

## Contents:

	Page
Advice to owners of EPIRBs.....	1
The COSPAS-SARSAT satellite aided rescue system.....	2
Safety Alert Model: SA3G.....	3
When a distress situation occurs.....	4
In the event of inadvertent Activation.....	4
Beacon test procedure .....	5-6
Instruction for use in water.....	7
Instruction for use on land.....	8
To switch OFF.....	7-8
Helpful operation and information notes.....	9
Registration contacts.....	10
Product Warranty .....	11
Battery replacement and servicing.....	11
Specifications.....	12
Beacon installation.....	13

## Owners details

Name:
Address:
Phone:
Hex ID (as printed on beacon)

## When a DISTRESS situation occurs

**Only operate in a grave and imminent danger situation.  
(Non-emergency operation carries a severe penalty.)**

A mariner, aviator or individual in distress has several options to alert authorities when in need of assistance and to help them and Search and Rescue (SAR) to locate the precise distress position.

If two-way, HF, MF, VHF or other radio or even a mobile phone are available, they should be used immediately to contact authorities. If contact cannot be made by two-way radio communications and all other distress procedures fail to summon assistance and there is a grave and imminent danger situation, then the **Safety Alert** EPIRB should be deployed to alert authorities to the emergency and provide an accurate distress position.

Should the EPIRB be activated other than for a test, we recommend the EPIRB be removed from service and returned to Kinetic Technology International Pty Ltd. for battery replacement.

## In the event of INADVERTENT ACTIVATION

If the EPIRB is inadvertently turned ON, immediately turn OFF EPIRB by lifting RED switch UP until all lights turn off then release and rotate "Switch Interlock" to align tab with switch shaft.

**Immediately** inform the nearest search and rescue (SAR) authority or the Rescue Co-ordination Centre (RCC) in Australia, toll free on: 1800 641 792 or Aviation: 1800 815 257

or in New Zealand the Rescue Coordination Centre (RCCNZ), toll free on: 0508 472 269 or +64 4 577 8030

## Advice of EPIRB purchase or transfer

Registration of 406 Mhz satellite EPIRBs with the Registration Section of the Australian Maritime Safety Authority (AMSA) or Rescue Co-ordination Centre New Zealand (RCCNZ) is mandatory because of the global alerting nature of the COSPAS-SARSAT system.

The information provided in the registration is used only for search and rescue purposes.

Fill in the owner registration card immediately upon completion of the sales transaction. Register on-line, mail, fax or email the registration card to the Australian Maritime Safety Authority (AMSA) or Rescue Co-ordination Centre New Zealand (RCCNZ) immediately. Registration cards are also available on-line, visit [www.amsa.gov.au/beacons](http://www.amsa.gov.au/beacons) and [New Zealand](http://www.beacons.org.nz) on-line at [www.beacons.org.nz](http://www.beacons.org.nz)

If the beacon is to enter service immediately, complete the registration card, register on-line, mail, fax or email the information to the Australian Maritime Safety Authority (AMSA) or Rescue Co-ordination Centre New Zealand (RCCNZ).

If the beacon is being transferred to a new owner, the current owner is to inform the Australian Maritime Safety Authority (AMSA) or Rescue Co-ordination Centre New Zealand (RCCNZ) by email, facsimile, letter, telephone or on-line of the name and address of the new owner.

The new owner of the beacon is required to provide the Australian Maritime Safety Authority (AMSA) or Rescue Co-ordination Centre New Zealand (RCCNZ) with the information as shown on the registration card.

This obligation transfers to all subsequent owners.

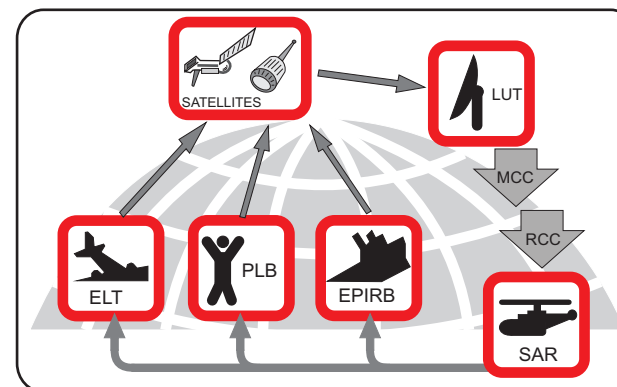
## The COSPAS-SARSAT Satellite aided rescue system

COSPAS-SARSAT is an international (global) search and rescue system that uses satellites to detect and locate 406MHz emergency beacons carried by vessels, aircraft, or individuals.

The system consists of three networks of satellites (LEOSAR, GEOSAR and MEOSAR), ground stations called Local User Terminal (LUT), Mission Control Centre (MCC) and rescue coordination centres.

When an EPIRB is activated, the 406MHz signal may be received by a satellite, the signal processed and data with position and digital message then re-transmitted either in real-time or stored. The signal is continuously down loaded until the satellite is in view of a LUT, when the LUT receives satellite data it's directly forwarded to MCC. The Rescue Co-ordination Centre who may arrange the search and Rescue using appropriate SAR organisations in the vicinity of the distress location.

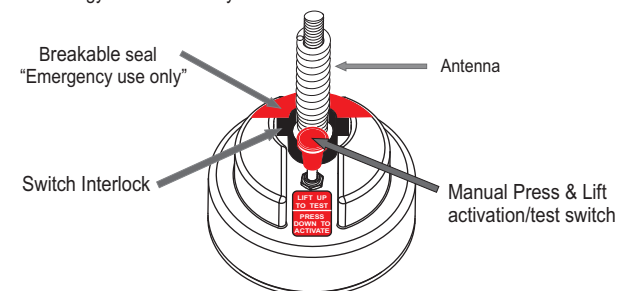
The **Safety Alert** EPIRB homing signal (121.5MHz) allows SAR aircraft and boats to "home" directly to the signal using radio direction finders.



## Beacon Self Test Procedure

**To prevent inadvertent activation:  
Under no circumstances rotate Switch Interlock during TEST.  
(Non-emergency operation carries a severe penalty.)**

**Note:** Limit testing to the first five minutes of the hour. Beacon testing should be limited to no more than once per month. Visually inspect the beacon for signs of physical damage and verify the red breakable "Emergency use only" seal on top the switch interlock is intact. Check the "Replace battery by" date has not expired. Should the seal be broken, the battery time expired or the beacon fail subsequent test, return to Kinetic Technology International Pty. Ltd. For service.



**Beacon test:** (Warning do not rotate Switch Interlock)

Release antenna from mounting bracket to upright position and ensure antenna clear of metal objects.

Lift up Red switch and release when Red light illuminates, the Red light will extinguish when the Self Test starts. After a few seconds the White strobe will flash and Green light will illuminate for one second to indicate test pass. If these lights fail to illuminate within five seconds after releasing the switch then a fault may have developed in the beacon. If the beacon fails the self test please contact your local distributor or KTI directly to arrange product inspection.

Upon test-pass carefully place EPIRB and antenna back into stowed position on mounting bracket.

The test pass confirms the EPIRB is functioning at the time, but does not necessarily confirm remaining battery capacity. It is therefore important that the "Replace battery by" date be checked.

## Beacon GPS Test Procedure

**Warning:** The optional GPS test consumes energy from the battery and should not be started more than twice per year. If used excessively the GPS test function will be locked out to preserve battery charge. GPS test lockout is indicated by three slow Red flashes following an attempt to start a GPS test.

Before testing ensure beacon is positioned out doors in an open area with antenna clear of metal objects and a clear unobstructed view of the sky to maximise satellite acquisition. Avoid testing during poor weather conditions, i.e. heavy precipitation.

**Note:** Testing maybe terminated at any time by lifting the switch until all lights turn off. Test switch will spring return to OFF position when released.

**Optional GPS test:** (Warning do not rotate Switch Interlock)

Lift up Red switch and hold until Red light flashes rapidly then release. Red light will flash periodically during test (up to 1 minute). When a GPS position fix is achieved the White strobe will flash once and the Green light will illuminate for three seconds to indicate GPS test pass.

If a position fix is not achieved within one minute the Red light will illuminate for three seconds to indicate a GPS test fail. The GPS may have difficulty achieving a position fix due to poor satellite visibility or geometry. If the GPS test fails once, a second attempt is recommended after waiting 20 minutes and ensuring clear sky visibility. If the GPS test continues to fail please contact your local distributor or KTI directly to arrange product inspection.

Upon GPS test pass carefully place EPIRB and antenna back into stowed position on mounting bracket.

**Note:** A switch interlock at antenna base prevents the SA3G EPIRB from being accidentally activated.

The switch interlock "Emergency use only" seal will be broken when rotating the switch interlock before permitting activation. It is in the owner's interest to ensure that this seal remains intact to remove any doubt as to whether the beacon has been operated causing reduction of battery life.

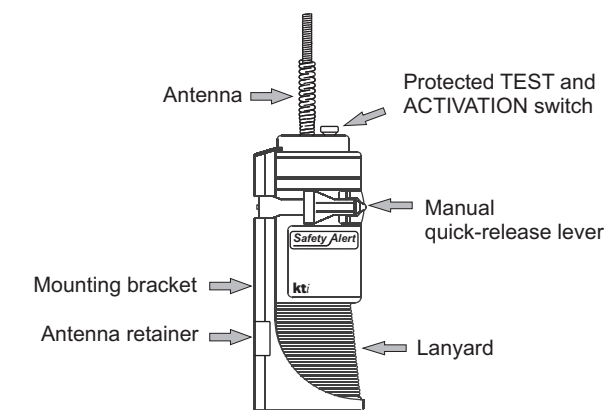
## Safety Alert model: SA3G

The **Safety Alert** EPIRB model: SA3G is a compact, buoyant, self-contained emergency radio transmitter. When activated it will emit a distinctive digital radio signal on the 406MHz international distress frequency and a 121.5MHz homing signal for 48 hours minimum.

Since February 2009 any Emergency Position Indicating Radio Beacon (EPIRB) sold or manufactured in Australia must be satellite compatible and will therefore be capable of being detected by the **COSPAS-SARSAT** satellite aided Search and Rescue System.

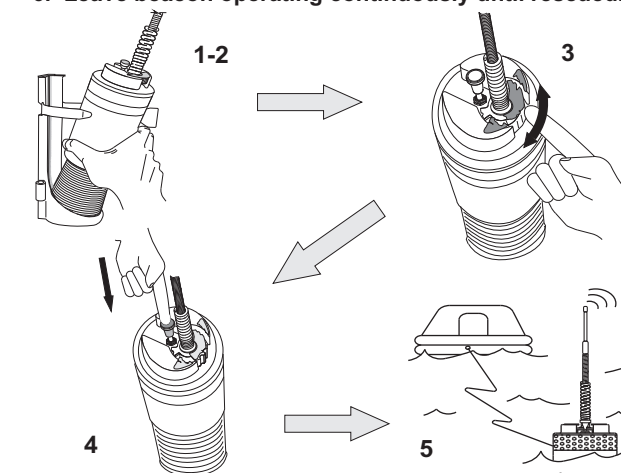
The **Safety Alert** EPIRB has been designed and manufactured in Australia and approved to the exacting performance specification of the Australian/New Zealand and COSPAS-SARSAT standards.

EPIRB should be securely positioned in the mounting bracket at all times with antenna end secure in "Antenna retainer".



## INSTRUCTIONS FOR USE IN WATER

1. Remove **Safety Alert** from stowage (mounting bracket).
2. Unwind lanyard from **Safety Alert** and attach free end of lanyard to life jacket or survival craft.
3. Rotate Switch Interlock in either direction, breaking the "Emergency use only" seal in the process.
4. Press RED switch DOWN and hold until green light flashes then release. White strobe lights will also flash. (Switch will spring return to centre position when released)
5. Deploy the beacon to the water and allow to float away from persons and objects to extent of lanyard.
6. Leave beacon operating continuously until rescued.



## To switch OFF

1. Lift RED switch UP until all lights turn off then release.
2. Rotate "Switch Interlock" to align tab with switch shaft, this will help to prevent the beacon from being accidentally activated.

## Owner/Operator Advice

### Know your beacon before you travel.

Emergencies often arise under the most unfavorable conditions, when reading instructions is simply not practical. You may need to activate your beacon in dark conditions or after suffering an eye or head injury. Read this instruction manual carefully before you travel and familiarise yourself with the product. Practise removing the beacon from stowage and mime the actions to activate the beacon. Knowing your beacon may help save your life.

## Distributor Details



Kinetic Technology International Pty. Ltd.  
1 Kembla Street, Cheltenham, Victoria, 3192  
Australia.  
Tel: 61 3 9583 9566 Fax: 61 3 9583 9805  
ABN 50 058 419 695

internet: [www.kti.com.au](http://www.kti.com.au) © K.T.I. Pty. Ltd. 2018  
E-mail: [info@kti.com.au](mailto:info@kti.com.au)

Page 14

NME40810A  
Issue: A

## Registration contacts

**Australian coded beacons**, address all correspondence to:

Australian 406 Distress Beacon Register  
Australian Maritime Safety Authority  
GPO Box 2181  
Canberra ACT 2601  
Australia

Fax: International +61 2 9332 6323 Local 1800 406 329  
Phone: International +61 2 6279 5766 Local 1800 406 406

On-line registration: [www.amsa.gov.au/beacons](http://www.amsa.gov.au/beacons)  
Email: [ausbeacon@amsa.gov.au](mailto:ausbeacon@amsa.gov.au)

**New Zealand coded beacons**, address all correspondence to:

Rescue Coordination Centre New Zealand  
PO Box 30050  
Lower Hutt 5040

Beacon registration: 0508 406 111 or 0800 406 111  
General enquiries: +64 4 557 8034  
Fax: International: +64 4 577 8041

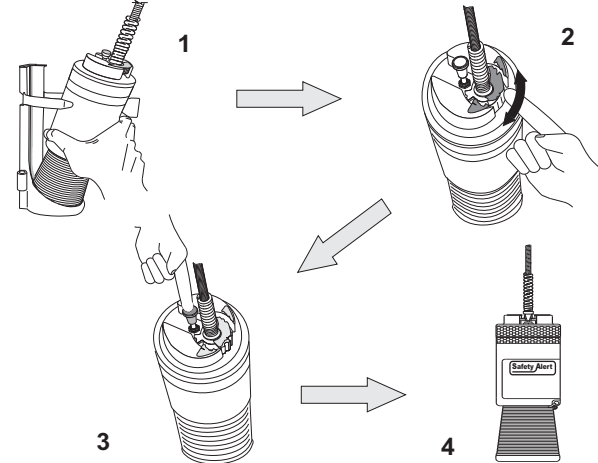
On-line registration: [www.beacons.org.nz](http://www.beacons.org.nz)  
Email: [406registry@maritimenz.govt.nz](mailto:406registry@maritimenz.govt.nz)

All information subject to change without notice or obligation.

Page 10

## INSTRUCTIONS FOR USE ON LAND

1. Remove **Safety Alert** from stowage (mounting bracket).
2. Rotate Switch Interlock in either direction, breaking the "Emergency use only" seal in the process.
3. Press RED switch DOWN and hold until green light flashes then release. White strobe lights will also flash. (Switch will spring return to centre position when released)
4. Place the **Safety Alert** in a clear area away from persons or objects with the beacon/aerial in a vertical position.
5. Leave beacon operating continuously until rescued.



### To switch OFF

1. Lift RED switch UP until all lights turn off then release.
2. Rotate "Switch Interlock" to align tab with switch shaft, this will help to prevent the beacon from being accidentally activated.

Page 8

## PRODUCT WARRANTY

The "Safety Alert" EPIRB model SA3G is covered by manufacturer's warranty valid for 10 years from date of purchase. This Warranty covers labour and materials: all freight charges are to be borne by the purchaser. In the event of any claim under this Warranty, please arrange the return of the EPIRB to Kinetic Technology International Pty Ltd. 1 Kembla Street, Cheltenham, Victoria, Australia 3192, either direct or through supply dealer, together with your proof of original purchase date. This Warranty does not exclude any conditions and remedies you may have under the Australian Consumer Law (ACL). Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## Battery replacement and servicing

The **Safety Alert** EPIRB is fitted with special lithium batteries and it is therefore not possible to replace batteries in the field. Battery replacement and servicing of the beacon is carried out by Kinetic Technology International Pty. Ltd. (KTI) at their premises. Unless the beacon has been activated, battery replacement should only occur at ten yearly intervals. Kinetic Technology International Pty Ltd (KTI) conduct full mechanical and operational testing when replacing the batteries in accordance with specifications.

## Beacon Disposal

For beacon disposal in Australia: [www.amsa.gov.au/beacons](http://www.amsa.gov.au/beacons)  
New Zealand: [www.beacons.org.nz](http://www.beacons.org.nz)

DO NOT incinerate beacon.  
DO NOT short circuit the battery or cells.

All information subject to change without notice or obligation.

Page 11

## Helpful operating and information notes

The **Safety Alert** EPIRB is most effective (i.e. has maximum range) when floating in water or placed on a clear elevated area. Metal objects or people in the immediate vicinity of the EPIRB can distort the radiation pattern of the radio signal, it is therefore desirable to have the transmitting beacon a few metres clear of such objects. The lanyard is designed to be attached to a life jacket or survival craft, it should not be used to secure the beacon to fixed structures i.e. vessel or aircraft. It is not recommended to operate an EPIRB inside a life raft or under any cover or canopy. To view the test/activation strobe light in bright sunlight, it may be necessary to shade it with your hand. It is recommended the EPIRB be mounted with bracket supplied in an upright or horizontal position and easily accessible by all personnel at all times.

### Cleaning your EPIRB if required:

Care should be taken not to damage the "Emergency use only" seal or inadvertently activate the beacon when cleaning. Visually inspect the beacon for any physical damage, (ie. Damage to antenna or cracks in the case.) which could allow moisture ingress and cause a malfunction. Only wipe the EPIRB with a damp cloth. Do not use chemicals.

**Note:** The EPIRB is fabricated with durable plastic materials. All plastics are vulnerable to highly reactive chemicals. Avoid contact with chemical compounds such as sunscreen, deodorant, cosmetics, perfume, hand creams/soaps, sanitizers or compounds containing animal, vegetable or mineral, fats or oils.

**Note:** At all times avoid exposing the EPIRB to close proximity of high energy electric/magnetic fields.

### Photosensitive Seizures:

A very small percentage of people may experience a seizure when exposed to certain visual images, including flashing lights. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that may cause these "photosensitive epileptic seizures" while watching an EPIRB.

These seizures may have a variety of symptoms, including light-headedness, altered vision, eye or face twitching, jerking or shaking of arms or legs, disorientation, confusion, or momentary loss of awareness. Seizures may also cause loss of consciousness or convulsions that lead to injury from falling down or striking nearby objects. Immediately stop looking at strobe light and consult a doctor if you experience any of these symptoms.

### RF exposure:

Due to transmitted RF power requirements for EPIRBs, Australian standards recommend where practical to minimise exposure by keeping more than 20cm from an EPIRB which is activated.

Page 9

## SPECIFICATIONS

<b>Frequencies:</b>	406.040 MHz and 121.5 MHz (homing signal).
<b>Approvals:</b>	Australian and New Zealand: AS/NZS 4280.1 COSPAS-SARSAT: C/S T.001, Class 2, TAC: 290 Manual Activation
<b>GPS:</b>	GPS receiver accuracy: 3.0m (CEP) 50. Type receiver: GPS L1 C/A-code, SPS. GPS aerial: L1-band.
<b>Homing signal:</b>	Homing signal Amplitude Modulated, down swept tone.
<b>Activation:</b>	Manual switch with Test facility and Indicator light.
<b>Solid-state Strobe:</b>	Greater than 1.0cd effective intensity.
<b>Transmission Time:</b>	48 hours minimum.
<b>Batteries:</b>	Long-life lithium LiFeS2, Factory replaceable only. Replace battery prior to expiry date shown on beacon.
<b>Lanyard:</b>	8 metres max. UV, high density polyethylene twine.
<b>Antenna:</b>	Compound flexible marine grade stainless steel and fibreglass.
<b>Mounting Bracket:</b>	Quick manual release, rustproof, UV stabilised polypropylene
<b>Dimension:</b>	Diameter 8cm. Height 32cm mounted in bracket.
<b>Weight:</b>	Gross weight 940 grams approx.
<b>Immersion:</b>	Watertight to a depth greater than 5 metres for 1hour.
<b>Operating Temperature:</b>	-20° C to +55 °C
<b>Storage Temperature:</b>	-30° C to +70 °C

Page 12

# Safety Alert

## EPIRB 406MHz /121.5MHz

Model: SA3G GPS equipped

## Instruction Manual

Emergency  
Position  
Indicating  
Radio  
Beacon

COSPAS-SARSAT  
Satellite compatible  
International  
Distress  
Frequencies



Proudly designed and manufactured by:



Kinetic Technology International Pty. Ltd.  
1 Kembla Street, Cheltenham, Victoria, 3192  
Australia.

internet: [www.kti.com.au](http://www.kti.com.au) e-mail: [info@kti.com.au](mailto:info@kti.com.au)

## Beacon Installation

Your Safety Alert EPIRB is supplied with a manual quick-release mounting bracket which is designed to be mounted upright or horizontal, on secure bulkhead or vessel structure.

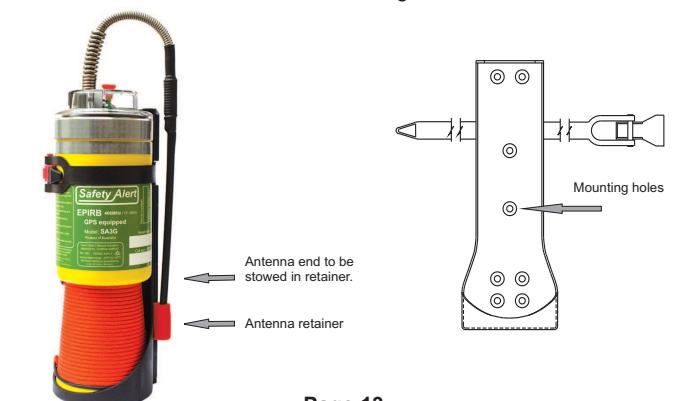
The beacon bracket has eight countersunk 5.5mm dia. holes in different locations for a versatile mounting preference, only four holes may be required depending on fastening screws or bolt size.

Recommended fasteners to have countersunk head as not to damage the beacon when repositioned in bracket after installation.

### When installing the beacon consider carefully location.

- Easily accessible by all personnel at all times.
- Avoid prolonged exposure to sun light and salt water.
- Avoid exposure to extreme heat from engines and fuel/fumes.
- Avoid areas where personnel or machinery may cause physical damage to beacon.
- Beacon does not contain magnets however provide sufficient mounting distance from compass.

**Warning:** Antenna spring under tension when in stowed position (antenna end placed in antenna retainer).  
Caution must be taken when removing antenna end from retainer.



Page 13