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## 1. INTRODUCTION

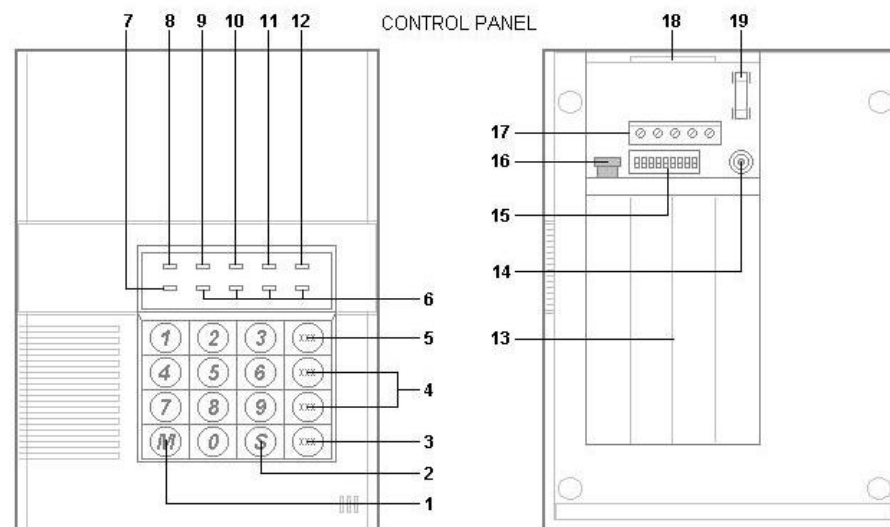
Thank you for purchasing this Security System which represents a major step in the protection of your home and property. The Multi zone control panel and wireless detectors provide a very convenient and easy installation and is amazingly simple to operate.

The system uses the very latest in digital radio frequency technology and incorporates micro processor circuitry. The day to day use of other wireless products such as Mobile phones, Intercoms and radio phones etc. cannot effect the normal operation of this system due to the incorporation of advanced interference detection circuitry compliant with BS6799 Class III.

This system also complies with the following relevant standards.  
License exempt DTI-MPT-1340 or ETS-300-220. BS 415, EN-60065 or TUV Safety Standard. EN-60950 system safety standard, Certified to BS 6707 & BS6799 (1986) Class III (true class III), CE Certified.

## 2. ILLUSTRATION & DESCRIPTION

Fig. 1



### CONTROL PANEL

1. **'M' BUTTON** Used only when changing the keypad security code.
2. **'S' BUTTON** Used to arm, disarm & part arm the system.
3. **'BAT. C' BUTTON** Used when changing detector batteries.
4. **'PROG.' & 'SAVE' BUTTON** Used when programming the system memory.
5. **'PANIC' BUTTON** Press only in an emergency. Activates built-in & SolarGuard wireless sirens instantly.
6. **ZONE 1 - 4 INDICATOR** At normal operation, when a detector has been activated, the Zone indicator will illuminate for 1 minute in Disarm mode, serving as a monitor function; and in Arm mode, the indicator will remain on until the system is re-armed, serving as a system memory function.
7. **'LOW BAT.' INDICATOR** Flashes simultaneously with the Zone indicator to identify a detector in low battery.
8. **'POWER' INDICATOR** Indicates that the AC power is connected.
9. **'ARM' INDICATOR** Indicates when the system is in Arm mode.
10. **'P/ARM' INDICATOR** Indicates when the system is in Part Arm (Home) mode.
11. **'Rx/MONITOR' INDICATOR** Indicates reception from a detector and interference detection.
12. **'TAMPER/PANIC' INDICATOR** Indicates that a Tamper switch has been activated or a Panic button has been pressed.
13. **BATTERY COMPARTMENT** Holds 8 pieces of Ni-Mh rechargeable battery (AA 1.2V/500mA)

- 14 **TAMPER SWITCH** Designed to protect the rear access cover from removal. When removed, the sirens will sound instantly.
- 15 **SITE CODE DIP SWITCHES** Make sure they match all your detectors
- 16 **DC ADAPTER INPUT JACK**
- 17 **EXPANSION CONNECTOR** To connect with Siren Transmitter Module or to connect with wired external siren & strobe unit, or auto dialer.
- 18. **CABLE ACCESS ROUTE** Allows cable access into the back of the control panel.
- 19. **FUSE** 1A/1.25 A

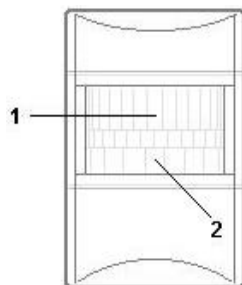
## WIRELESS PIR SENSOR

### 1. PIR SENSOR

To detect movement within its protected area.

### 2. TEST indicator

The red indicator only operates when the wireless PIR sensor is set to the TEST mode.



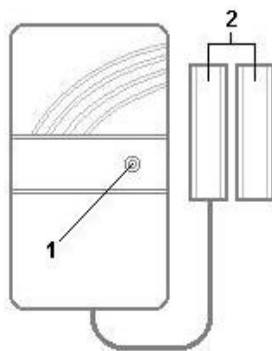
## MAGNETIC TRANSMITTER

### 1. INDICATOR

Indicates that a signal is being sent.

### 2. MAGNETIC DOOR SENSOR

To detect the opening of doors or windows.



## REMOTE CONTROL

### 1. INDICATOR

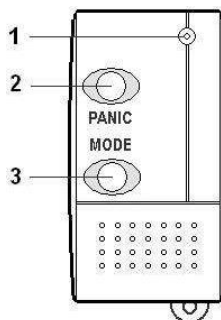
Indicates that signal has been sent and the battery is still working

### 2. PANIC BUTTON

To instantly trigger the sirens during an emergency.

### 3. MODE (ON/OFF) BUTTON

Used to Arm or Disarm the system



# SYSTEM DETAILS

## • Remote control & keypad operation

It is possible to operate the system via the Control panel keypad, remote control or an accessory Keypad unit

## • Panic feature

A remote panic feature enables sirens to sound instantly in the event of an emergency

## • Full tamper protection

All detector covers and the control panel rear cover are prevented from deliberate removal without first entering the special 'Battery Change command'

## • Compatible with any number of additional detectors

You can add any number of detectors to each zone

## • Long range PIR movement detectors

The PIR detectors are able to view an area up to 12 meters long at an angle of 120 degrees

## • Entry/Exit zone (Zone 1)

This zone is used to protect the main entrance and provides a period to disarm the system when entering the property

## • Instant activation zones with exit default & entry zone follow on

Zones 2 to 4 will activate the system instantly except zone 2 if zone 1 is activated first

## • Part arm feature for selected detectors

Arms the system but omits detectors set to zones 3 and 4

## • Programmable siren duration

The siren will sound for the programmed siren duration period

## • Programmable entry time period

You can adjust the time allowed to enter your property and enter your keypad code before the siren sounds

## • Programmable exit time period

You can adjust the time allowed to exit the property following arming

## • Latching strobe output for wired strobe unit

If the system is allowed to sound its sirens for the programmed siren duration period the strobe can continue until the system is disarmed.

## • LED memory function to show activated zone

The arm & part arm light will remain lit with the zone light to indicate the system was activated when last set into Arm.

## • Audible entry/exit countdown warning

A warning tone is given upon arming reminding you of imminent siren activation if the property is not vacated during the exit period. During initial entry to the property you are also reminded to disarm the control panel with an identical warning tone.

## • Battery change mode for servicing and detector battery replacement

Disables the tamper switches and allows detector covers to be removed to replace batteries

- **Mains power failure warning**  
In the event the mains power fails the power light will extinguish but the battery back up will maintain power for up to 2 days
- **Low detector battery warning**  
The Low Battery light will flash alternately with the Zone light to indicate a low battery in a detector operating on that zone
- **Frequency code combinations**  
There are over 500 different frequency code combinations referred to as the site code
- **Expansion connector**  
For the connection of wired accessories.
- **Rx reception level/channel monitor indication**  
A singular momentary flash indicates a poor reception level indication from detectors. Multiple flashing or prolonged illumination for 1/2 second indicates a good reception level. Interference present on the frequency channel will cause the Rx LED to illuminate. If the jamming circuitry has been activated the LED will remain permanently illuminated.
- **Programmable jamming detection circuitry**  
Provides an early indication of possible interference present on the frequency channel. Can be programmed to activate sirens in the event of prolonged jamming. We recommend you set this to the 'on' position provided the Rx light does not remain constantly lit during normal operation.
- **Programmable jamming duration 'Patent Pending'**  
Unique to these systems this function allows the user to set the period malicious interference is allowed to affect the day to day operation. We recommend this is set to 15 seconds.
- **Frequency channel monitoring**  
Provides an early indication of possible interference present on the frequency channel
- **Automatic noise level self test**  
Following initial connection to the power the interference detection circuitry will measure the background noise to avoid false triggering of the Jamming detection circuitry
- **Programmable remote control 'Disarm' disable function**  
When switched on - prevents the system from being disarmed via the transmitted Disarm radio frequency code when the sirens have sounded. Disarm is only possible via the control panel keypad code

### 3. PLANNING YOUR INSTALLATION

Before proceeding with any part of the installation you must give very careful consideration to the location of detectors, the control panel and external siren unit. It would prove extremely useful if you sketch a plan of your property and identify the optimum location of each component of the system.

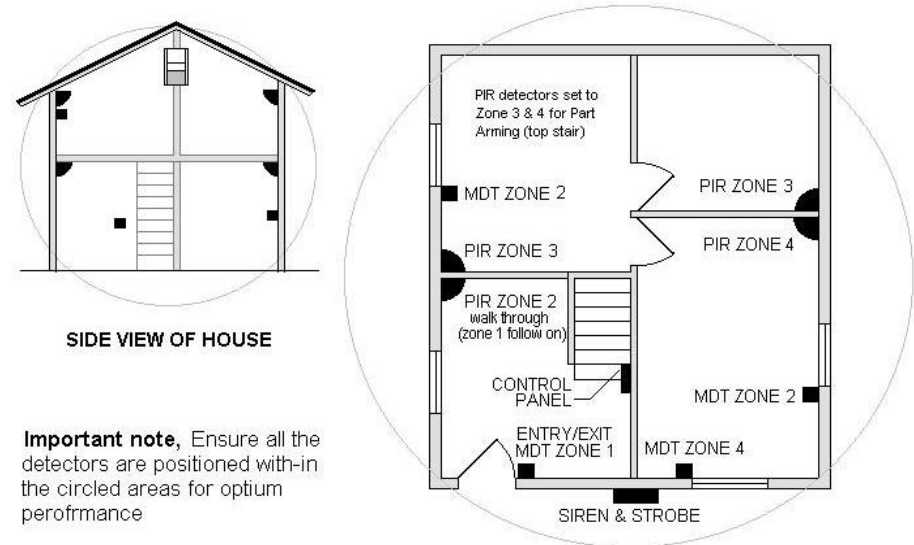
The base pack is designed to suit the smallest property and provide a significant improvement in protection. The use of additional detectors is strongly recommended in larger buildings, for example a home consisting of 4 rooms on the lower floor and 4 rooms on the upper floor should use at least 4 PIR Movement Detectors and 3 Door/Window Contacts.

Detectors set to Zone 3 & 4 will not activate the system when set into Home Mode. As an example - this is ideal for use in Bedrooms and a Hallway so that the system may be entered into Home Mode during the night thus allowing the occupants access to the upper rooms only.

**NOTE** It is possible to add any number of detectors to each Zone.

Fig. 2 is a plan showing this type of dwelling and how best to position the detectors. The Control Panel is positioned at a center point between detectors for optimum reception performance.

Fig.2



**Important note,** Ensure all the detectors are positioned with-in the circled areas for optimum performance

## CONTROL PANEL

The optimum transmitting range of your detectors is dependent on the location of your Control Panel and the number of walls between your detectors and the Control Panel. The Control Panel should be located at a point central to the building thereby ensuring easy access for operating via the Keypad on a day to day basis.

The location you choose must be close to the building access route and within easy reach of a mains power socket.

## EXTERNAL SIREN UNIT

If your system includes this unit you must choose a location for the External Siren that is preferably out of easy reach and clearly visible.

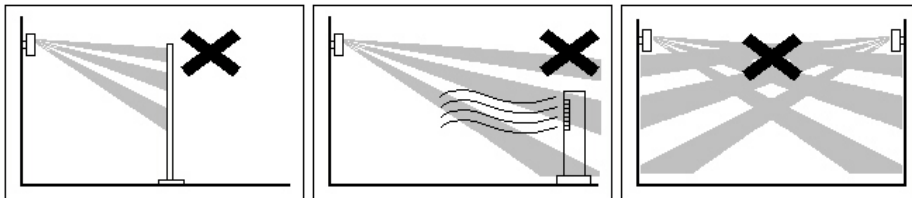
**NOTE** Never run the alarm cable along the surface of any external wall or close to mains power cables. If the cable is run under carpets, please avoid possible damage from carpet nails. If using the SolarGuard please ensure it is set to position B.

## PIR DETECTOR (Passive Infra-red Detector)

Make sure the detection area is not obstructed by curtains, large pieces of furniture, plants etc which may block the pattern of coverage.

Avoid locating a unit in areas which contain objects likely to produce a rapid change in temperature, such as central heating, radiators or ducts etc.,

Avoid installing 2 PIR detectors in one room protecting the same area.



The PIR movement detector has a detecting coverage of 12 meters in a 120 degree arc on 3 layers. Install the detector at a 140 height of approximately 7 feet (2.1m) from floor.

## MDTs (Magnetic Door/Window Transmitter)

The MDT units can be used for a number of functions. The most popular is protection to doors and windows however, the unit can be connected to a panic switch and with the Zone code switches all set to OFF the panic zone can be activated. This is ideal as a fixed Wireless Panic Alarm.

# 4. PREPARING THE SYSTEM FOR INSTALLATION

## Setting the Site Code (DIP Switches 1 to 9)

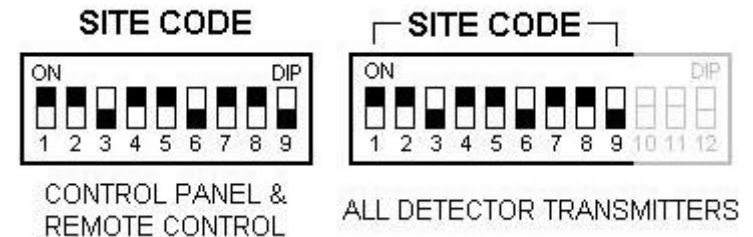
The Site Code is set using the first 9 DIP switches in all your Wireless detectors, together with the 9 DIP switches in your Remote Control and Control Panel.

It sets your communication ID code. One analogy that simplifies this explanation is that it sets the transmitting frequency your detectors operate on, thereby avoiding interference from similar systems operating nearby.

Fig.3 shows a typical example setting for the Site Code.

When you have chosen a Site Code, you must set it the same in all your Wireless detectors, Control Panel and Remote Control, Refer to Fig. 5, 6, 7 & 9.

Fig. 3



**NOTE** the site code must be the same in all and should be changed from the original setting as supplied.

## Setting the Wireless detectors to specific Zones (DIP Switches 10 to 12)

In the Wireless detectors there is a 12 DIP switch bank. The first 9 DIP switches are used for the Site Code as explained above and DIP switches 10 to 12 when set in various combinations of ON and OFF determine which Zone the detector will operate on. Refer to Fig. 4 for typical example settings for DIP Switches 10 to 12.

Fig.4

ZONE DIP SWITCH	ZONE 1 ENTRY/EXIT	ZONE 2 INSTANT	ZONE 3 INSTANT	ZONE 4 INSTANT	PANIC TAMPER
10	ON	OFF	ON	OFF	OFF
11	OFF	ON	ON	OFF	OFF
12	OFF	OFF	OFF	ON	OFF
ZONE CODE SETTINGS					

\*The table above shows the correct switch settings inside the detectors

\*The above figure shows how switches must be set to the various zones in the detectors

e.g. You would normally set your Magnetic Door Transmitter (MDT) to zone 1 as this is the only zone that allows sufficient time to disarm the system when entering the building Zone 2 to 4 are Instant Zone.

ZONE INDICATOR MODE	* = NOT ACTIVE			✓ = ACTIVE	
	ZONE 1 ENTRY/EXIT	ZONE 2 INSTANT	ZONE 3 INSTANT	ZONE 4 INSTANT	PANIC TAMPER
Disarm	*	*	*	*	✓
Arm	✓	✓	✓	✓	✓
P/ARM	✓	✓	*	*	✓
Bat. C	*	*	*	*	*

\*The table above shows which zones are active in the various modes that the system can be set to.

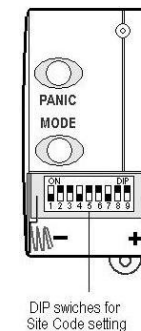
\*Bat. C. disables all zones including the Tamper Zone to allow for battery changing

# 5. INSTALLING THE SYSTEM FOR USE

## 1) Remote Control

Fig.5

Before use, check that you have set the correct Site Code. Once you have done this, the Remote Control is ready to use.



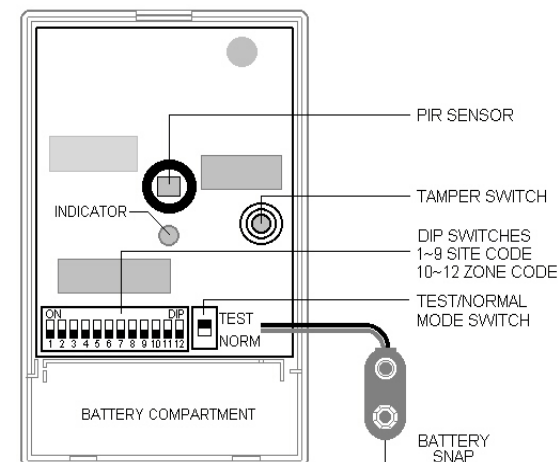
DIP switches for Site Code setting

## 2) PIR Movement Detector Transmitters (PIRs)

Having previously set the Site Code and Zone Code in all your PIR detectors, the PIRs are ready to be fixed to a wall using the screws and wall plugs provided.

1. Check the Site and Zone code is correct.
2. Check the Slide Switch is set to TEST mode (See Fig.6)
3. Install a 9V (MN1604) Alkaline battery.
4. Clip the front cover of the PIR back on. At this point the indicator will flash each time the PIR detects movement.
5. Fix the Wall Mounting Bracket
6. Mount the PIR detector on the Wall Mounting Bracket

Fig. 6



**NOTE** When the battery is first connected to the PIR a 2 minutes period must be allowed for "Warming Up".

### 3) Magnetic Door/Window Contact Transmitters (MDTs)

The MDTs do not have a Test mode. However, confirmation of correct operation is given in normal day to day operation by activating the door or window to which it is protecting. This causes the red indicator on the MDT to flash.

1. Remove the Battery Cover and fix using 2 screws provided
2. Fix the Magnetic contacts to the door or window
3. Install a 9V (MN1604) Alkaline battery.
4. Refit the battery cover and the indicator will go out

Fig. 7

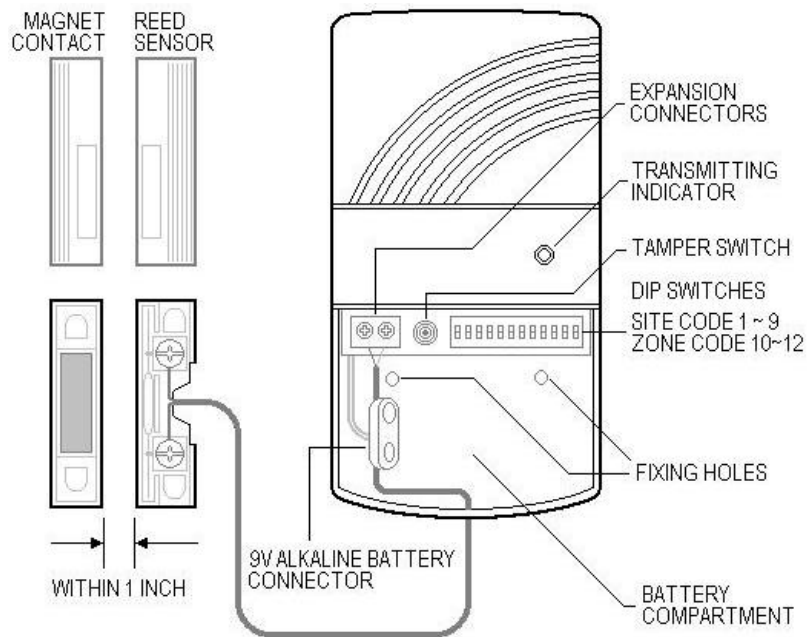
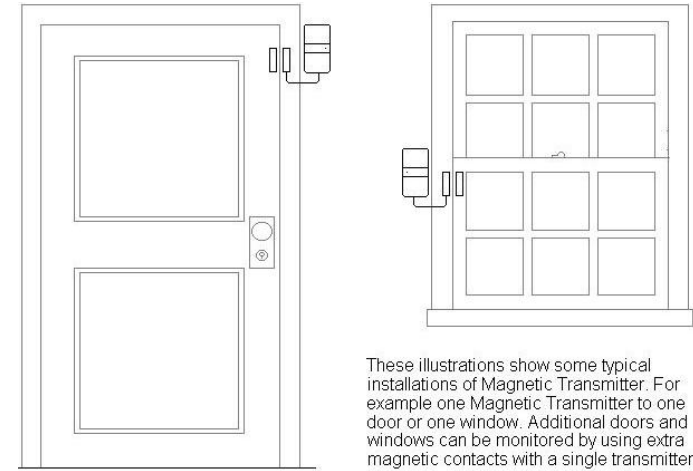
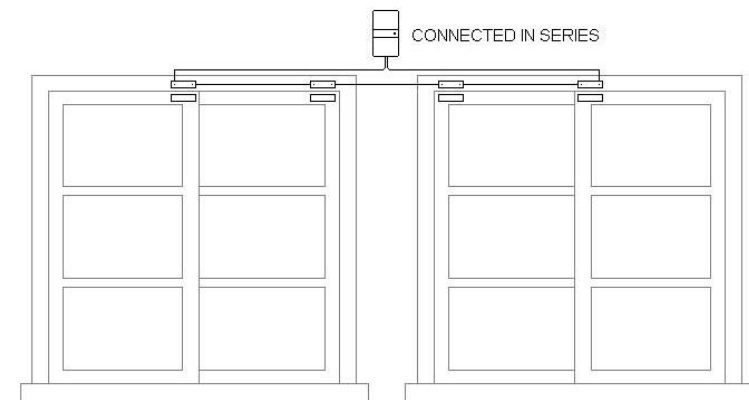
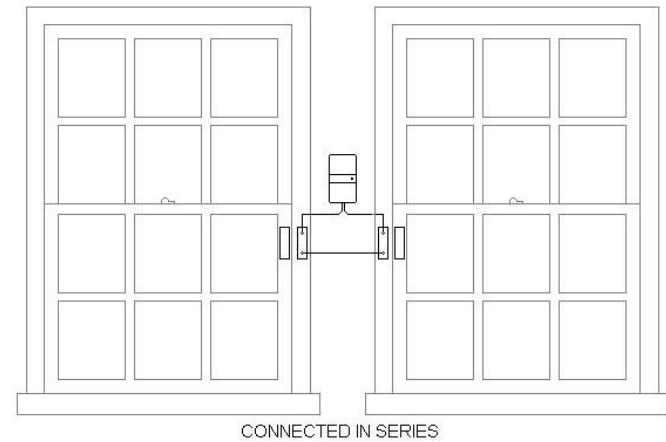


Fig.8



These illustrations show some typical installations of Magnetic Transmitter. For example one Magnetic Transmitter to one door or one window. Additional doors and windows can be monitored by using extra magnetic contacts with a single transmitter

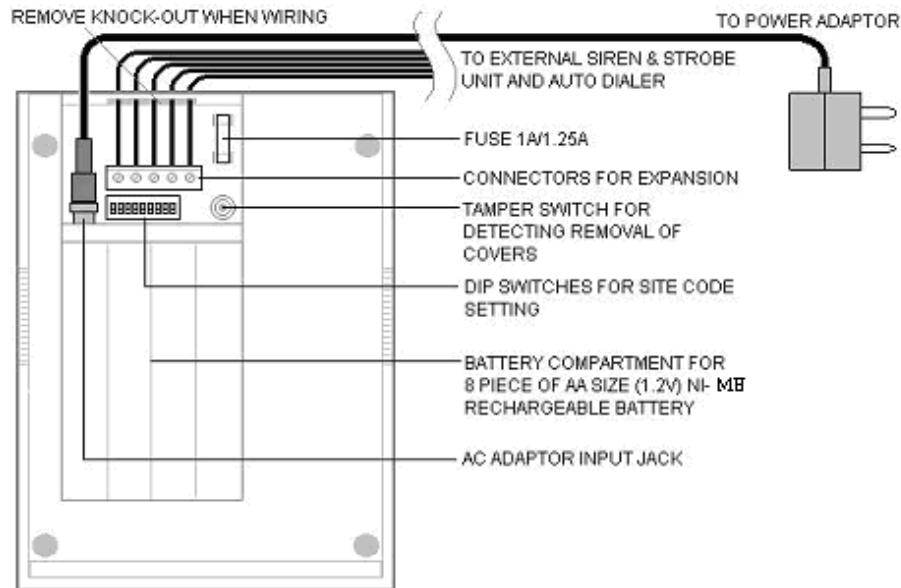


## 4) Control Panel

Having chosen the best location for the Control Panel follow the steps below.

1. Remove the access covers from the Control Panel
2. Check the Site Code is set correctly
3. Connect the cable between the Control Panel and External Siren unit (if supplied)  
Refer to the WIRING DIAGRAM.
4. Plug the mains power adapter into the Wall socket and connect to the Control Panel
5. Install the 8 pc of AA Ni-Mh rechargeable battery
6. Refit the access covers to the Control Panel. Make sure that the Tamper Switch is pressed properly.

Fig. 9



**NOTE** The use of other types of battery in the Control Panel will cause acid damage and will invalidate your Warranty.

## 6.10 QUICK STEPS TO INSTALLATION

<p><b>Step 1</b> <i>All site code must set to the same !</i></p> <p><i>remote &amp; detectors control panel</i></p> <p><i>Select &amp; set your site code setting for switches 1 to 9</i></p>	<p><b>Step 2</b></p> <p><i>Zone 1 Zone 2 Zone 3 Zone 4</i></p> <p><i>Now set the zone code switches 10, 11 &amp; 12 in your detectors</i></p>
<p><b>Step 3</b></p> <p><i>Connect the mains power adaptor to the control panel</i></p>	<p><b>Step 4</b></p> <p><i>Press the 'ON' button on the remote and the siren will sound. Press again to stop the siren.</i></p>
<p><b>Step 5</b></p> <p><i>Enter 1 2 3 4 BAT.C on the keypad then install the detector batteries</i></p>	<p><b>Step 6</b></p> <p><i>Make sure the PIR switch is set to Test and ensure covers are re-fitted</i></p>

## Step 7

*Place the detectors in the position you require. Activate all the detectors to confirm correct operation, check the zone and Rx light correctly*

## Step 8

*Remove the mains power, fit the external siren unit (if supplied)*

## Step 9

*Now fit the battery back up, re-connect the mains power.*

## Step 10

*Set your PIR movement detectors back to the Normal mode & ensure covers both on control panel and detectors are re-fitted*

*All that remains is to setup your own keypad code and other functions as required. Refer to page 16 & 17.*

# 7. OPERATING THE SYSTEM

Once you are familiar with the day to day operation of the system you must change your Keypad Security Code which has been pre-programmed to **1 2 3 4**. All other programmable functions have been pre-programmed to suit the vast majority of installations therefore it is not necessary to make any further programming amendments.

## How to Arm the System with the Keypad

1. Press the **0** button
2. Press the **S** button

\* You would notice the Arm indicator will illuminate.

## How to Disarm the System with the Keypad

The Keypad Security Code has been factory pre set to **1 2 3 4**.

1. Enter your Keypad Security Code **1 2 3 4**
2. Press the **S** button.

\* The Arm or P/Arm indicator will extinguish.

## How to Arm the System into P/ARM mode

This function simply Arms the Control Panel but omits any Detectors that you have set to Zone 3 & 4 and is ideal for using at night to protect areas set to other Zones only. The system can only be set into Home Mode using your Keypad Security Code. However it can be Disarmed with your Remote Control or via the Keypad.

1. Press the **9** button
2. Press the **S** button

\* You would notice the P/Arm indicator will illuminate

## How to Operate the System with the Remote Control

The Remote Control offers the user the following functions.

- (1) **ON (Arming)**    (2) **OFF (Disarming)**    (3) **PANIC (Instant Alarming)**

To operate simply press the button you choose. The Control Panel will emit **1 chirp for ARM and 3 chirps for DISARM**. If you press the Panic Button the siren will sound immediately. It is not possible to arm the control panel into Home (P.Arm) Mode using the Remote Controller or Remote Keypad .



# 8. PROGRAMMING THE SYSTEM MEMORY

When altering the system memory you should be extremely careful pressing the Keypad. In order to perform this. Following the successful recognition of a programming entry the siren will emit 1 chirp. If however, your entry was incorrect the Siren will emit 3 beeps and ignore the entry. Repeat your last step if this occurs.

## Example Programming Sequence

This example shows how to change the Keypad Security Code

**The Factory setting is 1 2 3 4.** The new code must also be 4 digits. To program a new code or to change existing code to a new code please proceed as follows.

1. Enter the current code                   **[1] [2] [3] [4]**
2. Press the [M] [0] button               **[M] [0]**
3. Enter the new security code you require **[?] [?] [?] [?]**
4. Press the [M] button                   **[M]**

**For example:** You want to set up your new code as 6 4 5 0 from the factory setting & your current code is the factory default code 1 2 3 4.

1	2	3	4	M	0	6	4	5	0	M
---	---	---	---	---	---	---	---	---	---	---

CHANGING YOUR KEYPAD CODE			
FUNCTION	FACTORY DEFAULT SETTING	SYSTEM SETTING PROCEDURE	REMARKS
Keypad Code	1 2 3 4	1 2 3 4 M 0 ? ? ? ? M	? ? ? ? = Your new code  If you are changing your code use your old code instead of the factory default 1234

PROGRAMMING			
It is not necessary to make any changes in this section for the majority of installations			
FUNCTION	FACTORY DEFAULT SETTING	SYSTEM SETTING PROCEDURE	REMARKS
BAT. C	Off	? ? ? ? BAT. C	Tamper alarm disable for detector battery changing
Alarm Duration	4 mins	???? PROG 03 ?? SAVE	??= 01 to 20 mins Max.
Exit Time	20 Seconds	???? PROG 04 ?? SAVE	??= 10 to 99 seconds
Entry Time	20 Seconds	???? PROG 05 ?? SAVE	??= 10 to 99 seconds
Jamming Duration	30 Seconds	???? PROG 06 ?? SAVE	?? = 10 to 99 seconds
True Jamming Status	Off	???? PROG 07 ?? SAVE	?? = 01 for On or 00 for Off
Remote Control Disarm Disable	Off	???? PROG 08 ?? SAVE	?? = 01 for On or 00 for Off

# 9. TESTING

Whilst checking the operation of each detector it is possible to confirm reception by the control panel each time a detector is activated. The Rx indicator illuminates for approximately 1 second each time a recognized transmission is received.

During normal day to day operation the Rx indicator will illuminate regardless of the system status when a detector transmission from your system is received. If the signal level received from a detector is below a safe operating level the indicator will flicker once. If this occurs it will be necessary to reposition that particular detector to a different location thereby improving the signal level to the control panel.

## TESTING THE PIR DETECTORS AND MDT UNITS

Provided you have followed the previous section accurately, all PIR detectors will have been set to the TEST mode and each time you activate a PIR detector or open a Door/Window protected by a MDT the detector red Indicator will illuminate. At this moment a digital code is transmitted by the detector to the Control Panel and the corresponding Zone indicator on the Control Panel will illuminate for 2 minutes. If persistent activation of a detector occurs you will notice the corresponding Control Panel Zone indicator will remain on and this confirms that the Control Panel is receiving the correct codes from the detectors. If you experience problems at this stage it may be necessary to move the detector to a different location.

Once you have confirmed correct operation of the PIR detectors you must set the detector back into Normal operation. This is illustrated in Fig. 6. Entering the BAT. C.(battery changed) code will prevent the siren from sounding when the Tamper switch is activated during removal of Tamper protected covers.

**IMPORTANT NOTE** When the PIR detector is set into the TEST mode using the slide switch shown in Fig.6 the indicator will flash every 3 to 5 seconds and transmission will take place immediately. When set into NORMAL mode a quiet period of 3 minutes exists between transmissions and the red indicator behind the PIR lens does not illuminate, thereby preserving battery power.

## TESTING THE EXTERNAL SIREN AND REMOTE CONTROL

By pressing the ON/OFF button once on the Remote Control you should hear a chirp from the Control Panel. 1 chirp for ON (Arm) and 3 for OFF (Disarm). This enables the system to be entered into and out of Full Arm condition only. In Arm condition the Arm Indicator on the Control Panel will illuminate. This confirms the system status. Now press the Panic Button on the Remote Control and the Siren built into the Control Panel and the External Siren (if fitted) will sound. If you have fitted a strobe to the External Siren unit this will flash at the same time.

Now press the ON/OFF (Arm/Disarm) button to stop the Siren sounding.

The Panic button performs the same function as the Tamper switches and activates the 24 Hour Panic/Tamper Zone on your Control Panel, however this function does not work when the Control Panel is first powered up. During initial power up to the control panel, the system automatically defaults into the Battery change function.

## PERIODIC TESTING AND MAINTENANCE

Performing periodic test functions is important in order to confirm continual operation of the system whilst at home and when away.

### Checking the System Detectors

To confirm correct operation of the detectors simply activate the detector whilst the system is set into the DISARM mode. The corresponding indicator will illuminate for 3 minutes on the Control Panel thereby confirming correct reception from each of the detectors to the Control Panel. The Rx indicator will illuminate or flicker each time a transmission is received.

### Checking the External Siren Unit (if supplied)

The External Siren unit should be tested 1 month after installation then every 6 months. This can be achieved by simply pressing the Panic Button on the Remote Control or Control Panel.

# 10. CHANGING THE BATTERIES

## The Control Panel Back Up Battery

The batteries fitted inside the Control Panel are 8 pcs of AA Ni-Mh rechargeable battery. Once fitted inside the Control Panel they are kept constantly charged and should last for 3 years. However, as each year passes the batteries ability to hold charge is reduced and it may be necessary to change the batteries after a period of 3 years in order to maintain a sufficient period of operation in the event of a Mains power failure.

**WARNING** Other types of battery fitted in the control panel will damage the Control Panel and invalidate your warranty

## The Detector Battery

The use of Alkaline batteries in detectors is strongly recommended in order to provide an adequate length of operation. Alkaline batteries installed in the detectors will generally provide an operation life up to 18 months. Newly available Lithium batteries are capable of providing approximately 3 to 5 years of life but are relatively high in cost.

When a detector battery is running low a code is transmitted from the detector and the Low Battery indicator on the Control Panel will flash alternately with the Zone indicator.

The Low Battery Indicator will not stop flashing until the Control Panel has been armed and then disarmed via the keypad.

### **Battery Change Function** (refer to Page 18 for programming battery change function)

This feature provides the following functions:

- 1) Prevents the siren from sounding when a Tamper switch is activated during removal of tamper protected battery covers.
- 2) Checks specific detectors battery status.
  - a. 6 beeps are emitted to indicate a detector with a low battery
  - b. If detector battery is in good condition then the control panel will emit chirps corresponding to the zone that the detector operates on.  
e.g. 1 chirp for Zone 1, 2 chirps for Zone 2 and so on.

## Installing A New Battery In The Remote Control

The Remote Control is the only unit supplied with the battery already fitted. A low battery will result in a dramatically reduced range in transmission distance.

The battery should last up to 3 years. **When replacing the battery ensure you observe the correct polarity connections.** (Refer to Fig. 5)

# 11. EXPANDING THE SYSTEM WITH ACCESSORY PRODUCTS

It is possible to add any number of Wireless accessories to the system including:

SolarGuard Wireless Siren & Strobe Unit, Remote Controls, PIR Movement Detectors, MDT Units, Remote Keypad Units & Smoke Detectors. A Transmission Extender Unit can also be added but must be limited to one per system.

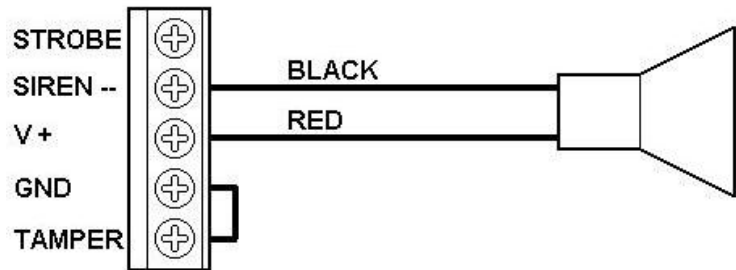
The Expansion connector located on the underside of the Control Panel allows you to connect any of the following wired accessory products:

External Siren Unit, Internal Siren, Auto dialer & Strobe/SAB units. Additional Emergency Panic buttons and wired magnetic Door/Window contacts can be connected to each MDT unit.

The maximum combined output current that can be provided from the Expansion connector is 500mA. This is sufficient to drive 1 Strobe/Siren and 1 Auto dialer.

# WIRING DIAGRAMS

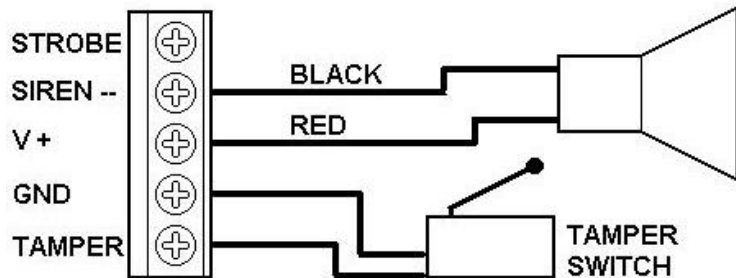
## CONNECTING A DC SIREN ONLY



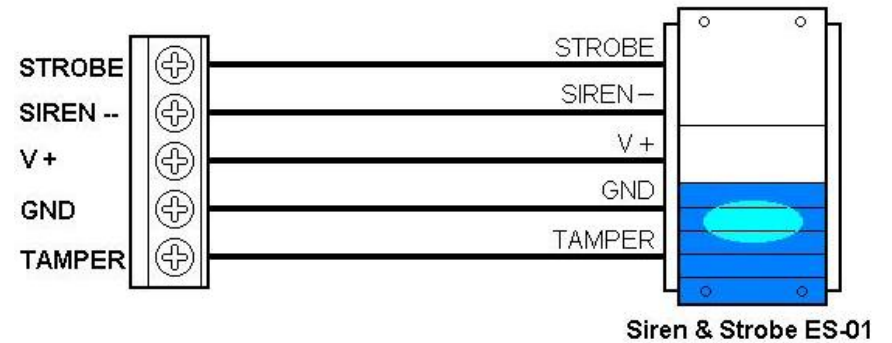
When connecting Siren may sound until siren cover is refitted.

If you are not making a connection to the Tamper terminal, you must leave the link connected between GND and TAMPER

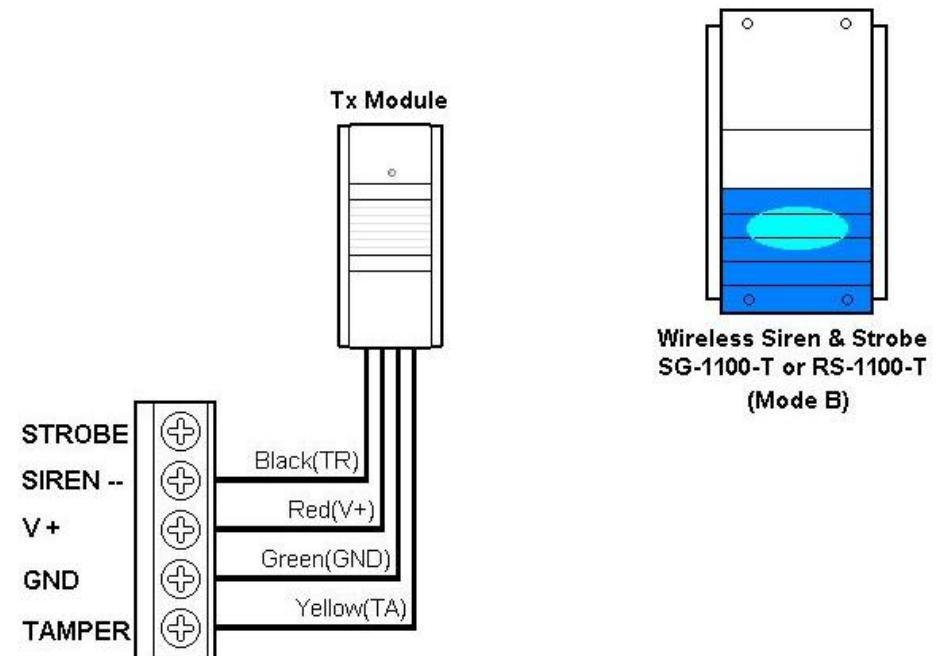
## CONNECTING A DC SIREN WITH TAMPER SWITCH



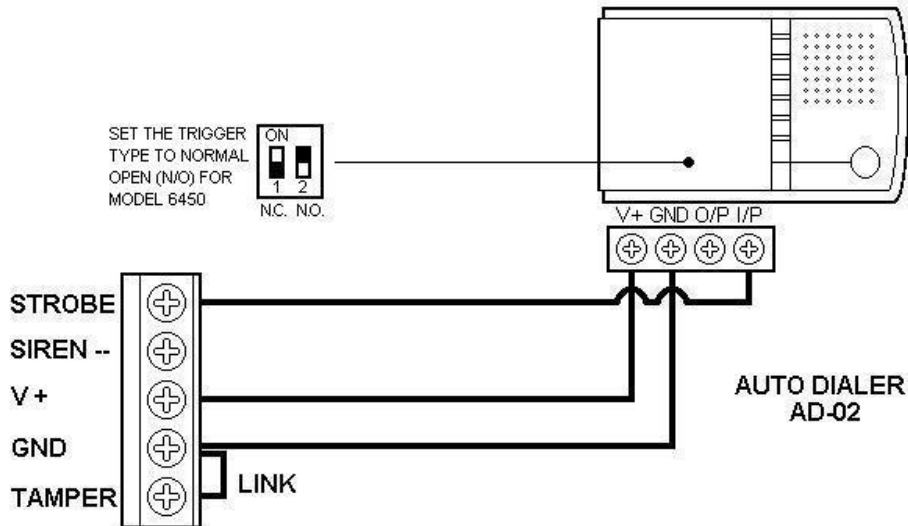
## CONNECTING TO EXTERNAL SIREN & STROBE UNIT



## CONNECTING TO WIRELESS SIREN & STROBE UNIT



## CONNECTING TO AN AUTODIALER



# 12.YOUR QUESTIONS ANSWERED

## Q. WHAT TO DO IF YOU FORGET KEYPAD SECURITY CODE

A. If you forget your Keypad Security code you must perform the Global Reset Function. This restores the memory back to the factory pre-set codes. Perform the following steps:

- Step 1) Disconnect the control panel from the mains power supply
- Step 2) Remove the Rechargeable Ni-Mh batteries from the Control Panel
- Step 3) Wait 5 minutes
- Step 4) Reapply the mains power and refit the rechargeable batteries

This procedure will restore all user programmable parameters back to the manufacturers default settings and when the power is re-applied the External Siren (if fitted with an SAB) will stop sounding.

## Q. WHEN I WALK IN FRONT OF A PIR MOVEMENT DETECTOR THE SIREN SOUNDS IMMEDIATELY WHEN THE SYSTEM IS IN DISARM MODE. WHY?

A. You have not set up your zone code correctly on the switch bank inside the detector or you have not fitted the cover back on the detector properly - check the Tamper switch operation.

## Q. WHY DO MY BATTERIES ONLY LAST A FEW MONTHS IN THE DETECTORS.

- A. Check the battery connections are tight especially if you are using duracell as this make of battery has an unusually narrow positive nipple.
- A. Make sure you have not left the switch in the PIR set to TEST mode.

## Q. WHY CAN I NOT GET A VERY GOOD RANGE WITH ANY OF MY DETECTORS OR REMOTE CONTROL?

A. The system is designed for use up to 80 meters from the control panel in clear space with low background RF noise conditions. The range is also influenced by the number of walls between your detectors and control panel. Try to remain within 18 meters of the control panel and **do not install the control panel close to metal objects or inside cupboards.**

## Q. WHY DO MY DETECTORS NOT RESPOND AT THE CONTROL PANEL?

- A. You have not set the correct Site code. Check your switches 1 to 9 in the control panel match your detectors.
- A. Try moving the switches on & off a few times so as to ensure they make a good contact.

## Q. WILL I NEED TO CHANGE THE BATTERIES IN THE CONTROL PANEL?

A. The batteries are Ni-Cad rechargeable and their charge is maintained by the mains power automatically. They will require replacement after approximately 3 years of operation.

- Q. WHY DOES THE PIR INDICATOR NOT ILLUMINATE WHEN THE PIR IS SET INTO THE NORMAL MODE?**
- A.** To conserve battery power. But the zone indicator will show on the control panel when the PIR is activated.
- Q. WHEN THE PIR IS SET INTO NORMAL MODE I CANNOT GET THE CONTROL PANEL ZONE INDICATOR TO RESPOND WHEN I MOVE IN FRONT OF THE DETECTOR.**
- A.** This is because the PIR sleeps when it sees movement for long periods of time. It will only wake up when you stop movement for at least 2 minutes.
- Q. THE TAMPER CIRCUIT IS ACTIVATED THE MOMENT I ARM THE CONTROL PANEL.**
- A.** This is because the back access cover on the control panel has not been refitted. If you have connected a wire to the tamper terminal on the expansion connector then you have not fitted the cover onto any external unit such as a siren & strobe.

## **WARNING**

*The ingress of dust, damage to cases, printed circuit boards etc. will invalidate your warranty. Batteries are exempt from any warranty.*

*This system is designed for indoor use only.*

*You may be required to advise your local Police department of the installation of this equipment.*

*Only basic tools are required to install this product but if you use electrical installation tools you must follow the safety procedures recommended by their manufacturer. Always use an RCD breaker with such tools. Use eye protection when hammering and drilling. Please do not risk your safety during the installation of this product. If you are unfamiliar with the use of tools and ladders please consult an Electrician or other competent person.*

# **SPECIFICATIONS**

## **Standard Specifications**

- Remote control & keypad operation
- 5 Zone (4 Zone plus Tamper Zone) operation
- Panic feature
- Full tamper protection
- Compatible with any number of additional detectors
- Long range PIR movement detectors
- Control panel with built-in loud siren
- Instant activation zones with exit default & follow on
- Part arm feature for selected detectors
- Programmable siren duration
- Programmable entry time period
- Programmable exit time period
- Latching strobe output for wired strobe unit
- LED memory function to show activated zone
- Audible entry/exit countdown warning
- Audible zone identification function for detector testing
- Battery change mode for servicing and detector battery replacement
- Wireless SolarGuard external siren & strobe compatibility
- Wireless remote keypad compatibility
- Wireless smoke detector compatibility
- Auto telephone dialer compatible

## **Advanced specifications for use by professional installers**

- Rx reception level indication from detectors
- Instant zone operation with entry & exit follow on
- Programmable jamming detection circuitry
- Programmable jamming duration
- Frequency channel monitoring
- Automatic noise level self test
- Programmable remote control disable function

Worldwide patents pending on programmable functions and interference detection features