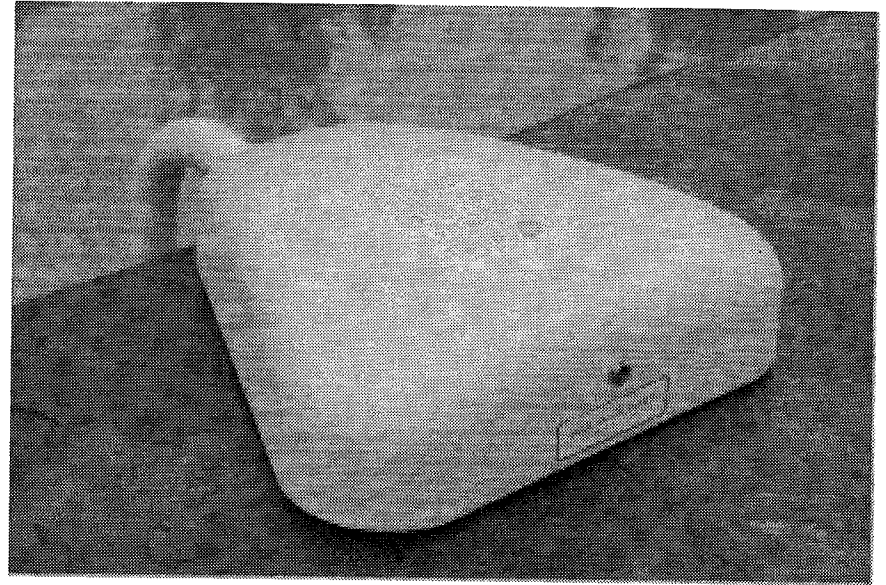


AQUAGUARD™

POOL ALARM SYSTEM



OWNER'S MANUAL

Revision 1.4



RJE Technologies, Inc.

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FCC REGULATIONS

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

Per FCC Part 15.21, any changes or modification not expressly approved by RJE Technologies, Inc. could void the user's authority to operate the equipment.

The minimum separation distance between the antenna and any part of human bodies should be 2.5 cm.

INTRODUCTION

Congratulations on the purchase of your AquaGuard Pool Alarm System. You have taken an important step in creating a safer environment for your children.

At RJE Technologies, Inc., makers of AquaGuard, we have over 7 years experience providing the world's best pool security systems. Thank you for including AquaGuard on your swimming pool or spa.

About This Manual

This manual will help you install and operate your AquaGuard Pool Alarm System properly.

Read this manual carefully and completely before installing and operating your AquaGuard system.

The AquaGuard Pool Alarm System is an important safety addition to your swimming pool or spa. However, AquaGuard by itself *is not* a lifesaving device and *does not* take the place of proper adult supervision and intervention when the alarm sounds.

We recommend the use of multiple layers of protection.

Contacting RJE Technologies, Inc.

Please feel free to write or call us with your comments or questions at the address below. We have trained staff available between 8:00 AM and 5:00 PM (Pacific Time), Monday through Friday.

RJE TECHNOLOGIES, INC.
Irvine, CA 92618
(949) 727-9399
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SAFETY PRECAUTIONS

Important! The AquaGuard system is a pool alarm; *not* a life-saving device. It should be used *along with* other safety equipment and precautions. It is intended to provide an *additional* level of security to your pool and/or spa.

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.

Always observe the following safety guidelines:

- **DO NOT** allow children to operate the AquaGuard system without adult supervision.
- This system is a protection device that sounds an alarm to indicate a potential **EMERGENCY** situation. When the alarm sounds, **PROMPT ACTION** by a responsible adult is essential to preventing serious injury or death.
- Be sure a **RESPONSIBLE ADULT** is present to observe swimming activities whenever the AquaGuard system is turned off.
- **AquaGuard is designed to detect a fall into the pool. AquaGuard may not detect a gradual entry into the pool.**

General Swimming Pool Safety Guidelines

- **NEVER** leave children unattended in or around the swimming pool or spa. Children under five years of age are at the **GREATEST RISK** for injury or death in pool-related accidents.
- **DO NOT** assume that swimming pool safety devices replace the need for adult supervision. **ALWAYS** have a responsible adult present to ensure safety. Give extra attention when several people are swimming at the same time.
- Teach your children to swim at an **EARLY** age.
- Instruct **ALL** pool and spa users in the location and proper operation of safety features. **BE SURE** that pool maintenance personnel understand and can properly operate the AquaGuard system.
- Keep **RESCUE EQUIPMENT** (such as a rubber life preserver and/or rescue pole) within easy reach.
- Keep a **TELEPHONE** close to the pool so it can be easily accessed in case of an emergency.
- Learn child **CPR** (cardiopulmonary resuscitation) and other life-saving techniques.
- Keep the pool area **CLEAR** of toys and other obstructions. Keep the water **CLEAN** and uncontaminated.
- Keep security gates **CLOSED** when the pool is unattended.

IF AN ACCIDENT OCCURS

- Get the person out of the pool as **QUICKLY** as possible.
- **IMMEDIATELY** call for help, and follow the advice given.
- Administer **CPR** (cardiopulmonary resuscitation) as directed or as necessary.
- Remove wet clothes and replace with warm covers.

QUICK REFERENCE GUIDE

The following is a "quick reference" guide to operating your AquaGuard Pool Alarm System. Refer to *OPERATING THE AQUAGUARD SYSTEM* on page 11 of this manual for *detailed* instructions to operate, monitor and maintain the system.

Quick Start Setup

- Step 1** Plug AC adapter into Remote Unit and wall outlet within 100 feet (30m) of detector and in direct line of sight. (Page 10)
- Step 2** Attach sensor tube (and extender if needed) to detector. (Page 8)
- Step 3** Insert batteries into detector (automatically turns unit on). **SYSTEM REQUIRES 5-15 MINUTES TO CALIBRATE AND ARM.** (Page 7)
- Step 4** Put detector into pool (verify proper depth for tube and proper location) (Page 8)
- Step 5** When detector arms (audio sequence of 10 beeps plus rear red LED blinking slowly), check Remote Unit to insure that "Armed" indicator LED (green) is blinking. (Page 10)
- Step 6** Drop full 2.5 gallon water jug into pool at furthest point away from detector and insure that alarm goes off (siren in the detector and in the Remote Unit).
- Step 7** Turn off alarm by pressing any button in detector keypad or by pressing "OK" button on Remote Unit.
- Step 8** Check remote operation by pressing OK three times to place detector in "swim" mode (green and red LED are now off). Wait a few seconds and press OK three times to re-arm detector. Green LED will blink to indicate "armed" mode.

ABOUT THE AQUAGUARD POOL ALARM SYSTEM

The AquaGuard Pool Alarm System is designed to detect a child, pet or object of a minimum size falling into a pool or spa. The system monitors the movement of water caused by a fall into the pool or spa by detecting changes in water pressure. When a change in water pressure is great enough to indicate a fall may have occurred, a siren sounds at the Detector Unit (by the pool or spa) and at the Remote Unit (inside the house).

AquaGuard technology has been extensively tested to **the most rigorous standard in the world for pool alarms (AFNOR)** as well as the U.S. ASTM standard. What does all this mean? It means, finally, there is a consumer-installed pool alarm system that provides excellent performance features combined with high immunity to wind, rain and other water surface disruptions.

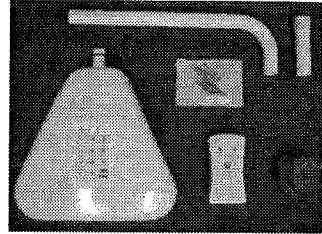
System Components

Your AquaGuard Pool Alarm System is shipped with the following components:

- Detector Unit (1)
- Remote Unit (1)
- AC Adapter (1)
- Sensor Tube (1)
- Sensor Tube Extension (1)
- Installation Kit (1)
- Owner's Manual (not shown)

You will also need the following item **NOT SUPPLIED** with the system:

- "D" cell batteries (4) to power the Detector Unit



Controls and Indicators

Each AquaGuard Pool Alarm System includes a main Detector Unit and a wireless Remote Unit with an AC adapter. The system can be operated from *either* unit using the controls and indicators described below.

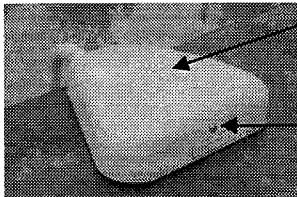
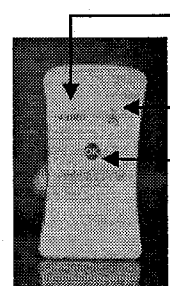
Swimming Pool Alarm Operation

One AquaGuard Pool Alarm System will cover a typical 16 X 32 foot (5 X10 meter) rectangular or kidney-shaped swimming pool. If the pool is larger, or irregularly shaped, two detectors will be needed (consult your AquaGuard dealer or call us directly with questions). When using two detectors, both are operated by one wireless Remote Unit.

The AquaGuard Pool Alarm System is operated using the keypad on the Detector Unit or the OK button on the Remote Unit. An audible "beep" sounds when you press a key on the Detector Unit keypad:

- Short "beep" for valid entry
- Long "beep" when an error is detected

The AquaGuard Pool Alarm System provides ease of use and intuitive "messaging" that lets you know the status of the system. When you want to use the pool, press 1234 at the Detector Unit's keypad or OK OK OK from the Remote Unit, putting the system in "swim mode". A short while after everyone has left the pool, the system will automatically re-arm.

 <p>Detector Unit is powered by four (4), standard D-size batteries</p>	<p>Detector Keypad – A PIN code places the detector unit in standby for swimming, arms the detector and clears an active alarm.</p> <p>Detector LED – Provides visual confirmation that the system is armed.</p> <table border="0"> <tr> <td>Low Battery</td> <td>Audible beeps (press "OK" once to acknowledge)</td> </tr> <tr> <td>Armed</td> <td>Slow blinking</td> </tr> <tr> <td>Not Armed</td> <td>LED off</td> </tr> <tr> <td>Rough Mode</td> <td>Fast blinking</td> </tr> </table>	Low Battery	Audible beeps (press "OK" once to acknowledge)	Armed	Slow blinking	Not Armed	LED off	Rough Mode	Fast blinking
Low Battery	Audible beeps (press "OK" once to acknowledge)								
Armed	Slow blinking								
Not Armed	LED off								
Rough Mode	Fast blinking								
 <p>Remote Unit is powered by an AC adapter</p>	<p>Green LED on Remote Unit – Provides visual confirmation when the system is armed. In this mode, an alarm sounds whenever a fall in the pool is detected.</p> <p>Red LED on Remote Unit – Provides visual confirmation of low battery in detector or loss of radio link.</p> <p>OK Button on Remote Unit – Places the detector in standby for swimming and also clears an active alarm.</p> <table border="0"> <tr> <td>Low Battery</td> <td>Audible beeps + Red LED</td> </tr> <tr> <td>Armed</td> <td>Green LED blinking</td> </tr> <tr> <td>Not Armed</td> <td>No LED's blinking</td> </tr> <tr> <td>Loss of Radio Link</td> <td>Red LED blinking fast (3 times/second)</td> </tr> </table>	Low Battery	Audible beeps + Red LED	Armed	Green LED blinking	Not Armed	No LED's blinking	Loss of Radio Link	Red LED blinking fast (3 times/second)
Low Battery	Audible beeps + Red LED								
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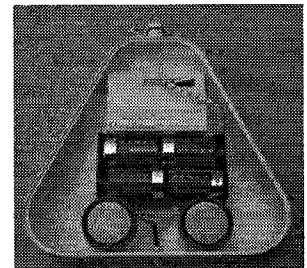
ASSEMBLING THE AQUAGUARD SYSTEM

Installing the Batteries

It is recommended that you use "long life" Alkaline batteries in the Detector Unit.

Detector Unit:

1. Remove the two screws at the rear of the Detector Unit.
2. Turn the unit upside down. Lift up slightly on the base plate (see photo). Slide the base plate toward the back of the unit, and remove the base plate from Detector Unit housing.
3. Install four "D" size batteries in the battery compartment. The unit is now on and is calibrating.
4. Slide the tab on the front of the base plate into the slot in the nose of the Detector Unit housing, and then lower the base plate into place.
5. Reinstall the two screws at the rear of the Detector Unit.
6. The Detector Unit will emit 10 short beeps, followed by one long beep, indicating that the system is armed. The rear LED will begin flashing. This can take 5-7 minutes.



Assembling the Detector Base Unit and Sensor Tube

You must assemble the Sensor Tube and Detector Unit before installing the unit at poolside.

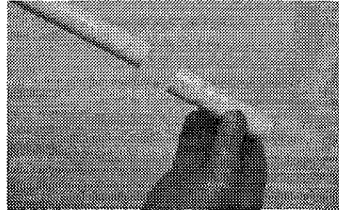
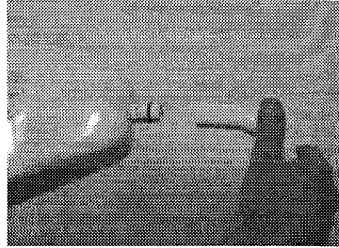
1. Remove the screw from the front fitting of the Detector Unit.

Make sure the o-ring is installed on the front fitting of the Detector Unit *before* installing the Sensor Tube.

2. Slide the short end of the Sensor Tube onto the front fitting of the Detector Unit. Twist the Sensor Tube back and forth slightly while applying firm pressure to slide the tube onto the fitting.

3. Line up the hole at the top of the Sensor Tube with the mating hole in the front fitting of the Detector Unit; then re-install the screw to secure the tube in place.

Depending on the installation site for the Detector Unit (see *Installation* on page 7 for details), you may need to install a Sensor Tube Extension. If so, simply slide the Extension onto the end of the tube. The tube must penetrate the water by 5-6 inches (13-15 cm).



Remote Unit:

Connect AC Adapter to Remote Unit.

The remote unit must always be powered by the AC adapter.

INSTALLING THE AQUAGUARD SYSTEM

Installation Considerations

There are a number of features that can affect AquaGuard's "detection" abilities. Keep the following system limitations in mind to ensure optimum performance of your AquaGuard system:

- The AquaGuard alarm must be audible from inside your home. *Be sure* to verify that the alarm can be heard inside your home when testing the system during installation. Care should be taken to place the Remote Unit in an accessible location and in direct line of sight of the detector. The remote should be as close to the pool as possible to insure a radio link.
- Pool cleaners (sweeps) that move around the pool, climb the pool walls, and fall back into the pool can look like a small child to the AquaGuard system. False alarms can occur if the pool sweep hits the Sensor Tube.
- Water movement caused by high velocity/high flow filtration systems can affect AquaGuard's performance.

- Extreme environmental conditions (strong wind, heavy rain) can affect AquaGuard's performance, or in rare cases, cause a false alarm. The time required to return to "armed" mode under these conditions may be longer than normal.
- In order to properly *detect*, the AquaGuard Detector Unit *must* be installed within *22 feet (7 meters)* of all possible fall locations. Larger pools should be equipped with an *additional* Detector Unit to meet this requirement. (Maximum 2 detectors on a pool)
- Pools with perimeter overflow are not compatible with AquaGuard.
- Vanishing edge (Infinity or zero edge) pools typically require two AquaGuard Detector Units.

Tools Required

You will need the following tools and materials to install and test the AquaGuard system:

To Mount On Deck:

- Marking pen
- Drill
- 1/4" (7 mm) Masonry drill bit

Other:

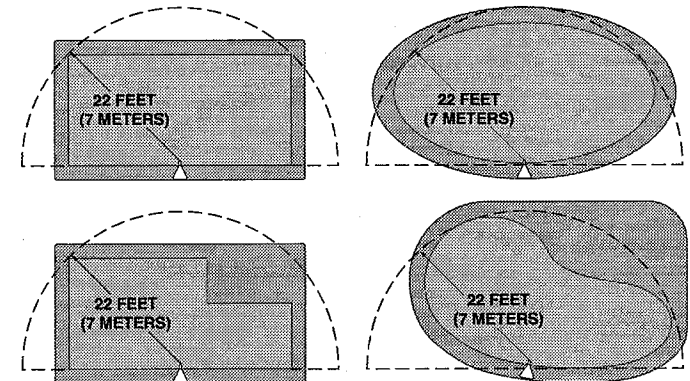
- Flat-head screwdriver
- 2.5 (19.5 liter) gallon water container
- Rope

Installation

Permanent installation of the Detector Unit on the pool deck (as described in STEP 6) is *optional*.

STEP 1 - Choose the Detector Unit Installation Site

- The Detector Unit *must* be installed within *22 feet (7 meters)* of all possible fall locations and must have *direct view* of the rest of the pool. In most cases, this location will be at the *middle* of the *longest side* of your pool. Typical examples of installation are shown below.



- *Be sure* that the Detector Unit *is not* installed next to any pool features (jets, water features, etc.) that may cause disturbance.
- *Be sure* that the Detector Unit can be accessed easily.

STEP 2 - Position the Detector Unit at the Chosen Site

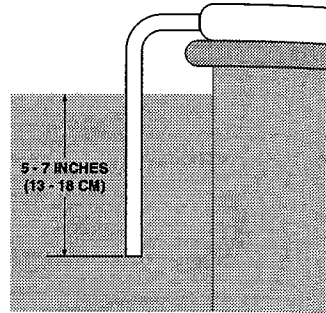
- Place the Detector Unit at the installation site so the Sensor Tube extends into the water.
- Make sure* the bottom of the Sensor Tube is between 5 - 7 inches (13 - 18 cm) below the water's surface.

If the Sensor Tube is too short, install a Tube Extension on the Sensor Tube to meet the required depth (see

Assembling the Detector Base Unit and Sensor Tube on page 6 for details).

If the Sensor Tube is too long, it may be necessary to cut the Tube to the proper length. **BE SURE** the water in the pool is at its normal level before measuring. Fill the pool if necessary. **BE SURE** to measure carefully before cutting the Tube.

If the tube end is at less than 5 inches (15 cm), unwanted alarms may occur. If the tube end is deeper than 7 inches (18 cm), the unit's "detection" sensitivity will be decreased.

**STEP 3 - Choose a Location for the Remote Unit**

- The Remote Unit *must* be placed within 100 feet (33 meters) of the Detector Unit and in direct line of sight.

The Selected location should have as few obstructions between the Remote Unit and the Detector Unit as possible. Interior and exterior walls or other obstacles will reduce the range of the Remote Unit.

- The remote must be at the same level or a level above the pool. The ideal location would be a window overlooking the pool.
- Do not place the remote unit in an underground basement.
- Choose a location that will allow the Remote Unit alarm to be heard throughout the house.
- Choose a location that is near an AC outlet to allow the Remote Unit to be powered by the AC adapter.

The Remote Unit must *always* be powered by the AC adapter.

STEP 4 - Establish the Radio Link

The AquaGuard system uses a radio transmitter/receiver to allow communication between the Detector Unit and the Remote Unit. You *must* establish the radio link to use the Remote Unit to monitor and control your AquaGuard system. Perform the following:

- Power up the Remote Unit by plugging the AC Adapter into the wall outlet.
- Wait for remote unit to establish radio link with detector. This may take up to 5 minutes.
- Remote Unit will beep once when RF Link has been established and "Armed" LED should be blinking if detector is armed.

- Press the **OK** button on the Remote Unit three times to put the Detector Unit into "swim" mode, then press the **OK** button on the Remote Unit three times again to put the Detector Unit into "armed" mode.

STEP 5 - Test the System for Detection**Prepare a Test Simulator**

- Fill a 2.5-gallon (19.5 liter) water container with enough water to weigh approximately 18 pounds (8 kg).
- Tie a 6-foot (1.8 meter) length of rope to the container handle.

Perform Test One

- Make sure* both the "**ARMED**" LED on the Detector Unit and the "green" LED on the Remote Unit are on.

If the LEDs *are not* on, the system *is not* "armed". Allow *additional time* for the water in the pool to settle enough to allow the Detector Unit to "arm."

- Place the test simulator on the edge of the pool, 4 - 6 feet (1.2 - 1.8 meters) from the Detector Unit.
- Hold the rope, and roll the test simulator into the pool. Both the Detector Unit and the Remote Unit alarms should sound.

If the alarms *do not* sound, it may be necessary to change the location of the Detector Unit.

Reset the System

- Press any key on the Detector Unit keypad to turn the alarm off.
- Remove the test simulator from the pool.
- Wait 6 to 10 minutes to allow the unit to automatically "re-arm." When the water has stabilized and the unit is "armed", the "**ARMED**" LED will blink and the beep sequence will repeat.

Perform Test Two

- Make sure* both the "**ARMED**" LED on the Detector Unit and the "green" LED on the Remote Unit are on.

If the LEDs *are not* on, the system *is not* "armed". Allow *additional time* for the water in the pool to settle enough to allow the Detector Unit to "arm."

- Place the test simulator on the edge of the pool, at the point *farthest* from the Detector Unit, not to exceed 22 feet (7 meters).
- Hold the rope, and roll the test simulator into the pool. Both the Detector Unit and the Remote Unit alarms should sound.

If the alarms *do not* sound, it may be necessary to change the location of the Detector Unit.

Reset the System

- Press any key on the Detector Unit keypad to turn the alarm off.
- Remove the test simulator from the pool.

The Detector Unit's alarm will sound if the Unit's cover is opened while the system is on. Enter **1234** on the Detector unit keypad to deactivate the alarm prior to opening cover.

STEP 6 - Mount the Detector Unit Base Plate (optional)

- Turn off the system by pressing 1234*99 before opening the detector.
- Mark the location of the Detector Unit on the pool deck. Remove the Detector Unit from the pool.
- Remove the two screws at the rear of the Detector Unit, and slide the base plate off the Detector Unit housing. Remove the batteries from the Detector Unit to prevent the "anti-theft" alarm from activating.
- Place the base plate at the previously marked position. Use a permanent marker to mark the locations of the three holes in the base plate. Set the base plate aside.
- Use a drill and 1/4" (7 mm) masonry bit to drill three holes, 3/4" (19 mm) deep, at the marked locations.

Be sure to drill the holes straight and perpendicular to the surface of the pool deck. If the holes are drilled at an *angle*, the base plate may not secure properly.

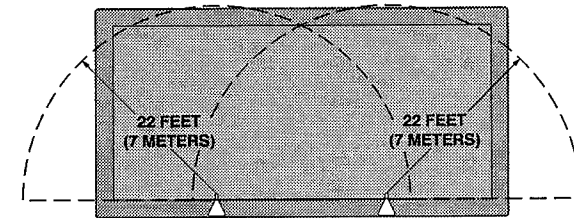
- Install one plastic insert (provided) into each of the drilled holes.
- Place the base plate on the pool deck over the drilled holes. Secure the base plate to the pool deck with the three screws provided.
- Re-install the batteries in the Detector Unit. Place the Detector Unit housing over the base plate. Lift up slightly on the rear of the housing. Slide the tab on the front of the base plate into the slot in the nose of the Detector Unit housing; then lower the housing onto the base plate.
- Re-install the two screws at the rear of the Detector Unit.

STEP 7 - Confirm the System is On and Armed

- Wait 6 to 10 minutes to allow the unit to automatically "arm." When the water has stabilized and the unit is "armed", the "ARMED" LED will blink and the beep sequence will repeat.
- Establish the radio link as described in step 4.
- Repeat the tests described in step 5.

Installing Two Detector Units in a Pool

The AquaGuard Pool Alarm System can be configured with *two* Detector Units when required due to pool size or to accommodate a vanishing edge (Infinity) type design, as shown on the following page.



- Assemble and position the Detector Units as described in STEP 1 and STEP 2.
- Establish the Radio Link
 - Turn the Detector Units (at pool edge) off by pressing 1234*99
 - Power up the Remote Unit by plugging the AC Adapter into the wall outlet.
 - Turn the Detector Units on by pressing 1234 on the keypad.
 - Wait until the Detector Units arm and observe that the green LED on the Remote Unit is flashing.
 - Press the **OK** button on the Remote Unit three times to put the Detector Units into "swim" mode, then press the **OK** button on the Remote Unit three times again to put the Detector Units into "armed" mode.

OPERATING THE AQUAGUARD SYSTEM

Operating the System

Your AquaGuard system has *five* operating modes or states. This section describes the AquaGuard modes of operation, and provides the procedures for entering and/or exiting each mode. You can control and monitor your AquaGuard system from either the Detector Unit or the Remote Unit. Refer to *Controls and Indicators* on page 4 for general instructions on using system controls and indicators.

AquaGuard Operating Modes

Condition	Indication		Response
	Detector Unit	Remote Unit	
"ARMED" Mode	Red LED blinks once every two seconds	Green LED shows a steady series of single blinks. (Every 2 seconds)	"ARMED" Mode is the <i>normal</i> operating mode for the AquaGuard system. When the AquaGuard system is in "ARMED" Mode, an alarm sounds whenever a fall is detected (or there is similar activity in the pool).
"SWIM" Mode	Red LED is off	Green LED is off; Red LED is off	You <i>must</i> place the AquaGuard system in "SWIM" Mode <i>whenever</i> you wish to use your swimming pool. When the AquaGuard system is in "SWIM" Mode, activity in the pool <i>will not</i> trigger the alarm. <i>Be sure</i> a RESPONSIBLE ADULT is present to observe swimming activities whenever the system is placed in "SWIM" Mode. To place the system in "SWIM" Mode: <ul style="list-style-type: none"> • From the Detector Unit: Enter 1234 on the Detector Unit keypad. • From the Remote Unit: Press the Remote Unit OK button <i>three</i> times. Once you have placed the system in "SWIM" Mode, you <i>must</i> enter the pool within 4 to 5 minutes, or the system will return to "ARMED" Mode <i>automatically</i> . You can also <i>manually</i> reactivate the alarm as described below.
Re-arm system	Red LED blinks slowly, and audible beeps sound for 10 seconds before the system returns to "ARMED" mode	Green LED blinks slowly while arming	After swimming, the AquaGuard system will <i>automatically</i> return to "ARMED" Mode after 4 to 5 minutes. If desired, you can <i>manually</i> return the system to "ARMED" Mode when the pool is calm. To reactivate the alarm manually: <ul style="list-style-type: none"> • From the Detector Unit: Press the OK button on the keypad <i>twice</i>. • From the Remote Unit: Press the Remote Unit OK button <i>three</i> times.
Alarm Condition	Siren sounds.	Siren sounds.	When an entry or another activity in the pool is detected, the alarm sounds. YOU MUST RESPOND IMMEDIATELY. Press any key on the Detector Unit keypad or the OK button on the Remote Unit to silence the alarm. NOTE: The alarm will turn off <i>automatically</i> three minutes after activation.
OFF Mode	NONE	NONE	You can turn the AquaGuard system OFF to change the Detector Unit batteries, or to perform other pool maintenance activities. NOTE: <i>Be sure</i> a RESPONSIBLE ADULT is present to observe swimming activities whenever the system is turned OFF. To turn the system OFF: Enter 1234*99 on the Detector Unit keypad. To turn the system ON: Enter 1234 on the Detector Unit keypad.

Managing the System

You can use the LED indicators and alarm siren on the Detector Unit or the Remote Unit to monitor the current state of your AquaGuard system. The following table shows a list of possible system conditions, the indications associated with each condition, and the proper responses/remedies to restore normal system operation.

Be sure to correct system faults *promptly* to avoid an interruption in protection. If a fault *cannot* be corrected, contact your reseller for assistance.

Alert and Fault Signal Indications

Condition	Indication		Response
	Detector Unit	Remote Unit	
Fall or activity in the pool while system is in "ARMED" mode.	Siren sounds.	Siren sounds.	<ul style="list-style-type: none"> • Press <i>any</i> key on the Detector Unit keypad; or • Press the OK key on the Remote Unit <i>once</i>. • <i>Immediately</i> determine whether an accident has occurred, and provide aid as necessary.
Anti-Tampering alarm activated (Detector Unit opened <i>without</i> turning unit off)	Siren sounds.	Siren sounds.	<ul style="list-style-type: none"> • Enter your access code on the Detector Unit keypad. NOTE: The Anti-Tampering alarm can be cancelled <i>only</i> at the Detector Unit.
Low battery in Detector Unit	Audible beeps/sound	Red LED shows a steady series of two flashes (two per second) Audible Beeps	<ul style="list-style-type: none"> • Press OK on the Detector Unit keypad to cancel the audible beeps (BATTERY indicator will continue flashing until batteries are replaced). • Replace Detector Unit batteries <i>as soon as possible</i> to avoid an interruption in protection (see <i>Replacing the Batteries</i> on page 14 for details).
Loss of radio link		Red LED shows a steady series of flashes (3 per second)	<ul style="list-style-type: none"> • Relocate remote until link is established
Detector fault or "rough" condition in pool (accurate detection cannot be assured due to disturbance in water)	Rear LED is blinking fast (2 pulses/sec)	Both LEDs are off	<ul style="list-style-type: none"> • Check to see if water is agitated due to recent swimming activity or by environmental "noise" (wind, rain, etc.). If so, allow 6 to 12 minutes for water to settle and unit to "arm." NOTE: In case of "rough" condition, it may be necessary to <i>temporarily</i> disable the system to prevent a "false" alarm. <i>Be sure</i> to monitor activity around the pool <i>whenever</i> the alarm is disabled. <i>The system will re-arm automatically when the rough condition is no longer present</i> <ul style="list-style-type: none"> • <i>Make sure</i> the end of the Sensor Tube is 5 to 7 inches (13 to 18 cm) below the water surface. If necessary, add water to pool, or install Extension Tube on Sensor Tube • Assembling the Detector Base Unit and Sensor Tube on page 6 for details. • If problem <i>cannot</i> be corrected, contact your reseller.
General system fault	Red LED flashes rapidly and permanently.	Red LED flashes rapidly and permanently.	<ul style="list-style-type: none"> • The AquaGuard system is not functional. • Contact your reseller immediately.

MAINTAINING THE AQUAGUARD SYSTEM

Once installed, your AquaGuard system requires very little maintenance. To ensure trouble-free system operation, perform the following maintenance functions at regular intervals:

- **Battery Replacement:** Replace the Detector Unit batteries (see *Replacing the Batteries* on page 14 for battery replacement procedures) whenever a low battery is indicated (see *Managing the System* on page 12 for a description of the low battery indication).
- **Sensor Tube Check:** Check the sensor tube monthly to ensure it is secure and damage-free (no cracks, breaks, deformation, etc.). *Make sure* the bottom of the sensor tube is 5 - 6 inches (13 - 15 cm) below the surface of the water. Add water to the pool, or install the Sensor Tube Extension (see *System Components* on page 4 for more information) if needed.

- **Storage During Winter:** If the water in your pool *normally* freezes during the winter months, the Detector Unit *must* be removed for storage before freezing occurs (see *Special Considerations During Winter* on page 14 for more information).

Replacing the Batteries

Replace the Detector Unit batteries whenever a low battery is indicated (see *Managing the System* on page 12 for a description of the low battery indication).

Be sure to turn the system off whenever replacing the Detector Unit batteries. If the unit *is not* turned off, the unit's Anti-Tampering Alarm will sound (see Anti-Tampering Alarm on page 15 for more information).

Detector Unit:

1. Press **1234*99** on the Detector Unit keypad(s) to turn the system "off."
Note: You will not hear a beep when you press the second 9.
2. Remove the two screws at the rear of the Detector Unit. Lift up slightly at the rear of the Detector Unit housing, and slide the unit forward off of the base plate.
3. Remove the old batteries from the battery compartment. Install four "D" size batteries in the battery compartment.
4. Place the Detector Unit housing over the base plate. Lift up slightly on the rear of the housing. Slide the tab on the front of the base plate into the slot in the nose of the Detector Unit housing; then lower the housing onto the base plate.
5. Re-install the two screws at the rear of the Detector Unit.
6. The system will now start the arming sequence. The Detector Unit will emit 10 short beeps, followed by one long beep, indicating that the system is armed. The rear LED will begin flashing.

Re-establish the Radio Link:

- Turn the Detector Unit (at pool edge) off by pressing **1234**.
- Power up the Remote Unit by plugging the AC Adapter into the wall outlet.
- Turn the Detector Unit on by entering 1234 on the keypad.
- Wait until the Detector Unit arms and observe that the green LED on the Remote Unit is flashing.
- Press the **OK** button on the Remote Unit three times to put the Detector Unit into "swim" mode, then press the **OK** button on the Remote Unit three times again to put the Detector Unit into "armed" mode.

Testing the System

It is strongly recommended that a System Test be performed periodically using the procedure described in *Installation*, STEP 5 on page 9.

Special Considerations During Winter

The AquaGuard system *will not* operate if the water in your pool becomes frozen. Additionally, allowing water to freeze in the Sensor Tube can damage the system's sensing mechanism.

If your pool is located in an area where freezing *normally* occurs and you *do not* intend to maintain your pool in a heated state throughout the winter season, you should remove the Detector Unit *before* freezing occurs. Store the unit indoors and re-install when the water has thawed.

Be sure to remove the batteries from the Detector Unit when placing the unit in storage for a prolonged period. Corrosion may occur if the batteries are left in the unit during storage.

Anti-Tampering Alarm

When the AquaGuard Detector Unit is installed and initialized, its anti-tampering alarm system is enabled. Any attempt to dismantle or remove the Detector Unit without first turning the system off will cause the alarm siren to sound. To deactivate the alarm, enter **1234*99** on the Detector Unit keypad.

Be sure to turn the system "off" before removing the Detector Unit for maintenance or storage by entering **1234*99** on the Detector Unit keypad.

Changing the Access Code

The default access code for your Detector Unit is **1234**. To change it to a different access code, do the following:

1. Enter **1234**.
2. Enter * 0 1
3. Enter a new 4-digit access code.

TERMS AND CONDITIONS OF WARRANTY

The AquaGuard™ Pool Alarm System manufactured by RJE Technologies, Inc. is warranted to be free from defects in workmanship and materials under normal use and service when correctly installed, used and maintained. This limited warranty is subject to the following conditions and qualifications.

Duration of the Warranty:

AquaGuard™ products are warranted for a period of three (3) years from the date of purchase. RJE Technologies, Inc shall, at its option, repair or replace defective products free of charge within the three-year period. Warranty replacements or repairs will not extend the three-year period.

Scope of Warranty:

This limited warranty is effective on AquaGuard™ products only. It does not cover any product, component, part or accessory, which AquaGuard™ determines to have become defective through abuse or neglect. In addition, the limited warranty will be voided if the equipment has been modified, altered, or contains components, parts, or other accessory products that are not part of the AquaGuard™ product line.

RJE Technologies, Inc shall not be responsible to customers or any third party for loss, damage, or injury caused by, resulting from, or in any way attributable to the use or operation of AquaGuard™ products or any special, indirect, incidental or consequential damages arising from the use of AquaGuard products.

Purchaser's sole remedy for any AquaGuard™ product found to be defective will be to have it repaired or replaced by an AquaGuard retailer.

Please contact the AquaGuard™ Customer Service Department for instructions or assistance.

Exclusions (That are not covered):

The above warranties do not apply to:

- Conditions resulting from a defect in a component part which is not part of AquaGuard™.
- Conditions resulting from failure to provide reasonable and necessary maintenance in accordance with AquaGuard™ Owner's Manual.

- Conditions resulting from misuse, abuse, negligence, accident or alteration.
- Normal discoloration, fading and minor deterioration of exterior surfaces resulting from exposure to the elements, except conditions that do or will affect performance.
- Conditions resulting from improper pool maintenance, water level, and pool equipment usage.
- Items consumed through use.

Warranty Disclaimers and Additional Information:

The warranty set forth above is in lieu of, and RJE Technologies, Inc hereby disclaims and excludes, all other warranties, express or implied, including without limitation, any warranty of merchantability or fitness for a particular use. RJE Technologies, Inc is not liable for, and purchaser waives any right of action if has or may have against RJE Technologies, Inc for any consequential or special damages arising out of any breach of warranty, and for any damages purchaser may claim for damages to any property or injury or death to any person arising out of it's purchase of the use, operation or maintenance of the product. RJE Technologies, Inc will not be liable for any damage done by unauthorized repair work, unauthorized replacement parts, from any misapplication of them, or from damage due to accident, abuse, rodents, weather, conditions creating improper pool use of maintenance, or acts of god.

RJE Technologies, Inc will not be responsible for damages or events from improper electrical supply. In no event shall RJE Technologies, Inc be liable for loss damage, or expense directly or indirectly arising from the use of the AquaGuard™, or from any other cause, except as expressly stated in this warranty.