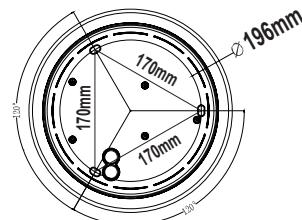
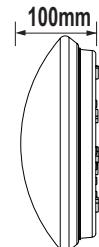
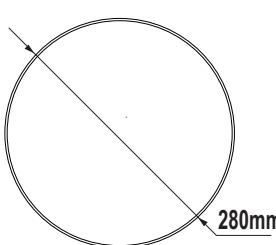


LX-360LED-1 Microwave Sensor Lamp Instruction



Summary

Packing list in	Quantity
Microwave Sensor Lamp	1X
Φ6 Plastic Expansion	3X
3x30 Screw	3X
Instruction	1X

IP 20



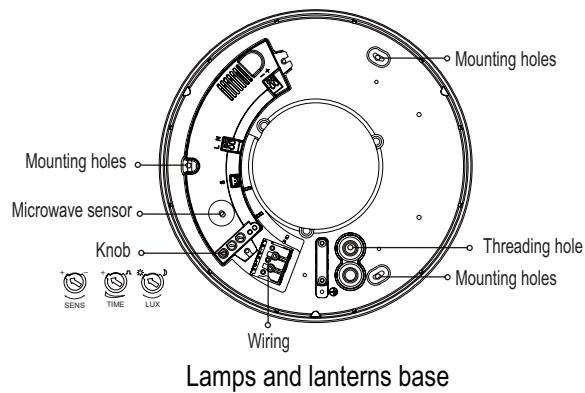
This is a microwave sensor switches controlled LED lights, the microwave sensor was built into the lamp, it has 36pcs high brightness LEDs inside, with total power of 15 watts. When light on, the luminous flux will be more than 750 lm, equivalent to twice that of 60 watt incandescent lamp($\approx 400\text{lm}$). 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 0.3 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.

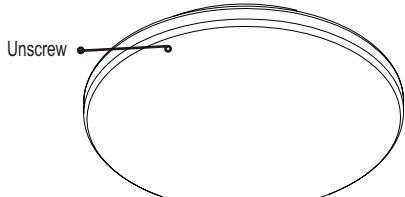
The built-in microwave sensor switch can penetrate plastic, glass, wood. So it can be installed in glass or plastic shell lamp. This allows the application of microwave sensor switch in different styles of lights for energy control. Now, we can provide a variety of microwave sensor LED lamps to meet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

This lamp is designed with several collocations, namely, the pure LED lamp without sensor; the automatic LED lamp with sensor; the automatic LED lamp with battery backup that is the Emergency Function(LX-360LED-ADS).

Name of each part



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



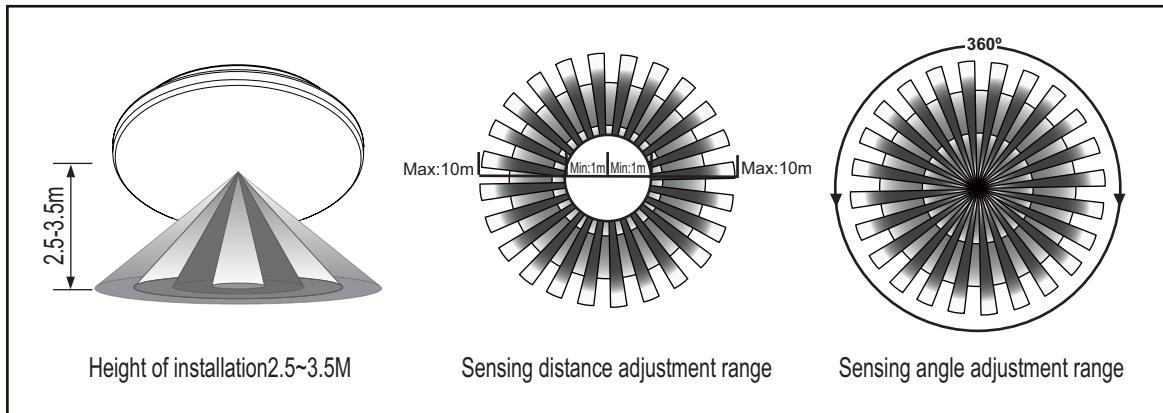
White frosted glass chimney

Specifications

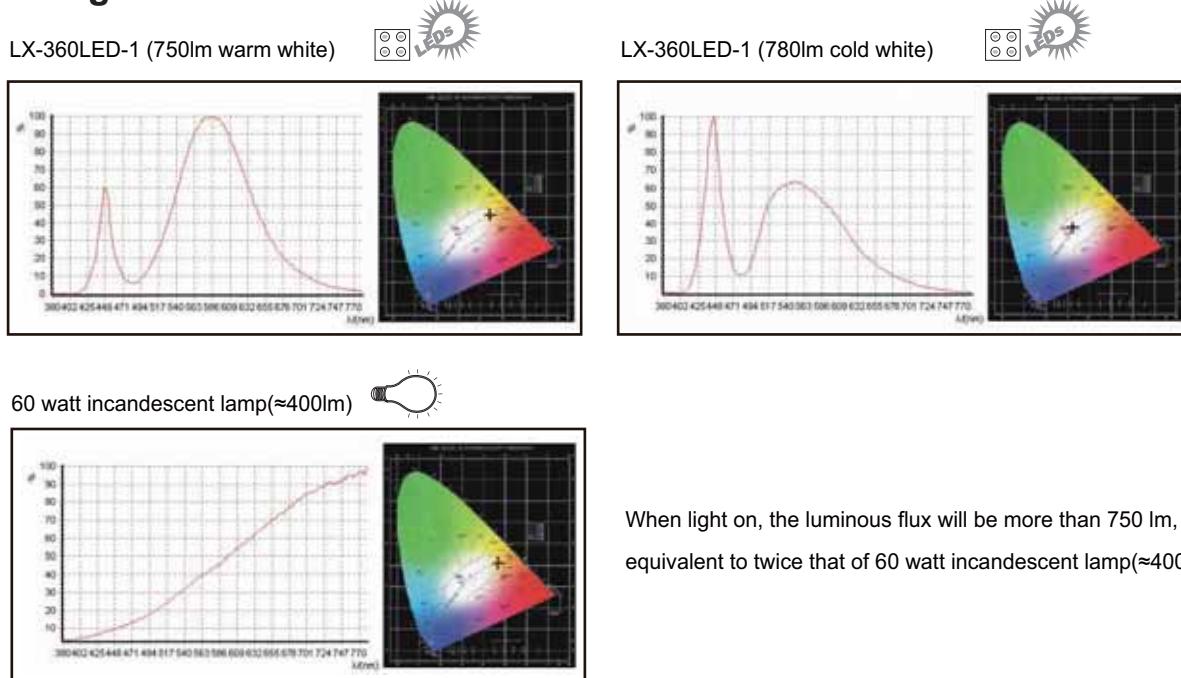
Power source: 220-240V/AC
 Power frequency: 50Hz
 Rated load: 15W Max.
 HF system: 5.8GHz CW electric wave, ISM wave band
 Transmission power: <0.3mW
 Time setting: 6sec to 12min (adjustable)
 Detection range: 1-10m (radii.)(adjustable)
 Light-control: 10-2000LUX(adjustable)

Standby power: <0.9W
 Detection angle: 360°
 Luminous flux: 750lm (warm white)
 780lm (cold white)
 Installation height: 2.5-3.5m (ceiling mount)
 Lamp part
 LED quantity: 36PCS
 LED specifications: FM-5630WNS

Sensor information



Spectrogram



Function

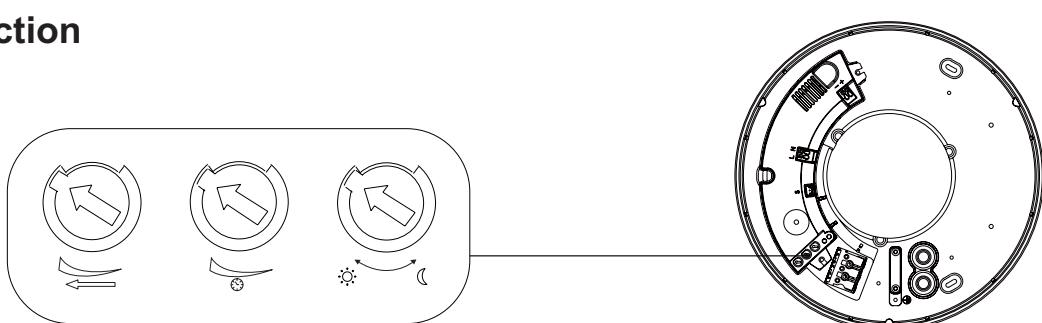
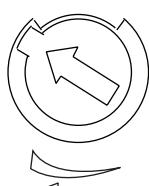


Fig.1

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).

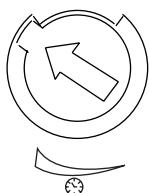
NOTE: the above detection range is gained in the case of a person who is between 1.6m~1.7m tall with middle figure and moves at a speed of 1.0~1.5m/sec. if person's stature, figure and moving speed change, the detection range will also change.
In different cases, the sensitivity of the lights has certain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

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.

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.

Time setting

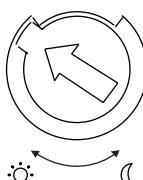


The light can be set to stay ON for any period of time between approx. 6sec(turn fully anti-clockwise) and a maximum of 12min(turn fully clockwise). Any movement detected before this time elapse will re-start the timer. It is recommended to select the shortest time for adjusting the detection zone and 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.

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. The adjust range limit is 270°, please do pay attention to this.

Procedure of installation



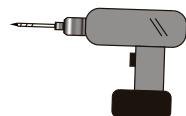
Warning!

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.

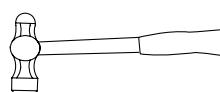
Note:Please bring the following tools.



Pencil



Electric drill



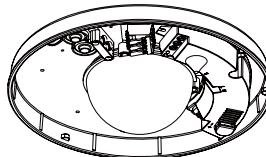
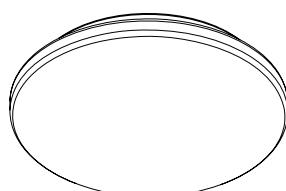
Hammer



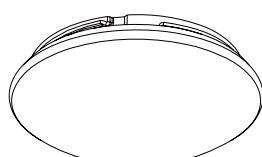
Screwdriver

- Step1 Separate the lamp into two parts:A and B.

NOTE: Chimney is fragile, please don't take too much force



A



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 (as Fig.3)
- Step4 Install the product on the place where you marked (as Fig.4)

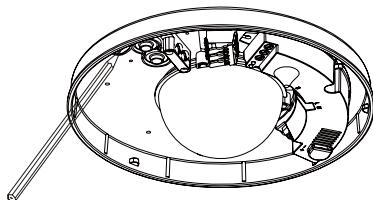


Fig.3

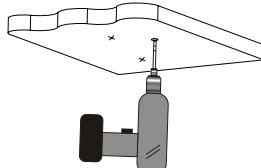
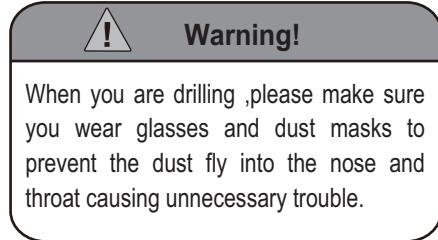


Fig.4



- Step5 Knock the plastic expansion screw into the hole which you drill (as Fig.5)
- Step6 Put the power line through the line hole to connect on the wiring (as Fig.6)

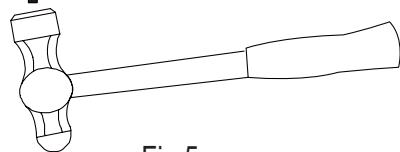
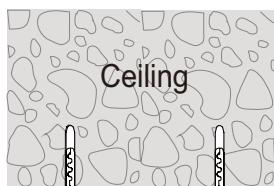


Fig.5

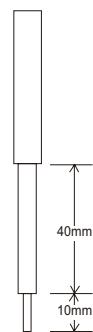
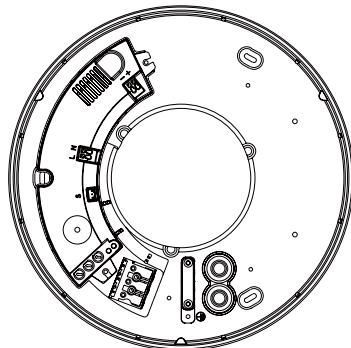
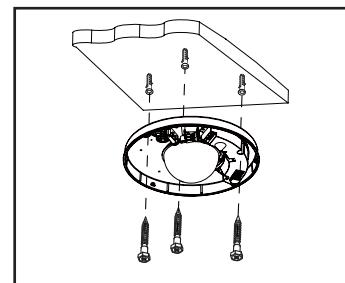
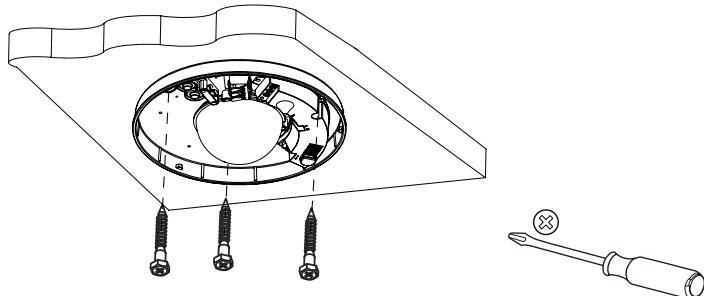


Fig.6

- Step7 Fix the base of the product on the selected place with the screws (as Fig.7)



Concrete ceiling

Fig.7

- Step8 Rotate the lampshade clockwise into the base. Installation finished. (as Fig.8)

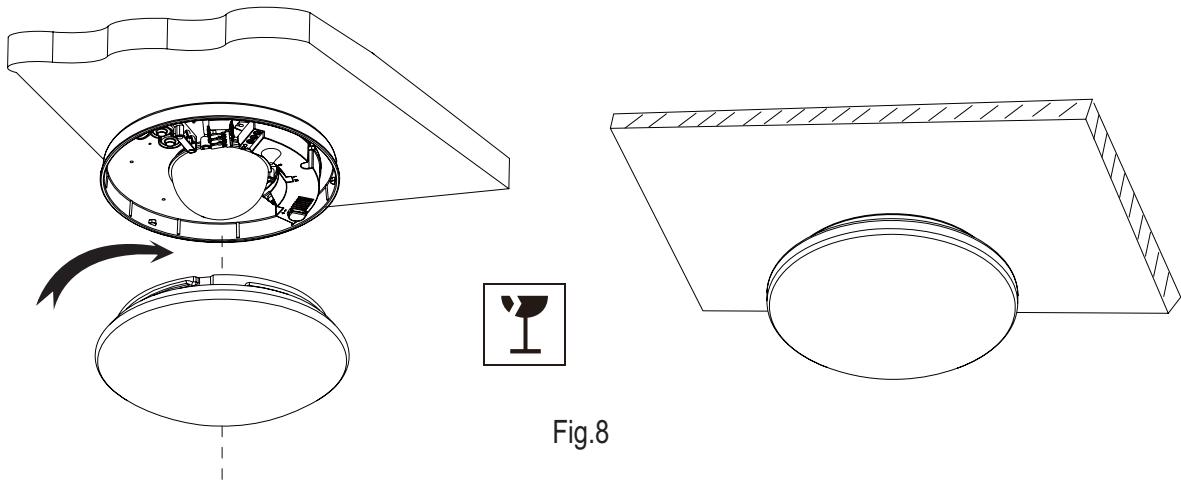
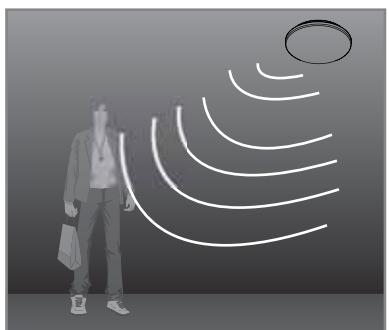
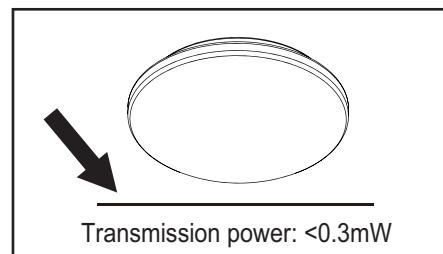


Fig.8

Fault and the solution

Fault	Failure cause	Solution
The load fails to work.	Light-illumination is set incorrectly.	Adjust the setting of the load.
	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 no motion signal detected.	The lamp isn't installed well so that sensor fails to detect reliable signals.	Re-adjust the installation place.
	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 $<0.3\text{mW}$ - that is just one 3300^{th} 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!

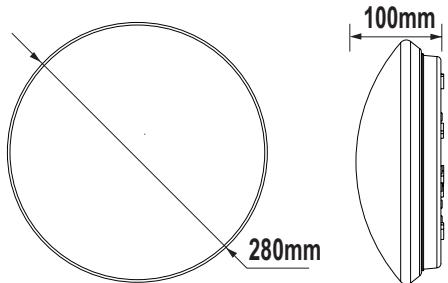
- 1.The LEDS in serial can function when all the seals installed in place.
- 2.Please don't remove or connect with other lamp when powered on.
- 3.When the LEDS in serial are damaged ,you need experienced technician to repair using the same rating LEDS.

- 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.

This instruction, without our permission, should not be copied for any other purposes.

LX-360LED-ADS Microwave Sensor Lamp Instruction



Packing list in	Quantity
Microwave Sensor Lamp	1X
Φ6 Plastic Expansion	3X
3x30 Screw	3X
Instruction	1X

Summary

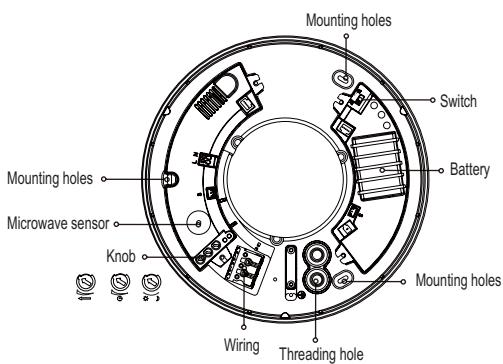
This is a newly designed intelligent ceiling mount microwave sensor LED lamp, with the extra function of power supply in emergency. The lighting is auto-managed by AC direct power or battery backup, that is, when power failure, the battery backup will be responsible for the power supply of 7.5 watt. When light on, the luminous flux will be more than 400 lm, equivalent to that of 60 watt incandescent lamp($\approx 400\text{lm}$). The battery backup can continuously supply power for more than 2 hours or even more in the sensor energy-saving mode. It is widely applied in the corridor, washing room, elevator lobby etc.

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.

IP 20



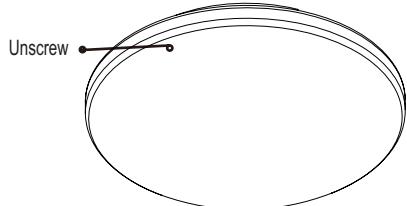
Name of each part



Lamps and lanterns base



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



White frosted glass chimney

Specifications

Power source: 220-240V/AC, 50/60Hz

Rated LED: 15W Max.(AC)
7.5W Max.(DC)

Charging power: 6W Max.(light off & light on)

Protection: IP20, Class1

Material: Body: Metal Lampshade: Glass

Working temperature: -20~+55°C

HF system: 5.8GHz

Battery: 7.4V / 2000mAH lithium battery

Continuous illumination time: $\geq 120\text{min}$

Transmission power: $< 0.3\text{mW}$

Time setting: 6sec to 12min (adjustable)

Detection range: 1-10m (radii.) (adjustable)
(Installation height: 2.5m)

Light-control: 10-2000LUX(adjustable)

Detection angle: 360°

Luminous flux: 660lm(AC) 330lm(DC) (cold white)
600lm(AC) 300lm(DC) (warm white)

Installation height: 2.5-3.5m (ceiling mount)

Lamp part

LED quantity: 36PCS

LED specifications: FM-5630WNS

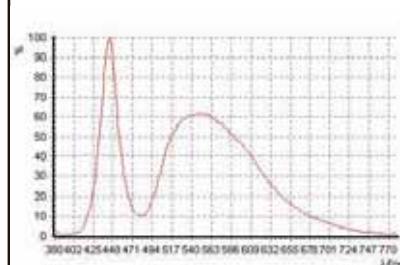
Emergency function



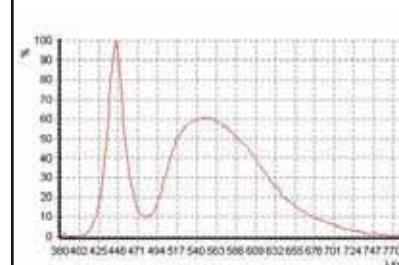
* Installed in the elevator, when power fails, it still supports lighting for the trapped.

Spectrogram

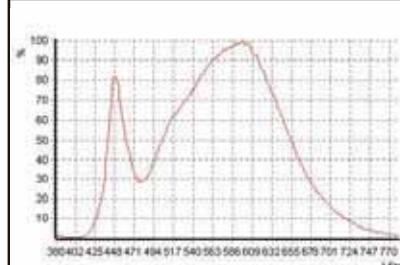
LX-360LED-ADS (AC 660lm) (cold white)



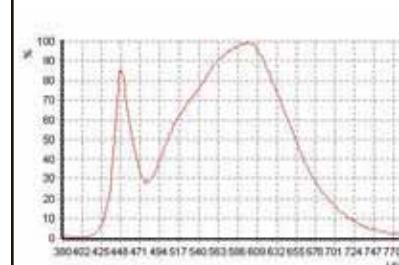
LX-360LED-ADS (DC 330lm) (cold white)



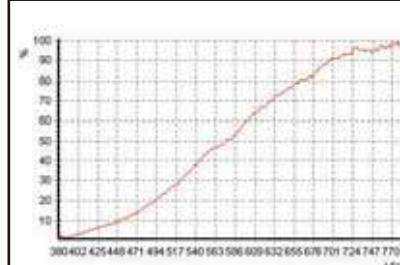
LX-360LED-ADS (AC 600lm) (warm white)



LX-360LED-ADS (DC 300lm) (warm white)

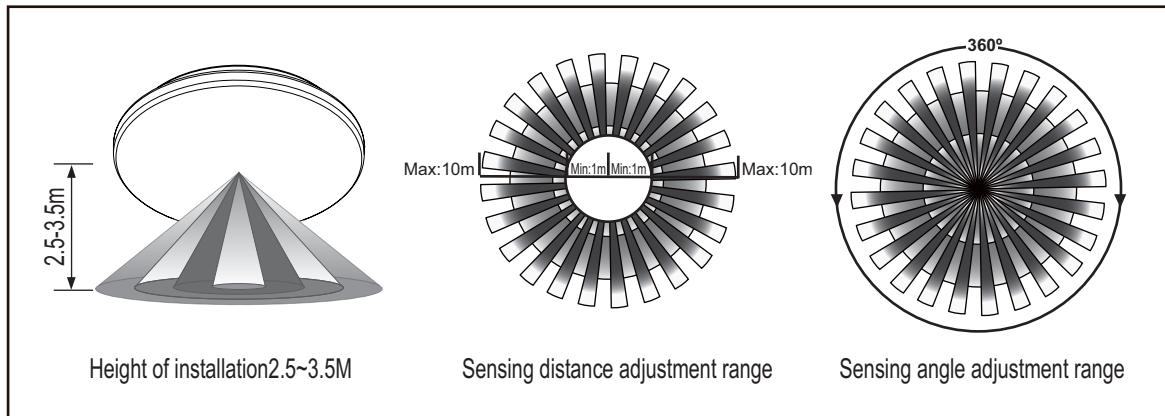


60 watt incandescent lamp(\approx 400lm)



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

Sensor information



Function

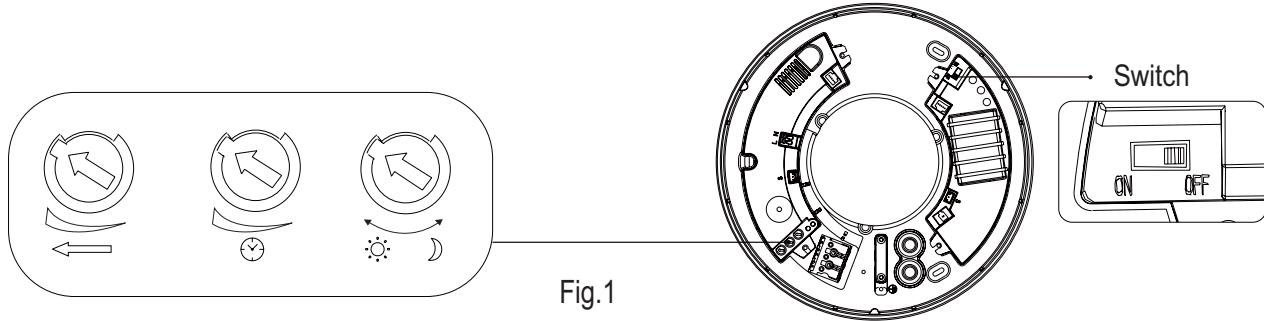
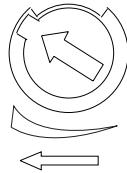


Fig.1

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.

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.

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.2 fig3), so we advise sensitivity hadn't be adjusted to the max.



Fig.2

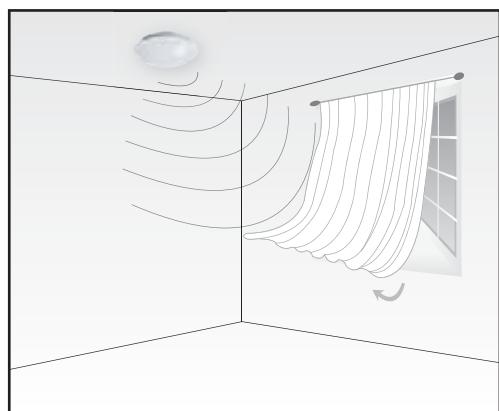


Fig.3

Time setting



The light can be set to stay ON for any period of time between approx. 6sec (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.

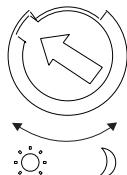
Warning: in the process of installation test, please far away from the sensor lamp, because it will turn on once detect you or test staff.

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.4

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.5), 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.(as fig.6)

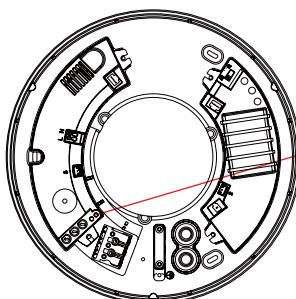


Fig.5

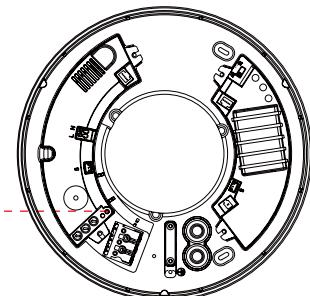
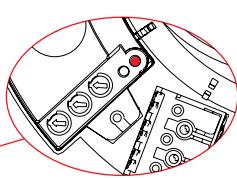


Fig.6

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. The adjust range limit is 270°, please do pay attention to this.

Procedure of installation



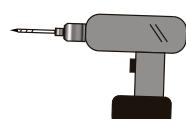
Warning!

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.

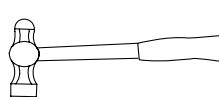
Note:Please bring the following tools



Pencil



Electric drill



Hammer



Screwdriver

- Step1 Separate the lamp into two parts:A and B.

NOTE: Chimney is fragile, please don't take too much force.

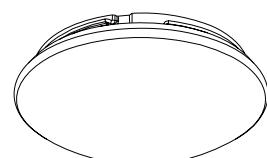
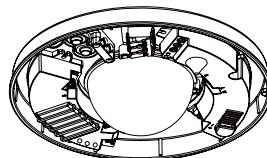
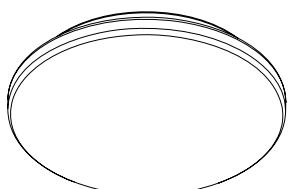


Fig.7

A

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 (as Fig.8)
- Step4 Install the product on the place where you marked (as Fig.9)

Products should be installed more than 4 meters one from the other, otherwise the interference among them will cause error action.

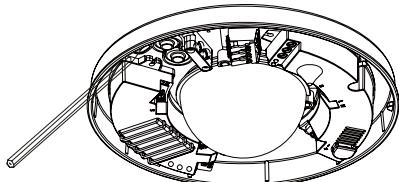


Fig.8

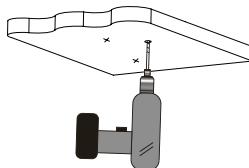
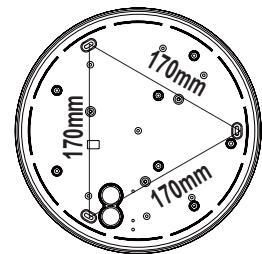


Fig.9



- Step5 Knock the plastic expansion screw into the hole which you drill (as Fig.10)
- Step6 Put the power line through the line hole to connect on the wiring (as Fig.11)

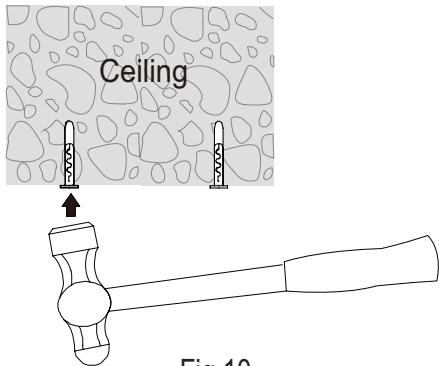


Fig.10

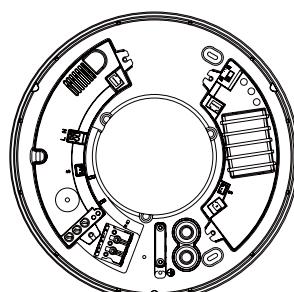


Fig.11

- Step7 Fix the base of the product on the selected place with the screws (as Fig.12)

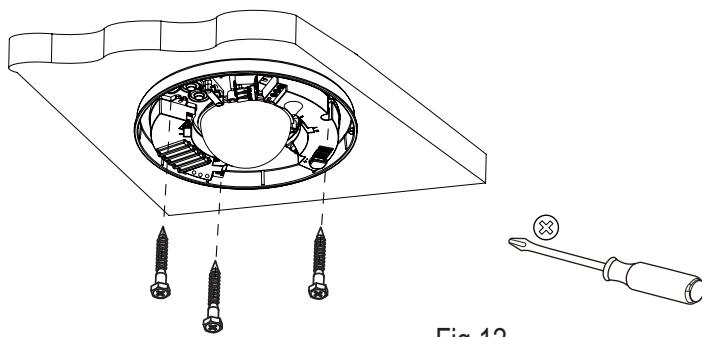
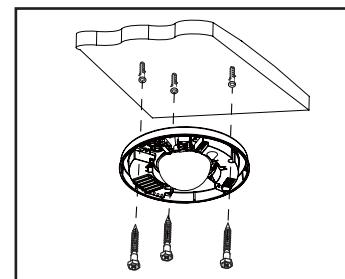
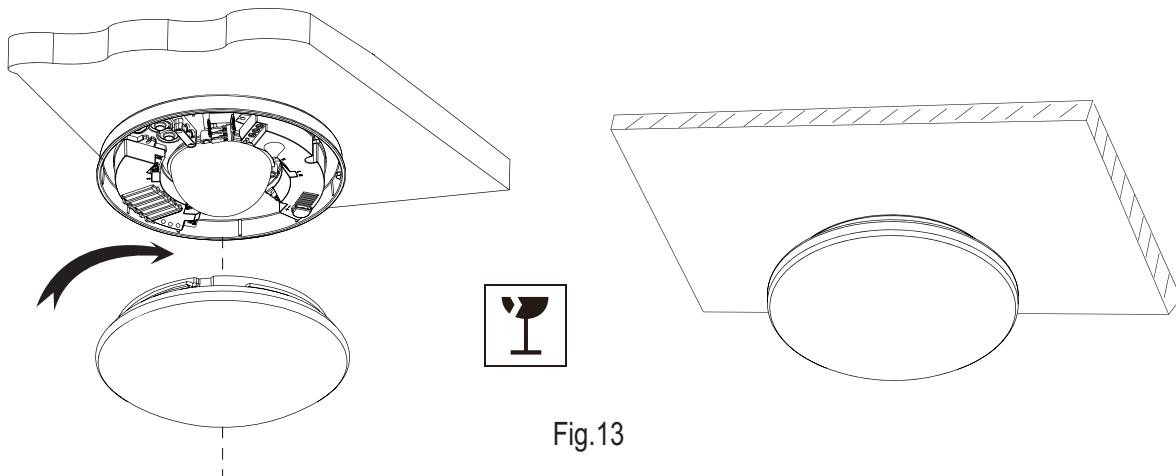


Fig.12



Concrete ceiling

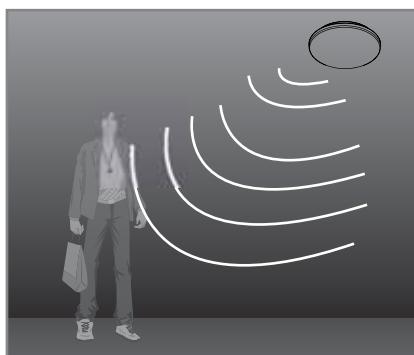
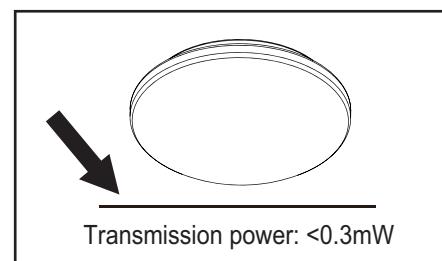
- Step8 Rotate the lampshade clockwise into the base. Installation finished. (as Fig.13)



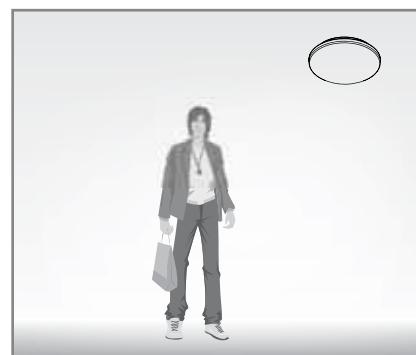
Fault and the solution

Fault	Failure cause	Solution
The load fails to work.	Light-illumination is set incorrectly.	Adjust the setting of the load.
	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 no motion signal detected.	The lamp isn't installed well so that sensor fails to detect reliable signals.	Re-adjust the installation place.
	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.



Induction of human movement



Since entering lighting condition



Application



Warning!

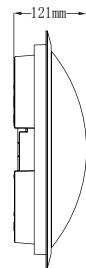
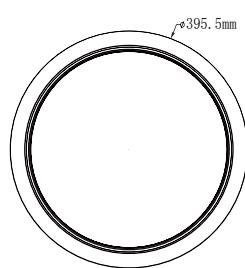
1. The LEDS in serial can function when all the seals installed in place.
2. Please don't remove or connect with other lamp when powered on.
3. When the LEDS in serial are damaged, you need experienced technician to repair using the same rating LEDS.

- 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.

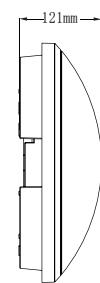
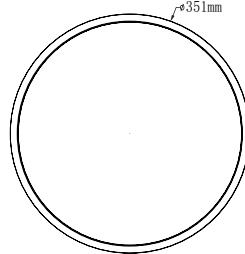
This instruction, without our permission, should not be copied for any other purposes.

LX-MV-120LED-D Microwave Sensor Lamp Instruction



Champagne

Silver



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(≈ 400 lm). 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(≈ 400 lm). 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.

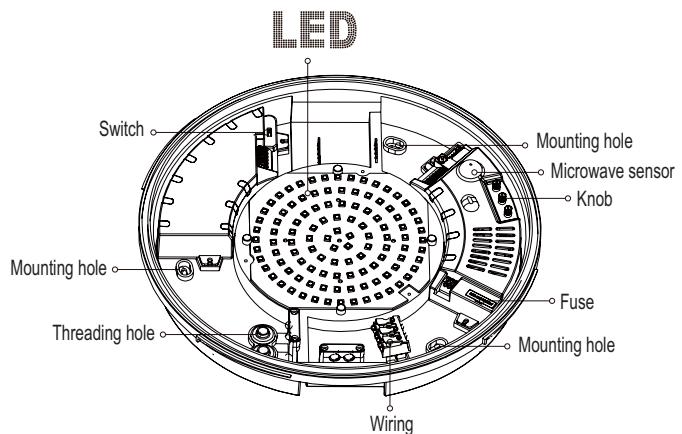
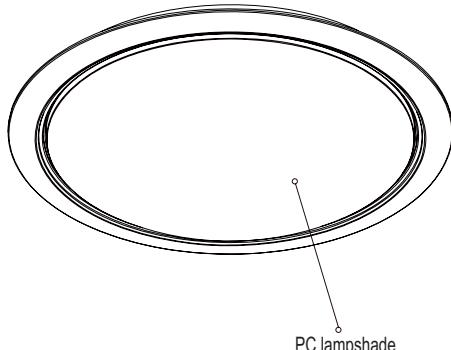


LED lamp consumes power 80% less than incandescent lamp and 50% less than fluorescent lamp.

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

IP 55

Name of each part



Specifications

Power source: 220-240V/AC 50Hz
 Rated LED: 19W Max.(AC)
 12W Max.(DC)
 Charging Power: 15W Max.(light off)
 3.6W Max.(light on)
 Protection: IP55, Class2
 Material: Body:PC Lampshade:PC
 Working Temperature: -20~+55°C
 HF system: 5.8GHz
 Battery: 7.4V x2 / 2600mAH lithium battery
 Continuous illumination time: ≥150min

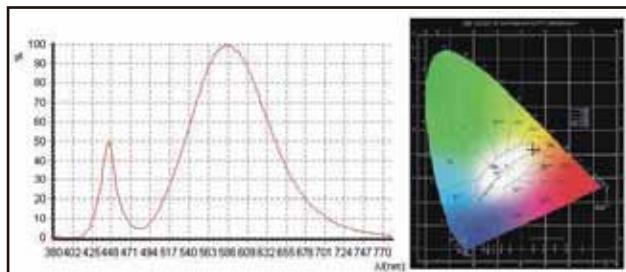
Transmission power: <0.3mW
 Time setting: 8sec to 12min (adjustable)
 Detection range: 1-10m (radii.) (adjustable)
 Light-control: 10-2000LUX(adjustable)
 Luminous flux: 850lm (AC) 560lm (DC) (warm color)
 660lm (AC) 420lm (DC) (cold color)
 Standby power: <0.9W
 Detection angle: 360°
 Installation height: 2.5-3.5m (ceiling mount)
 LED quantity: 120PCS(T5050)



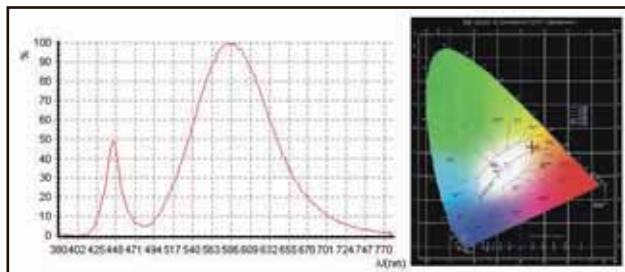
* Installed in the elevator, when power fails, it still supports lighting for the trapped.

Spectrogram

LX-MV-120LED-D (AC 850lm)(warm white)



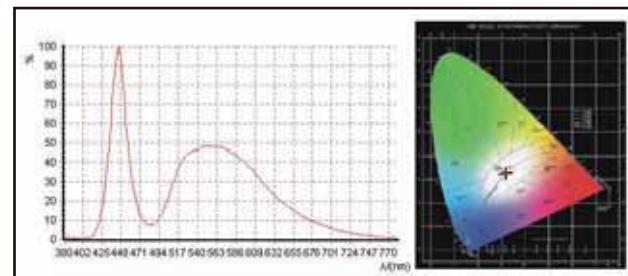
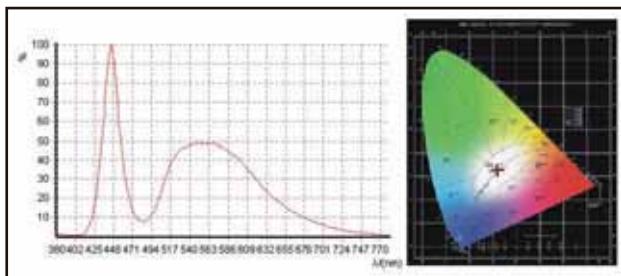
LX-MV-120LED-D (DC 560lm)(warm white)



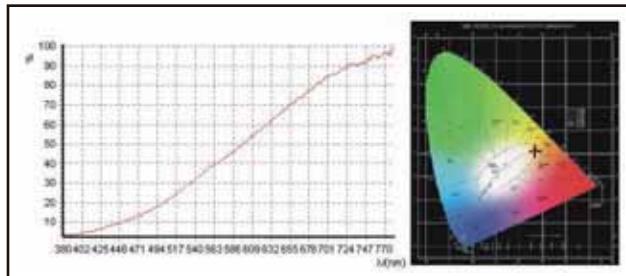
LX-MV-120LED-D (AC 660lm)(cold white)



LX-MV-120LED-D (DC 420lm)(cold white)



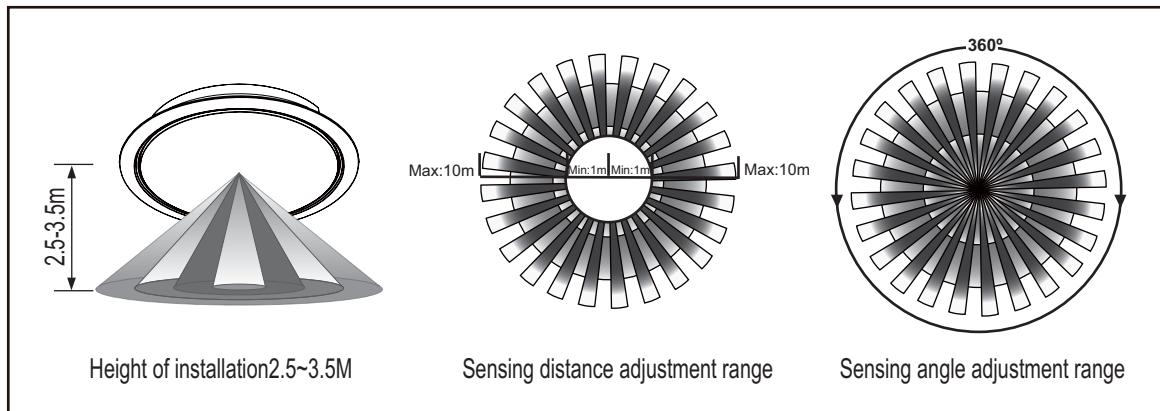
60 watt incandescent lamp(\approx 400lm)



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

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

Sensor information



Function

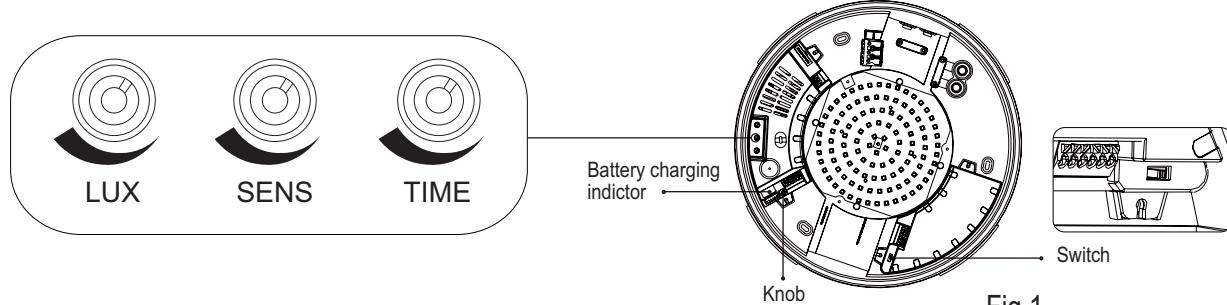


Fig.1

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 indicator

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.

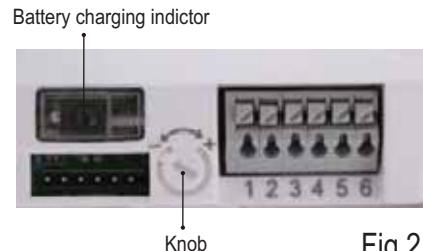


Fig.2

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.

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.3

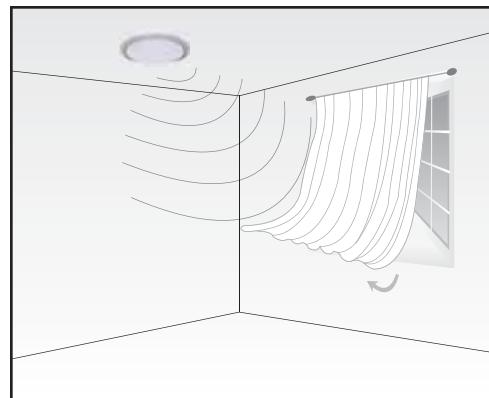


Fig.4

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.

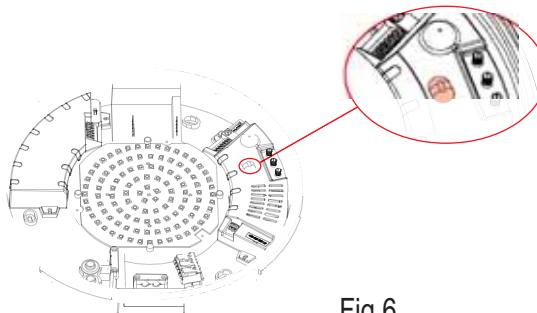


Fig.6

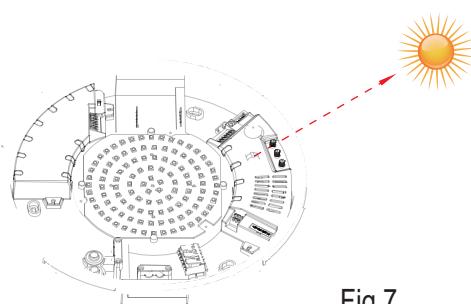


Fig.7

Procedure of installation



Warning!

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.

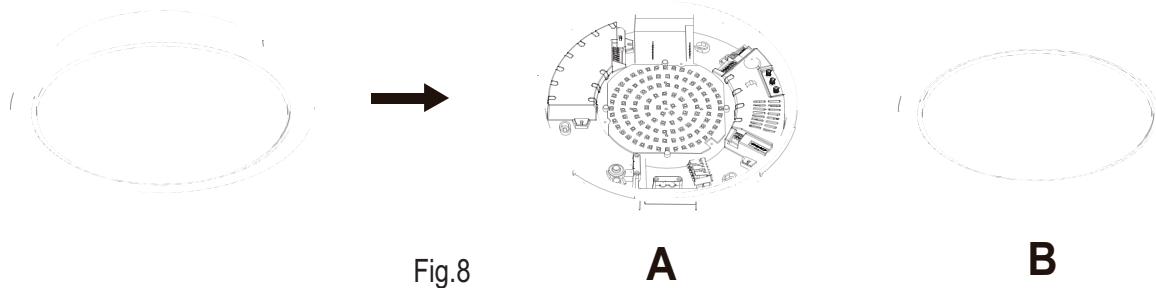


Fig.8

A

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.

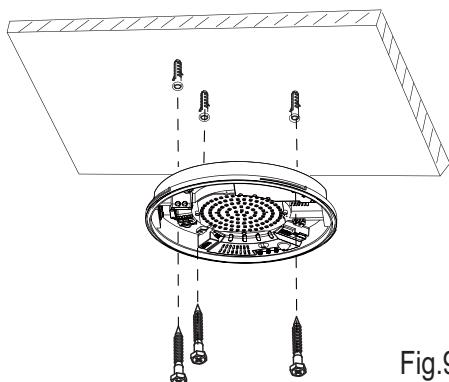


Fig.9

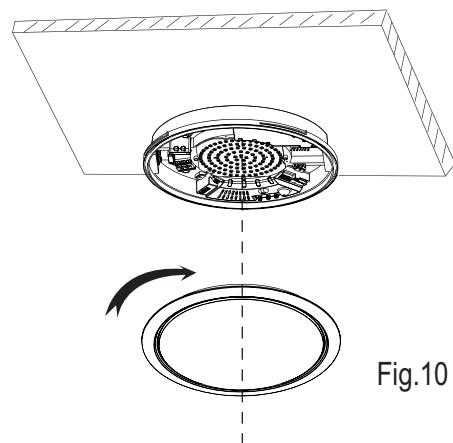
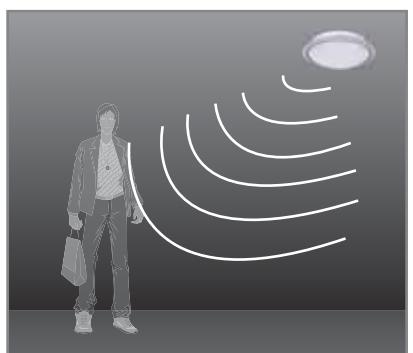
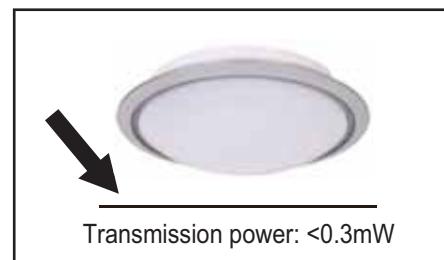


Fig.10

Fault and the solution

Fault	Failure cause	Solution
The load fails to work.	Light-illumination is set incorrectly.	Adjust the setting of the load.
	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 no motion signal detected.	The lamp isn't installed well so that sensor fails to detect reliable signals.	Re-adjust the installation place.
	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 $<0.3\text{mW}$ - that is just one 3300^{th} 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!

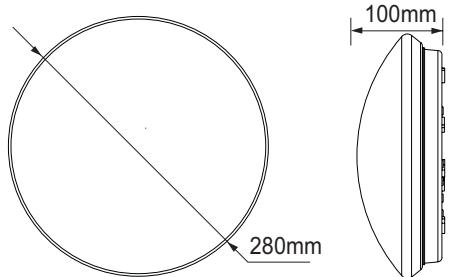
1. The LEDS in serial can function when all the seals installed in place.
2. Please don't remove or connect with other lamp when powered on.
3. When the LEDS in serial are damaged ,you need experienced technician to repair using the same rating LEDS.

- 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.

This instruction, without our permission, should not be copied for any other purposes.

LX-MV-122LED-D Microwave Sensor Lamp Instruction



Summary

Packing list in	Quantity
Microwave Sensor Lamp	1X
φ6 Plastic Expansion	3X
3x30 Screw	3X
Instruction	1X

This is a newly designed intelligent ceiling mount Microwave sensor LED lamp, with the extra function of power supply in emergency. The lighting is auto-managed by AC direct power or battery backup, that is, when power failure, the battery backup will be responsible for the power supply of 8 watt. When light on, the luminous flux will be more than 330 lm, equivalent to that of 60 watt incandescent lamp($\approx 400\text{lm}$). The battery backup can continuously supply power for more than 2 hours or even more in the sensor energy-saving mode. It is widely applied in the corridor, washing room, elevator lobby etc.

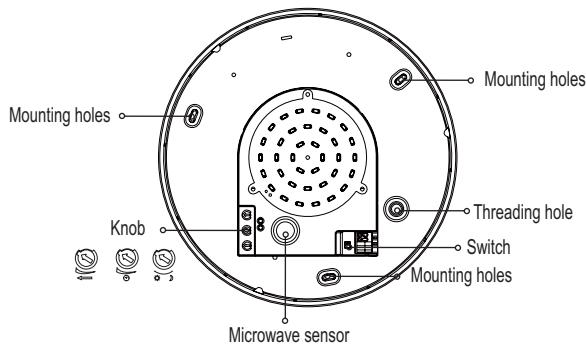
This product is designed with two configurations: one is the sensor lamp with the function of supplying power in emergency and the other one is the intelligent sensor lamp without the emergency function. You can make purchase according to the practical need. But in most cases, it is necessary and wise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

IP 20

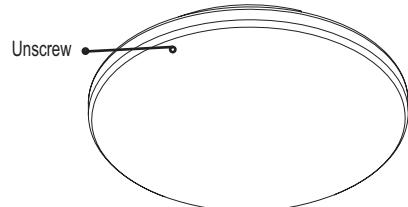


Use high quality White frosted glass chimney. Strengthen the flexible refraction of light. And its function of anti-ultraviolet makes the shade not easy to turn yellow and be broken.

Name of each part



Lamps and lanterns base



White frosted glass chimney

Specifications

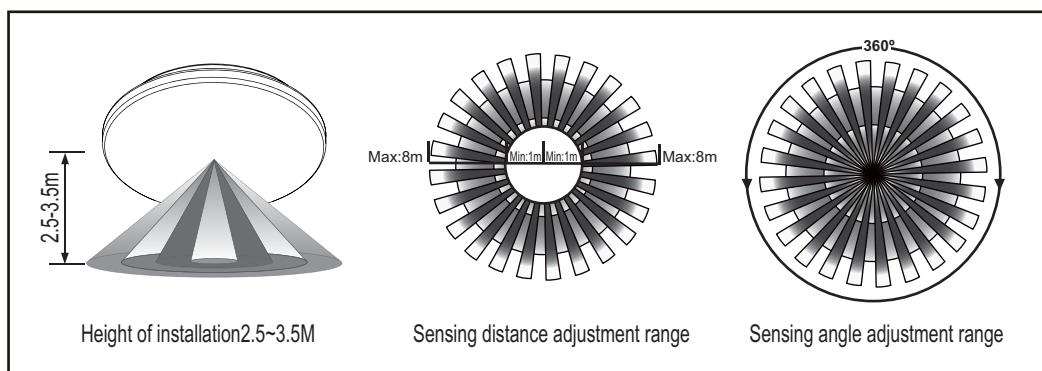
Power source: 220-240V/AC 50Hz
 Rated LED: 9W Max.(AC)
 8W Max.(DC)
 Charging Power: 7W Max.(light off)
 3W Max.(light on)
 Protection: IP20, Class 2
 Material: Body: PC Lampshade: Glass
 HF system: 5.8GHz
 Battery: 7.4V / 2600mAH lithium battery
 Continuous illumination time: $\geq 120\text{min}$
 (when the battery power supply)

Transmission power: $<0.2\text{mW}$
 Time setting: 8sec to 12min (adjustable)
 Detection range: 1-8m (radii.) (adjustable)
 Light-control: 10-2000LUX(adjustable)
 Detection angle: 360°
 Luminous flux: 340lm (AC) 330lm (DC) (warm white)
 570lm (AC) 490lm (DC) (cold white)
 Installation height: 2.5-3.5m (ceiling mount)
 Working Temperature: -20~+55 °C
 LED quantity: 36PCS
 LED specifications: FM-2835WNS

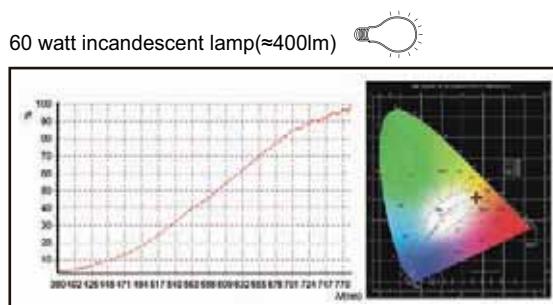
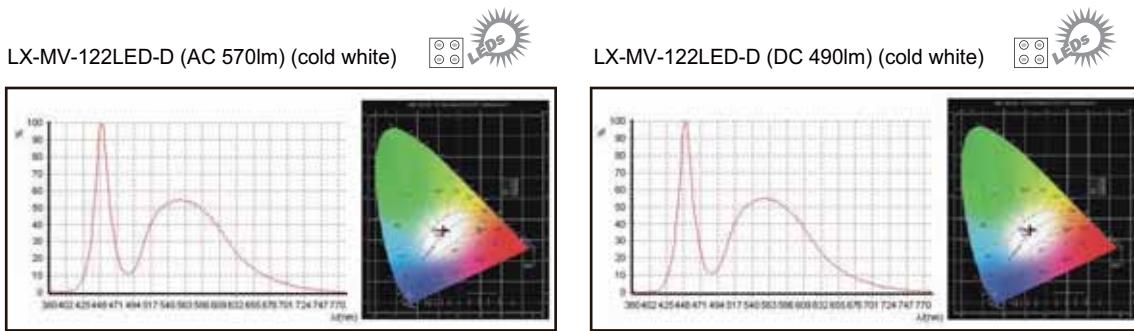
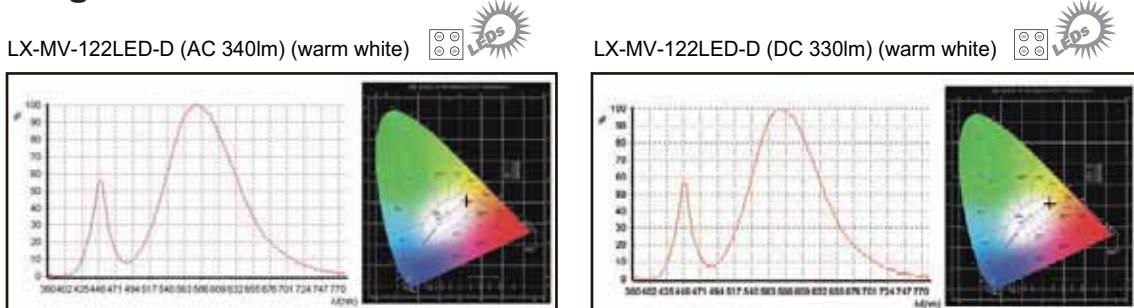


* Installed in the elevator, when power fails, it still supports lighting for the trapped.

Sensor information

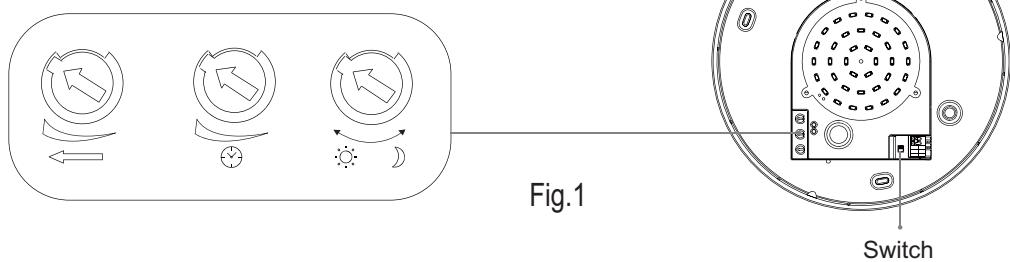


Spectrogram



When light on, the luminous flux will be more than 330 lm, equivalent to that of 60 watt incandescent lamp (~400lm).

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.

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. 8m 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.

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.2 fig3), so we advise sensitivity hadn't be adjusted to the max.



Fig.2

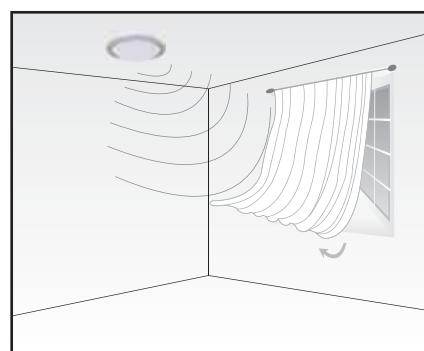
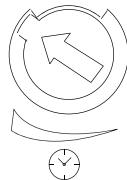


Fig.3

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.

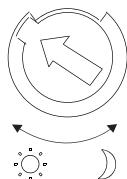
Warning: in the process of installation test ,please far away from the sensor lamp,because it will turn on once detect you or test staff.

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.4

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.5), 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.(as fig.6)

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. The adjust range limit is 270°, please do pay attention to this.

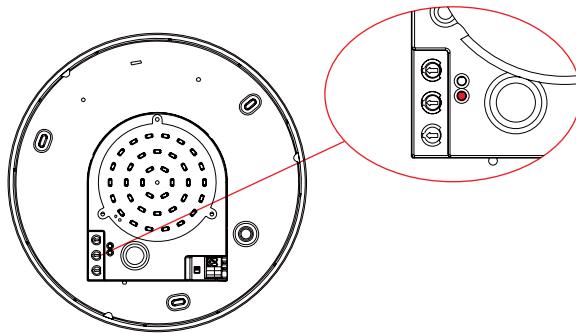


Fig.5

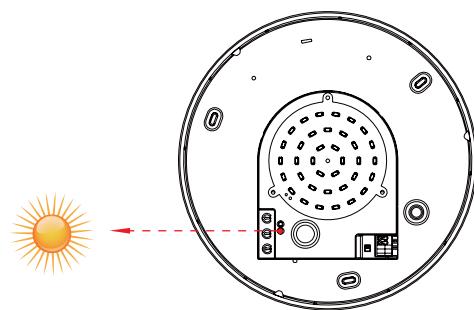


Fig.6

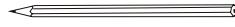
Procedure of installation



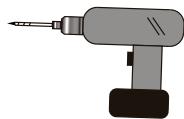
Warning!

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.

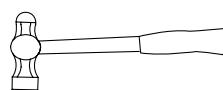
Note:Please bring the following tools.



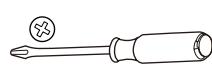
Pencil



Electric drill

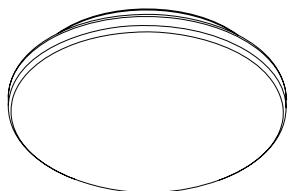


Hammer

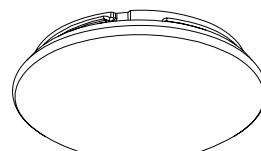


Screwdriver

- Step1 Separate the lamp into two parts:A and B.
NOTE: Chimney is fragile, please don't take too much force.



A



B



Fig.7

- 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 (as Fig.8)

- Step4 Install the product on the place where you marked (as Fig.9)

Products should be installed more than 4 meters one from the other,
otherwise the interference among them will cause error action.

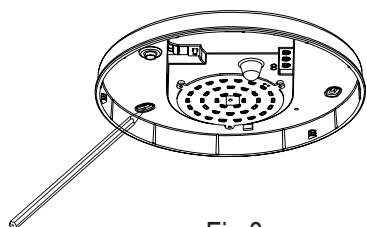


Fig.8

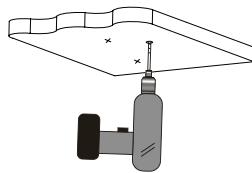
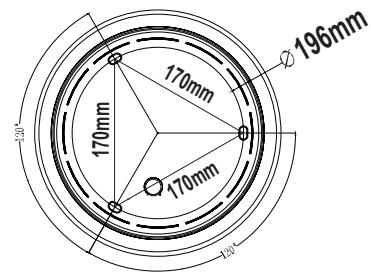


Fig.9



- Step5 Knock the plastic expansion screw into the hole which you drill (as Fig.10)

- Step6 Put the power line through the line hole to connect on the wiring (as Fig.11)

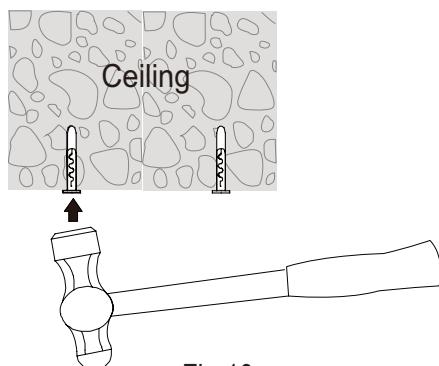


Fig.10

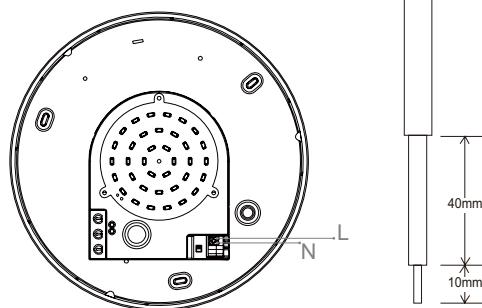


Fig.11

- Step7 Fix the base of the product on the selected place with the screws (as Fig.12)

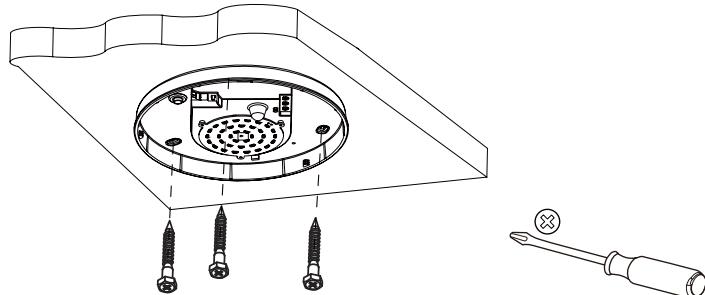
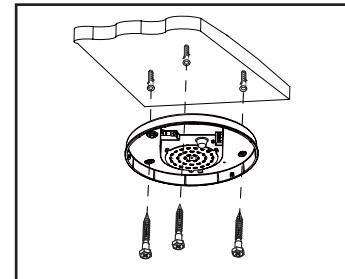


Fig.12



Concrete ceiling

- Step8 Rotate the lampshade clockwise into the base. Installation finished. (as Fig.13)

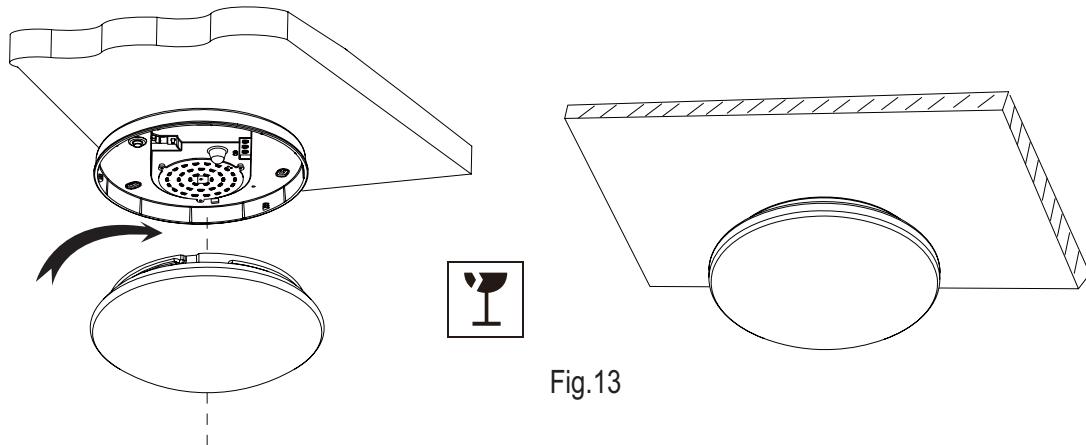
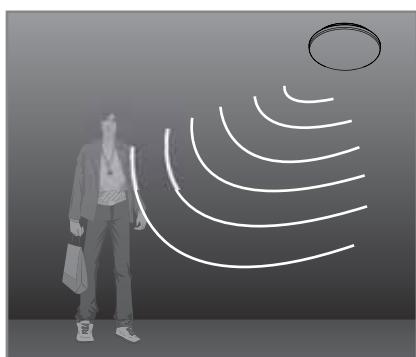
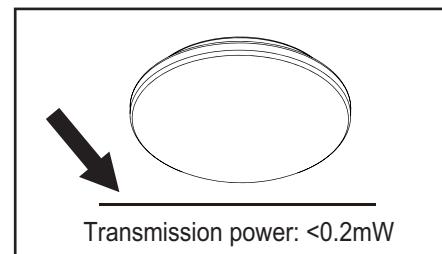


Fig.13

Fault and the solution

Fault	Failure cause	Solution
The load fails to work.	Light-illumination is set incorrectly.	Adjust the setting of the load.
	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 no motion signal detected.	The lamp isn't installed well so that sensor fails to detect reliable signals.	Re-adjust the installation place.
	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 $<0.2\text{mW}$ - that is just one 5000th 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.

This instruction, without our permission, should not be copied for any other purposes.

FCC NOTE :

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.□□

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV
INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS OR CHANGE
TO THIS EQUIPMENT. SUCH MODIFICATIONS OR CHANGE COULD VOID AND
CHANGE ANNTENA WHICH THE MANUFACTURER PROVIDES.
IT IS THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.