ME2 ALERT 1

HOW IT WORKS

The Alert 1 Infrared Perimeter Pool & Spa Alarm system is surprisingly simple. The emitter/receiver unit projects a beam of infrared light that is reflected around your pool or spa area to create a perimeter of infrared light. If that light beam is broken, the alarm will sound. The Alert 1 system is designed to alarm, both indoors & out simultaneously, before an unwanted or unsupervised visitor to the pool area has a chance to enter the pool or spa.

Step #1   WHAT'S INCLUDED

When you receive your Alert 1 from Millennium Electronics 2, Inc., the first step in the installation is to check the contents of your package against the list below.

You should have:
- (12) "O" Ring spacer seals
- (12) Double Sided Tape tabs
- (16) 3/8" Lock Nuts
- (16) Round Washers
- (12) Round-end Carriage Bolts 3"
- (4) Concrete Anchor Bolts
- (1) Indoor Alarm Panel with A/C Adapter
- (1) Key chain Remote Control
- (1) Data Line Cable
- (1) Outdoor Alarm Panel/Circuit Box
- (1) Emitter/Receiver Unit (the "alien face" box)
- (3) Reflector Housings
- (3) 1/8" Mirror Panes (Reflector Face) with 4 double sided tape tabs on each.

If anything is missing from your package, please contact our service department.

INSTALLATION

Tools Needed: Hammer, 3/8 open end wrench or adjustable wrench, bubble level, Power Drill with a bullseye level (or equivalent, to ensure holes are drilled straight), a 3/8" masonry bit, a sight level, silicone sealant (if additional adhesive is desired for mounting mirrored panes), Flat Head Screwdriver, Phillips Head Screwdriver.

Step #2-   Select your perimeter. The beam path must determined in order for the reflectors to be placed around the pool. It is necessary to provide a clear, unobstructed path for the beam. Avoid pool furniture, plants, or other objects to obstruct the path of the beam. The reflector units need to be as far back from the pool edge as possible without affecting function, especially the beams projected in front of entryways. Picture how a child would enter the pool area. Or picture how an intruder might enter over a fence to enter the pool or spa area. The beam should be able to give earliest warning for both: not too close to a fence, but not too near the water. The beam paths should be as uniform as possible, one not being significantly longer than the rest. This aids in keeping the strength of the beam uniform as it is directed around the pool or spa area by the reflector units.

Step #3-   Separate your hardware remove all of the 3" round end carriage bolts used for leveling the components. Place a 3/8" nut on the end of each and screw it down. Place an "O" ring washer onto the bolt after the nut. Then screw the bolts, with nut & "O" ring into the threaded holes on the base of each reflector and the emitter/receiver unit. Do not insert any into the threaded hole in the center of each component, as this is for the anchor bolt. Repeat this step for each component. You can also put the Mirror Panes on to the Reflector Housings. The panes simply slide into the grooves from the top of the housing.

Step #4-   Place the Alert 1 components around the pool or spa where they can best function. The Outdoor Alarm Panel/Circuit Box should be mounted first. Mount it so the door swings upward on a wall, post, or fence within 10 feet of the Emitter/Receiver unit, which mounts on the pool deck. The Outdoor Alarm Panel should be within cord range of an electrical power (A/C) outlet. Extension cords are also a temporary option for setup only, but not for long term use. Do not splice the Data Line that runs from the Emitter/Receiver to the Outdoor Circuit Panel. It cannot be cut or left on the ground. We recommend using conduit to protect the Data Line from the Emitter/Receiver Unit to the Outdoor Alarm Panel/Circuit Box if it needs to be underground. You may also use "U" hangers to mount the data line to a fence or wall to keep it off the ground. Once the Emitter/Receiver unit and 3 reflector units are placed around the pool or spa, there should be an obvious perimeter that completely surrounds the pool and crosses in front of all entryways to the pool area. All gates, windows, doorways, etc. should have a beam path between them and the water, but be mindful that gates & doors do not swing into the path of the beam. The entire perimeter should not exceed 150-160 linear feet otherwise you may experience false alarms due to fog, dirty reflectors, etc. Once the Outdoor Alarm panel is mounted, open it and plug in the backup battery. An obvious outlet for the connector is on the circuit board in

Step #5-   Now you're ready to place your anchor bolts into your pool deck. Mark the desired position of each component on the pool deck with a pencil. Drill the hole into the concrete about 1½ inch using the power drill with 3/8" masonry bit. Keep your eye on the Bulls eye drill level to ensure the hole is drilled straight into the concrete. Next, hammer the anchor bolts, threaded end up, into the concrete. Repeat for each component.

Step #6   With the anchor bolts set; place each component over the anchor bolt. Line up the threaded hole in the center of the base of each component with the anchor bolt. Spin the component down onto the anchor bolt until the carriage bolts on the bottom begin to touch the concrete. The Emitter/Receiver unit has screws on its base that allow you to remove the housing and see the center anchor bolt as it threads downward. Use a Phillips head screwdriver to remove the housing and make sure none of the anchor bolts cross thread into the components. Now you're ready to level each component.

Step #7   Before each component is tightened down, use the sight level to measure each component's height relative to the other components. The face of each component must be uniform in height to accurately direct the infrared light beam. The height of each component is adjusted in two ways. For rough adjustment, spin the component down onto the anchor bolt. Then, for fine adjustment, turn the carriage bolts on the base downward onto the deck surface. Once this is done, place the bubble level on top of each component to ensure it sits level, and re-measure the face heights with the sight level to ensure they are uniform.

Step #8   Once all components are level and height is uniform; tighten the nuts on the leveling carriage bolts upward until the "O" ring contacts the bottom of the component. The "O" ring will seal the hole and provide some shock protection in case the unit is bumped. Next, double check your sight & bubble level on each component to make sure nothing has moved.

Step #9   Now the system can be plugged in. To activate the Indoor Alarm Panel, you must press both buttons on the Indoor panel simultaneously while the Outdoor Circuit Box is plugged in to an AC outlet. This will set up the frequency between the 2 components so they can "talk" by radio frequency. The indicator lights will flash FAST on the Outdoor Alarm Panel/Circuit Box and on the Indoor Alarm until the beam is aligned.

Step #10   To aim and align the beam, you need 2 people. Put your head down in front of the Emitter/Receiver and look down the path the beam will travel. Try to spot the 2nd reflector in the reflection of the 1st reflector. The 2nd person can rotate the mirrored reflector slightly from side to side until it's spotted. If it won't move, loosen the carriage bolt nuts a bit & try again. Once spotted, move to the 2nd reflector and repeat the process. Then to the 3rd mirror until the Emitter/Receiver unit is spotted. At that point, it's possible the system will activate. If it doesn't, repeat the sight & bubble level measurement process

again to verify all height & level settings are correct. When the system comes on line, the indicator lights on the Outdoor Alarm Panel/Circuit Box will stop flashing. Re-tighten the nuts under the bases to secure components, if needed.

Step #11   The Indoor Alarm Panel is designed to mount on a wall in plain view so the indicator lights can be seen at all times. Test the function from the area you intend to mount it. It must be near an outlet to plug into. If all lights on Indoor panel are flashing quickly, there is no RF communication with Outdoor Circuit Box. The battery in this unit is for backup only. If the unit is running on the backup battery, the green "Power" indicator light will flash; if running on A/C adapter current, it stays on and does not flash. When the system is aligned & armed, the red "Status" light will flash slowly (2x per second). If the system is out of alignment and unarmed, the red "Status" light will flash quickly (5x per second). These patterns are the same for the indicator lights on the Outdoor Alarm Panel/Circuit Box. Mount the Indoor Alarm Panel and test. The Key chain remote can be used indoors or out to arm or disarm the system. Be mindful of the indicator lights when doing so. Included is an indicator light function guide. In general, when Indicator lights flash FAST, it means something's WRONG. Refer to function guide. Be sure to keep & understand the function guide so your unit will always be ready when you need it.

The Pet-Away Unit (optional, available at www.me2products.com)

The Pet-Away unit is designed to mount in the pool area and will emit a high-pitched frequency inaudible to most humans whenever the motion sensor on the unit is activated. It will drive away small animals, dogs, cats, deer and other creatures humanely and effectively and keep your pool area clear of pests and pets which can drown easily. Simply mount it on a wall near the pool, preferably near an outlet and turn it on. It is effective for approximately 4,000 square feet, depending on the frequency chosen and what animals it is set to deter. For specific information & functions, refer to Pet-Away instructions.

Frequently Asked Questions

"Does my system require any maintenance?"

Yes. Occasionally, you should clean the mirrored reflectors on your system with window cleaner and a paper towel. Dust, dirt, & residue can cut down on the reflective ability of these components. You should also test the unit by breaking the beam and setting off the alarm at least once a month to verify all components are operational. Have someone indoors to listen for the indoor alarm panel to sound.

"What if I have trouble installing the system and need some help? Can I call someone?"

We ask that our customers who are installing the product themselves send us an e-mail explaining the problem and include your daytime callback number, best time to contact you, and address. One of our staff will contact you and attempt to solve your problem. We process these inquiries with urgency, though we are unable to guarantee a solution. In some instances, it may be necessary to hire the installation be completed by a qualified contractor in the event your pool or spa design presents unique obstacles.

"Can I use an outlet timer to turn the system on and off at certain times?"

No, this system is designed to be activated anytime the pool or spa area is not in use. Using a timer assumes a child would not wander to the pool at some set point. We make no such assumptions. It also requires the backup battery to be disabled. If a timer is used with this system, we assume no responsibility for loss and the warranty is voided.

Are the outdoor plastic components able to be painted another color?

Yes, they are. However the White plastics used are UV resistant and the light color helps dissipate heat. Painting the components may lessen or eliminate the UV resistance and be less reflective, depending on the color and type of paint used. Painting or altering product will void warranty & return rights.

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 to 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 receiving 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 equipment has been certified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

Notes / ALERT 1 Condition	MainBox AC Power	MainBox BU Battery	Sensor Status	System Status	Remote Panel AC Power	Remote Panel BU Battery	MainBox Status LED	MainBox Status LED	Remote Panel Status LED	Remote Panel Status LED	Remote Panel Alarm LED
No Commulcation with Base	*	*	*	*	*	*	*	*	FAST	FAST	FAST
Power Status - Panel	On	Good	Aligned/Not Blocked	Disarmed	On	Good	On	Off	On	Off	Off
"	On	Good	Aligned/Not Blocked	Disarmed	Fail	Good	On	Off	FAST	Off	Off
"	On	Good	Aligned/Not Blocked	Disarmed	On	Low/Fail	On	Off	SLOW	Off	Off
"	On	Good	Aligned/Not Blocked	Disarmed	Fail	Low	On	Off	FAST	Off	Off
"	On	Good	Aligned/Not Blocked	Disarmed	Fail	Fail	On	Off	Off	Off	Off
Power Status - MainBox	Fail	Good	Aligned/Not Blocked	Disarmed	On	Good	FAST	Off	FAST	Off	FAST
"	On	Low	Aligned/Not Blocked	Disarmed	On	Good	SLOW	Off	SLOW	Off	SLOW
"	Fail	Low	Aligned/Not Blocked	Disarmed	On	Good	FAST	Off	FAST	Off	FAST
"	Fail	Fail	Aligned/Not Blocked	Disarmed	On	Good	Off	Off	FAST	FAST	FAST
Sensor Blocked/Not Aligned	On	Good	Not Aligned/Blocked	Disarmed	On	Good	On	FAST	On	FAST	Off
System Armed	On	Good	Aligned/Not Blocked	Armed	On	Good	On	SLOW	On	SLOW	Off
System Triggered	On	Good	Tripped	Armed	On	Good	On	On	On	On	FAST

FAST = Flashes 5x per second (0.1s on / 0.1s Off)
SLOW = Flashes 2x per second (0.25s on / 0.25s Off)

As a rule, if any light is flashing FAST, that's BAD. Check chart for status when any light flashes FAST and correct problem.