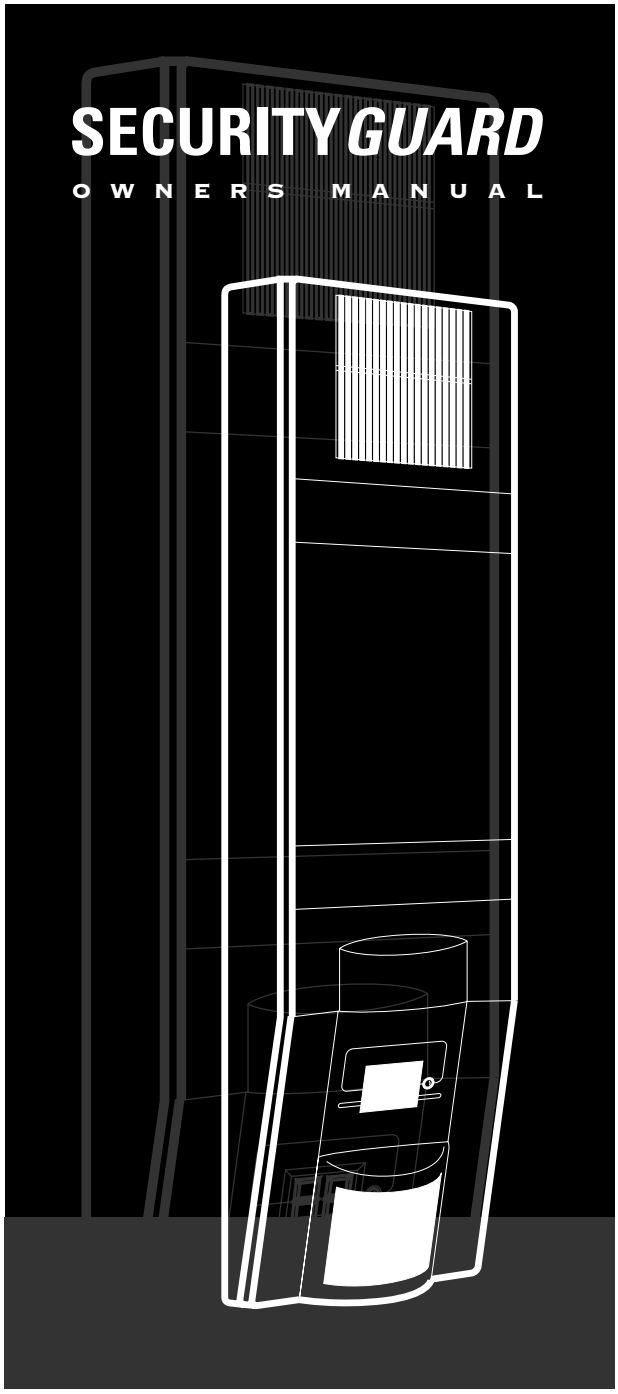
# SECURITY *GUARD*

OWNERS MANUAL



# Australia 131 241

# New Zealand 0800 799

WE CARE


July 1998

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|---|---|

# INTRODUCTION

Thank you for purchasing your SecurityGuardII intruder alarm system. SecurityGuardII is a revolutionary new radio based alarm system which has been built to the highest quality standards possible and complies with the Australian Standard for Intruder Alarm systems AS2201, United Kingdom Standard BS4737 & BS6799 and Canada C22.2 CSAN$^{0}$ 205-M-1983

SecurityGuardII has been designed specifically to keep your family, yourself and your valuables under constant guard and give you peace of mind for their safety. SecurityGuardII works tirelessly 24 Hours a day whether you are at home or away protecting the things that you value the most.

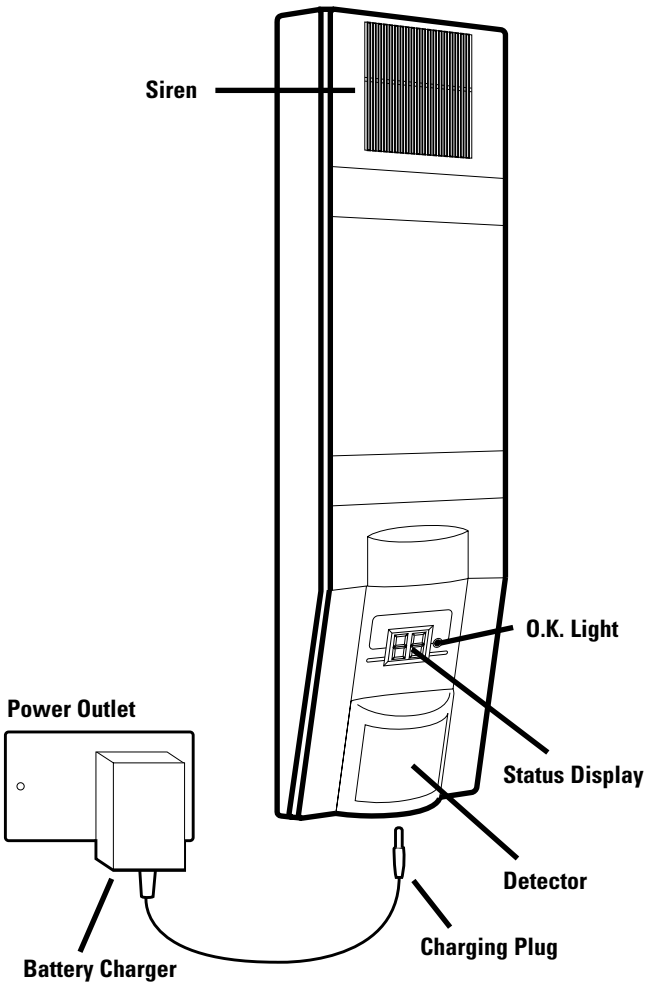
SecurityGuard is the result of many years of experience and research in the personal and home security industry. The system is operated very easily using the pocket size Radio Key and the friendly seven segment display but SecurityGuard's apparent simplicity belies the powerful, sophisticated electronic system which provides features not found on many systems. Testament to the sophistication and innovative design of SecurityGuardII was the awarding of the coveted Australian Design Award to SecurityGuard in 1992 and again in 1996.

## SECURITYGUARD FEATURES

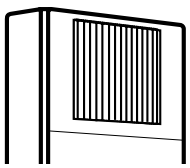
- ***A very loud inbuilt siren***
- ***An infra-red movement detector***
- ***Long-life rechargeable battery***
- ***Water proof Radio Key remote control***
- ***Additional Reed Switches as required***
- ***Panic alarm on the Radio Key***
- ***Additional infra-red detectors as required***
- ***Additional Radio Keys as required***
- ***External Siren and optional Strobe (if fitted)***
- ***Home mode***
- ***Optional Telephone Dialler***

SecurityGuardII is unobtrusive and stylish yet is very robust being made of an extremely tough polycarbonate. When positioned correctly SecurityGuard's inbuilt infra-red movement detector will detect movement in an area of up to 12 metres x 12 metres. Research has shown that most intruders are frightened off once they realise they have been detected. For this reason, SecurityGuard has been designed with a very loud siren to scare intruders and alert your neighbours.

Used and maintained correctly SecurityGuardII will provide you with years of trouble free operation. We are confident in predicting that you will be so impressed by your SecurityGuardII alarm system that you will want to recommend one to your friends and family.

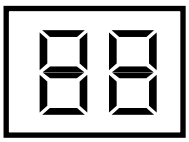



**SIREN**

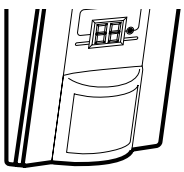


The extremely loud siren sounds if an intruder is detected or a Radio Key emergency button is pressed. It is also used to give you various "Beep" warnings.

**STATUS DISPLAY**



A very bright, red, dual 7 segment display which is used to display the status of SecurityGuard and provide various warnings for conditions such as Low batteries etc.

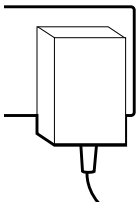


**DETECTOR** An inbuilt Infra-Red detector used to detect movement from intruders in an area of up to 12 metres x 12 metres.

**O.K. / BATTERY CHARGE LIGHT**

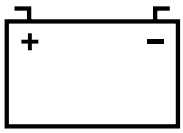
Flashes briefly every 5 seconds if the battery is charged and SecurityGuard is functioning correctly. Flashes every 2 seconds in Home Mode.
On constantly and blink off every 5 seconds while battery is charging.

**BATTERY CHARGER**



Used to charge SecurityGuard's battery. This low voltage device does not
have any dangerous voltages at it's plug connected to SecurityGuard. DO NOT use the charger on any other appliance as damage to the appliance or charger may occur.

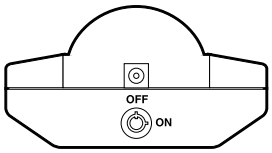
**BATTERY**




The internal rechargeable battery will run SecurityGuard for around 3 to 4 months under normal operating conditions, before it requires recharging.

## EMERGENCY OVERRIDE KEY SWITCH

In case you lose your Radio Key or you cannot stop the Siren on your SecurityGuard with your Radio Key then the Override Keyswitch on the bottom of the SecurityGuard can be used to totally disable SecurityGuard. Two keys are supplied and should be kept in a safe place. Note that the Keyswitch cannot be used to Arm and Disarm SecurityGuard. It completely disables SecurityGuard when it is turned off.




The illustration above shows the keyswitch in the OFF position *(SecurityGuard Disabled).*

If you have turned the Keyswitch off and back on again wait at least 5 minutes after turning on before you ARM SecurityGuard, to allow the inbuilt PIR to settle otherwise false alarms may occur.

**WARNING: Do not press any Radio Key buttons until the display has stopped flashing.** If you turned your Keyswitch off because you had a problem and the problem still exists after you have turned back on, then contact the service number you

# GLOSSARY OF TERMINOLOGY

**The following is a compilation of the terminology used throughout this manual and a short explanation of the terms.**
**Words of interest are written in *Italics.***

The microcomputer based ***SecurityGuard*** forms the heart of your security system. Your ***Radio Key*** is a pocket sized device which transmits an encoded radio signal to tell the ***SecurityGuard*** to go into one of three operating modes; ***Arm, Disarm*** or ***Home***. Additionally the ***Radio Key*** can tell the ***SecurityGuard*** to create an ***Emergency Alarm*** at any time.

Additional detection devices called ***Passive Infra-Red Detectors*** (or ***P.I.R.s*** for short) can detect the movement of an intruder by sensing their body heat. ***P.I.R.s*** are used to cover various critical areas of your premises where an intruder might enter or trespass and will transmit an encoded radio signal to tell ***SecurityGuard*** that there is movement present.

***Reed Switches*** are detection devices which attach to doors and windows and are used to detect if a door or window has opened. A ***Reed Switch*** is made up of two parts; A Magnet which normally attaches to the moving portion of the door or window and a Reed which detects the presence or absence of the magnet. The ***Reed Switch*** transmits an encoded radio signal to tell ***SecurityGuard*** that a door or window has been opened.

Your ***SecurityGuard*** is said to be Armed or on when it allows all ***P.I.R.*** and ***Reed Switches*** to cause a full ***Alarm.*** Your ***SecurityGuard*** is said to be in *Home* mode when it allows only selected ***P.I.R.*** or ***Reed Switches*** to cause an ***Alarm***. This is normally the case when you are home and wish to have part of your alarm active and part of it inactive to allow freedom of movement in that area. At all other times your ***SecurityGuard*** is said to be ***Disarmed*** or off when it does not allow any ***P.I.R.*** and ***Reed Switches*** to cause a full alarm.

When leaving your premises ***Arm*** your ***SecurityGuard*** using your ***Radio Key*** to enable it to detect intruders and generate an alarm. ***SecurityGuard*** will ignore detection devices for the ***Exit Time*** to enable you to depart your premises without triggering an alarm.

When you enter the premises the ***SecurityGuard*** will delay an alarm for a short ***Entry Time***. Failure to ***Disarm SecurityGuard*** before this time will cause an alarm. Alternatively you can ***Disarm*** from outside the premises in which case no ***Entry Time*** is required.

An ***Alarm*** will cause the ***SecurityGuard Siren*** and ***External Siren*** to sound. The ***Sirens*** will sound for up to 5 minutes unless a ***Disarm*** signal is received from a ***Radio Key*** in which case the ***Siren*** will stop immediately. An optional ***Strobe Light*** will flash on the ***External Siren*** cover as a visible warning of an ***Alarm*** and continue flashing for one hour.

The ***External Siren*** has an inbuilt ***Tamper Switch*** which will cause an ***Alarm*** if an unauthorised attempt is made to disconnect the ***Siren***.

An ***Emergency Alarm*** or ***Panic*** can be created by pressing the side lever on any ***Radio Key*** for 2 seconds, an ***Emergency Alarm*** will sound the sirens in the same manner that a normal ***Alarm*** does. An ***Emergency Alarm*** can be used to scare intruders or alert friends or neighbours.

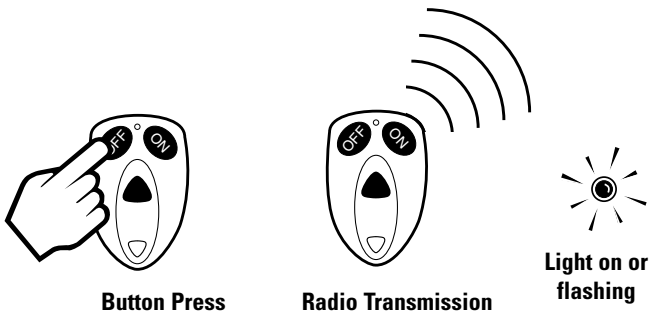
The ***SecurityGuard*** is fitted with a ***Rechargeable Battery*** which will normally run ***SecurityGuard*** for around 3 to 4 months before requiring recharging. A ***Battery Charger*** is provided which plugs into the ***SecurityGuard*** and plugs into a standard power point to recharge your battery as required.

The ***SecurityGuard*** displays all information by way of its ***Status Display.*** The ***Status Display*** is a very bright, red, dual 7 segment display which it can be seen from anywhere in the same room as the ***SecurityGuard*** and will display conditions such as status ***(Armed, Disarmed etc.)*** and warnings such as Low Battery etc.

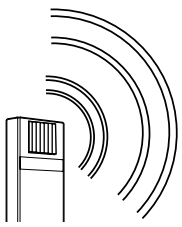
At other times your ***SecurityGuard*** may have been programmed for one or more ***Reed Switches*** or ***P.I.R. Detectors*** sound a ***Chime*** warning. A ***Chime*** warning has a lower priority than an ***Alarm*** and therefore the ***SecurityGuard*** will only sound a series of beeps from it's siren. ***Chime*** can be used for things such as front door alarms, pool gates, studies etc.

## SYMBOLS USED IN THIS MANUAL

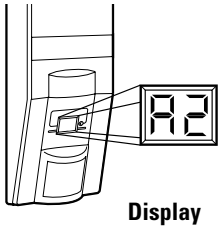
**Single Beep** **Three Beeps** **Double Beeps** **Chime Alarm**




**Button Press** **Radio Transmission** **Light on or flashing**



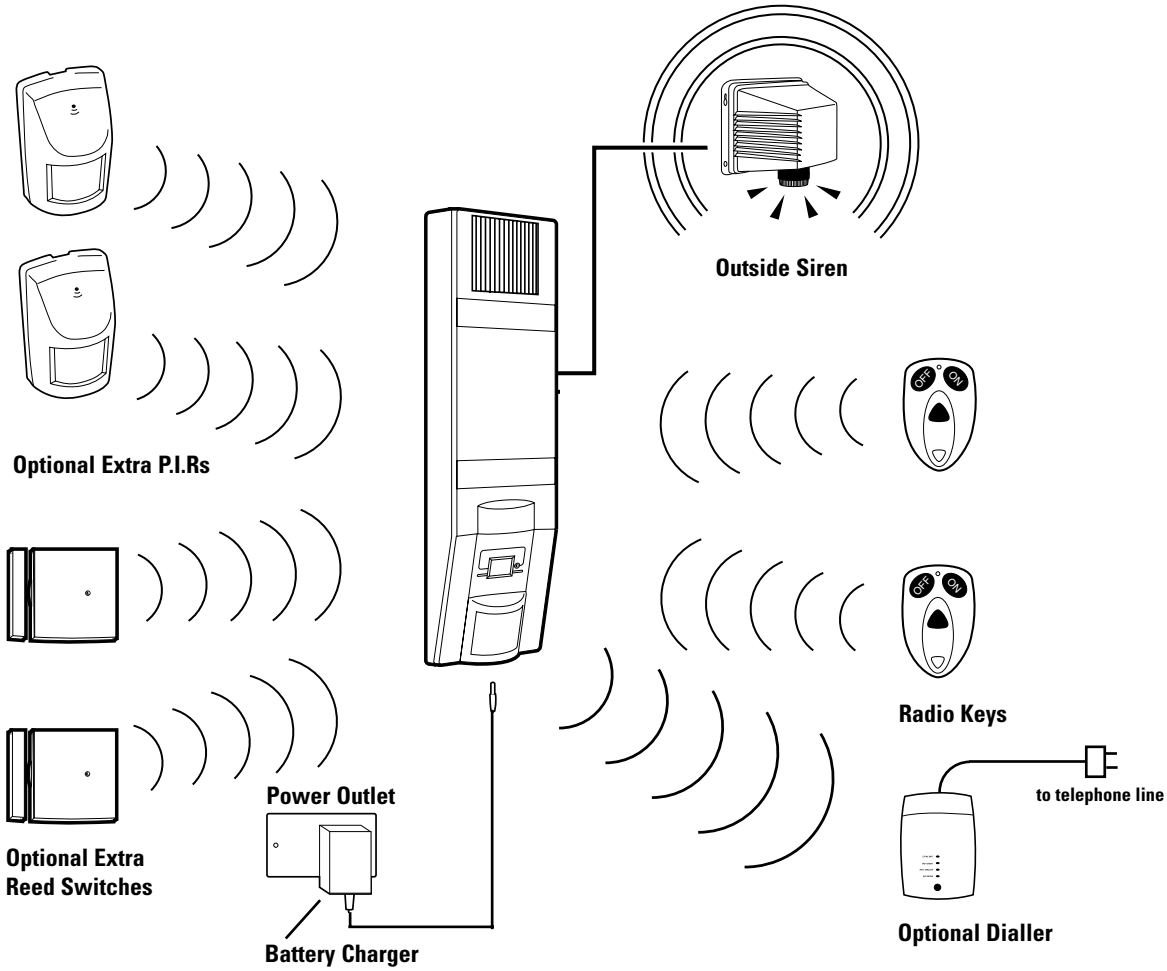
**Siren**



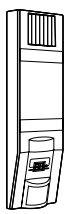

**Display**

# TYPICAL SECURITYGUARD ALARM SYSTEM

**THE FOLLOWING DRAWING SHOWS A TYPICAL SYSTEM.**

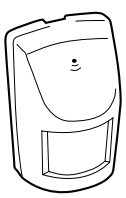



**SECURITYGUARD** The microcomputer based heart of your Security system.

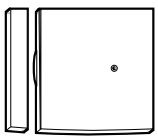


**RADIO KEY** Pocket sized radio transmitter device used to operate your alarm.

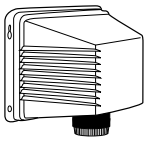
**PIR** An alarm device which senses movement by detecting body heat and transmits an alarm back to SecurityGuard.



**REED SWITCH** An alarm device used to sense the opening of a door or window and transmits an alarm back to SecurityGuard.



**SIREN COVER** An outside secure housing for the siren which alerts neighbours.



**STROBE**
An optional flashing light to alert police and neighbours.

**DIALLER**

A Device which connects to the telephone line to transmit alarm information to a Central Monitoring station.

# RADIO KEY

The Radio Key is your means of controlling SecurityGuard. It does this by sending an encoded radio signal which is deciphered by SecurityGuard. The Radio Key is fully waterproof and uses a long life Lithium battery which under normal use will last approximately 2 years* .

You can control your SecurityGuard with up to 8 individual Radio Keys each with their own unique high security codes programmed into SecurityGuard. All of your Radio Keys can be used to; Arm, Disarm or turn SecurityGuards Home mode on. All radio keys can also create an Emergency Alarm at SecurityGuard.


**Button**

Press once to ARM SecurityGuard. Press twice within 3 seconds to place SecurityGuard into HOME mode.


**Button**

Press once to DISARM SecurityGuard or to stop an ALARM.

**EMERGENCY PANIC BUTTON**
Press this button for at least 2 seconds to create an Emergency Alarm. ( This button has an inbuilt delay to minimise the chance of false activations from accidental pushes of the button).

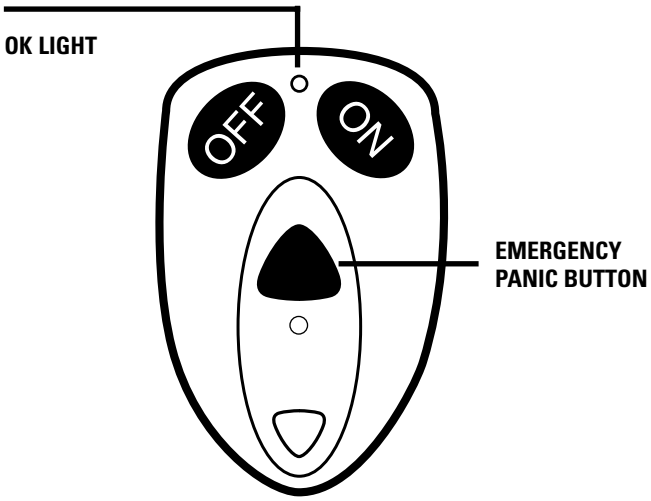

**OK LIGHT**
The light illuminates when the Radio Key is transmitting a signal. If the light flashes or does not illuminate then the battery may be low or flat. Under these conditions your Radio Key will still operate, although with possible reduced radio range. You should change the battery as soon as possible.

SecurityGuard will normally warn you of a low battery in your Radio Key.

***Some models of Radio Key have a different location for the OK Light.***

* 1 year for the International Key

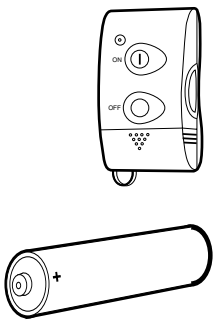
**BATTERY**
The Radio Key uses a 3 Volt Lithium Coin Cell, we recommend the following brands;
Panasonic CR 2016
Sony CR 2016
or equivalents.


**INTERNATIONAL RADIO KEY**

This key uses a 12V lighter style battery, we recommend that you only use alkaline type batteries,

Duracell MN21
Energiser A23
or equivalents.




**Should you mislay a Radio Key or you require an extra Key, contact the service number you were provided with at the time of installing to arrange the supply of a new Key and have your SecurityGuard reprogrammed to ignore the lost Key and to recognise the new Radio Key.**

# PASSIVE INFRA-RED DETECTOR PIR SENSORS d2 - d8

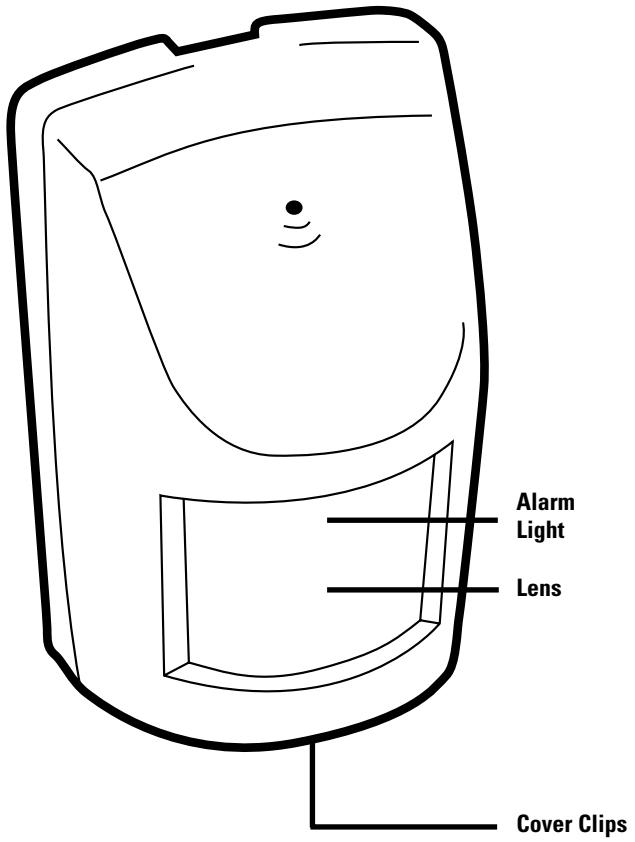
## OPTIONAL PIR OPERATION d2 - d8

PIR detectors are able to sense movement by detecting small changes of Infra-red energy in the area that they are looking at. PIR detectors use special filters which are tuned to the Infra-red energy produced by human beings, they use advanced lenses to gather the Infra-red energy in a room and focus it back to a sensor inside the unit.

### SLEEP MODE

Your PIR detectors are always active by scanning their area for movement. To conserve battery life and to limit unwanted radio transmissions the PIR waits until all movement in the room has ceased for **at least 4 minutes** before it transmits an alarm message to the SecurityGuard. Thus constant movement in a room will not cause constant alarm messages to be sent and battery power is conserved.

**Note** - ***Although an alarm message is sent by the PIR, the SecurityGuard determines if it should sound a siren or not depending on whether it is Armed or Disarmed.***




**RED ALARM LIGHT**

Illuminates for 5 seconds whenever an Alarm message is being transmitted to the SecurityGuard.
*(There must be no movement in the room for at least 4 minutes before an Alarm message will be sent).*
Flashes when an Alarm is transmitted and the battery is low.

**LENS**

The lens directs Infra-red energy to the sensor inside the unit. Keep the lens clean at all times.
**DO NOT PAINT !**

**LOW BATTERY**

The Red Alarm Light will change from a steady light to a flashing light when the battery is low. SecurityGuard will warn you when the battery is low and needs replacing. You should replace the battery as soon as possible after the warning.

The PIR uses a special 9 Volt Lithium battery which should provide a battery life of between 2 and 3 years. We recommend you only use a Lithium battery as a replacement. The life of other types of batteries such as Alkaline is several times less than a Lithium.

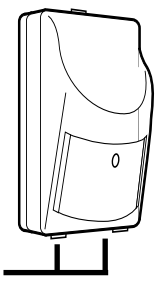
*Ultralife U9VL or equivalent.*

**COVER CLIPS**

These are used to hold the cover of the sensor. To release the cover of the sensor when changing the battery, use a small screwdriver to gently lever the cover off the base to overcome the clips. (see changing batteries)

**INTERNATIONAL PIR**

These are used to open the cover of the sensor. To release the cover use the tip of a pen or a small screwdriver to depress these clips



**WARNING**

**Infra-red energy will not pass through solid objects. Do not place furniture etc. in front of the PIR.**
**Do not place heaters or similar devices close to your PIR sensors, as the heat generates Infra-red energy and may cause false alarms when you have ARMED your SecurityGuard.**

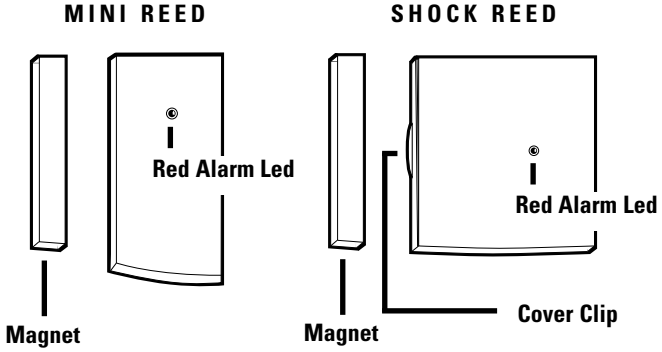
## OPTIONAL REED SWITCH OPERATION d2 - d8

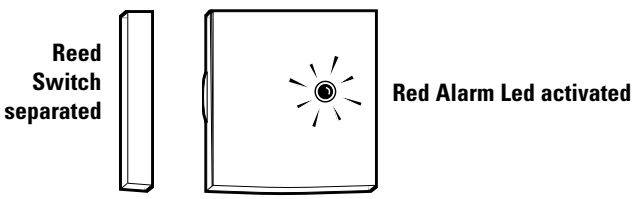
Reed switches are able to detect the opening of doors and windows by detecting the presence or absence of a magnet. The Reed Switch is made up of two pieces; A magnet which normally is placed on the moving part of a door or window and the Reed which is housed inside the main unit.

Your Reed Switch is always active checking to see if the door or window that it is installed on has opened. When the Reed Switch senses an opening it transmits a coded Alarm message back to Securityguard® and Securityguard® then determines what it should do with the message i.e. It may choose to sound an Alarm or sound a Chime depending on whether it is Armed, Disarmed or in Home mode.

The Reed switch will transmit an Alarm message to tell Securityguard® when a door or window is opened and again when it is closed.

## REED SWITCHES




**RED ALARM LED**
Illuminates for 5 seconds whenever an Alarm message is being transmitted to the Securityguard®
*(An Alarm message is transmitted when the door or window is opened and also closed again).*
Flashes or will not illuminate when battery is low.

**MAGNET**
A small magnet housed inside a plastic case, normally mounted on the moving part of a door or window.

**REED SWITCH**
The Reed and the main electronics are housed in the larger plastics. The Reed senses the presence or absence of the magnet and transmits an Alarm message accordingly.

The Shock Reed can also detect an attack on surfaces such as windows, doors, walls etc by the addition of external shock sensors.

**LOW BATTERY**
The red alarm led will not illuminate when the battery is low and requires replacing. Securityguard® will warn you when the battery is low. Although the Reed Switch will still function when the battery is low you should replace the battery as soon as possible after a low battery warning.

The Reed Switches uses special Lithium batteries which should give a battery life of between 2 an 3 years under average usage. We recommend you only use a Lithium battery as a replacement. The life of other types of batteries such as Alkaline is several times less than a Lithium.

**Shock Reed** *Ultralife U9VL or equivalent.*
**Mini Reed** *CR2032 Lithium.*

**COVER CLIP**
This is used to open the cover of the Reed Switch to change the battery. Lever upwards with your thumb or finger.

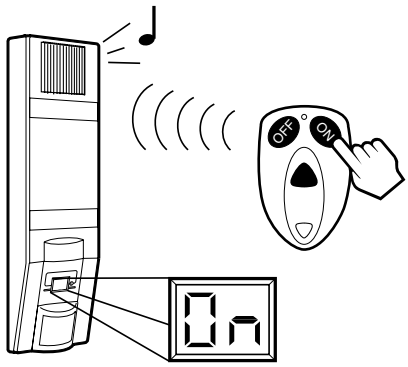
**NOTE**
**The Battery life of your Reed Switch is directly related to the number of times that it is opened and closed. For the Shock Reed the Battery will last about 3 years if the Reed Switch is opened and closed approx 25000 times or about 24 times a day and about 2 years if the Reed Switch is opened and closed about 35 times a day. The Mini Reed battery will last about three years if it is activated twice a day. Unnecessary opening and closing a window or door on which the Reed Switch is installed will diminish the battery life.**

## ARMING

To Arm your SecurityGuard press the ON button on any Radio Key.

Your SecurityGuard will Beep once ♩ and On will be displayed.

Your SecurityGuard will be programmed with a short Exit Time, this allows you to depart your premises without triggering an alarm. Your SecurityGuard will Beep once ♩ more to warn that Exit Time has finished and it is now ready to detect intruders.

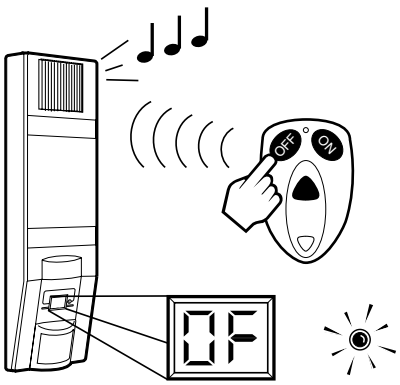



## DISARMING

To Disarm your SecurityGuard press the OFF button on any Radio Key.

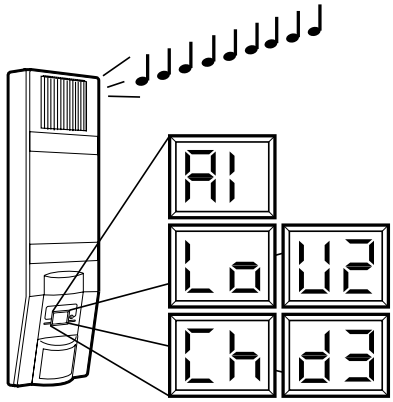
Your SecurityGuard will Beep three times ♩♩♩ and OF will be displayed.

When Disarmed the O.K. light will flash once every 5 seconds to indicate that SecurityGuard is happy and all is O.K. If the Battery Charger is plugged in the O.K. light will be on constantly and blink off once every 5 seconds.



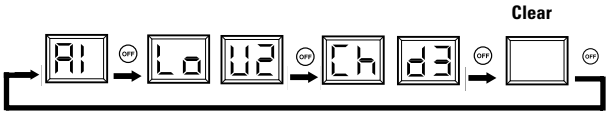

## OTHER WARNINGS

When you Disarm your SecurityGuard it may have some warnings to give you. SecurityGuard will alert you by sounding a series of Beeps ♩♩♩♩♩ or double beeps ♩♩ ♩♩ instead of the normal 3 Beeps ♩♩♩ and a message will be displayed accordingly.

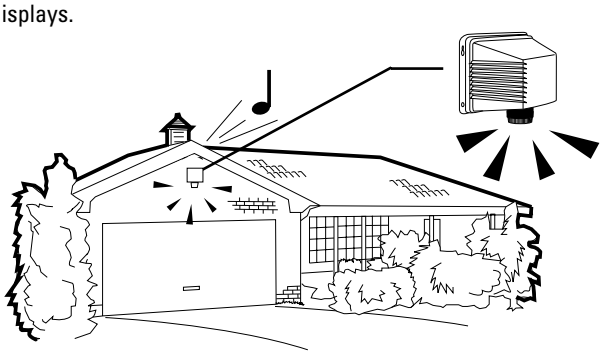



The warnings may be for Low Battery or Alarms, these are fully explained later in this manual.

The Display will remain flashing for 5 minutes after you Disarm, you may choose to stop the display by pressing OFF once. You can also recall warning displays at any time by simply pressing OFF again, this will bring the flashing display back for another 5 minutes.




When SecurityGuard has more than one warning to give, pressing the OFF button repeatedly will cycle you through the displays.

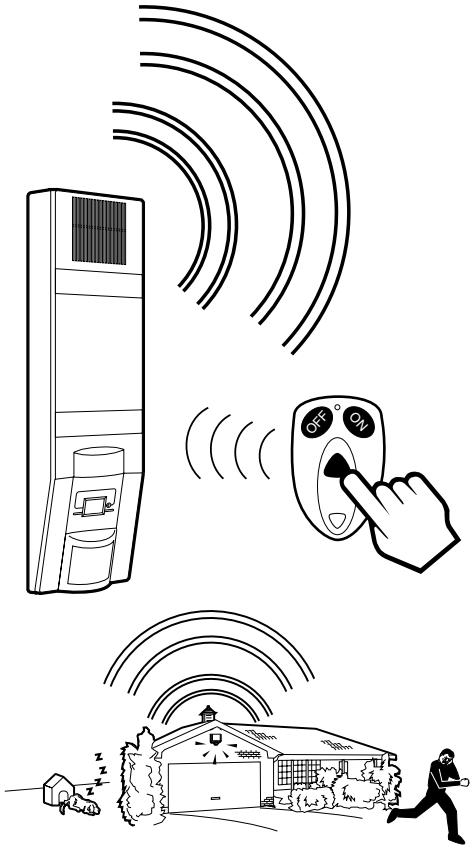


**OPTIONAL**
**Your outside siren may beep when you Arm and Disarm if programmed.**

**If a Strobe light is fitted to your outside siren, it will flash briefly when you Arm and Disarm**

## EMERGENCY OR PANIC

In case of emergency you can sound the siren immediately to alert neighbours or to scare away intruders by pressing the small Panic button on any Radio Key for at least 2 seconds.
*(The Panic button has an inbuilt delay to minimise the chance of creating accidental alarms).*




The inside and outside siren will sound and the strobe *(if fitted)* will flash.

## OPTIONAL SILENT PANIC

If you have an optional dialler fitted then your SecurityGuard may be programmed not to sound the sirens when you press your Panic Button. If this is the case then your SecurityGuard will send an Emergency message to an Alarm Monitoring Base Station via the telephone line and the Alarm monitoring station will action the alarm as required by you.

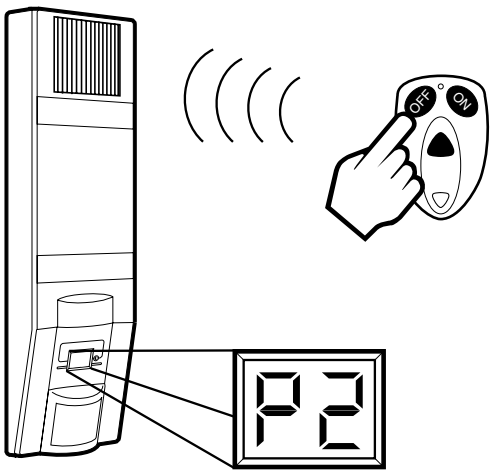
This may be useful in home Medical applications where emergency assistance can be summonsed by the carrier of a Radio Key whenever they are in difficulties.

## TO TURN THE SIREN OFF

Press the OFF button on any Radio Key

When the siren has stopped SecurityGuard will flash the number of the Radio Key which caused the alarm along with a P for panic.

This is handy if a Radio Key has accidentally triggered your alarm and you are not sure which Key caused it.




**Example**
If Radio Key number 2 caused the Panic alarm then SecurityGuard will flash P2 for 5 minutes. As with all SecurityGuard displays, you may choose to clear or recall the display at any time by pressing OFF.

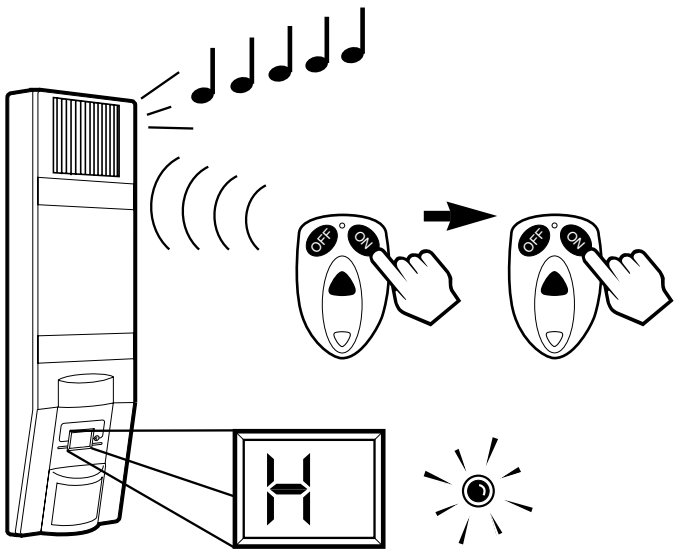
**NOTE**
**Each one of your Radio Keys has been allocated a number from 1 to 8.**
**This number is used to identify things like which Key has a Low Battery or caused a Panic Alarm.**
**The Radio Key Number and user name are listed in the table on the back of this manual.**

## OPTIONAL HOME MODE

Your SecurityGuard alarm system may be programmed to operate a Homemode. Home mode allows some Detection devices *(PIRs and Reed Switches)* to cause an alarm while other detection devices are ignored. This is normally used while you are at home and want certain areas of your home secure while you are there.

To place SecurityGuard in Home mode

Press the (ON) button on any Radio Key twice within 3 seconds.




Your SecurityGuard will beep 5 times ♩♩♩♩♩ and H will be displayed thereafter, the O.K. light will flash once every 2 seconds to indicate SecurityGuard is in Home mode.

If the battery charger is plugged in and the O.K. light is illuminated constantly it will blink off every 2 seconds to indicate SecurityGuard is in Home Mode.

**Note** - Exit Time applies to Home mode as per normal Arming, therefore one extra beep ♩ will sound at the end of Exit time.

**NOTE**
**The detection devices required to be in Home Mode will be set by your technician at the time of installation**

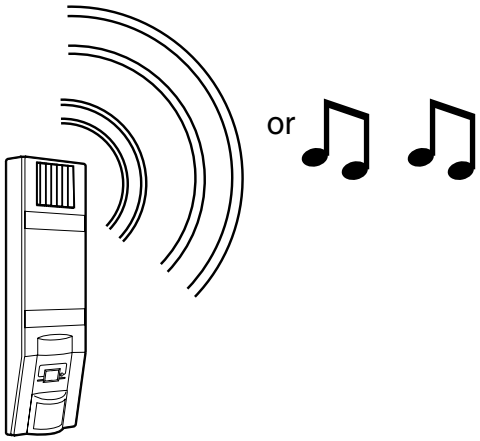
**Refer to the table on the back page for home detectors.**

## ALARMS

Your SecurityGuard will be programmed to sound one of two types of Alarm in Home mode, when a home detector is triggered;

**Full Alarm** *Where the normal Alarm siren will sound for up to 5 minutes.*

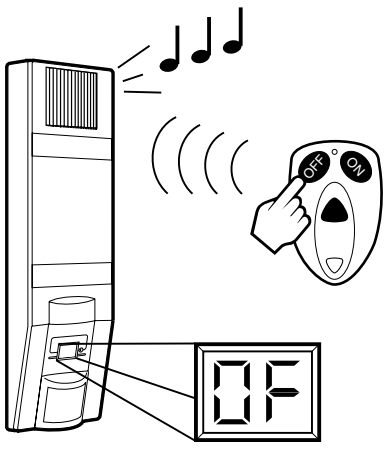
**Home Chime** *Where your SecurityGuard will sound a low volume two-tone siren for 5 seconds whenever a Home detection device is triggered.*




## DISARMING

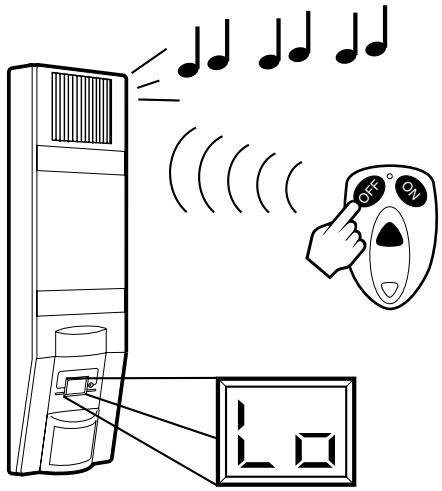
To turn SecurityGuard Off or to stop any alarms that have happened in Home mode Press (OFF) on any Radio Key once.

SecurityGuard will beep 3 times ♩♩♩ and OF will be displayed.



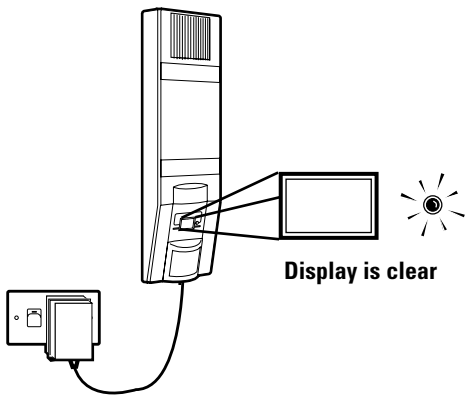
## BATTERY CHARGING

SecurityGuards battery should only need charging every 3 to 4 months under normal usage. SecurityGuard will warn you when it's battery needs charging by sounding a series of double beeps ♩♩ ♩♩ ♩♩ for 3 seconds when you Disarm after the normal 3 beeps ♩♩♩ SecurityGuard will also flash Lo on it's display for 5 minutes.
*(As with all SecurityGuard displays you may choose to stop the display before the 5 minutes by pressing (OFF) on any Radio Key).*




When SecurityGuard has a low battery it will continue to function normally for up to a week, however you should charge SecurityGuard as soon as possible.

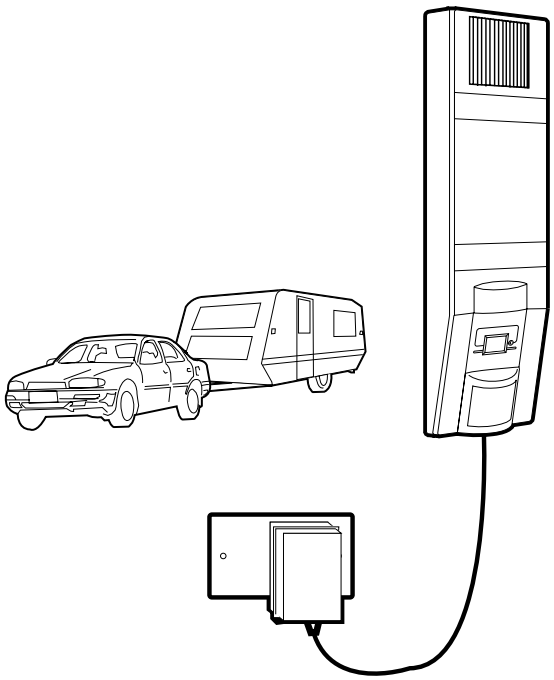
Plug your Charger into the bottom of your SecurityGuard and into the nearest power point.




**WHEN YOU PLUG IN THE CHARGER**

- ***The O.K. / Battery Charge light will illuminate constantly and blink off every 5 seconds.***
- ***The Lo display will extinguish, to indicate that the battery is charging.***
- ***When the battery is fully charged the O.K. light will revert back to it's normal blink on every 5 seconds and the charger may be disconnected.***
- ***The battery will take approximately 24 hours to fully charge.***

Although SecurityGuard may only need charging every 3 to 4 months you may intend to be away for extended periods of time and you may not be sure when you last charged SecurityGuard. SecurityGuard has been designed to safely leave the charger connected permanently so you may wish to leave the charger plugged in for the time you are away or if it is more convenient you may wish to leave it permanently connected.

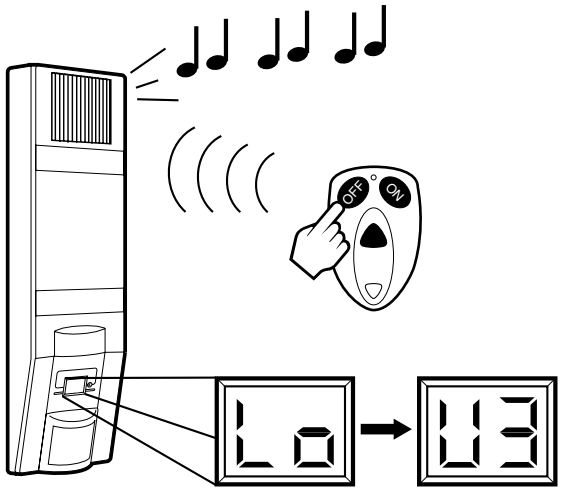


**NOTE**
**There are no dangerous voltages present at your charger and it is quite safe to handle, however please keep it away from excessive moisture as damage may occur to the charger.**
**Keep the charger plug clean and always inspect it before plugging into SecurityGuard to ensure that no dust or other material has collected inside.**

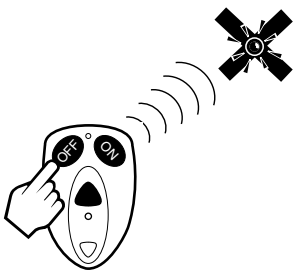
## RADIO KEY LOW BATTERY Lo U1-Lo U8

SecurityGuard will warn you when a Radio Key which has operated recently has a Low Battery. The Low Battery warning is normally given when SecurityGuard is Disarmed.

SecurityGuard will flash the Radio Key number for 5 minutes along with a Lo U1-8 on it's display and will sound a series of double beeps ♩♩ ♩♩ ♩♩ for 3 seconds to warn of the problem.




**Example**
If Radio Key number 3 *(User 3.)* has a Low Battery then SecurityGuard will flash Lo U3 for 5 minutes and double beep ♩♩ ♩♩ ♩♩ for 3 seconds at Disarm.
*(As with all SecurityGuard displays you may choose to stop the display before the 5 minutes by pressing (OFF) on any Radio Key).*




The O.K. light on the Radio Key will flash or not illuminate when there is a Low battery, however the Radio Key should still function for some time.

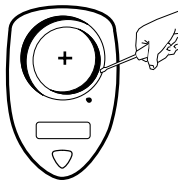
***Some models of Radio Key have a different location for the OK Light.***

**NOTE**
**Each one of your Radio Keys has been allocated a number from 1 to 8. This number is used to identify things like which Key has a Low Battery or caused a Panic Alarm. The Radio Key Number and user name are listed in a table on the back of this manual.**

### TO REPLACE BATTERY

**1.** Using a coin, turn the Battery cover anticlockwise and remove.

**2.** Lever the battery out with a small screwdriver or knife.

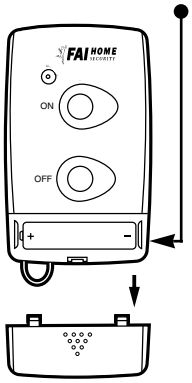



**3.** Replace the Battery with a 3 Volt Lithium type;
Panasonic CR2016
Sony CR2016

Ensure the battery is the correct way in with the + side facing up.

**4.** Re-assemble the Battery cover making sure that the dot on the Battery cover matches the dot on the key and turn cover clockwise to tighten.

### INTERNATIONAL KEY




**1.** Glide battery hatch off. You may need to use a small screwdriver or knife to help lever, the hatch off.

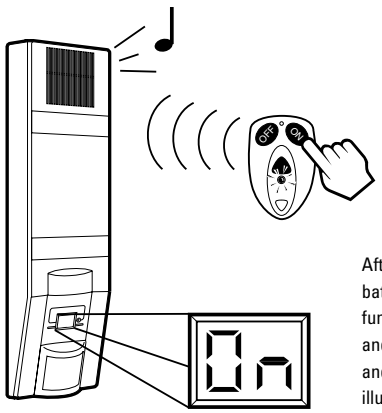
**2.** Replace the battery with a 12 Volt alkaline type battery;

| | |
|---|---|
| *Duracell* | *MN21* |
| *Energiser* | *A23* |
| *Vinnic* | *L1028* |

or equivalents.

Ensure the Battery is in the correct way, you can test this by pressing the OFF button and checking that the light illuminates before re-assembling the Radio Key.

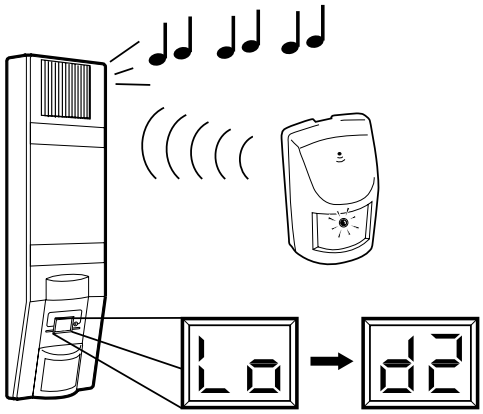
**3.** Re-assemble the battery hatch.




After replacing the Radio Key battery, test that the Radio key is functioning correctly by Arming and Disarming your SecurityGuard and checking that the O.K. light illuminates on the Radio key.

## PIR LOW BATTERY Lo d2 - Lo d8

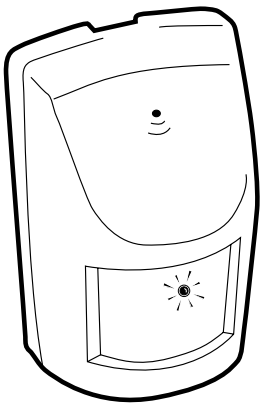
SecurityGuard will warn you when a P.I.R. has a Low Battery. The Low Battery warning is given when the low battery occurs.




SecurityGuard will flash the P.I.R. number for 5 minutes along with a Lod2-8 on it's display and it will sound a series of double beeps ♩♩ ♩♩ ♩♩ for 3 seconds, ten seconds after the low battery occurs to warn of the problem.

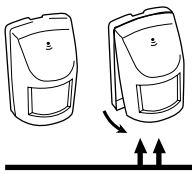
**Example**
If P.I.R. number 2 *(Detector 2)* has a Low Battery then SecurityGuard will flash Lod2 for 5 minutes and double beep ♩♩ ♩♩ ♩♩ for 3 seconds.
*(As with all SecurityGuard displays you may choose to stop the display before the 5 minutes by pressing (OFF) on any Radio Key.)*

The P.I.R. will flash it's Red Alarm Light when it has a Low battery each time it transmits an Alarm message. Remember though that the P.I.R. will only trigger and transmit alarm messages when all the movement in the room has ceased for at least 3 minutes.

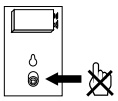


**NOTE**
**Each one of your P.I.R.s has been allocated a number from 2 to 8 ,*(SecurityGuard is Detector number 1),* these should be identified and listed in the table on the back of this manual.**

### TO REPLACE BATTERY



**1.** Remove the cover of the PIR by gently levering the two halves apart at the bottom using a small screwdriver or knife where the cover meets the base and twist. Swing the cover out from the bottom and off the middle hook.



**2.** Replace the battery with a 9 Volt Lithium type battery;
Ultralife U9V or equivalent.

Do not place your fingers unnecessarily on the circuit board, particularly on the round Infra-red sensor as these are very delicate and the PIR could be rendered inactive.

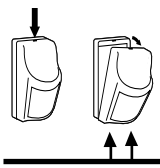
**3.** Replace the cover by first attaching the top hook and closing the lid firmly until it snaps shut into the bottom clips.

**4.** To test that the PIR is working correctly you will need to leave the room for at least 4 minutes while the P.I.R. settles after being powered up and it waits for movement in the room to cease.

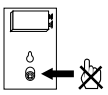
Enter the room after the 4 minutes, check that the Red Alarm Light on the PIR illuminates.

Your PIR is working correctly and ready for use.

### INTERNATIONAL DETECTORS



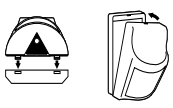
**1.** Remove the cover of the P.I.R. by depressing either the small catch at the top of the cover or the two bottom catches on the cover, with a small flat bladed screwdriver or similar object and then pull the cover away from the base.



**2.** Replace battery as indicated on the circuit board **Caution:** Battery may explode if mistreated. Do not recharge, disassemble or dispose of used batteries promptly, keep away from children.

*Only replace battery with Ultralife 9 Volt Lithium U9VL*
*Use of another battery may present a risk of Fire or Explosion*

Try to not place your fingers on the circuitry, particularly the round Infra-red sensor as these are very delicate.



**3.** Replace the cover by first aligning the bottom clips and the small triangular lens on the bottom of the cover to the slots in the base by holding the cover at an angle, then close the cover and push firmly at the top until the it snaps shut into the top clip.

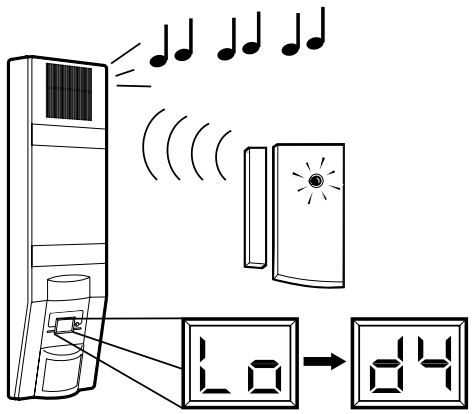
**4.** To test that the P.I.R. is working correctly you will need to leave the room for at least 4 minutes while the P.I.R. settles after being powered up and it waits for movement in the room to cease.

Enter the room after the 4 minutes, check that the Red Alarm Light on the P.I.R. illuminates.

Your P.I.R. is working correctly and ready for use.

## REED SWITCH LOW BATTERY Lod2-Lod8

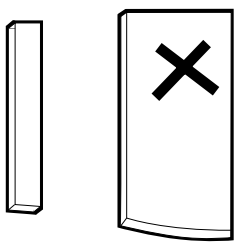
Securityguard® will warn you when a Reed Switch has a Low Battery. The Low Battery warning is given when the low battery occurs.




Securityguard® will flash the Reed Switch number for 5 minutes along with a Lod2-8 on it's display and it will sound a series of double beeps ♫♫ ♫♫ ♫♫ for 3 seconds when the low battery occurs to warn of the problem.

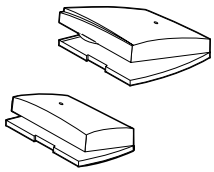
**Example**
If Reed Switch number 4 *(Detector 4)* has a Low Battery then Securityguard® will flash Lod4 for 5 minutes and double beep for 3 seconds.
*(As with all Securityguard® displays you may choose to stop the display before the 5 minutes by pressing (OFF) on any Radio Key.)*

The Reed Switch's Red Alarm Light will flash or not illuminate when it sends an Alarm message and it has a Low battery. You can test if the Battery is O.K. by opening the door or window that the Reed Switch is mounted on. The Red Alarm Light should illuminate for 5 seconds. If it flashes or does not illuminate the battery should be replaced as soon as possible.

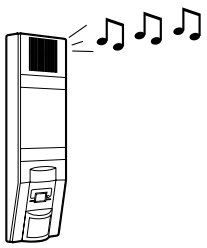


**NOTE**
**Each one of your Reed switches has been allocated a number from 2 to 8, *(Securityguard® is Detector number 1),* these should be identified and listed in the table on the back of this manual.**

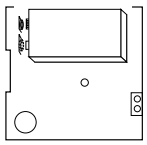
**TO REPLACE BATTERY**



**1.** Remove the cover of the Reed Switch by lifting the small catch on the side of the larger housing. You should be able to do this with your thumb or finger, if not use a screwdriver to lever it off.

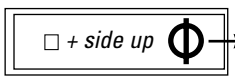


**2.** Your Securityguard® may be programmed to recognise that the lid has been taken off a Reed Switch and a Tamper Alarm has been generated. If this is the case Securityguard® will sound a two-tone siren for 5 seconds and flash A2-8 for 5 minutes as a warning, this is normal and you can press (OFF) on any Radio Key, to clear the display.



**3.** Replace battery as indicated on the circuit board.
**Caution:** Battery may explode if mistreated. Do not recharge, disassemble or dispose of used batteries promptly, keep away from children.

**Shock Reed** Only replace with Ultralife 9 Volt Lithium U9VL
**Mini Reed** Only replace with Panasonic 3 Volt Lithium CR 2032
*Use of another battery may present a risk of Fire or Explosion*




***Try to not place your fingers on the circuitry as the components are delicate.***

**4**. Replacement of the cover is the reverse of the removal *(step 1.)*

**5.** To test that the Reed Switch is working correctly you can open or close the window or door that it is installed on and check that the Red Alarm Light turns on for 5 seconds.

Your Reed Switch is working correctly and ready for use.

# MISCELLANEOUS ALARMS AND WARNINGS

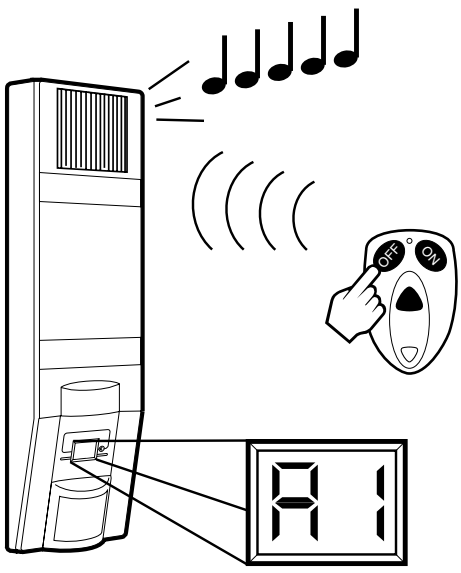
SecurityGuard will try and warn you of any problems or if there has been an Alarm by flashing it's display and sounding various beep warnings. Most warnings are provided when you next Disarm SecurityGuard although some may occur as they happen when you are home.

Warnings which have not been dealt with earlier in this manual include things like,

- *Alarms that have occurred since you last Armed.*
- *A Tamper on your external Siren cover is opened.*
- *A PIR or a Reed Switch that has not triggered recently.*
- *A Dialler which is not working correctly.*

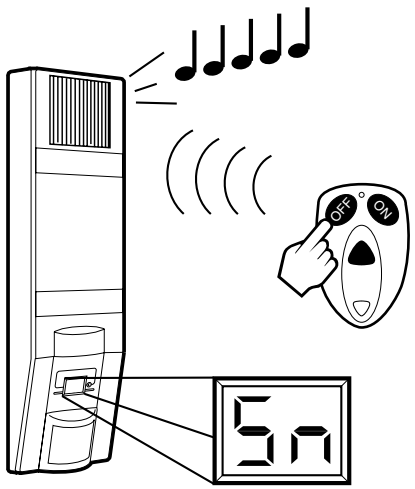
## ALARM

If you have had an Alarm from one of your PIRs or Reed Switches while you were away, SecurityGuard will warn you when you Disarm by giving a rapid series of beeps ♩♩♩♩♩ for 5 seconds and flashing the number of the device which caused the Alarm along with an A, on it's display.

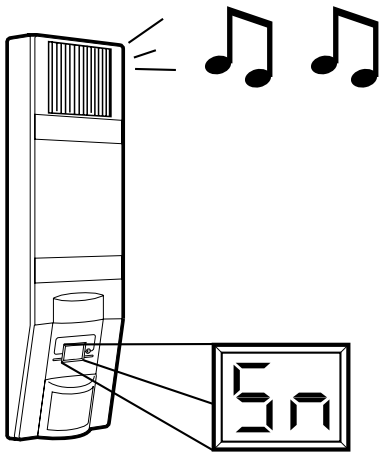



**Example**
If SecurityGuard's inbuilt PIR *(Detector 1)* alarmed while you were away, SecurityGuard will flash A1 on it's display for 5 minutes and beep rapidly ♩♩♩♩♩ for 5 seconds at Disarm.
*(As with all SecurityGuard displays you can cancel the display by pressing (OFF) on any Radio Key).*

## TAMPER




***While you were away***
If you have had an Alarm caused by your External Siren Cover Tamper switch being opened while you were away, SecurityGuard will warn you when you Disarm by giving a rapid series of beeps for 5 seconds and flashing Sn on it's display for 5 minutes.



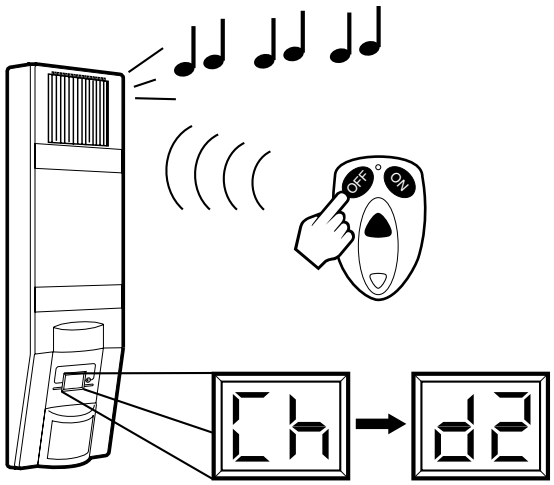

***While you are home***
If you have an Alarm caused by your External Siren Cover Tamper switch being opened while you are at home, SecurityGuard will warn you by sounding a low level 2 tone siren for 5 seconds and it will flash Sn on it's display for 5 minutes.

*(As with all SecurityGuard displays you can cancel the display by pressing (OFF) on any Radio Key).*

## CHECK DETECTORS Ch d2 - Ch d8 *(Optional)*

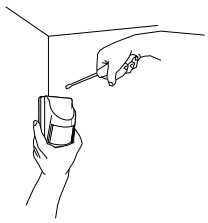
Your SecurityGuard has a special inbuilt feature which always ensures that your optional detection devices *(PIRs and Reed Switches)* are operating correctly and sending alarm messages as they are triggered.

Your SecurityGuard is constantly monitoring the alarm messages sent by your PIR and Reed Switch detectors and expects to receive messages on a regular basis, caused by your normal day to day activities. Of course SecurityGuard decides if it will create an alarm from those "alarm" messages depending on whether it is Armed or not.




However if SecurityGuard does not receive an alarm message from each one of the your additional detectors on a regular basis, SecurityGuard will warn you when you Disarm by sounding a series of double beeps for 3 seconds and flash the number of the suspect detector along with Ch d2-8 on it's display for 5 minutes.
*( As with all SecurityGuard displays you can cancel the display before 5 minutes by pressing (OFF) on any Radio Key).*

**Example**
If your PIR number 2 has not regularly alarmed then SecurityGuard will flash Ch d2 and beep a series of double beeps for 3 seconds when you Disarm. ♩♩ ♩♩ ♩♩



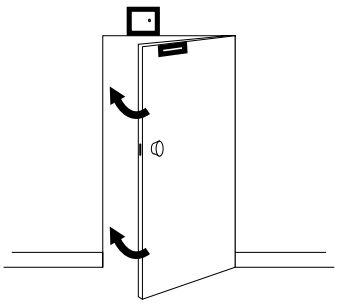
***What you Should do***
If you receive this warning from a detector that you know should have triggered recently, then before you do anything else you should test the detector, if it is still not working you should replace the battery and test the detector as described in the PIR or Reed Switch Low Battery sections of this manual.

If you still have a problem you should contact the service number you were provided with at the time of installation.

## CHECK DETECTOR WARNING *(Optional)* WHEN ARMING *(Reed Switches only)*

If you receive the Check Detector warning Ch d2-8 when you try to Arm your SecurityGuard then this is a warning that you have left a window or door open which has a Reed Switch detector on it.

SecurityGuard will warn you by flashing Ch d2-8 along with the detector number and give a series of double beeps ♩♩ ♩♩ ♩♩ for 3 seconds after you Arm.



If you receive this warning you should immediately Disarm your SecurityGuard. The warning is repeated when you Disarm, so that you can see the display and check the Reed Switch which caused the warning. Close the window or door before Re-Arming.

## RADIO DIALLER (optional)


The Radio dialler is an intelligent standalone dialler which receives it's alarm information via radio signal from your SecurityGuard. The radio dialler will warn you directly if there is a fault by sounding a beeper and/or flashing lights on the front panel, these are described below;

**Mains**
This light is normally on, when it is flashing it indicates that you do not have Mains supply, check that the Power Pack has not been disconnected or turned off at the power point. If Mains remains disconnected for longer than one hour then the dialler will beep a periodic warning to alert you.

**Low Battery**
If this light is flashing then the internal rechargeable battery is flat, if mains is plugged in and the problem persists then contact your Service Centre.

**Radio Link**
It is normal for this light to blink occasionally as SecurityGuard as SecurityGuard comunicates with the dialler. If however this light is flashing constantly then the Radio link between your SecurityGuard and your Dialler has failed. Check to make sure that your Securityguard is still operational if the problem persists Contact your Service Centre.

**Line Fail**
If this light is flashing check that your phone connection has not been unplugged. If it is O.K. then contact your Service Centre.

## INTERNATIONAL DIALLER (optional)

Fd

The International Dialler is installed inside your SecurityGuard, if it has had trouble communicating with your Central Station it will warn you by sounding a series of double beeps for 3 seconds and will Flash "Fd" on it's display for 5 minutes. If this occurs you should check your phone line connection to make sure the dialler has not been unplugged otherwise you should contact your nearest Service Centre immediately.

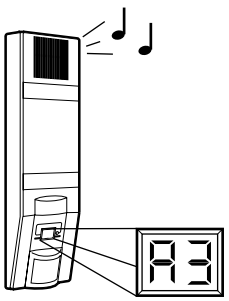
## DETECTOR SETUP OPTIONS

Your SecurityGuard allows for each of it's detectors D1 to D8 to operate in various modes to suit your particular needs. Your installer has programmed these for you at installation. The more commonly used of those have been described earlier in this manual e.g. Alarm when Armed, Alarm when Home etc.

The way the detector has been setup is summarised on the back page of this manual under the column headed "Mode".

Two of the least used setups or "Modes" of operation not described earlier in the manual are described below, they are Chime and Fire.

## CHIME DETECTORS




Chime mode allows a Detector to sound a single pleasant two tone warning beep ♩♩ similar to a doorbell if the detector is triggered when your alarm is Disarmed.
This may be useful if you want a warning if someone has entered or left a room without causing a full alarm while you are home e.g. You want to know if the children have gone into the study, or you want to know if the children have gone into the backyard *(particularly if you have a pool).*
A Chime Mode detector if triggered will flash the display with it's number as well as an A to show which detector caused the alarm.

**Example**
Detector 3 is setup for chime mode and is triggered, A3 is displayed for 5 minutes and a single two tone beep is sounded. ♩♩

## 24 HOUR DETECTORS

Detectors setup to operate in 24 Hour mode are operational at all times whether SecurityGuard is Armed, Disarmed or in Home mode.

When these detectors are triggered SecurityGuard will sound a full alarm with inside and external sirens sounding.

**To silence the alarm**
Press OFF on any Radio Key, the detector number along with an A will be displayed for 5 minutes to identify which detector caused the Alarm.


**Example**
Detector 6 triggers then A6 is displayed for 5 minutes when an OFF button is pressed on any Radio Key.

**DETECTOR OPERATING MODE SUMMARY**

| | | |
|---|---|---|
| **A** | **Alarm** | Alarm when Armed, inactive in Home and Disarmed. |
| **H** | **Home** | Alarm when Armed and in Home mode, inactive when Disarmed. |
| **F** | **24 hour** | 24 Hour Alarm, always active. |
| **C** | **Chime *** | Chime only in Disarmed, inactive in Armed and Home modes. |
| **AC** | **Alarm/Chime **** | Alarm when Armed, Chime when Disarmed, inactive when Home. |
| **HC** | **Home/Chime **** | Alarm when Armed, Chime when Home, inactive when Disarmed. |
| * | | Chime is a single two tone beep ♩♩ |
| ** | | Chime is a low volume two tone siren which sounds for 5 seconds ♫♫ |

# MAINTENANCE

## TESTING

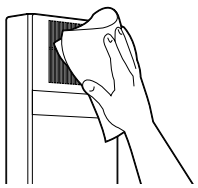
We strongly suggest that you should carry out a full test of your alarm system at a minimum 6 monthly interval.

You should Arm your SecurityGuard and test that each of your PIR and Reed Switch detectors triggers an alarm as programmed. A test procedure is described for each detector in the replacing batteries section of this manual.


You could also check that your sirens are fully functional by triggering an Emergency alarm from your Radio Key.

## CLEANING

Do not clean SecurityGuard with solvents like benzine or thinners and do not use commercial spray pack cleaners as the chemicals may attack the polycarbonate housing of SecurityGuard.

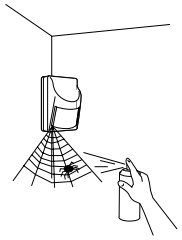


A light dusting and if necessary warm soapy water should only be used for cleaning.

The same applies for your Radio Key, PIR and Reed Switch housings.

## INSECTS

Take particular care that insects like spiders and moths are not forming webs or similar around any of the PIR detectors including SecurityGuards inbuilt detector. Insects can cause false alarms. Brush away any spider webs and if insects appear to be a problem spray around the detector with a surface insect spray.



**Do Not Spray Directly Onto The Detector or Lens Area !**

## BATTERIES

Your PIR, Reed Switch and Radio Key batteries should last approximately 2 years under normal usage when you use the recommended Lithium batteries. We would advise that you replace the batteries at this interval even if you have not received a Low Battery warning.

## SPECIFICATIONS

**SecurityGuard**

| | |
|---|---|
| Model No | SG II |
| Weight | 2.4 KG |
| Dimensions | 800 x 115 x 80 mm |
| Radio Frequency | 303.875 Mhz. Aus, USA, Canada |
| Radio Frequency | 418 Mhz. UK 433 Mhz. Europe |
| Siren | > 120 db @ 1 metre |
| Display | Dual 7 Segments |
| Battery | 12 V Sealed Lead Acid 2.8 - 3.2 AH |

**Battery Charger**

| | |
|---|---|
| Voltage in | 220v - 260v A.C. Aus, UK |
| Voltage in | 110v - 130v A.C. USA, Canada |
| Voltage out | 17 V A.C. @ 300 mA |

**Radio Key**

| | |
|---|---|
| Frequency | 303.875 Mhz. Aus, USA, Canada |
| Frequency | 418 Mhz. UK 433 Mhz. Europe |
| Battery | 3V Lithium Coin Cell<br>12 V Alkaline (International Key) |
| Transmit Power | 10 uW PEP MAX. Aus, USA, Canada |
| Transmit Power | 100 mW PEP MAX. UK |

**P.I.R.**

| | |
|---|---|
| Frequency | 303.875 Mhz. Aus, USA, Canada |
| Frequency | 418 Mhz. UK 433 Mhz. Europe |
| Battery | 9 V Lithium |
| Transmit Power | 10 uW PEP MAX. Aus, USA, Canada |
| Transmit Power | 100 mW PEP MAX. UK |

**Reed Switch**

| | |
|---|---|
| Frequency | 303.875 Mhz. Aus, USA, Canada |
| Frequency | 418 Mhz. UK 433 Mhz. Europe |
| Battery | 3V Lithium Coin Cell ( Mini Reed )<br>9V Lithium (Shock Reed) |
| Transmit Power | 10 uW PEP MAX. Aus, USA, Canada |
| Transmit Power | 100 mW PEP MAX. UK |

Manufactured in Australia by Ness Security Products Pty Ltd.

**NOTE:** Specifications subject to change without notice in the course of further development.

# TROUBLESHOOTING

| SYMPTOM | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Lo warning is given or keeps recurring | SecurityGuard Battery is Low | Plug in Battery Charger and leave plugged in for a minimum 24 Hours |
| Radio Key light does not illuminate when button pressed and/or | Battery is Low or Flat | Change Battery and test |
| LoUI-8 warning is given | Radio Key is Faulty | Contact Number provided at the time of installation |
| Radio Key not working or Radio Range is Low and/or | Battery is Low or Flat | Change battery and test |
| LoUI-8 warning is given | Radio Key is Faulty | Contact Number provided at the time of installation |
| Cannot enter Home mode | Incorrect Radio Key operation | Press (ON) twice within 3 seconds |
| | No Home Detectors programmed | Home mode cannot be entered if there are no Home Detectors programmed |
| Red Alarm Light does not always illuminate on PIR | Constant movement in room | There must be no movement for at least 3 minutes in room, leave room for full 3 minutes before re-entering to test |
| | PIR is Faulty | Contact Number provided at the time of installation |
| Lod2-8 warning is given | PIR or Reed Switch battery is low and needs replacing | Check the display to identify the detector which caused the warning and replace the battery |
| Red Alarm Light does not illuminate on Reed Switch and/or | Battery is Low or Flat | Replace battery and test |
| Lod2-8 warning is given | Reed Switch is faulty | Contact Number provided at the time of installation |
| Fast Beeps sound at Disarm instead of normal 3 beeps | SecurityGuard has an Alarm warning to give you | Check the display, and refer to this manual for the cause of the Alarm |
| Double Beeps sound at anytime | SecurityGuard has a Low Battery warning to give you | Check the display, and refer to this manual for the cause of the Low Battery |
| PIR False Alarming | Insects crawling on detector | Clear spider webs or spray around the detector with an insect surface spray **Do Not Spray Directly on PIR !** |
| | Air draughts caused by open windows | Do not leave windows open near PIRs when Alarm is Armed |
| | Sensitivity settings to high | Contact Number provided at the time of installation |
| | PIR Faulty | Contact Number provided at the time of installation |
| | Pets in detection area | Avoid having pets in areas protected by PIR's. |

# TROUBLESHOOTING

| SYMPTOM | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Siren sounds unexpectedly when alarm is Disarmed | Emergency button accidentally pressed on a Radio Key | Check the display to identify the cause of the Alarm |
| Siren will not stop when a Radio Key (OFF) is pressed | Radio Key Battery Low or flat | Use Emergency override key to stop siren, then replace battery in Radio Key and test |
| Display is flashing when you Disarm | SecurityGuard has a warning to give you | Note the warning message and consult this Manual for the cause<br><br>The flashing display can be cleared by pressing (OFF) on any Radio Key |
| Your External Strobe light is flashing when you come home | An Alarm occurred while you were away | Disarm your alarm and check the display to find the cause of the Alarm |
| Sn is displayed and warning beeps sound | Your external siren cover has an open tamper or your wiring is faulty | Contact Number provided at the time of installation |
| Ch d2-8 is displayed and warning beeps sound when you Disarm | A detector has not triggered recently | Check the display to identify the detector, and test the detector as described in this Manual |
| Ch d2-8 is displayed and warning beep sound when you Arm | A Reed Switch is open on a door or window | Disarm check the display to identify the detector and close door or window |
| Fd is displayed and warning beeps sound when you Disarm | Your Dialler has no phone line connection | Check the Telephone lead is plugged in if it is accessible |
| | The Phone line is not working | Check your telephone and call your telephone provider if there is no line |
| | The Dialler is faulty | Contact Number provided at the time of installation |
| An unusual Display not described in this manual will not clear | SecurityGuard program mode has inadvertently been activated | Turn SecurityGuard OFF using the Override Keyswitch on the bottom of SecurityGuard for 10 seconds and then turn back on<br><br>If the display does not clear after 5 seconds call your nearest Service Centre |
| A Display has cleared after 5 minutes and you want to check it again | Display stops after 5 minutes as normal | Press (OFF) and the display is re-called for another 5 minutes |
| When trying to clear a Display by pressing (OFF), another warning appears | This is normal if SecurityGuard has more than one warning to show you | Press (OFF) to cycle through multiple Displays |

# SUMMARY OF OPERATION AND DISPLAYS

| OPERATION | DISPLAY | SOUND | ACTION/DESCRIPTION |
|---|---|---|---|
| Arm | On | Single Beep ♩ | Press (ON) once |
| Disarm | OF | 3 Beeps ♩♩♩ | Press (OFF) once |
| Home | H | 5 Beeps ♩♩♩♩♩ | Press (ON) twice within 3 seconds |
| Emergency | P1-8 | rapid beeps for 5 seconds | Press Red side lever for 2 seconds |

**WARNINGS**

| | | | |
|---|---|---|---|
| at Disarm | Lo | double beeps 3 seconds | SecurityGuard Low Battery |
| at Disarm | LoU1-8 | double beeps 3 seconds | Radio Key Low Battery |
| anytime | Lod2-8 | double beeps 3 seconds | PIR or Reed Switch Low Battery |
| at Disarm | A1 -8 | rapid beeps for 5 seconds | Alarm from a Detector |
| at Disarm | P1-8 | rapid beeps for 5 seconds | Panic Alarm from a Radio Key |
| at Disarm | Sn | rapid beeps for 5 seconds | Alarm from Siren Cover Tamper |
| at Disarm | Chd2-8 | double beeps 3 seconds | Check Detector for correct operation |
| anytime | Fd | double beeps 3 seconds | Dialler not working correctly |

**DETECTOR GUIDE**

| | TYPE | LOCATION | MODE | SIGNAL STRENGTH |
|---|---|---|---|---|
| D1 | Main Unit | | | — |
| D2 | | | | |
| D3 | | | | |
| D4 | | | | |
| D5 | | | | |
| D6 | | | | |
| D7 | | | | |
| D8 | | | | |

**MODE TYPES**

| | |
|---|---|
| A | Alarm |
| H | Home |
| F | 24 hour |
| C | Chime |
| AC | Alarm/Chime |
| HC | Home/Chime |

**RADIO KEYS**

| | USER NAME | SIGNAL STRENGTH |
|---|---|---|
| U1 | | |
| U2 | | |
| U3 | | |
| U4 | | |
| U5 | | |
| U6 | | |
| U7 | | |
| U8 | | |


**P/No 890-114 Rev.2**