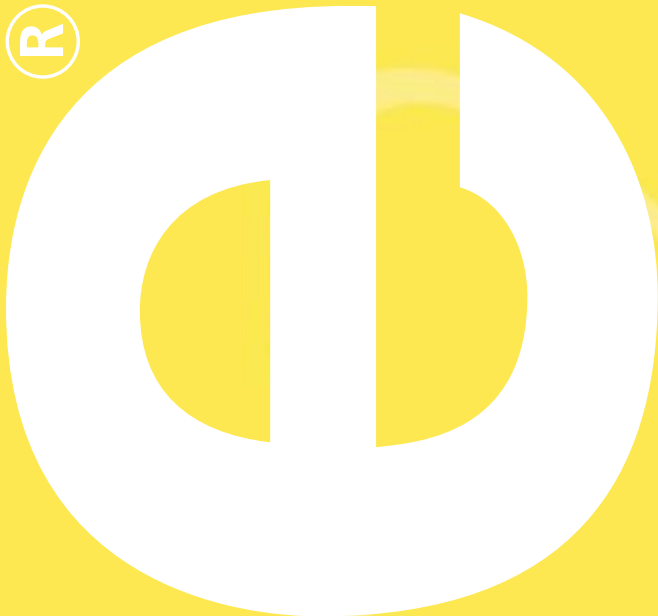®

HSA3500

Wirefree communicating alarm system

Installation

Programming

Operating

Keep in a handy place for reference and for future maintenance

Helpline 01902 635998

Introduction

General system overview

Thank you for choosing the Yale HSA3500 Security Alarm System. This simple to install system has been designed with the user in mind.

Two window stickers are included in the pack. Please stick them in a front and rear window.

No connections

All the components are self contained and normally no connections are needed between the units. There is no need to damage the home decor, lift carpets or run cables.

Number of devices

You can install up to 20 devices in the system. This includes accessories such as smoke detectors, keypad remote controls and help watches.

Long battery life

All the components are battery operated with batteries included and so avoids wiring into the 230V mains supply and requiring the services of a qualified electrician.

Alkaline batteries must be used as replacements. Regular testing and battery changes (when notified by the system) will ensure reliability and peace of mind.

Tamper proof system

The security detectors and external siren are 'tamper' protected. Any unauthorised interference with these items will result in an alarm. This feature can be turned off by the user when a battery change is required.

Unique telephone links

The siren has a sounder and strobe. If for any reason it is not responded to, the system will phone six allocated numbers to secure a response. The system includes six credit card sized quick reference cards, so you can distribute them amongst the people who will receive the calls, including yourself.

The system allows you to dial into your home and have control of the system from anywhere in the world. This innovative feature allows the kind of flexibility and control we have come to expect in this day and age. The system can only be operated via telephone with your unique PIN number. It is important to ensure that you keep this number secure.

Home and away

The system allows for different arming modes. The 'home' mode allows you to arm the system in such a way that you can protect the non-sleeping areas, such as downstairs, allowing access from the bedroom to the bathroom for example, without triggering the alarm.

Take care of your safety

Display extreme caution when using ladders or steps, please follow manufacturer instructions.

Be careful when using hand and power tools and follow the manufacturers' guidelines when using them. Take care that the correct tools are used. Wear goggles or protective clothing where required.

The external Siren is extremely loud, please ensure you replace the cover and retreat to a safe distance before testing.

Warranty

Please complete and return the warranty card. You will then be sent your certificate and number. Yale offer extended periods of warranty, please see warranty card for details.

Calling for help

Yale have a helpline team who are there to offer advice or solve problems over the phone.

Have your certificate number ready.

Helpline 01902 635998

Caution

The dialling facilities must only be used with persons who have consented to being contacted by the user's system.

The system is not to be used to make 999 emergency calls directly. Yale do not hold responsibility for any actions taken by emergency services for incorrect use of the dialling facility.

Contents

Recommended installation sequence

We recommend you follow the simple install sequence, headings numbered 1-5.
Subsequent sections provide:
• Use of additional accessory devices including keypad and keyfob remote controls, fire alarm and help watch
• Telephone connection
• Advanced protection and features

Carton contents

Control unit and mounting base
External siren
PIR
Door contact
Door contact magnet

500mA 9V power adapter
3-metre telephone cable
2-way telephone adapter

Rechargeable battery pack
2 x 1.5V AAA alkaline cells
3 x 1.5V AA alkaline cells
4 x 1.5V D alkaline cells

Large adhesive pad
Small adhesive pad
2 x small wall plugs
8 x medium wall plugs
4 x large wall plugs
4 x 4mm x 30mm cross head fixing screws
2 x 3.5mm x 22mm cross head fixing screws
6 x 3.5mm x 16mm cross head fixing screws
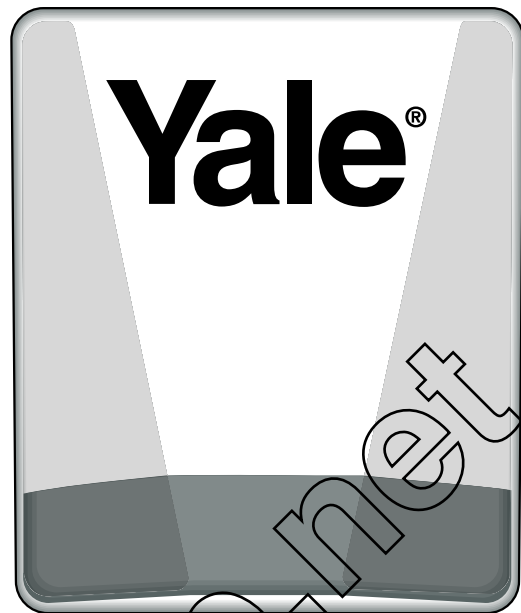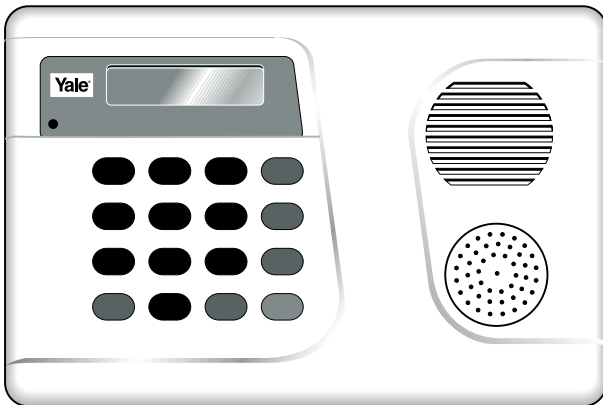2 x 3mm x 12mm cross head fixing screws

2 x window stickers
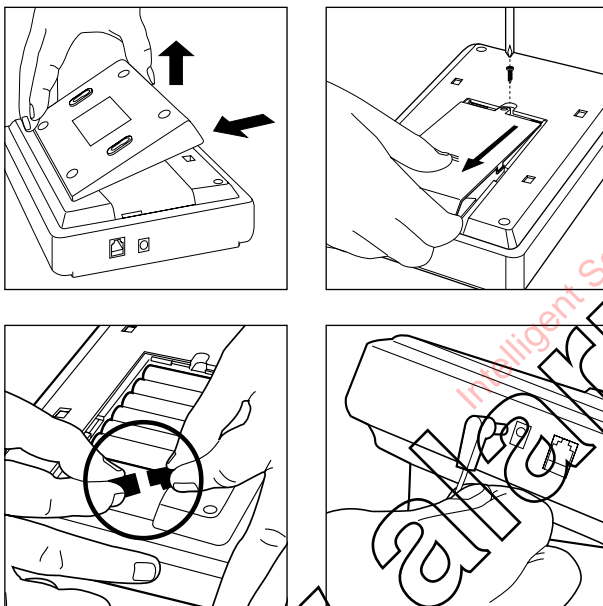6 x quick reference cards

Contents

1 Unpack all the parts onto a table top

The easiest way to get to know the system and get it up and running quickly is to get all the devices and accessories programmed on a table top before locating and mounting them.

Control unit

Remove the mounting base and back cover, insert the battery pack and connect as shown.
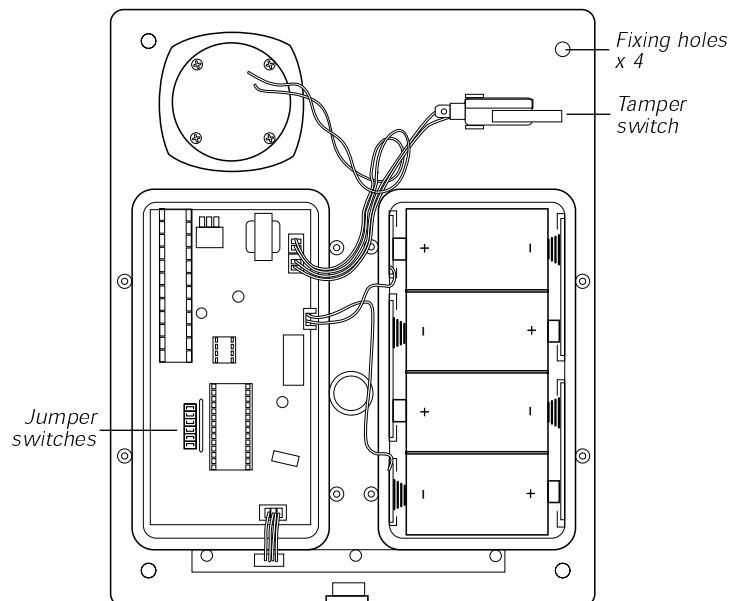

Plug the power adaptor into the mains supply wall socket and the other end into the control unit. Replace the back cover.

- The batteries in the control unit are rechargeable and act as a back-up in case of power failure. They are charged automatically by the mains supply. If the mains supply is disconnected, an AC Power Fail message will be displayed and the LCD back light will be switched off.
- The batteries need 72 hours to charge completely.

Siren

WARNING
The siren is very loud, be prepared for a loud noise. Take care not to activate the siren unnecessarily.

1 Remove the cover by unscrewing the single screw located at the bottom.
2 Remove the covers of the two internal compartments.
3 Insert the four D batteries as shown.
There is a slight pause while the unit initialises. The siren will then beep and the LEDs flash.

Fixing holes x 4

Tamper switch

Jumper switches

Tamper switch   *Jumper switch*
Learn/Test button
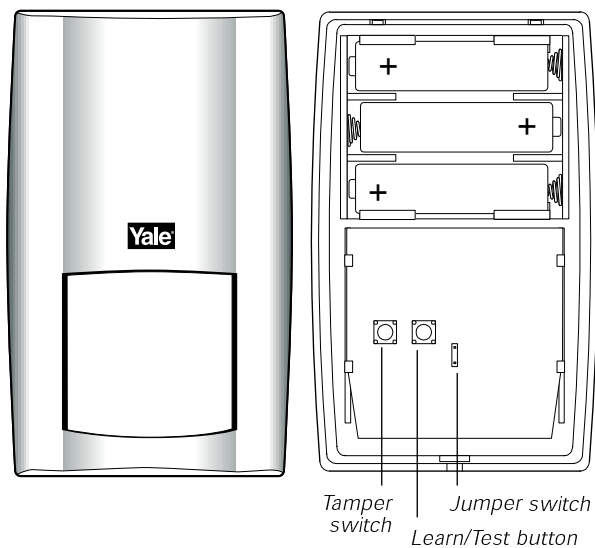
PIR movement detector

Remove the fixing screw and cover assembly and insert the three AA batteries as shown.
• The light steadily flashes for 30 seconds while components initialise.

Extension terminals
Tamper switch   *Learn/Test button*
Jumper switch
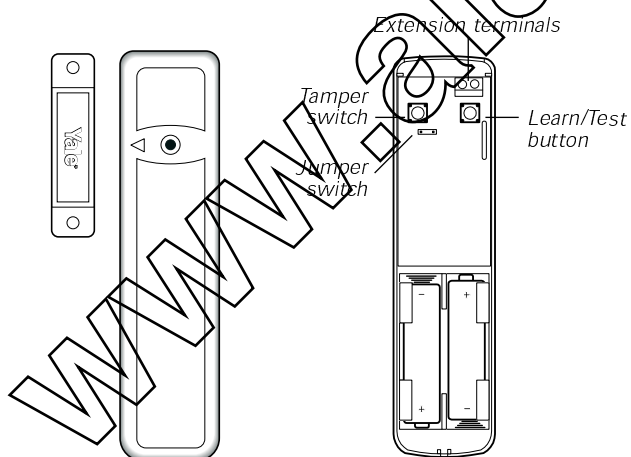
Door/window contact

1 Remove the cover by loosening the fixing screw.
2 Insert the two AAA batteries as shown. The indicator will flash briefly.

Remote keypad accessory

Remove the cover and insert the PP3 battery as shown. The light will flash briefly while components initialise.
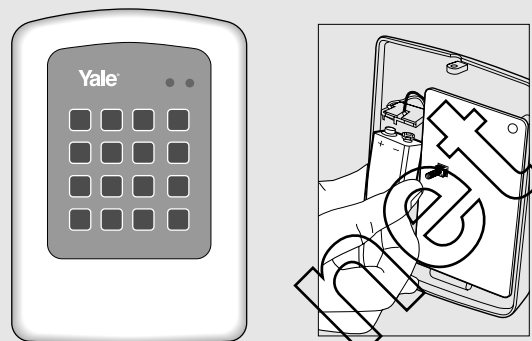
Smoke alarm accessory

Remove the bayonet cover and insert the PP3 battery as shown.
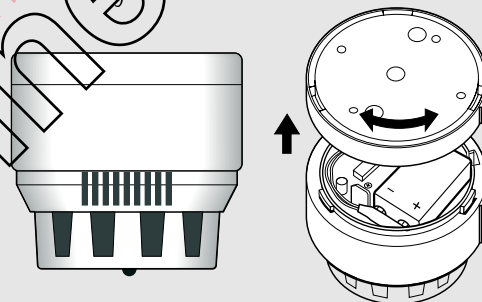
Remote keyfob accessory

Slide off the battery cover, insert the battery as shown, and replace battery cover. Switch on.

Help watch accessory

This has the permanent battery already inserted. The watch cannot be opened.

5

2 Location planning

Work out the best places to locate the devices for maximum protection

Home and away mode planning

The home arming mode allows the premises to be part armed so that no one can get inside without warning the occupier, yet the person already inside the house can move freely without triggering the alarm. For example the downstairs of a house can be partly armed while upstairs can be disarmed allowing the user to go to bed without causing an alarm.
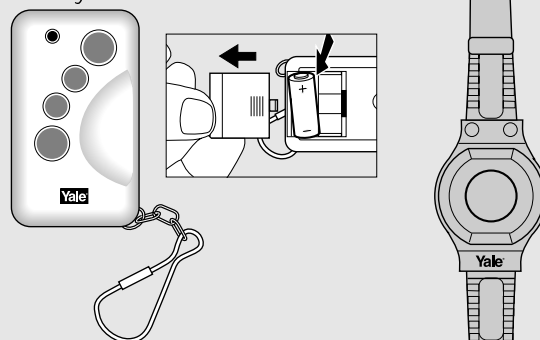
If this feature is to be used, then it should be planned now, before installation.

Decide what areas can be occupied when in home arming mode, the sensors for these areas should be programmed to home omit; and the sensors activated on the path to access the control unit should be to be set to home delay - see section Additional programming.

This mode is best used with additional PIR and Door/Window contact accessories.

Range and interference

All devices must be within 30 metres of the control unit and must not be mounted on or near large metal objects.

Tamper switches

If mounting a device on an uneven surface, ensure that the tamper switch that protrudes from the rear is pressed in firmly.

Extend the system

Extend the system in the future to increase your security or as your needs change.

For example, add extra PIR detectors in the garage and extra door/window contacts.

Remote keypad accessory

When used as second keypad, it is ideal in bedrooms or at the top of a stairwell so the ground floor can be armed when going to bed for the night. Or, at a side, back or garage door for alternative entry.
• Chest height for ease of use
• Not outdoors
• Protected by another device

Help watch accessory

For the elderly or infirm, and worn on the wrist, when pressed signals medical emergency or personal attack.
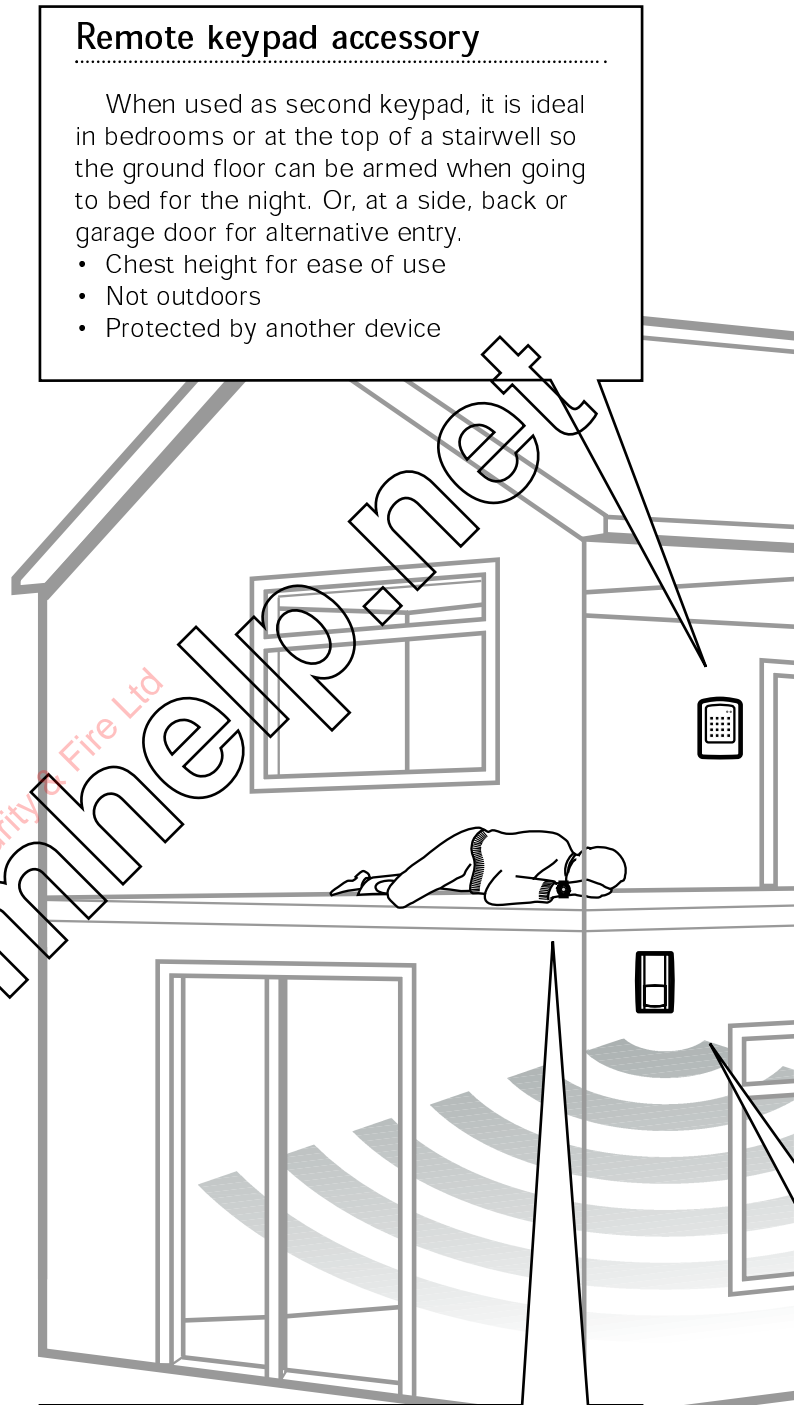
Smoke alarm accessory

- Mount on the ceiling at the top of a stairwell, or where smoke would most likely be detected
- Install additional detectors if there are closed doors preventing smoke from reaching detectors

Siren

Warning
The siren is extremely loud, so cover the unit before testing.
- Choose a prominent position high up on an external wall, out of reach of the ground
- Away from large metal structures and obvious sources of electrical interference

Door/Window contact

Select a door that will be the main point of entry and exit, usually your front door.
- Mount as high as possible
- Do not aim a PIR at this door or window

Keyfob remote accessory

Can be used inside or outside the property and can be kept on your key ring

PIR movement detector

- In a position such that an intruder would normally move across the PIR's field of view
- Between 1.7 and 2.3m above floor level
- In a corner to give the widest view
- Where its field of view will not be obstructed eg by curtains, ornaments etc
- Not pointing directly at sources of heat eg fires or boilers, and not above radiators
- Not pointing directly at a window facing the sun
- Not between the control unit and the final exit door
- Not pointing at a door protected by a door contact

Control unit

- Accessible when entering
- Not visible from outside
- By a mains socket
- By a telephone socket
- Protected by another device
   It can be placed on a table top or mounted on the wall.

7
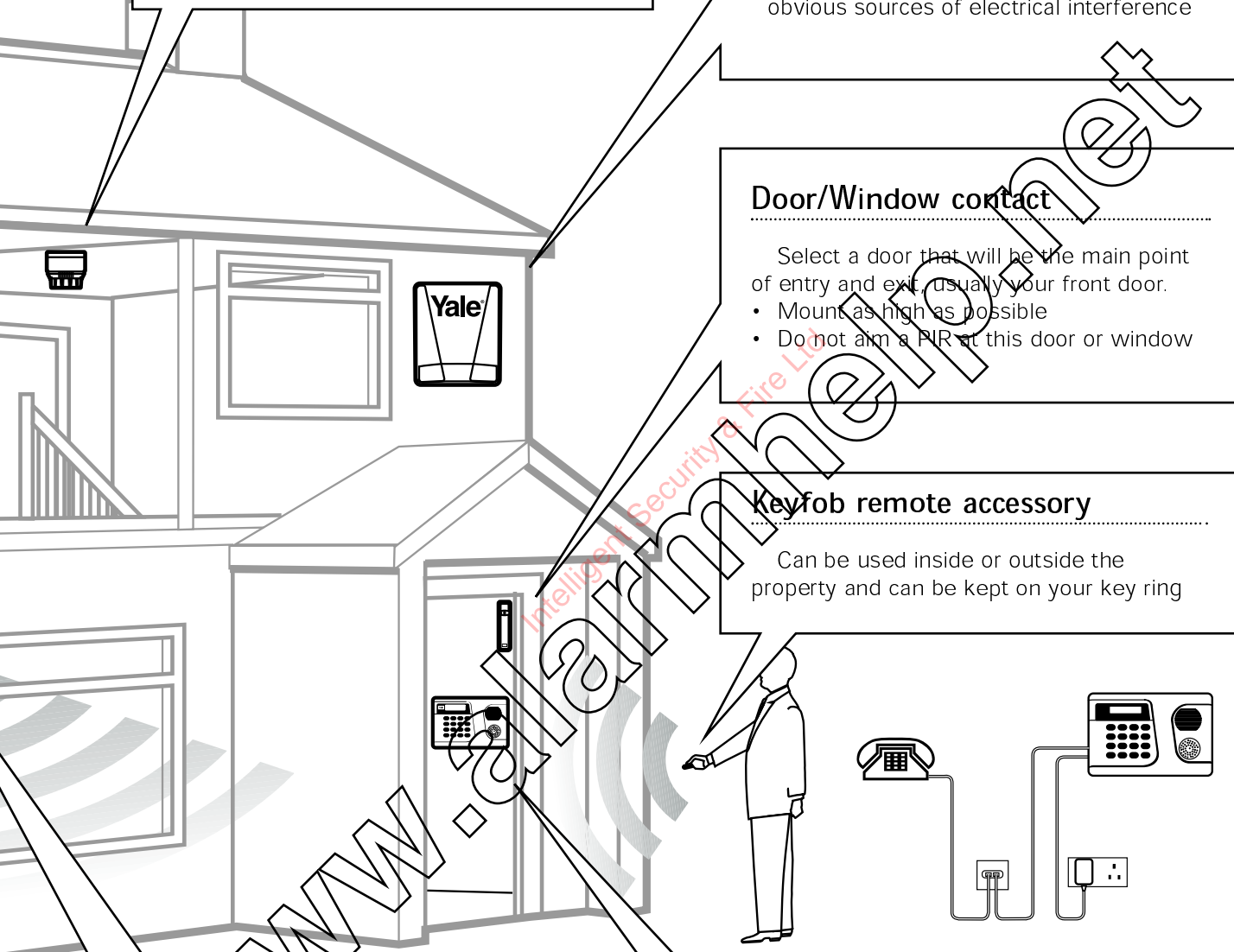
3 Easy install programming

First, create your own PIN code and teach the control unit to recognise (learn) all the devices and get the basic system up and running.

Control unit

When power is connected, a long beep will sound. Alarm On will be displayed. This indicates that the system is armed.

Before you can deactivate the alarm, or enter any information into the system, you must enter a PIN code. This is factory set to 0000.

Disarm

1 Key 0, Enter Code is displayed.
2 Key in 000 to complete the factory set code.
3 Press OK. You will hear 2 short beeps and the display will show Alarm Off, and the default time and date.
The system is now disarmed.
• If no correct code has been entered for a while, the display will go back to the original screen.

Introduction to programming

Entering a new PIN code will introduce you to the ease of programming the system.
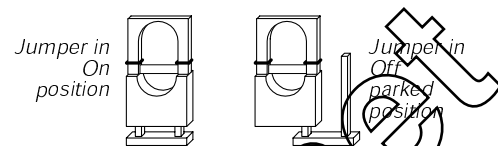
Set your PIN code

1 Press # (programming key).
2 Enter 0000.
3 Press OK.
Program menu/Make a Selection appears briefly, which is then replaced by a list which can be scrolled up and down using the arrow keys. The action to be selected has a pulsing symbol alongside.
4 Use the down arrow key to select General Settings.
5 Press OK to select this sub-menu.
The first item in this list is Pin Code which we require.
6 Press OK.
7 The system asks you for a new PIN number. Think of one all the family can remember and key it in. Don't forget it, write it in the inside back cover.
8 Press OK.
9 Confirm by keying in your PIN number again.
10 Press OK. If the incorrect code is entered, a message prompts the previous step.

Most programming functions work in this way, by entering your code, selecting from menus and sub-menus and responding to the prompts.
• During entering the PIN code press the ↻ button to clear the screen and enter new information.
• Press ↻ to return to a previous menu.
• To return to Alarm off in normal mode, keep pressing ↻ repeatedly.

Use of jumper switches

Some devices have internal switches, or jumpers, which control normal or test modes, or offer additional programming. The jumpers are either on or off. On is when the jumper connects two pins, off when it is removed. To prevent the jumper from being lost when removed, it can be 'parked' on one pin as shown:

Jumper in On position

Jumper in Off parked position

Add the PIR movement detector

1 Press # (programming key), enter your PIN code and press OK.
2 Select Devices +/ by scrolling down in the Programming menu and press OK.
3 Select Add Devices and press OK.
4 Press the learn button in the back of the PIR.
• The PIR will be detected and the second line on the control unit display will show that it has recognised the device correctly by displaying PIR.

Learn/ Test button

5 Press OK.
6 You are prompted to select a zone. Allow the unit to automatically select the next available zone, press OK. All available zones (those that do not have a device added) are displayed.
• Each device is given a zone number so that the control unit can indicate the source of an alarm.
• The PIR can be set to work in other different modes (see later further programming section, page 15) but for the moment we will assume that it is being used to protect the living room from a burglar.
7 Select Burglar from the list displayed and press OK.
8 The screen will then show all the programmed settings: PIR Zone01 B; ie a PIR has been programmed into zone 1 in Burglar mode.
9 Press OK.
10 Press ↻.
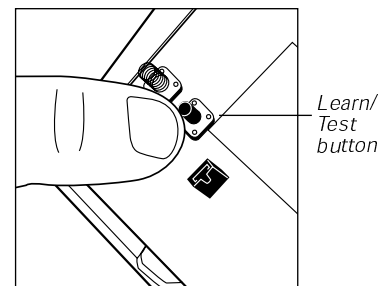
Add the door/window contact

1 Select Devices +/- by scrolling down in the Programming menu and press OK.

2 Select Add Devices and press OK.

3 Press the learn button in the back of the door contact.

Extension terminals

Learn/ Test button

- The door contact will be detected and the second line on the control unit display will show that it has recognised the device correctly by displaying Door Contact.

4 Press OK.

5 You are prompted to select a zone. Allow the unit to automatically select the next available zone, press OK.

- The door contact can be set to work in other different modes (see later further programming section, page 15) but for the moment we will assume that it is being used to protect the point of entry. This means that when the door is opened and the system armed, the control unit will start the entry time countdown to give enough time to disarm the system.

6 Select Entry from the list displayed and press OK.

7 The screen will then show all the programmed settings: DC Zone02 E - a door contact has been programmed into zone 2 in Entry mode.

8 Press OK.

- Press ↺ to return to a previous menu.
- To return to Alarm off in normal mode, keep pressing ↺ repeatedly.

Add the siren unit

WARNING
The siren is very loud, be prepared for a loud noise. Take care not to activate the siren unnecessarily.

The siren is programmed by the jumper switches in the left hand compartment.

J7 J6 J5 J4 J3 J2 J1
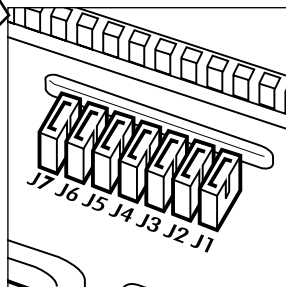
1 Lift off jumper number 1 and park it. The siren will beep and flash. The siren is now in learn mode.

2 Lift off jumper 5 and park it. This must be left in the off position permanently.

- If jumper 3 and jumper 4 are removed during the learning-in process, the siren will only be activated for 1 second if accidently activated and is useful for testing. Ensure they are replaced in there chosen positions before replacing the covers.

3 Program the control unit by selecting Device +/- menu, then Program Siren menu, then Learn Siren.

4 Press OK and the unit will give a long beep to confirm - the siren will also respond by a beep and a flash.

5 Replace jumper 1 to the on position, the siren will beep and flash to confirm.

6 Disable the tamper switch by selecting Program Siren menu on the control unit, then Siren A/T Off, and press OK.

- The siren disable tamper will automatically revert to on after about an hour if not switched back on again manually by selecting Siren A/T On.
- Press ↺ to return to a previous menu.
- To return to Alarm off in normal mode, keep pressing ↺ repeatedly.

Further siren programming

The siren can be further programmed if you desire.

Siren jumper programming

J7	Jamming detection
J6	Clear memory (leave On)
J5	Standalone mode (leave On)
J4	Siren activation time
J3	Siren activation time
J2	Strobe activation mode
J1	Learning-in mode (leave On)

Jumper positions

J7 on = jamming detection off; off = jamming detection on
J6 on = normal, J6 off = clear memory
J5 on = stand alone operation, not used in this system; off = slave operation
J3 on, J4 on = 3 minute siren on period J3 off, J4 on = 5 minute siren on period J3 on, J4 off = 10 minute siren on period J3 off, J4 off = 1 second siren on test period
J2 on = LEDs on during siren period; off = LEDs on until system disarm
J1 on = normal; off = learn-in mode

- Jumper 5 must be left in the Off position.
- J6 must be left on in normal service otherwise the the siren will lose its learn-in memory when the batteries are replaced.
- With J7 off, jamming by radio interference is detected when continuously present for more than 30 seconds and activates the siren only when armed.
- If jumper 3 and jumper 4 are removed during the learning-in process, the siren will sound for 1 second and is useful for testing. Ensure they are replaced in their chosen positions before replacing the covers.

7 Replace the battery and electronics compartment covers, ensuring the gasket between the electronics compartment and cover is correctly located and the wires placed in their slots to ensure a good seal from the environment.

8 Enable tamper switch by selecting Program Siren menu on the control unit, then Siren A/T On, and press OK.

Tamper alarm

If the siren detects a tamper condition it will activate the siren for the programmed period. If the tamper condition persists the siren will sound a series of five pips either every time the system is armed or when the tamper is enabled, to indicate a fault.

Confirm Programming

The siren can be programmed to produce additional comfirmation beeps to tell you when the system is armed and disarmed from outside the premisies. One beep for armed or home armed, two beeps for disarmed.

1 Program the control unit by selecting Device +/- menu, then Program Siren menu, then Confirm On.

2 Press OK and the unit will give a long beep to confirm - the siren will also respond with a beep.

Testing the radio performance

Before permanently installing the system, check that the siren will receive the system radio transmissions by doing a simple radio range test.

1 Ensure that the siren tamper is disabled.

2 Mount the siren temporarily in the location you have chosen.

• Use either a masonry nail or single screw in the siren base keyhole to temporarily fix in place.

3 Put the control unit in the chosen position and arm and disarm as described in Alarming and disarming, page 13, and check that the siren responds.

4 Put the control into Walk Test mode, as described in Testing the system, page 16, steps 1-3. Hold the devices in their chosen locations and activate.

• The PIR and door contact can be tested by pressing the learn/test button.

• The keypad can be tested by attempting to arm and disarm the system.

• The smoke detector is tested by pressing the button until the control unit responds (approx 10 seconds).

5 When you are satisfied that the devices work in their chosen locations, proceed with the installation as described next.

• If the device does not respond, the location may be out of radio range, try alternative locations until reliable radio contact is obtained.

Alternative mounting methods

Yale provide two methods of mounting. Choose either the self adhesive pads or the screws and wall plugs supplied.

Self adhesive installation *for door/window contact and smoke detector accessory*

Clean the surface with a suitable degreaser. Remove the protective covering from one side of the double sided adhesive pad and firmly apply to the back of the device. Next remove the other cover and firmly press the item onto the desired location.

• Do not use the adhesive pad method of installation on a surface with peeling or cracked paint, or on a rough surface.

Screw mounting

Remove the front of the device, and, if necessary, break through the appropriate knockout (where the plastic is thinner).

Using the holes as a template, drill holes in the surface and insert the wall plugs if fixing into plaster or brick.
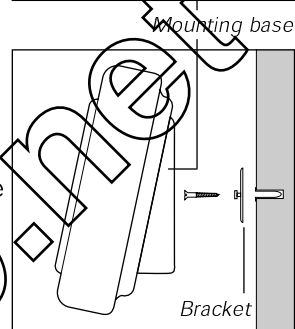
Control unit

Table top

Place the mounting base on the back of the control unit and snap in place so that the unit is angled towards you.
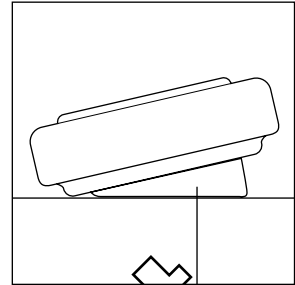
Mounting base

Wall mounting

Fix the bracket to the wall as described under Installation. Snap the mounting base so that the control unit is angled upwards, as shown.

Hang the control unit on the bracket.

Bracket

PIR movement detector

The PIR has a built-in sleep timer to save battery power. If there is no movement in front of the PIR for 1 minute, the PIR will become 'ready to signal' and any movement will now be reported. The PIR will sleep for 1 minute after. Any movement detected in sleep time will not be reported and will extend the sleep period by 1 minute. This feature is designed to conserve battery life.

Ensure the test/normal mode jumper switch is in the test 'On' position. This reduces the sleep time to a few seconds and enables the LED to flash every time movement is detected.

1 Screw the rear case to the wall using two of the knockouts shown, as described above under Screw mounting methods. The case has angled back edges for neat corner mounting. Screw the PIR front on.

Surface fixing holes x 2

2 Walk around the protected area noting when the LED flashes and check that the detection coverage is adequate.

Corner fixing holes x 4

• Remember to wait a few seconds after the PIR has detected movement.

• Do not try to test the detection pattern by walking straight up to, or away from the detector, walk across the field of view.

3 When you are satisfied with the detection coverage, remove the PIR, place the jumper in

11
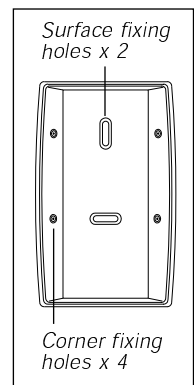
the normal 'Off' parked position and screw the PIR back on to its case.

- With the jumper in the normal position the LED will not normally light unless there is a problem, either a low battery or a tamper condition. In the event of a low battery, replace the exhausted batteries with fresh alkaline replacements.
- Do not position a PIR to look directly at a door protected by a door contact, this could cause the door contact and PIR radio signals to be transmitted at the same instant when entering, cancelling each other out.
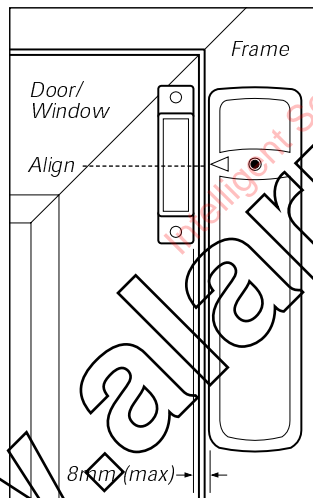- Ensure the jumper is in the normal Off position when testing is finished, otherwise low battery and tamper conditions will not be shown.

Door/Window contact

1 Ensure the jumper switch is in the test 'On' position.
- In this position the indicator light will illuminate every time the door contact is operated.
2 Fit as described above under Alternative mounting methods, mounting the detector base on the frame and aligning the magnet by the arrow as shown.

Frame

Door/Window

Align

8mm (max)

- The magnet should not be more than 8mm from the detector when the door is closed.
- Ensure the tamper switch spring is positioned so that it makes contact with the mounting surface through the tamper switch aperture.
- If the door contact cannot be mounted on the door frame, use the HSA3090 multiple door/window contact accessory kit with a length of wire to mount the door contact remotely.
- When fitting to a window, fix the magnet to the moving part and the detector to the frame.
3 Fix the detector on its base and secure with screw. Test it by opening and closing the door or window. The light will flash when an open condition is detected.
4 Remove the detector, put the jumper switch in the normal 'Off' position. Screw the detector back onto its base.

- When the jumper is in the normal Off position the indicator light will normally be off. It will only light if there is a problem, either a low battery or a tamper condition.
- Ensure the jumper is in the normal Off position when testing is finished, otherwise low battery and tamper conditions will not be shown.

Siren

WARNING
The siren is extremely loud!
The tamper switch plunger protrudes through the back of the unit, so that if the siren is pulled from the wall the alarm is activated. Ensure it is fully depressed when the siren is mounted. If there is a gap, pack with a suitable spacing material.
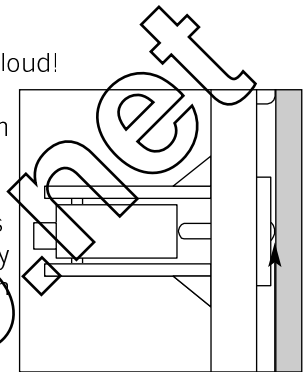
Tamper switch plunger must be pressed in fully by wall surface

1 Find suitable location, as previously described in section 2
2 Disable the tamper switch by selecting Program Siren menu on the control unit, then Siren A/T Off, and press OK.
3 Using the large screws provided, mount on wall through the base plate mounting holes shown.

Fixing holes x 4

4 Fix the siren cover with the securing screw.
5 Enable tamper switch by selecting Program Siren menu on the control unit, then Siren A/T On, and press OK.
6 Test by arming and disarming with the control unit. If 5 pips sound the tamper is not correctly set.
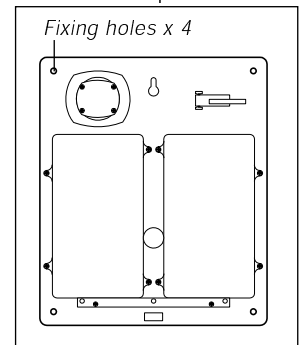
Installation is complete.

Remote keypad accessory

Mount as described under Screw mounting.

Smoke alarm accessory

Mount as described under Alternative mounting methods.

Arming and disarming

Arm and disarm the system and practice using it. Trigger the alarm by arming the system and opening protected doors/windows and walking past PIR's. Now is the time to show the rest of the family how simple it is to use. The telephone features are yet to be programmed.

Arming the system

Full arming

1 Enter your PIN code and press OK.
2 Arm and Home can be selected by using the arrow keys, select Arm.
3 Press OK. The exit delay is displayed and counts down from the default setting of 10 seconds. The control unit beeps (unless it has been switched off).
4 When the time is up, the control unit sounds a long beep. Alarm ON is displayed and the system is armed.
• The siren will beep once (if siren confirm has been switched on) and the strobe will flash once after the Exit Delay has expired.

Home arming

1 Enter your PIN code and press OK.
• You have a silent exit period in which to vacate the armed area. This exit period is the same as used when fully arming.
2 Press ▼ to move the cursor down to select Home.
3 Press OK.
• You can also put the system into the home mode by using the keypad or keyfob accessory.

Stopping the exit delay

Do this by disarming the system.
1 Press ↻.
2 Enter the PIN code.
3 Press OK.
Alarm Off will be displayed and the system returns to disarmed mode.

Disarming the system

1 Enter your pin code.
2 Press OK. The control unit will sound 2 short beeps and disarm.
• The siren will beep twice (If siren confirm has been switched on) and the strobe will flash from side to side after the system has been disarmed.

Alarm activation

If a sensor is triggered when armed, or if an entry period is left to expire, the control unit will activate the alarm immediately, while if a Home Omit sensor is triggered, the control unit will not respond if in home mode.

If a 24 hour alarm, fire alarm, personal attack, alarm tamper or medical emergency is triggered, the control unit will activate the alarm immediately irrespective of what armed mode the control unit is in.

During an alarm, the control unit will sound the siren and start dialling the emergency phone number.

Tamper and low battery display

The control unit will identify the device triggering a tamper alarm or low battery warning when disarmed. The display can be cleared when disarmed by entering PIN code, OK, and exiting the Arm (Home) display by pressing ↻.

Stopping the alarm

1 Key in your PIN code, and then press OK.
The alarm and dialling will stop and the display will show the device and zone which triggered the alarm in the Alarm Log.
2 Press any key.
The display will show the telephone call made if successful.
3 Press any key again to see if the second call was successful (if programmed).
If nobody has answered the call or only one recipient has answered the call, the screen will return to Alarm Off.
When the log has been displayed the screen will return to Alarm Off.

Alarm memory

If an alarm was raised during your absence, and the alarm sequence has been carried out, the screen will continue to show ALARM!

When you come back and disarm the system the siren will sound a 3 second alarm instead of the normal 2 beep sound.

To clear the display, follow the same steps as Stopping the alarm described above.

Warning If the siren is activated for 3 seconds when you disarm your system there could be an intruder still in your premises.

Configuring your system

Record your zone numbers and PIN on page 27 for future reference. For your security please keep this information confidential.

General settings menu

Pin code

Described under simple start.

Entry time

Enables you to alter the entry delay time. Options available are 0 sec., 10 sec., 20 sec., up to 70 sec. in 10-sec increments.
1 Use the arrow keys to switch between options.
2 Press OK to confirm.
• 10 sec. is set as factory default.
• Entry delay time applies only to the zone that a door contact or PIR is installed and is set to entry point.

Exit time

Enables you to alter the exit delay time. Options available are 0 sec., 10 sec., 20 sec. up to 70 sec. in 10-sec increments.
1 Use arrow keys to switch between options.
2 Press OK to confirm.
• 10 sec. is set as factory default.

Alarm length

This is for you to select the period of time that the control unit siren will sound when an alarm is activated. You can choose from 1 minute to 15 minutes in 1 min increments.
1 Use arrow keys to switch between options.
2 Press OK to confirm.
• 3 minutes is set as factory default.

Control unit siren on/off

Enables you to decide whether the control unit siren will sound or not when an alarm is activated.
1 Press arrow keys to select the option.
2 Press OK to confirm.
• Siren ON is set as factory default.
• It is recommended that the control unit siren is left on.

Exit sound

Turns on and off the exit delay audible warning.
1 Press arrow keys to select the option.
2 Press OK to confirm
• Exit Snd Low is set as factory default.
• The exit sound can be selected for high or low volume.

Entry sound

Turns on and off the entry delay audible warning.
1 Press arrow keys to select the option.
2 Press OK to confirm.
• Entry Snd Low is set as factory default.

• The entry sound can be selected for high or low volume.

Door chime

Turns on and off the door chime in the control unit when an entry sensor is activated.
1 Press arrow keys to select the option.
2 Press OK to confirm.
• Door Chime Off is set as factory default.
• The door chime can be selected for high or low volume.

Listen-in

Turns on and off the listen-in feature if privacy is required.
1 Press arrow keys to select the option.
2 Press OK to confirm.
• Listen-in On is set as factory default.
• It will not be possible to remotely listen-in or listen-in on an alarm situation when this feature is turned off.

Time

Sets the current time (hours and minute).
1 Hours will flash, use arrow keys to set the hour, 24-hour format is used.
2 Press OK to confirm the hour setting. The next screen will then be displayed for setting the minutes.
3 Minutes will flash.
4 Use arrow keys to set the minute.
5 Press OK to confirm.

Date

Sets the current date.
1 Months will flash.
2 Use arrow keys to choose the month.
3 Press OK to confirm the day setting. Next screen will then be displayed to set the current month.
4 Day will flash.
5 Use arrow keys to set the day.
6 Press OK to confirm.

Interference

Sets the interference display and reporting feature.
• Radio interference is unlikely, but can effect the operation of the system. The siren (see Further siren programming section page 9) and the control unit have the ability to detect interference and give warnings.
1 Use arrow keys to choose the setting.
2 Press OK to confirm the setting.
• Disp Off is set as factory default.
• Disp On will enable the display of any

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interference that is detected for more than 30 seconds when the control unit is disarmed.
- Disp and Rep On will enable the display and reporting using the speech dialler. The control unit will give an address message without a specific message to report interference.

Remote controller entry enable

Turns on and off the remote controller disarm function.
1 Press arrow keys to select the option.
2 Press OK to confirm.
- Remote Controller Entry Enable off is set as factory default.
- When the remote controller entry enable is set to off it will not be possible to disarm the control unit when the system is fully armed unless an entry point device is activated first. This feature is used to ensure that the system cannot be disarmed with a stolen remote control without unlocking a door first.
- When the remote controller entry enable is set to on, the remote controller can arm and disarm the control unit as normal without activating an entry point first.
- A panic alarm cannot be disarmed by a remote controller. This prevents an assailant from silencing a personal attack alarm by snatching the remote controller and pressing Disarm.

Further PIR programming

The PIR can be set to work in four different modes:
- whether it is armed when the control unit is in home or fully armed condition;
- whether it is omitted in home mode;
- whether it is installed as an entry point.
These choices are presented during the learning cycle and are summarised at the end of the process by these codes:
B	Burglar	armed when in armed or home modes
O	home Omit	not active when in home mode
D	home Delay	starts entry delay when in home mode
E	Entry	control unit will start the entry time when activated

PIR operation

The light does not flash normally when it is sensing movement, unless the jumper is in the On test position.

If the LED flashes regularly, it indicates that it has either been tampered with, or the battery is getting low and needs replacing.

Further door contact programming

The door contact can be set to work in five different modes:
- whether it is armed when the control unit is in home or fully armed condition;
- whether it is omitted in home mode;
- whether it is a fire alarm;
- whether it is a 24 hour alarm;
- whether it is installed as an entry point.
These choices are presented during the learning cycle and are summarised at the end of the process by these codes:
B	Burglar	armed when in armed or home modes
O	home Omit	not active when in home mode
D	home Delay	starts entry when in home mode
F	Fire	activation will give a fire alarm
H	24 Hour	the door contact is active all the time and will give a burglar alarm when activated
E	Entry	the control unit will start the entry time when activated

- Fire and 24hr door contacts are active all the time and do not have to be armed or disarmed.

Points for consideration

- In home mode, the Burglar PIR or door contact is active while the home Omit PIR or door contact is idle. Therefore, if the Burglar PIR or door contact is triggered, the alarm will sound, while if the home Omit PIR or door contact is triggered, the alarm will not sound.
- If the PIR or door contact has been set to Entry and triggered when the system is in a full or home armed mode, the control unit will start an entry period to give enough time to disarm the system.
- If the PIR or door contact has been set to Entry and triggered when the system is in disarmed mode, the control unit will sound a ding-dong door chime (if selected).
- If the PIR or door contact has been set to home Delay and triggered when in home armed mode, the control unit will start an entry period.
- The jumper is normally in the off position. This means that the light will flash only when it has been tampered with or the batteries are running low and need replacing. The on position puts it into test mode so that it flashes at every operation. To save battery life ensure it is left in the off position.

Multiple door contact wiring

More than one window and door can be protected by a door contact using the HSA3090 door/window and contact accessory kit. The contacts must be wired to the internal extension terminal block as shown.
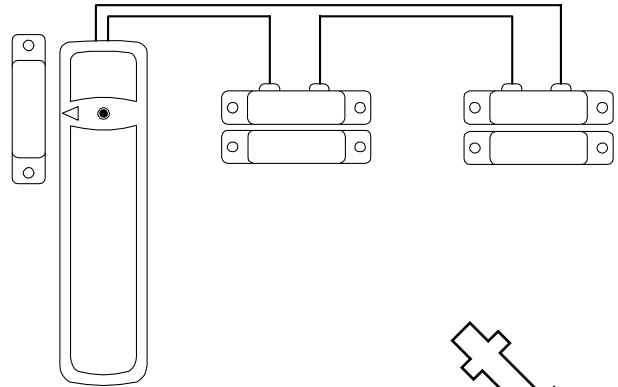
Testing the system

Testing the system should be done on a regular basis and after any alterations.

PIR sleep feature

The PIR has a built-in sleep timer to save battery power. If there is no movement in front of the PIR for 1 minute, the PIR will become 'ready to signal' and movement will now be reported. The PIR will sleep for 1 minute after. Any movement detected in sleep time will not be reported and will extend the sleep period by 1 minute. This feature is designed to conserve battery life.

Walk test

This allows you to test the system without causing an alarm.

1 Press # followed by your PIN code.
2 Press OK.
3 Select Walk Test.
4 Walk around protected areas in front of PIR's and open doors/windows protected by door contacts.
• If the control unit receives a signal, it will sound a chime and the display will show the sensor and zone number which has been tested.
• The message will be displayed until being replaced by another test signal.
• Pressing the ↺ key, will return to programming menu.

Testing the siren

The siren can be tested by arming and disarming the system, the siren will respond as follows:
• While the control unit is armed the siren will beep once (if siren confirm is switched on) and will flash after the Exit delay period has expired.
• While the control unit is disarmed, the siren will give two short beeps (if siren confirm is switched on) and will flash from side to side twice.

Adding and using other devices

To provide additional protection you can add additional door and window contacts, two types of remote controller, a help watch and a smoke alarm.

Remote keyfob controller

Programming

Learn in the keyfob as follows:
1. Use the control unit Device +/- menu and select the Add Devices sub menu.
2. Press the Arm button when requested.
3. After a zone number for the keyfob is assigned a choice is displayed.
- Medical Emg: whether it dials a medical emergency alarm; or
- Personal Att: whether it dials a personal attack alarm.
4. Make a selection, the screen will show you the successfully added device.
5. Press OK.
- The Panic button has to be pressed for more than 2 seconds to operate.

Using

The system is armed by pressing the Arm or Home button for at least 1 second (this delay feature prevents accidental operation).

The system is disarmed by pressing the Disarm button in the same way.

The switch at the side prevents the keyfob from transmitting accidently.

A panic alarm is raised by pressing the Panic button continuously for over 2 seconds - the LED will flash during this time. The panic alarm must be silenced at the control unit (unless programmed for Remote Controller Entry Enable).
- The keyfob can also be used to answer an incoming telephone call by pressing the Disarm button twice for 1 second with a pause between and then to close the call by pressing the Disarm button again for 1 second.
- The keyfob will arm and disarm the system instantly when using the Home mode, however it will only arm the system after an entry delay when arming normally. The external siren will signal arming and disarming after a delay.

Remote keypad

Programming

1. Learn-in as usual by putting the control unit into learn mode.
2. Enter 0000 on the keypad then press TEST. The Tx LED will flash.
3. Press TEST and 1 on keypad when requested. The keypad and control unit will beep.
4. After the zone number is assigned, the screen will show you the successfully added device.
5. Press OK.
6. Press Off twice on the keypad to exit programming mode, the Tx LED will stop flashing.

PIN number

1. Put the keypad into programming mode by entering the factory set code 0000 and pressing TEST.
2. Enter 0000 then press CLR.
3. Enter your new 4 digit code and press PROG. The keypad will beep in response.
4. Press OFF twice to exit programming mode. It is advisable to use the same PIN code as the control unit, but it can be different.

Help watch

Programming

1. Learn-in as usual by putting the control unit into learn mode and pressing the Help watch button.
2. After a zone number for the Help watch is assigned a choice is displayed.
- Medical Emg: whether it dials a medical emergency alarm; or
- Personal Att: whether it dials a personal attack alarm.
3. Make a selection, the screen will show you the successfully added device.
4. Press OK.

Using

The help watch is worn on the wrist like a watch. Deliberately pressing the button as shown for 3 seconds will activate the alarm. Pressing the button continuously for 10 seconds will cancel the alarm.

The watch is water resistant and can be worn while in a bath or shower.
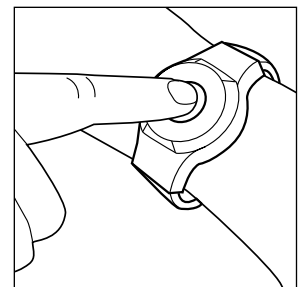
Smoke detector

Programming

1 Put the control unit into learn mode as usual.
2 Press the learn button on the smoke detector until confirmed (approx 10 seconds). The detector will sound during this time.
3 Complete the operation by confirming the zone number.
4 Press OK to confirm.

Remove a device

If a sensor needs to be re-programmed (for example, to change home mode settings) or a replacement device needs to be fitted, it first needs to be removed from the control unit memory.

Adding a new sensor to a used zone is prevented until the previous sensor is deleted. To delete a sensor, choose Remove Device in the Device +/- menu, all the used zones with the sensor names are listed.

1 Use arrow keys to move the cursor to the position where the device listed is to be deleted.
• The list is displayed in zone number order.
2 Press OK. The selected device will be displayed for you to confirm.
• Press ↺ to exit if you do not want to delete this device, the screen will return to the previous list.
3 Press OK to delete.

List devices

To view all the devices that have already been installed, choose List Devices in the Device +/- menu, all the sensors included in the system will be displayed.
• The list is displayed by zone number. Use arrow keys to scroll the display. Press ↺ to exit.

Zone already allocated

Each device can only be given one zone number. When a sensor is added to the system for a second time (without removing first) an error message is displayed and then the screen will prompt new action.
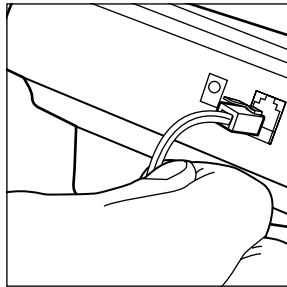
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Telephone connection & programming

Powerful facility that enables the system to telephone 6 numbers in an emergency - your mobile, friends, relatives, neighbours or colleagues - but not 999 directly.

Telephone connection

A telephone lead and 2-way adapter is included so you can have your telephone and the control unit connected to telephone network at the same time.

1 Plug the 2-way adapter into the telephone wall socket.
2 Plug one end of the telephone lead into the control unit and the other end into the adapter.
3 Plug your telephone into the 2-way adapter.
• The control unit will not be able to telephone out if any handsets are accidently left off, or if someone is ringing in.
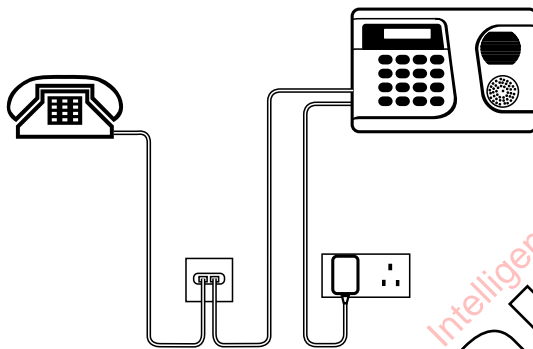
Telephone programming

This menu Tel. Settings is for you to set/change/delete telephone numbers and play/record messages.
• Use arrow keys to move the cursor to select the item, press OK to confirm the selection.
• Select Stop or the ↺ key, the screen will return to programming Main menu.

Setting telephone numbers

In Tel Settings menu, select Tel Numbers, allow you to set/change/delete the emergency telephone numbers.

A maximum of six numbers can be stored in priority order (in the order of A to F).
• The unit will dial using tone dialling
• Telephone number positions A to F represent the priority number of the six telephone numbers respectively.
• If the telephone number for a particular number has not been stored, three dots are displayed indicating the memory slot is empty.

• Only 9 digits are displayed on the Tel. Numbers list. Non fitting numbers are indicated with ".." after the incomplete number.

Storing telephone numbers

1 Use arrow keys to move the cursor to select the desired priority number of which the number field is empty.
2 Press OK to confirm.
3 Key in your phone number.
4 Press OK
The screen will return to the Tel. Numbers list screen for you to store another number.
• The maximum length of a number is 20 digits including ✱ and #. If this length is reached, the control unit will sound 3 beeps and the unit will only respond to the ↺ and OK keys.
• During entering the number, the ↺ key is used as backspace. However, if the number field is empty, pressing the ↺ key will return to Tel. Numbers lists screen.
• During entering the number, when the 15th position is reached, non-fitting numbers will scroll sideward to the left.

Special function characters

Two special keys ✱ and # are provided for special functions.
✱ represents a 3 sec. delay or (pause). The control unit will not dial the tone ✱.
tells the control unit to go off line.

Storing a pager number
Pager number – ✱ - identity code – # - OK
The identity code is a number that you can key in at your discretion. This enables the recipient to know the call is from the control unit.
• Only one attempt will be made to the pager number.

Storing a telephone number in PABX phone system
PABX access code 0/9/8 – ✱ – telephone number – OK
You can add as many ✱'s as required.

Storing a telephone number with extension number
Telephone number – ✱ – ✱ – extension number – OK
You can add as many ✱'s as required.

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Change telephone numbers

1 In the Tel. Numbers List screen, use the arrow keys to move the cursor to the position of the telephone number you want to change.
2 Press OK.
3 Press OK to confirm.
• Press ↺ to abort and the screen returns to Tel. Numbers List screen.
4 Key in the new number.
5 Press OK.
    The new number will then override the previous one. The screen returns to "Tel. Numbers List" screen.

Delete a telephone number

    To delete a telephone number, follow steps 1 to 3 of Changing telephone numbers above, and the Enter new No. prompt screen is displayed.
4 Press OK. The previous stored number will be deleted.

Message menu

    Enables you to record and play messages.

Messages

    With a total capacity of 20 sec, you are allowed to record the emergency messages in 5 parts.

Address part	12 seconds
Burglar part	2 seconds
Fire part	2 seconds
Panic part	2 seconds
Emergency part	2 seconds

    In an emergency, the control unit will dial the emergency phone numbers according to the priority order, then first play the address part message and then play the specific part message (burglar, fire panic or emergency) according to the nature of the alarm raised.

Recording Messages

    When the Record Msg. is selected, the Recording Selection menu is displayed for you to select which part of the message is to be recorded.

Recording address part message
1 Move the cursor to Tel. Settings, select Messages, Record Message and Rec. Address and then press OK, the screen will ask you to confirm.
2 Press OK to confirm, a prompt Message will be displayed for 2 sec.
3 After 2 sec, the control unit will sound a long beep and recording can be started.

4 Press OK to end the message, the screen will go to specific part selection menu to allow you to select a specific part to be recorded.
• Any time, pressing ↺ will abort recording and the message will not be saved. The screen returns to Recording Selection menu.
• The maximum length of address part message is 12 sec. When the 12 sec duration is over, recording will be stopped automatically. The message being recorded will be saved.
• When recording, make sure you are facing the microphone and are within 30 cm of it.

Recording specific part messages
    If Rec. Specific is chosen, the specific part selection menu is displayed for you to select the desired specific message.
    Select a specific message and follow the same procedure as those for recording address part message to record each specific message respectively.
• The message length for each specific message is 2 sec only.
• Specific messages have to be recorded for specific alarms, eg fire messages for a fire alarm, panic message for a panic alarm etc. otherwise the wrong message might be sent.

Playing Messages

1 Select Play Message and then press OK. You are prompted to select the appropriate message to be played.
2 Move the cursor to select the desired message and then press OK. The address part message will first be played.
3 After the address part message is played completely, the selected specific part message is played accordingly.
4 After playing the specific part message, the address part message is played again and starts a new cycle. Playing the message will be repeated for a total of 5 times, and then the screen returns to Play Selection menu.
• During playing the message, pressing the ↺ key will stop the playing and the screen returns to Play selection menu.

Changing a message

    If for any reason, you want to change any part of the recorded message, just follow the same procedure to record a new message for that part. The new message will override the previous one.

Dialling and call acknowledgement

Auto dialling

When an alarm occurs, the control unit will immediately dial the phone numbers you preset and play the recorded messages.

After dialling, the control unit will delay 5 seconds then starts to play the message. It will first play the address part of the recorded message then play the specific part message (burglar, fire, personal attack and medical emergency) depending on the nature of the alarm.

To ensure the recipient successfully receives the call, the recipient should acknowledge the message by pressing the appropriate button on their telephone set (described below).

The control unit, while playing the message, will check if there is any acknowledgement signal being received. If the recipient does not acknowledge the call, the message will be repeated for a period of 80 seconds; the control unit will then consider the call as unsuccessful and will try to dial the next phone number in priority.

If more than one number is programmed the control unit will continue to dial the number(s) until two emergency calls are successfully answered with either 1 or 0, or closed down with a 9 acknowledgement.

- The control unit is connected to the telephone line using a parallel connection. Care must be taken not to have other phones off the hook otherwise the alarm call will not be able to get through.

Call acknowledgement

If the recipient successfully receives the call, they should acknowledge it by pressing the 0, 9 or 1 button on their telephone set.

Acknowledging with 0 key

If the recipient presses 0 on their phone set as the acknowledging signal, the control unit will then take the following actions.

The control unit will go back offline.

The control unit will continue alarming.

The control unit will try to dial the next phone number(s) until two recipients have acknowledged the call.

Acknowledging with 9 key

If the recipient presses 9 on their phone set as the acknowledging signal, the following will happen:

The control unit will go back offline.

The control unit will stop alarming and stop dialling.

Acknowledging with 1 key

The recipient can press 1 to acknowledge the call and also initiate a two-way voice communication. Please see Two-way voice communication in next section for details.

Auto redial

When only one number is stored and that number is engaged or the control unit does not receive the acknowledgement signal, the control unit will automatically redial that number up to a maximum of 5 times with an interval of 62 sec. between dialling attempts.

When more than one telephone number is stored, the control unit will dial in accordance to the set priority order. If the number being dialled is engaged or the control unit does not receive the acknowledgement signal, it will try the next number in sequence and so on. Each number will be tried a maximum of 5 times and the redial interval between each number is 5 sec.

The maximum number of times the control unit will retry is 15 times.

- When no telephone number is stored or no address message is recorded, the control unit will not dial.
- When dialling a pager number, the control unit will only send the identity code, it will not play the message and the call is not considered to be successful.
- The same pager number will be dialled only once.

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Hands-free call answering

If the system is in Disarmed mode or Home mode, when the telephone rings you can answer the call without lifting a handset.

1 When the telephone rings, the screen will display Ring!

2 If you want to answer the call hands-free, press the ▲ key.

3 Press OK to confirm; the control unit will go online.

4 Voice communication is now enabled; you can then converse with the caller through the microphone and speaker on the control unit.

5 To hang up either press the ↻ or ▼ key or press the Disarm button on the remote keyfob controller.

• The control unit will hang up automatically after 30 minutes. You will hear a repeated beeping sound beginning 20 seconds before the call is disconnected.

• If you want to continue the conversation, press any numeric key on the keypad of the control unit, another 30 minutes will be added.

If you want to hang up, you can either press the ↻ or ▼ key or press the Disarm button on the remote keyfob controller. The control unit will then disconnect the line and go offline.

• A keyfob can also be used to answer an incoming telephone call by pressing the Disarm button twice for 1 second with a pause between and then to close the call by pressing the Disarm button again for 1 second.

Remote access

The control unit gives you the power to control your system remotely through the telephone line.

1 Dial your phone number.

2 Hang up on the first ring.

3 Wait 5-10 seconds.

4 Dial your number again.

5 The control unit will answer the phone on the first ring of that second call.

6 Key in your PIN Code within 3 seconds.

7 If the PIN code is correct, you will hear a long beep, then press the appropriate key as follows.

Press 1 Open the two way communication channel. You can then listen in to what is happening in your house or talk to anybody at home through the microphone and speaker on the control unit.

Press 2 Put the system into a fully armed mode (arm the system)

Press 3 Disarm the system

Press 5 Turn on the microphone (listen only)

Press 6 Turn off the microphone

Press 7 Activate siren

Press 8 Deactivate siren

Press 9 Check the system mode

Press 0 To hang up

• After you press 1 to open the Two Way Voice communication channel, you can press 0 to close the channel or the control unit will hang up automatically after 5 minutes.

• If you want to continue talking or listening, press 1 again, and another 5 minutes will be added.

• When you press 9 to check the system mode, the control unit will report a 1 second tone for armed, 2 pips for part armed and 3 pips for disarmed.

• Remember to press 0 before you hang up, or the control unit will hang up automatically 30 seconds after (except in the situation that the two way communication channel was opened by pressing 1, in this case the control unit will hang up 5 minutes after).

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Two-way voice communication

Opening two—way communication

In an emergency, the call recipient can press 1 to acknowledge the call and also initiate two-way voice communication.

The two way voice communication channel enables you to permit the recipient to listen in to what is happening on your side. You can also talk to the recipient through the microphone and speaker on the control unit, hands free.

The communication channel, once opened, lasts for 5 minutes. The recipient will hear repeated beep sound 20 seconds before the control unit hangs up the line.

If the recipient wants to have more time to listen and talk, they can press the 1 button on their telephone set again to add another 5 minutes.

- When the recipient opens the two way voice communication channel by pressing 1, the control unit will then stop the audible alarms to allow speech communication.
- If the call is not terminated with a 0 or 9 within 5 minutes, it is acknowledged as one of the 2 attempted calls and will not re-activate the sirens. It will re-dial if a previous acknowledgement has not been registered.

Terminating two-way communication

After two-way voice communication has been initiated, the recipient can terminate the communication by pressing 0 or 9 on their phone set.

Terminating with 0 key

If the recipient presses 0 on their phone set, the following will happen.

The two-way voice communication will be terminated.

The audible alarm will continue.

The control unit will go back offline.

The control unit will try to dial the phone number of the next priority until a total of 2 calls have been acknowledged.

Terminating with 9 key

The two-way voice communication will be terminated.

The control unit will go back offline.

The alarm will be silenced.

The control unit will stop dialling.

Hands free calling

The control unit provides the convenience of functioning as a hands-free phone.

You can dial the phone number on the keypad of the control unit, communicate with the call recipient using the built-in microphone and speaker without lifting your hand-set. To do this, follow the procedure below.

1 If the system is in disarmed mode or home mode, press the ▲ key on the keypad.
2 A prompt screen is shown to ask your confirmation.
3 Press OK to confirm. The control unit will go online and the next screen is displayed.
- Pressing ↻ to abort will return the screen to the Alarm Off screen.
4 You can key in the telephone number, the number entered will be dialled.
5 Voice communication is now enabled.
6 To hang up you can either press the ↻ or ▼

key or press the disarm button on the remote controller.
- 30 minutes is allowed for one call. The control unit will hang up automatically after 30 minutes. You will hear a repeated beeping sound beginning 20 seconds before the call is disconnected.
- If you want to continue the conversation, press any numeric key on the keypad of the control unit, another 30 minutes will be added.
- If you want to hang up, you can either press the ↻ or ▼ key or press the disarm button on the remote controller.

The control unit will then disconnect the line and go offline.
- During hands-free conversation, pressing Arm button or Home button on the remote keyfob controller, the control unit will not respond.

Changing the batteries

Always use alkaline batteries as replacements to ensure long service life. The typical life of the batteries is 2 years.

Siren

The siren will produce a series of pips when armed and disarmed, and an interrupted alarm sound (if activated) if the siren batteries are near exhaustion. Change the batteries as soon as possible. The sound will be reset when the batteries are changed.
• When changing the batteries allow the battery detection feature time to reset by waiting a minute after removing the old batteries before replacing them with new alkaline replacements.
• The difference between a tamper alert and a low battery alert can be determined by arming and disarming the system. If there are 5 pips when the system is armed and disarmed, the batteries are low. If there are 5 pips only when the system is armed, this means the siren tamper has been disturbed.

PIR and door contact

The LED will flash everytime the device is activated indicating a low battery and the control unit display will identify the sensor low battery.
• Before changing the battery check that the tamper switch is operating correctly.
1 Disable tamper as described below.
2 Remove device from mounting.
3 Change the batteries with alkaline replacements.
4 Screw device back on.
5 Enable tamper protection as described below.

Keyfob

The LED will either be very dim or will not light at all when the battery is low. Change the battery as soon as possible with an alkaline replacement.

Keypad

The Tx will flash repeatedly everytime the device is used indicating a low battery and the control unit display will identify the keypad low battery.
• Before changing the battery check that the tamper switch is operating correctly.
1 Disable tamper as described below.
2 Remove keypad from mounting.
3 Change the battery with alkaline replacement.
4 Screw keypad back on.
5 Enable tamper protection as described below.

Smoke detector

The LED will flash and the sounder will beep periodically to signal low battery. Change the battery as soon as possible with an alkaline replacement.
• The control unit display will identify the smoke detector low battery only after activation.

Help watch

The help watch has a permanent battery that will last at least ten years and cannot be replaced.

Disable and enable tamper

1 Put the control unit into program mode to disable system device tampers.
2 If the siren batteries are going to be changed, the siren tamper must also be disabled by selecting Device +/- and Program Siren menu on the control unit, then Siren A/T Off, and press OK.
3 Remember to enable siren tamper afterwards by selecting Program Siren menu on the control unit, then Siren A/T On, and press OK.

Trouble shooting

Siren

Siren does not respond to arming or disarming

- Siren batteries are completely exhausted. Check siren batteries by removing siren cover, if there is no tamper alarm when removed, replace batteries with new alkaline equivalents.
- Siren not learnt-in. If siren produces a tamper alarm when the cover is removed and siren is OK, learn-in the siren.

Siren produces a 3 second alarm when disarmed

- There has been a previous alarm and there might be an intruder still in the premises.

Siren produces a series of pips when armed or disarmed

- The siren has low batteries. Check that the siren produces a series of pips when arming and disarming, indicating low batteries. Change batteries with new alkaline replacements.
- The siren tamper switch has been disturbed. Check that the siren produces a series of pips only when arming, indicating a tamper fault. Check that the siren cover is firmly secured and the tamper switch plunger is in contact with the wall. If not use suitable packing material to fill gap.

Siren produces an interrupted tone when sounding an alarm

- The siren has low batteries. Change batteries with new alkaline replacements.

Siren will not learn-in

- No detectors are learnt-in. Learn-in a detector first. The siren will not learn-in into a control unit without a previously learnt-in detector.

PIR

PIR does not respond to movement

- Previous movement has triggered the PIR sleep timer is preventing subsequent movement detection. Arm system and vacate protected room for at least 1.5 minutes before testing.

PIR is slow to respond

- This is normal, the PIR has sophisticated false alarm filtering that will filter out random fluctuations and responds to genuine movement across field of view, it is less sensitive walking directly towards it.

PIR gives false alarms

- Check pets have no access to protected area.
- Check that PIR is not pointed at sources of heat or moving objects, e.g. fluttering curtains.
- Check that PIR is not mounted above convector heaters or pointing directly at windows.

PIR LED flashes when jumper is in normal position

- Batteries are low or the tamper switch is disturbed. Check that the tamper switch spring is making contact with base. If the tamper switch is OK, change batteries with new alkaline replacements.

PIR does not respond to movement when jumper is in test position

- Batteries are completely exhausted. Change batteries with new alkaline replacements, LED will flash for 30 seconds while components initialise.

Door contact

Door contact LED flashes when jumper is in normal position

- Batteries are low or the tamper switch is disturbed. Check that the tamper switch spring is making contact with the mounting surface. If the tamper switch is OK, change batteries with new alkaline replacements.

Door contact does not respond to door opening when jumper is in test position

- Batteries are completely exhausted. Change batteries with new alkaline replacements
- The magnet is too far away from the door contact. Check that the gap between door contact and magnet is not greater than 8mm.

Control unit

Control unit does not dial out when there is an alarm

- No messages recorded. Check that the speech messages are all recorded.
- No telephone numbers programmed. Program telephone numbers.
- Faulty telephone connection. Check all connections to the telephone line. Test with spare telephone handset if neccessary.

Specifications

All devices

EMC
Tested to EN 300 220-1 and ETS 300 683

Environmental conditions
-10°C to 40°C, relative humidity 70% non-condensing for all units except the external siren. Siren: -20°C to 50°C, relative humidity 95% non-condensing

Radio operational range
30m in a typical domestic installation
Can vary depending on building construction and RF environment.

Housings ABS

Control unit

Keys
▼ Scrolls display downwards
▲ Scrolls display upwards
Program button, telephone dialler
✳ Phone number pause?
↺ When in programming mode, clears the screen or return to previous menu; back space for telephone numbers

Device codes
DS Door contact
PIR PIR movement detector
SD Smoke sensor
RC Remote controller (keyfob)
KP Remote keypad
WTR Help watch

Control unit illumination Display is back lit when the unit is mains powered.
Housing ABS
Siren Output 95dBA sound pressure @ 1m minimum
Zones 20 radio devices
Radio system 433.92MHz AM integral transmitter and super heterodyne receiver with jamming detection
Power supply Plug top adapter type, input 230VAC 50Hz output 9VDC, 500ma, tested to EN 60 950
Rechargeable battery Nickel cadmium 7.2V, 600mah, charge time 72h, standby duration 8h
Telephone interface Tested to TBR 21. Hands free vox operated, 6 programmable numbers with 4 different pre-recorded messages

Siren

Siren output 104dBA sound pressure @ 1m minimum
Radio 433.92MHz AM super heterodyne receiver with jamming detection
Power supply 6V, 4 X D alkaline cells. 2 years minimum typical service life

PIR movement detector

Alarm processing Microprocessor controlled dual edge sequential pulse count with pulse length discrimination
Radio 433.92MHz AM transmitter
Power supply 4.5V, 3 X AA alkaline cells. 2 years minimum typical domestic service life, 1-minute sleep timer
Movement detection range 15m, 110°

Door contact

Radio Microprocessor controlled 433.92MHz AM transmitter
Power supply 3V, 2 X AAA alkaline cells. 2 years minimum typical domestic service life @ 50 activations a day

Smoke detector

Radio Microprocessor controlled 433.92MHz AM transmitter
Power supply 9V alkaline PP3. 2 years minimum typical domestic service life

Keyfob controller

Radio Microprocessor controlled 433.92MHz AM transmitter
Power supply 12V alkaline miniature "lighter" battery. 2 years minimum typical domestic service life

Keypad controller

Radio Microprocessor controlled 433.92MHz AM transmitter
Power supply 9V alkaline PP3. 2 years minimum typical domestic service life

Help watch

Radio Microprocessor controlled 433.92MHz AM transmitter
Power supply Sealed for life lithium battery, minimum typical domestic service life 10 years
Environmental conditions Water resistant to a depth of 1m

YALE SECURITY PRODUCTS UK LTD
Wood Street, Willenhall,
West Midlands,
England, WV13 1LA

EC Declaration of Conformity

We: Yale Security Products UK Limited
Wood Street
Willenhall
West Midlands
WV13 1LA
UK

declare under our sole responsibility that the following product(s):

Model: HSA3500
HSA3510
HSA3020
HSA3060
HSA3010
HSA3050
HSA3040
HSA3080
HSA3030
HSA3070

is (are) in conformity with the following relevant harmonised standards:

EN 300 220-1
ETS 300 683

following the provisions of Council Directive 1999/5/EC on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity,

Name: Martin Wakeman   Position: Financial Director

Signature: _____   Date: 26/7/00

On behalf of Yale Security Products UK Limited

System records

For your future convenience, record your system settings below.

My PIN number

_____

Zone no.	Location	Type
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Stopping the alarm

- Key in your PIN code and press OK on the control panel

If any of the devices beep or flash, they have either

been tampered with
See trouble-shooting, page 25

or require a new battery
See how to change a battery, page 24

http://www.yale.co.uk
E-mail: info@yaleuk.com

Yale®

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