



SMART HALO

Wire-Free Home Alarm System with Phone Dialer



Patent Pending



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User Guide

Model # WS-98X-01

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SECTION 1 – GETTING STARTED

1.1 General system overview

CAUTION! The 9V battery in the Smart Halo Panel is for power back-up purposes only, and the unit should be supplied with mains power (through the AC adaptor) at all times.

Difficulty in disarming the Smart Halo Panel in ARM mode may occur when it is powered by the back-up battery alone. This is not a malfunction, and can be resolved by the use of a fresh 9V battery and mains power supplied through the AC adaptor included.

IMPORTANT!

Due to the strong signal of the alarm, we advise that you change the House Security Code settings (explained in Section 4.3), if you suspect that one of your in-range neighbours may also be using this type of alarm system

Alarm system limitations

Even the most advanced alarm systems cannot guarantee 100% protection against burglary or environmental problems. All alarm systems are subject to possible compromise or failure-to-warn for a variety of reasons.

* Please note that you may encounter problems with your system if:

- The siren is not placed within hearing range or is in a remote part of the premises.
- The sensors are placed behind doors or other obstacles.
- Intruders gain access through unprotected points of entry (where sensors are not located).
- Intruders have the technical means of bypassing, jamming, or disconnecting all or part of the system.
- The power to the sensors is inadequate or disconnected.
- The sensors are not located in acceptable operating areas e.g. too close to a heat source.

* Inadequate maintenance is the most common cause of alarm failure. Therefore, test your system at least once per week ensure the sensors and siren(s) are working properly.

*Although having an alarm system may make you eligible for reduced insurance premiums, the system is no substitute for insurance.

WARNING: Security system devices cannot compensate for loss of life or property.

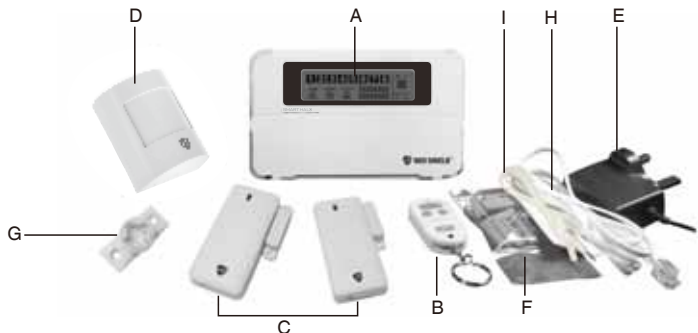
1.2 Introduction to the system

The SMART HALO Home Protection System is a high quality security system combined with a range of user-friendly features. The system is controlled by a Smart Halo Panel, which gathers information from wireless sensors placed inside and at the entry points of your home or office. If the Smart Halo Panel detects a security breach, indicator lights will flash and the siren(s) will sound. Details of how to correctly install and operate the system are contained within this User Guide.

1.3 Items included with the system

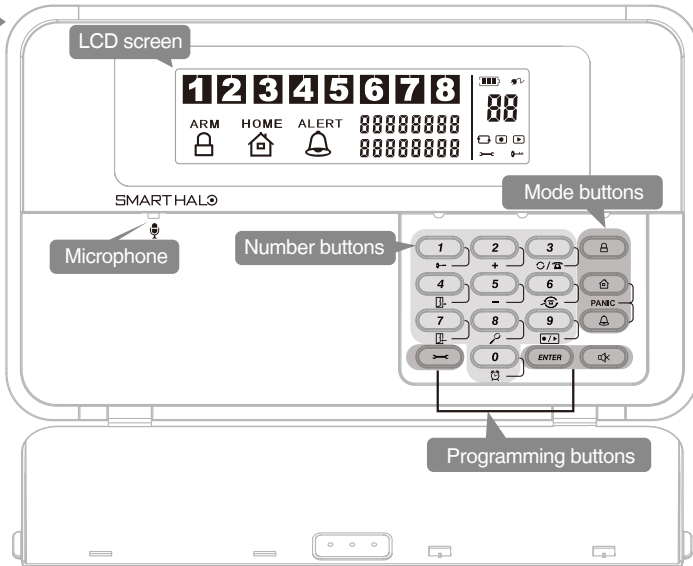
Please check that all of the following items were included in the package before installing the system:

- A. Smart Halo Panel
- B. Key Fob Remote Control
- C. Door/Window Sensors
- D. Motion Sensor
- E. AC adaptor for Smart Halo Panel
- F. Double-sided adhesive strips for Door/Window Sensor, Screws and wall plugs
- G. Mounting bracket for Motion Sensor
- H. Telephone wire
- I. Audio Cable
- User Guide



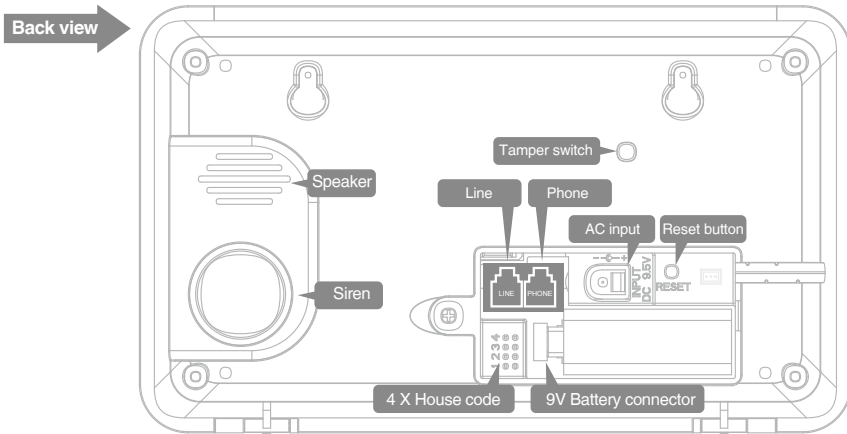
1.4 Introduction

Front view



Key Pad Icon	Brief descriptions
	PIN setting
	Add additional keychain remote or additional keypad control
	Dialing cycle or add recipient numbers
	Exit delay timer setting
	Remove additional keychain remote or keypad control
	Inquiry recipient number
	Entry delay timer setting
	Querying the ID number of a remote control or keypad control
	Record or playback
	Alarm duration setting
	Setting mode
ENTER	Enter
	1. Stop panel flashes when the zone is triggered under ALERT status 2. Disable the beeping countdown under entry/exit delay
	ARM mode
	HOME mode
	ALERT mode (Chime)
PANIC	

LCD Icon	Brief descriptions
	Play
	Record
	Dialing cycle
	AC power
	Battery power
	Timer counter
1 2 3 4 5 6 7 8	Zones
8 8 8 8 8 8 8 8	Recipient telephone numbers
8 8 8 8 8 8 8 8	



1.5 Introduction to the Smart Halo Panel sound alert and backlight

Operating Mode	Situation	Sound alert and backlight indication
ARM	Zone triggered under ARM status	<ul style="list-style-type: none"> Alarm duration: Adjustable between 1 – 6 minutes (siren). Default is 1 minute Smart Halo- flashes RED every 1.5 seconds with triggered zone indicated (To stop - enter 4-digit PIN and press ENTER)
	Alarm set under ARM status	<ul style="list-style-type: none"> No siren Smart Halo - flashes RED every 5 seconds providing an intruder deterrent (different from when an intrusion occurs and the panel rapidly and continuously flashes RED).
HOME	Zone triggered under ARM status	<ul style="list-style-type: none"> Alarm duration: Adjustable between 1 – 6 minutes (siren). Default is 1 minute Smart Halo - flashes RED every 1.5 seconds with triggered zone indicated (To stop - enter 4-digit PIN and press ENTER)
	Zone triggered under ALERT status	<ul style="list-style-type: none"> Sound output: Chime (ding-dong) Smart Halo – flashes WHITE every 1.5 seconds with triggered zone indicated (To stop panel flashes - press ⏏)
ALERT	Zone triggered under ALERT status	<ul style="list-style-type: none"> Sound output: Chime (ding-dong) Smart Halo – flashes GREEN every 1.5 seconds with triggered zone indicated (To stop panel flashes press ⏏)
STANDBY	Silent	<ul style="list-style-type: none"> Smart Halo – WHITE backlight remains ON for 10 seconds after entering into STANDBY mode

SECTION 2

– INSTALLING THE SMART HALO HOME PROTECTION SYSTEM

2.1 Installing the Smart Halo Panel

WARNING: The Red Shield Smart Halo Panel has a built-in tamper-proof switch to prevent the system being disabled by an intruder. When fixing the Smart Halo Panel to a wall, first ensure that it is in Standby mode to avoid the alarm sounding.

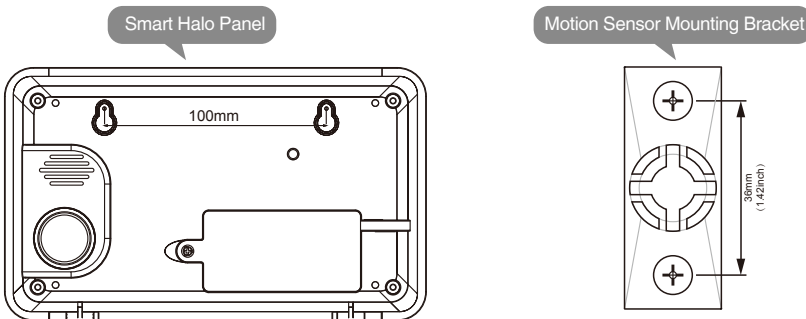
2.1.1 Locating the Smart Halo Panel

Determine the location of the Smart Halo Panel, which should be placed:

- Within a few feet of an electrical outlet and Telephone socket
- Where it is easily accessible
- Away from doors or windows that could be accessed by intruders
- Away from extreme temperature sources (radiators, ovens, stoves etc.) and large metal objects that could interfere with the wireless performance

2.1.2 Wall mounting the Smart Halo Panel

- Measure up the Smart Halo Panel for position for screws

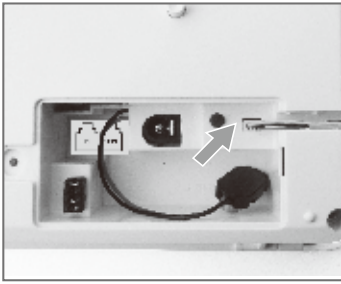


- Mark on the wall the points for drilling holes for the wall plugs and mounting screws.
- Drill the holes, insert wall plugs and locate the mounting screws for the Smart Halo Panel
- Once the Smart Halo Panel has been installed the system can be powered up. The tamperproof switch is enabled once the Smart Halo Panel is switched to HOME, ALERT or ARM mode

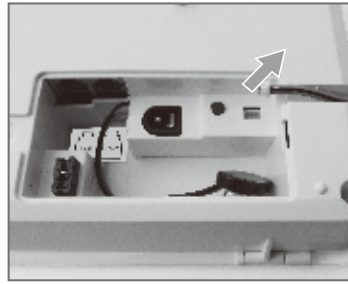
2.2 Connecting the telephone line and powering up the Smart Halo Panel

Note: The Smart Halo Panel is supplied with a demonstration switch to show the LCD display panel working whilst the unit is in its packaging.

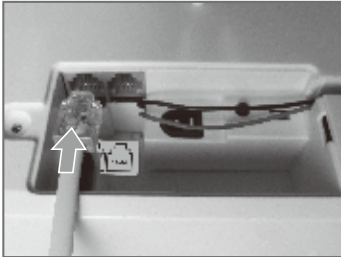
- Before powering up the Smart Halo Panel the wire for this switch must be removed as describe below (See Figs 1&2).
- This device must be connected to a public switched telephone network (PSTN) phone line (with an individual phone number) with tone frequency at 450Hz +/-20Hz. This equipment will not function with party lines, coin operated phone lines, ISDN connections or any part of a private or corporate switch board system.
- Open the battery compartment.
- Connect the telephone network plug to line and the telephone to phone and then power up your Smart Halo Panel with 9V battery and AC adaptor (if you find on the display screen CONNECT LINE, please disconnect power supply and make sure the telephone line is connected first before powering up the Smart Halo Panel) Fig 3 & 4. To connect phone is optional, if your home has only the one wall telephone socket then you must connect to a phone via the Smart Halo Panel.
- Once you inserted a new 9V back up battery (Noting the polarity) and plug the AC adaptor into the Smart Halo Panel (Fig 5) replace cover and screw firmly.
- Your telephone will function normally until Auto Dialer is activated. Upon activation the device will take control of the telephone line functions.



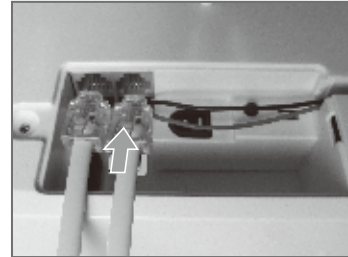
► Fig. 1



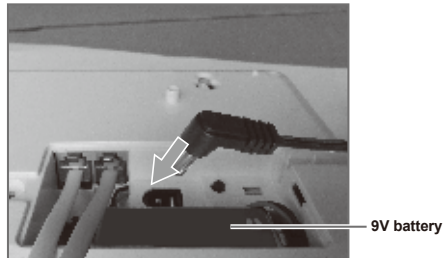
► Fig. 2




► Fig. 3



► Fig. 4






► Fig. 5

Description	Note
Insert 9V Alkaline backup battery	<ul style="list-style-type: none"> • One beep will sound and the backlight will blink within 1 second (White) • The Smart Halo Panel will display the below image: <div data-bbox="565 1204 846 1284" data-label="Image"> </div> • The Smart Halo Panel will enter "STANDBY" mode after the automatic self-checking is complete. Then  will appear on the LCD screen. Enter the default 4-digit PIN "1234"
Plug in AC adapter to the DC socket in the back of the Smart Halo Panel	The main power supply (with AC adaptor) must be plugged in at all times, with the 9V battery functioning as back-up power supply only, when the mains power supply is interrupted.

2.3 Understanding the battery and AC adaptor icon


Battery icon shows power status below:

Full - 
 High - 
 Middle - 
 Low - 

- Battery icon shows when the AC power supply is unplugged or interrupted.
- 9V battery functions as BACK-UP only and the  symbol means LOW BATTERY. The LCD backlight flashes YELLOW for 30 seconds and  will blink until the new battery is replaced or the mains power supply (with AC adaptor) is plugged in.

AC Adaptor icon

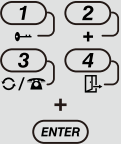
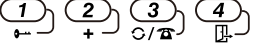





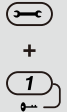







- When the AC adaptor to the Smart Halo Panel is connected to a wall socket, the AC symbol  will appear.
- The backlight will be 'ON' for 10 seconds while the AC adapter connects to the power supply.

SECTION 3

– USING THE SMART HALO HOME PROTECTION SYSTEM

3.1 Programming your new 4-digit PIN

Keys	Description	Note
	<p>You must be in STANDBY mode before programming your new 4-digit PIN</p>	<ul style="list-style-type: none"> • To make sure you are in STANDBY mode: • Enter the default PIN  • Press ENTER • The Smart Halo Panel will display the image below when you are in STANDBY mode: <div style="border: 1px solid black; padding: 5px; display: inline-block;"> 1 2 3 4 5 6 7 8  </div> <p>(One beep indicates that you entered a valid PIN, three beeps indicate that an invalid operation was performed).</p>
	<p>Enter the default PIN  OR your new 4-digit PIN for setting followed by ENTER</p>	<ul style="list-style-type: none"> • The Smart Halo Panel will display the below image with the  off: <div style="border: 1px solid black; padding: 5px; display: inline-block;"> 1 2 3 4 5 6 7 8  </div>
	<p>Press  followed by  + </p>	<ul style="list-style-type: none"> • The Smart Halo Panel will display the below image with the  &  on: <div style="border: 1px solid black; padding: 5px; display: inline-block;"> 01 </div>
<p>New 4-digit PIN + ENTER</p>	<p>Enter the new 4-digit PIN followed by ENTER</p>	<ul style="list-style-type: none"> • Enter the new 4-digit PIN • Press ENTER to confirm <div style="border: 1px solid black; padding: 5px; display: inline-block;"> 02 </div>
<p>New 4-digit PIN + ENTER</p>	<p>Re-enter new PIN for followed by ENTER for final confirmation</p>	<ul style="list-style-type: none"> • Re-enter the new 4-digit PIN • Press ENTER for final confirmation (One beep indicates that you entered a valid PIN, two beeps indicate that an invalid operation was performed).

3.1.1 Use Smart Halo App to set up or set up with the panel keypad

Smart Halo Set-up Guide

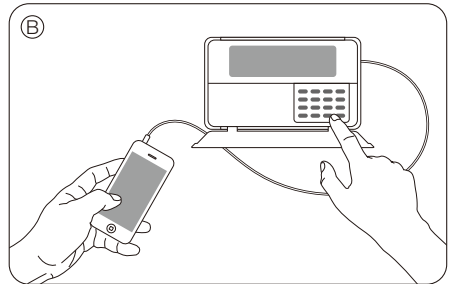
Download "Smart Halo" app on App StoreSM or Google PlayTM.



Download and Install 'Smart Halo' App
on your smartphone or tablet



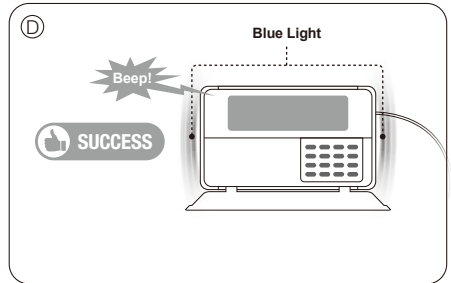
Turn audio volume to maximum



Connect the cable and enter the default
PIN #1234, press ENTER



Launch Smart Halo App to start setting up



The panel LED will turn Blue upon successful set-up,
retry if no signal

Instructions:

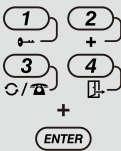
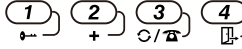

- You can now complete your setting for various modes: Home, Alert, Arm and Standby with the App
- You may also set up your system directly with the panel keypad
- App is used for system setting only. It is not a remote control for system operation
- System alerts will be communicated via PSTN network

3.2 Operating different modes

The system has 4 operating modes (STANDBY, ARM, ALERT, and HOME) to suit individual requirements. These modes can be set as follows:

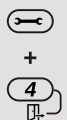






3.2.1 STANDBY mode

If in STANDBY mode, the Smart Halo Panel is prepared for mode selection

Keys	Description	Note
	<p>You must be in STANDBY mode before turning to ARM mode</p>	<ul style="list-style-type: none"> To make sure you are in STANDBY mode: Enter the default PIN  OR your new 4-digit PIN Press . The Smart Halo Panel will display the below image while you were in STANDBY mode: <div data-bbox="709 478 993 558" style="border: 1px solid black; padding: 5px; display: inline-block;"> 1 2 3 4 5 6 7 8 * </div> <p>(One beep indicates that you entered a valid PIN, three beeps indicate that an invalid operation was performed).</p>










A. Adjusting Exit Delay

The default setting of the Smart Halo Panel allows the user 20 seconds to exit the property before the alarm is ARMED. However, this Exit Delay can be adjusted to between 10 and 60 seconds as follows, make sure you are in standby mode before the setting.

Keys	Description	Note
	<p>Press  then  (as many times as required) to set the new Exit Delay</p>	<ul style="list-style-type: none"> When  is pressed the first time the Smart Halo Panel flashes with the number of seconds currently set for the Exit Delay(The factory default setting is 20 seconds) Each time  is pressed the Exit Delay is increased by a further 10 seconds between the adjustable range of 10 to 60 seconds <div data-bbox="682 1037 966 1117" style="border: 1px solid black; padding: 5px; display: inline-block;"> 1 2 3 4 5 6 7 8 60 </div> <ul style="list-style-type: none"> The Exit Delay time on the LCD display will flash until the setting is completed
	<p>Press  to complete the setting</p>	<p>Confirm the setting and return the Smart Halo Panel to STANDBY by pressing</p>










B. Adjusting Entry Delay

The default setting of the Smart Halo Panel allows the user 30 seconds to enter the property and DISARM the alarm before it is triggered. However, this Entry Delay can be adjusted to between 10 and 60 seconds as follows, make sure you are in standby mode before the setting.

Keys	Description	Note
 + 	Press  then  (as many times as required) to set the new Entry Delay	<ul style="list-style-type: none"> When  is pressed the first time the Smart Halo Panel flashes with the number of seconds currently set for the Entry Delay (The factory default setting is 30 seconds) Each time  is pressed the Entry Delay is increased by a further 10 seconds between the adjustable range of 10 to 60 seconds <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> 1 2 3 4 5 6 7 8 60 </div> <ul style="list-style-type: none"> The Entry Delay time on the LCD display will flash until the setting is completed
	Press  to complete the setting	Confirm the setting and return the Smart Halo Panel to STANDBY by pressing 

C. Adjusting the Alarm Duration

The default setting of the Smart Halo Panel gives an alarm duration of 1 minute after being triggered. However, this alarm duration can be increased up to 6 minutes, make sure you are in standby mode before the setting.

Keys	Description	Note
 + 	Press  then  (as many times as required) to set the new Alarm Duration	<ul style="list-style-type: none"> When  is pressed the first time the Smart Halo Panel flashes with the number of minutes currently set for the Alarm Duration (The factory default setting is 1 minute) Each time  is pressed the alarm duration is increased by a further minute up to a maximum of 6 minutes <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> 1 2 3 4 5 6 7 8 06 </div> <ul style="list-style-type: none"> The Alarm Duration on the LCD display will flash until the setting is completed
	Press  to complete the setting	Confirm the setting and return the Smart Halo Panel to STANDBY by pressing 


3.2.2 ALERT mode

If in Alert mode, the Smart Halo Panel chime will sound and the Smart Halo Panel flashes GREEN every 1.5 seconds with the triggered zone indicated, when the system detects a visitor in the protected area.

ALERT mode default setting:

Sensor	Zone	Status (mode)
Door/Window Sensor	1	ALERT
Door/Window Sensor	2	ALERT
Motion Sensor	8	ALERT

A. Entering ALERT mode

- On the Key Fob Remote: Press  to activate.
- On the Smart Halo Panel: First make sure the Smart Halo Panel is in STANDBY mode, and then enter into ALERT mode by taking the following steps:

Keys	Description	Note
	Enter 4-digit PIN, press ENTER and for ALERT mode	<ul style="list-style-type: none"> The system will then enter ALERT mode If the Zone is enabled, a number will appear as displayed in the image as: (Factory default)



B. Exiting the ALERT mode

- On the Smart Halo Panel: Enter your 4-digit PIN followed by **ENTER** to exit ALERT mode.
- On the Key Fob Remote Control: Press to exit ALERT mode.

C. Zone settings

Programming each zone in ALERT mode, make sure you are in standby mode before the setting.

Keys	Description	Note
	Press ENTER then to set the ALERT Mode	<ul style="list-style-type: none"> Toggle 1, 2, 3, 4, 5, 6, 7, 8 to turn each zone ON or OFF If no number appears, the zone is turned OFF If all zones are enabled, the Smart Halo Panel will display the image as:
	Press ENTER to complete the setting	Confirm the setting and return the Smart Halo Panel to STANDBY by pressing ENTER



3.2.3 HOME mode

There are default settings that allow the system to operate after opening the package. These settings can be adjusted to suit your individual requirements. The HOME mode allows the system to operate in both the ARM and ALERT modes in different zones.

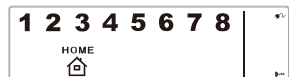
HOME mode default setting:

Sensor	Zone	Status (mode)
Door/Window Sensor	1	ALERT
Door/Window Sensor	2	ALERT
Motion Sensor	8	ARM

A. Entering the HOME mode

- On the Key Fob Remote Control: Press to activate.
- On the Smart Halo Panel: First make sure the Smart Halo Panel is in STANDBY mode, and then enter HOME mode by taking the following steps:

Keys	Description	Note
	Enter 4-digit PIN, press ENTER and for HOME mode	<ul style="list-style-type: none"> Then system will enter HOME mode If the Zones are enabled, a number will appear as displayed in the image below: (factory default)








B. Exiting the HOME mode

- On the Smart Halo Panel: Enter your 4-digit PIN followed by **ENTER** to exit HOME mode.
- On the Key Fob Remote Control: Press **ENTER** to exit HOME mode.

C. Zone settings

Programming each zone in HOME mode, make sure you are in standby mode before the setting.

Keys	Description	Note
 + 	Press  then  to set the HOME mode	<ul style="list-style-type: none"> • Toggle 1, 2, 3, 4, 5, 6, 7, 8 to turn each zone in different mode • 1 Indicates ALERT mode for a zone • 1 Indicates ARM mode for a zone Below image for e.g.: Zone 1 、 3 、 4 ALERT Zone 2 、 6 、 8 ARMED Zone 5 and 7 is OFF
	Press ENTER to complete the setting	Confirm the setting and return the Smart Halo Panel to STANDBY by pressing ENTER



3.2.4 ARM mode










ARM mode default setting:

Sensor	Zone	Status (mode)
Door/Window Sensor	1	ARM
Door/Window Sensor	2	ARM
Motion Sensor	8	ARM

A. Arming the system

On the Key Fob Remote Control: Press **ARM** to ARM the system.

On the Smart Halo Panel: First make sure the Smart Halo Panel is in STANDBY mode, and then ARM the system by taking the following steps:

Keys	Description	Note
  +   +  + 	Enter the default PIN, press ENTER and ARM for ARM mode	Exit delay: up to 20 seconds <ul style="list-style-type: none"> • There is a 20 second exit delay time with a visual and audible (beeping) countdown before the system is armed. (Press  to disable the beeping countdown, press  again to resume the beeping) • If the Zone is enabled, a number will appear as displayed in the image below:
		 <ul style="list-style-type: none"> • The system will then enter ARM mode after 20 seconds.

When in ARM mode, the Smart Halo Panel flashes RED every 5 seconds, acting as a deterrent to potential intruders. However, if an intruder is detected the panel continuously and rapidly flashes RED.






Once an intrusion has occurred (with the zone triggered under ARM status), the alarm siren will sound and the Smart Halo Panel flashes RED every 1.5 seconds with the triggered zone indicated. After the initial triggering, the alarm will immediately sound, without delay, if any other sensors are triggered.

B. Disarming the system

- On the Smart Halo Panel: Enter your 4-digit PIN followed by **ENTER** to disarm the system.
- On the Key Fob Remote Control: Press **⏏** to disarm the system



C. Zone settings

Programming each zone in ARM mode:

Keys	Description	Note
 + 	Press  then  to set the ARM mode	<ul style="list-style-type: none"> • Toggle 1, 2, 3, 4, 5, 6, 7, 8 to turn each zone ON or OFF • If no number appears, the zone is turned OFF • If all zones are enabled, the Smart Halo Panel will display the image as: 
ENTER	Press ENTER to complete the setting	Confirm the setting and return the Smart Halo Panel to STANDBY by pressing ENTER

D. Triggers in ARM mode

Example: Zone 1 trigger

Description	Note
Under the “ARM” Mode	<ul style="list-style-type: none"> • The Smart Halo Panel will display the below image: 
System trigger	<ul style="list-style-type: none"> • One beep indicates that the system is triggered.
Entry delay 30 seconds	<ul style="list-style-type: none"> • There are 30 seconds of entry delay time with a visual countdown for disarming. • Once an intrusion has occurred (zone triggered under ARM status), the alarm siren will sound for 1 minute and the Smart Halo Panel flashes RED every 1.5 seconds with the triggered zone indicated, until the system is disarmed. *To disarm the system, enter the 4-Digit PIN or press  on the remote control.
Return to ARM mode after the initial triggering	After the initial triggering, the alarm will immediately sound, without delay, if any other sensors are triggered.

3.3 Introduction of Key Fob Remote Control

A. Introduction

The Red Shield SMART HALO Home Protection System Remote Control allows you to operate the systems Smart Halo Panel remotely, from inside or outside the property. Using the control the system can be armed or disarmed and the siren can be activated instantly if required (using the Panic function).








B. Operation

i. Powering up the Key Fob Remote Control

The Remote Control includes a 12V alkaline battery. To activate, unscrew and remove the back of the Remote Control, and carefully remove the clear plastic insulation tab from the battery. If the battery is dislodged, replace it noting the correct polarity as shown inside the battery compartment. Replace the battery cover.

ii. Enrolling the Remote Control onto the Smart Halo Panel

Note: Before being able to use the Key Fob Remote Control supplied with the system, or any additional Remote Controls, they first need to be enrolled (added onto the system) as follows, make sure you are in standby mode before the setting.

Keys	Description	Note
 +  +	Press  then  to enter the Remote Control Enroll mode. Then press any key on the new Remote Control to enrol it onto the system	<ul style="list-style-type: none"> • LCD display flashes the ID no. of the remote to be enrolled e.g. when enrolling the first remote ID no. "01" will flash. Once the first remote is enrolled the "02" will flash ready for a second remote to be enrolled (One beep indicates that the remote was enrolled to the Smart Halo Panel successfully) <div style="border: 1px solid black; padding: 5px; display: inline-block;"> 1 2 3 4 5 6 7 8 02 </div> <p>Note: It is recommended that the ID No. is marked on the remote in case it needs to be deleted at a later stage</p>
	Press  to complete the setting	Confirm the enrolment and return the Smart Halo Panel to STANDBY by pressing 

iii. Operating the Key Fob Remote Control

The remote can be used to arm, disarm, and operate the system instantly.

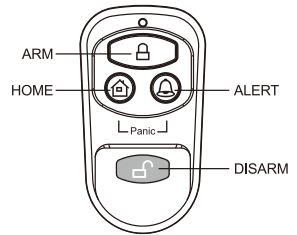
ARM – Pressing the ARM button on the remote will arm the system, triggering the preset exit delay. When triggered the Smart Halo Panel's LED light will flash Red and indicate the triggered zone.

DISARM – Pressing the DISARM button on the remote will disarm the system instantly and the system will return to Standby mode.

ALERT – Pressing the ALERT button on the remote will put the system into Alert mode and a chime will sound if any of the sensors are triggered. The Green light on the Smart Halo Panel LED display will flash and indicate the triggered zone.





HOME – Pressing the HOME button on the remote will set the system in Home mode which will operate the system in both Arm and Alert modes in different preset zones.

PANIC – If the HOME and ALERT buttons are pressed together the systems alarm is immediately activated.







iv. Deleting a Remote Control from the Smart Halo Panel

If a Remote Control device is damaged or lost, it can be deleted from the system as follows, make sure you are in standby mode before the setting.

Keys	Description	Note
 +  -	Press  then  to enter the Remote Control Deleting mode. Then input the ID no. of the Remote Control you wish to delete from the system	<ul style="list-style-type: none"> • LCD display flashes the total number of remote currently enrolled to the system(e.g. If the Smart Halo Panel has 3 remotes enrolled the LCD display will flash "03") <div style="border: 1px solid black; padding: 5px; display: inline-block;"> 1 2 3 4 5 6 7 8 03 </div> <ul style="list-style-type: none"> • Input the remote ID no. (e.g. "02") for the remote you wish to delete (Inputting "00" will delete all remote controls) • LCD display will then flash the total number of remotes enrolled after deletion(One beep indicates that the remote was successfully deleted from the Smart Halo Panel)

ENTERPress **ENTER** to complete the settingConfirm the enrolment and return the Smart Halo Panel to STANDBY by pressing **ENTER****v. Querying the ID Number of a Remote Control**

The ID number of a Remote Control device can be identified as follows:




Keys	Description	Note
 + 	Press  then  to go into Remote Querying mode, and then press any key on the remote to check its ID.	<ul style="list-style-type: none"> After entering into Remote Querying mode, the LCD display will flash the total number of remote controls currently enrolled to the system <div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 10px 0;"> 1 2 3 4 5 6 7 8 03 </div> <ul style="list-style-type: none"> (e.g. If 3 remotes are enrolled the LCD display will flash "03") The ID No. of the Remote can then be checked by pressing any key on the remote (e.g. if the LCD display flashes "02" then that is the ID of the remote)
ENTER	Press ENTER to complete the setting	Complete the query and return the Smart Halo Panel to STANDBY by pressing ENTER

3.4 Programming the built in Auto Dialer**3.4.1 Built in Auto Dialer**

The Auto-Dialler is designed to allow a pre-recorded message to be transmitted to up to 8 pre-programmed telephone lines when triggered. The device allows limited two way communication to help those in the household to communicate with the alerted individuals. This feature is activated when the Red Shield alarm system is activated.

3.4.2 Telephone number + Dialing cycle




Program mode allows you to change recipient contact numbers (up to 8) as well as change the number of dialing cycles (attempts to call each recipient). To use Program mode please follow the instructions:

- Key in the PIN and press **ENTER**
-  + 
- Set the recipient contact number keep on setting mode
- Press key 1-8 location recipient and key in the telephone number desired (Up to 15 digits)
- Press **ENTER** to repeat step to entry number of recipient once all recipient number is done
- To change dialing cycle key in  and press any numerical key 1-9
- The default number is 3 but can be from 1 to 9 times, press **ENTER**
- Press **ENTER** to exit in standby mode

3.4.3 Query Mode

Query mode allows you to inspect which recipient lines correspond to which number.

A.To inspect numbers in the memory enter Query mode and look:

- Key in the PIN and press **ENTER**
- Press  SETTINGS and  (Query mode)
- Select  to observe "look"
- Press numbers 1-8 to see which numbers are stored in memory

- Press **ENTER** to exit in standby mode

B. To delete an entry you will need to enter the same mode and select delete:

- Enter PIN and **ENTER**
- Press **←** SETTINGS and **6** (Query mode)
- Press **5** to delete
- Pressing numbers 1-8 will delete that entry. Ensure that you are sure that the corresponding number is the number you wish to remove
- Press **ENTER** to exit in standby mode

3.4.4 Record + Playback Mode

To prerecord a message for the intended recipients please enter the following:

- Key in the PIN and **ENTER**
- Press **←** and **9** (Playback mode)
- Press **2**
- Press **2** again to start recording for up to 20 seconds
- You may press **2** during this recording to stop recording
- Press **5** to hear the voice recording
- Press **ENTER** to exit in standby mode

3.4.5 Instructions for Recipients of Emergency Auto Dialer

It is important that recipients of the Auto Dialler are informed on the correct procedures to follow when they receive a recorded message.

- After having full listened to the recorded message, press the hash key (#) to confirm that the message is NOT merely delivered to a voicemail. This will terminate the connection for all existing call and the remaining calls in the recipient list.
- The recipient can then activate the listening in function by keying '1' within 10 seconds of the end of the recorded message or '#'. This will last up to 60 seconds.
- The recipient can also activate the speaker function by keying in '3' within 10 seconds of the end of the recorded message or '#'. This will last up to 60 seconds.

By alternating between '1' and '3' the recipient can interact with any individual near the Auto Dialler. As long these keys are repeatedly keyed in within a 60 second interval the connection will remain active. The line will disconnect if no keys have been pressed within 60 seconds.

3.4.6 Inactivating the Auto Dialer after an Alarm

The Auto dialer will continue dialing the numbers until the call is answered.

The recipient can stop the Auto dialer by waiting until the message has finished, and pressing (#) this will stop the auto dialer from calling all remaining phone numbers

As this termination stops the Auto dialer from calling anymore phone numbers, the recipient must know the exact situation before terminating it.



If the recipient is unable to cancel the alarm the alternative to deactivate the Auto Dialler is to cut off the mains power as well as removal of the back-up battery in the device.

3.4.7 Muting the Audible Countdown

When the Smart Halo Panel is ARMED the audible countdown (beeper) can be silenced by pressing the **⏏** button, during the countdown. To reactivate the audible countdown (beeper) simply press the **⏏** button again.

3.5 Transmitting an emergency (Panic) alarm

3.5.1 Using the Panic alarm

Pressing  &  buttons together on the Keypad or Key Fob Remote Control will immediately transmit an alarm signal to the Smart Halo Panel, activating the siren, and transmitting an alarm signal to any optional response devices (Auto Dialer & Outdoor Bell Box), to request emergency assistance

To disarm the Panic alarm

On the Smart Halo Panel: Enter your 4-digit PIN followed by  to exit from the Panic alarm.

On the Key Fob Remote Control: Press  to exit from the Panic alarm.

3.5.2 Using the Panic alarm without activating the siren

If you are forced to disarm the system, enter the Duress Password to stop the siren from sounding. The Smart Halo Panel will then silently transmit an alarm signal to the optional response devices (Auto Dialer & Outdoor Bell Box) to request emergency assistance.

Duress Password:

Enter the default 4-digit PIN +  (+     + ) + 

OR

Enter your personalised 4-digit PIN +  + 

SECTION 4 – INSTALLING THE SENSORS

4.1 Introduction to the Sensors

This package includes 3 wireless sensors which have a pre-programmed default setting that begins working immediately once the battery is activated. It is advisable to install the main package first and then personalise the settings once the system is functioning properly. This section should help you to change the system settings in order to create a more personal home environment.

4.2 Installing the Sensors

First, determine the location of the sensors.

*Note: The sensors should be placed:

- where they are not easily accessible.
- in the most vulnerable rooms or near key entry points.
- away from extreme temperature sources (radiators, ovens, stoves etc.) and large metal objects that could interfere with the wireless performance.
- where better RF performance can be achieved (if necessary).

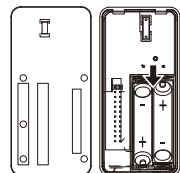
Once you have selected a location for the sensors, the system can be powered up.

4.2.1 Installing the Door/Window Sensor

The Door/Window Sensor consists of two parts, a transmitter and a magnet. Once this sensor is installed, and the two parts are fastened onto the door or window, the sensor will trigger and transmit a message to the Smart Halo Panel when the door or window is opened. One Door/Window Sensor is pre-programmed in Zone 1 and the other one is set in Zone 2; however, these settings can be adjusted according to your requirements.

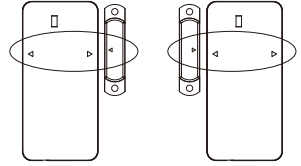
A. Powering up the the Door/Window Sensor

- Remove the battery cover; insert new batteries noting the polarity as shown in the diagram below and replace the cover. (Requires 2 x AAA batteries)
- Low battery indication: If the batteries need to be replaced, the RED LED on the transmitter will flash slowly.



B. Installing the Door/Window Sensor

- Mount the transmitter on a fixed surface such as a door or a window frame.
- Mount the magnet on a movable surface such as a door or a window.
- Ensure the >/< marks on the sides of the transmitter and magnet match up as shown in the diagram.
- The transmitter and the magnet must be no more than 5mm apart



C. Mounting with the double-sided adhesive pad

- Ensure the mounting surface is clean.
- Peel back one layer of the protective film and attach it to the transmitter.
- Peel back the remaining layer of protective film and press the transmitter firmly in place against the mounting surface until firmly attached.
- Repeat to attach the magnet.

4.2.2 Installing the Motion Sensor

The Motion Sensor is designed to sense movement in a given area.

Note: It is best if pets are not allowed onto higher surfaces so that the sensors are not triggered unnecessarily (no more than 1 metre high).

A. Powering up the Motion Sensor

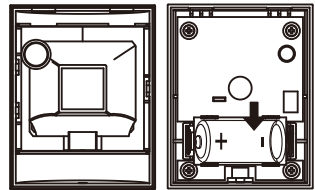
- Remove the battery cover, insert and connect a 3V (CR123A) battery as shown in diagram below and replace the cover. Requires 1 x 3V (CR123A) battery
- Low battery indication: If the batteries need to be replaced, the RED LED will flash (not including entry / exit delay flashing).

B. Installing the Motion Sensor

First, determine the location of the Motion Sensor.

*Note: The Sensor should be placed:

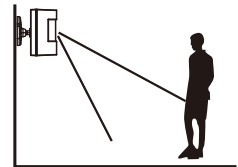
- in the most vulnerable rooms or near key entry points.
- on a solid surface between 1.8m to 2.4m (6ft to 8ft) from the floor.
- away from extreme temperature sources (radiators, ovens, stoves etc.)
- away from direct sunlight.
- indoors only and not behind partitions
- where better RF performance can be achieved (if necessary)



C. Sensor sensitivity

IMPORTANT! The Motion Sensor is designed with a power saving program and will remain inactive for 3 minutes after each detection. Please bear this in mind during system set up.

The sensitivity of the Motion sensor is adjustable and can be changed by setting the connector, found in the battery compartment, on either the 'High', 'Middle' or 'Low' position. When the sensitivity is set to "Low", more movement is required to trigger the sensor. It is recommended to set the sensitivity to "Low" and perform a "Walk Test" (Described in part D). If the walk test result is satisfactory, the sensitivity does not require further adjustment. If the walk test result shows the sensitivity is too low, then the sensitivity can be set to "Middle" or "High" as required. It is recommended that a walk test be conducted after each change in sensitivity setting. Test the Motion Sensor by pressing the test button inside the battery compartment.



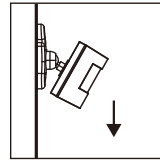
D. Walk test

After mounting the sensor at the desired location, it is important to perform a walk test in order to determine if the sensor is detecting the correct area.

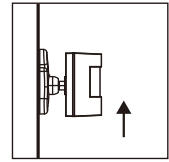
The distance at which the sensor can detect motion can be adjusted by altering the angle of the sensor.

To reduce the detection range, simply move the sensor downward and move the sensor upward to maximize the range.

Note: Enter into ALERT mode before you perform the walk test, so that the alarm is not triggered.



Move the sensor downward to reduce the range.



Move the sensor upward to maximize the range

You should walk in the area that you would like the sensor to monitor. If movement is detected the red light inside the unit will appear. If the red light does not appear, adjust the mounting angle accordingly. Perform the walk test again after 3 minutes. Repeat this procedure until motion is detected. Whilst carrying out the test, there should be no movement in the detection area during the 3 minute interval.

* Tips: The sensor should not face towards direct sunlight, be placed near heat or cold producing devices (i.e. air conditioning, radiators, fans, ovens, heaters etc.) that may cause false triggers. Also perform the walk test in areas which the sensor is not intended to cover, to ensure movement cannot be detected.

E. Mounting using screws

- Hold the enclosed mounting template against the wall at the selected location and mark the points for drilling.
- Drill the holes and insert wall plugs.
- Attach the bracket to the mounting surface with the screws provided.
- Attach the Motion Sensor to the mounting bracket.

4.3 House Security Code settings

In most cases the factory settings of the House Security Code will NOT need to be changed. However, if the Smart Halo Panel and Sensors activate intermittently or do not work at all, this may be due to interference with other systems, which can be avoided by changing the House Security Code. To change this code, take the following steps with each system module:

- 1) There are 4 Jumpers/Dip-switches on each device. To locate these remove the battery compartment cover.
- 2) Then set the Jumpers as shown below (ON-Push in / OFF –Pull out) to change the House Security Code setting. Make sure the Jumpers on the Smart Halo Panel and its Sensors exactly match each other AND the Dip-switch setting on the Key Fob Remote Control.

Jumpers for House Security Cod



- Smart Halo Panel
- Each sensor
- Default House Security Code:
1: ON, 2: ON, 3: ON, 4: ON
- *Jumper: ON = Pushed in, OFF = Pulled out

Dip-switches for House Security Code



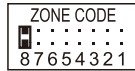
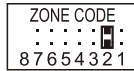
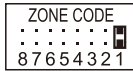
- Key Fob Remote Control
- Default House Security: 1: ON, 2: ON,
3: ON, 4: ON

4.4 Zone Code settings

In most cases the factory settings of the House Security Code will NOT need to be changed. However, if the Smart Halo Panel and Sensors activate intermittently or do not work at all, this may be due to interference with other systems, which can be avoided by changing the House Security Code. To change this code, take the following steps with each system module:

- 1) There are 4 Jumpers/Dip-switches on each device. To locate these remove the battery compartment cover.
- 2) Then set the Jumpers as shown below (ON-Push in / OFF –Pull out) to change the House Security Code setting. Make sure the Jumpers on the Smart Halo Panel and its Sensors exactly match each other AND the Dip-switch setting on the Key Fob Remote Control.

Jumper for Zone Code



Default zone code:

Door/Window sensor – Zone 1

Door/Window sensor – Zone 2

Motion sensor – Zone 8

SECTION 5 – TROUBLESHOOTING

5.1 FAQs

Q.1: What is the best way to set up my system? Where should I put my Smart Halo Panel and the sensors?

A.1: We recommend that you take some time in advance to think about the placement of the Smart Halo Panel and Sensors. The best location for the Smart Halo Panel is usually by the main entry/exit point, in a hallway, or in another central location in your home. However, it must be plugged into a power socket, which may dictate where it can be placed.

- Please note that the alarm is pre-programmed with default settings, allowing you a pre-determined amount of time to enter (30 seconds) and time to exit (20 seconds) before the alarm sounds. front door you can either change the default setting to allow more time to enter/exit your home or, alternatively use the Key Fob to disarm the system.

Q.2: How many Sensors can the Smart Halo Panel support?

A.2: An unlimited number of sensors can be supported by the system, added to different zones in your house, as you see fit.

Q.3: What wireless range should I expect from Sensors?

A.3: The range will vary depending on the type of structure; however, in an open space, the sensors should be capable of transmitting a signal up to 150 meters from the Smart Halo Panel. Determine the location of the sensors first and change to a different location for better RF performance.

Q.4: How do I attach my Sensors?

A.4: Adhesive tape and screws are provided for the purpose of securely mounting these items. Please refer to the user guide for more information about mounting the Smart Halo Panel and the wireless sensors.

Q.5: Do I have to programme the Smart Halo Panel?

A.5: The SMART HALO Home Protection System is designed for easy installation. This means that the wireless sensors are in a default setting already registered to the Smart Halo Panel and will therefore function immediately after the sensors are powered up. If you choose to buy additional accessories, these will need to be added to your system using the easy to follow instructions.

*Note: Due to the strong signal of the alarm, we advise that you change the House Security Code settings following section 4.3 of this manual, if you suspect that one of your in-range neighbours may also be using this alarm system.

Q.6: Can I still use the same system if I move?

A.6: The SMART HALO Home Protection System is completely portable. If you move, you can remove your Smart Halo Panel and wireless accessories and re-install them in your new property.

Q.7: What if I forget my PIN?

A.7: If you forget your PIN, you may press the "Reset" button inside the battery compartment of the Smart Halo Panel

and the PIN will be reset to the factory default PIN 1234.

Q.8: Why does my Motion Sensor not respond to movement?

A.8: Motion Sensor are very sensitive so to preserve battery life the Sensor will go to "Sleep" after an event has been identified and reported to the panel. This "Sleep" period lasts 3 minutes, after which, if no activity is detected, the Motion Sensor will again become active and ready to detect other events.

Q.9: Why does my Motion Sensor keep generating false alarms?

A.9: If you have a pet, make sure they have not triggered the system. Remember, sensitivity to pets increases in certain circumstances e.g. the nearer the pet to the Sensor.

Q.10: How can I synchronize my smartphone clock with the Smart Panel clock?

A.10: When you start setting up your phone number, your smartphone app will not start to synchronize the clock with the panel. The clock synchronization will only be done during basic set-up and zone set-up sections with the smartphone app.

5.2 Troubleshooting

AC power failure:

This may occur if your security system is accidentally unplugged or if there has been a mains power cut. If a full power failure occurs, please contact your electric company to find out the source of the problem. The back-up battery will continue to run the system for approximately 6 hours.

System battery failure:

This may occur if the emergency back-up battery has been drained and needs to be replaced. If AC power is not restored, the low battery symbol will flash indicating that the Smart Halo Panel back-up battery is running low.

The back-up battery should be replaced once the low battery symbol appears.

Sensor failure:

This may occur if a sensor is not communicating with the Smart Halo Panel. It is necessary for you to ensure the House Security Code dipswitch and jumpers of the sensors are set correctly to the Smart Halo Panel.

Smart Halo Panel power saving:

In order to save battery power, the blue light surrounding Smart Halo Panel will not turn on if a battery is used. The blue light will only be turn on if the AC adaptor is connected to Smart Halo Panel.

SECTION 6 – GENERAL INFORMATION

6.1 Product Information

Wireless systems are reliable and tested to high standards; however, it is important to consider that there are some limitations due to their transmitting power and range:

- Receivers may be blocked by radio signals occurring on or near operating frequencies, regardless of the code selected.
- A receiver can only respond to one transmitted signal at a time.
- Wireless equipment should be tested regularly to determine whether there are sources of interference and to protect against faults.

6.2 Specifications

6.2.1 Smart Halo Panel

Power source:	AC adaptor
Back up power:	9V battery x 1pc
Sensor numbers:	Unlimited
House Code:	4 Jumpers
Operating frequencies:	433.92MHz +/-0.5MHz
Siren output:	120dB (Duration-adjustable)

6.2.2 Key Fob Remote Control

Power source:	12V alkaline battery x 1pc
RF working transmission frequency:	433.92MHz +/-0.5MHz
House Code:	4 Jumpers
Wireless range to Smart Halo Panel:	<65 meters (open area)

6.2.3 Door/Window Sensor

Power source:	AAA alkaline battery 1.5V x 2pcs each
RF working transmission frequency:	433.92MHz +/-0.5MHz
House Code:	4 Jumpers
Zone Code: Pin header:	8 pin
Wireless range to Smart Halo Panel:	≥100 metres (open area)

6.2.4 Motion Sensor

Power source:	CR123A battery x 1pc
RF working transmission frequency:	433.92MHz +/-0.5MHz
PIR detection angle:	>100 Degree (@3VDC)
PIR detection range:	"H":≥ 13M "M":≥ 8M "L":≥ 5M
House Code:	4 Jumpers
Zone Code:	Pin header: 8 pin
Wireless range to Smart Halo Panel:	≥100 metres
Power saving timer:	3 minutes

6.3 Maintenance

The product may be cleaned with a soft damp cloth and then wiped dry. Do not use abrasive, solvent based or aerosol cleaners as this may damage and/or discolour the product. Do not allow water to enter or attempt to clean the inside of the unit.

6.4 Batteries

- Do not allow batteries to corrode and leak as this may cause permanent damage to the product. Take care to insert the batteries with the correct polarity as shown inside the battery compartments.
- Do not mix new and old batteries or different types of batteries.
- Do not fit rechargeable batteries.
- At the end of their useful life the batteries should be disposed of via a suitable Recycling Centre. Do not dispose of with your normal household waste. DO NOT BURN.



SMART HALO

Wire-Free Home Alarm System with Phone Dialer



Smart Halo Home Alarm System guarantees peace of mind. Compatible with a wide range of sensors and accessories from **Red Shield**, the system can work under various conditions protecting your home anytime.



Outdoor Bell Box



Flood Sensor



Garage Door Sensor



Shock Sensor



Siren Sensor



Pet Immune Motion Sensor



Occupancy Sensor



Wireless Keypad Control



Outdoor Weatherproof Sensor



Indoor Siren



UPS



Mist Sensor