

Digital vibration detector user manual_(v1.0)

1.Introduction

The vibration detector provide reliable 24-hour perimeter protection. Once an intruder attempts to enter by blasting, digging, knocking, drilling or sawing through protected windows, doors, walls and roofs, it can be detected immediately. the vibration detector uses an advanced digital microprocessor to analyze and process the change signal from the piezoelectric sensor.

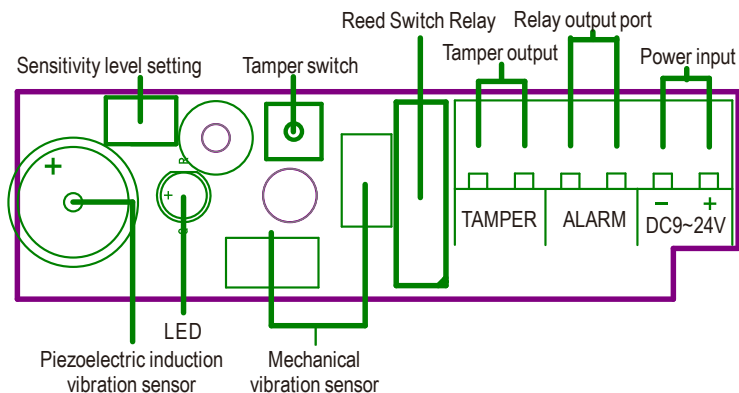
2.Function

- Adopt a piezoelectric vibration sensor and two mechanical vibration sensors.
- Built-in micro-processing chip, automatically adapt to the environment when power on.
- 8 levels of sensitivity can be set, which can effectively adapt to various complex environments.
- Low power consumption, low volume, stable performance and easy installation.

3.Parameter

- Detection method: piezoelectric vibration induction + mechanical vibration induction
- Working voltage: DC9-24V
- Static working current: $\leq 20\text{mA}@12\text{VDC}$
- Alarm working current: $\leq 10\text{mA}@12\text{VDC}$
- Working environment: $-10^{\circ}\text{C}\sim 55^{\circ}\text{C}$
- Relative humidity: $\leq 90\%\text{RH}$
- Alarm output: NC. Continuous alarm time: about 2 seconds after the vibration is completely removed
- Contact load: 100VDC/500mA/10VA(W) MAX
- Dimensions: 85mm*25mm*25mm

4.Wiring diagram



5.Instruction

1). Sensitivity level setting: 0~7 level can be set, the higher the level, the lower the sensitivity. the setting level is equal to the sum of the corresponding numbers of the jumper caps that are shorted. For example: 1 and 4 jumper caps are shorted, $1+4=5$, then the level is 5. When all jumpers are not inserted, it is level 0. Level 0 and Level 1 do not detect piezoelectric vibration sensor, only detect mechanical vibration sensor.

2).Tamper port: Normally closed by default when the cover is installed, and disconnected when the cover is opened.

3).Relay output port: Normally closed by default when power on, and disconnected when alarm.

4).Power input terminal: DC 9~24V power supply.

LED working status: it enters the self-checking status when it is turned on, the green light flashes for 20 seconds; Under normal working conditions, the green light is on; under alarm conditions, the red light is on.

Note: During the power-on self-test, do not have vibration interference in abnormal use environment.

6.Disassembly and assembly installation

1). Remove the cover, insert a screwdriver into the gap beside the screw cover, gently pry up the screw cover, loosen the screws, and then separate the cover and bottom base.

2). Wiring: DC9~24V power supply; TAMPER-tamper ; ALARM-signal line.

3). Installation: Remove the bottom base of the detector and fix it with screws to the position where the holes need to be installed, or fix it with AB glue. The detection radius of the installation surface is as follows:

Installation surface	Concrete	Brick wall	Steel plate	Wood board	Glass
Detection radius	1.5m	2.5m	3m	3.5m	3.5m

Note: The above detection radius is for reference only, and it depends on the actual use environment.