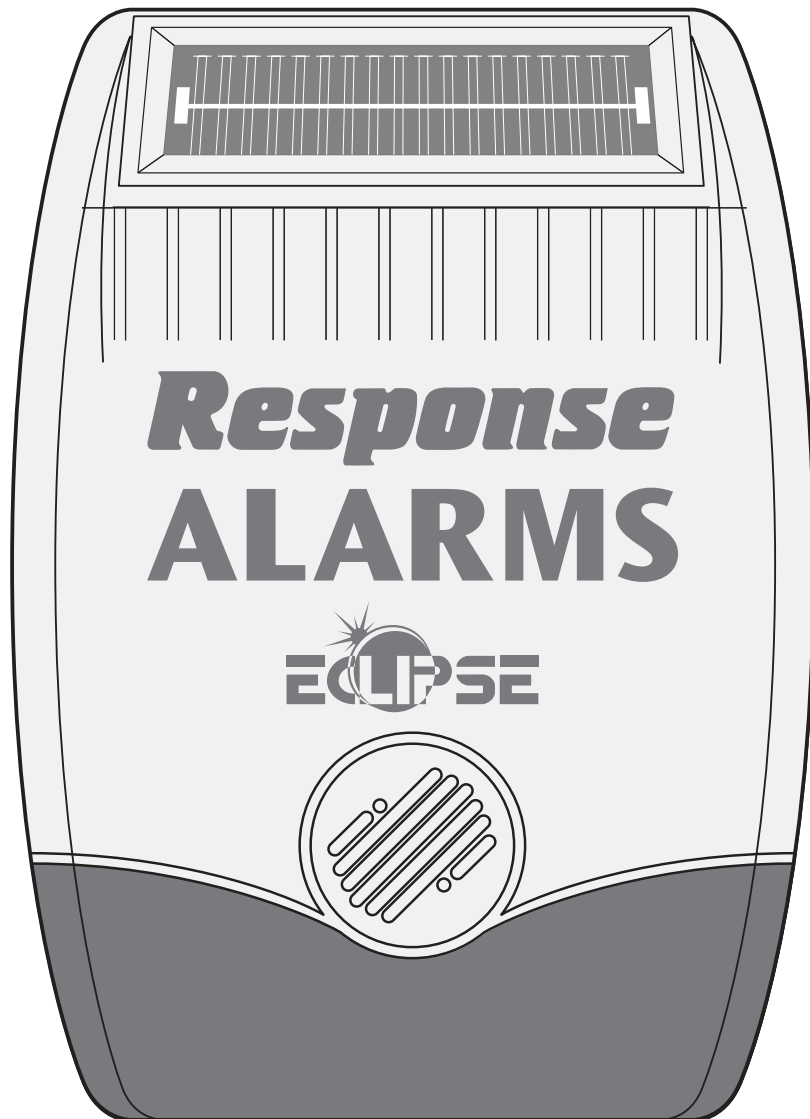




# **E400 Wirefree Alarm System**



## **Installation & Operating Manual**

**III Response III**

# FOREWORD

Your decision to purchase an Eclipse E400 Wirefree Alarm System represents a major and sensible step towards total protection of your premises, its contents and its occupants.

The E400 Wirefree Alarm System complies with the requirements of BS6799 Class 3 for Wire-Free Alarms. All components are designed and manufactured to provide a high standard of security protection and long, reliable service. In addition, the radio devices are tested and approved by the Radio Regulatory Division of the Department of Trade and Industry (DTI) to ensure that they will not interfere with other radio equipment. No radio license is required, however, the approved radio frequency is not protected from interference and may be withdrawn from use at any time subject to the DTI giving users an appropriate notice period.

The E400 Wirefree Alarm System is purposely designed for installation by non-experienced people using only conventional domestic tools. However, it is essential that the installer reads and fully understands the advice and procedures contained in this manual before proceeding with the installation. This manual should be retained for future reference.

During installation, it is also important that the procedures are followed in sequence.

## IMPORTANT NOTE

All components, with the exception of the External Solar Siren & Strobe, are only suitable for internal use.

## SYSTEM SECURITY

This system has been designed to both detect intruders and act as a strong deterrent to would-be intruders. Please remember that, given adequate knowledge and time, it is possible to overcome any alarm system and we therefore recommend that an Intruder Alarm is used in conjunction with good physical protection such as security window and door locks.

The system may be operated remotely from one or more Remote Controls, or by entering an Access Code at the Control Unit Keypad.

Care should be taken to ensure that your Remote Control Unit(s) are not lost as the finder could Disarm your alarm before you are able to re-code the system.

# CONTENTS

	Page No.		Page No.
FOREWORD	Inside Front Cover	PROGRAMMABLE FUNCTIONS	
INTRODUCTION AND OVERVIEW	2	House Code	14
PLANNING AND EXTENDING YOUR E400 WIREFREE ALARM SYSTEM	4	Instant/Delay Zone	15
CONTROL UNIT		Exit/Entry Delay Time	15
Indicators and Keypad	5	Alarm Autostop Time	15
Location	5	Part Arm/Zone Omit	16
Installation	6	Exit/Entry Delay Tones	16
Programme Memory	6	Jamming Detection System	16
Mains Adaptor and Back-up Battery	7	User Access Code	17
SYSTEM HOUSE CODE	7	Siren Code	17
REMOTE CONTROL	8	EXTERNAL CONNECTIONS	17
SETTING THE CONTROL UNIT HOUSE CODE	8	OPERATING INSTRUCTIONS	
SETTING THE CONTROL UNIT TO TEST MODE	8	Fully Arming the System	18
SYSTEM ZONING	9	Part Arming the System	18
WIREFREE PASSIVE INFRA RED MOVEMENT DETECTOR(S)	9	Disarming the System	19
Installation	10	Disarming After an Intrusion	19
Setting	10	Personal Attack Alarm	19
WIREFREE MAGNETIC CONTACT DETECTOR	11	Battery Monitoring	19
INSTALLING AND SETTING THE EXTERNAL SOLAR WIREFREE SIREN & STROBE		TESTING THE SYSTEM	20
Location	13	MAINTENANCE	
Installation	13	Control Unit	20
Settings	13	Solar Siren & Strobe	20
Initial Power-Up	14	Rechargeable Batteries	21
		Detectors and Remote Controls	21
		ALARM RECORD	21
		TROUBLE SHOOTING	22
		EXTENDING YOUR E400 WIREFREE INTRUDER ALARM SYSTEM	24
		ACCESSORIES	24
		YOUR GUARANTEE	Inside Back Cover
		E400 SPECIFICATION	Back Cover

# INTRODUCTION AND OVERVIEW

The E400 Wirefree Alarm System is designed to allow flexibility in configuring and using the system. The detectors can be set to operate on any one of 4 Zones, to give an instant alarm or a timed entry delay. There is no limit to the number of detectors that can be installed per Zone.

A normally closed, Hard-wired Zone input is also available on Zone 5.

Part Arm allows only selected detection Zones to be Armed. For example, for night time protection you can 'Arm' the downstairs areas, garage and outbuildings, whilst allowing you free access to the upstairs areas without activating your alarm.

The Control Unit is programmed and operated via its integral keypad. A User Access Code allows general operation and full access to the programming menu.

Wired output facilities are available for connection to a Telephone Dialler or Communicator or Hard wired External Siren & Strobe.

The Control Unit also incorporates a sophisticated Jamming Detection Circuit with pre-alarm indication.

The E400 Intruder Alarm package contains all the components necessary to install a complete Intruder

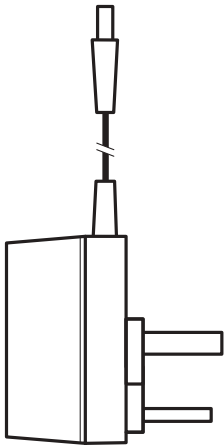
Alarm System within your premises. You can increase your protection by adding additional Wirefree Passive Infra Red Movement Detectors and Wirefree Magnetic Contact Detectors either at the time of initial installation or at a future date. You may also wish to purchase additional Remote Control Unit(s) for use by other members of your household. Full details of other accessories to extend your system are given on page 24.

The items included in your E400 package are shown opposite.

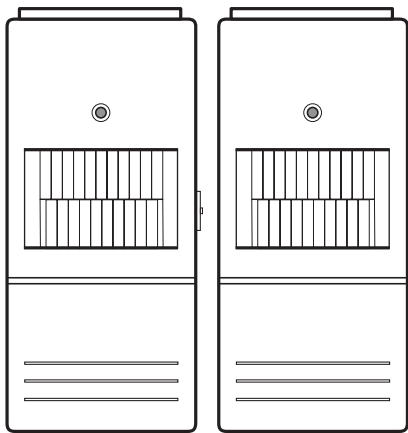
## EXTENDING THE ECLIPSE E400 SYSTEM

The following additional accessories are available to enhance your system and provide further protection and a higher level of security where required.

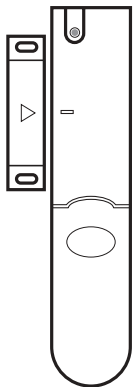
<b>Part No</b>	<b>Description</b>
<i>CA2000P</i>	Wirefree Passive Infra Red Detector
<i>CA2000M</i>	Wirefree Magnetic Contact Detector
<i>CA2000R</i>	Remote Control Unit
<i>E100D</i>	Dummy External Siren



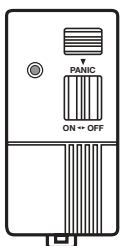
**Control Unit  
Mains Adaptor**



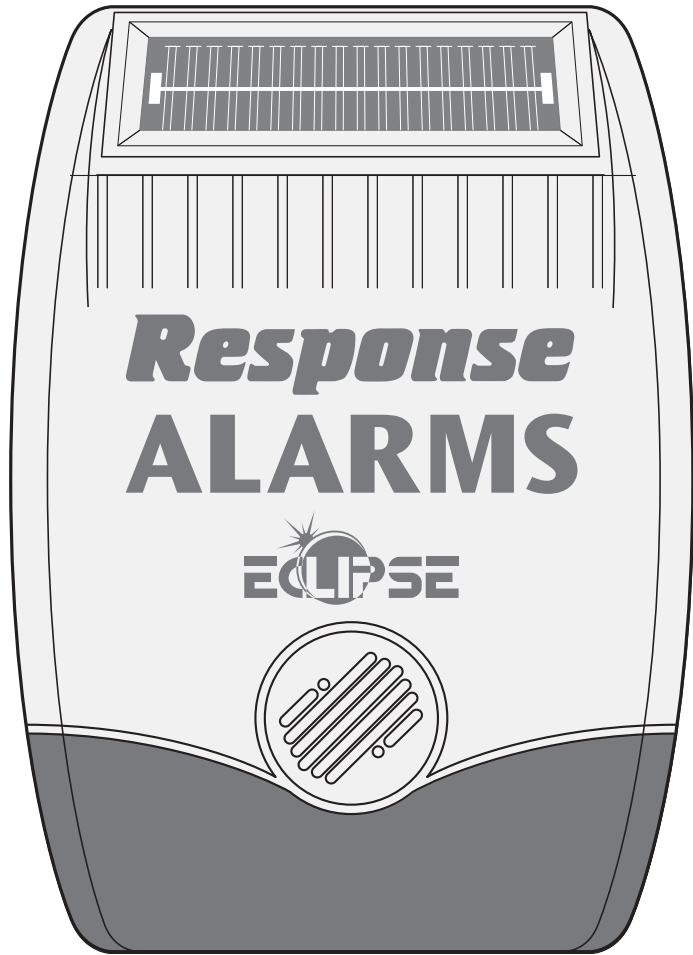
**2 x Wirefree Passive Infra Red  
Movement Detectors (PIRs)**



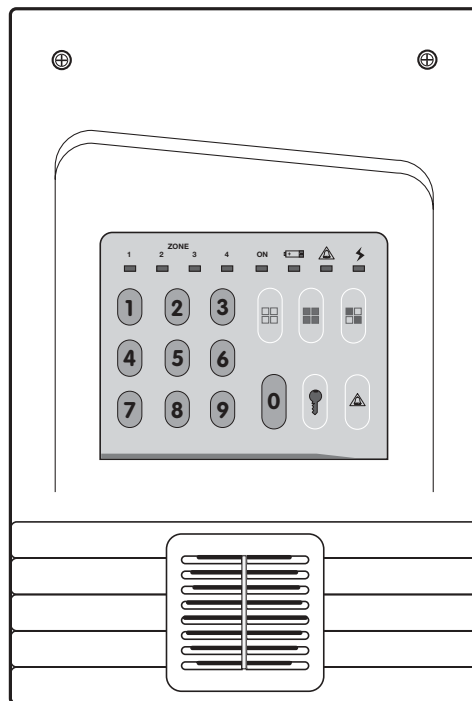
**Wirefree Magnetic  
Contact Detector**



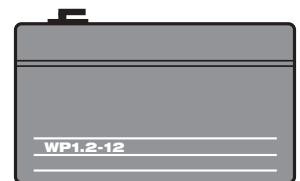
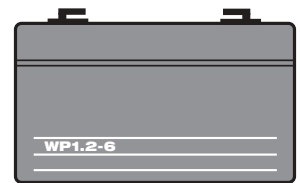
**Wirefree Remote  
Control**



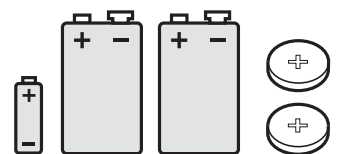
**External Solar Siren & Strobe**



**Control Unit**



**Rechargeable Batteries**  
(Supplied fitted in the Control Unit  
and Solar Siren & Strobe)



**Detector and Remote  
Control Batteries**

**Also included:**

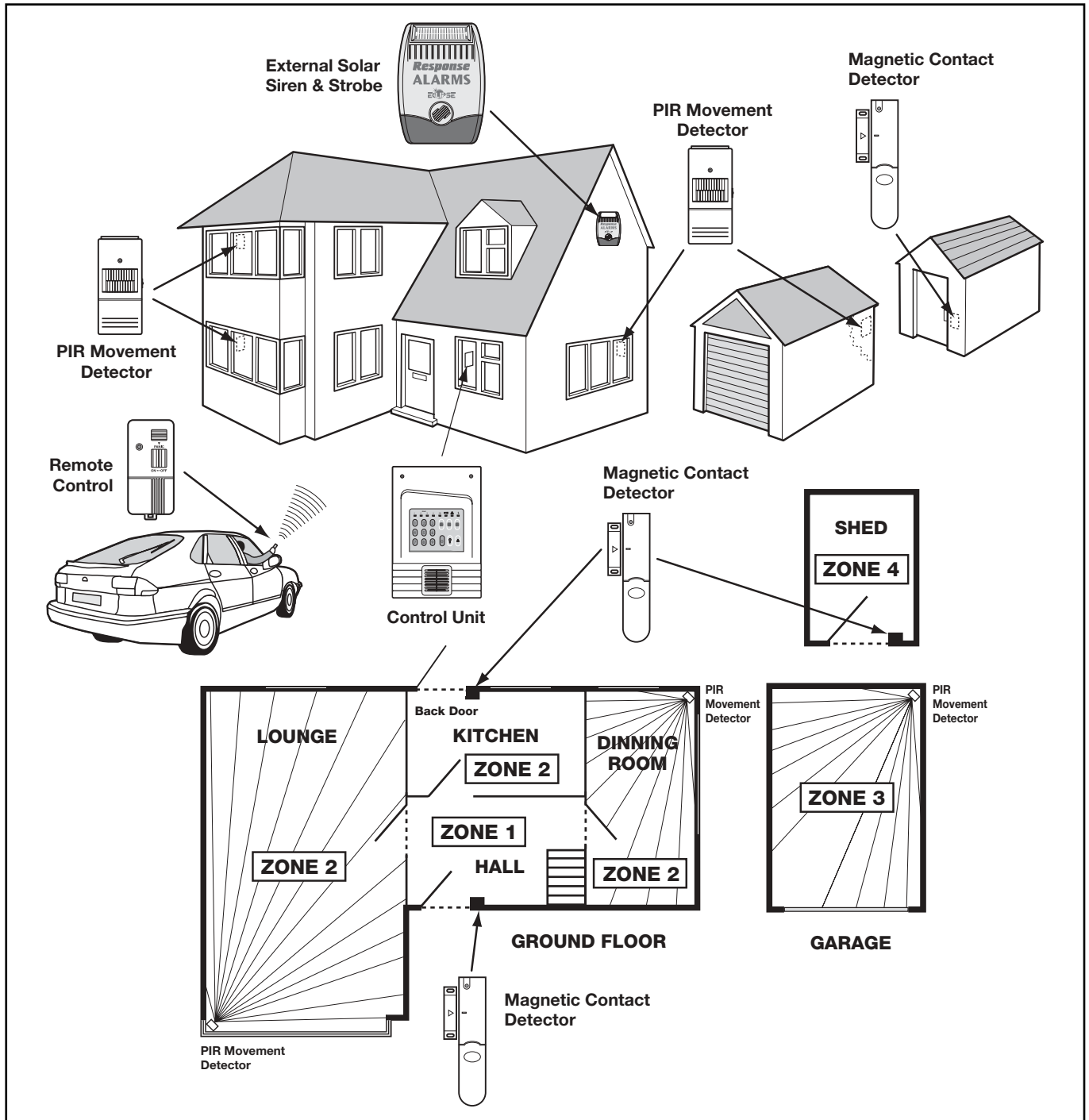
- Installation and Operating Manual
- All necessary fixings
- Window warning stickers

# PLANNING AND EXTENDING YOUR ECLIPSE E400 ALARM SYSTEM

For even greater protection you can install as many Passive Infra Red Movement Detectors and Magnetic Contact Detectors as and when you require. The E400 Alarm System is designed to give you protection for a three bedroomed house. Just add additional detectors where further protection is needed.

## PART ARM

Protect either all of your home or just the areas you choose. For example, for night time protection you can have downstairs plus the garage and shed 'ON' whilst upstairs is 'OFF'. This allows you to occupy upstairs areas without activating your alarm.



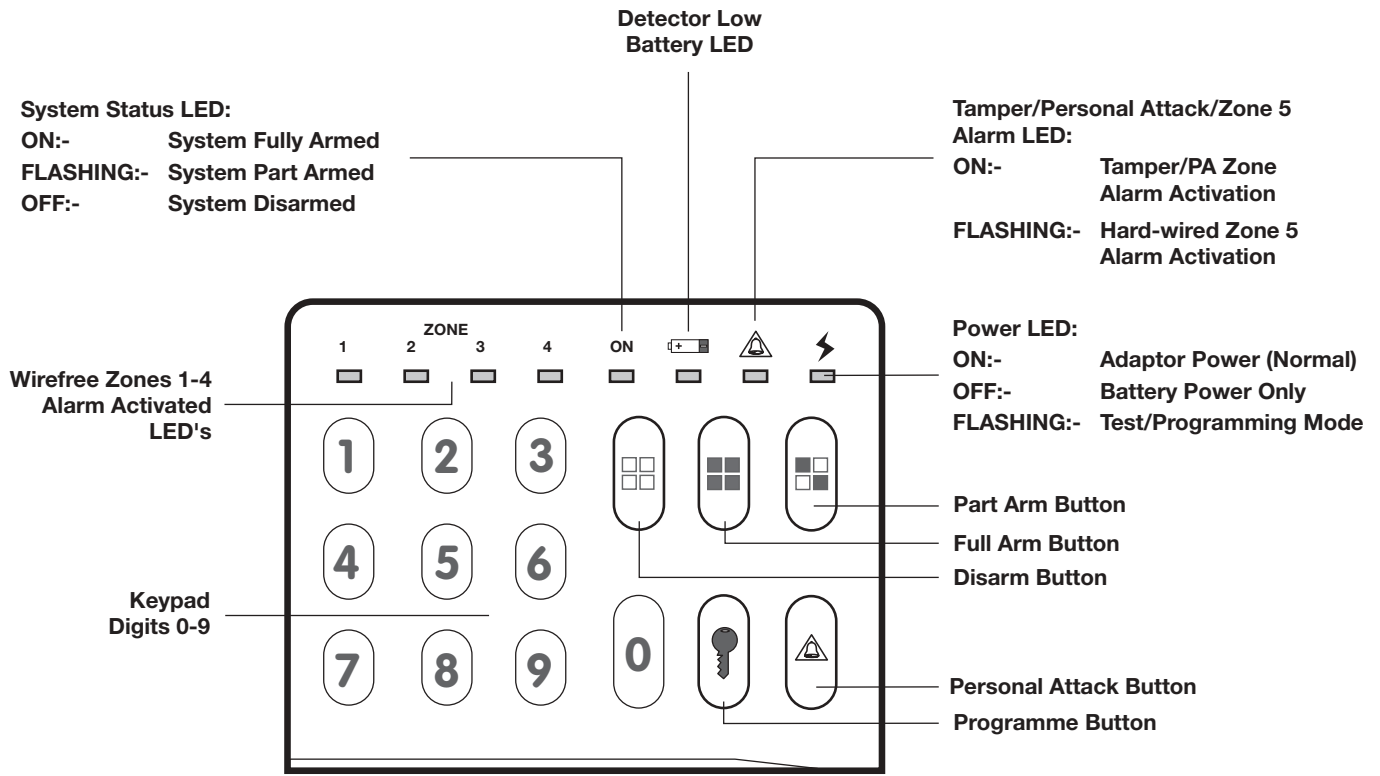
## PLANNING YOUR INSTALLATION

Before attempting to install your E400 Alarm System it is important to study your security requirements and plan your installation, including Zoning and Entry/Exit routes.

Each property will have its own layout, the diagrams shown are intended only as a guide.

# CONTROL UNIT

## INDICATORS AND KEYPAD



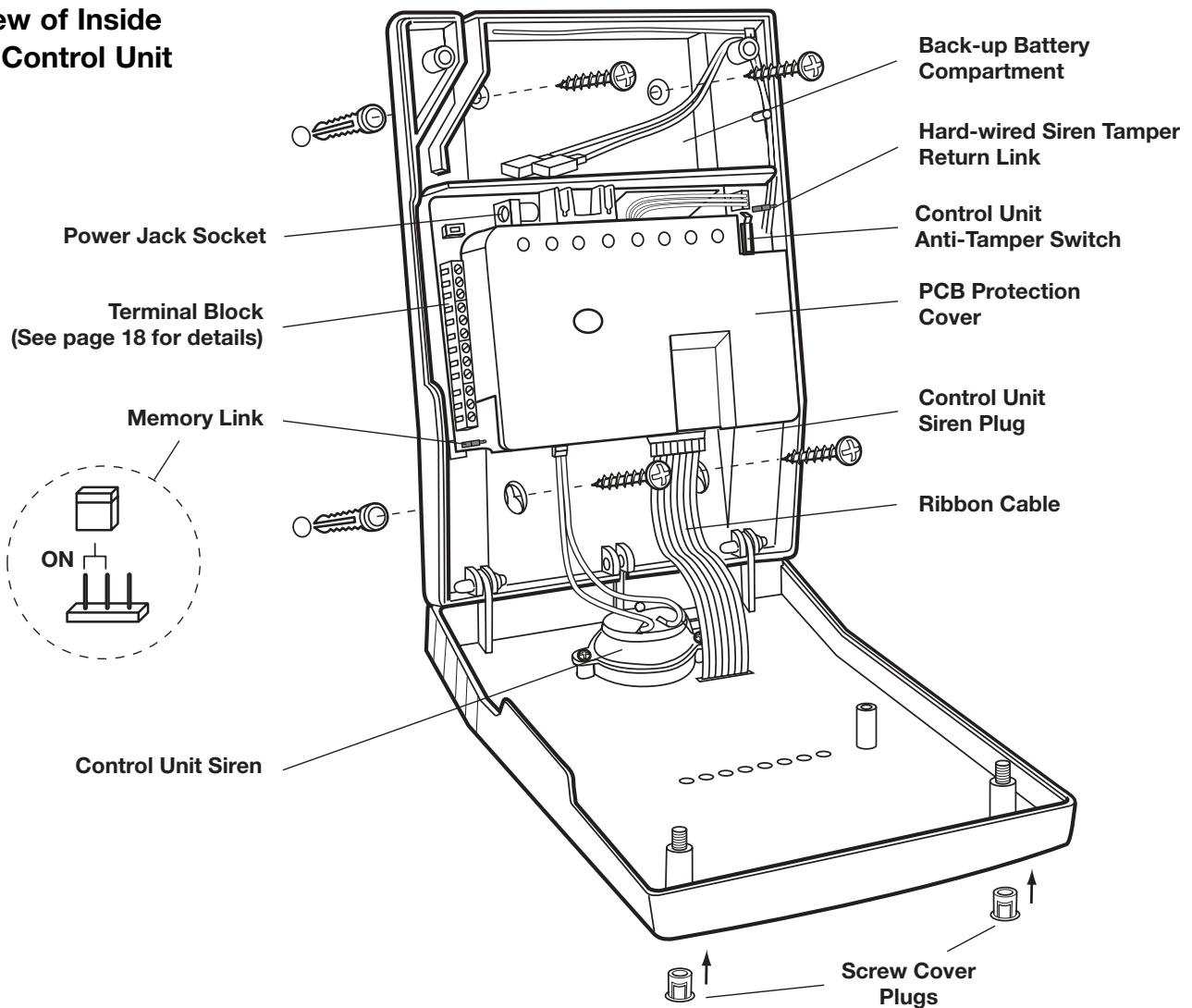
**View of Control Unit Indicators and Keypad**

## LOCATION

When choosing a suitable location for the Control Unit, the following points should be considered.

1. Ensure that the Control Unit is within a protected area with the system Armed, ie. an intruder cannot reach the Control Unit without opening a protected door or being detected by a movement detector.
2. The position selected must be within reach of a 13A socket.
3. The Control Unit should be close to the Entry/Exit door but not visible from the door or windows.
4. Do not locate the Control Unit closer than 1 metre to any large metallic object eg. mirrors, radiators, fridge-freezers etc., as this may affect the radio range.
5. Locate the Control Unit in any easily accessible position, between 1.5 and 2 metres above floor level and in a position where it will be seen each day.

## View of Inside of Control Unit



## INSTALLATION

1. Undo the two front cover retaining screws and hinge the Control Unit cover down. Remove the Control Unit Back-up Battery.
2. Hold the Control Unit in position and mark the four fixing holes. A small spirit level placed on top of the Control Unit will ensure that the panel is level. Note that the bottom fixings are keyhole type so the holes should be marked at the top of the keyhole.
3. Remove the Control Unit and drill four, 4mm diameter fixing holes.

**IMPORTANT NOTE:** Do not drill the fixing holes with the Control Unit in position, as the resulting dust could seriously affect the system electronics and invalidate the guarantee.

4. Fully insert the plastic wall plugs supplied and screw the Control Unit to the wall using the four screws

supplied. Be careful when fitting the bottom right hand screw not to damage the ribbon cable.

5. Ensure that the Control Unit Siren Plug is plugged into the socket on the circuit board.

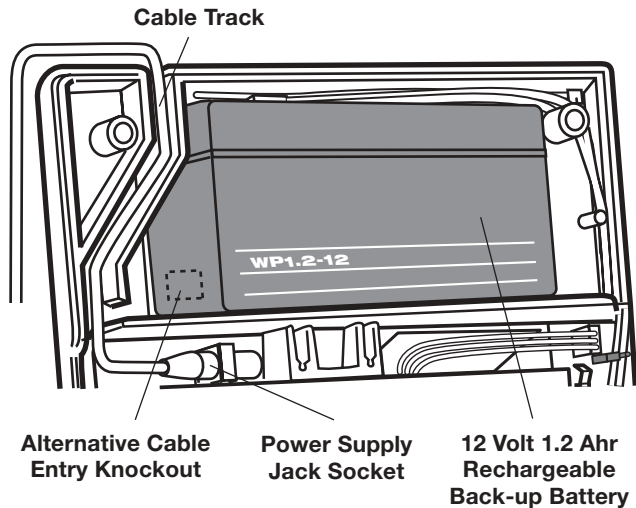
## PROGRAMME MEMORY

The Control Unit incorporates a 'Non Volatile Memory', which will memorise all programme settings indefinitely even when all power has been removed. To enable this facility to operate, the memory link must be set to the 'ON' position.

If, for any reason, you wish to erase the programme memory and reset the Control Unit to the factory settings, remove all power (mains and Back-up Battery), set the memory link to 'OFF' and then re-apply power. In all other circumstances the memory link should be left in the 'ON' position.



## MAINS ADAPTOR AND BACK-UP BATTERY



A DC Mains Adaptor and cable and 1.2Ahr rechargeable Back-up Battery are supplied with the E400 equipment. The purpose of the battery is to supply emergency power to the Control Unit in the event of a failure of the mains supply. The Back-up Battery is capable of providing emergency power to the Control Unit for a period of approximately 24 hours and will automatically recharge on restoration of the supply. To fit the mains adaptor and battery, proceed as follows.

1. Lead the cable along the cable track or pass the cable through the knockout in the rear of the casing.
2. Plug the jack plug into the jack socket on the printed circuit board as shown.
3. Plug the adaptor into a 13A socket.
4. The Control Unit will emit a bleep and the green power indicator will now illuminate steadily, indicating that the Control Unit is powered from the mains supply. (It is normal for the mains adaptor to appear warm to the touch when in use).
5. To fit the Back-up Battery, place the battery in the compartment provided and connect the battery leads red to red (+) and black to black (-).
6. In the event of mains failure the green power indicator will now extinguish warning that the Control Unit is powered by battery only.

**Note:** pressing any button on the Control Unit Keypad, or Arming/Disarming from the Remote Control will cause the power indicator to re-illuminate for approximately 10 seconds and then extinguish whilst on Back-up Battery power.

7. Close the Control Unit cover and hold it firmly closed whilst securing the two retaining screws. Fit the screw cover plugs supplied to cover the retaining screws.

**Note:** if you accidentally trigger the Control Unit Anti-Tamper Switch whilst closing the cover,

Enter **1 2 3 4**  to cancel the alarm.

## EXTERNAL CONNECTIONS

The Control Unit incorporates a terminal block to facilitate external connection of a Hard Wired Siren, Telephone Dialler or a Hard Wired Zone 5 Trigger input.

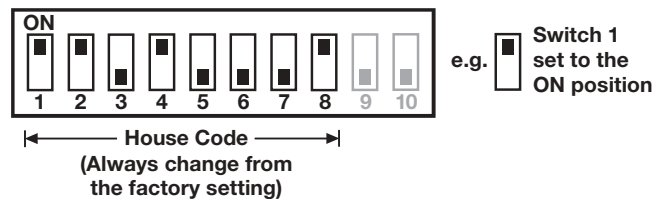
If any Hard-wired connections are to be made at the Control Unit it is recommended that these are made AFTER the initial installation and programming of the Control Unit.

For details of making external connections to the Control Unit, see page 17.

## SYSTEM HOUSE CODE

In order to prevent any unauthorised attempt to activate or disarm your system, you must set your system to accept encrypted radio signals only from your own detector(s) and Remote Control Unit(s). This is done by setting a series of two position miniature switches in the detectors and Remote Control Unit(s) to a special combination (House Code) selected by yourself and programming the Control Unit to recognise only this House Code combination.

**IMPORTANT:** In order for all detectors, Remote Control Unit(s) and accessories to communicate with the Control Unit, it is essential that the same House Code combination is used for all components. (Except the Solar Siren & Strobe which has a separate Siren Code).



**Note:** Miniature switches 9 and 10 control the system zones and DO NOT form part of the House Code

Inside your Remote Control(s) and detectors you will find a series of two position miniature switches. Your

House Code is set up by moving each of the first 8 switches (numbered 1-8) to a random sequence of 'ON' or 'OFF'.

**Note:** when setting the miniature switches in each item of equipment, ensure that each switch 'clicks' into position. Use the tip of a ball point pen or a small screw driver to move each switch in turn.

## REMOTE CONTROL

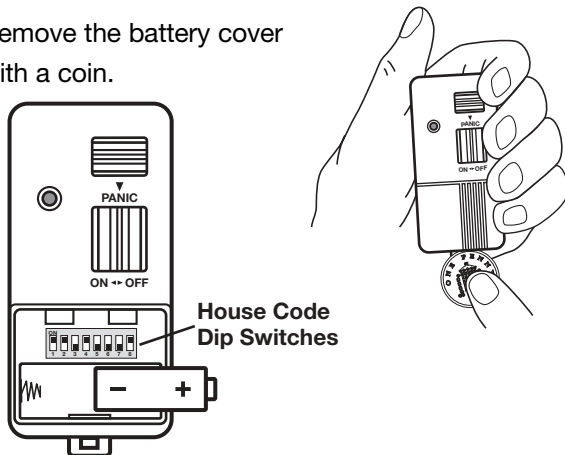
One Remote Control Unit is supplied in the standard E400 package. However, additional Remote Control Unit(s) can be purchased separately, if required. The Remote Control Unit(s) are used to Fully Arm or Disarm the system.

The Remote Control is also used to initially set the Control Unit's House Code and Siren Code.

The Remote Control Unit also incorporates a personal attack button. This sounds the alarm at any time whether the system is Armed or not. Just press 'Panic' and the alarm will sound. If this is activated by mistake you can cancel the alarm by pressing and releasing the 'OFF' button on the Remote Control.

Any number of Remote Control Unit(s) can be used with your system, providing they are all coded with the system House Code. To set the House Code and fit the battery, proceed as follows.

1. Remove the battery cover with a coin.



2. Fit the 12 Volt Alkaline battery supplied with the negative (-) towards the battery spring.
3. Using a small screwdriver or ball-point pen, set the miniature switches 1-8 to a random combination of 'ON' and 'OFF' settings. This is your House Code. Make a careful note of the setting of each switch as this information will be needed when you set up other items in your system.
4. Replace the battery cover.

## SETTING THE CONTROL UNIT HOUSE CODE

To enable the Control Unit to receive the radio signals from your Remote Control(s) and detectors, the system House Code must be programmed into the Control Unit's memory. The Control Unit learns the system House Code from the Remote Control. Ensure that a battery has been fitted and a House Code has been set in the Remote Control and then proceed as follows:-

1. Ensure that only the Control Unit's green mains power indicator LED is illuminated.

2. Enter **1 2 3 4**

The Control Unit is now in Test/Programming mode. The power LED will now be flashing.

3. Enter **1**

The Zones 1-4 LEDs will illuminate (unless a House Code has already been set in which case the LEDs will indicate the code set).

4. To set the Control Unit House Code, (or to change the House Code to the new code) simply press the 'OFF' button on your Remote Control.

The Control Unit will acknowledge the signal by beeping twice and memorise the House Code set in the Remote Control. The Control Units row of 8 LEDs will now indicate the House Code switch setting selected for each switch 1-8 in the Remote Control as follows:-

House Code switch 'ON' = LED 'ON'  
House Code switch 'OFF' = LED 'OFF'

5. Once the House Code has been set, press twice to exit Test/Programming mode.

## SETTING THE CONTROL UNIT TO TEST MODE


Before installing Passive Infra Red Movement Detectors, Magnetic Contact Detectors or other accessories you should set the Control Unit to Test/Programming mode. This will help to ensure that the correct House Code is used and to establish the radio range.

1. Enter **1 2 3 4**

The Control Unit will emit two beeps and the power LED will flash.

- The system is now in Test/Programming mode.
- Now, each time the Control Unit receives a valid radio signal from a detector or Remote Control, the Control Unit will emit a two-tone alarm for approximately 3 seconds and the associated Zone LED will illuminate. To clear the Zone LED indicator, press the 'OFF' button on your Remote Control.

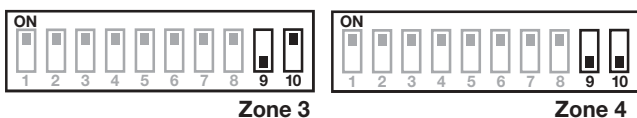
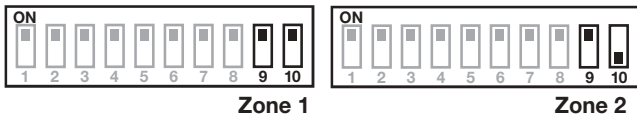
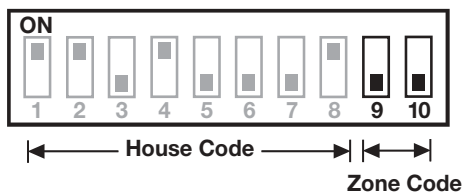
To test the radio range of the Control Unit's receiver, press and release the 'Panic' button on the Remote Control from in and around the property and from all locations where you plan to install the detectors and check that the Control Unit acknowledges the signals by emitting a two tone alarm.

The Control Unit should be left in Test mode whilst the detectors and other accessories are set up and installed. However, if you wish to exit the Test mode, press the  button. The Unit will emit two beeps and the power LED will illuminate steadily.

## SYSTEM ZONING

The E400 detectors can be set to operate on any one of four Zones. There is no limit to the number of detectors that can be installed on a Zone, although we recommend that only one detector is installed per Zone for ease of alarm verification. Alternatively, where more than four detectors are installed, group all the detectors in one area or room on the same Zone.

Zone selection is set on each detector using the two position miniature switches 9 and 10 as follows:-

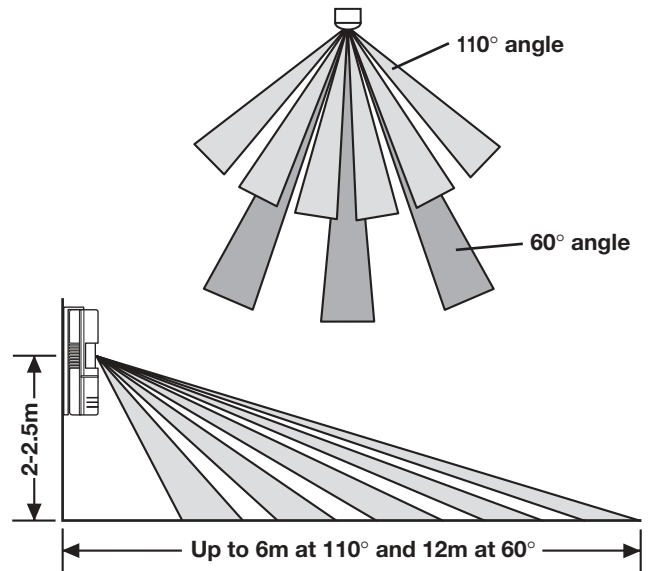


In addition to a Radio Detection Alarm input on Zones 1-4, facilities are available on the Control Unit terminal block to also Hard-wire a normally closed (open

on alarm) circuit. This is referred to as Zone 5 and is indicated at the Control Unit on the Tamper/Personal Attack/Zone 5 LED (LED flashing). The Hard-wired Zone should be wired across terminals 10 and 11 on the Control Unit terminal block, in place of the factory fitted link. The Tamper/Personal Attack Zone also monitors the detector and Control Unit Tamper Circuits, ie. Control Unit front and rear Tamper switches, Jamming Detection and, (where fitted), Hard-wired siren tamper return.

## WIREFREE PASSIVE INFRARED MOVEMENT DETECTORS (PIRS)

Two Passive Infra Red Movement Detectors are supplied in the standard package. However, additional Passive Infra Red Movement Detectors can be purchased separately, if required. Passive Infra Red Movement Detectors are designed to detect movement within a protected area. The detector element detects differences in Infra Red radiation when a person moves within the protected area. If movement is detected, a radio signal is transmitted to the Control Unit to activate the alarm.



The recommended position for a Passive Infra Red Movement Detector is in the corner of a room mounted between 2 and 2.5 metres from the floor. At this height, the detector will detect movement up to 6 metres at 110° and 12 metres at 60° depending on adjustment. Also, in this position, the 110°/60° fan-shaped detection patterns can normally offer greater protection than mounting on a flat wall.

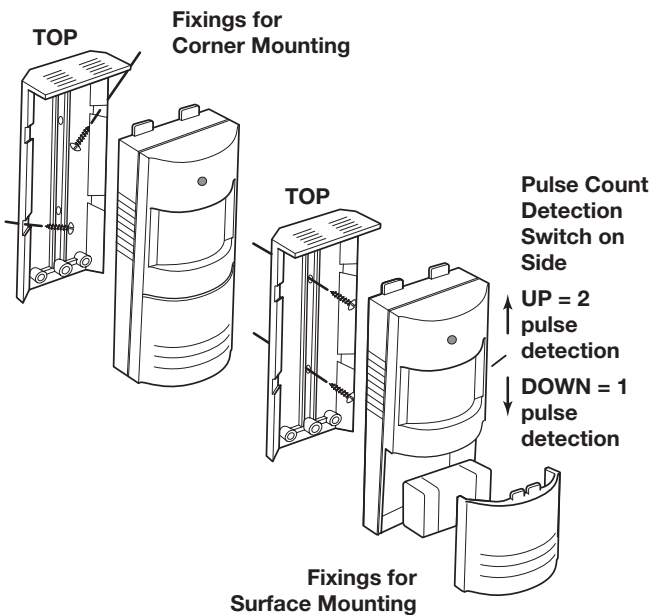
Before selecting a position for a Passive Infra Red Movement Detector the following points should be noted:

1. Do not position detector facing a window or direct sunlight. Passive Infra Red Movement Detectors are not suitable for use in conservatories or draughty areas.
2. Do not position detector directly above any source of heat, eg. fire, radiators, boiler etc.
3. Where possible, keep pets out of areas protected by Passive Infra Red Movement Detectors. If this is not possible, alternative mounting arrangements or a special Pet Lens may be required.
4. Where possible, mount the detector so that the logical path of an intruder would cut across the fan patterns rather than directly towards the detector.

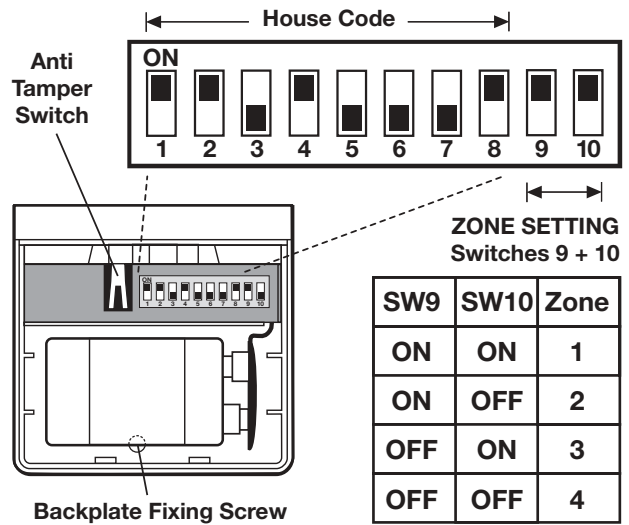
Any number of Passive Infra Red Movement Detectors can be used with your system, providing they are all coded with the system House Code and are within the radio range of the Control Unit. To install and set the Passive Infra Red Detector, proceed as follows.

### INSTALLING THE WIREFREE PASSIVE INFRA RED MOVEMENT DETECTORS (PIRs)

1. Remove the battery cover by inserting a coin under the cover lip and twisting open. Remove the fixings pack.
2. Remove the screw (in the battery compartment) holding the wall bracket to the detector.



3. Slide the bracket up and remove the wall bracket from the detector as shown.
4. Hold the wall bracket in position and mark the two mounting holes. (If corner mounting, drill pilot holes in the chamfers as shown). Drill two 4mm diameter holes and insert the plastic wall plugs and screw the bracket to the wall using the screws supplied.
5. Offer the detector up to the wall bracket and locate it into one of the bracket slots to angle the detector down slightly. Fix the detector in position on the bracket using the fixing screw at the rear of the battery compartment.



View inside PIR Movement Detector Battery Compartment

### SETTING THE WIREFREE PASSIVE INFRA RED MOVEMENT DETECTORS (PIRs)

ENSURE THAT THE CONTROL UNIT IS STILL IN TEST MODE.

1. Using a small screwdriver or ball-point pen, set the miniature switches 1-8 to the same combination of 'ON' and 'OFF' as the switches in the Remote Control.
2. Determine the Zone on which the detector is to operate and set miniature switches 9 and 10 to correspond to the required Zone. (Refer to System Zoning page 9).
3. The PIR incorporates an anti false-alarm feature designed to compensate where the detector may be affected by environmental changes, eg. insects, air temperature, etc. This feature is called 'Pulse Count' and may be selected for one or two pulses.

The recommended Pulse Count is one. In cases of extreme environmental problems or if unattributable false alarms are experienced, it may be necessary to select two Pulse Count detection.

**Note:** The higher the Pulse Count, the more paces an intruder will have to move before triggering the alarm.

To select the required Pulse Count move the switch on the side of the detector:

UP = Two Pulse Detection

DOWN = One Pulse Detection

4. Fit the 9 Volt Alkaline battery supplied to the battery terminals, but do not replace the battery cover.

**Note:** As soon as the battery is connected, a two tone Alarm will be emitted from the Control Unit siren for 3 seconds and the Tamper/PA Zone LED will illuminate. This confirms that the House Code is correct and that the detector is within radio range of the Control Unit.

5. After the battery has been connected for approx. 40 seconds, the Infra Red Movement Detector will become active causing the LED above the detector window to flash every time movement is detected. Where two Pulse Count detection has been selected, the LED will be dim on the first detection and brighter on the second.

The Control Unit will also emit a 3 second alarm tone each time the detector senses movement and the appropriate Zone LED will be illuminated to confirm the Zone selected.

6. By walking into the protected area the detector will now be triggered each time the detector senses movement. If necessary re-adjust the detection distance by angling the detector up or down on its wall bracket.
7. Replace the battery cover on the detector.

**Note:** When the detector is fully installed, ie. battery cover is refitted, the Unit will not detect movement for approx. 40 seconds after each activation. In normal operation, with the battery cover on, the red LED, above the detector window, will NOT illuminate upon detection of movement.

Leave the Control Unit in Test mode and proceed to install your remaining detectors.

## WIREFREE MAGNETIC CONTACT DETECTOR

One Magnetic Contact Detector is supplied in E400 package. However, additional Magnetic Contact Detectors can be purchased separately if required. Any number of Magnetic Contact Detectors can be used with your system providing they are all coded with the system House Code and are within radio range of the Control Unit. Magnetic Contact Detectors can be fitted to protect doors or windows, as required.

Before fixing the detector to a metal door/window check the radio range as previously described. Under exceptional circumstances it may be necessary to space the magnet/detector off the metal surface using a plastic or wooden spacer to achieve the necessary radio range.

To install the detector, set the House Code and fit the battery, proceed as follows:

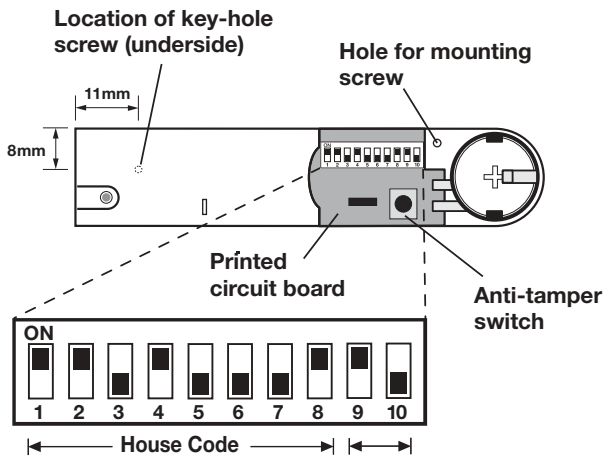
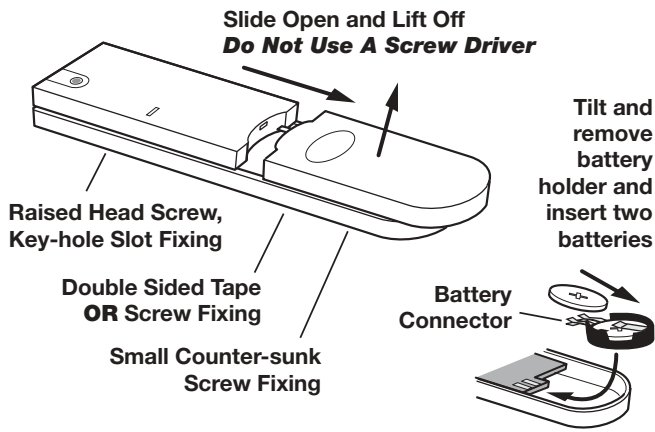
### ENSURE THAT THE CONTROL UNIT IS STILL IN TEST MODE

1. Remove the battery cover by sliding and lifting off. Do not use a screw driver to lever off.
2. Remove the battery holder by carefully tilting up the end and sliding the connectors off of the printed circuit board.
3. Fix the detector and magnet to the opening using either the double sided tape **OR** screws provided. When using the screws ensure that the small countersunk screw is used within the battery compartment.

Mount the magnet to the door and the detector to the door frame (or vice versa, if necessary). Ensure that the arrows on the magnet and detector are pointing towards each other and that the gap between the detector and the magnet is less than 5mm.

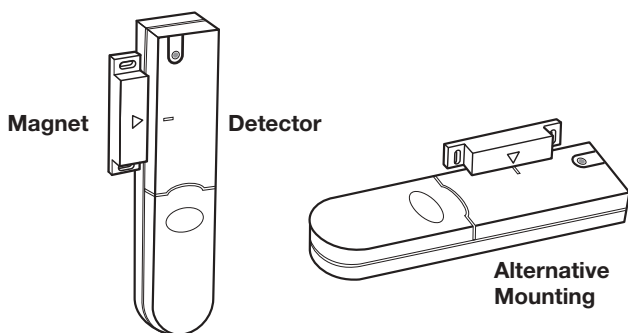
4. Using a ball-point pen, set the miniature switches 1-8 to the same combination of 'ON' and 'OFF' as the switches in the Remote Control.
5. Determine the Zone on which the detector is to operate and set miniature switches 9 and 10 to correspond to the required Zone. (Refer to system Zoning page 9).





ZONE SETTING  
Switches 9 + 10

SW9	SW10	Zone
ON	ON	1
ON	OFF	2
OFF	ON	3
OFF	OFF	4




- Slide the batteries supplied into the battery holder, ensuring that the positive (+) side is uppermost on each battery as it is installed.
- Carefully refit the battery holder into the detector ensuring that the spring connectors slide onto either side of the circuit board.

**Note:** As soon as the battery holder is connected, the Control Unit will emit a two tone alarm for 3 seconds

and the Tamper/PA Zone LED will illuminate. This confirms that the House Code is correct and that the detector is within radio range of the Control Unit.

- Refit the battery cover by placing it over the batteries and sliding it on.
- Test the operation by opening the door/window. The LED on the detector will light for approx. 1 second and then extinguish each time the magnet is parted from the detector.

The Control Unit will also emit a 3 second alarm tone each time the detector is operated and the appropriate Zone LED will be illuminated to confirm the Zone selected.

Once you have completed installing all your detectors, take the Control Unit out of Test mode by pressing the  button. The Control Unit will emit 2 beeps and the Power LED will illuminate steadily.

## INSTALLING AND SETTING THE EXTERNAL SOLAR SIREN & STROBE

The Solar Siren & Strobe Unit should be fitted to the outside of the building in a position that is clearly visible and at a height which is relatively inaccessible to an intruder.

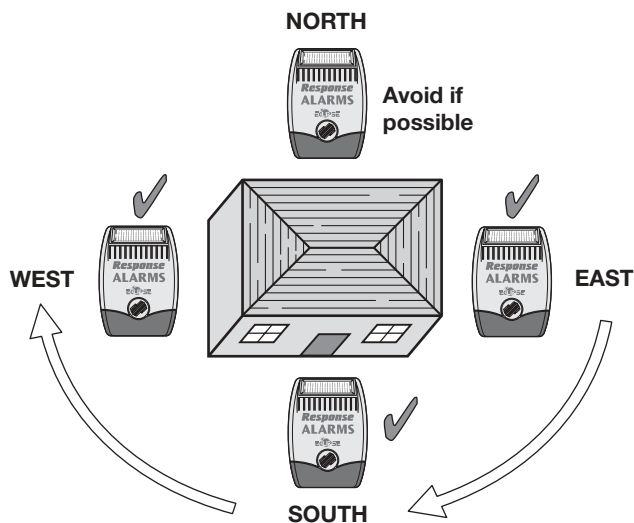
The Solar Siren & Strobe incorporates a solar panel which will maintain a charge to the integral 6 Volt 1.2Ahr sealed lead acid rechargeable battery during daylight hours. During the night, a negligible amount of energy is released by the rechargeable battery to operate the Siren & Strobe. The Solar Siren & Strobe is self maintainable during darkness and long winter periods.

### LOCATION

To provide the optimum amount of daylight to the Solar Panel, you should ideally mount the Solar Siren & Strobe on a south facing wall. However, an easterly or westerly position will suffice.

Although the Solar Siren & Strobe is designed to work on any aspect wall, for optimum performance you should refrain from siting the Unit on a north facing wall where possible. Shadows cast by neighbouring walls, trees and

roof overhangs should also be avoided. Where applicable, the Solar Siren & Strobe should be positioned a minimum of twice the width of the eaves overhang below the eaves. Remember that in winter the sun is lower in the sky and you should avoid winter shadows where possible.



**Note:** The Solar Panel does not have to be mounted in direct sunlight, but does require a minimum of two hours of daylight each day.

The Solar Siren & Strobe contains a sophisticated radio receiver. However, reception of radio signals can be affected by the presence of metallic objects within the vicinity of the Solar Siren & Strobe. It is therefore important to mount the Solar Siren & Strobe a minimum distance of 1 metre radius

away from any external or internal metalwork, i.e. external drain pipes, gutters and internal radiators, mirrors etc.

## INSTALLATION

Remove the holding screw from the base of the housing and carefully hinge off the front cover. All electronic components are housed within the front cover.

Use the rear backplate as a template to mark the position of the four fixing holes on the external wall. Drill four 5mm diameter holes and insert the plastic wall plugs. Mount the backplate using the four screws provided.

## SETTINGS

Undo the three screws holding the dip switch cover in place and remove the cover.

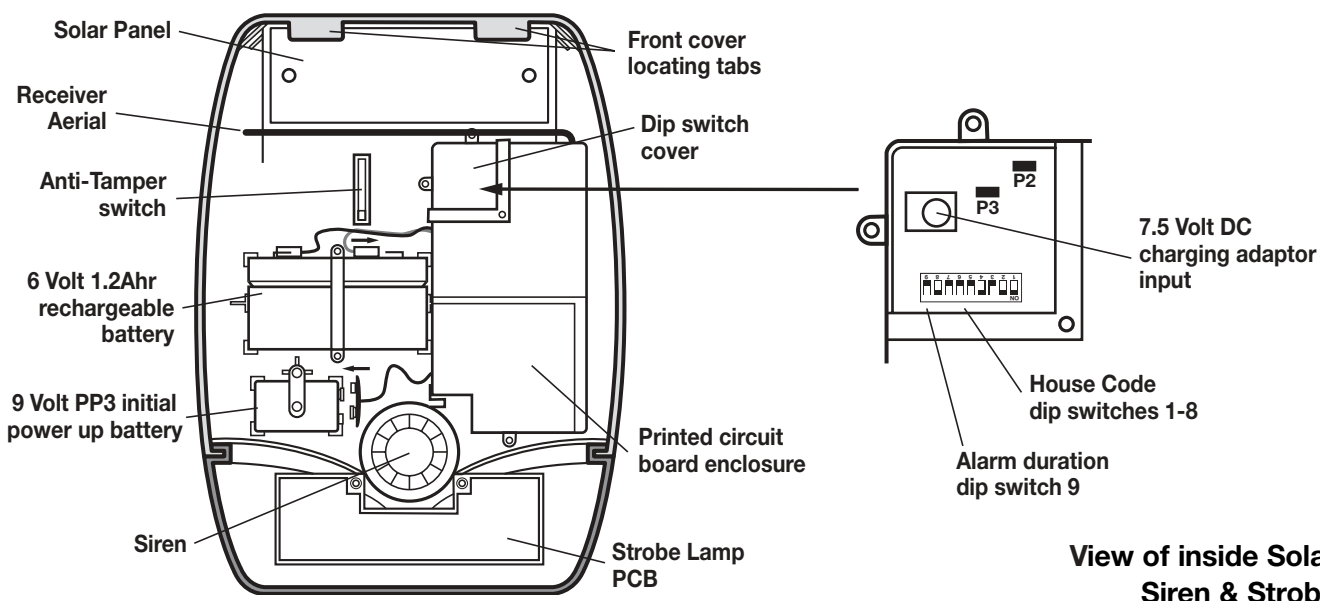
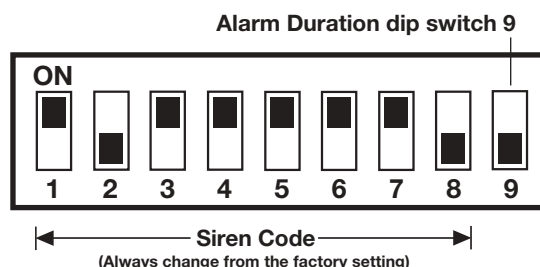
### SIREN CODE

Under the cover you will find a series of two position miniature dip switches.

Using a ball-point pen set the miniature dip switches 1-8 to a random sequence of 'ON's' and 'OFF's'. Make a note of the Siren Code dip switch settings as this will be needed when programming the Siren Code into the Control Unit.

### DO NOT SET THE SIREN CODE TO THE HOUSE CODE USED IN THE DETECTORS/REMOTE CONTROLS.

**Note:** When the Siren & Strobe is viewed as shown below (solar panel at top) the dip switches are 'upside down'.



**View of inside Solar Siren & Strobe**

## ALARM DURATION

This is the maximum length of time that the Solar Siren & Strobe alarm will sound for, following activation. Alarm duration can be set for either 3 or 15 minutes. Set dip switch 9 'OFF' for 3 minutes or 'ON' for 15 minutes.

Refit the dip switch cover securely.

**Note:** Following activation into alarm condition the Solar Siren & Strobe will continue to sound until either the Control Unit is disarmed, or the Control Unit Autostop time expires, or until the Siren & Strobe Alarm Duration Time expires; whichever occurs first.

## INITIAL POWER-UP

Once you have completed setting your Siren Code and Alarm Duration Time, connect the 9 Volt PP3 initial Power-up Battery to the clip-on connectors. Connect the Rechargeable Battery to the charging leads red to red (+) and black to black (-).

Hinge the front cover locating tabs over the top edge of the backplate, push the base of the Siren cover into place and secure with the lower fixing screw.

The installation of your Solar Siren & Strobe is now complete.

**Note:** Once the batteries have been connected, the unit will be operational and it is important that the Solar Panel receives sufficient light to maintain the battery charge. Also, the Unit should not be repeatedly set into alarm during installation/testing as this could rapidly drain the battery.

## PROGRAMMABLE FUNCTIONS

The Control Unit incorporates nine programmable functions which are selected and set via the Control Unit's keypad. A factory 'Default' setting is incorporated for each programmable function. The system incorporates a non-volatile memory which memorises all the user programmable settings in the event of a total power down.

In the event that you wish to revert the Control Unit to factory 'Default' settings, remove all power (mains and Back-up Battery), set the memory link to 'OFF' and then re-apply power. In all other circumstances the memory link should be left 'ON' for full system security.



**IMPORTANT:** As all programmable functions have a 'Default' setting it is important that each function is selected and set to your requirements on initial installation.

The Control Unit has an initial 'Default' User Access Code (the code that operates the system) of ① ② ③ ④.

To enter the Test/Programming mode and change each programmable function, proceed as follows:

Enter ① ② ③ ④   
|-----|  
or Current User  
Access Code

The Control Unit will emit two bleeps and the Power LED will flash to indicate the system is in Test/Programming mode.

**Note:** If you make an error when entering your settings, press  once to exit the programming function then enter the function number followed by  and re-enter your correct settings.


To exit the Test/Programming mode at any time

Enter  

## 1. HOUSE CODE

The House Code setting enables the Control Unit to receive signals only from its associated detectors.

**The House Code is usually self-learned from the Remote Control on initial installation (see page 8) and further programming is therefore not required.**

However, if a Remote Control is lost or the House Code needs to be re-programmed for any other reason, proceed as follows:- with the Control Unit in Test/Programming mode enter ① . The Control Unit's row of 8 LEDs will indicate the House Code switch setting selected for each switch 1-8 as follows:-

House Code Switch 'ON' = LED 'ON'

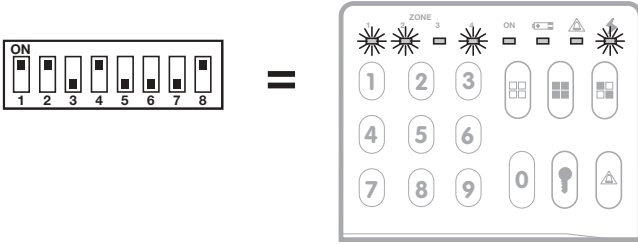
House Code Switch 'OFF' = LED 'OFF'

Factory Default House Code 1, 2, 3, 4, 'ON' - 5, 6, 7, 8, 'OFF';  
LEDs 1, 2, 3, 4, 'ON' - 5, 6, 7, 8, 'OFF'.

To set the House Code (or change the House Code to a new code), ensure that a battery has been fitted and a House Code set in the Remote Control then press the 'OFF' button on the Remote Control.



The Control Unit LEDs 1-8 will indicate the new House Code switch setting eg.



Press to memorise the House Code setting and to revert to the Test/Programming mode.

## 2. INSTANT/DELAY ZONE

Any Zone can be set to give an Entry Delay when the appropriate detector(s) are triggered, eg. to allow access to the Control Unit for manual Disarming. (The length of the entry delay period is programmed separately - see 3 below).

With the Control Unit in Test/Programming mode

Enter

The Zone LEDs 1-4 and Zone 5 (Tamper/Personal Attack) LED will indicate the status of each Zone:-

Zone LED 'ON' = Delay Zone  
 Zone LED 'OFF' = Instant Zone

Factory default:-

Zone 1 Entry Delay  
 Zone 1 LED 'ON'

To add or delete a Delay Zone, press the number of the Zone to illuminate or extinguish the appropriate Zone LED.

**Note:** The Hard-wired input Zone (Zone 5) can also be set for instant or delay operation and its status will be indicated by the Tamper/Personal Attack Zone LED being 'ON' or 'OFF'.

Press to memorise the setting and to revert to the Test/Programming mode.

## 3. EXIT/ENTRY DELAY TIME

When the system is Fully Armed either at the Control Unit or via a Remote Control, the system will ignore all detectors for the Exit/Entry Delay time, to allow you to leave the premises.

Similarly, when entering an Entry Delay Zone with the system Armed or Part Armed, the system will be inactive for the Exit/Entry Delay time to allow you time to Disarm the system by entering your Access Code at the Control Unit, or using the Remote Control.

**Note:** The Exit and Entry Delay times cannot be individually programmed to different settings. The Exit delay when the system is Part Armed is preset to 30 seconds and cannot be changed. However, the Entry Delay time will be the same as that set for Full Arm operation.

With the Control Unit in Test/Programming mode

Enter

A Zone LED will illuminate to indicate the setting:-

Factory default:-

30 seconds - Zone 3 LED 'ON'

To change the setting, press the appropriate key to illuminate the associated Zone LED:-

**Note:** 50 seconds setting will be indicated on Tamper/Personal Attack/Zone 5 LED.

Press					
Exit/Entry Time	10s	20s	30s	40s	50s

Enter to memorise the setting and to revert to the Test/Programming mode.

## 4. ALARM AUTOSTOP TIME

This is the length of time that the alarm will sound for when activated. (If accidentally triggered, the alarm can be stopped at any time using the Remote Control or by Disarming at the Control Unit keypad).


**Note:** The maximum length of time that the External Solar Siren & Strobe will sound for when activated is set within the Solar Siren & Strobe to either 3 or 15 minutes - refer to 'Installing and Setting the External Solar Siren & Strobe' for details.

With the Control Unit in Test/Programming mode

Enter **4** 

A Zone LED will illuminate to indicate the setting:- (factory default 3 minutes - Zone 3 LED 'ON'). To change the setting press the appropriate key to illuminate the associated Zone LED:- (Note: 10 minutes setting will be indicated on the Tamper/Personal Attack/Zone 5 LED).

Press	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Alarm Time	<b>1</b> minute	<b>2</b> minutes	<b>3</b> minutes	<b>5</b> minutes	<b>10</b> minutes

Press  to memorise the setting and to revert to the Test/Programming mode.

## 5. PART ARM/ZONE OMIT

Any of the Zones 1-5 can be omitted (ie. made in-active) when the system is Part Armed. This will enable you to Arm only the selected (active) Zones when you Part Arm the system.

With the Control Unit in Test/Programming mode


Enter **5** 

The Zone LEDs 1-4 and Tamper/Personal Attack/Zone 5 LED will illuminate to indicate the Zones which are **OMITTED** (in-active) when the system is Part Armed:-

Factory default:-

Zones 3 and 4 omitted - Zones 3 and 4 LEDs 'ON'  
(ie. Zones 1, 2 and 5 are Active in Part Arm)

To add or delete an omitted Zone, press the number of the Zone to illuminate or extinguish the appropriate Zone LED.

Press  to memorise the setting and to revert to the Test/Programming mode.

## 6. EXIT/ENTRY DELAY TONES

During the Exit/Entry delay periods the Control Unit may be set to either emit a constant Exit/Intermittent Entry beep tone or two short beeps at the beginning and end of the delay time (semi silent), depending on the programming.

With the Control Unit in Test/Programming mode

Enter **6** 

Zone 1 LED will indicate the setting:-


LED 'ON' - constant Exit/Intermittent Entry beep tone selected

LED 'OFF' - semi silent Exit/Entry beeps selected

Factory default:-

Constant Exit/Intermittent Entry beep tone 'ON' - Zone 1 LED 'ON'

Press **1** as required to select the delay tone required

Press  to memorise the setting and revert to the Test/Programming mode.

## 7. JAMMING DETECTION SYSTEM

In order to detect any attempts to illegally Jam the radio channel used with your alarm system a sophisticated Jamming Detection system is incorporated into the Control Unit. If this feature is selected and the radio channel is continuously jammed for more than 30 seconds, when the system is Armed or Part Armed, the Control Unit sounder will emit a pre-alarm series of rapid beeps for 5 seconds. If the Jamming continues for a further 10 seconds or more, a Full Alarm will occur indicated by the Internal and External Alarms sounding and the Tamper/Personal Attack Zone LED illuminating.

The Jamming Detection circuit is designed to scan for jamming signals. However, it is possible that it may detect other local radio interference operating legally or illegally on the same frequency. If it is planned to operate the jamming detection feature we recommend that the system is monitored for false jamming alarms for at least 2 weeks prior to leaving the Jamming Detect function on permanently.

With the Control Unit in Test/Programming mode

Enter **7** 

Zone 1 LED will indicate the setting:-


LED 'OFF' - Jamming Detection system 'OFF'

LED 'ON' - Jamming Detection system 'ON'

Factory default:-

Jamming Detection 'OFF', Zone 1 LED 'OFF'

Press **1** as required to select the Jamming Detection 'ON'/'OFF'

Press  to memorise the setting and revert to the Test/Programming mode.

## 8. USER ACCESS CODE

The Control Unit is supplied with a preset User Access Code of **1 2 3 4**. This code allows general operation (Arming/Disarming etc) and programming/re-programming of the system at the Control Unit. However, for security reasons, it is essential that you change the User Access Code to another four-digit number which only you and other users of the system will know and use (usually a number with a personal significance is easier to remember).

To change the User Access Code:-


With the Control Unit in Test/Programming mode

Enter **8** 

Zones 1 - 4 LEDs will be illuminated.

Enter your new Access Code **? ? ? ?**

The Zone LEDs 1-4 will extinguish as each digit is entered.

Press  to memorise the setting and to revert to Test/Programming mode.

**IMPORTANT:** The Control Unit will only recognise the entering of the new User Access Code from now on. If you should forget your Access Code and need to change it, you will need to completely power down the Control Unit and reset the memory link to 'OFF' to revert the Access Code and all the other programmable functions back to the factory default settings.

## 9. SIREN CODE

A small radio transmitter is incorporated within the E400 Control Unit to operate and control the External Solar Siren & Strobe. To enable the Control Unit to communicate with the External Solar Siren & Strobe the Siren Code set in the External Siren (see page 13) needs to be programmed into the Control Unit.

This is done by temporarily resetting the House Code in the Remote Control to the Siren Code and teaching the Siren Code to the Control Unit.

To programme the Siren Code into the Control Unit, with the Control Unit in Test/Programming mode

Enter **0** 


The Control Unit's row of 8 LEDs will indicate the Siren Code switch setting selected for each two position switch as follows:-

Switch set 'ON' - LED 'ON'


Switch set 'OFF' - LED 'OFF'

Factory default:- switches 1, 3, 5, 7 'ON'

To enter/change the Siren Code, refer to the Siren Code switch 1-8 settings previously set in your Solar Siren & Strobe, remove your Remote Control's battery cover and temporarily reset the miniature switches 1-8 in the Remote Control to the Siren Code. Press and release the 'OFF' button on the Remote Control. The Control Unit will acknowledge the signal by beeping twice and the Control Unit LEDs 1-8 will illuminate to indicate the new Siren Code setting.

Press  to memorise the Siren Code setting and to revert to the Test/Programming mode.


### RESET YOUR REMOTE CONTROL MINIATURE SWITCHES TO YOUR HOUSE CODE AND REPLACE THE BATTERY COVER.

Programming of your Control Unit is now complete. Exit Test/Programming mode by pressing  again.

## EXTERNAL CONNECTIONS

The Control Unit incorporates a terminal block for external connection of a Hard-wired Siren, Telephone Dialler or a Hard-wired Zone 5 trigger input.

To access the terminal block, set the Control Unit to Test/Programming mode by

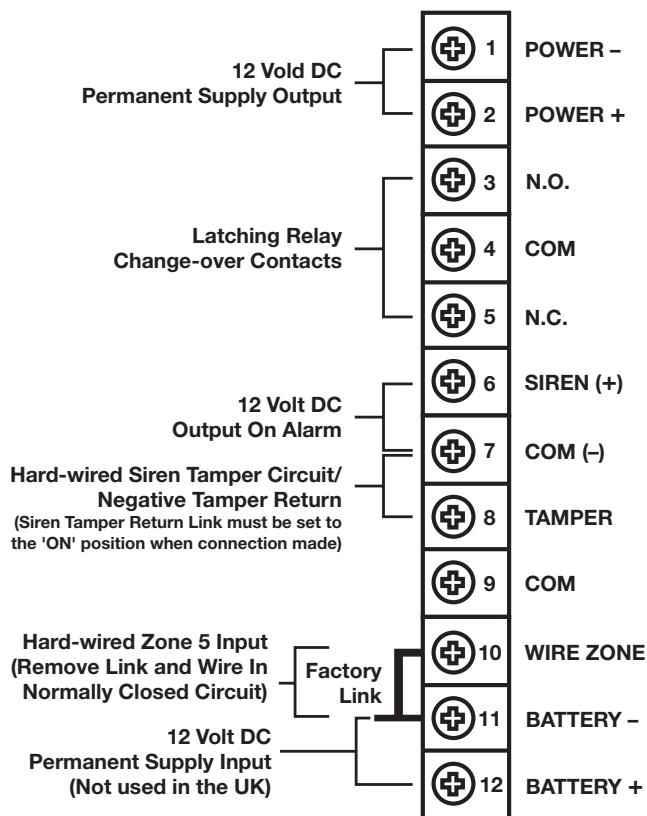
Entering **? ? ? ?**   


and open the Control Unit cover. (The alarm will sound on 'Test').

Before making any connections, ensure that the memory link is in the 'ON' position and then remove the power (mains and Back-up Battery).

Full details of the Control Unit terminal block connections are shown overleaf.

After making your external connections reconnect the power supply and Back-up Battery and close the Control Unit front cover.



Details of Control Unit Terminal Block

# OPERATING INSTRUCTIONS

## FULLY ARMING THE SYSTEM

When leaving the premises, the system must be Fully Armed. However, before doing so, check that all windows are closed and locked, all protected doors are closed and Passive Infra Red Movement Detectors are not obstructed. Ensure that pets are restricted to areas not protected by Passive Infra Red Movement Detectors or that suitable precautions have been taken to allow for pets.

The system may be Fully Armed either at the Control Unit or using a Remote Control. To Fully Arm at the Control Unit



To Fully Arm the system from a Remote Control simply press the 'ON' button.

If the system has been programmed for a constant Exit/Entry Delay tone, the Control Unit will emit a continuous tone for the duration of the Exit time Arming automatically when the Exit time expires.

If the system Exit/Entry Delay tone has been set for 'Semi Silent', the Control Unit will emit two beeps, followed by two beeps on expiry of the Exit time.

All occupants must leave the premises before the Exit time has expired. If for any reason you are unable to leave the premises before the Exit time has expired, you will need to Disarm the system, then Re-Arm. Failure to do so will cause a Full Alarm if any protected door is opened or movement is detected by a Passive Infra Red Movement Detector.

**Note:** When Fully Armed, the Control Unit 'System Status' LED will be constantly illuminated.

## PART ARMING THE SYSTEM

If you are remaining in the premises, you may Arm all the Zones which have not been omitted, by selecting Part Arm. This will permit free access to the omitted Zone areas.

The system may only be Part Armed from the Control Unit. The Part Arm time is preset to 30 seconds. To Part Arm the system



The LEDs associated with the Part Arm Zone(s) will illuminate for 30 seconds. (Any Zone LED not lit indicates that the Zone has omitted and will not be active in Part Arm mode).

In addition, the Control Unit will emit two beeps, followed by two beeps on completion of the 30 second Exit time.

**Note:** Zone 5 'Active' will be indicated by the Tamper/Personal Attack/Zone 5 LED illuminating.

After the 30 second Exit time the LEDs will extinguish.

You must leave all protected Zones before expiry of the 30 second Arming time. If for any reason you are unable to leave the protected areas within the Arming time, you will need to Disarm the system then Re-Arm. Failure to do so will cause a Full Alarm if any protected door is opened or movement is detected by a Passive Infra Red Movement Detector set to operate in Part Arm.

**Note:** When Part Armed the Control Unit 'System Status' LED will be flashing.

## DISARMING THE SYSTEM

Upon entering an Entry Delay Zone, the appropriate Zone LED(s) will illuminate and the Control Unit sounder will either emit a constant intermittent tone or two bleeps depending on the Exit/Entry delay tone programmed.

You may Disarm the system by pressing the 'OFF' button on the Remote Control Unit or by proceeding immediately to the Control Unit and

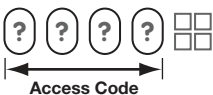
Entering  at the Control Unit.

**Note:** If the system is not Disarmed during the Entry Delay Period a Full Alarm will occur. When using the Remote Control Unit, you may be able to Disarm the system from outside the premises before entering. Establish the operational range of the Remote Control Unit before using this method.

## DISARMING AFTER AN INTRUSION

A Full Alarm condition (Control Unit Siren and External Siren & Strobe operating) will be initiated following an intrusion. This condition will continue until expiry of the preset Auto Stop and/or Alarm Duration times, whereby the Control Unit Siren and External Siren & Strobe respectively will cease. The appropriate Zone LED(s) will illuminate to indicate the Zone(s) which triggered the alarm. The Control Unit will now immediately re-arm itself. In the event of a further intrusion the Control Unit will once again initiate a Full Alarm condition and the above process is repeated.

If a Full Alarm condition is initiated accidentally, the Alarm can be cancelled immediately by pressing the 'OFF' button on your Remote Control or by

Entering  at the Control Unit.


**IMPORTANT:** Following Remote Control Disarming of the system after an Alarm activation, make a careful note of the Zone LED indication(s) to assist with tracing the cause of the alarm. The Control Unit must then be reset by

Entering  at the Control Unit.

## PERSONAL ATTACK ALARM

A Full Alarm condition can be initiated by the user at any time (system Armed or Disarmed) in the event of

threat or danger. To initiate a personal attack alarm either:

- press and release the 'Panic' button on the Remote control or
- press and hold the  button on the Control Unit for three seconds.

The Control Unit Siren will emit a slow two tone Tamper/Personal Attack warning, the Tamper/Personal Attack Zone LED will illuminate and the External Siren & Strobe will operate. To cancel the alarm press 'OFF' on your Remote Control or

Enter  at the Control Unit.

## BATTERY MONITORING

The system will continuously monitor the battery condition of all PIR Movement Detector and Magnetic Contact Detectors. If the voltage level of any battery falls unacceptably low, a radio signal will automatically be transmitted to the Control Unit and the low battery LED will illuminate.

To identify a PIR Movement Detector with a low battery, leave each protected area for at least 40 seconds. If, when you re-enter the area, the PIR LED flashes on detection of movement, this indicates a low battery.

The batteries in the Magnetic Contact Detectors can be checked by operating the detector (opening and closing the protected door/window) and observing the LED on the detector. If the LED is dim or does not illuminate, the batteries need to be replaced. In the event of a low battery condition, set the Control Unit to Test mode, see page 8. Replace the batteries as required and ensure that the Test alarm is emitted when the battery holder is refitted. Remember to take the Control Unit out of Test mode when you have finished. To clear the low battery warning LED

Enter  at the Control Unit.

**Note:** When replacing PIR Movement Detector batteries, fit PP3 Alkaline type. Rechargeable batteries should NOT be fitted. For areas subject to seasonal low ambient temperatures (eg. garages, sheds etc.) we recommend the use of PP3 Lithium batteries (order code 3005B) in PIR Movement Detectors.



# TESTING THE SYSTEM

You may test your system at any time, however, it is recommended that the system is tested at regular intervals not exceeding three months. You cannot readily test the system using the Remote Control Unit. To set the Control Unit to Test mode

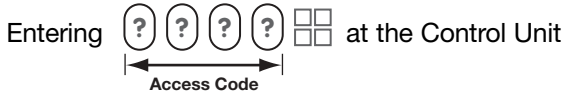


The Control Unit will emit 2 beeps and the power LED will flash.

Before testing areas protected by Passive Infra Red Movement Detectors, ensure that the area is completely clear of occupants, including pets. Wait 40 seconds before testing areas protected by Passive Infra Red Movement Detectors and also allow 40 seconds between tests. Where two Pulse Detection has been selected, ensure you take two or three paces within the area to trigger the detector.

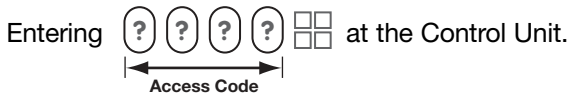
When a Passive Infra Red Movement Detector is activated, or a protected door or window is opened the Control Unit will emit a 3 second alarm tone and the associated Zone LED will illuminate.

On completion of testing, return to the normal Disarmed mode of operation by



and ensure that the Power LED illuminates steadily.

To test the External Solar Siren & Strobe, ensure that the Control Unit is out of Test mode, then press 'Panic' on the Remote Control Unit to activate the Control Unit Siren and External Siren & Strobe. Allow the alarm to sound for at least 10 seconds then press the 'OFF' button on the Remote Control to de-activate. Clear the Control Unit Tamper/Personal Attack Zone Activated LED by



# MAINTENANCE

Your E400 Intruder Alarm system requires very little maintenance. However, a few simple tasks will ensure its continued reliability and operation.

## CONTROL UNIT

The Control Unit requires no maintenance. If cleaning is required, wipe the outside of the casing with a soft damp cloth. Do not use aerosols or sprays or proprietary cleaners. Do not attempt to clean inside the Unit or allow water to enter the Unit.

## SOLAR SIREN & STROBE

1. At least once a year, preferably in the Autumn, the Solar Panel on the top of the siren housing should be cleaned using a soft, damp cloth. This operation will ensure that the Solar Panel receives all the available light. The cleaning operation can be combined with the general cleaning of the outside of the house, windows etc. to reduce maintenance time.
2. The Solar Siren & Strobe incorporates tamper protection for system security. Should you, for any reason, have to completely power down the Solar Siren & Strobe (eg. to move the system to a new premises) remove the holding screw at the base of the Siren and hinge off the front cover.

### WARNING - THE SIREN WILL SOUND

Disconnect the rechargeable battery and initial power up battery and ensure that the Solar Panel is covered with a light proof material to prevent it being energised.

3. The Solar Siren & Strobe should not be left for long periods with the batteries connected, unless the unit is able to receive sufficient light to maintain the battery charging circuit. Failure to maintain charge to the unit will result in the rechargeable battery running unacceptably low. Should this occur, the unit must be recharged from a 240 Volt AC/7.5 Volt DC mains adaptor (Response order code S100TR). When re-powering the Solar Siren & Strobe fit a new 9 Volt PP3 leak proof Alkaline Initial Power-Up Battery to ensure that the Unit receives sufficient power until the Solar Panel can recharge the main battery completely.

## RECHARGEABLE BATTERIES

The rechargeable batteries in the Control Unit and Solar Siren & Strobe have a typical life of 3-4 years and need no maintenance during this period providing the batteries are kept charged. The batteries will be damaged if stored in a discharged state.

The rechargeable batteries should be taken to a suitable Recycling Centre at the end of their useful life. DO NOT dispose of with your normal household waste. The rechargeable batteries contain Sulphuric Acid - DO NOT attempt to open the casing.



## DETECTORS AND REMOTE CONTROL

The detectors and Remote Control(s) require no maintenance. Simply replace the batteries once a year or when a low battery is indicated. The specifications of the detector and Remote Control batteries are as follows:

PIR Movement Detectors: 9 Volt PP3 Alkaline

Magnetic Contact Detector(s): 2 x 3 Volt 230mAh Lithium Cells (Panasonic CR2032 or equivalent)

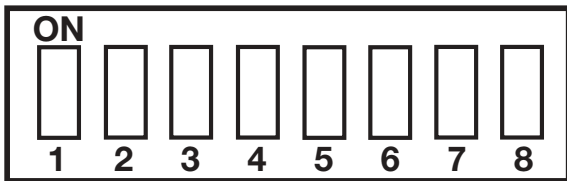
Remote Control(s): 12 Volt 23A Alkaline

Please recycle used batteries where Local Authority facilities exist. Keep batteries away from children and do not dispose of in fire.

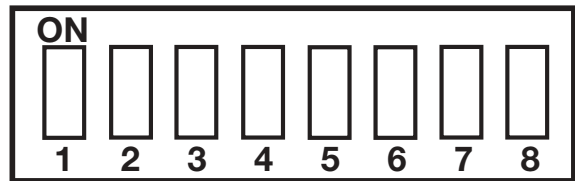
# E400 ALARM RECORD

Complete the following information during installation for future reference.

Zone	Detector Type(s)	Location(s)	Settings	
			Instant/Delay	Part Arm/Omit
1				
2				
3				
4				
5 Hard-wired				

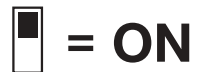


House Code



Siren Code

Use the above diagrams to record your House Code and Siren Code, eg.,



Purchase date ..... Installation date .....

Control Unit serial number .....

***This information is highly confidential and should be kept in a very safe location.***

# TROUBLE SHOOTING

<b>Symptom / Recommendation</b>	<b>Symptom / Recommendation</b>
<p><b>Control Unit not working. Mains light is off</b></p> <ol style="list-style-type: none"> <li>1. Press  key on Control Unit. If mains light illuminates and then extinguishes after 10 seconds this indicates the Control Unit is operating on Back-up Battery.</li> <li>2. Check that mains adaptor is plugged in/connected and switched on.</li> </ol>	<p><b>Control Unit not accepting Access Code</b></p> <ol style="list-style-type: none"> <li>1. Pausing too long between pressing keys. Do not pause for more than 5 seconds between keys.</li> <li>2. Incorrect code entered. Allow 5 seconds to elapse before re-entering correct code.</li> <li>3. Unit has reset to factory default codes/programme. Fit Memory Link in 'ON' position and re-programme all programmable functions.</li> </ol>
<p><b>Full Alarm Occurs when alarm has not been activated by an intruder</b></p> <ol style="list-style-type: none"> <li>1. Ensure mains adaptor is plugged in/connected and switched on.</li> <li>2. Check that battery covers on all detectors are fitted securely.</li> <li>3. Ensure that the Control Unit is securely fitted to the wall and that the front cover is firmly closed.</li> <li>4. Check that the Personal Attack Button or Smoke Detectors (if fitted) have not been operated.</li> <li>5. Check for Jamming Detection Alarm.</li> </ol>	<p><b>Control Unit not responding to detectors</b></p> <ol style="list-style-type: none"> <li>1. Ensure detectors are within radio range of Control Unit. If not, move detector closer.</li> <li>2. Ensure that the House Code on the detector is the same as that set in the Control Unit.</li> <li>3. Replace detector battery.</li> </ol>
<p><b>Control Unit 'Low Battery' LED illuminated</b></p> <ol style="list-style-type: none"> <li>1. Check all PIR Detector(s) for low battery, indicated by detector LED flashing when movement is detected - change battery(s) as required.</li> <li>2. Check all Magnetic Detectors for low battery indicated by detector LED not illuminating when detector is opened/closed - change batteries as required.</li> <li>3. Check the battery in all Optional Wirefree Smoke Detectors - a low battery will also cause the Smoke Detector to beep every minute - change battery as required.</li> </ol>	<p><b>Solar Siren and Strobe sounding but no alarm at Control Unit</b></p> <ol style="list-style-type: none"> <li>1. Siren Anti-tamper activated. Check security of Siren/Strobe fixing to wall and that Siren anti-tamper switch is fully depressed.</li> <li>2. Siren &amp; Strobe has not received 'Stop' signal. Press 'Panic', wait 15 seconds then press 'OFF' on Remote Control to re-transmit 'Stop' signal.</li> </ol>
<p><b>Detection Zone has been triggered but no alarm is sounding</b></p> <ol style="list-style-type: none"> <li>1. Entry Delay Zone triggered - alarm will sound when delay time has expired.</li> <li>2. Zone omitted when part armed.</li> </ol>	<p><b>Solar Siren and Strobe does not operate when system is activated</b></p> <ol style="list-style-type: none"> <li>1. Incorrect Siren Code dip switch settings in Solar Siren &amp; Strobe or Siren Code incorrectly programmed into Control Unit.</li> <li>2. Siren duration time timed-out before Control Unit Autostop time.</li> <li>3. Disconnect rechargeable and power-up batteries. Cover solar panel and leave unit for 3-5 minutes. Re-connect the batteries and then remove the solar panel cover.</li> <li>4. Rechargeable battery low. Power down, fit new initial power up battery and re-power up.</li> </ol>
<p><b>Control Unit will not function (Sirens are sounding)</b></p> <ol style="list-style-type: none"> <li>1. Disconnect power (including Control Unit Back-up Battery), for 10 seconds, then re-connect mains power followed by Back-up Battery. (Remember, all programmed functions will be retained if the Memory Link is in the 'ON' position).</li> </ol>	<p><b>No response from Passive Infra Red Movement Detector</b></p> <ol style="list-style-type: none"> <li>1. Check battery connections are good.</li> <li>2. Ensure that House Code is same as that set in Control Unit.</li> </ol>



## TROUBLE SHOOTING - continued

<b>Symptom / Recommendation</b>	<b>Symptom / Recommendation</b>
<p><b>Passive Infra Red Movement Detector not detecting a person's movement</b></p> <ol style="list-style-type: none"> <li>1. Allow up to one minute for the detector to settle down and retry.</li> <li>2. Pulse Count set too high - reset to one Pulse Count Detection.</li> <li>3. Ensure that detector is mounted the correct way up (battery compartment at the bottom except for Pet Alley).</li> <li>4. Ensure that the detector is mounted at the correct height 1.8 - 2 metre from floor, (except Pet Alley).</li> <li>5. Check that the detector is correctly set-up. (See Setting Up Infra Red Movement Detectors).</li> <li>6. If the detector is mounted upside down for Pet Alley, check that the mounting height is not greater than 1 metre from the floor, depending on the size of pet.</li> </ol>	<p><b>Remote Control Unit not working</b></p> <ol style="list-style-type: none"> <li>1. Ensure House Code is the same as that set in the Control Unit.</li> </ol>
<p><b>Passive Infra Red Movement Detector LED flashes when you walk past it</b></p> <ol style="list-style-type: none"> <li>1. Low battery - replace alkaline battery.</li> </ol>	<p><b>Red light on Remote Control Unit not illuminating</b></p> <ol style="list-style-type: none"> <li>1. Ensure battery is connected with correct polarity.</li> <li>2. Replace battery with alkaline type.</li> <li>3. Ensure battery connections are good.</li> </ol>
<p><b>Passive Infra Red Movement Detector false alarming</b></p> <ol style="list-style-type: none"> <li>1. Ensure that the detector is not pointing at a source of heat or a moving object.</li> <li>2. Ensure that the detector is not mounted above a radiator or heater, or in a draughty area.</li> <li>3. Ensure that the detector is not facing a window or in direct sunlight.</li> </ol>	<p><b>Magnetic Contact Detector not working</b></p> <ol style="list-style-type: none"> <li>1. Ensure House Code is the same as that set in the Control Unit.</li> </ol>
	<p><b>Red light on Magnetic Contact Detector not illuminating or is dim when door or window is opened</b></p> <ol style="list-style-type: none"> <li>1. Ensure batteries are connected with correct polarity.</li> <li>2. Replace batteries with new.</li> <li>3. Ensure battery connections are good and that connector is fitted correctly to PCB.</li> </ol>
	<p><b>Magnetic Contact Detector false alarming</b></p> <ol style="list-style-type: none"> <li>1. Ensure that gap between magnet and detector is less than 5mm.</li> <li>2. Tamper switch below battery cover not depressed. Check battery cover fixing lugs are not broken.</li> </ol>

<p><b>HELPLINE</b> If you need help, just dial for expert technical support</p>	<p style="font-size: 2em; font-weight: bold;">01372 450960</p> <p>(Lines open 9.00am to 6.00pm, Monday to Friday).</p>
<p><b>Important notice following alarm installation</b></p>	<p>In order to comply with the Code of Practice on Noise from Intruder Alarms 1981 you should carry out the following procedures within 48 hours of the Intruder Alarm installation.</p> <ol style="list-style-type: none"> <li>1. Notify your local police station in writing that an Intruder Alarm System has been installed, giving names and contact details of at least two persons who know the Access Code or who have a Remote Control.</li> <li>2. Inform the Local Environmental Health Authority of the installation and which police station has been informed.</li> <li>3. Ensure that all users are aware of the operating procedures.</li> <li>4. Immediately inform your Local Authority and police station if there is a change to the persons who have access to the system.</li> </ol>



***If you need help, just dial the Helpline  
for expert technical support:***

**01372 450960**

(Lines open 9.00am to 6.00pm, Monday to Friday).

***We can solve most problems quickly over the phone.***

---

## **GUARANTEE**

This product (excluding Alkaline batteries) is guaranteed for one year from the date of purchase against faulty materials or workmanship. We will repair or replace any faulty product. No liability can be accepted for any problems caused by fair wear and tear, buyers negligence, improper fitting or use, local radio interference, wilful or accidental damage, or any consequential loss or damage howsoever caused. This guarantee does not affect your statutory rights and is valid in the UK and Eire only.

If an item develops a fault, please call the Helpline on the above number. Should you need to return a product, it must be to the address below in adequate packaging with:

1. A copy of your original invoice/receipt.
2. A full description of the fault.
3. All relevant batteries.

### **NOTE:**

If returning a system, make sure that all batteries are disconnected and secure and that the unit is adequately packaged to prevent damage in transit.

For security, Recorded or Registered Post is recommended.



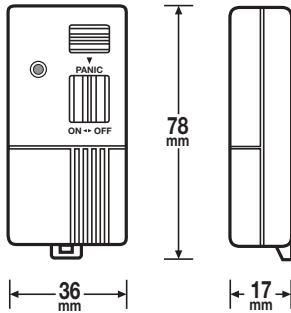
**17 Church Road, Great Bookham, Surrey KT23 3PG**

**Telephone: 01372 450960**

**E-mail: [info@wireless-alarms.net](mailto:info@wireless-alarms.net)**

**[www.wireless-alarms.net](http://www.wireless-alarms.net)**

## Wirefree Remote Control



- Full Arm/Disarm
- Personal Attack Button
- LED confirmation
- Alkaline battery supplied

## RESEARCH & DEVELOPMENT

Our R & D Department is constantly developing new products. We practice a policy of continued improvement and reserve the right to change specifications without prior notice.

**If you need help, just dial the Helpline for expert technical support**

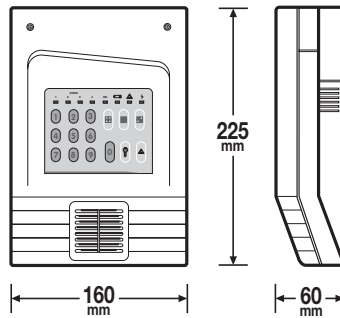
**HELPLINE:  
01372 450960**

(Lines open 9.00am to 6.00pm, Monday to Friday.)



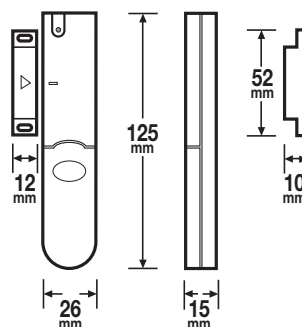
**RADIO DEVICES FOR USE IN THE UK**

## Control Unit



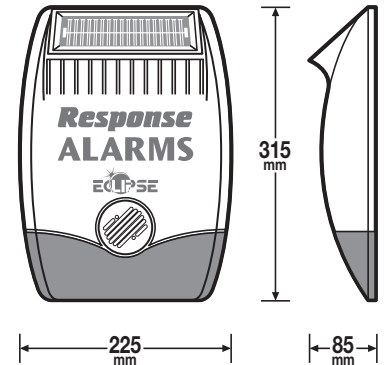
- Four Wirefree Programmable Zones
- Integral 105dB Siren
- Two Siren Tones - Intruder and Tamper/Personal Attack
- Zones programmable for:
  - Entry Delay
  - Part Arm/Zone omit
- Entry/Exit Delay - variable 10, 20, 30, 40 or 50 seconds
- Alarm duration - variable 1, 2, 3, 5 or 10 minutes
- Self learn House Code
- Four digit User Access Code
- Test mode facility
- Front and Rear Anti-Tamper
- N.O./N.C. latching change-over contacts
- Sophisticated Jamming Detection facility
- Individual Zone Alarm activation LEDs
- Detector low battery indication
- Dialler wiring facilities
- Integral Solar Siren & Strobe transmitter
- Non volatile memory
- Integral Back-up Battery
- Hard-wired Zone input facility
- Hard-wired Siren connection facility
- 12 Volt DC Auxiliary output facilities

## Wirefree Magnetic Contact Detector



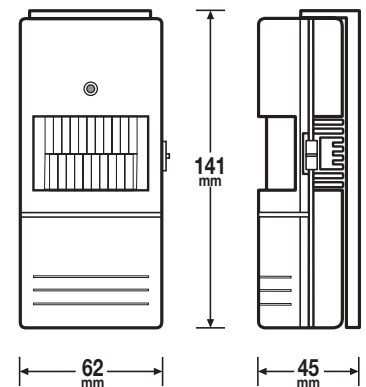
- LED Battery confirmation
- Anti-tamper
- Operating gap 5mm
- Door or window mounting
- Low Battery indicator
- Lithium batteries supplied

## External Solar Siren & Strobe



- Case material 3mm polycarbonate
- Dual front and rear Anti-tamper
- Internal Receiver and Aerial UK frequency 418MHz
- Sealed Lead Acid Battery 6 Volt 1.2Ahr
- Solar Panel 7.5 Volt - Charge Rate typically 60mA
- Time out - switchable 3 or 15 minutes
- Xenon Strobe current 125mA (1 Watt)
- Quiescent current 850µA (typical)
- Piezo Sounder 105dB current 150mA
- Operation time in complete darkness - 40 days
- Anti-Foam
- Also available as visual deterrent Dummy Unit (order code E100D)

## Wirefree Passive Infra Red Movement Detector



- Detection range: up to 6 metres at 110° and 12 metres at 60°
- Walk test facility
- Pulse Count facility
- RF immunity
- Low Battery indicator
- Anti-tamper
- Adjustable wall bracket
- Corner or surface mount
- Pet mount option
- Alkaline battery supplied

**Wireless Alarms.** 17 Church Road, Great Bookham, Surrey KT23 3PG  
Telephone: 01372 450960 E-mail: info@wireless-alarms.net www.wireless-alarms.net