Yale®

HSA3600

Control panel 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 HSA3600 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 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. As well as extra door/window contacts and PIRs, you can add smoke detectors, keyfob remote controls, keypad remote controls and help buttons.

Long battery life

There is no need to wire into the mains supply or seek the services of a qualified electrician as all the components are powered by battery (all batteries included).

Batteries will operate for 3 years before they need changing. Regular testing and battery changes (when notified by the system) will ensure reliability and peace of mind. Please note that alkaline batteries must be used as replacements.

Tamper proof system

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

Home and away arming

In addition to fully arming the system, the HSA3600 also allows you to ‘home’ arm. 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. This will not be returned unless it is for an extended warranty period.

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

Helpline service available 9am-5pm Monday to Friday.

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, smoke alarm and help button

Carton contents

Control unit
External siren
2 x PIRs
2 x door contacts
2 x door contact magnets

4 x 1.5V AAA alkaline cells
6 x 1.5V AA alkaline cells
8 x 1.5V D alkaline cells

2 x large adhesive pads
2 x small adhesive pads
4 x small wall plugs
12 x medium wall plugs
4 x large wall plugs
4 x 4mm x 30mm cross head fixing screws
4 x 3.5mm x 22mm cross head fixing screws
12 x 3.5mm x 16mm cross head fixing screws
4 x 3mm x 12mm cross head fixing screws

2 x window stickers

Contents

Accessories available

HSA3020 Passive infra-red (PIR) detector
HSA3030 3 x Passive infra-red (PIR) detectors
HSA3010 Door/window contact
HSA3090 Multiple door/window contact switches
HSA3060 Remote control (keyfob)
HSA3080 Remote keypad
HSA3045 Help button
HSA3070 Smoke detector
HSA3050 External siren

1 Location planning

Work out the best places to locate the devices for maximum protection. Having chosen the locations *do not mount at this stage*.

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 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 as explained in ‘Further programming’ (page 16).

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

Operating range

All devices must be within 30 metres of the control unit and must not be mounted on or near large metal objects. Avoid obvious sources of electrical interference such as fridges and microwave ovens.

Tamper switches

When mounting devices ensure that any tamper switches close fully. On uneven surfaces it may be necessary to place packing behind the switch for reliable operation.

Extend the system

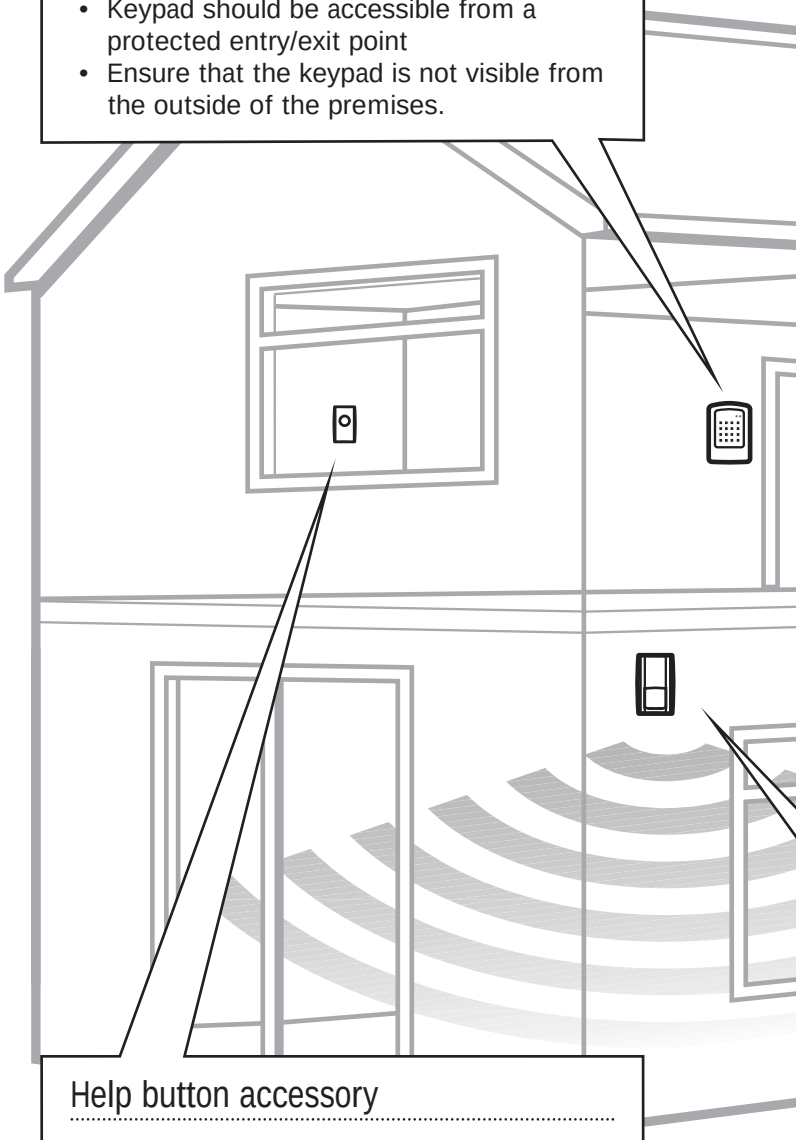
Extend the system in the future to increase your security or as your needs change.

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

Keypad remote control 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 or back door for alternative entry.

- Mount at chest height for ease of use
- Designed for indoor use only
- Keypad should be accessible from a protected entry/exit point
- Ensure that the keypad is not visible from the outside of the premises.



Help button accessory

The help button provides extra protection for you and your family. When help is needed the button can activate your alarm immediately - even when the system is disarmed.

- Mount on bedroom wall or by the front door
- Not clearly visible to an intruder
- Easily accessible
- Out of reach of children
- Not outdoors

Smoke detector 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

Choose a position on an external wall where the siren would be most prominent. Mount as high as possible, out of easy reach.

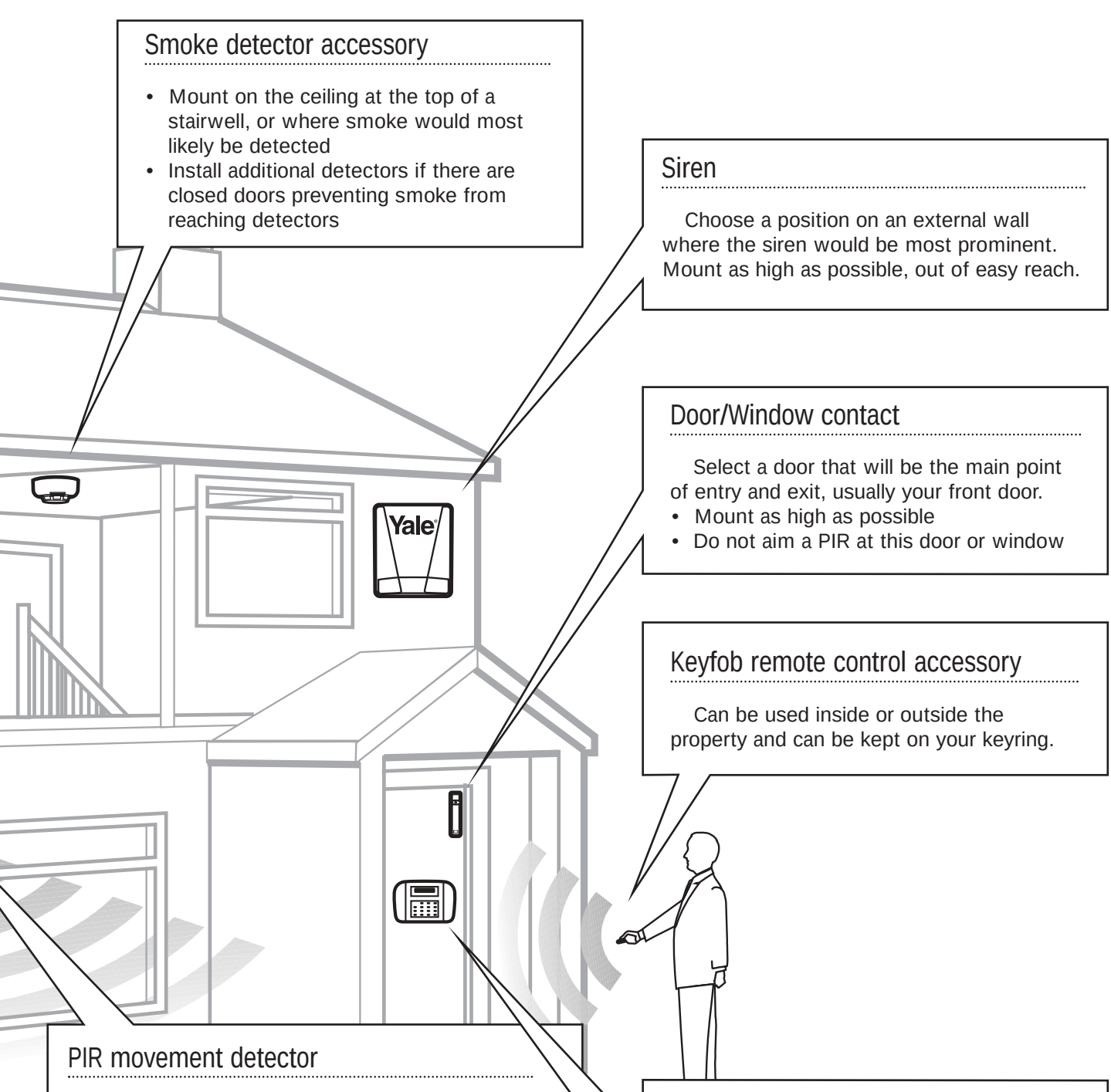
Door/Window contact

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 control accessory

Can be used inside or outside the property and can be kept on your keyring.



PIR movement detector

- Mount in a position such that an intruder would normally move across the PIRs field of view
- Height should be between 1.7 and 2.3 metres above floor level
- Location in a corner will ensure wider room coverage
- Do not mount the PIR where its field of view will be obstructed e.g. by curtains, ornaments etc
- Do not point directly at sources of heat e.g. fires or boilers, and do not position directly above radiators
- Avoid mounting the PIR directly facing a window
- Do not point the PIR at a door protected by a door/window contact

Control unit

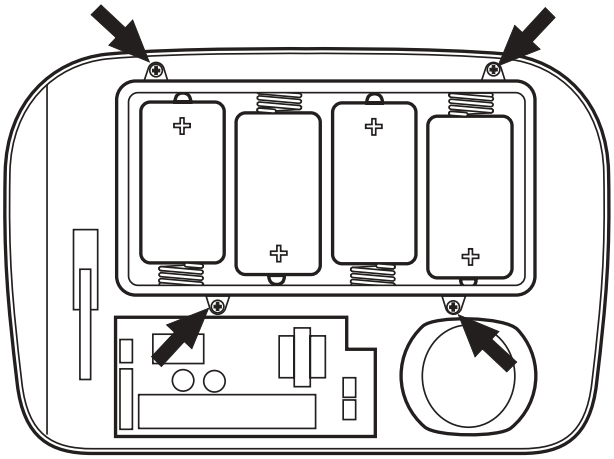
- Ensure the control unit is accessible when entering through a protected entry/exit point
- Avoid mounting the control unit where it would be visible from the outside of the premises
- Wall mounted

2 Unpack all the parts onto a table top

Identify all the parts to get to know the system and get up and running quickly by programming them on a table top before installing them.

Control unit

Loosen the lid securing screw on the right hand side of the control unit and hinge the lid forward and to the left hand side to reveal the battery compartment

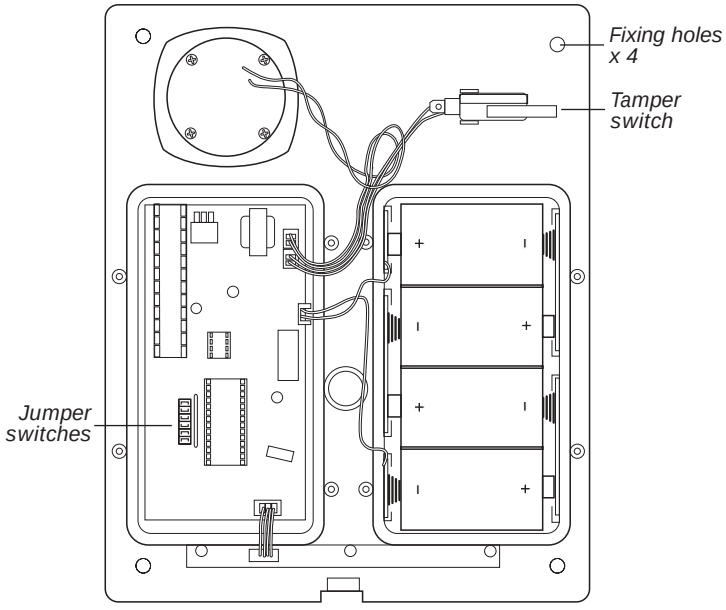


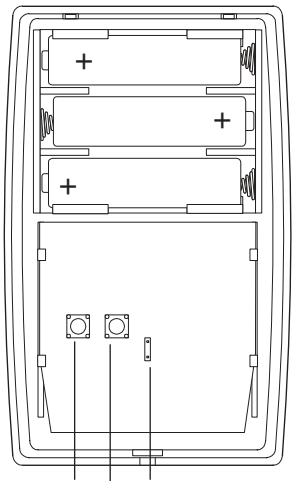
1 Remove the four screws as shown and take off the compartment lid.
2 Insert the D cell batteries provided into the battery compartment, taking care to put the batteries in the right way around.
3 The unit will give a long beep when the last battery is inserted and the front display will show Alarm On for a while.
4 Replace the battery compartment with the four screws taking care not to over tighten.

WARNING
The siren is very loud, avoid touching the tamper switch arm or opening and closing the lid unnecessarily.

Siren

WARNING: The siren is very loud, be prepared!
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 will be a slight pause and the siren will beep and the LEDs flash.

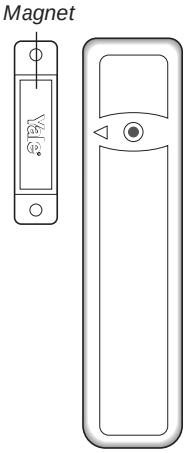


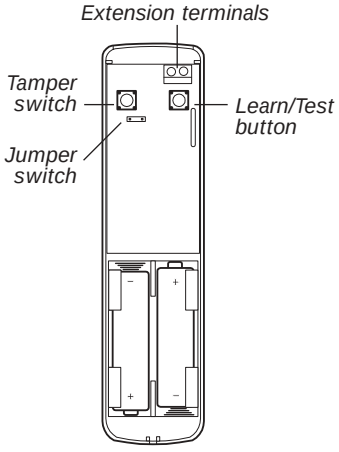


PIR movement detector

Remove the fixing screw and cover assembly and insert the three AA batteries as shown.

- The light will flash for 30 seconds while the unit stabilises.





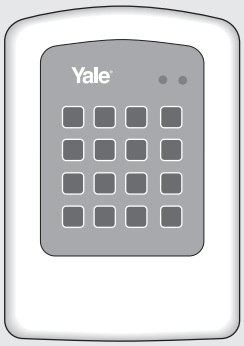
Door/window contact

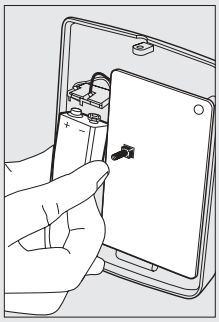
1 Remove the cover by loosening the fixing screw.

2 Insert the two AAA batteries as shown. The indicator will flash briefly.

Remote keypad accessory

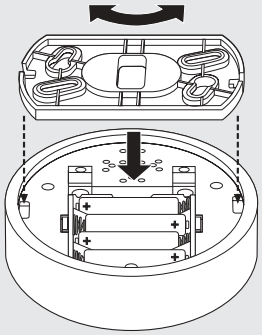
Remove the cover and insert the PP3 battery as shown. The 'Tx' LED will flash briefly while components initialise.





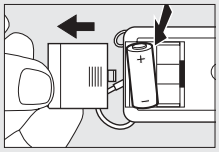
Smoke detector accessory

Twist off backing plate and insert 4 AAA batteries as shown.



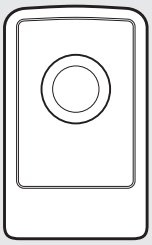
Remote keyfob accessory

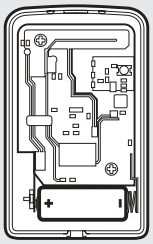
Slide off the battery cover, insert the 23A/MN21 battery as shown, and replace cover. Switch to 'on'.



Help button accessory

Remove the cover by loosening the fixing screw and insert the 12V battery (supplied) as shown. Please ensure you observe battery polarity.





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. *Do not mount at this stage.*

Control unit

When batteries are connected a long beep will be heard and Alarm off will be displayed, this indicates that the system has been armed.

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

Disarm

1 Key in 0, if not already lit the display will light up and 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. The system is now disarmed.
- If no code is entered for a while the display will go blank and the display light will go off.

Introduction to programming

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

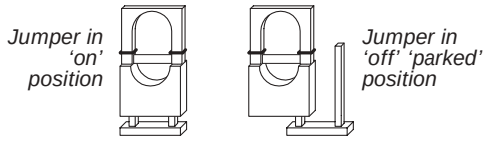
Set your PIN code

1 Press # (programming key), you will be asked to enter the P code.
2 Enter 0000.
3 Press OK, you will be asked for the M (Master) code.
4 Enter 0000 again and press OK. Program Menu/Make a Selection appears briefly, which will be replaced by a list that can be scrolled up and down using the arrow keys. The action to be selected has a pulsating line under the first letter.
5 Use the arrow keys to select General Settings.
6 Press OK to select this sub-menu. Select the first item in this list which is User Pin code.
7 Press OK.
8 The display the four codes that can be programmed, User 1, User 2, Cleaner and Temp, select User 1 and press OK.
9 The unit asks you for a new PIN number, think of one that can easily be remembered, don't forget to write it down.
10 Press OK. If the correct code is entered, the programming menu goes back to the previous step.

Most programming functions work in this way, by entering your code, selecting the menus and sub menus and responding to the prompts.
- While 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

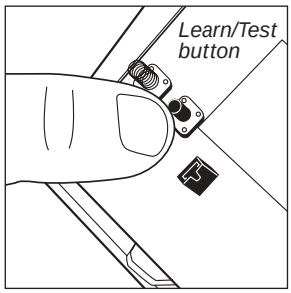
Some devices have internal jumper links, which control normal or test modes, or offer additional programming. The jumpers are either 'on' or 'off'. 'On' is where the jumper connects two pins, 'off' is when it is removed. To prevent the jumper being lost when removed, it can be 'parked' on one pin as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



Add the PIR movement detector

1 Press the # (programming key), enter your PIN code and press OK.
2 Enter the master code to access the programming mode and press OK.
3 Select Devices +/- by scrolling down the menus and press OK.
4 Select the Add Device menu and press OK.
5 Press the learn button in the back of the PIR.
- The PIR will be detected and the device type displayed.

6 Press OK.
7 You are prompted to select a working mode.

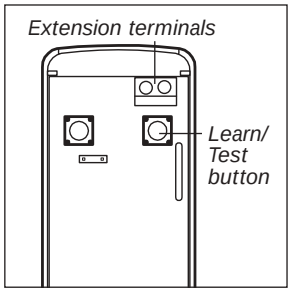


- Each device is automatically given a zone number for identification purposes.
- The PIR can be set to work in other different modes (see later in the programming section), for now we will assume it is being used to protect the living room.

1 Select Burglar from the list displayed and press OK.
2 Select instant off and press OK.
3 When the Enter zone NAME menu is displayed press OK without entering text.
4 The display will then show all the programmed settings: PIR Zone01 B, Press OK and the device will be installed.
5 Press OK.
6 Press ↺.

Add the door/window contact

1 Select Devices +/- by scrolling down the menus and press OK.
2 Select the Add Device menu and press OK.
3 Press the learn button in the back of the door contact.
4 The door contact will be detected and the device type displayed.
5 Press OK.
6 You are prompted to select a working mode.

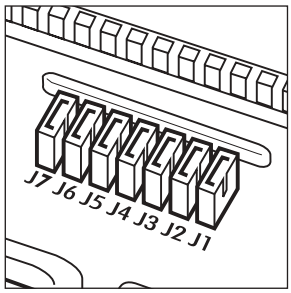


- Each device is automatically given a zone number for identification purposes.
- The PIR can be set to work in other different modes (see later in the programming section), for now we will assume it is being used to protect the point of entry. This will start an entry time countdown when the system is armed and the entry door is opened.

7 Select Entry from the list displayed and press OK.
8 Select instant off and press OK.
9 When the Enter zone NAME menu is displayed press OK without entering text.
10 The display will then show all the programmed settings: DC Zone01 EC, Press OK and the device will be installed.
11 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! Take care not to activate the siren tamper switch unnecessarily.

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

1 Lift off jumper 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 accidentally activated and is useful for testing. Ensure they are replaced in their 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 siren tamper switch by selecting Siren A/T off and press OK.

- The siren tamper disable 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 required.

Siren jumper programming

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 remain ‘on’ (after an alarm) until system is disarmed
J1 on = normal; off = learn-in mode

- J5 must be left in the ‘off’ position.
- J6 must be left ‘on’ in normal service otherwise the siren will lose its 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 once only when armed.
- If J3 and J4 are removed during the learning-in process, the siren will sound for 1 second and is useful for testing. Ensure they are replaced in your chosen positions before replacing the covers.

7 Replace the battery and compartment covers, ensuring that 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 the 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 5 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 confirmation beeps to tell you when the system is armed from outside the premises. One beep for armed or home armed, two beeps for disarmed.

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

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

Testing the radio performance

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

1 Ensure that the siren's tamper is disabled.
2 Mount the siren temporarily in the location you have chosen.
- Use either a masonry nail or a 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 Arming and disarming, and check that the siren responds.
4 Put the control unit into Walk Test mode, as described in testing the system. Hold the devices in their chosen positions and activate.
- The PIR and door contact can be tested by pressing the learn/test button.
- The keypad can be tested by arming and disarming the system
- The smoke detector can be tested by pressing the button until the control unit responds.
- The emergency button can be tested by pressing the button for 2 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.
- Avoid mounting detectors and the siren on metal surfaces or by large metal structures.

Alternative mounting methods

Yale provides two methods of mounting, choose either the self-adhesive pads or the screws and wall plugs provided.

Self adhesive installation *for door/window contact*

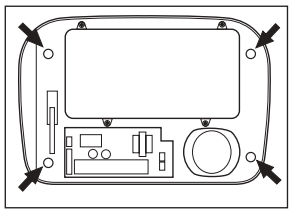
Clean the surface with a suitable degreaser. Remove he protective covering from one side of the double-sided adhesive pad and apply firmly to the back of the door/window contact. Next remove the other cover and firmly press the detector on the desired mounting surface.
- Do not use the adhesive pad method of installation on a surface with peeling or flaky 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 the plaster or brick.

Control unit

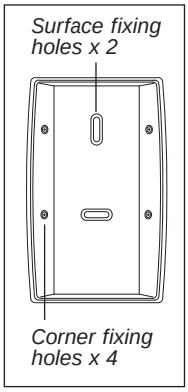


Open the control unit and using the 4 holes as shown, fix the control unit to a wall as described under screw mounting. Ensure the control unit is fitted at approximately chest height where the display can be easily seen and the keypad convenient to operate.

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 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 time by 1 minute. This feature is designed to conserve battery life.

Ensure that 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 a flat wall using the knockouts shown, as described under screw mounting methods. The case has angled back edges for neat corner mounting. Screw the PIR front on.
2 Walk around the protected area noting when the LED flashes and check that the detection coverage is adequate.
- Corner mounting is recommended, as this position is best for detecting movement across the PIR's field of view.
- 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 from its base, place the jumper in the normal 'off' parked position and screw the PIR back onto its base.
- 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.

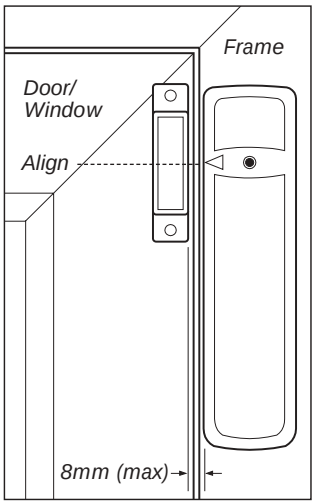
- Do not position a PIR to look directly at a door protected by a door contact, this could cause the door contact and PIR radio signals to be transmitted at the same instant when entering, cancelling each other out.
- Ensure the jumper is in the normal 'off' position when testing is finished, otherwise the low battery and tamper conditions will not be shown.

Door/window contact

1 Ensure that the jumper 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 under alternative mounting methods, mounting the detector base on the frame and aligning the magnet by the arrow as shown.



- The magnet should not be more than 10mm 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 doorframe, use the HSA3090 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.

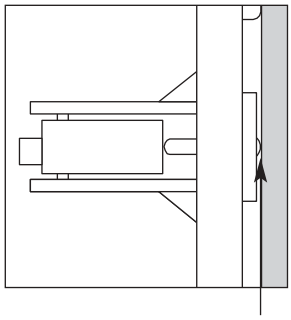
4 Remove the detector, put the jumper in the normal 'off' position. Screw the detector back onto its base.

- 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 that 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!

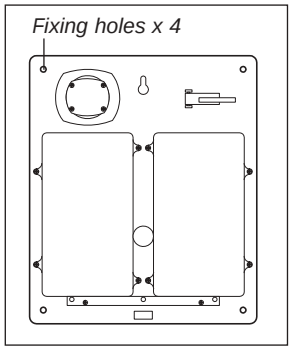
The tamper switch plunger protrudes through the back of the unit, so that if the siren is pulled from the wall the alarm is activated. Ensure that it is fully depressed when the siren is mounted. If there is a gap, pack with a suitable spacing material.



Tamper switch plunger must be pressed in fully by wall surface

1 Find a suitable location, where it is clearly visible and out of reach.

2 Disable the tamper switch by selecting Program Siren, then Siren A/T Off and press OK.



3 Using the large screws provided, mount on the wall through the base plate mounting holes shown.

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 switch is not correctly set.

Installation is complete.

Remote keypad accessory

Mount as described under screw mounting.

Smoke alarm accessory

Mount as described under screw mounting.

Help button accessory

Mount as described under screw mounting.

Arming and disarming

5

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.

Arming the system

Away arming

1 Enter your PIN code and press OK.
2 Away Arm and Home Arm can be selected by using the arrow keys, select Away Arm.
3 Press OK. The display will go blank and exit delay counts down from the default setting of 10 seconds with a series of pips.
4 When the time is up, the control unit sounds a long beep.

- The siren will beep once (if the siren confirm has been switched on) and the strobe will flash once after the exit delay has expired.
- You can also put the system into away arm mode by using the keypad or keyfob accessory.

Home arming

1 Enter your PIN code and press OK.
2 Press ▼ to move the cursor down to select Home Arm.
3 Press OK. The display will go blank and exit delay counts down from the default setting of 10 seconds silently.
4 When the time is up, the control unit sounds 3 beeps.

- The siren will beep once (if the siren confirm has been switched on) and the strobe will flash once after the exit delay has expired.
- You can also put the system into home arm mode by using the keypad or keyfob accessory.

Stopping the exit delay

Do this by disarming the system.
1 Press ↺ and an Enter Code display will show the exit seconds counting down.
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 beep twice and disarm.

- The siren will beep once (if the siren confirm has been switched on) and the strobe will flash once after the exit delay has expired.
- You can also disarm the system by using the keypad or keyfob accessory.

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 auxiliary alarm is triggered, the control unit will activate the alarm immediately irrespective of what alarm mode the control unit is in.

During an alarm, the control unit will sound the siren depending on the programmed options chosen.

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.

If an alarm is silenced using a remote keypad or keyfob, the system will only silence the alarm - not disarm the system. The system can only be disarmed after an alarm event at the control panel.

Tamper and low battery display

The control unit signal any device triggering a tamper alarm or low battery warning by beeping every 30 seconds when disarmed.

When any key is pressed a two-tone fault beep will sound and the device causing the fault will be displayed.

The display can be cleared when disarmed by pressing OK if the fault has been remedied, if not the display will be shown every time a key is pressed. Keying in your PIN code while the fault display is shown will allow arming and disarming the system.

- Tamper and low battery warnings cannot be cleared completely until the problem is rectified.

Stopping the alarm

1 Key in your PIN code and press OK. The alarm will stop and the display will show the device, zone and name (if entered) that triggered the alarm.
2 Press OK and the display will be cleared and replaced with Alarm Off.

Alarm memory

If an alarm was raised during your absence the screen will show the device that detected the alarm. The alarm display can be cleared by pressing OK.

Alarm log

The alarm log memorises the last 20 system events including alarms.

1 Key in your PIN code and press OK.
2 Press the ▼ key repeatedly to select Log and then press OK and the start of the log will be displayed.
3 The log can now be scrolled up and down and viewed with the ▼▲ keys, the most recent event will be at the start.

Dual key alarm feature

Personal emergency alarm

A personal emergency alarm can be triggered at the control unit by pressing keys 1 and 3 simultaneously for 2 seconds.

Fire alarm

A fire alarm can be triggered in a similar way by pressing keys 4 and 6 simultaneously for 2 seconds.

System records

For your future convenience, record your system settings below. For your security please keep this information confidential.

My PIN code

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

Configuring your system

Fine tune the operation of the control panel to your requirements; advanced programming for PIRs and door/window contacts.

General settings menu

User PIN code

There are 4 user PIN codes that can be activated and programmed for use.

1 Use the arrow keys to select the PIN number for changing.
- Only user 1 is activated with a 0000 factory default code and the code is displayed with a (0) indicating it is in use.
- The code can be enabled/disabled by pressing the # key.

2 Press OK when the desired code is selected and enter a 4-digit number when Enter New Code is shown.

3 Press OK to confirm and the display will return to the previous screen where the new code will be shown.
- User 1 and User 2 are normal user codes used to regularly arm and disarm the system.
- The Cleaner code can only be used to Away Arm the system.
- The Temporary code will only disarm the system once and when Away Arming the system will automatically erase the code, perfect for trades people who need access to your house occasionally.
- Ensure that user1, user 2, cleaner and temporary codes are all different.

Master PIN code

Programs the PIN code used for accessing the programming mode.

1 The system asks you for a new PIN number. Enter a new 4-digit code and press OK.

2 Confirm by keying in your PIN number again.

3 Press OK, if an incorrect code is entered, a message prompts the previous step.
- The master PIN code is used to protect the programming mode from unauthorised use.
- The user code and the master code can be made the same for easier use, however it is recommended that they are made different where one responsible person has programming access only.

Entry time

Enables you to alter the entry delay time. Options are 0 sec, 10 sec up to 70 sec in 10-second increments.

1 Use the arrow keys to switch between options.

2 Press OK to confirm.
- 10 seconds is set as factory default.

Exit time

Enables you to alter the exit delay time. Options are 0 sec, 10 sec up to 70 sec in 10-second increments.

1 Use the arrow keys to switch between options.

2 Press OK to confirm.
- 10 seconds is set as factory default.

Alarm length

This is for selection of the period of time that the control unit will sound or not when the alarm is activated.

1 Press the arrow keys to select the option.

2 Press OK to confirm.
- Siren On is the factory default.
- It is recommended that the siren is left on.

Exit sound

Turns on and off the exit delay audible warning.

1 Press the arrow keys to select the option.

2 Press OK to confirm.
- Exit Sound Low is set as factory default.
- The exit sound can be selected for high or low volume.

Exit sound

Turns on and off the entry delay audible warning.

1 Press the arrow keys to select the option.

2 Press OK to confirm.
- Entry Sound Low is set as factory default.

The exit 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 the arrow keys to select the option.

2 Press OK to confirm
- Door Chime Off is set as factory default.
- The door chime can be set for high or low volume.

Interference

Sets the interference display
- Radio interference is unlikely, but can effect the operation of the system. The siren (see Further siren programming) and the control unit have the ability to detect interference and give warnings.

1 Use the arrow keys to choose the setting.

2 Press OK to confirm the setting.
- I.Disp Off is set as factory default.
- When the interference detection is switched off the unit will not respond at all to interference.
- When the interference detection is switched

on, interference will be detected if it is present for 30 seconds or longer.
- When disarmed interference will give a warning and when armed will cause a single alarm only, i.e. the alarm will sound only once even if there is continuous interference.

Remote controller entry enable

Turns on and off the remote controller disarm function.

1 Press the arrow keys to select the option.
2 Press OK to confirm.
- RC Entry E On 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 protected door first.
- When the RC Entry E On is set, the remote controller can arm and disarm the system as normal without unlocking a protected door first.

Warning beep

Turns on and off the system fault warning beep.

1 Press the arrow keys to select the option.
2 Press OK to confirm.
- Warning Beep On is set as factory default.
- The warning beep is a periodic warning tone given by the control unit to draw user attention in the event of a system fault being active.

Device naming

Detectors can be given names and location descriptions to help understand system events. The devices can be named when first installing them or by editing them afterwards, the procedure is similar for both situations.

1 When the Enter zone NAME menu is selected while in the Device +/- menu, the keypad can be used to enter text, similar to “texting” with a mobile telephone.

The keys have the following functions:

1	1
2	ABCabc2
3	DEFdef 3
4	GHIghi4
5	JKLjkl5
6	MNOmno6
7	PQRSpqrs7
8	TUVtuv8
9	WXYZwxyz9
0	<space>0
✻	/&’.*
#	Upper or lower case selection
▲	Forward space
▼	Backward space
⟲	Delete character and backspace

- When the # key is pressed the upper and lower case characters will toggle and will be indicated by either a upper or lower case “NAME” in the top line of the screen.

2 When the name is complete press OK to confirm and return to the previous or main menu.
- The name can be erased by clearing the display with entering backward spaces and pressing OK.

Further PIR programming

The PIR can be set to work in 4 different modes:
- Whether it is armed when the control unit is in home or away armed condition.
- Whether it is omitted in home mode.
- Whether it is installed as an entry point.
- Whether an alarm is started instantly or delayed during the entry period.

These choices presented in the learning-in and editing procedure and a re summarised by these codes:

B	Burglar	Armed when in away or home armed modes
O	Home Omit	Not active when in home armed mode
D	Home Delay	Starts entry delay when in home armed mode
E	Entry	Control unit will start the entry time when activated
I	Instant	Works with other modes and starts an alarm instantly when triggered in away arm entry period. Not available with Entry mode

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, 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 6 different modes:

- Whether it is armed when the control unit is in home or away 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.
- Whether an alarm is started instantly or delayed during the entry period.

These choices presented in the learning-in and editing procedure and are summarised by these codes:

B	Burglar	Armed when in away or home armed modes
O	Home Omit	Not active when in home armed mode
D	Home Delay	Starts entry delay when in home armed 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
E	Entry	Control unit will start the entry time when activated
I	Instant	Works with other modes and starts an alarm instantly when triggered in away arm entry period. Not available with Entry, Fire or 24-hour modes.

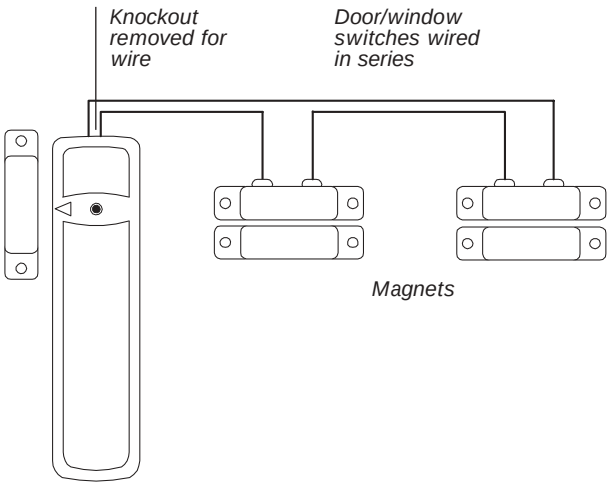
- Fire and 24-hour door contacts are active all the time and do not have to be armed or disarmed.

Points for consideration

- In home-armed 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 full or home-armed mode, the system will sound a chime (if selected).
- If the PIR or door contact has been set to Home Delay and triggered when Home armed mode, the control unit will start an entry period.
- If the PIR or door contact has the Instant attribute selected with the Burglar, Home Omit or Home Delay modes an alarm will be started instantly when the control unit is in entry mode if the devices are triggered. Do not use this attribute if there is any likelihood of persons straying into the protected areas during the entry period.

Multiple door contact wiring

More than one window and door can be protected by a door contact using the HSA3090 door/window 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 any movement will 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 time by 1 minute. This feature is designed to conserve battery life.

Walk test

This allows the testing of the system without causing an alarm.

1 Key in your PIN code
2 Press OK
3 Select Walk Test
4 Walk around protected areas in front of PIRs and open doors/windows protected by door contacts.

- Walk test can also be done from within the programming mode.
- If the control unit receives a signal, it will sound a chime and the display will show the sensor, zone number and name, if programmed.
- The message will be displayed until being replaced by another test signal.
- Pressing the Q key will return to the user menu.
- If no test signals are received for 3 minutes the control unit will power down automatically to conserve battery power.

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.
- When the control unit is disarmed, the siren will give 2 short beeps (if siren confirm is switched on) and will flash from side to side twice.

Adding accessories

To provide additional protection you can add extra door/window contacts, PIRs, two types of remote controller, a help button and a smoke alarm. These are available separately from your local stockist.

Keyfob remote control accessory

Programming

Learn-in the keyfob as follows.

1 Use the control unit Device +/- menu and select the Add Device sub menu.
2 Press the Arm button when requested.
3 The display will show that a remote controller has been detected.
4 Press OK.
5 The control unit will ask for a name to be entered (described in device naming), either enter a name and press OK, or just press OK for no name.
6 The display will show you the successfully added device.
7 Press OK, the addition of a new device is complete.

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 transmitting accidentally.

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.

- This is to prevent the controller from being snatched from the user and the alarm silenced using the disarm button.
- 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 away arming. The external siren will signal arming and disarming after a delay.

Remote keypad

Programming

1 Learn-in as described 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 then 1 on the keypad when requested. The keypad and control unit will beep.
4 The display will show that a remote keypad has been detected.
5 The control unit will ask for a name to be entered (described in device naming), either enter a name and press OK, or just press OK for no name.
6 The display will show you the successfully added device.
7 Press OK, the addition of a new device is complete.

PIN code

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 the 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 one of the control unit codes, but it can be different.

Help button

Program your help button before installation and test in the desired location before mounting.

Programming

1 Learn-in as described by putting the control unit into learn mode.
2 Press the button when requested for at least 3 seconds.
3 The display will show that a Help Button has been detected.
4 Press OK.
5 The control unit will ask for a name to be entered (described in device naming), either enter a name and press OK, or just press OK for no name.
6 The display will show you the successfully added device.
7 Press OK, the addition of a new device is complete.

Using

To activate, press and hold the red button for at least 2 seconds – LED will light momentarily and the alarm will be activated.

To silence an alarm, press and hold down the red button, after 10 seconds the LED will light momentarily for a second time – alarm will be silenced.

• Please note that silencing the alarm with the help button does not reset the system. If the alarm is armed prior to activation, the system will re-arm after being silenced with the help button.

Smoke detector

Programming

1 Learn-in as described by putting the control unit into learn mode.
2 Press the button when requested and the smoke detector will give a two tone beep.
3 The display will show that a smoke detector has been detected.
4 Press OK.
5 The control unit will ask for a name to be entered (described in device naming), either enter a name and press OK, or just press OK for no name.
6 The display will show you the successfully added device.

Press OK, the addition of a new device is complete.

Using

• The smoke detector has an internal siren and a light to indicate a fire alarm, in addition to triggering the control unit.
• The smoke detector can be walk tested by pressing the test button without using smoke. Ensure that the control unit is put into walk test mode first before testing.
• The smoke detector has a self-test feature; if everything is OK then the detector will produce a two-tone beep when the test button is pressed, if three pips are heard the detector is faulty.
• The smoke detector will trigger the control unit repeatedly when activated, to silence the smoke detector and prevent the control unit being re-triggered for 10 minutes the test button should be pressed when in alarm.

Remove a device

If a replacement device needs to be fitted, it first needs to be removed from the control unit memory.

To delete a sensor, choose Remove Device in the Device +/- menu where all the zones with the sensor types and names are listed.

1 Use the 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 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.

Editing a device

If a sensor mode needs to be altered or renamed, the editing function can be used.

To edit a sensor, choose Edit Device in the Device +/- menu where all the zones with the sensor types and names are listed.

1 Use the arrow keys to move the cursor to the position where the device listed is to be edited.
- The list is displayed in zone number order.

2 Press OK. The selected device will be displayed to confirm.

3 Press OK.
- A list of options will be displayed to choose, followed by the device naming screen menu.

4 When the desired changes have been done press OK to confirm, the screen will return to the previous list.
- Press ↺ to exit at any time if you do not want to edit this device, the screen will return to the previous list.
- The naming procedure is described in Device naming above.

Already in system

Only one device can be allocated to each one of the 20 zones. When a zone is already allocated any attempt to re-learn the device a second time (unless removed first) will give an error message and then prompt new action.

Changing the batteries

Always use alkaline batteries as replacements to ensure long service life. The typical life of the batteries is 2 to 3 years depending on device type.

The control unit will signal all low battery devices, except the keyfob, by producing a low volume pip periodically to attract attention. When a control unit key is pressed the display will show the device with a low battery accompanied with a two-tone beep.

Control unit

The control unit will display a low battery condition when any key is pressed, with a two-tone beep.

1 Disable tamper detection as described below.

2 Loosen front screw with a coin and hinge front away from base.

3 Remove battery compartment screws and lid.

4 Change the batteries with alkaline replacements.
- When the batteries are replaced the control unit will power up in an armed state; disarm the system before an alarm is triggered.
- Do not activate the tamper switch while the front is hinged open otherwise a tamper alarm will be triggered.

5 Replace battery compartment lid and front.

Siren

The siren will produce a series of pips when armed and disarmed, and an interrupted sound when activated) if the batteries are near exhaustion. The batteries should be changed as soon as possible. The siren operation will be reset when the batteries are changed.

1 Disable the siren tamper as described below.
2 Remove the cover and the right hand battery compartment lid.
- Remove the batteries and wait one minute to allow the siren time to reset before inserting new alkaline replacements.

3 Replace the battery compartment lid and cover, taking care to correctly set the tamper switch.
4 Enable tamper protection and check the siren by arming and disarming the system.
- The difference between a tamper 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 that the siren tamper has been disturbed.

PIR and door contact

The LED will flash every time the device is activated indicating a low battery and the control unit display will identify the sensor with a low battery.

- Before changing the battery check that the tamper switch is operating correctly.

1 Disable tamper detection as described below.
2 Remove device from mounting.
3 Change the batteries with alkaline replacements.
4 Screw device back on mounting.
5 Enable tamper protection as described below and check the sensor using the walk test facility.

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 every time the device is used indicating a low battery and the control unit will identify the keypad with a low battery.

- Before changing the battery check that the tamper switch is operating correctly.

1 Disable tamper detection as described below.
2 Remove keypad from mounting.
3 Change the batteries with alkaline replacements.
4 Screw keypad back on mounting.
5 Enable tamper protection as described below and check the keypad by arming and disarming the system.

Smoke detector

The LED will flash and a pip will sound periodically and the control unit will identify the smoke detector with a low battery.

1 Twist off the smoke detector from its mounting.
2 Change the batteries with alkaline replacements.
3 Twist on the smoke detector onto the mounting.
4 Select walk test mode on the control unit and check the smoke detector by pressing the test button.
- This will ensure that the low battery condition is reset.

Help button

Remove the cover by loosening the fixing screw and insert a new 12V battery.

Disable and enable tamper

1 Put the control unit into program mode to disable system device tampers.
- The program mode will automatically quit after 10 minutes if no keys are pressed.

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.
- Remember to enable the 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 and disarming

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

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 and is preventing subsequent movement detection. Vacate protected room for at least 1.5 minutes before walk 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 the PIR is not pointed at sources of heat or moving objects e.g. fluttering curtains.
- Check that the PIR is not mounted above convector heaters or pointing directly at windows.
- Check that the PIR location is insect free, e.g. a spider in a web across the lens, or a large moth flying near the PIR can trigger an alarm.

PIR LED flashes when the jumper is in the normal position

- Batteries are low or the tamper switch is disturbed. Check that the tamper spring is making contact with the 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 the jumper is in the normal position

- Batteries are low or the tamper switch is disturbed. Check that the tamper 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 the door contact. Check that the gap between door contact and magnet is not greater than 8mm.

Control unit

Control unit beeps periodically

- There is a system problem; to check press a key on the control unit and the display will show the nature of the fault.

The control unit display is blank without any backlight

- This is normal, the control unit is in power saving mode to conserve the batteries where it is constantly scanning the system for events and alarms.

The control unit will not respond to key presses

- Batteries are completely exhausted. Change batteries with new alkaline replacements.

The control unit beeps when a key is pressed, but the display stays blank

- The wrong code has been entered 4 times and the control unit is protecting itself against unauthorised access by ignoring key presses for 1 minute.

Specifications

All devices

EMC Tested to EN 300 220-1 and ETS 300 683/ EN 301 489-1-3

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, over 100m in free field conditions. Can vary depending on building construction and RF environment

Housings ABS

Control unit

Device Codes

DS	Door Contact
PIR	Movement detector
SD	Smoke detector
RC	Remote controller (keyfob)
KP	Remote keypad

Zone types

B	Burglar
O	Home Omit
D	Home Delay
E	Entry
H	24Hour
F	Fire
P	Personal emergency

Zone attributes

I	Instant

Siren output 103dBA sound pressure @ 1m minimum

Zones 20 radio devices

Radio 433.92Mhz AM integral transmitter and super heterodyne receiver with jamming detection

Power supply 6V 4 X D alkaline cells, 2 years minimum typical domestic service life

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, 3 years minimum typical domestic 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, 3 years minimum typical domestic service life

Door contact

Radio Microprocessor controlled 433.92Mhz AM transmitter

P**ower supply** 3V 2 X AAA alkaline cells, 3 years minimum typical domestic service life @ 50 activations per day

Smoke detector

Detector Microprocessor controlled optical labyrinth

Radio 433.92Mhz AM transmitter

Power supply 6V 4 X AAA alkaline cells, 2.5 years minimum typical domestic service life

Keyfob controller

Radio Microprocessor controlled 433.92Mhz AM transmitter

Power supply 12V alkaline miniature 'lighter' battery, 3 years minimum typical domestic service life

Keypad controller

Radio Microprocessor controlled 433.92Mhz AM transmitter

Power supply 4.5V 3 X AA alkaline cells, 3 years minimum typical domestic service life

Help button

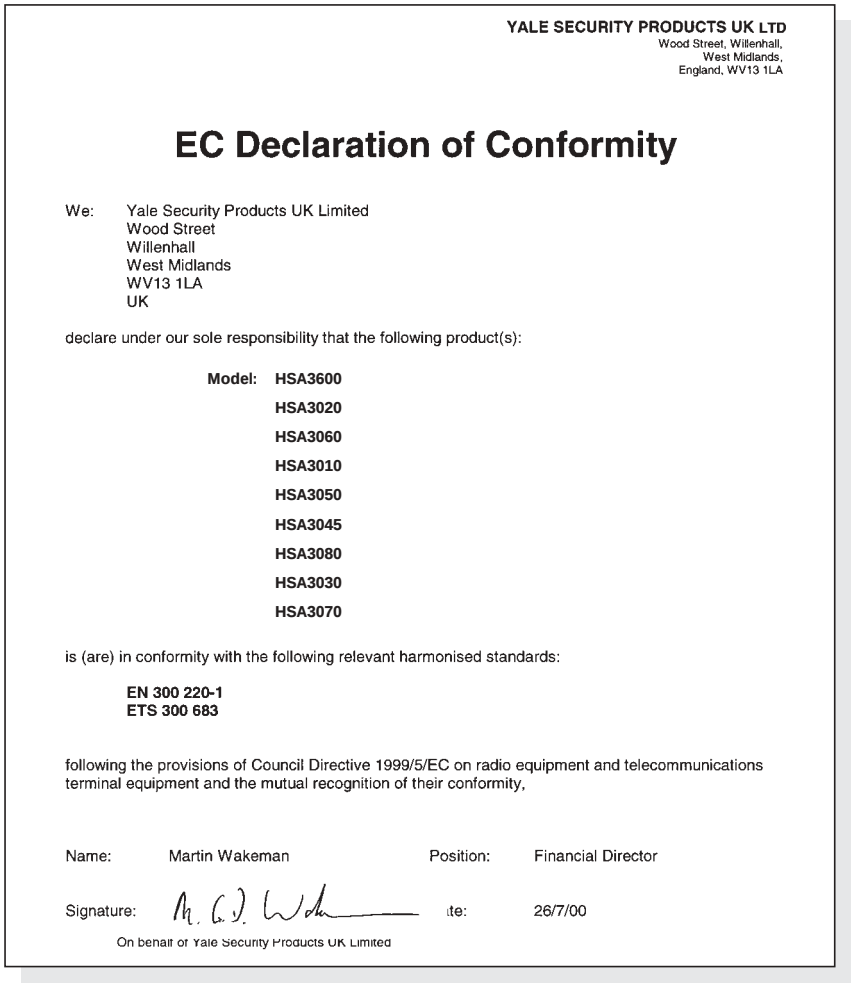
EMC Tested to EN 300 220-1 and ETS 300 683

Environmental conditions -10°C to 40°C, relative humidity 70% non-condensing

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

Radio Microprocessor controlled 433.92MHz AM transmitter

Power supply 12V 23A/MN21 alkaline miniature 'lighter battery'. 3 years typical domestic service life



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: **HSA3600**
HSA3020
HSA3060
HSA3010
HSA3050
HSA3045
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: M. C. J. Wa... te: 26/7/00

On behalf of Yale Security Products UK Limited

Key points

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 22

or require a new battery
See how to change a battery, page 20

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

Security Products UK Ltd.

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E2 11/03