

ADWP1 Wireless Motion Detector

1. Introduction

The ADWP1 is a PIR technology intruder detector designed to detect human body movement in a protected area. Digital processing ensures a high immunity to false alarms and outstanding stability. The ADWP1 uses a sophisticated radio communication protocol with a high level of data safety. The detector makes regular contact to the system for full supervision. Built-in tamper switch trigger an alarm if there is any attempt to tamper with the detector. An automatic testing mode makes testing an easier.



Fig.1 Appearance

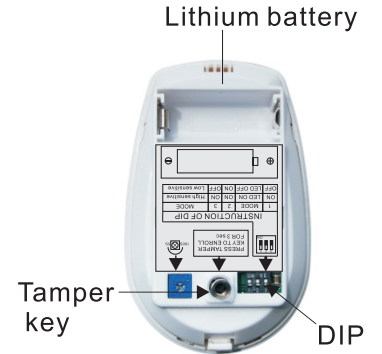


Fig.2. Internal Structure

2.Specifications

Type:ADWP1

Detection range: 9m(25°C)

Angle of coverage: 90°

Transmit range: 50m (open area)

Power supply: 3 VDC lithium battery (CR123A)

Current consumption:

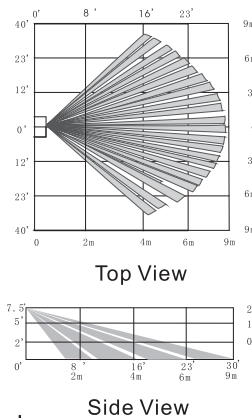
Static $\leq 30 \mu A$, Alarm $\leq 50mA$ (868MHz)

Battery life: Approx 1 year

Max coverage area: 9m*12m
(23*46 inches)/90°

Transmit frequency: 868MHz

Alarm indication: LED lights for several seconds



3.Installation

Installation:

Installation height from 2.0 to 2.5m

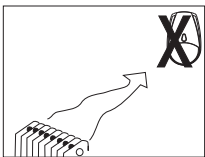
Environment:

Work environment: -10°C to +50°C
(14°F - 122°F)

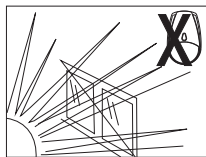
Storage environment: -20° C to +60°C
(-4°F - 140°F)

White light protection(inner): >9000LUX
Dimension: 95*64*49mm

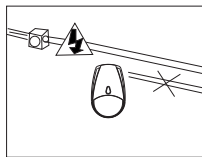
4.1 Installation Notice



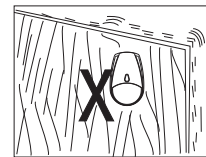
Do not expose to heating/cooling vents



Prevent direct sun-light from reaching the detector



Keep away from electrical power cables

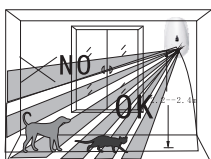


Ensure a stable mounting location

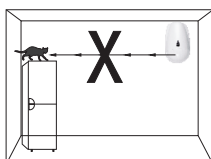


Avoid facing metal walls

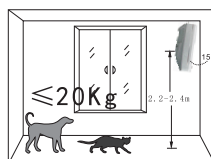
4.2 pet-immunity guidebook



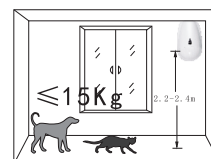
The top of the detecting area is the non-pet-immunity area



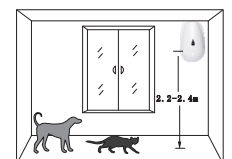
Avoid locations where the pets can climb up



The pet is smaller than 20kg



The pet is smaller than 15kg



The installation height of 2.2m to 2.4m is available pet-immunity height

4.3 Introduce DIP function:

The ADWP1 has three options of pulse count:

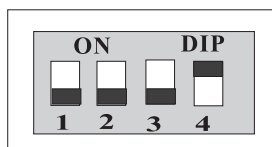
1-pulse: Alarm 1-pulse.

2-pulse: Alarm 2-pulse.

3-pulse: Alarm 3-pulse(Factory default).

The higher the pulse count requires more movement to operate the detector which may reduce false alarms.

1	2	Modes
ON	OFF	1-pulse
OFF	ON	2-pulse
OFF	OFF	3-pulse



Test Mode: Emitting alarm signal once detector is triggered. No time-lag between two emissions.

Power-saver mode: Detect every 3 minutes. Send detection signal of detector and battery status every 65 minutes (Factory default)

Coding Mode: Press tamper switch for more than 3 seconds and send an identification code to receiver.

Dip switch 3 and 4 set modes

3	4	Modes
ON	OFF	Test
OFF	ON	Power-saver
OFF	OFF	Coding

Please Note: Do not leave the DIP switch in TEST mode as this will dramatically reduce the battery life expectancy.

4.4. Coding method between detector and control panel:

① Coding set:

learn and code the sensor at the control panel prior to installation. Install the battery LED flashes, when the detector stabilises, press tamper switch for more than 3 seconds and detector will send a wireless signal. If the control panel receives the signal and give the response sound then code successfully. Please refer to control panel manual for details.



Press the tamper switch for study the ID code

② If short-circuit pin "A" with a jumper then the tamper alarm function invalid.

4.5. Detection distance adjustment and battery changes

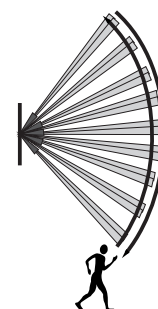
When the signal between detector and control panel becomes weak. That means a low battery condition. Users should change the battery with same type. Pull out the base cover and change battery. Please pay attention and ensure the correct polarity.

Insert one new battery



5. Walk test in coverage area:

- ① Set as Test Mode to precess walk-test, pulse count set as 1, 2 or 3.
- ② Walk across the far edge of coverage area at the speed of 1 step/second (about 0.75m/s)
The LED will flash then alarm
- ③ Do walk-test in opposite direction to confirm the boundary of both sides, Make sure the detection centre pointing to the centre of protected area.
- ④ After adjusting the detection angle, check the area with another walk test.
- ⑤ Please change TEST mode to NORMAL mode after the Walk-test. If left in test mode this will dramatically reduce the battery life expectancy.



6. Customer service

Due to our policy of continuous improvement we reserve the right to change specification without prior notice. Errors and omissions excepted. These instructions have been carefully checked prior to publication. However, no responsibility can be accepted by Challenger for any misinterpretation of these instructions.

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