



# SWIMMING POOL FALL DETECTOR

## SENSOR ESPIO™

Sensor Espio™: ESP007-US

### INSTALLATION AND OPERATION GUIDE

READ CAREFULLY AND KEEP FOR REFERENCE

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#### FCC REGULATION

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

**THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.** OPERATION IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

## 1 Introduction – Safety recommendations

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Thank you for purchasing a Sensor Espio™ swimming pool alarm.

This swimming pool alarm complies with the ASTM F2208-02<sup>e1</sup> standard

**This guide will help you** install your swimming pool alarm and understand its operating principle.

If you have any question or comment concerning your swimming pool alarm, please contact your retailer or:

Sensor Espio™ Customer Care  
P.O. Box 3839  
Cary, North Carolina 27519-3839  
Toll Free number: 888 501 9209  
usa@sensor-espio.com

- **Sensor Espio™ is a swimming pool alarm which detects the fall of a child weighing 18 lbs or more by setting off a siren.**
- **This device is not intended to replace any other safety consideration; that is, adult supervision, lifeguards, fences, gates, pool covers, locks, and so forth, and some devices may not detect gradual entry.**
- **Sensor Espio™ is not intended as a substitute for the watchfulness of parents and/or responsible adults, which remains the essential factor for the protection of children under the age of five.**
- **Sensor Espio™ is not a rescue device, immediate action by a responsible adult is essential when the alert signal is heard.**
- **In no event can your retailer or the manufacturer of the alarm system be held responsible for any person or animal falling or drowning.**
- **Warning must be given that the pool and surrounding area are under electronic surveillance.**

Please read carefully the safety recommendations given throughout and in §11 of this manual.

## 2 Contents of the package

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Despite the careful attention we pay to the quality of our products and their packaging, we ask you to check its contents.

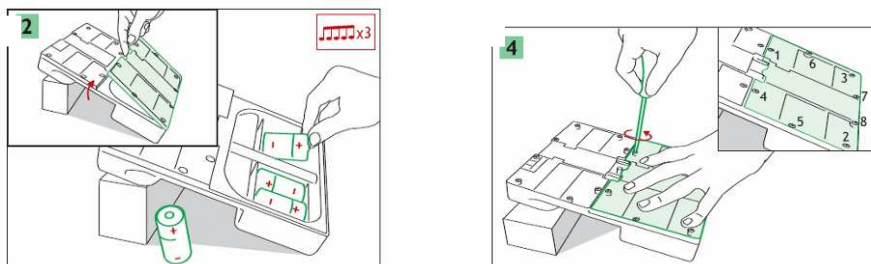
- Central unit
- 4 D alkaline batteries
- 1 “existing pool” attachment support
- 1 “pool under construction” attachment support
- 1 “existing pool” rubber protection
- 1 attachment kit (screws, rawplugs, front screw cover, magnet key-rings, wedge, wedging foam pad)
- 1 remote control (battery included - 3V DL2032)
- 1 conformity declaration sheet
- 1 test validation sheet
- The terms of guarantee at the end of this guide
- 1 remote siren, its mains power supply and its attachment kit (2 screws, 2 rawplugs)

To get additional magnets, contact your retailer.

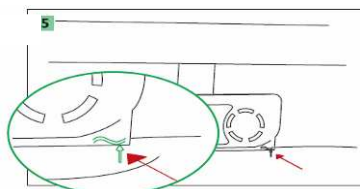
### 3 Quick Start Guide

#### INSTALLATION

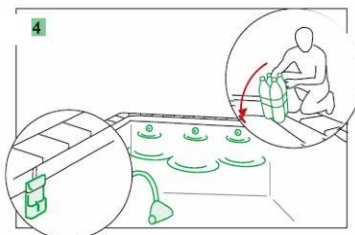
- Insert the batteries in your fall detector, and put the cover carefully back on the battery compartment, with all the screws (see §5.1).



- Put in place the attachment support selected (for existing pool – see §5.3 or pool under construction – see 5.4) on your pool at the appropriate location.
- Place your fall detector on the attachment support, in accordance with the immersion level indicated by the mark on the device.





- Switch your detector to ARMED mode (long beep – green indicator light flashing) by pressing the grey button on your remote control.
- Carry out a fall test: from the top of the coping, drop a 2.5 US gallon jerry can filled so as to weigh 18 lbs, as far away from your detector as possible. The siren should go off in less than 20 seconds. (See §5.5)



- Stop the siren by pressing the grey button on your remote control.
- Fasten Sensor Espio™ on the edge of your pool using the attachment kit supplied (see §5.6 or §5.7).
- Wait for your device to restart automatically (long beep – green indicator light flashing). Your device is now operational..

USE

| SIGNAL  | STATUS   |
|---|--|
| Green indicator light flashing<br> | Detector in ARMED mode – Pool under surveillance             |
| Red indicator light flashing<br>   | Detector in DISARMED mode – Pool not monitored               |
| All indicator lights off  | Detector in OFF mode – Pool not monitored                    |
| 1 low-pitched beep every minute   | Batteries low: replace the 4 batteries in your fall detector |
| 2 low-pitched beeps every minute  | Malfunction requiring return to the after-sales service      |

To switch between ARMED and DISARMED mode, use the remote control or the magnet (see §7.1 and §7.4)

## 4 Operating principle

- How does Sensor Espio™ work?

Sensor Espio™ detects and analyzes disturbances in your pool. It was designed to detect the fall of a child weighing 18 lbs or more in the conditions specified below. It warns of the fall by setting off a loud siren.

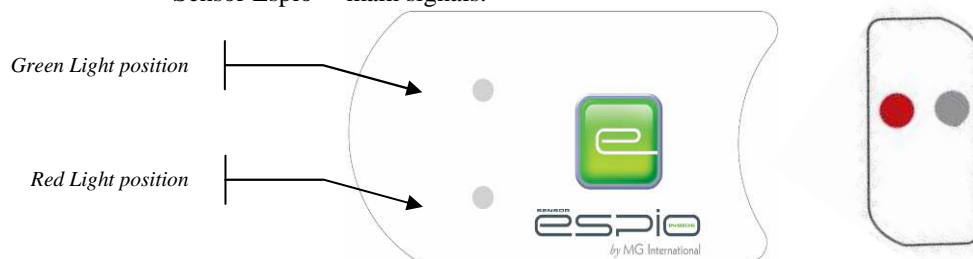
The device is supplied with a remote control with a range of about 5 m, and a magnet.

For your safety and comfort, it has three main operating modes:

- **ARMED MODE:**
  - Sensor Espio™ monitors the pool, its green indicator light is flashing.
  - The siren will go off if a body weighing 18 lbs or more falls into the pool.
- **DISARMED MODE:**
  - You must activate this mode before using the pool to avoid setting off the siren.
  - Sensor Espio™ is not monitoring the pool, the red indicator light is flashing.
  - No accidental fall will be detected.
  - Warning: the device remains in DISARMED mode for about 10 minutes after the swimmers have left the pool. It automatically switches to ARMED mode once the pool is still.
  - In case of strong wind, the device can no longer monitor the pool and will automatically switch to DISARMED mode.
- **OFF MODE:**
  - You can activate this mode to replace the batteries or perform maintenance operations on the pool.
  - Sensor Espio™ is not monitoring the pool. All indicator lights are off.
  - No accidental fall will be detected.
  - There is no automatic restart.




In order to minimize your response time, Sensor Espio™ has a remote siren controlled by a radio link, which is to be installed as close as possible to your living quarters. It will also set off the siren in case of a fall into your pool (see §6)

▪ Sensor Espio™ main signals:



Pict. 1  
(See table next page)

▪ Sensor Espio™ main signals:

| MODE                | SIGNAL  |                    | DETAILS   |
|---------------------|---|--------------------|---|
|                     | DETECTOR  | REMOTE SIREN       |   |
| ARMED               | Green indicator light flashing<br>                     |                    | <ul style="list-style-type: none"> <li>- The siren goes off if a body falls into the pool (or if the device detects an event similar to a fall)</li> </ul> <hr/> <p>To switch to ARMED mode</p> <ul style="list-style-type: none"> <li>- From the DISARMED mode: either press the grey button on the remote control (Pict. 1), or wait for the pool to be sufficiently still to allow automatic switching to the ARMED mode (1 long beep). This may take from 5 to 10 minutes, depending on how disturbed the water in the pool is.</li> </ul>  |
| DISARMED            | Red indicator light flashing<br>                       |                    | <ul style="list-style-type: none"> <li>- Mode allowing swimming</li> <li>- The siren will not go off if you are swimming.</li> <li>- Sensor Espio™ is liable to switch automatically to the DISARMED mode when there is too much wind and it can no longer perform its monitoring function.</li> </ul> <p><b>NEVER LEAVE THE POOL UNATTENDED IN THIS MODE</b></p> <hr/> <p>To switch to DISARMED mode:</p> <ul style="list-style-type: none"> <li>- From the ARMED mode: Press the red button, and then the grey button of the remote control (5 short beeps - see §7.1 and Pict. 1)</li> </ul> <p>Once Sensor Espio™ has switched to the DISARMED mode, you will have 3 minute to use the pool before the device automatically switches back to ARMED mode</p> |
| Re-activation phase | Red and green indicator lights flashing in turns<br> |                    | <ul style="list-style-type: none"> <li>- Intermediate mode, during which only heavy falls are detected (see §7.3).</li> </ul> <p><b>NEVER LEAVE THE POOL UNATTENDED IN THIS MODE</b></p>  |
| Setting off         | The siren goes off  | The siren goes off | <ul style="list-style-type: none"> <li>- A fall or similar event is detected in the pool.<br/><b>QUICK ACTION MUST BE TAKEN IMMEDIATELY.</b></li> <li>- Stop the siren by pressing the grey button on the remote control (Pict. 1).</li> </ul> <p>NOTE: In the absence of action on your part, the siren stops automatically after 3 minutes.</p>   |

|     |      |  |  |
|-----|------|--|--|
| OFF | None |  | <p>You can completely switch off Sensor Espio™ when replacing the batteries or during maintenance on your pool.</p> <p><b>NEVER LEAVE THE POOL UNATTENDED IN THIS MODE</b></p> <p>-----</p> <p>To switch to this mode: See §7.6.<br/>         To switch from this mode: Press the grey button on the remote control (5 short beeps – Pict. 1), you are switching to the DISARMED mode.</p> |
|-----|------|--|--|

▪ Failure signals

| Failure  | Sound signals              |  |
|--|----------------------------|--|
|  | With the remote control    | Periodic   |
| Batteries low  | 4 short, low-pitched beeps | 1 short, low-pitched beep every minute             |
| <b>Malfunction<br/>Return to the after-sales<br/>service</b> | –                          | <b>2 short, low-pitched beeps every<br/>minute</b> |

## 5 Installing Sensor Espio™

### INSTALLATION PRECAUTIONS

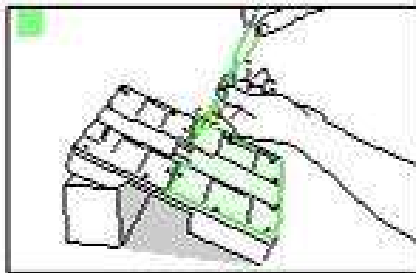
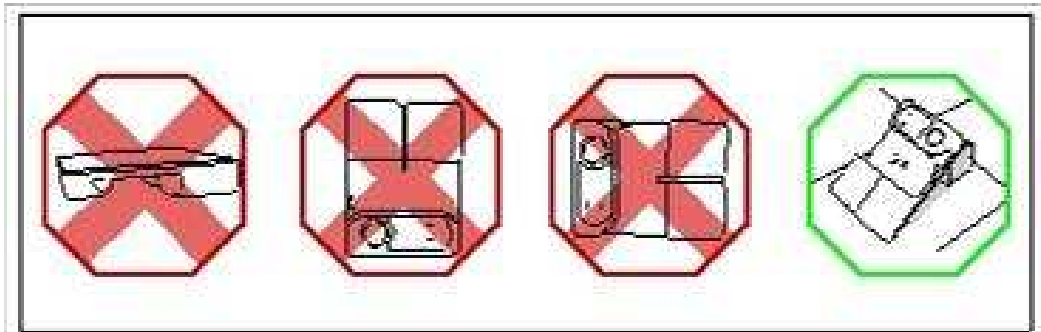
- Make absolutely sure that Sensor Espio™ is vertical when handled, with the battery compartment down.
- If the device is turned upside down, with the battery compartment up, or if it is dropped in the swimming pool during handling, you must imperatively allow it to dry with the battery compartment down for at least 1 hour, and then check that it is working properly.
- Check that the Sensor Espio™ sirens can be heard from inside your home.
- Your fall detector must be installed in calm weather on a still pool
- This alarm system is only suited to swimming pools meeting the two following conditions at the location of the alarm system:
  - a water depth of 23 in. minimum.
  - a distance between the underside of the coping and the waterline between 3.4 in. and 7.8 in.
- Make sure that the water of your pool is clear and pure before installing your device.
- The immersion level must imperatively be as recommended (+/- 1 in). If this instruction is not complied with, your fall detector will not work properly.
- Some robot cleaners of the diving robot type are incompatible with fall detection systems.
- Proper operation of Sensor Espio™ cannot be guaranteed in the presence of a bubble pool cover.
- **Warning: Sensor Espio™ is fitted with a powerful siren (over 100 dB). In case the siren should go off, please take all necessary precautions to protect your auditory system during the installation.**

- Tools required for installation:
  - 1 pozi screwdriver
  - 1 tape measure
  - 1 2.5 US gallon jerry-can
  - 1 rope about 6 ft long
  - 1 drill with concrete bit Ø0.31 in (8mm)
  - 1 cutter
  - 1 pen
- The installation of Sensor Espio™ is done in 6 steps:

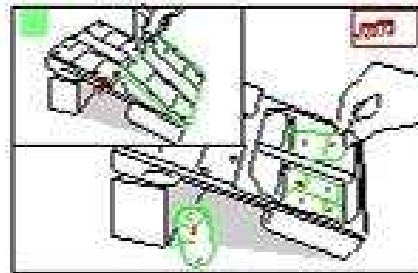
- 5.1 Inserting the batteries
- 5.2 Choice of location
- 5.3 Existing pool: set up of the attachment and temporary installation.
- or
- 5.4 Pool under construction: set up of the attachment and temporary installation.
- 5.5 Installation tests
- 5.6 Existing pool: final attachment of Sensor Espio™
- or
- 5.7 Pool under construction: final attachment of Sensor Espio™
- 5.8 Validation tests

## 5.1 Inserting the batteries

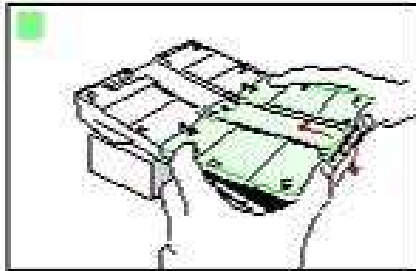
Make absolutely sure that Sensor Espio™ is vertical when handled, with the battery compartment down.



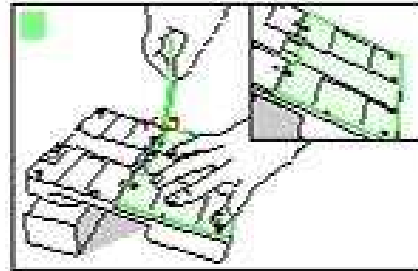
Place Sensor Espio™ on a prop, as shown. Unscrew the battery compartment screws.



Make sure the polarity is respected.  
Validation sound signal.



Sensor Espio™ is in “total shut-off” mode (see §7 .6).



In order to ensure waterproofing, screw in the tightening sequence given.



## 5.2 Choice of location

Do not install your device on the pool edge before having determined the location that will ensure optimal monitoring of your swimming pool.

After having determined the appropriate location, you must ensure that the siren can be heard from your home.

Sensor Espio™ must be positioned in the center of the long side (position recommended for rectangular swimming pools) and against a flat wall in your pool. If your pool does not correspond to the configurations shown below, **ask your retailer for advice**.

Check that there is easy and practical access to the activation zone (where you place the magnet).



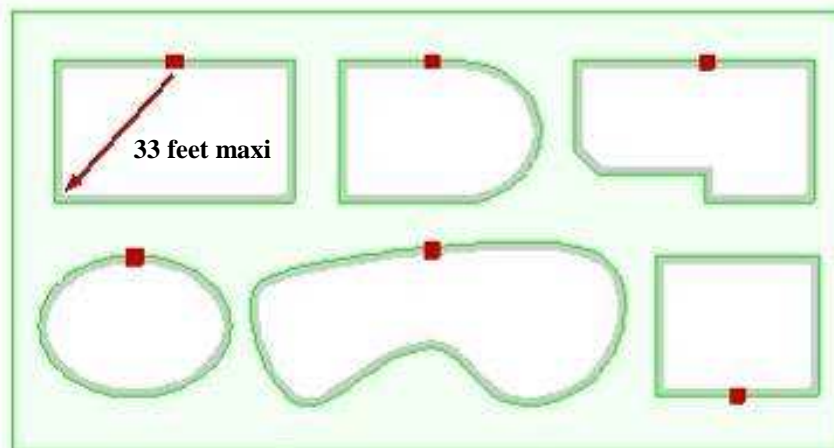
Ensure that the central unit is more than one meter away from the filtration system (return fittings, waste plug, skimmer, vacuum fittings, etc.) or waterfall or any other device that may disturb the pool at this place.



Your fall detector can be used on pools with maximum dimensions of 20 x 50 feet, and must not be more than 33 feet away from all possible fall locations.

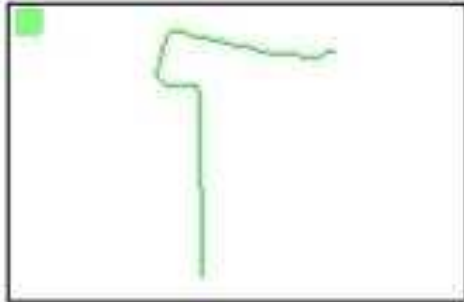


In the case of a larger swimming pool, or one that is of a particular shape, ask your retailer for advice.

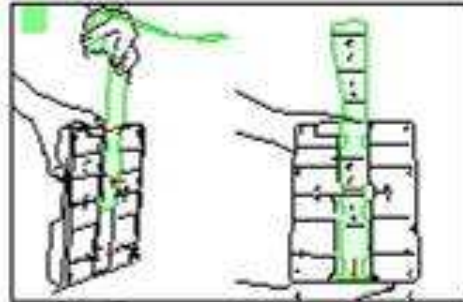


### 5.3 Existing pool: set up of the attachment and temporary installation.

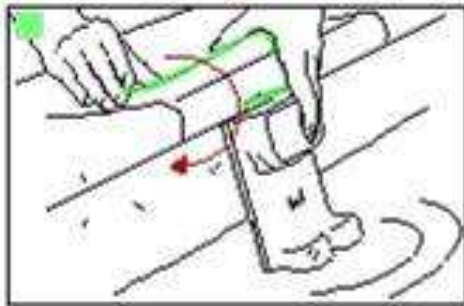
Make absolutely sure that Sensor Espio™ is vertical when handled, with the battery compartment down.



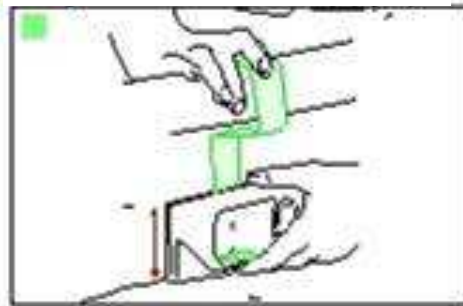
Attachment support suitable for coping on existing pool.



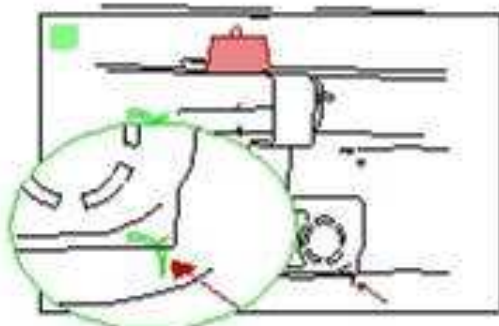
Position the attachment on the line and slide it down to the stop.



Sensor Espio™ must be fully flat against the wall.. Adjust the attachment support if need be. If there is a gap between the attachment support and the coping, put the wedging foam pad in it (cut it down to size if need be).



Slide Sensor Espio™ on its support in order to make absolutely sure that the water level is on the level mark.



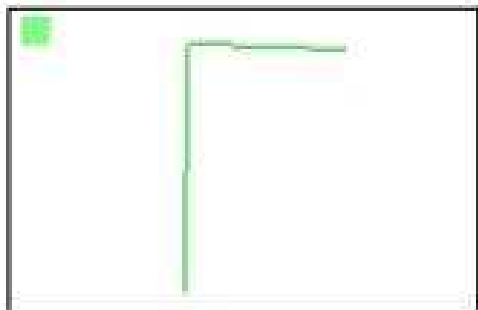
Immersion level mark.



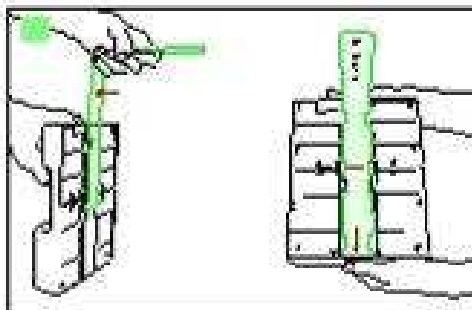
Tighten gently in order to maintain Sensor Espio™ on its support.

## 5.4 Pool under construction: set up of the attachment and temporary installation

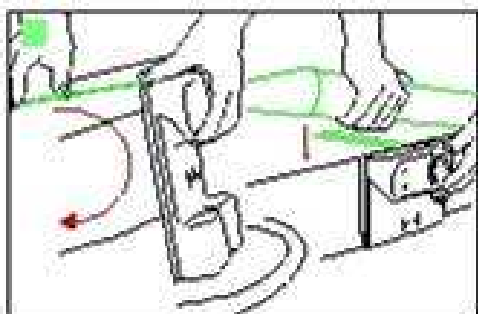
Make absolutely sure that Sensor Espio™ is vertical when handled, with the battery compartment down.



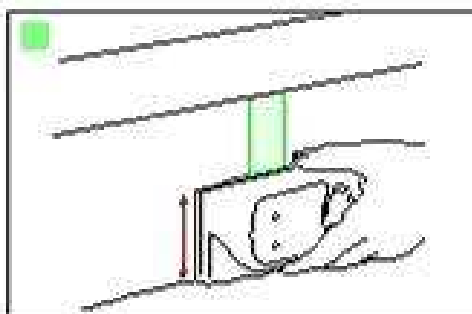
Attachment support suitable for coping on pool under construction.



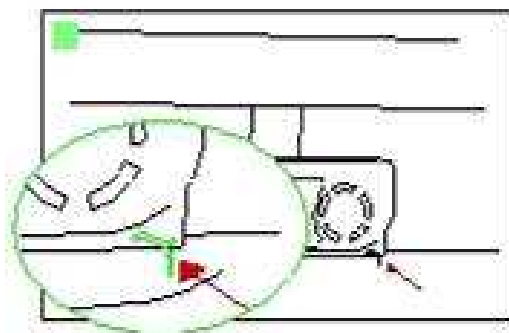
Position the attachment on the line and slide it down to the stop.



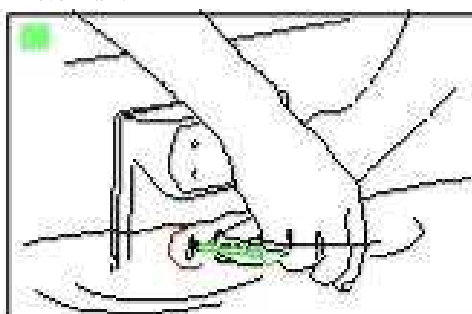
Sensor Espio™ must be fully flat against the wall.. Adjust the attachment support if need be.



Slide Sensor Espio™ on its support in order to make absolutely sure that the water level is on the level mark.



Immersion level mark.



Tighten gently in order to maintain Sensor Espio™ on its support.

## 5.5 Installation tests

- Make sure that the pool is still. If you have a swim jet, turn it off.
- Prepare a 2.5 US gallon jerry can with enough water to reach a weight of 18 lbs (8 kg), and tie the 6 foot rope to it to recover it when performing fall tests.

NOTE: If you wish, you can conduct your tests in low-volume siren mode (optional). In this mode, the volume of the siren is reduced and the siren stops automatically after 5 seconds. Refer to §7.5 for further details.

- For these tests, Sensor Espio™ must be in ARMED mode (green indicator light flashing). If such is not the case, press the grey button on your remote control.
- If in spite of this, the indicator light does not switch to green, this means that the pool is not still enough. You must imperatively wait until your pool is still before carrying out the tests.
- Test 1 - Robot cleaner + filtering
  - Leave Sensor Espio™ in ARMED mode for 10 minutes with the filtering on and the robot cleaner working, only if you have a robot cleaner.
    - o Sensor Espio™ must remain in ARMED mode (green indicator light flashing) without the siren going off.

Some diving type robot cleaners (a robot which moves out of and dives back into the water, possibly causing a disturbance similar to a fall) are not compatible with fall detectors.

If this test fails:

- Look up § 9.
- Contact your retailer
- Contact our technical support service: [usa@sensor-espio.com](mailto:usa@sensor-espio.com)

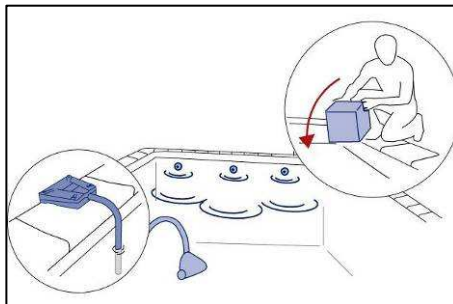
- Test 2 - Falls

- Make sure that your device is in ARMED mode (green indicator light flashing)

1) Move to the spot furthest away from your fall indicator.

- Simulate the fall of a body by dropping the 18 lbs jerry can from the top of the coping.
  - o The siren must go off less than 20 seconds after the fall.
  - o Stop the alarm by pressing the grey button on your remote control.

Wait for your fall detector to restart automatically (1 long beep – green indicator light flashing).



**During the tests, after each fall, you must wait for the automatic reactivation of Sensor Espio™ before performing another fall. Depending on wind and pool disturbance conditions, this reactivation may take about ten minutes.**

2) Move to 3 feet away from your fall detector

- Simulate the fall of a body by dropping the 18 lbs jerry can from the top of the coping.
  - o The siren must go off less than 20 seconds after the fall.
  - o Stop the alarm by pressing the grey button on your remote control.

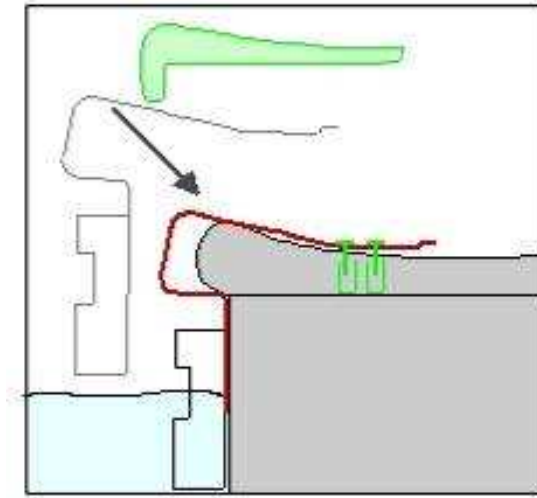
The test is validated.

If one of these tests fails:

- Look up § 9
- Contact your retailer
- Contact our technical support service: [usa@sensor-espio.com](mailto:usa@sensor-espio.com)

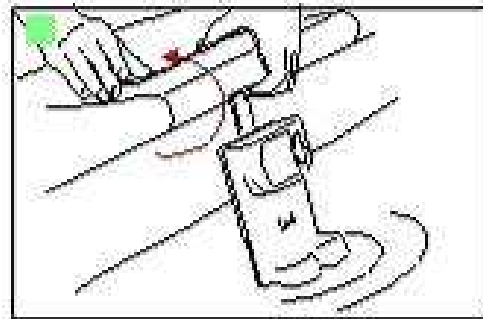
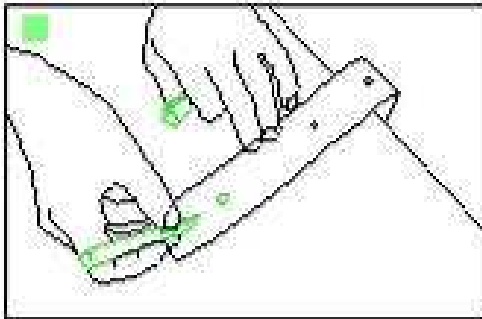
All the tests have been conducted successfully, you may now proceed with the final installation of your device.

## 5.6 Existing pool: final attachment of Sensor Espio™

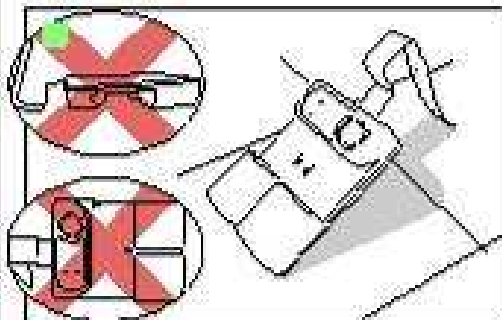


Sensor Espio™ must imperatively be flat against the wall of the pool.  
To make sure this is the case, you might have to put the attachment support slightly out of shape so that it fits snugly against the coping.

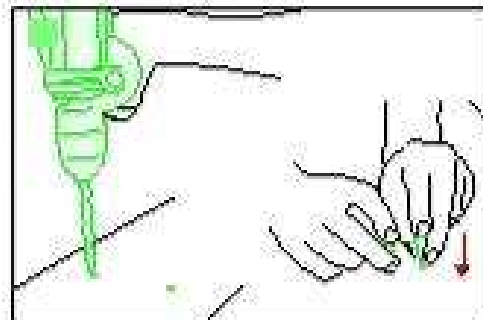
Put Sensor Espio™ in “total shut-off” mode (see §7.6) so that it can be handled freely during its final installation.



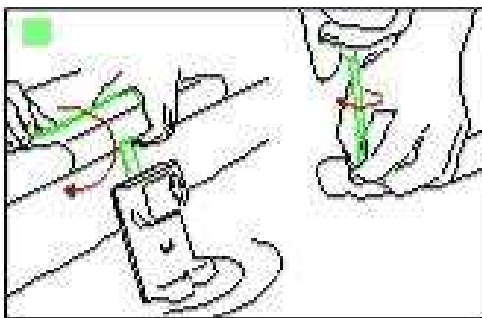
Make absolutely sure that Sensor Espio™ is vertical when handled, with the battery compartment down.



It is essential that Sensor Espio™ be handled and positioned as shown.



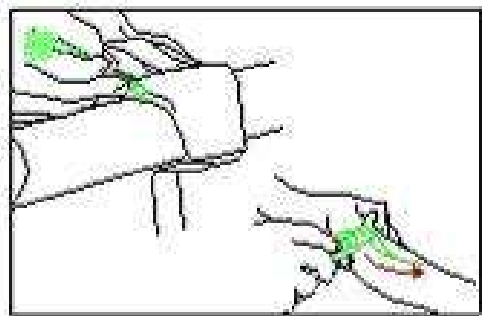
Drill the 2 holes with a Ø8mm bit and put in the two rawplugs.



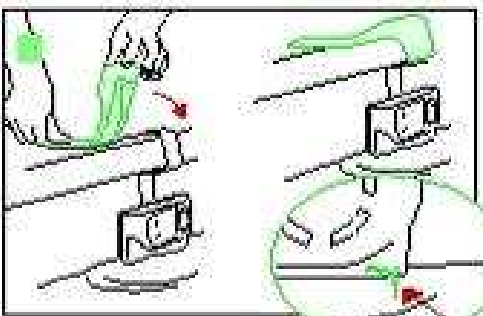
Clip the attachment support on the coping again. If there is a gap between the attachment support and the coping, put the wedging foam pad in it (cut it down to size if need be). Tighten the 2 screws.



Fit the protection for the attachment support.

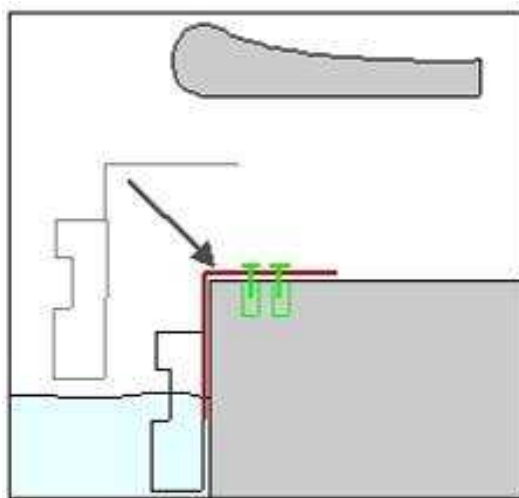


If need be, cut the protection down to size using a craft knife.



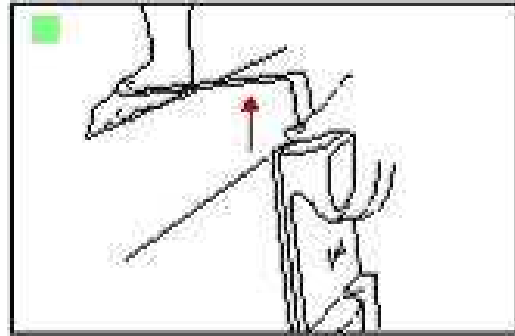
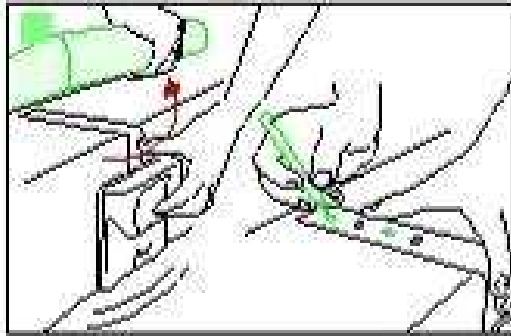
Check the immersion level.

## 5.7 Pool under construction: final attachment of Sensor Espio™

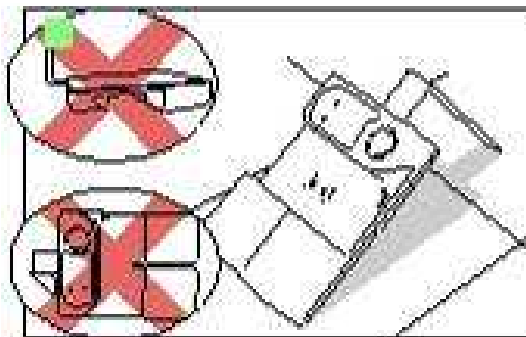


Fasten the attachment support as your pool is being built, and imperatively before the coping is laid.

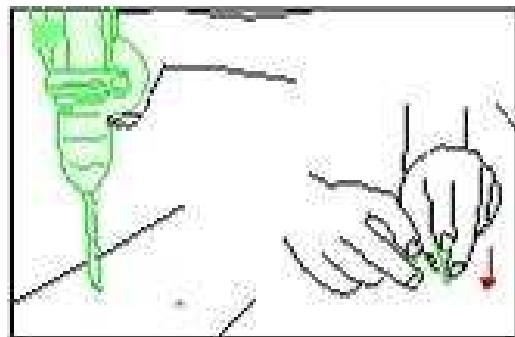
Sensor Espio™ must imperatively be flat against the wall of the pool. To make sure this is the case, you might have to put the attachment support slightly out of shape.



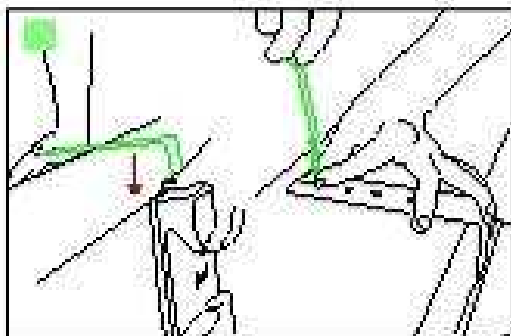
Make absolutely sure that Sensor Espio™ is vertical when handled, with the battery compartment down.



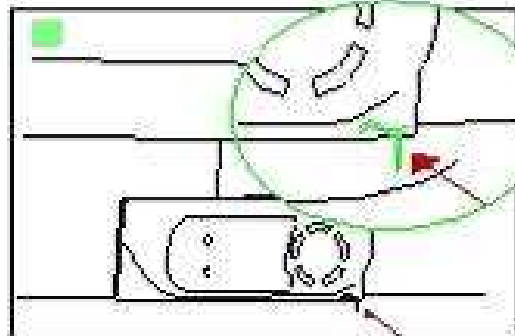
It is essential that Sensor Espio™ be handled and positioned as shown.



Drill the 2 holes with a Ø8mm bit and put in the two 2 rawplugs.



Tighten the 2 screws and replace the coping.



Check the immersion level.

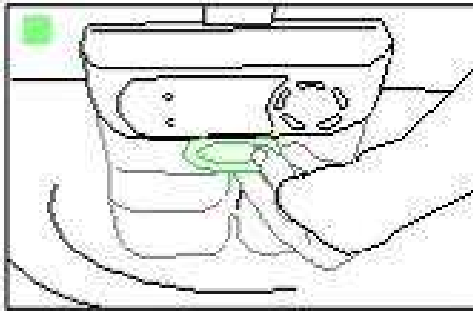


## 5.8 Validation tests

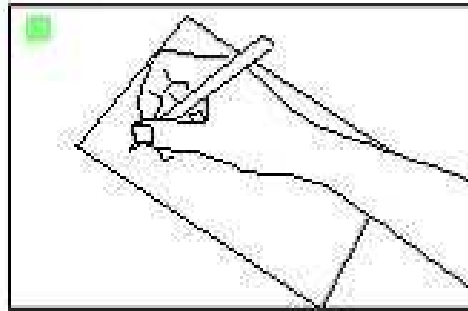
- Check one last time that your alarm is working properly.
  - o Switch to disarmed mode by pressing the grey button on your remote control (5 short beeps, red indicator light flashing).
  - o Wait for your device to restart automatically (1 long beep – green indicator light flashing).
  - o Perform a fall test as far away from your device as possible.
  - o If the fall is detected in less than 20 seconds, your device is validated.
- Wait for Sensor Espio™ to restart automatically before walking away from the pool.
- Complete the test validation sheet and send it to the address below:

Sensor Espio™ Customer Care  
P.O. Box 3839  
Cary, North Carolina 27519-3839

**Put your remote control and magnet away to keep them out of the reach of children.**



Fit the screw cover.

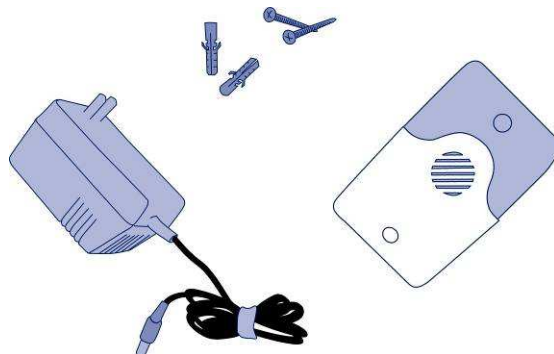


Fill in the test validation sheet and send it back to the manufacturer.

## 6 Installation of the remote siren

To install and use your remote siren, you must have the following components and tools:

- The siren (red and white unit)
- The 110V/12V, 450 mA AC power adapter
- The attachment kit (bag containing 2 screws and 2 rawplugs)
- A drill with a Ø 0.25 in. bit
- A pozi screwdriver



The remote siren must be installed at a maximum distance of 100 feet from Sensor Espio™.

**This is not an outside siren, it must be installed inside the house, and protected from bad weather.**

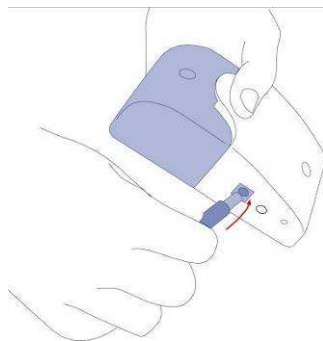
### - Operating principle

- o The remote siren is controlled from a distance by Sensor Espio™ using radio waves.
- o If a fall is detected by Sensor Espio™ in the pool, the Sensor Espio™ siren and the remote siren will go off simultaneously.
- o You cannot turn off the sirens from your remote siren; you must imperatively go to the pool, ascertain the reason why the siren went off, take any necessary action and turn off the sirens by pressing the remote control grey button.
- o As with Sensor Espio™, if you do not turn off the siren by pressing the remote control grey button after it has gone off, the siren will stop automatically after 3 minutes.
- o When you switch modes from Sensor Espio™ (ARMED, DISARMED), the remote siren beeps to indicate that your action has been taken into account.

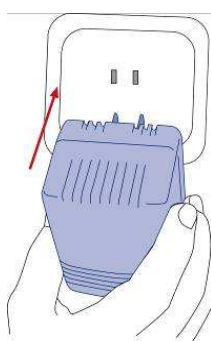
### - Synchronization

To make sure that Sensor Espio™ and the remote siren are connected, you must synchronize the two devices.

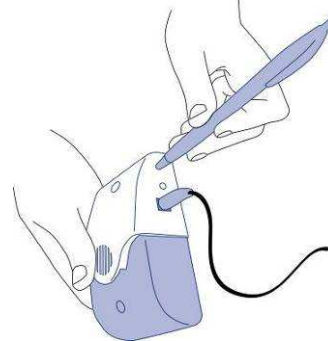
- Select a location for your remote siren
  - o Less than 100 feet from Sensor Espio™
  - o Fitted with a mains power point
- Connect the adapter to the remote siren (Pict. 2)
- Connect the adapter to the mains, a sound signal is heard, your remote siren is powered up (Pict. 3)
- Using a pen, briefly press the black button on the side of the remote siren, a sound signal is heard, and the green indicator light inside the siren flashes (Pict. 4).
- Leave your siren at the location of your choice and go back to your fall detector on the edge of your pool.



Pict. 2

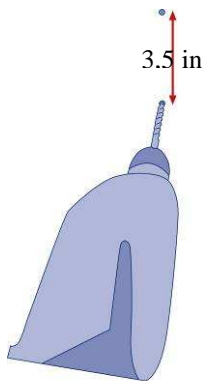


Pict. 3

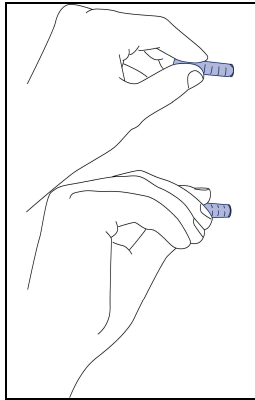


Pict. 4

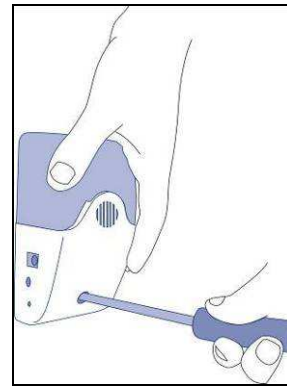
- f) Lay a magnet (for about 3 seconds) on the Sensor Espio™ green light position, until you hear a short loud beep and the Sensor Espio™ red indicator light starts flashing quickly. The remote siren must emit a beep.
  - g) Go back to your remote siren and, using a pen, press again on the black button on the side of the remote siren; a sound signal is heard. Sensor Espio™ and your remote siren should now be synchronized.
  - h) Press the remote contro grey button: Sensor Espio™ and the remote siren should each emit a sound signal.
  - i) Perform a fall test in your pool to validate the radio link. Turn the two sirens off by pressing the remote control grey button.
    - You can synchronize one or more Sensor Espio™ with one or more sirens. To do this, you must repeat operations d), e) and f) for each Sensor Espio™ after having pressed the black button on the remote siren(s).
    - You can re-initialize your remote siren by pressing the black button for a longer time (about 3 seconds). You will then have to repeat the synchronization operations.
- **Fastening**
- At the selected and validated location, drill two holes with a diameter of 0.25 in. one above the other, 3.5 in. apart. To make the radio link easier, it is recommended to position the siren as high as possible on the wall (but check the length of the adapter cord) (Pict. 5).
  - Insert the two rawplugs into the two holes (Pict. 6).
  - Screw the two screws through the siren and into the rawplugs (Pict. 7).



*Pict. 5*



*Pict. 6*



*Pict. 7*

## 7 Using Sensor Espio™

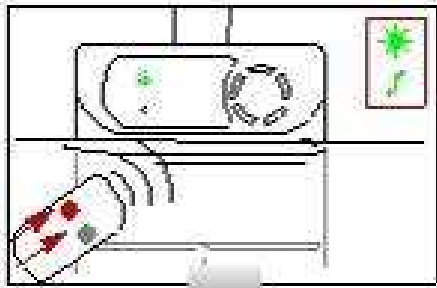
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The remote control and magnet must imperatively be kept out of the reach of children.

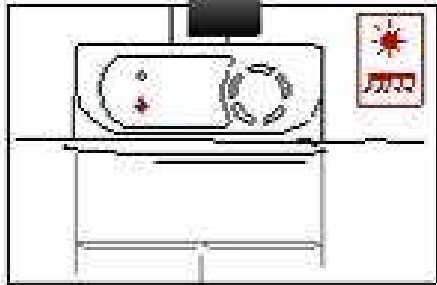
### PRECAUTIONS FOR USE

- **Sensor Espio™ is not intended as a substitute for the watchfulness of parents and/or responsible adults, which remains the essential factor for the protection of children under the age of five.**
- **Action must be taken when the siren is heard.**
- **Make absolutely sure that Sensor Espio™ is vertical when handled, with the battery compartment down.**
- **Certain rough weather conditions (strong winds, storms, etc.) and the use of certain powerful cleaning equipment can cause untimely alarm triggering.**
- **Your alarm system will not operate if the water in the probe is frozen or the surface of the pool is frozen. It is hard to know when the water is frozen in the tube. If unsure, check that the alarm works.**
- **Regularly check the water level in your pool, especially when the weather is very hot, or rainy, or if it has been windy for several days. The immersion level must imperatively be as recommended, plus or minus two centimeters maximum. If this instruction is not complied with, your fall detector will not work properly.**
- **When cleaning the outside of your fall detector, do not use any high-pressure cleaning apparatus, abrasive brush and/or other implements which might scratch or damage your fall detector.**
- **Proper operation of Sensor Espio™ cannot be guaranteed in the presence of a bubble pool cover.**
- **To ensure proper operation of your device, please keep the water in your pool pure and clean at all times (in particular, to avoid the formation of algae inside the probe).**
- **Should you restart your alarm system after a long period, perform the tests described in § 5.5. In case of a problem, contact your retailer immediately.**
- **The only authorized operation on the device once it is installed is changing the battery.**
- **Regularly check that your Sensor Espio™ is working properly by performing the tests mentioned in this guide (see § 5.5).**
- **The greatest vigilance by the parent/responsible adult is necessary between the end of the swim and reactivation of the alarm system.**

## 7.1 I want to have a swim



While Sensor Espio™ is in “ARMED” mode, keep the red button on the remote control pressed and press the grey button for confirmation within three seconds.



The RED light of Sensor Espio™ comes on.

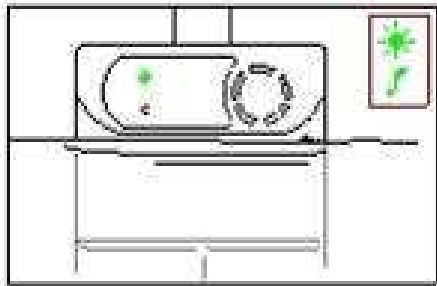
Sensor Espio™ automatically switches to ARMED mode as soon as the pool is sufficiently still (automatic restart).

The automatic restart can take place 10 to 15 minutes after the end of the swim, depending on the disturbance in the pool and the wind conditions.

**DURING THIS TIME, YOUR POOL IS NOT PROTECTED. UTMOST VIGILANCE IS REQUIRED FROM THE PARENT/RESPONSIBLE ADULT.**

Sensor Espio™ is no longer monitoring, the red light is flashing .

AUTOMATIC RESTART



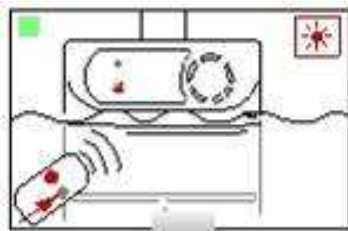
Sensor Espio™ checks the disturbance conditions of the pool at all times.

As soon as Sensor Espio™ considers that your pool has become still again, after a swim or strong disturbance (strong wind, counter-current swimming...), it switches to ARMED mode and the GREEN light flashes.

Your pool is now protected.

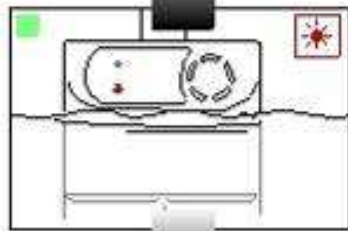
Sensor Espio™ is monitoring .

## 7.2 Manual restart



After your swim, you can indicate to Sensor Espio™ that the pool is not being used, so that monitoring is resumed faster. You are then in one of the three situations described below:

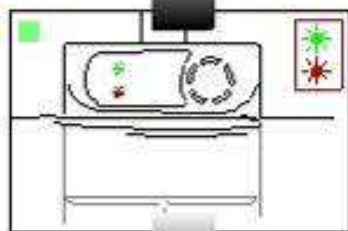
- Pool very disturbed:** restart in 4 stages (steps 1-2-3 and 4)
- Pool disturbed:** restart in 3 stages (steps 1-3 and 4)
- Still pool:** restart in 2 stages (steps 1 and 4)



1) Press the grey button on the remote control when leaving the pool.

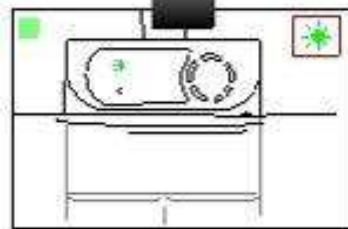
2) Sensor Espio™ considers that your pool is very disturbed. In this case, your fall detector acknowledges your request by emitting a short, high-pitched beep, but cannot resume monitoring immediately. Its red indicator light flashes.

**DURING THIS TIME, YOUR POOL IS NOT PROTECTED. UTMOST VIGILANCE IS REQUIRED FROM THE PARENT/RESPONSIBLE ADULT.**



3) Sensor Espio™ considers that your pool is disturbed and that its detection is disrupted. It indicates this by a short, high-pitched beep. Its green and red indicator lights flash in turn. It is in reactivation phase. Your fall detector will resume monitoring gradually, and as soon as possible.

**DURING THIS TIME, THE UTMOST VIGILANCE IS REQUIRED FROM THE PARENT/RESPONSIBLE ADULT.**



4) Sensor Espio™ considers that your pool is still. It resumes monitoring by emitting a long, high-pitched beep. Its green indicator light flashes.

**Your pool is now protected.**

## 7.3 Too much wind

In some cases, in the presence of rough weather conditions (strong wind, heavy rain, thunderstorm...), your fall detector is liable to interrupt its monitoring function. Its red indicator light flashes.

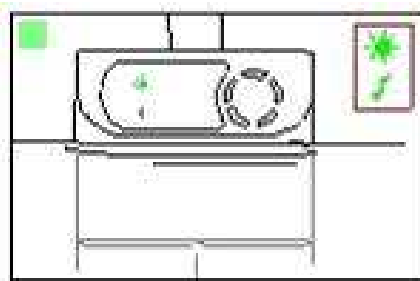
**YOU MUST BE PARTICULARLY VIGILANT WHEN THE WEATHER IS ROUGH.**

Warning: The performance of Sensor Espio™ is not guaranteed beyond wind levels higher than those specified in standard ASTM F2208-02<sup>e1</sup>.

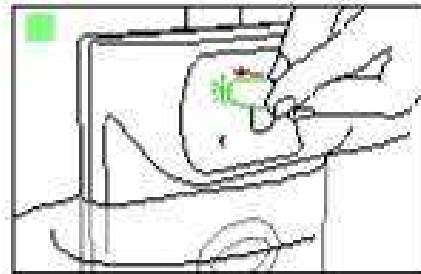
## 7.4 Using the magnet

I WANT TO HAVE A SWIM

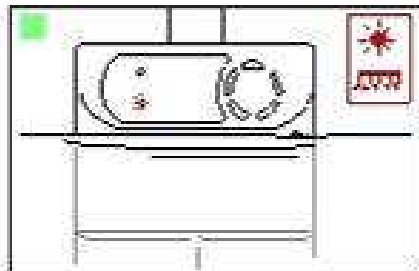
The magnet replaces the remote control, should it be lost or out of order.



Sensor Espio™ is monitoring.



Place the magnet on the green light as shown.



Sensor Espio™ is no longer monitoring!

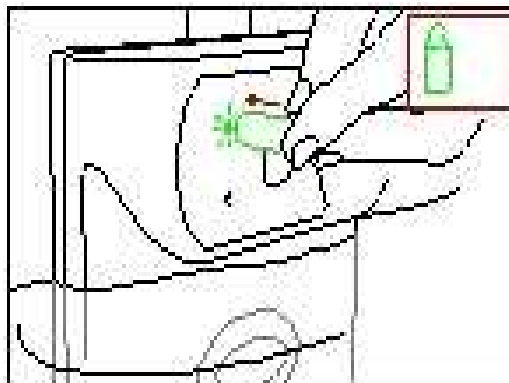
You can also perform a manual restart by placing the magnet on the green light.

## 7.5 Test mode

This mode allows you to perform the installation and monthly tests without disturbing you or the neighborhood. In this mode, the siren sounds only for a short time and at a low volume.

The test mode lasts for 30 minutes.

The start and stop of the test mode are indicated by a specific tune.

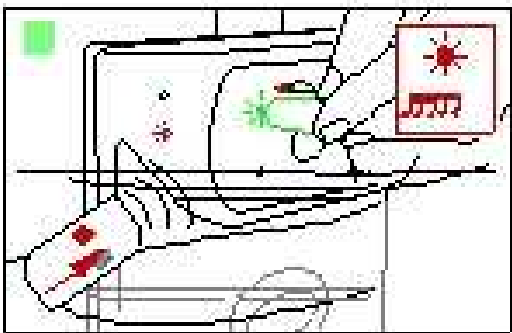


To switch in and out the test mode manually, place the magnet on the green indicator light until sound validation (loud beep) and fast flashing of the red indicator light. Repeat this operation three times.

**Warning:** When you place the magnet on the green light, the device first reacts as described above in the “using the magnet” section.

You must keep the magnet on the light to have sound validation (indicated by a loud beep) and flashing of the red indicator light.

## 7.6 Complete stop



In complete stop mode, all Sensor Espio™ indicator lights are off.

Place the magnet on the green indicator light until you obtain sound validation (indicated by a loud beep) and fast flashing of the red indicator light, then press the grey button on the remote control for confirmation. The red indicator light remains on during the confirmation sound signal (15 short beeps).

To reactivate Sensor Espio™ press the grey button.

**Warning:** When you place the magnet on the green light, the device first reacts as described above in the “using the magnet” section.

You must keep the magnet on the light to have sound validation (indicated by a loud beep) and flashing of the red indicator light.



## 8 Replacing the batteries

### 8.1 Central unit

Sensor Espio™ gives a low-battery alert by:

- 1 low pitched beep every minute,
- 1 low pitched beep at each change of status (I want to have a swim, Automatic restart, Manual restart,...).

In this case, the 4 D alkaline batteries must be replaced with new batteries of the same type as soon as possible.

For practical safety reasons, we advise you to replace the batteries at the start of the season.

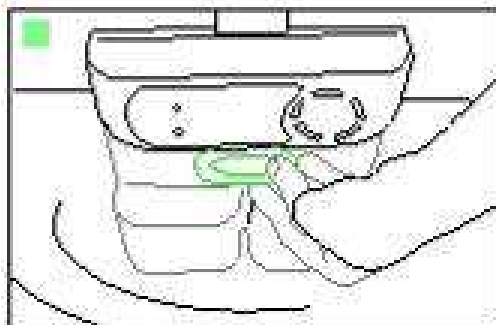
The use-by dates are given on the alkaline batteries. Be responsible, and take the old batteries back to your retailer instead of throwing them away.

Procedure:

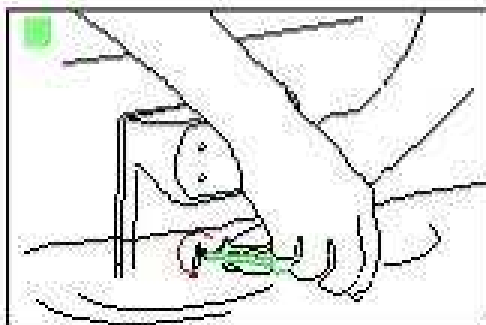
Put Sensor Espio™ in total shut-off mode (see §7.6).

Make absolutely sure that Sensor Espio™ is vertical when handled, with the battery compartment down.

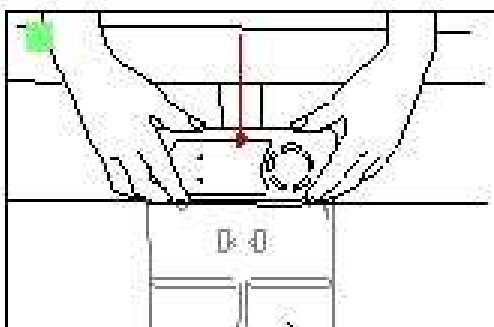
**DURING THIS TIME, YOUR POOL IS NOT PROTECTED. UTMOST VIGILANCE IS REQUIRED FROM THE PARENT/RESPONSIBLE ADULT.**



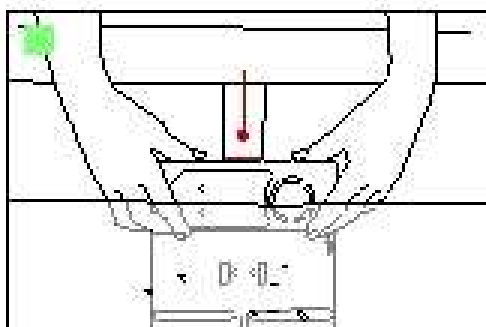
Remove the screw cover (if any) using a flat screwdriver.



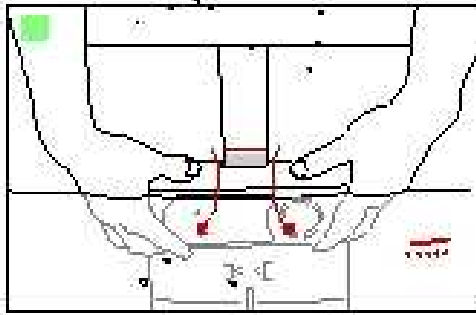
Unscrew the 2 front screws.



Slide Sensor Espio™ downwards along its support.



Bring Sensor Espio™ up to the attachment support stop.



Remove Sensor Espio™ from its attachment support.

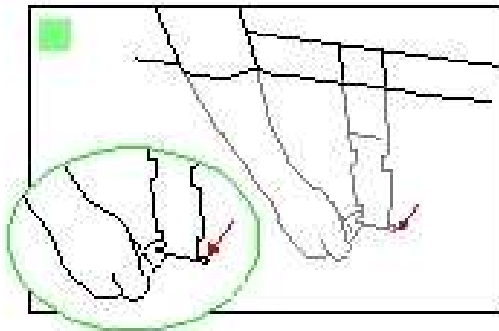


Take Sensor Espio™ out of the water, taking care to keep it vertical.

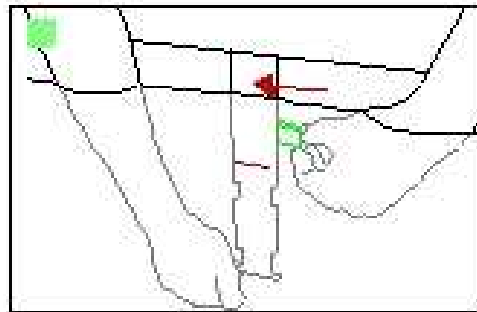
Replace the batteries as per the procedure described in §5.1

Remove any trace of moisture on the cover and in the compartment before inserting the new batteries.

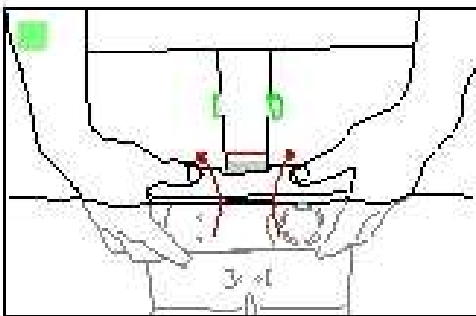
Once the batteries have been inserted, please replace your fall detector at its location in the swimming pool as follows:



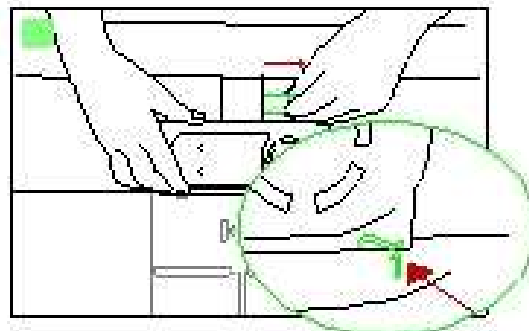
Move the attachment support away from the wall by grabbing it by the end.



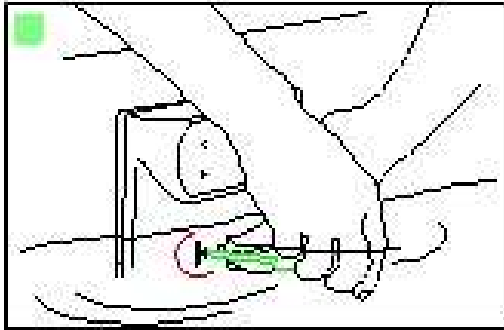
You must insert the shim supplied 5 cm above the mark, between the wall of the pool and the attachment support.



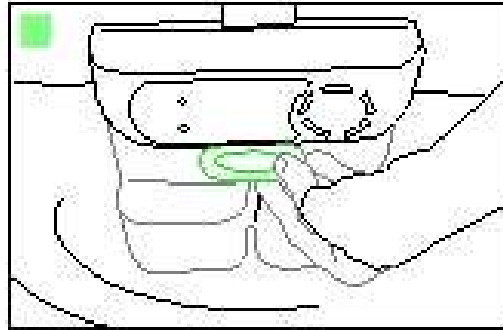
Position the top of Sensor Espio™ opposite the mark on the attachment support. Slide it upwards on the attachment support.



Remove the shim. Adjust Sensor Espio™ on its support in order to respect the immersion level.



Screw the 2 front screws.



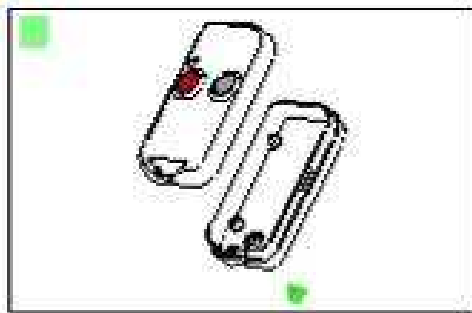
Clip on the screw cover.

Perform the validation tests again for a last check (see §5.8)

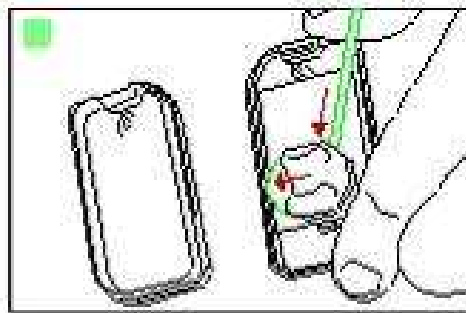
## 8.2 Remote control

When the battery is too low, the remote control indicates this with:

- either fast flashing of the red indicator light for 3 seconds;
- or the light stays off.



Unscrew the screw under the base.



Carefully take the old battery out using a screwdriver. Replace it with a new one (ref. 3V DL2032)

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## 9 I have a problem with my fall detector

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### 9.1 Two regular beeps are heard

Sensor Espio™ indicates that there is an operating problem by emitting 2 short, low-pitched beeps every minute. In this case, please contact your retailer or contact us to the address below (§9.2).

### 9.2 I cannot find the cause of my problem

Your device does not emit the 2 beeps as described above, and you cannot understand where the problem comes from.

In this case, please contact by phone, e-mail or mail the MG International After-Sales Service:

- E-mail: [usa@sensor-espio.com](mailto:usa@sensor-espio.com)
- Address:

Sensor Espio™ Customer Care  
P.O. Box 3839  
Cary, North Carolina 27519-3839  
[usa@sensor-espio.com](mailto:usa@sensor-espio.com)

Please provide a clear description of the problem encountered, so that your device can be processed quickly. Please also provide our technicians with your details and a sketch of your pool, including its dimensions (length, width, depth, recess if any) as well as the location of the return fittings, vacuum fittings, skimmer, and any other piece of equipment which might create disturbances, such as, for instance, a swim jet. Show the location of the fall detector on the edge of your pool.

This information will help our technicians to better understand the problem with your device, and to quickly find a solution.

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## 10 Frequently asked questions

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Q1. During the test phase with filtering or filtering + robot cleaner, the siren goes off accidentally, or your fall detector switches from monitoring mode (green light flashing) to non-monitoring mode (red light flashing)?

R1.1. Make sure that your fall detector is further than one meter away from the filtration system (return fittings, waste plug, skimmer, vacuum fittings, etc.) or waterfall or any other device that may disturb the pool at this place.

R1.2. Check the immersion depth of your fall detector. Rectify it if required (see §5.3 and §5.4)

R1.3. Perform the installation and validation tests under favorable weather conditions.

R1.4. Your fall detector is not suited to your type of pool. Ask your retailer or the after-sales service for advice: [usa@sensor-espio.com](mailto:usa@sensor-espio.com)

R1.5. Your robot cleaner is not compatible with your fall detector. Either it causes an event similar or identical to the fall of a child, or it is too powerful. Contact your retailer for advice.

R1.6. If none of these conditions seems to you to be the cause of the malfunction, ask your retailer for advice or contact our technical support: [usa@sensor-espio.com](mailto:usa@sensor-espio.com)

Q2. When the 18 lbs weight is dropped during the test phase, your fall detector takes longer than 20 seconds to set off the siren, or does not set it off at all?

R2.1. The dimensions of your pool are greater than 20 x 50 feet, or your pool is of a particular shape. A single fall detector is not sufficient. Contact your retailer for advice.

R2.2. Your fall detector is not positioned at the recommended location. The fall occurs beyond its 33 feet detection range. Position it at the recommended location (see §5.2).

R2.3. If none of these conditions seems to you to be the cause of the malfunction, ask your retailer for advice or contact our technical support: [usa@sensor-espio.com](mailto:usa@sensor-espio.com)

## 11 Safety advice related to the alarm

**This alarm system is not a replacement for common sense or individual responsibility. Its purpose is not to be a replacement for vigilance by a parent or responsible adult, which remains the vital factor in protecting children under the age of 5.**



### WARNING

**Improper installation, testing, maintenance or operation of this product can make the alarm fail to sound, increasing the risk of drowning.** Follow all instructions in this document to reduce this risk.

#### IMPORTANT SAFETY INFORMATION ABOUT YOUR POOL ALARM

**Even when correctly installed, maintained, tested, and operated, this alarm cannot completely prevent drowning:**



- **In some situations, the alarm will not sound when a child enters the pool.**
  - If a child enters the pool slowly or gradually, without disturbing the water much, the alarm may not detect it.
  - The alarm may not detect very small children (under 18 lbs) entering the pool.
  - When weather (e.g., wind) or other factors disturb the water, the alarm automatically reduces sensitivity or becomes **DISARMED**, to prevent excessive false alarms. When this happens, a child may enter the pool without the alarm sounding.
  - When the alarm is **DISARMED** to allow swimming, it will not sound if a child enters the pool or if a child is drowning.
  - After swimming with the alarm in **DISARMED** mode, the alarm will not sound if a child enters the water until the device **switches back to ARMED mode**. Depending on how disturbed the water is from swimming, this may take more than 10 minutes (depending on weather conditions) .
  - If the water level is too high or too low, the alarm will not function properly.
  - The alarm will not operate if the water in the probe is frozen or the surface of the pool is frozen.
  - If the alarm is in off mode, the alarm will not sound.
  - If the alarm is in “low-volume siren” mode, the alarm sound will be quieter than usual and may not be heard.
  - When a bubble pool cover is used at the same time.
- **The alarm does not rescue children from the water.** When the alarm sounds, a rescuer must respond immediately – a child rescued in less than 1 minute has a good chance of survival, but the odds of surviving rapidly decline the longer the child is immersed. To increase the chance of rescuing a child who enters the pool, a responsible adult capable of rescuing a child must be present, able to hear the alarm, and ready to respond immediately. Even an immediate response when the alarm sounds does not guarantee survival; the only sure way to prevent drowning is to keep children out of the pool.
- **The alarm does not rescue children from the water.** Use adult supervision and barriers, such as fences, enclosures, or pool covers, to keep children from entering the pool.
- **This device is not intended to replace any other safety consideration:** that is, adult supervision, lifeguards, fences, gates, pool covers, locks, and so forth, and some devices may not detect gradual entry. This device may not detect children entering the water gradually.

- **Check local requirements to determine the safety measures that are required in your jurisdiction.** Consider using multiple layers of protection, in addition to adult supervision and this pool alarm, to keep children away from the pool or alert adults to their presence. For more information, contact the Association of Pool and Spa Professionals ([www.TheAPSP.org](http://www.TheAPSP.org)).



- **This alarm does not replace responsible adult supervision.**
- **Whenever children are in an area where they have access to the pool:**
  - Assign an adult to be in charge of watching the children. This person must stay close to the children and actively look at what the children are doing at all times. Make sure that the adult knows it is its job, and that if he leaves, he must tell another adult to take over.
  - Make sure the adult in charge of watching the children is able to swim so he can rescue a child from the pool, and is able to call for emergency assistance. The adult should understand how the alarm works and know not to rely on the alarm in place of actively watching the children.
  - If there are many children near the pool, it may be necessary to assign multiple adults to watch them.
  - When the alarm is DISARMED to allow swimming, it will not sound if a child enters the pool or if a child is drowning.
- **Whenever children are in an area where they have access to the pool:**
  - Make sure that adults understand that they must keep children away from the pool, even with the alarm in place.
  - Make sure any adult who uses the pool understands how to operate the alarm, and that they must monitor the pool after swimming until the alarm returns to ARMED mode.

#### **GENERAL SWIMMING POOL SAFETY TIPS**

- Teach children to swim as early as possible. Do not allow a child who does not swim well to enter the pool unaccompanied. Consider putting Personal Flotation Devices (PFDs) on children who do not swim well.
- Learn first aid and CPR.
- Prohibit diving and jumping when small children are in the water nearby. Prohibit running and playing around the pool.
- Don't leave pool toys and floats in the pool or pool area that may attract young children to the water.
- Always keep the pool water clear and clean.
- Keep a telephone and list of emergency numbers accessible near the pool so you can call for help in an emergency, and so you can answer the phone without leaving children unattended.
- Keep rescue equipment, including a life ring and shepherd's hook, near the pool.
- Wet the back of the neck, arms and legs before entering cold water in order to accustom the skin to the water temperature and reduce the risk of a "cold shock" response.

#### **How to rescue a child from the pool**

1. Rescue the child first and yell for help. Call emergency services and begin CPR for one minute.
2. Extend a long object, such as a pole, shepherd's hook or towel, and pull in the child, or throw the child a floating object.
3. If the child is not responsive, grab a float and jump into the water. Turn the child face up, bring him or her to shallow water or pool steps, and lift the child up onto dry ground.
4. Roll the child onto his or her back while supporting the head and neck. Begin CPR if you are trained. If you are not trained in CPR, follow the instructions from the emergency personnel.
5. Replace wet clothes with warm blankets.

## 12 Warranty and after sales service

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### WARRANTY

MG International warrants this (Sensor Espio™) product (the “Product”) against any defects in materials and workmanship and shall provide warranty services and/or replacements during the periods stipulated below, beginning from the date of first purchase:

- Alarm system & siren – two (2) years parts and labor; and
- Any consumables (e.g. batteries, dehydrating sachets, magnets, etc.) included in the original Product – ninety (90) days free replacement.

In addition to the warranty exclusions noted below, this warranty does not apply to normal discoloration, fading, or minor deteriorations of exterior surfaces resulting from exposure to the elements, except to the extent that the Product’s intended performance is affected thereby.

Replacement or repair of any defective part or Product will not extend the applicable warranty period.

If any fault or defect with the Product arises, the following steps must be taken:

- (i) Notify MG International of the Product model number, serial number and details of the defect. On receipt of this information, MG International will provide service data or shipping instructions for defects that meet the warranty criteria; and
- (ii) If the Product is not covered by warranty, an estimate of charges will be furnished by MG International before any repairs are made.

MG International’s sole liability for any defective Product is limited solely to MG International repairing or replacing any Product or part thereof pursuant to this warranty. MG International reserves the right to replace any repairable parts with new or refurbished parts. In no event shall MG International be held responsible for any other costs, charges, expenses, losses or damages (direct, indirect, incidental, special, exemplary, consequential, or otherwise), of any kind whatsoever arising out of a defective Product.

**DURING ANY PERIOD IN WHICH THE PRODUCT IS DISABLED, WHETHER DUE TO DEFECT OR OTHERWISE, THE PURCHASER IS ADVISED TO INCREASE ACTIVE PERSONAL MONITORING AND SUPERVISION OF THE POOL AREA.**

### WARRANTY EXCLUSIONS

The warranty does not apply to any Product (i) that is not installed in compliance with the applicable Product documentation; (ii) for which the user does not successfully perform any installation tests, and subsequently conduct regular maintenance and tests, as required in the applicable Product documentation; or (iii) on which the original identification marks have been removed or modified or the warranty sticker (inside the Product) is damaged. Further, this warranty does not apply to, and MG International shall not be liable for: (i) any defect in, or failure of, the Product resulting from an accident, shock, negligence or misuse; (ii) any defect in, or failure of, the electrical supply to the Product; (iii) damage or defect due to lightning or other Acts of God; (iv) any defect of, or caused by, parts not supplied by MG International; (v) degraded or corroded components due to prolonged immersion of the Product in water other than as specified in the applicable Product documentation; (vi) modification, adjustment, repair, disassembly or maintenance performed by any party other than MG International or its approved subcontractors and retailers; or (vii) due to any other cause which does not result from a defect in materials and workmanship.

### WARRANTY DISCLAIMERS

EXCEPT FOR THE WARRANTIES SET FORTH ABOVE, MG INTERNATIONAL HEREBY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, WHETHER ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

THE PRODUCT IS NOT A REPLACEMENT FOR COMMON SENSE OR INDIVIDUAL RESPONSIBILITY. THE PRODUCT IS NOT INTENDED TO BE, AND IS NOT, A REPLACEMENT FOR ACTIVE PERSONAL SUPERVISION OF A POOL.

NEVER LEAVE A CHILD NEAR A POOL WITHOUT THE SUPERVISION OF A RESPONSIBLE ADULT. CHILDREN CAN DROWN QUICKLY AND SILENTLY. THE PRODUCT IS NOT A LIFE SAVING DEVICE AND IS MERELY AN AID TO A COMPREHENSIVE PROGRAM OF POOL SAFETY INCLUDING ADULT SUPERVISION. THE PRODUCT IS INTENDED FOR USE ON RESIDENTIAL SWIMMING POOLS ONLY AND MG INTERNATIONAL ASSUMES NO RESPONSIBILITY FOR INJURIES (INCLUDING DEATH) OR PROPERTY DAMAGES ARISING OUT OF THE USE OF THE PRODUCT, OR INABILITY TO USE THE PRODUCT, OPERATION OR MAINTENANCE OF THE PRODUCT.

This warranty is not transferable, and shall be null and void in the event of any transfer of ownership of the Product.



## 13 Monthly tests

In order to check the proper operation of your Sensor Espio™, it is essential that verification tests be carried out on a monthly basis (see §5.5) and that the results be recorded in the form below.

**In the event of malfunction, inform your retailer immediately and take the necessary measures to prevent access to your pool, and monitor it.**

Retailer contact details.....

Serial number of device .....

Date of purchase: .....

1. tests performed on:.....  
successful ☐ - not successful ☐

2. tests performed on: .....

successful ☐ - not successful ☐

3. tests performed on:.....  
successful ☐ - not successful ☐

4. tests performed on: .....

successful ☐ - not successful ☐

5. tests performed on:.....  
successful ☐ - not successful ☐

6. tests performed on: .....

successful ☐ - not successful ☐

7. tests performed on:.....  
successful ☐ - not successful ☐

8. tests performed on: .....

successful ☐ - not successful ☐

9. tests performed on:.....  
successful ☐ - not successful ☐

10. tests performed on: .....

successful ☐ - not successful ☐

11. tests performed on:.....  
successful ☐ - not successful ☐

12. tests performed on: .....

successful ☐ - not successful ☐

13. tests performed on:.....  
successful ☐ - not successful ☐

14. tests performed on: .....

successful ☐ - not successful ☐

15. tests performed on:.....  
successful ☐ - not successful ☐

16. tests performed on: .....

successful ☐ - not successful ☐

17. tests performed on:.....  
successful ☐ - not successful ☐

18. tests performed on: .....

successful ☐ - not successful ☐

19. tests performed on:.....  
successful ☐ - not successful ☐

20. tests performed on: .....

successful ☐ - not successful ☐

21. tests performed on:.....  
successful ☐ - not successful ☐

22. tests performed on: .....

successful ☐ - not successful ☐

23. tests performed on:.....  
successful ☐ - not successful ☐

24. tests performed on: .....

successful ☐ - not successful ☐

### Product references :

**Sensor Espio™ (ESP007-US)**

**Manufacturer / distributor:**

MG International - Z.I. Athélia II 13600 La Ciotat - France

infoconso@aquasensor.com

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