

# BA-231 intrusion detector user manual

## 1. Brief introduction

BA-231 is a kind of PIR detector used to detect the suddenness and hostile intrusion and can meet the normal defending needs. And it has small and white streamline design. Can be installed on the wall or at the front direction with the 45 degrees. The ideal installing height is 2.3m higher than the floor. The detecting area can avoid the protecting dead zone. the optical sensitivity setting can suit for different installing environment. The product is built-in tamper switch to prevent the non-auth or critical taking-away.

The product can widely be used in family, store, bank, office, warehouse, garage and so on

LED GUIDE LIGHT BEAM



LENS

shell



TAMPER

DIP SWITCH

BOTTOM SHELL

## 2. specification

Detecting distance: 9m / 25°C

Input voltage: 12VDC

Current consumption:  $\leq 15\text{mA}$

The part of Ir (see the right picture)

alarm and tamper

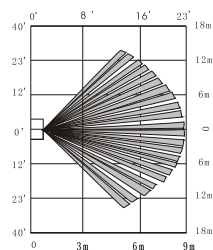
Alarm output: solid relay, NC

Less than 100mA/30V,  $-10\Omega$  interior impedance

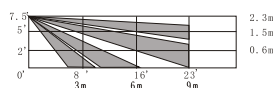
Tamper terminal: NC, 50mA/30VDC

Less than 100mA/30V,  $-10\Omega$  interior impedance

Alarming indicator: the blue light on is alarm



Top view of wall-mounted



Side view

installation : installed on the wall or at the wall corner ,  
and the installing height is 2.0-2.4 from the floor

note: base seat allow the 45 degrees installation between the single corner and corner

working environment :

working temperature :  $-10^{\circ}\text{C}$ - $50^{\circ}\text{C}$

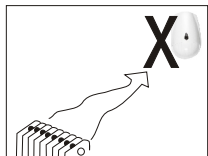
storing temperature:  $-20^{\circ}\text{C}$ - $60^{\circ}\text{C}$

Anti-white( indoor): higher than 6000LUX

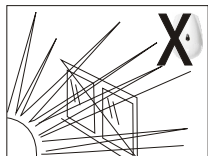
anti-radiation : 30V/ m , 10MHz-1000MHz

## 3. installation

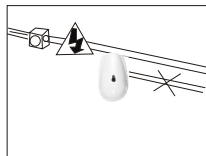
### 3.1、Attentions



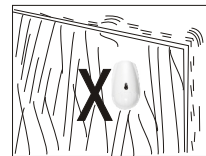
Do not face hot and cold source



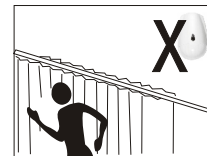
Do not face the sun directly



Do not install at the place loose-base

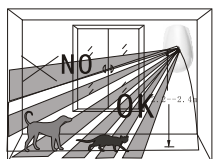


The wiring can not together with the high voltage

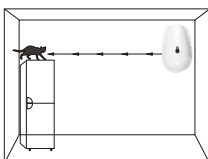


Do not face metal-wall

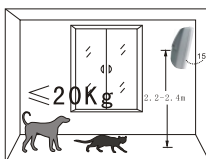
### 3.2、Pet-immunity guideline



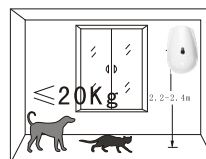
The top of the detecting area is the zone of non-pet-immunity



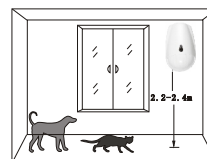
Do not directly face the detector to the place where the pets can climbing on



Pet immunity: <20Kg pets



The detecting pet-immunity can be smaller than 20KG

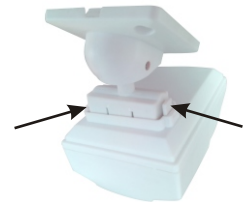
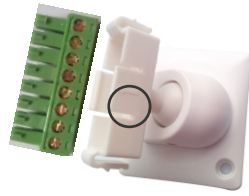
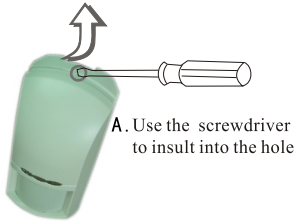


The installing height is 2.2m-2.4m can have the function of pet-immunity

### 3.3、Installing shown

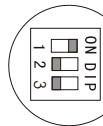
#### ①. Decomposition step

B. Pull out the shell



### 3.4、DIP switch description

Switch	ON	OFF
1	2-PULSE	1-PULSE
2	NO	NC
3	LED ON	LED OFF

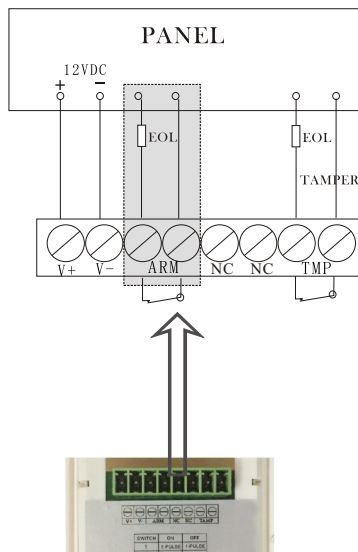


### 3.5、Light indicator instruction

On: alarm  
normal status: off



### 3.6、Terminals wiring



### 3.7、Walk test in the covering area

Cover the case and hop the button

- 1, powering on, after the self-checking, then start the walk test.
- 2, at the far end of the covering area, moving at any direction, need to light the LED for 2s-3s
- 3, test at the convert direction to make sure the perimeter of the two sides. To make the detecting center face to the protecting center.
- 4, slowly hang up your hands at the distance of 3-6m of the detector and stretch to the detecting area, mark the bottom perimeter of the PIR. Repeat the step to make sure all the perimeters
- 5, the detecting center should be vertical. If can not get the ideal detecting distance, adjust the detecting area to make the right direction.



Important note: to make sure the good performance of the detector, suggest have walk test once in a month.