

SolarGuard™ SG1100ARM2

100% Wire free Alarm System

USER GUIDE

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**TO INSTALL THIS ALARM PLEASE FOLLOW
THE STEP BY STEP GUIDE IN PAGE ORDER.**

Installation Guide

Table of Contents

NOTES

PAGE	CONTENTS
3	Introducing the <i>SolarGuard™ SG1100ARM2</i>
4	STEP 1: Unpacking your <i>SolarGuard™</i>
5	STEP 2: Choosing your site code
6	STEP 3: Setting the zone codes
7	STEP 4: Installing the bell box
8	STEP 5: Learning the site code
9	STEP 6: Installing the PIR sensor
10	STEP 7: Resetting the PIR sensor
11	STEP 8: Installing the door contacts
12	Day to day operation
13	Expanding your system
14	HELP! Frequently asked questions
15	Notes

IMPORTANT NOTICE.
PLEASE FOLLOW YOUR POWER
TOOLS SAFETY GUIDELINES.
ALWAYS USE AN RCD BREAKER
WITH MAINS POWER TOOLS.

HELP!

Frequently asked questions

- Q: Can I give additional remote controls to family members/friends etc.?
A: Yes - use part number RM01 (see opposite)
- Q: In disarm (UNSET) mode, the alarm sounds when I walk in front of a sensor!
A: You must check the zone settings for the sensor that is activating the alarm. It should be set to zone 1,2 or 3 for standard operation - see page 6 for details.
- Q: The SolarGuard battery is completely discharged!
A: You can use the quick charge socket in the SolarGuard with a standard AC or DC 12V mains adapter. This will charge the battery faster than sunlight.
- Q: The LED in the PIR detector does not light up!
A: In NORMAL mode, the light will not come on when movement is detected.
- Q: I have a sensor which appears to be out of range of the SolarGuard. How can I use it in my system?
A: Use the range extender ET01-434 in conjunction with your sensor.

NEED MORE HELP?

At our web site, **www.aei.info** you can find a large selection of updated FAQ's, manuals, guides and an interactive user forum.

Alternatively, you can contact our support department by the following means:

email:	support@aei.info
telephone(UK):	0845 1667940
telephone(Intnl):	+ 44 1797 226122

Introducing the SolarGuard™ SG1100ARM

Congratulations in selecting the SolarGuard™ Wireless Burglar Alarm System. You have taken a sensible step towards protecting your family and property. The SolarGuard console and wireless detectors provide an extremely easy installation and are amazingly simple to operate.

The SolarGuard™ power is maintained by an internal sealed Lead-acid rechargeable battery designed to retain operation for approximately 3 years. The standby current is incredibly small, thus allowing the solar panel to maintain the battery charge when the sirens are activated. In fact, the solar panel is so sensitive it will even top up the battery in very cloudy or overcast weather conditions.

The SolarGuard™ is fully protected by a tough Polycarbonate UV proof housing. All electronic components are protected with moisture repellent material applied during the manufacturing process to ensure long, reliable, trouble free operation. Two integral front and rear tamper switches give maximum security to the unit. When activated, the SolarGuard™ sounds a built-in twin siren system at a powerful 115dB's and strobe (optional extra) will flash. The siren duration is selectable from between 1 and 8 minutes. If it's allowed to sound for the full siren duration the strobe will latch and continue for approximately 20 minutes or until the system is disarmed.



STEP 1

Unpacking your SolarGuard™

Before proceeding to step 2 of the installation, unpack the contents of your SolarGuard alarm system on to a flat surface - such as a table or workbench.

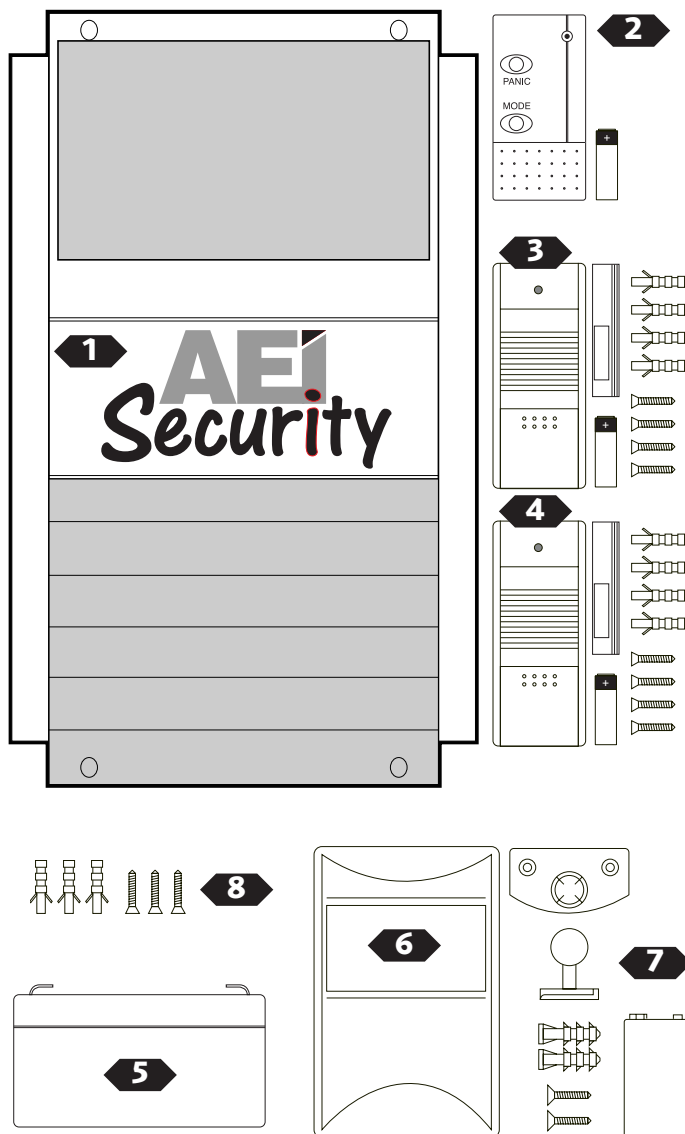
Although we weight check every box on the production line, please check the you have all the items listed below.

You will also require the following tools:

- Power Drill
- 5mm Masonry Bit
- Posidrive Screwdriver

KIT CONTENTS:

- 1) SolarGuard™ Bell Box
- 2) Remote Control + 12V Battery
- 3) Magnetic Door/Window Transmitter, magnet, 12V Battery, 4xWall Plugs, 4xScrew
- 4) Magnetic Door/Window Transmitter, magnet, 12V Battery, 4xWall Plugs, 4xScrew
- 5) 6V Sealed Lead Acid Battery
- 6) PIR Movement Detector
- 7) 9V PP3 Battery, PIR mounting bracket (2 piece), 2xWall Plug, 2xScrew
- 8) 3xWall Plug, 3xScrew



Expanding your system



Remote Control

Give additional family members remote controls for your alarm.
PART: RM01-434



Magnetic Door/Window Contact

Protect additional doors and windows.
PART: MT01-434



PIR Movement Detector

Protect additional areas around your home.
PART: IR02-434



Smoke Detector

Protect your home and family against fire.
PART: SD01-434



Range Extender

For protecting remote areas in your home.
PART: ET01-434

Multi-zone Control Panel Upgrade

Add a fixed control panel to your SolarGuard for full Multi-zone operation. Feature packed specifications.
PART: MU6450TX-434



Strobe Upgrade

Adds a bright flashing light when the alarm is sounding. High brightness Xenon tube.
PART: ST01



SolarGuard™ Dummy Bell Box

Adds an additional low cost visual deterrent to your alarm system.
PART: SGD



Day to day operation

Changing the current mode of the SolarGuard.

Pressing the MODE button on your hand held remote control causes the SolarGuard to cycle through it's different mode settings. The SolarGuard gives a number of beeps to indicate the current mode:

- 1 BEEP** = ARMED (SET)
- 3 BEEPS** = DISARMED (UNSET)
- 5 BEEPS** = DISARMED (Low battery detected in a PIR or door contact)
- 21 BEEPS** = DISARMED (Alarm has been triggered since it was last armed)
- 6 CHIRPS** = BATTERY TEST MODE (see below)

Testing the system batteries

You should check your alarm systems batteries every 6 months. The main bell box battery should be replaced every 3 years.

In battery test mode, all tamper circuits are disabled and the system will be set to give an audible indication of a PIR detecting movement or magnetic contact detecting a door opening.

Carry out the following to test for low batteries:

- 1) Set your system to BATTERY TEST MODE (see above)
- 2) Set your PIR detectors to TEST mode and replace cover
- 3) Activate every door contact (by opening the door/window) and PIR (by moving around in its detection area), listening out for the following indications from the bell box.

*1-4 BEEPS - Battery OK. The number of beeps indicates the sensors zone setting.
5 BEEPS - Low Battery. This means a low battery is present in the PIR or door contact you have just activated. The battery should be replaced as soon as possible.*

Once the test is completed, return all PIR sensors to NORMAL mode (see page 12)

STEP 2 Choosing your site code

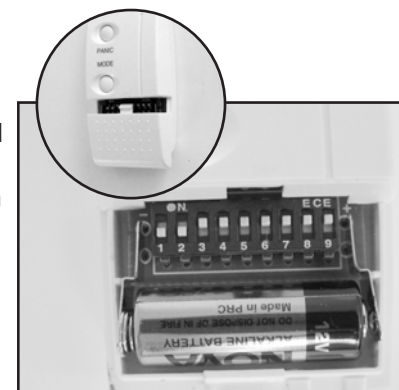
What is your site code?

Your site code is a code set by you, which identifies components of your alarm system. It is set by the first 9 switches located in every PIR, magnetic door contact and remote control. *Every device must have the same setting for the system to function correctly.*



REMOTE CONTROL

This has the 9 switches located under the battery cover on the rear of the device.



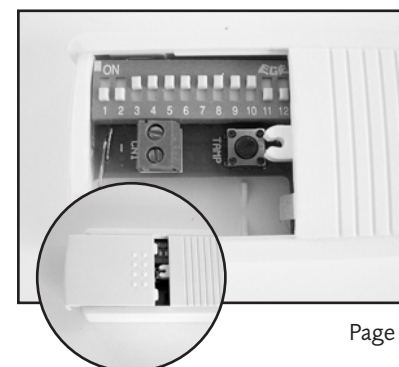
PIR DETECTOR

This device has 12 switches in total. Switches 1-9 represent the site code.



MAGNETIC DOOR CONTACT

This device has 12 switches in total. Switches 1-9 represent the site code.



Do I need to change the site code from its default setting?

Yes, we recommend you change the default setting as all of our systems are shipped with the same site code.

STEP 3

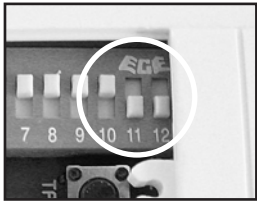
Setting the Zone Codes

What is a Zone Code?

The Zone code sets the desired behavior of a sensor. Every PIR and magnetic door contact has a zone setting.

How do I set the Zone Code?

The code is set by modifying switches 10,11 and 12. Please refer to the table opposite when setting the zone setting.



NOTICE:
You can skip this step if you do not wish to change the default settings of your sensors.
i.e. PIR on Instant/Walk through and both door contacts set to Entry/Exit mode.

ZONE	10	11	12	Usage
Zone 1	ON	OFF	OFF	Entry/Exit A sensor set to Zone 1 will give you a 20 Second entry/exit delay in this area. <i>Normally used for magnetic door contacts)</i>
Zone 2	OFF	ON	OFF	Instant Walk through A sensor set to Zone 2 will give you a 20 second entry/exit delay ONLY if a zone 1 sensor has been triggered first. If not, the sensor will trigger the alarm immediately if set. <i>Normally used for a PIR in your entrance hallway.</i>
Zone 3	OFF	OFF	ON	Instant A sensor on Zone 3 will trigger the alarm immediately if set.
Zone 4	ON	ON	OFF	24 Hour Protection A sensor on Zone 4 will trigger the alarm immediately wether it is set or not. <i>Normally used for wireless smoke detectors.</i>

STEP 8

Installing the door contacts

Do I have to use these on doors?

No, your magnetic contacts can also be used to detect the opening of windows and cabinets.

Must the magnet and transmitter be lined up as below?

Yes.



SOME UPVC DOORS CAN INTERFERE WITH THE OPERATION OF THIS UNIT.
NEVER USE SCREWS TO ATTACH THIS DEVICE TO A UPVC DOOR.

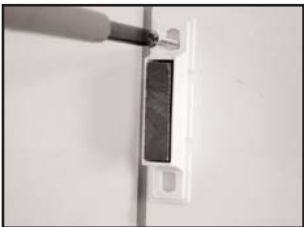
STEP 1

Remove the magnet cover.



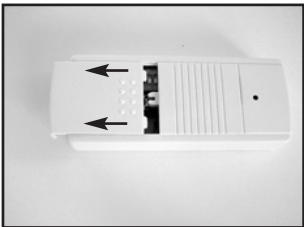
STEP 2

Fix the magnet to the door frame using the supplied screws (wooden door only)



STEP 3

Set your SolarGuard to BATTERY TEST MODE. Open the sliding cover on the transmitter.



STEP 4

Install the A23 battery, ensuring it is in the correct alignment.



STEP 5

Mount the transmitter section to the door using the 2 supplied screws. **Replace the cover.**



STEP 7

Resetting the PIR sensor

Keeping your PIR in TEST mode will dramatically reduce the battery life. Therefore we recommend you switch your PIR to NORMAL mode when you have finished your installation and testing the system. This will ensure that the batteries last between 18 months and a 5 years depending on usage.

Help! When I switch to NORMAL mode, the PIR stops working.

A PIR that works in TEST mode, will always work when switched to NORMAL mode. However, please be aware of the following points:

1) The red indicator light will not function in NORMAL mode. This is correct, and is designed to increase the battery life.

2) The PIR will sleep for 4 minutes when movement has been detected. Whilst sleeping, the PIR will NOT detect movement. After the sleep period the PIR will begin detecting again.

3) The PIR will not function with the cover removed. Please ensure that the cover is fully in place.



Move the mode switch into the down position - marked NORM.

ENSURE THAT THE SOLARGUARD CONSOLE IS SET TO BATTERY TEST MODE PRIOR TO OPENING THE PIR AND DOOR CONTACTS.

- press mode on your remote control every 2-3 seconds until you hear 6 chirps from your bell box

STEP 4

Installing the bell box

Where should I install the bell box?

Ideally, the bell box should be located on a south facing wall in position where it will receive a good level of sunlight. If this is not possible then an east or west facing wall with good sunlight should be acceptable.

IMPORTANT NOTICE.
PLEASE FOLLOW YOUR POWER TOOLS SAFETY GUIDELINES.
ALWAYS USE AN RCD BREAKER WITH MAINS POWER TOOLS.

STEP 1

Following the supplied "MAIN UNIT FIXING HOLE TEMPLATE", drill 3 holes using a **5mm Masonry bit**. Insert the supplied 3 x Plastic Wall Plugs into the holes.



STEP 2

Insert the top screw and hang the SolarGuard bell box on the wall.



STEP 3

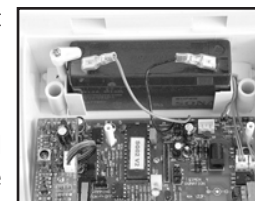
Remove the blue cover by removing the screws located on either side.

STEP 4

Insert the two remaining screws into the holes on either side of the SolarGuard circuit board.

STEP 5

Insert the supplied 6V Sealed lead acid battery and connect battery terminals. Ensure that red is connected to positive on the battery, and black is connected to negative on the battery.



PRO's TIP!

To avoid false triggering caused by the rear tamper switch not making good contact with the wall, place a piece of lino or plastic behind the rear tamper switch to create a flat surface flush with the bell box.

STEP 5

Learning the site code

Your SolarGuard bell box needs to learn which site code to respond to i.e. in order to respond to *your* remote control and *your* sensors, it needs to learn *your* site code.

This is achieved by following the code learning procedure.

STEP 1

Check that your SolarGuard console is set to **MODE A** and **FUNCTION 1**. These switches are shown opposite. Press the **START** button once.

STEP 2

Press the button labeled "LEARN", then immediately after, press the MODE button on your hand held remote control.

If you hear two beeps then this step has been successful - proceed to Step 3. If you don't get any response from the SolarGuard, please repeat this step until you hear two beeps.

STEP 3 - IMPORTANT!

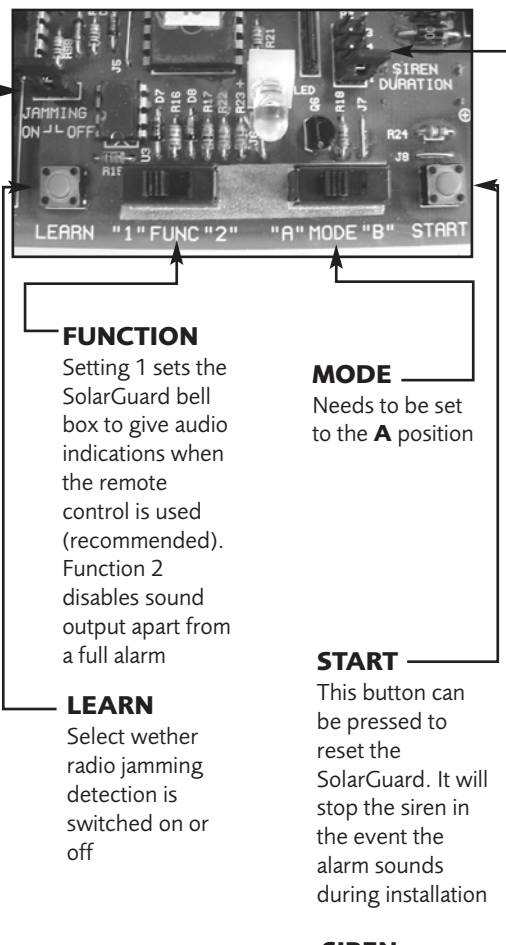
Replace the blue cover and screw firmly down.

STEP 4

Test the operation of the SolarGuard bell box by pressing the mode switch on the remote control. Keep pressing the mode button until you hear 6 chirps for battery test mode.

1 BEEP = FULL ARM MODE (SET)
3 BEEPS = DISARM MODE (UNSET)
6 CHIRPS = BATTERY TEST MODE

Page 8



FUNCTION

Setting 1 sets the SolarGuard bell box to give audio indications when the remote control is used (recommended). Function 2 disables sound output apart from a full alarm

MODE

Needs to be set to the **A** position

START

This button can be pressed to reset the SolarGuard. It will stop the siren in the event the alarm sounds during installation

LEARN

Select whether radio jamming detection is switched on or off

JAMMING

Select whether radio jamming detection is switched on or off

SIREN DURATION

Sets the length of time the siren will sound for in an alarm condition

STEP 6

Installing the PIR sensor



What is a PIR sensor?

Your PIR detector is used to detect movement in a large area such as your living room, hallway or similar.

PIR is an acronym for Passive Infra Red.

Where should I install the PIR?

You can install the PIR in any area you wish to protect. We would recommend installing it in an area where entry through windows may be possible such as a downstairs living room or hallway. Install it in a top corner of the room, looking into the centre of the room. Do not install above a radiator or facing windows.

Is it 'pet friendly'?

PIR's detect the movement of warm bodies, so we recommend using this detector in an area where large pets are not present whilst the system is set.

Can I install a PIR in my garage or conservatory?

PIR's are sensitive to temperature change so installing it in a garage/conservatory may cause false alarms.

How long does the battery last?

In normal operation, the battery will last between 18 months and 5 years.

ENSURE THAT THE SOLARGUARD CONSOLE IS SET TO BATTERY TEST MODE PRIOR TO INSTALLING THE PIR AND DOOR CONTACTS.

- press mode on your remote control every 2-3 seconds until you hear 6 chirps from your bell box

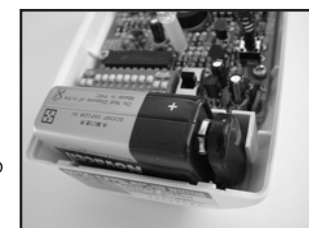
STEP 1

Fix the mounting bracket to the target wall using the supplied wall plugs and screws. Requires 4mm drill bit.



STEP 2

Install the supplied 9V battery into the PIR and set the MODE switch to the 'TEST' position.



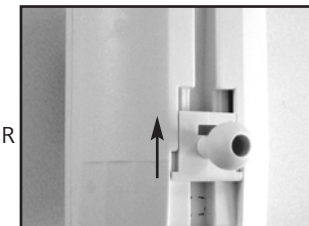
STEP 3

Clip both parts of the PIR casing together.



STEP 4

Attach the second part of the mounting bracket to the PIR case by sliding upward.



STEP 5

Mate both parts of the bracket together and direct the PIR into the centre of the room.



Page 9