Passive Infrared Ceiling Detector: EAP-12C
User Manual V1.0

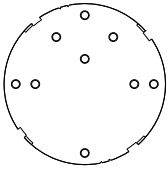
1. Product description

This product is a high-stability ceiling infrared detector. It uses intelligent signal analysis and processing technology to greatly improve the detection and anti-false alarm performance of the product, and to ensure the stability of the product from the design. When an intruder passes through the detection area, the detector will automatically detect the activities of people in the area and send an alarm signal to the control panel. The product is suitable for safety precautions in homes, shops, houses, shopping malls, warehouses, office buildings and other places.

2. Features

- Intelligent logic calculation and analysis to filter out false positives
- Support temperature compensation technology
- Anti-radio frequency interference
- Ceiling installation
- Using SMT craftsmanship, more stable performance
- Anti-white light interference
- Fresnel optical lens
- Alarm output NC/NO selectable

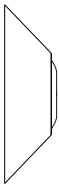
3. Product structure



Bottom shell (top view)

Bottom shell

Main board



Upper cover

4. Technical parameters

- Ceiling installation height: 2.5m-3.5m
- Working voltage: DC9~30V
- Working current: 50mA
- Self-inspection time: about 60s
- Alarm indicator: Red LED
- Installation method: Ceiling
- Detection degree: 360 °
- Detection distance: installation height of 2.5m, diameter of 8m; installation height of 3.5m, diameter of 10m
- Sensor: Dual-element pyro-infrared sensor
- Working temperature: -10℃~50℃
- Humidity environment: up to 95%RH (no condensation)
- Anti-RF interference: 0MHz-1GHz20V/m
- Alarm output: NC/NO selectable, contact DC28V 100mA
- Tamper output: NC, contact DC28V 100mA
- Dimensions: φ95*35mm

5. Function Description

1). LED status description

The LED light is an alarm indicator, which synchronizes the alarm status of the device. under normal conditions, the LED light is off. After the equipment is powered on and the self-check is completed, if the detector triggers an alarm, the LED light is on.

2). Jumper function selection

The SW2 jumper on the main board is the alarm output state selection, the middle is the common terminal, another 2 ends are respectively NC and NO. Shorting NC and common terminal is NC output; shorting NO and common terminal is NO output; the default output is NC output.

SW2 jumper is also the option of power failure alarm function. it will turn into normally closed alarm when short-circuiting normally open, and when short-circuiting normally closed, it will turn into normally open alarm.

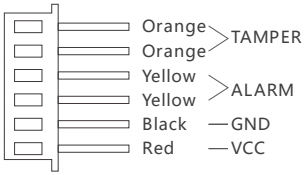
3).Wiring instructions

This product is an external wiring type cable connection:

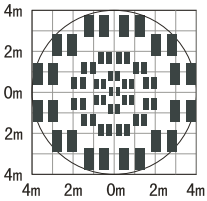
TAMPER is the tamper output, the line color is orange+orange.

ALARM is the alarm output, the line color is yellow+yellow.

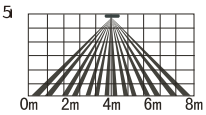
GND and VCC are the power input, the line color is red of positive, black of negative



6. Product Detection Range Displayed



Top view



Side view

7. Product instructions

1). Choose a suitable installation height, the recommended height for ceiling installation is 2.5-3.5m. Connect the wires of the detector as required, then open the bottom cover and tighten the screws to install it, and finally close the front cover to adjust the detection degree.

2). The power supply voltage is DC9~30V. During the installation process, pay attention to whether the power supply voltage meets the requirements and polarity.

3). Walk Test

Turn on the power and after the self-inspection is completed (the self-inspection time is about 60 s) the detector is triggered and the LED light is on, indicating that the detector is in the normal detection state; walking slowly through the sensing area, the LED light is on, indicating that the detector is working normal, if the detector does not respond, please adjust the detection level in time.

8. Installation Precautions

1). Avoid installing it outside the house, places with pets, near air conditioners, near heat sources, places exposed to direct sunlight, rotating or shaking objects.

2). The installation surface should be sturdy and not vibrate.

3). Install the detector in a place where the intruder can pass easily.