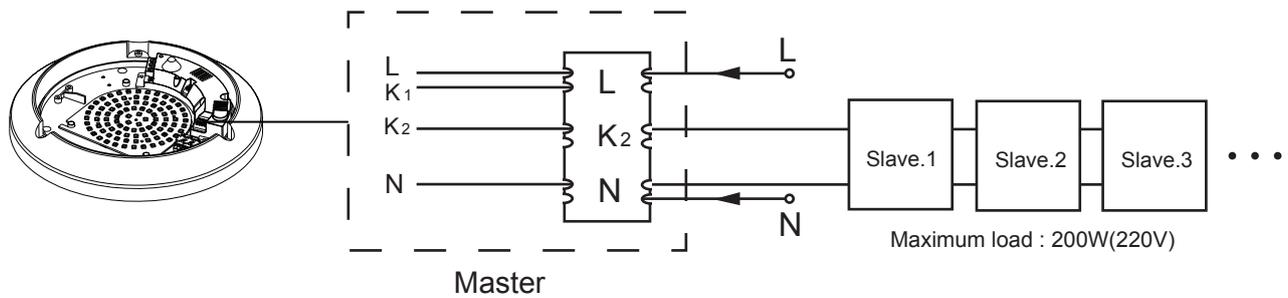


Fig.7

Connection-wire diagram



K1 and K2 is equivalent to one switch,electricity from L to K1, then output from K2. Connect to laod ,the other end of N .Maximum load it's 200W(220V)

- Step7 Fix the base of the product on the selected place with the screws (as Fig.8)

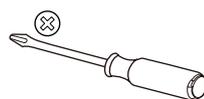
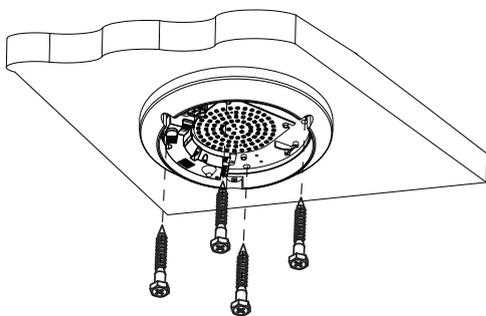
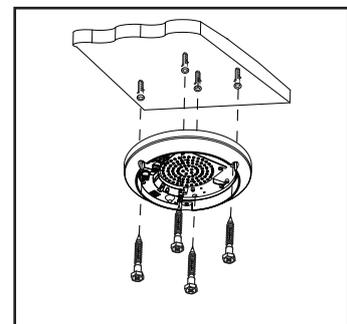


Fig.8



Concrete ceiling

- Step8 Fix the PC lampshade on the base with the screws (as Fig.9)

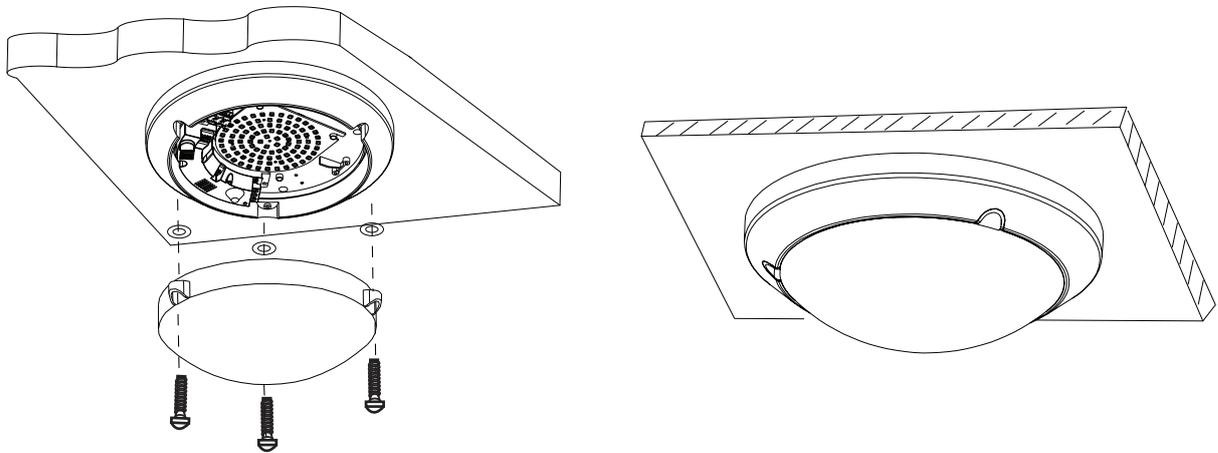
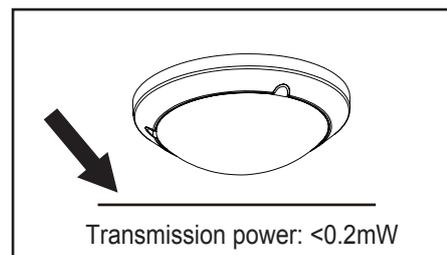


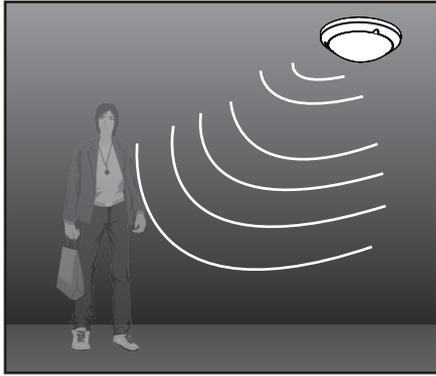
Fig.9

### Fault and the solution

Fault	Failure cause	Solution
Does not work with the load	Light-illumination set incorrectly, the load is broken	Adjust the setting of the load
	The power is off	Change the load
	There is a continuous signal in the region of the detection	Turn the power on
Work all the time with the load	The sensor have not been installed correctly	Check the settings of the detection area
When there is no a moving signal work with the load	Sensors failed to pack good cause its cannot reliably detect signal	Re-install the outer covering
	Moving signal is detected by the sensor (movement behind the wall, the movement of small objects, etc.)	Check the settings of the detection area
When there is a moving signal work with the load	The moving body is too fast or the detection area is too small	Check the settings of the detection area

**NOTE:** the high-frequency output of this sensor is <math><0.2\text{mW}</math>- that is just one 5000<sup>th</sup> of the transmission power of a mobile phone or the output of a microwave oven.





Induction of human movement



Since entering lighting condition



Application



## Warning!

- 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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