Guarantee

The product is guaranteed for one year from the date of purchase against faulty materials and workmanship. No liability can be accepted for any problems caused by fair wear and tear, buyer's negligence, improper fitting or use, wilful or accidental damage, or any consequential loss or damage howsoever caused. This guarantee does not affect your statutory rights and is valid for UK and EIRE only.

If you believe the product to be faulty or in the unlikely event of the product developing a fault during the warranty period, then please contact our Technical Support Team (contact details shown below) for product assistance. Product repair or replacement will be offered for faulty products only with our prior agreement. Should you need to return a product then:

1. Contact the Help Line on the number below to obtain a Return Authorisation Number

2. Return your product adequately packaged, ideally in its original packaging to prevent damage in transit and include the following:

    a. A copy of your original invoice/receipt

    b. A covering letter giving your full contact details, including email address (if applicable)

    c. A description of the fault or problem

View our range of miGuard products

Disposal and Recycling

Disposal of this product is covered by the Waste Electrical or Electronic Equipment (WEEE) Directive. It should not be disposed of with other household or commercial waste.

At the end of its useful life the packaging and product should be disposed of via a suitable recycling centre. Please contact your local authority or the retailer from where the product was purchased for information on available facilities.

www.responseelectronics.com

Response Electronics Limited
Roman House, Lysons Avenue, Ash Vale, Surrey, GU12 5QF
email: info@responseelectronics.com

[f] [t] @ResponseLTD

CE

MGAW1_V1.0_1545

---

miGuard™   Response Electronics Limited

Remote Monitoring WiFi Communicating Wireless Alarm System

AWI

Installation & Operating Instructions

miGuard Customer Helpline
0345 257 1000

lines open 0900 to 1700 Monday to Friday

Foreword

Dear Customer,
Congratulations on your purchase of the miGuard AW1 Alarm System. Before you commence installation we recommend that you unpack the product, familiarise yourself with the component parts, and carefully read through this instruction guide.
There are some parts of the installation that must be completed in the order shown to ensure successful installation.

Disclaimer

All statements, technical information and recommendations in this manual are believed to be reliable, but the accuracy and completeness thereof are not guaranteed or warranted.

The specifications and information regarding the products as shown in this document are subject to change without notice.

The reproduction, language translation modification, storage in a retrieval system or retransmission, in any form or by any means, electronic, mechanical or otherwise, is strictly prohibited without prior written permission.

In no event are we liable for any indirect, special, incidental, or consequential damages, including, without limitation, lost profits or loss or damage to data arising out of the use or inability to use this document.

Contents

Packing List

1x AW1 Control Panel
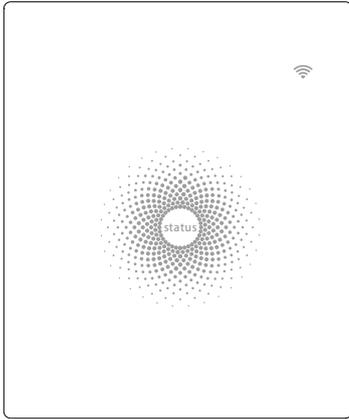
1x P910 Pet Friendly PIR Motion Sensor
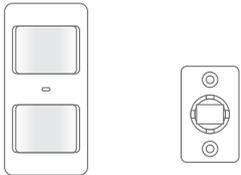
1xM102 Door/ Window Sensor
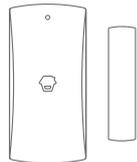
2x RC80 Remote Control

1x Power Adapter

1x User Manual

Control Panel

All Sensors are wirelessly linked to the Control Panel.

In the event of alarm activation, for example when a Sensor is triggered, a push notification will automatically be sent to all registered users

The system can be controlled and monitored both on-site using the Remote Control supplied and remotely from anywhere in the world, with the FREE iOS and Android Apps.

The system can easily be expanded to include up to: 30 Wireless Sensors and 10 Remote Controls.

WiFi Indicator

Status Indicator

Learn Button

Network Configuration

Power Switch

AC Adapter Jack
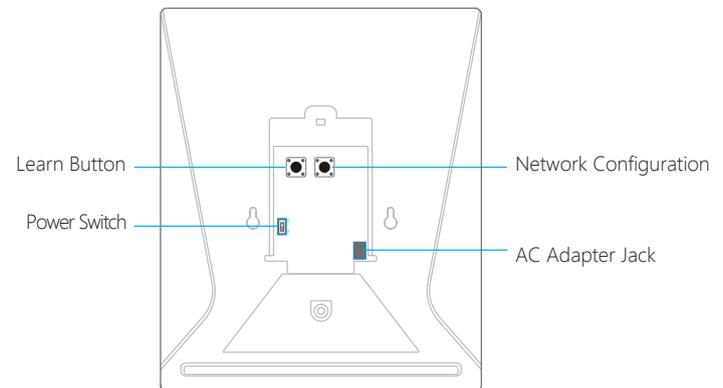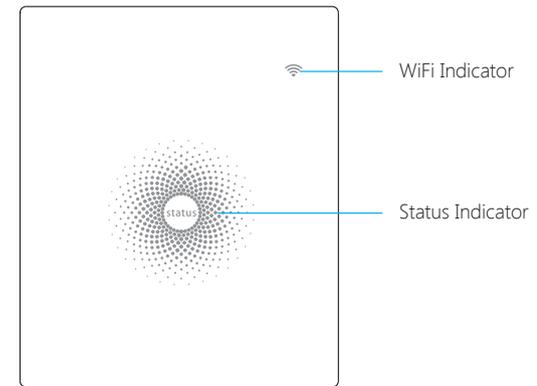
LED Indication

WiFi Indicator (Blue)	Steady On	Connected with Router
	One flash per second	Searching for a network or disconnected from the Router
	Off	1) Initialization (the Control Panel beeps every 3 seconds): lasts for up to 30 seconds after power up 2) The Power Adapter is not plugged in
Status Indicator (Red, Blue and Green)	Steady On	Stable WiFi connection
	Red	System is Armed
	Blue	System is in Home Mode (Part Arm)
	Green	System is Disarmed
	One flash per second	disconnected from the Router
	Three flashes per second	Alarm condition

Functionality of Buttons behind the Back Cover

Learn	Used to pair an accessory with the Control Panel
WiFi	Used to pair the Control Panel with the Router
On/off	Power Switch

> Note: The Control Panel must be plugged in to the Power Adapter in order to maintain the WiFi connection.

Remote Control

The Remote Control can be used to arm, part arm or disarm the system, and trigger an emergency alarm (SOS).

Arm
Home Arm (Part Arm)
Status Indicator
Disarm
SOS button

Button	System Status
🔒	All Sensors will be armed. This mode is for use when the property is unoccupied.
🔓	The System will be Disarmed, no Sensors will be triggered. Note: When set to 'Disarm', Fire, Smoke, and Gas Leakage Sensors will remain active as they are factory set to '24 Hour Zone'
🔒	Sensors which are set to the Home Zone will not be Armed. All other Sensors will be Armed. This mode allows for selected Sensors (for example, front/back door(s) to be Armed, allowing the occupier freedom of movement within the property.
SOS	The SOS Panic Button will trigger an 'emergency' alert notification to registered users regardless of the Control Panel mode.
🔒 + 🔒	Press the [🔒] button. After the indicator on the remote control blinks once, press [🔒] button within 3 seconds to mutely arm the system.
🔒 + 🔓	Press the [🔒] button. After the indicator on the remote control blinks once, press [🔓] button within 3 seconds to mutely disarm the system.

> Note: To turn off the arm/disarm tone permanently, open the AW1 Alarm App, go to 'Internal Siren'.

Door/ Window Sensor

Door/ Window Sensors are set to 'Normal Zone' by default and are ideal for protecting entry/exit points such as front and back doors and windows. When the system is Armed, should a Sensor be triggered (Magnet separated from the Magnetic Sensor), a push notification showing the named Sensor will automatically be sent to the registered users and the Control Panel Internal Siren will sound immediately.

Triggers when > 1cm

LED blinks once
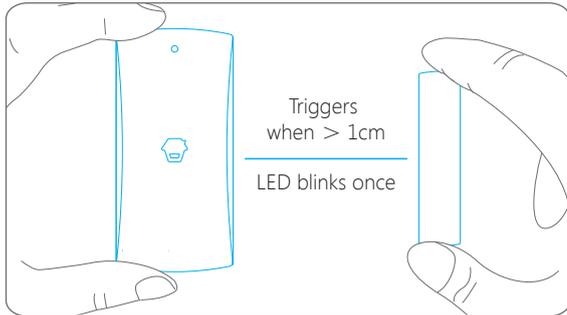
Tamper Switch
The Tamper Switch (small black button underneath the back cover) will activate an alarm condition if an unauthorized attempt is made to remove the Sensor from its installed location.

Low Battery Indication
If the LED indicator flashes once per 3 second, please replace battery.

Pet Friendly PIR Motion Sensor

The Motion Sensor is designed for use on interior walls and is set to Home Mode by default. Whenever the Sensor detects movement (while the alarm is armed) you will receive a push alert notification showing the name of the Sensor that has been triggered and the Control Panel Internal Siren will sound immediately.

LED flashes once when movement is detected
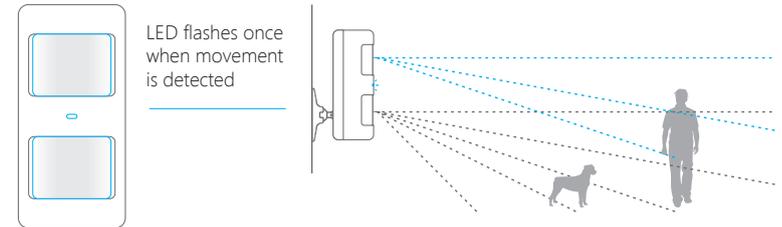
Tamper Switch
The Tamper Switch (a black button with a silver spring at the top, located inside this Sensor) is used to indicate an unauthorized attempt to remove its cover. Whenever this button is released, it will trigger an alarm and the push alert will notify you which Sensor has been triggered on tamper.

Low Battery Indication
If the LED indicator blinks once per 3 second, the battery must be replaced.

Working Mode

Test Mode

The Sensor enters a 1 minute settling down period on power up, thereafter entering into Test Mode. In Test Mode, the Sensor detects movement every 10 seconds and emits an alarm signal every time movement is detected. Test Mode will remain active for 3 minutes, thereafter entering into Power Saving Mode.

> Note: You may also enter Test Mode by pressing the Test Button at the back of the Sensor.

Power Saving Mode

If the Sensor detects movement twice within 3 minutes the Sensor will automatically enter into Sleep Mode and no movement will be detected. The Sensor will leave Sleep Mode after a 3 minute period without any movement.

Case 1:
Initial start and then arm.

Case 2:
Press the test button and then arm.

3 minutes later

Sleep after detecting human movement twice.

No human movement within 3 minutes

Switch from sleep to arm.
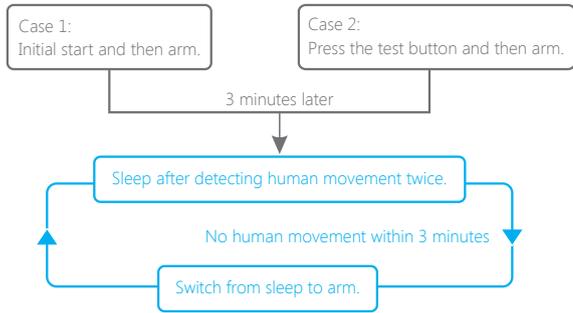
Pairing New Accessories to the Control Panel

There are two ways of pairing Accessories to the Control Panel – manually and via App.

Manual Pairing

To pair Accessories manually please follow the instructions below:

Remote Control and Sensors:

1. Press the Learn button at the back of the Control Panel

2. Press any button on the Remote Control or trigger the Sensor

Please note that pressing the Tamper Switch instead of triggering the Sensor will register it as a 24 Hour Zone.

(Optional Accessory) Wireless Siren:

1. Press the Learn Button on the Siren

2. Arm the Control Panel via the App

Pairing from the App

To pair the Accessories via App, open the AW1 Alarm App, go to 'Edit Accessories' and follow the instructions on the screen.

WiFi Setup

Step One: Download the App

The App can be downloaded from the App Store or Google Play by searching for "AW1 Alarm".

Step Two: Power On

1. Remove the back cover from the Control Panel.

2. Connect the Power Adapter.

3. Set the Power Switch to "ON".

4. Wait until the WiFi Indicator starts to blink (approx. 30 seconds)

Note: The Control Panel will emit a short 'beep' every 3 seconds when powered up. After 30 seconds there will be a long 'beep' to confirm that the Panel is ready for use.

①   ②

③   ④
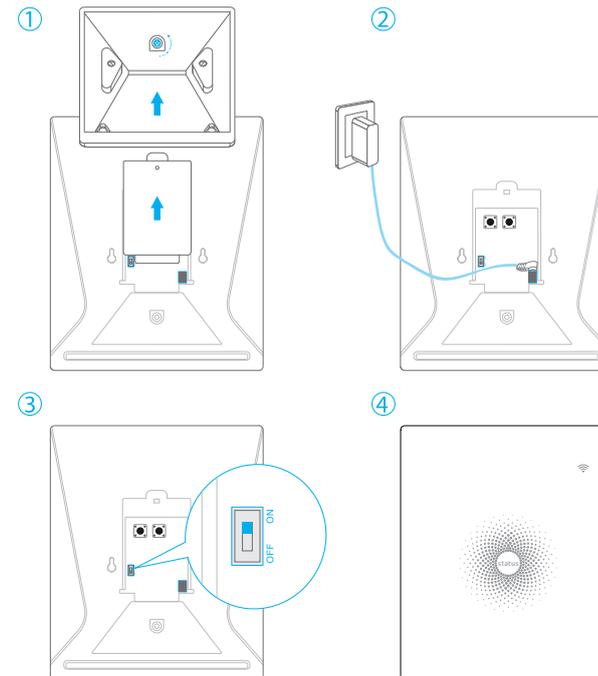
Step Three: Connect the Control Panel to the Router

Important: Make sure your smartphone is connected to the local WiFi network and then follow the steps in the App to connect the AW1 Control Panel to the Router

1. Press and hold the [WiFi] Button inside the Control Panel for 3 seconds, the Control Panel will emit one 'beep'.

2. Tap [WiFi] in the [Settings] of your smartphone, and select the 'WiFi Alarm' network.

3. Return to the App and key in your WiFi name and password or open the drop down menu to scan for all the nearby wireless networks.

4. The Control Panel will beep once, wait until the WiFi indicator and the Status indicator stop blinking, indicating that the Control Panel has successfully connected to the network.

①
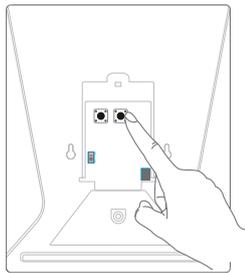
②

Make sure this network icon appears in the Status Bar

③

④

WiFi Indicator

Status Indicator
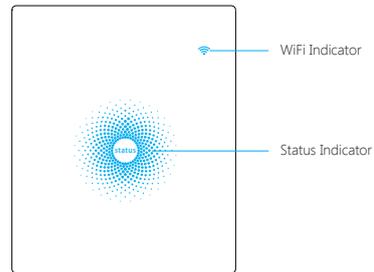
APP Control and Settings

Access to an optional IP Camera
Re-configuring the network

Pull down to refresh and see the 'Live Alarm' status

Arm

Disarm

Home Arm (Part Arm)

Important Notice

In order to control the system remotely (WiFi/App), the Control Panel must be 'mains' powered via the Power Adapter. WiFi accessibility is disabled when the Control Panel Power Adapter is unplugged from the mains power supply and running on batteries.

Synchronize Time (Important Setting)

The time shown on your mobile device must be synchronized with the time shown on the Server prior to setup. Operation history will only be recorded once synchronization is complete.
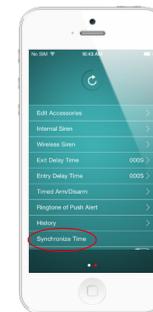
Edit Accessories

Rename, add, delete and change the Zone Mode of each Sensor. (except the 24 Hour Zone). Remember to tap the Save button in the top right hand corner to save the changes.

Normal Zone (Switchable to Home Zone or 24 Hour Zone)

Home Zone (Switchable to Normal Zone or 24 Hour Zone)

24 Hour Zone (Unchangeable)
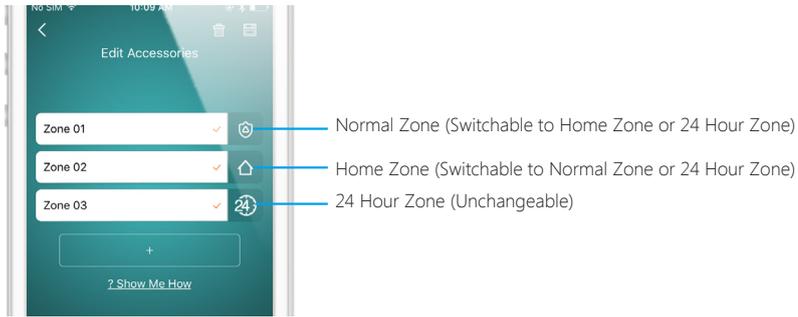
Normal Zone ⊚ : Sensors set to Normal Zone are armed whether the alarm is in Arm (Full Arm) or Home Arm (Part Arm) Mode. We recommend setting Window/Door Sensors to Normal Zone.

Home Zone ⌂ : Sensors set to Home Zone are only armed in Arm (Full Arm) Mode. If Home Mode (Part Arm) is used, these Sensors are not armed and will not activate the alarm on trigger. We recommend setting PIR Motion Sensors to Home Zone.

24 Hour Zone 🕟 : Sensors set to 24 Hour zone will activate the alarm when triggered, regardless of the alarm status at the time (armed or disarmed).

> Note: Smoke, Gas Leakage or Water Flood Sensors are automatically registered as 24 Hour Zone Sensors and cannot be changed to Normal or Home Zone.
> Any Motion or Door/ Window Sensor paired to the Control Panel by pressing the Tamper Switch will also register as a 24 Hour Zone Sensor. A 24 Hour Sensor will activate the alarm when triggered, regardless of the alarm status at the time (armed or disarmed)."

Internal Siren

The volume level, alarm duration, and arm/disarm beep can be adjusted in the App.

Wireless Siren

When connecting an Outdoor Siren (optional accessory) to the Control Panel, it can be enabled/ disabled by switching the Alarm option to on/off. The on/off arm/disarm beep and alarm duration can also be adjusted.

Exit Delay Time

Set a time delay for you to leave your property without triggering an alarm.

Entry Delay Time

Set a time delay for you to enter your property without triggering an alarm.

Timed Arm/Disarm

The system can be programmed to automatically Arm and Disarm the alarm at predefined times by following the steps below:
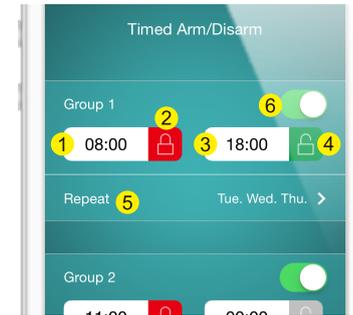
1. Set the time you want the alarm to arm (on the left)
2. Tap the Arm Button once to activate automatic arming and twice to disable it
3. Set the time you want the alarm to Disarm (on the right)
4. Tap the Disarm Button once to activate automatic disarming and twice to disable the automatic disarming
5. Select the days you want the alarm to automatically arm/ disarm
6. Slide the switch to the 'on' position to activate the new schedule

Ringtone of Push Alert

The selected ringtone will be heard when a Push Alert is received.

History

The Event Log holds a record of up to 100 events (More details in 'Notifications' on page 13).

Passcode

We recommend that passcode protection is enabled to avoid unauthorized access to the App.

Delete User

The alarm can be controlled by up to 5 Users who will also receive Push Alerts. To delete a User Account from the App go to the submenu 'More' and select 'Delete Users'

Notifications

The system uses status notification to give you feedback about how the system is functioning.

Operation Notification (Record in App Menu-History)

System Arm	System armed by Remote Control
System Disarm	System disarmed by Remote Control
System Home Arm	System home armed by Remote Control
Arm by App	System armed by App
Disarm by App	System disarmed by App
Home Arm by App	System home armed by App
Arm as Scheduled	System has auto-armed according to the 'Timed Arm/Disarm' schedule
Disarm as Scheduled	System has auto-disarmed according to the 'Timed Arm/Disarm' schedule

Alarm Notification

System SOS Alarm	Remote Control SOS button activation has triggered an emergency alert
(Zone 1) Alarm	A zone no. 1 sensor has been triggered
(Zone 1) Tamper Alarm	Unauthorized attempt to remove the cover of a zone no. 1 sensor.

Status Notification

(Zone 1) Low Battery	A zone no. 1 sensor battery is low. Change the battery as soon as possible.

Installation

Control Panel

Wall Mounting
The Control Panel can be wall mounted using the Wall Bracket provided.

Using the screws supplied, mount the Wall Bracket onto the wall (ensuring that the arrow on the bracket is pointing upwards), then match-up the Wall Bracket hooks to the holes at the back of the Control Panel, and slide the Control Panel down onto the Wall Bracket.
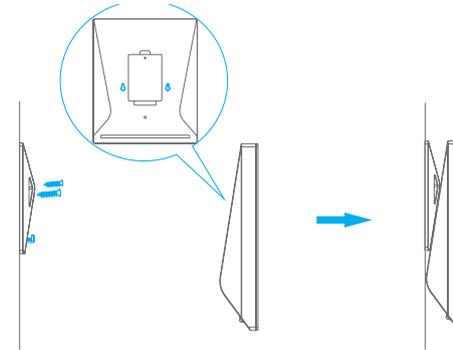
Free-standing
The Wall Bracket can also be used as a tabletop stand.

Turn the Wall Bracket upside down so that the arrow is pointing downwards, and align the screw hole underneath the Control Panel Battery Cover with the screw hole on the Wall Bracket. Use the remaining screw to secure in place.
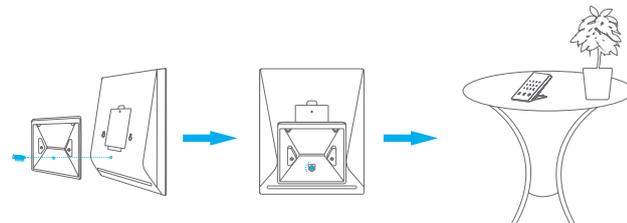
Warning:
A weak WiFi signal can seriously affect the performance of this Security Alarm System. Please make sure that the Control Panel is located as close as possible to the main Router for optimal connectivity.

Step 1: To power up the Sensor remove the Battery Tab

Step 2: Attach the Adhesive Pads to the back of the Sensor and Magnet
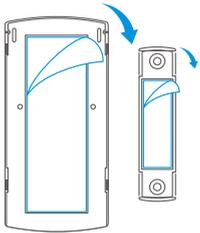
Step 3: Place the Sensor on the door/ window frame and the magnet on the door/ window ensuring that the distance between them is not greater than 1cm when the door/ window is shut.

<1cm

Horizontal orientation   Vertical orientation
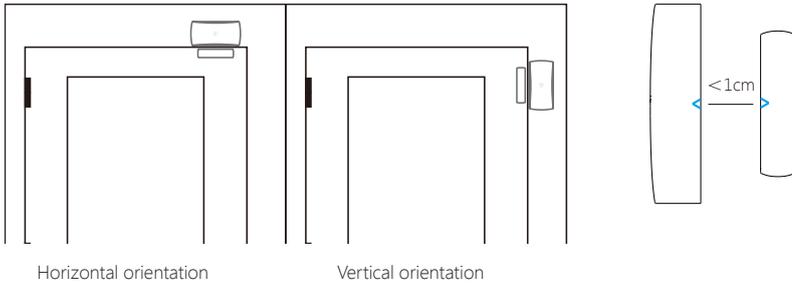
PIR Motion Sensor:

Warning - Do not install
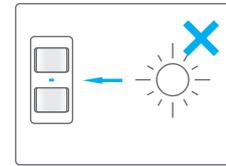
Facing direct sunlight
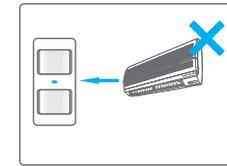
Near air conditioning/ heat sources
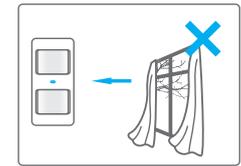
Facing moving objects

Direction of motion and Detection Range

8m Max.

110˚
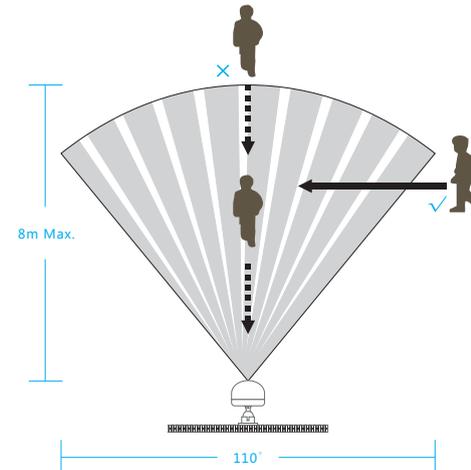
It is easier to detect objects that move sideways in front of the sensor, but more difficult to detect objects that move directly toward the sensor.

Step 1: To power up the Sensor remove the Battery Tab
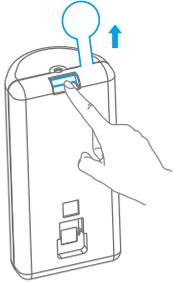
Step 2: Perform a Walk Test

Press the Test Mode button at the back of the sensor to put it in Test Mode.

Place the Sensor in your desired location (don't use screws at this point), arm the system and walk in front of the Sensor to test that the Sensor triggers the alarm.
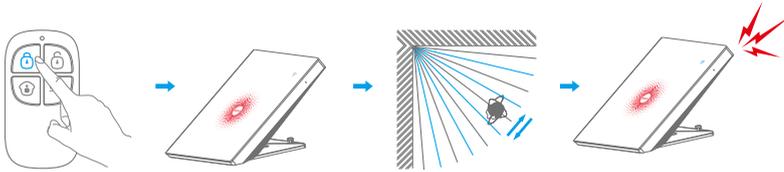
Step 3: Install the Sensor

2-2.2m

Ground
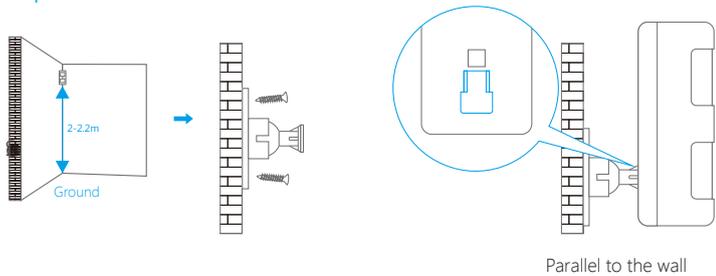
Parallel to the wall

Replacing Accessory Batteries

Remote Control

Remove the screw

Open the casing

Door/Window Sensor
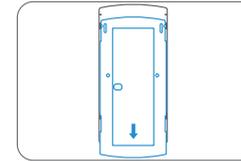
Open the casing

PIR Motion Sensor
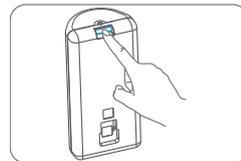
Remove the screw
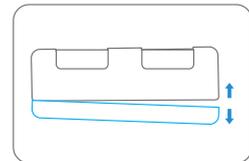
Open the casing

FAQ

Failed to connect to the WiFi

Check whether the WiFi Indicator on the Control Panel has stopped flashing

If the WiFi Indicator stops flashing and the Control Panel cannot be controlled from the App, please make sure that your local WiFi network is available and working properly.

Check that the WiFi name and password are correct.

Connect to a 2.4G WiFi network instead of 5G

Check that the Power Adapter is connected to the Control Panel.

Re-linking the Control Panel to the Router again by following the steps on page 7

The WiFi indicator and the status indicator are on, but I can't control the alarm by App

Check that your smartphone is connected to a WiFi network.

Wait a few minutes to see if the WiFi indicator and the status indicator start flashing. If they do, your local WiFi network is not stable. Make sure that the Control Panel is located in an area with good WiFi coverage and then re-pair with your local WiFi network.

No response from the Control Panel when a Sensor is triggered

The Sensor is not within range of the Control Panel.

Check that the Sensor has been successfully paired to the Control Panel: Press any Button on the Remote Control, arm the system and separate the Contact from the Magnetic Sensor or press the Test Button on the Motion Sensor. You can re-pair the Sensor to the Control Panel by following the instructions in the App – [Edit Accessories] – [Show Me How]

I can't Arm or Home Arm (Part Arm) my alarm by App

If the alarm has been triggered and hasn't been disarmed and a user tries to Arm or Home Arm the System, an error notification will appear stating "Operation failed". In even of Operation Failure first disarm the system and then try again.

How to delete an Accessory

You can delete any Sensor in the App by going to [Edit Accessories] and tapping the 'bin' icon in the top right hand corner of the screen.

To delete all accessories press and hold the [Learn] button inside the Control Panel for 3 seconds, the Control Panel will beep once to indicate that all accessories have been deleted.

No sound when alarming

Check that the Control Panel Alarm volume is not set to mute and the ring time is not set to '0'.

Adjust the volume and the ring time accordingly.

How to reset the alarm system

Press and hold the [WiFi] button inside the Control Panel for 7 seconds.

You will hear one short beep after 3 seconds and then a long beep after another 4 seconds.

The reset has been completed and all the settings have been restored to default conditions.

Please note that this process does not delete any Sensors.

I've done the reset but I keep receiving notifications from the Control Panel

To stop receiving notifications from the Control Panel you can either switch the notifications off for the AW1 Alarm App in your Phone Settings or Delete User (submenu 'More') within the App.

Specification

Control Panel

Power Supply	DC 12V 500 mA
Battery	3.7V 600 mAh Li-ion x 1pc
Battery Life Recharge Cycle	300 times
WiFi	IEEE 802.11b/g/n
Standby Current	<27mA
Alarm Current	<180 mA
Internal Siren	85 dB
Optional Accessories	10 Remote Controls, 30 Sensors
Radio Frequency	433.92MHz
Housing Material	ABS Plastic
Operating Condition	Temperature 0°C~+55°C Relative Humidity <80% (non-condensing)
Control Panel Dimensions	125 x 150 x 30 mm (L x W x H)
Bracket Dimensions	87.5 x 81.5 x 12 mm (L x W x H)

Remote Control

Power Supply	DC 3V (CR2025 lithium battery x 1pc)
Transmit Current	<7 mA
Transmitting Distance	<80 m (open area/no interference)
Radio Frequency	433.92 MHz
Housing Material	ABS Plastic
Operating Condition	Temperature 0°C~+55°C Relative Humidity <80% (non-condensing)
Dimensions	58 x 31 x 9.5 mm (L x W x H)

Door/ Window Sensor

Power Supply	DC 1.5V (1 x AA 1,5V LR6)
Static Current	<35 uA
Alarm Current	<40 mA
Transmitting Distance	<80 m (open area/no interference)
Radio Frequency	433.92 MHz
Housing Material	ABS Plastic
Operating Condition	Temperature 0°C~+55°C Relative Humidity <80% (non-condensing)
Transmitter Dimensions	71 x 34 x 17.5 mm (L x W x H)
Magnet Dimensions	51 x 12 x 13.5 mm (L x W x H)

Pet Friendly PIR Motion Sensor

Power Supply	DC 3V (2 x AA 1,5V LR6)
Static Current	<18 uA
Alarm Current	<12 mA
Detection Scope	8m/110°
Pet Immunity	<25kg
Transmitting Distance	<80 m (open area/no interference)
Radio Frequency	433.92 MHz
Housing Material	ABS Plastic
Operation Condition	Temperature 0°C~+55°C Relative Humidity <80% (non-condensing)
Detector Dimensions	108 x 52 x 36.8 mm (L x W x H)
Bracket Dimensions	52 x 30 x 26.5 mm (L x W x H)

Overview

· Front View

Camera

Microphone
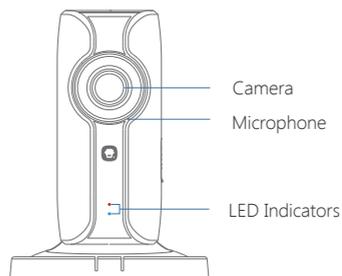
LED Indicators

Red indicator	Blinking	Enter WiFi pairing state
Blue indicator	Blinking	Searching network
	On	Network connected

· Side View

Reset Button

microSD Card Slot

· Back View

Heat Vent

Power Jack

---
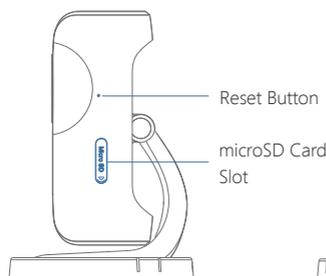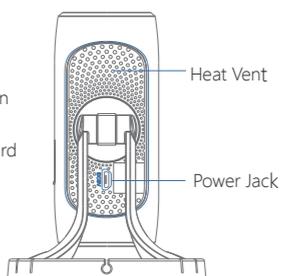
microSD Card (Not included)

Support 32GB microSD card maximum; please do not insert the card after the camera is powered on.

This camera automatically records and saves video once every 20 minutes; the video recorded at the earliest will be replaced with the latest ones if the microSD card is full.

Note: Please format your microSD card before inserting into this slot if any file had been written in.

Check What You Have
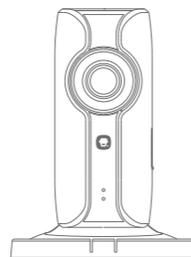
WiFi Camera×1
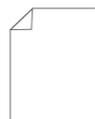
AC Adapter×1

Quick Guide×1

Reset Pin×1

Download the App

Download the App by searching "IP116 camera" from Apple Store or Google Play.

IP116 Camera

Available on the **App Store**

GET IT ON **Google play**

WiFi Pairing

1. Preparation
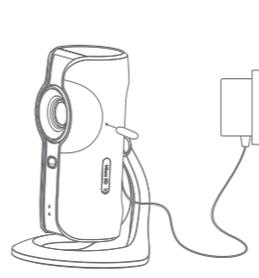
• Hold the reset button by using the supplied reset pin until the camera beeps once, and then the red indicator starts to blink

• Find and choose the WiFi named "HD WiFi Cam" from your phone's WiFi list

---

2. Pairing Camera with WiFi through App
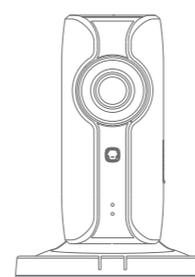
• Launch the App, tap [+] to add a new camera

• Name your camera, enter the password (default: 888888) and input your home WiFi name & password

• When the blue indicator is on, it means the camera has connected with WiFi

The paired camera will be displayed in the video list.

Note: For safety, it is recommended to change the password of your camera on the setting menu after pairing.

Settings

Camera Sharing QR Code

Setting Button

Device ID
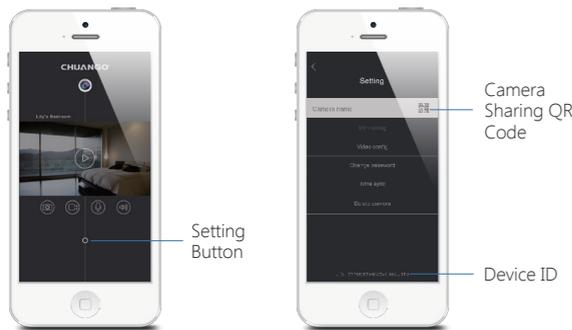
Share or Stop Sharing Camera with Your Friends

Show or send the QR code of your camera to your friends, they can simply add the camera by choosing the [QR code] on their App and then scan.

If you want to stop sharing the camera, please change the password of camera.

Password

All the successfully paired phones have the same authority as administrator who can view and set the camera (including changing the password), so it is recommended to pair the phones of users with caution. For non-administrator users, you can share the camera by sending the QR code for them to scan.

Sync the Date and Time

Check if the camera's date and time are set correctly. Sync them with your phone's time if necessary.

Enjoy the App

Snapshot
Record
Hold To Talk
Speaker

Installation

Important: This camera should be placed where the WiFi signal is strong for optimal performance before installation.

①
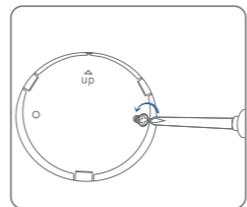
②
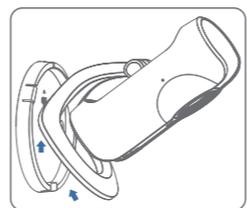
③
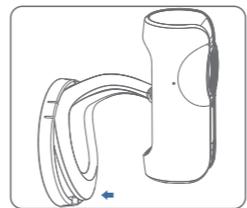
Specification

Image sensor	Sony 1/3" CMOS Sensor
Min. illumination	Color: 0.01Lux@ (F1.2, AGC ON)
	Black and white : 0.001Lux@ (F1.2, AGC ON)
Shutter time	1/50s to 1/100,000s
Lens	2.4 mm F2.0
Angle of view	110°
Video compression	H.264
Bit rate	Self - adaption
Max. image resolution	1280 x 720
Frame rate	30fps (1280 × 720)
Storage	Built-in microSD card slot, up to 32GB
Wireless standards	IEEE802.11b/g/n
Frequency range	2.4 GHz ~ 2.4835 GHz
Channel bandwidth	20/40MHz Support
Operating conditions	Temperature: -30 °C - 60 °C
	(-22 °F - 140 °F)
	Humidity: <95% (non-condensing)
Power supply	DC 5V 2A
Power consumption	5W MAX
Dimensions (L x W x H)	91 x 78 x 115 mm

CHUANGO®

Quick Guide
IP116 HD WiFi Camera

Smoke Detector

User Manual

SMK-500 (Wireless)
SMK-500D (Independent)

Introduction

Our photoelectric smoke detector is designed to sense smoke that comes into the detector chamber. It does not sense gas, heat, or flame. This smoke detector is designed to give early warning of developing fires by giving off the alarm sounds from its built-in alarm horn. It can provide precious time for you and your family to escape before fire spreads. However, the smoke detector makes such pre-warning of fire accident possible, only if the detector is located, installed, and maintained properly as described in this User's Manual.

WARNING: This smoke detector is designed for use in a single residential unit only, which means that it should be used inside a single family home or apartment. It is not meant to be used in lobbies, hallways, basements, or another apartment in multi-family buildings, unless there are already working detectors in each family unit. Smoke detectors, placed in common areas outside the individual living unit, such as on porches or in hallways, may not provide early warning to residents. In multi-family buildings, each family living unit should set up its own detectors.

WARNING: This detector is not meant to be used in non-residential buildings, warehouses, industrial or commercial buildings, and special purpose non-residential buildings require special fire detection and alarm systems. This detector alone is not a suitable substitute for complete fire detection systems for places where many people live or work, such as hotels or motels. The same is true of dormitories, hospitals, nursing homes or group homes of any kind, even if they were once single family homes. Please refer NFPA 101, the Life Safety Code, NFPA71, 72A, 72B, 72C, 72D, and 72E for smoke detector requirements for fire protection in buildings not defined as "households".

Locations to Install Your Smoke Detectors

Smoke detectors should be installed in accordance with the NFPA Standard 74 (National Fire Protection Association, Battery march Park, Quincy, MA 02169). For complete coverage in residential units, smoke detectors should be installed in all rooms, halls, storage areas, basements, and attics in each family living unit. Minimum coverage is one detector on each floor and one in each sleeping area and attics in each family living unit.

Here, we have useful tips for you:

- Install a smoke detector in the hallway outside every separate bedroom area, as shown in Figure 1. Two detectors are required in homes with two bedroom areas, as shown in Figure 2.
- Install a smoke detector on every floor of a multi-floor home or apartment, as shown in Figure 3.
- Install a minimum of two detectors in any household.
- Install a smoke detector inside every bedroom.
- Install smoke detectors at both ends of a bedroom hallway if the hallway is more than 40 feet (12 meters) long.
- Install a smoke detector inside every room where one sleeps with the door partly or completely closed, since smoke could be blocked by the closed door and a hallway alarm may not wake up the sleeper if the door is closed.

● SMOKE DETECTORS FOR MINIMUM SECURITY
○ SMOKE DETECTORS FOR MORE SECURITY

Figure 1: locations for placing smoke detectors for single residence with only one sleeping area
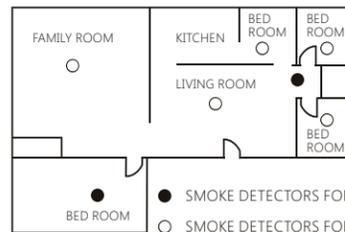
● SMOKE DETECTORS FOR MINIMUM SECURITY
○ SMOKE DETECTORS FOR MORE SECURITY

Figure 2: locations for placing smoke detectors for single-floor residence with more than one sleeping area
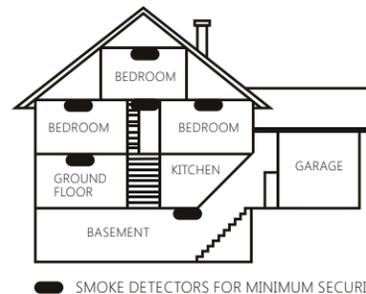
● SMOKE DETECTORS FOR MINIMUM SECURITY

Figure 3: locations for placing smoke detectors for a multi-floor residence

- Install basement detectors at the bottom of the basement stairwell.
- Install second-floor detectors at the top of the first-to-second floor stairwell.
- Be sure no door or other obstruction blocks the path of smoke to the detector.
- Install additional detectors in your living room, dining room, family room, attic, utility and storage rooms.
- Install smoke detectors as close to the center of the ceiling as possible. If this is not practical, put the detector on the ceiling, no closer than 4 inches (10 cm) from any wall or corner, as shown in Figure 4.
- If ceiling mounting is not possible and wall mounting is permitted by your local and state codes, put wall-mounted detectors between 4 and 6 inches (10 ~ 15 cm) from the ceiling, also see Figure 4.
- If some of your rooms have sloped, peaked, or gabled ceilings, try to mount detectors 3 feet (0.9 meter) measured horizontally from the highest point of the ceiling as shown in Figure 5.

○ BEST LOCATION
◌ ACCEPTABLE LOCATION
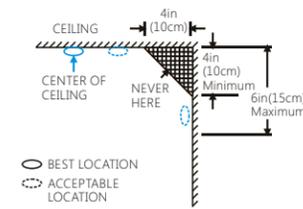
Figure 4: recommended best and acceptable locations to mount smoke detectors
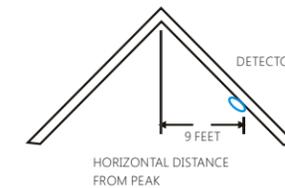
Figure 5: recommended locations to mount smoke detectors in rooms with sloped, gabled, or peaked ceiling

CAUTION (As required by the California State Fire Marshall)

"Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: (1) A smoke detector installed in each separate sleeping area (in the vicinity, but outside of the bedrooms), and (2) Heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and, storage rooms, basements and attached garages."
For your information, NFPA Standard 74, Section 2-4 reads as follows:
"2-4.1.1 Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basements and excluding crawl spaces and unfinished attics.
The provisions of 2-4.1.1 represent the minimum number of detectors required by this standard. It is recommended that the householder considers the use of additional smoke detectors for increased protection for those areas separated by a door from the areas protected by the required smoke detectors under 2-4.1.1 above. The recommended additional areas are living room, dining room, bedroom(s), kitchen, attic (finished or unfinished), furnace rooms, utility room, basement, integral or attached garage, and hallways not included in 2-4.1.1 above. However, the use of additional detectors remains the option of the householder." We recommend complete coverage and use of additional smoke detectors.

Locations not to Install Your Smoke Detectors

Nuisance alarms take place when smoke detectors are installed where they will not work properly. To avoid nuisance alarms, do not install smoke detectors in the following situations:
Combustion particles are the by-products of something that is burning. Thus, in or near areas where combustion particles are present you do not install the smoke detectors to avoid nuisance alarms, such as kitchens with few windows or poor ventilation, garages where there may be vehicle exhaust, near furnaces, hot water heaters, and space heaters.
Do not install smoke detectors less than 20 feet (6 meters) away from places where combustion particles are normally present, like kitchens. If a 20-foot distance is not possible, e.g. in a mobile home, try to install the detector as far away from the combustion particles as possible, preferably on the wall. To prevent nuisance alarms, provide good ventilation in such places.

IMPORTANT: For any reason, do not disable the detector to avoid nuisance alarms.
When air streams passing by kitchens, the way how a detector can sense combustion particles in normal air-flow paths is graphically shown in Figure 6, which indicates the correct and incorrect smoke detector locations concerning this problem.

○ CORRECT LOCATION
✕ INCORRECT LOCATION

Figure 6: recommended smoke detector locations to avoid air streams with combustion particles

In damp or very humid areas, or near bathrooms with showers. Moisture in humid air can enter the sensing chamber, then turns into droplets upon cooling, which can cause nuisance alarms. Install smoke detectors at least 10 feet (3 meters) away from bathrooms.
In very cold or very hot areas, including unheated buildings or outdoor rooms. If the temperature goes above or below the operating range of smoke detector, it will not work properly. The operating temperature range for your smoke detector is 40℉ to 100℉ (4℃ to 38℃).
In very dusty or dirty areas, dirt and dust can build up on the detector's sensing chamber, to make it over sensitive. Additionally, dust or dirt can block openings to the sensing chamber and keep the detector near fresh air vents or very drafty areas like air conditioners, heaters or fans, fresh air vents and drafts can drive smoke away from smoke detectors.
Dead air spaces are often at the top of a peaked roof, or in the corners between ceilings and walls. Dead air may prevent smoke from reaching a detector. See Figures 4 and 5 for recommended mounting locations.
In insect-infested areas. If insects enter a detector's sensing chamber, they may cause a nuisance alarm. Where bugs are a problem, get rid of them before putting up a detector.
Near fluorescent lights, electrical "noise" from fluorescent lights may cause nuisance alarms. Install smoke detectors at least 5 feet (1.5 meters) from such lights.

WARNING: Never remove batteries to stop a nuisance alarm. Open a window or fan the air around the detector to get rid of the smoke. The alarm will turn itself off when the smoke is gone. If nuisance alarms persist, attempt to clean the detector as described in this User's Manual.

WARNING: Do not stand close to the detector when the alarm is sounding. The alarm is loud in order to wake you in an emergency. Too much exposure to the horn at close range may be harmful to your hearing.

Installing Your Smoke Detectors

Read"Locations to Install Your Smoke Detectors" and "Locations not to Install Your Smoke Detectors" section in the manual first, and then decide where to install the detector.

Please follow these steps to install your smoke detector:

1 At the place where you are going to install the detector, draw a horizontal line six inches long.
2 Remove the mounting bracket from your unit by rotating it counterclockwise.
3 Place the bracket so that the two longest hole slots are aligned on the line. In each of keyhole slots, draw a mark to locate a mounting plug and screw.
4 Remove the bracket.
5 Using a 3/16-inch (5mm) drill bit, drills two holes at the marks and insert plastic wall plugs. Put the detector away from getting plaster dust on it when you drill holes for mounting.
6 Using the two screws and plastic wall plugs (all supplied), attach the bracket to the wall.
7 Line up the slot of the bracket and the detector. Push the clockwise to fix it into place. Pull outward on the detector to make sure it is securely attached to the mounting bracket.

BRACKET   DETECTOR

SCREWS

SCREWS
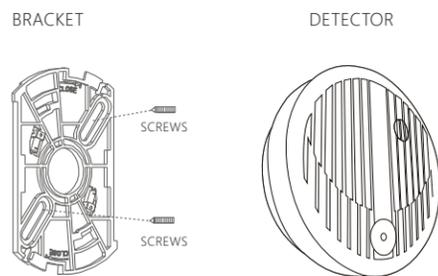
8 The steps to open the battery cover and to install the battery are listed as follows:

(1) To power smoke detector requires a battery.
(2) Match terminals on the end(s) of the battery with opposite terminal connections on the detector. Be sure to insert the zinc-manganese dry battery in the position shown on the detector.
(3) When terminals are properly matched, push battery firmly in until it snaps and cannot be shaken loose.
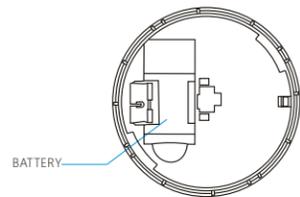
BATTERY

CAUTION: This smoke detector comes with cover latches that will prevent the smoke detector cover from closing if battery is not installed. This tells you that the smoke detector will not work until a new battery is properly installed. **The battery is purposely positioned WRONGLY in the factory to keep it fresh until installation. It must be re-positioned correctly to provide DC power.**

NOTE: When the detector battery first makes contact with the detector, the alarm horn may sound for one second. This is normal and indicates that the battery is positioned properly. Close cover, then press the test button, holding it down for about 5 seconds until the horn sounds. The horn should sound a loud, pulsating alarm. This means the unit is working properly.

LOUDSPEAKER

OFF TWIST ON

DO NOT PAINT

DO NOT PAINT

RED LED   TEST   TESTING BUTTON
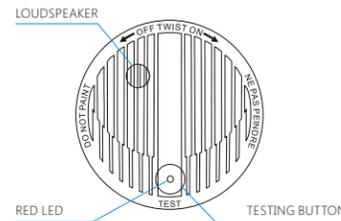
Connect with Alarm Control Panel

SMK-500 can not only work as a single station, but also can work with alarm control panel to form an alarm system when wireless module is added to the smoke detector.
1) Make sure the control panel is in learning state.
2) Press the testing button on the smoke detector for 3 seconds, two beeps are heard. Simultaneously, one beep is heard from the control panel. The detector has been connected successfully with the control panel.
Testing:
Press the testing button on the smoke detector for 3 seconds, the control panel will alarm immediately.

Red LED Indicator

The red LED, as the ALARM indicator, is featured with the detector. It can be seen through the test button on the cover of the detector. When red LED flashes once 32 seconds, it indicates the detector under normal operation. When smoke detector senses smoke and simultaneously sounds an audible alarm, the red LED will flash very frequently, once 0.67 seconds.

Testing Your Smoke Detector

Test the detector weekly by pushing firmly on the test button with your finger until the horn sounds. Testing method may take up to 5 seconds to sound the alarm horn. These are only ways to be sure that detector is working correctly. If the detector fails to test properly, have it repaired or replaced immediately.

WARNING: Never use an open flame to test your detector. You may set fire to damage the detector, as well as your home. The built-in test switch accurately tests all detector functions, as required by Underwriters' Laboratories. They are the only correct ways to test the unit.

WARNING: When you are not testing the unit and the alarm horn sounds a loud continuous sound, this means the detector has sensed smoke or combustion particles in the air. Be sure that the alarm horn is a warning of a possible serious situation, which requires your immediate attention.

The alarm could be caused by a nuisance situation. Cooking smoke or a dusty furnace, sometimes called "friendly fires" can cause the alarm to sound. If this happens, open a window or fan the air to remove the smoke or dust. The alarm will turn off as soon as the air is completely clear.

NOTE: Do not disconnect the battery from the detector. This will remove your protection from fires.

Using The Silence Feature

The silence feature can temporarily quiet an unwanted alarm for up to 8 minutes. To use the feature, press the"TEST" button .When remain in silence, the LED will flash once every 8 seconds (for up to 8 minutes) to remind you the alarm has been stopped. The flashing LED will stop when the unit returns to normal operation.
WARNING: The silence feature does not disable the unit. It is temporarily less sensitive to smoke. For your safety, if smoke around the unit is dense enough to suggest a potentially dangerous situation, it will stay in alarm, or may re-alarm quickly. If you do not know the source of the smoke, do not assume it is an unwanted alarm. Not responding to an alarm can result in property loss, injury or death.
NOTE: Do not disconnect the battery from the detector. This will remove your protection from fires.
.
If a beep or chirp virtually simultaneously with an LED flash once a minute, this means the detector's battery is weak. Replace new battery immediately.

If a beep or chirp occurring halfway an LED flash once a minute, this signal means that the detector is faulting, it is must repaired or replaced immediately.

Taking Care of Your Smoke Detector

To keep your detector in good working condition, you must test the detector weekly, as referring to section "TESTING YOUR SMOKE DETECTOR".
Replace the detector battery when the low battery "beep" signal sounds once a minute. The low battery "beep" should last at least 30 days.

NOTE: For replacement battery, use Gold Peak 1604P, 1604S, 1604G, 1604A; Eveready522, 216; Duracel Mn1604; PremisafeG6F22; UltralifeU9VL-J; EVE CR9V.

WARNING: Do not use any other kind of battery. This detector may not operate properly with other kind of battery.
Open the cover and vacuum the dust off the detector's sensing chamber at least once a year. This can be done when you open the detector to change the battery. Remove battery before cleaning. To clean detector, use soft brush attachment to your vacuum. Carefully remove any dust on detector components, especially on the openings of the sensing chamber. Replace battery after cleaning. Test detector to make sure battery works correctly. Check to make sure there is no obstruction inside the test button. If there is any dust in the test button, insert a toothpick from the back to the front.

NOTE: If nuisance alarms keep coming from the detector, you should check whether the detector's location is adequate. Refer to section "WHERE TO INSTALL SMOKE DETECTORS." Move your detector if it is not located properly. Clean detector as described above.
Clean detector cover when it gets dirty. First open the cover and remove battery. Hand-wash cover with cloth dampened with clean water. Dry it with lint-free cloth. Do not get any water on the detector components. Replace the battery, and close cover. Test detector to make sure that battery works correctly.

Technical Specifications

Power Supply:
DC 9V 6F22 battery x 1
Standby Current:
≤ 5uA
Alarm Current:
≤15mA
LED Frequency in Working State:
Once every 32 sec.
LED Frequency in Alarming State:
Once every 0.62 sec.
Low Battery State:
Beep once with a LED flash per 60s (last for 30 days)
Operation Condition
Temperature: -10°C ~ +55°C
Relative humidity: ≤95%(no condensing)
Monitoring Area:
20m^2
Alarm Decibel:
85dB/3m
Radio Frequency:
315MHz, 433.92MHz or 868MHz
Transmitting Distance:
≤80m in open area(SMK-500)
Housing Material:
ABS plastic
Dimensions(L x W x H):
102x102x31mm