SMARTPOOL®

POOLEYE®

SWIMMING POOL ALARM SYSTEMS

MODEL NO. PE23

INTRODUCTION

Thank you for purchasing the PoolEye PE23 swimming pool alarm. This product is the result of years of research and development and is loaded with patented features that will make your swimming environment a safer area for yourself, your family, guests, and pets.

This product has been designed using innovative and intelligent software coupled with high-tech sensors to provide you with an efficient yet trouble-free solution to pool security. It has been engineered to detect the intrusion into the pool by a young child, without annoying false alarms caused by wind, rain, pool filters, floating objects, or automatic cleaners. It has been tested to the toughest standards all over the world and is now ready for your pool.

VITAL INFORMATION

The PE23 is easily installed on most inground and aboveground pools with the exception of negative edge or infinity pools. Please read the entire manual before beginning the installation of this alarm. Once read through, follow the manual step-by-step to insure a quick and easy installation process. The PE23 is a pool alarm designed to detect an intrusion into an unsupervised pool. It is not a lifesaving device and should not replace the supervision of children around a pool by responsible adults. It is recommended that a pool be secured by multiple layers of protection including a gate, a gate alarm, pool cover, etc...

BASIC POOL SAFETY

This device is not intended to replace any other safety consideration - adult supervision, lifeguards, fences, gates, pool covers, locks, and so forth; some devices may not detect gradual entry.

It is imperative that if the alarm sounds, you react quickly as drowning can occur in as little as three minutes.

Never leave children unattended near a pool.

Once installed, the system should be tested weekly to insure it is in good working order.

Layers of protection add to the security of the pool. A barrier fence should always be used around a pool in conjunction with a gate or door alarm, such as SmartPool's YardGard® YG03, to alert the responsible party that an unwanted intrusion to the pool area has occurred.

Make sure that the alarm is situated in an area where the audible alarm can easily be heard.

Be sure to maintain a proper water level, as high or low water levels can trigger false alarms or allow for an intrusion to be undetected.

Be prepared to deal with an emergency should one occur. Have an action plan in place and a working phone close to the pool to handle an emergency. To best avoid an emergency please follow these precautionary procedures for pool safety:

Always keep the pool water clean and clear. A green or cloudy pool (caused by improper maintenance) can conceal a child or individual that has fallen into the pool and is on the bottom. If an individual sinks to the bottom of a green pool and cannot be seen, it will delay the rescue procedure, wasting precious seconds. This is a highly dangerous condition.

Children should be closely monitored when in proximity of the pool.

Added supervision is required if more people or children are in or around the pool.

Teach your children to swim as soon as possible.

Do not allow children who cannot swim to enter the pool area without a life vest on.

Always keep the water clean and clear so all objects on the bottom of the pool are visible.

Learn life-saving techniques, such as CPR, especially for small children.

Do not leave toys or objects floating in an unattended pool. This is an invitation for a child to enter an unattended pool.

Prohibit running near the pool.

Store pool chemicals out of reach of children

If water temperature drops below 32 degrees Fahrenheit or 0 Celsius the alarm must be removed to prevent damage to the unit.

INSTALLING THE PE23

Begin the installation by carefully unpacking the box and checking to ensure all parts are present. If any parts are missing contact Smartpool Customer Service at 732 730 9880 for replacement parts. See the parts list below.

A. Main Alarm Body.

B. Alarm Mounting Plate.

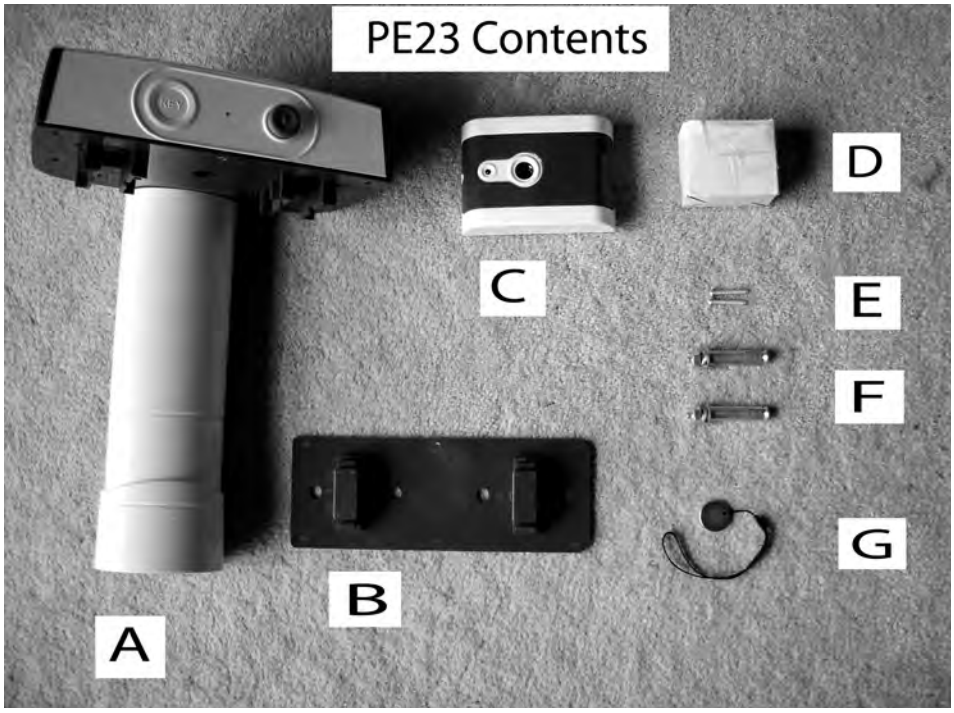
C. Remote Siren.

D. AC Adapter for Remote Siren.

E. Mounting screws for Main alarm Body.

F. Mounting Anchors.

G. Magnetic Key.



REQUIRED TOOLS

- Pencil
- Phillips head screwdriver
- 1/2" drill bit
- Electric Drill
- Adjustable wrench
- Masking tape

CHOOSING THE LOCATION TO INSTALL ALARM

The location of your alarm is critical to ensure that it performs to its optimum abilities. On the following page is a diagram showing the most popular pool styles and their optimum mounting points on the pool. Decide which configuration is closest to your pool and continue with the installation.

In configuration A the PE23 is effective on pools up to 16' x32' and should be placed at location 1 or 2.

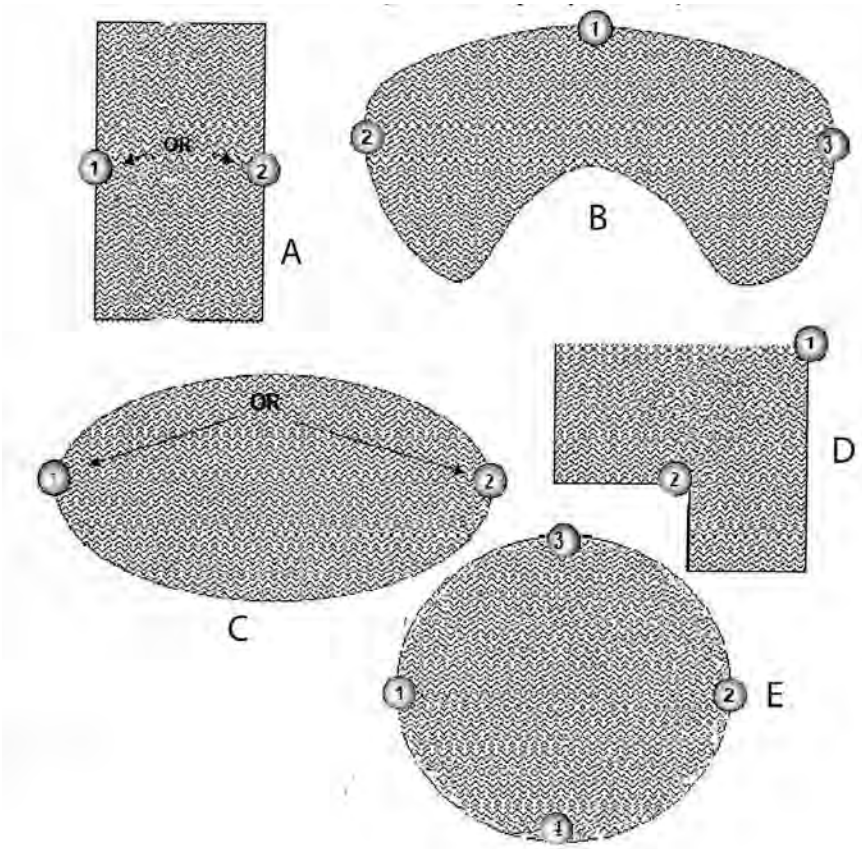
In configuration B the PE23 should be installed at location 1 if the pool size is 26 feet (8M) or less. If the pool exceeds 26 feet (8M) then a second alarm is required. In this case, install the alarms at location 2 AND 3.

In configuration C the PE23 should be installed in pools 24 feet (8m) or less, at location 1. For pools larger than 24 feet, a second alarm should be added at location 2.

In configuration D the PE23 should be installed in pools 17 feet or less in location 1. For pools larger than 17 feet a second alarm should be added to location 2.

In configuration E the PE23 should be installed in any of the 4 locations and a second unit should be installed if the diameter is greater than 24 feet.

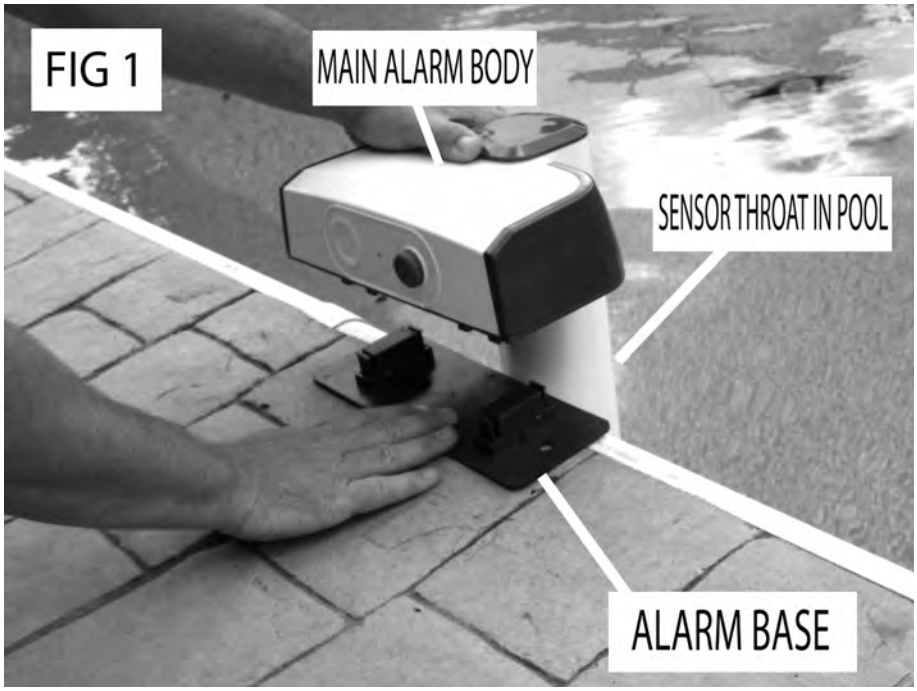
CHOOSING THE LOCATION TO INSTALL ALARM (cont.)



INGROUND INSTALLATIONS
(Aboveground installations can be found after step 7)

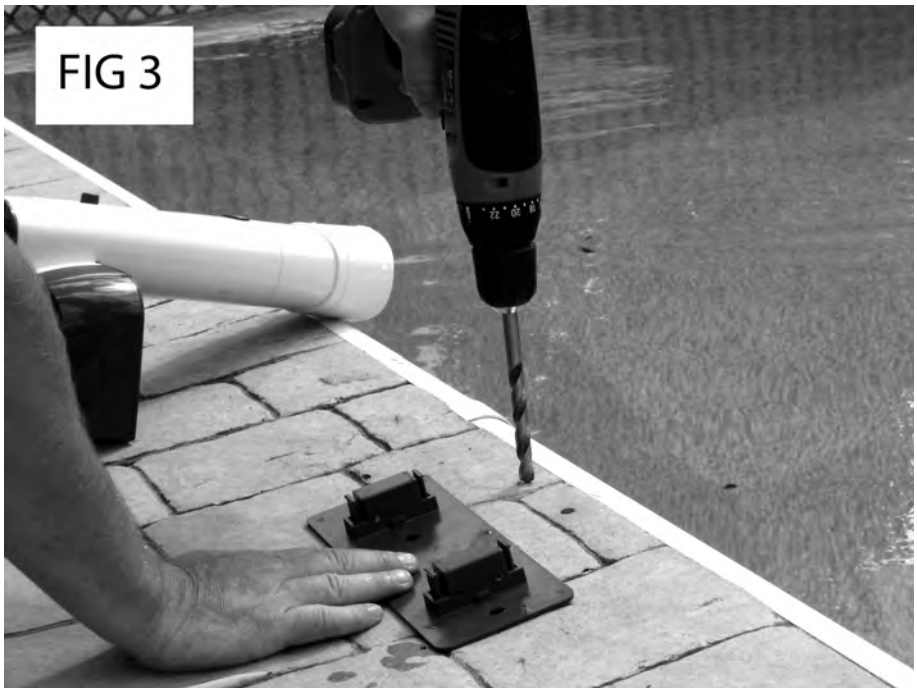
STEP 1

Test fit the alarm (A) in the location as predetermined by the configuration above. The alarm sensor pipe throat should be in the water as shown, and the mounting area for the base shall be level and flat. The alarm base (B) should snap into the bottom of the main alarm body easily while allowing the sensor throat to extend directly into the pool at a 90 degree angle as shown in FIG 1.



STEP 2
Once the location of the base plate (B) has been determined, use a pencil to mark two holes to be drilled into the deck to secure the alarm. There are four holes in the base, choose one hole on the left side and one on the right. See Fig 2.

STEP 3
After the holes are marked, drill the two holes using a ½ inch masonry drill. ****NOTE** TAKE GREAT CARE USING POWER TOOLS AROUND THE POOL. BE SURE THAT NO PEOPLE ARE IN THE POOL DURING ANY PHASE OF THE INSTALATION. REMOVE ALL POWER TOOLS FROM THE POOL AREA AS SOON AS THAT PHASE IS COMPLETE.**** The holes need to be drilled 1 ¾ inches deep (Fig 3). The easiest way to determine how deep to drill is to measure 1 ¾ inches from the end of the drill bit. Mark that location with a piece of tape. When drilling, stop when the deck is level with the tape. The hole should now be 1 ¾ inches deep. Remove all dust and debris from the holes. Remove the nuts and washers from the mounting anchors (F), and insert the mounting anchors into the previously drilled holes. To mount on a wood deck, use ½ inch x 1 inch lag screws with ½ inch washers (not included)

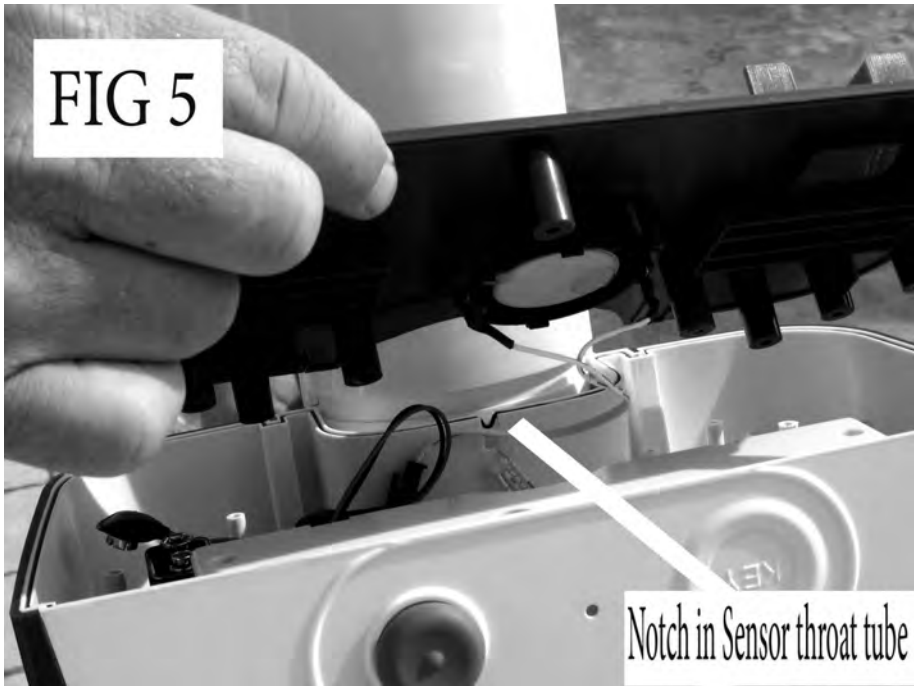


STEP 4
Install the alarm base over the two anchors. Place the flat washer over the anchor threads, then the lock washers. Next screw the two nuts onto the anchors and tighten snugly using a wrench as shown in Fig 4.

STEP 5

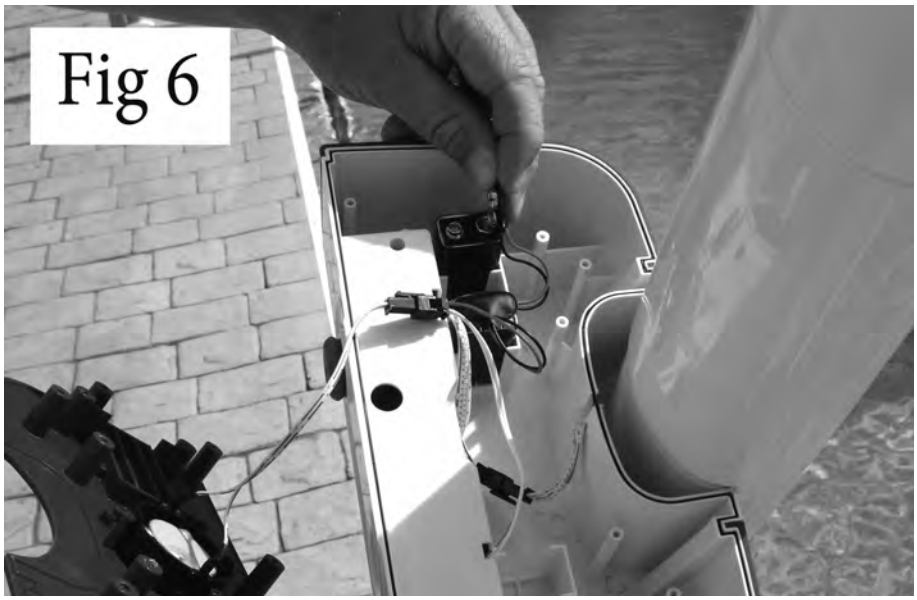
Turn the main alarm body over so the sensor throat is pointing skywards. Remove ALL 15 screws which secure the waterproof cover. Lift the cover off by carefully lifting it up and away from the side opposite of the sensor throat as shown in Fig 5. **Be careful not to lose any of the screws. When the batteries are installed, the alarm will sound and it is very loud! Be prepared and do not drop the unit!**

Slide two **NEW** long life 9V alkaline batteries (not included) into the battery holders as shown in Fig 6. Connect the batteries to the battery connectors. To ease installation, place the magnetic key over the round white embossed area on the front of the alarm labeled **KEY**. At the same time, press the blue push button. The alarm will sound in one long burst to signify that it is in swim mode. The LED indicator located between the key area and the push button will flash red. The alarm is on but will not sound and can be handled for 5 minutes without the siren sounding.



STEP 6

Tuck all wires into the main alarm body and reinstall the waterproof cover. Take care to slide the semicircular area at the back of the cover under the notch in the sensor throat tube **FIRST** as shown in Fig 5. Be sure that the cover is fully aligned and seated, and then replace **ALL 15 SCREWS.**



STEP 7

The alarm is now ready to be attached to the mounting base. Simply snap the main alarm body into the mounting base. Use a Phillips head screwdriver to install the mounting screws (E), into the base to secure the main body to the base as shown in Fig 7.

MOUNTING THE ALARM TO THE TOP RAIL OF AN ABOVEGROUND POOL

Once the desired location is determined, it is time to install the alarm. A properly secured alarm is crucial to its use and function. Please read through the instructions before installing the alarm.

1) Remove the alarm from the box. *Note that the mounting base is attached to the alarm; leave the mounting base on for the second and third steps.

2) Using a Phillips-head screw driver; remove the (2) screws (one on each side) securing the alarm to the mounting base. See Figure 1

3) Using a tape measure; determine the center of the top rail between two uprights and make a small mark with the pencil. On either side of the center mark measure 1 3/8" and mark them off.

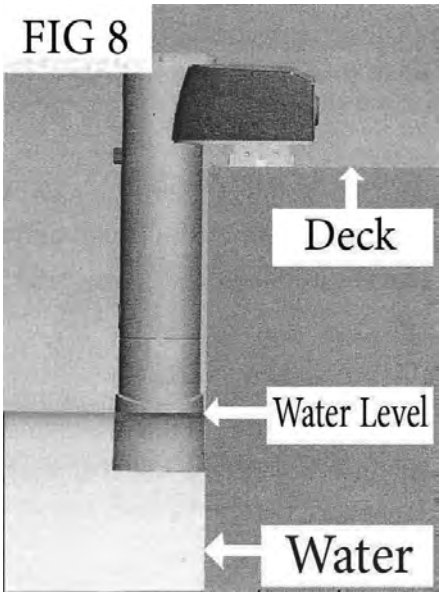
4) Take the mounting base and line up the two inside holes with the 2 marks previously made. Note: the base may need to be moved in or out depending on where the wall and liner line up.

5) Using a 1/4" drill bit; drill the marked holes. IMPORTANT make sure you have enough clearance to perform this step. Do not install the alarm if there is a risk of puncturing the pool wall or liner.

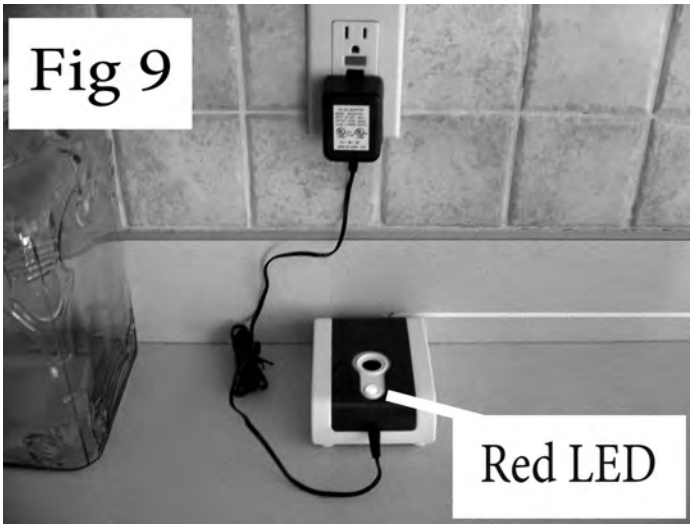
6) Once the holes are drilled; secure the base to the top rail using 1/4" 20 x 3/4'' round head machine bolts and nuts. Use the washers on both the topside of the mounting bracket and under the top rail.

STEP 8

The water level of the pool must be adjusted and maintained in order for the alarm to perform properly. The sensor throat tube should stick into the water 2.5 inches. If the water should go far above or below this level, the alarms effectiveness is greatly diminished. Maintain proper water levels at all times. Never block or fill the air hole located on the back of the alarm's sensor throat. See Fig 8.



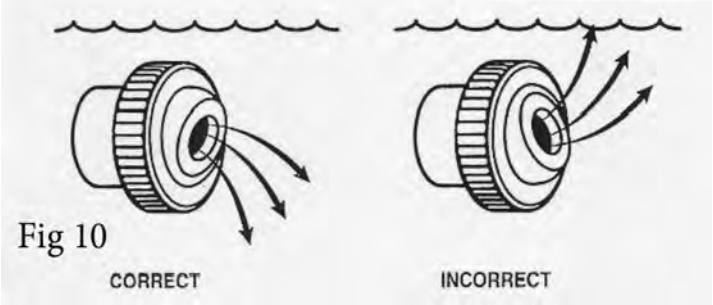
Mount the Remote siren no more than 100 linear feet from the base unit in an area inside your home where it can be heard throughout the house should the alarm sound. Turn the remote siren over and remove the Phillips head screw. Install one 9V long-life alkaline battery. Replace cover. Plug the AC adapter (D) into the remote siren (C). Then place it on a flat surface or use a screw to mount it to a wall near an electrical socket. Plug the 115VAC input adapter into a standard 115v wall socket. The AC adapter will supply 9vdc to the receiver. See Fig 9. It will give two short sirens to show that it is functioning, and a red led will glow on the unit. If the main AC power should fail (power outage or accidental unplugging) the siren will sound once announcing that the siren is now in battery backup mode. The siren will still receive a signal from the main alarm unit, and will alarm if triggered.



STEP 9

Turn the return jets from the pools filtration system down towards the bottom of the pool. This will not effect the pool circulation; in fact it will help conserve chemical consumption. This is required in order to maintain the tightest security level possible using this alarm. See Fig 10.

Installation is now complete, and the unit MUST be tested.



TESTING THE UNIT

To test the alarm, you can make a simple device that will simulate the size and weight of a young child. See Fig 11 and Fig 12. The materials needed are:

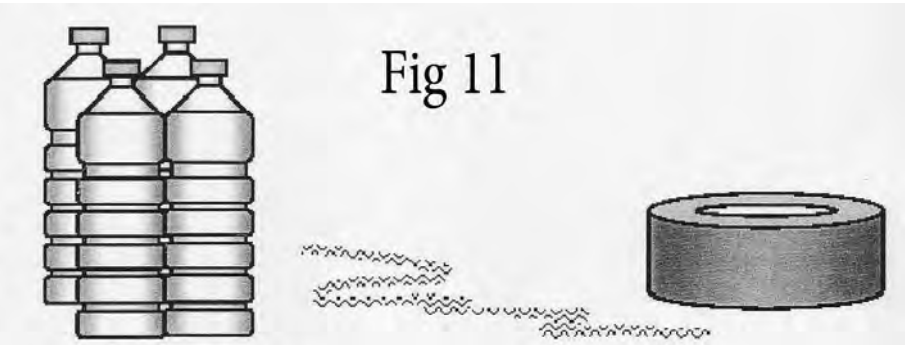
- 4 X 1.5 liter water bottles.
- Duct tape
- 6 ft of strong string

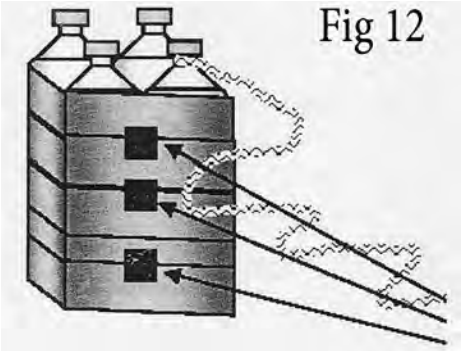
Fill the four bottles with water.

Use the duct tape to strap all 4 of the bottles together.

Tie the string tightly to one of the bottles.

Drop the bottles into the pool from a height of 2 feet. The alarm should sound. Use the string to retrieve the bottles. Test the alarm weekly to insure maximum protection.





USING THE ALARM

This pool alarm is designed to protect the pool at all times. To swim in the pool, the key must be present. To enter swim mode, an adult must place the magnetic key onto the faceplate area where it is marked KEY while at the same time pressing the blue button. The alarm will emit a long beep signifying that it is now in swim mode. The LED on the faceplate will now flash red, and will continue to flash red while it is in swim mode. The pool can now be used without the alarm sounding. When all swimmers exit the pool and the water becomes still, the alarm will automatically rearm itself in 5 minutes to protect the pool. The alarm will emit a long siren announcing that it is again in active protection mode and the green LED on the faceplate will flash. If immediate protection is desired, wait until the water is calm, and then push the blue button on the faceplate. This will instantly rearm the alarm.

If the alarm is sounding, immediately check the pool FIRST for any unsafe condition. If the pool is clear of danger, push the blue button to silence the alarm, returning to protection mode.

Note: This alarm has been vigorously tested under very difficult conditions, however since many pools have different water features such as waterfalls, and/or fountains, it is impossible to account for all configurations. If your alarm alerts due to a water feature, simply turn the water feature off when the pool is not in use. This will allow for maximum protection against false alarms, and best protection for your pool.

Automatic pool cleaners also come in many sizes and shapes and may also cause a false alarm. This unit has been tested with all of SmartPool's robotic pool cleaners and performs well with all of them. Since models vary by manufacturer, we cannot guarantee that other models of automatic pool cleaners will not cause the alarm to false alarm.

LOW BATTERY INDICATOR

The alarm comes equipped with a low battery indicator. If the batteries need to be replaced, the alarm will emit a chirp every 20 seconds. Refer to steps 5 and 6 for battery replacement.

WINTERIZATION

When the pool is closed and covered for the winter, remove the main alarm body from the pool and remove the batteries. Store the main alarm body indoors for the winter months. The alarm should be removed from the pool if the air temperature will ever drop below 32 degrees Fahrenheit. Remove the batteries from both the main alarm unit and the remote siren for storage. Freezing of the pool water will damage the alarm. Freeze damage is not covered under the warranty.

TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
Alarm beeps every minute or so	Low battery	Replace all batteries with fresh NEW batteries
Alarm is not sounding at all	Battery is dead	Replace all batteries with fresh NEW batteries
Alarm is being set off by high wind	High winds	Put the alarm into swim mode and carefully monitor the pool and do not allow anyone to enter the pool area until the wind subsides and the alarm resets.
Alarm is sounding when no one is in the pool	Loose alarm base and or return fittings are pointed toward alarm	Tighten alarm base and/or point return lines toward the bottom of the pool and away from the alarm.
Remote siren is beeping	Low battery	Replace battery with a fresh new one.
Remote siren is not sounding when alarm is triggered.	Remote siren is out of range.	Move the remote siren to a location closer to the main alarm.

1 YEAR LIMITED WARRANTY

One year limited warranty from date of original purchase for manufacturing defects under normal and reasonable use, and subject to the maintenance requirements and installation guidelines set forth in the product instruction manual.

THIS WARRANTY IS SUBJECT TO THE TERMS, LIMITATIONS AND EXCLUSIONS DESCRIBED BELOW, AND THERE ARE NO OTHER WARRANTIES OR REPRESENTATIONS, EITHER EXPRESS OR IMPLIED, WHETHER OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHER, MADE BY THE MANUFACTURER, OTHER THAN THOSE SPECIFICALLY SET FORTH IN THIS WRITTEN WARRANTY

What is Covered: SmartPool, Inc. warrants its electronic product to be free from defects in material and workmanship when leaving the factory.
What is not Covered: Any type of damage to the product due to improper installation, maintenance, or failure to provide necessary and reasonable maintenance; any damage or injury caused by misuse and/or unreasonable use of the product; batteries (if applicable); damage due to or related to improper draining, winterizing, storage or Acts of God; SmartPool, Inc. will not honor any claims for damage to any products in transit unless damage to the shipping container is noted at the time of delivery on the transfer company's delivery bill.

THE WARRANTY OBLIGATIONS OF SMARTPOOL, INC. ARE LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT OR OF ANY DEFECTIVE COMPONENT, AT THE OPTION OF SMARTPOOL. UNDER NO CIRCUMSTANCES WILL SMARTPOOL, INC. BE LIABLE OR RESPONSIBLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES, AND/OR CHARGES FOR LABOR. SMARTPOOL SHALL NOT BE LIABLE OR RESPONSIBLE UNDER ANY CIRCUMSTANCES OR ANY AMOUNT FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES, OR FOR ANY INJURIES OR DAMAGES TO PERSON OR PROPERTY USING OR USED IN CONNECTION WITH THE PRODUCT, OR FOR ANY OTHER LOSS OF PROFITS OR OTHER COSTS OR EXPENSES OF ANY KIND OR CHARACTER. IF SMARTPOOL, INC. DETERMINES THAT EITHER REPAIR OR REPLACEMENT OF THE PRODUCT IS NECESSARY, SMARTPOOL MAY EITHER REPAIR THE PRODUCT AT A NOMINAL CHARGE TO THE OWNER OR REPLACE THE PRODUCT. THE OWNER BEARS THE SOLE RESPONSIBILITY FOR PRE-PAID RETURN OF THE PRODUCT TO SMARTPOOL, AND ALL REPAIRED OR REPLACED PRODUCTS WILL BE RETURNED AT THE OWNER'S EXPENSE.

NO PERSON, FIRM, OR CORPORATION IS AUTHORIZED TO MAKE REPRESENTATIONS OR INCUR ANY OBLIGATIONS IN THE NAME OF OR ON BEHALF OF SMARTPOOL, INC., EXCEPT AS STATED HEREIN. THE REMEDIES SET FORTH IN THIS WARRANTY ARE EXPRESSLY UNDERSTOOD TO BE THE EXCLUSIVE REMEDIES AVAILABLE TO THE OWNER, AND THIS WARRANTY CONTAINS THE FULL AND COMPLETE AGREEMENT BETWEEN SMARTPOOL, INC. AND THE OWNER. THIS WARRANTY SETS FORTH THE ONLY OBLIGATIONS OF SMARTPOOL, INC., WITH REGARD TO THIS PRODUCT, AND THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

The representations set forth herein are the only representations made by SmartPool, Inc., with respect to the product, and this warranty does not constitute either a performance or satisfaction guarantee. It is the responsibility of the product owner to regularly test and check the product for proper function and safety.

This warranty gives the original owner specific legal rights. You may have other rights depending on where you live.

What you must do to file a claim: Call 1-732-730-9880 to initiate a claim. You will receive an instruction package within 10 days.

SMARTPOOL

www.smartpool.com