



ACCUSATO™
EMERGENCY BEACONS

CLASS 2 406 MHZ EPIRB WITH GNSS AND AIS

MT606G

**WATER &
MANUAL
ACTIVATION**

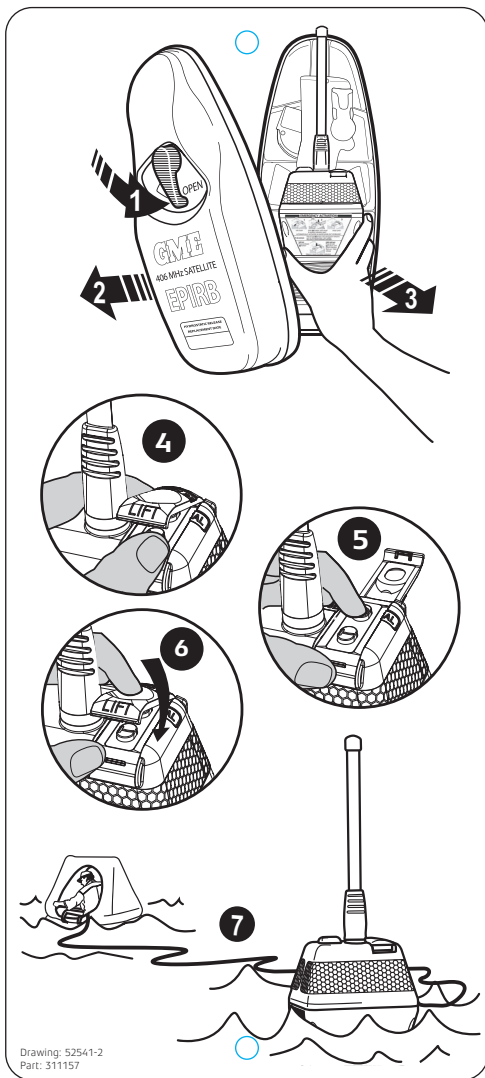


MT606FG

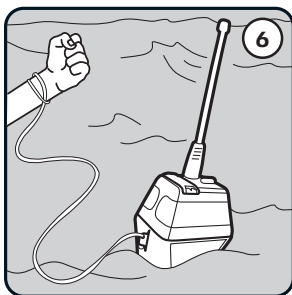
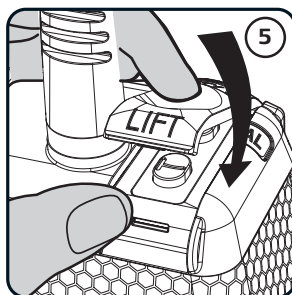
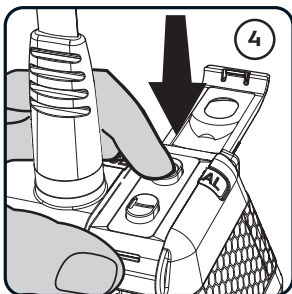
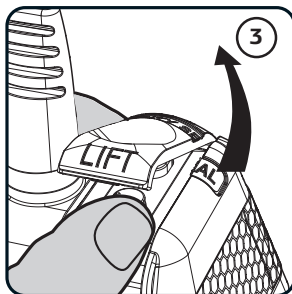
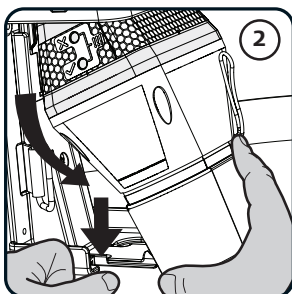
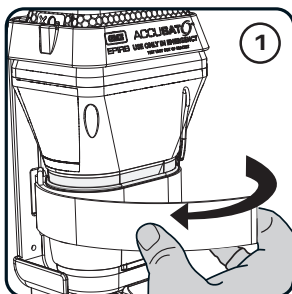
**FLOAT FREE
& WATER
ACTIVATION**



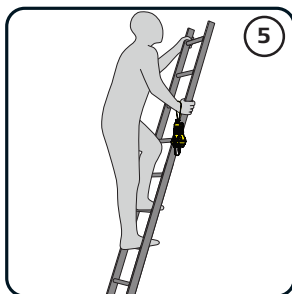
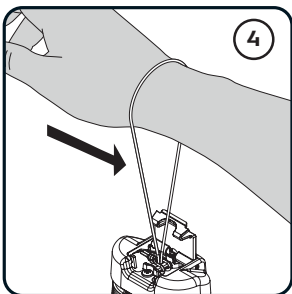
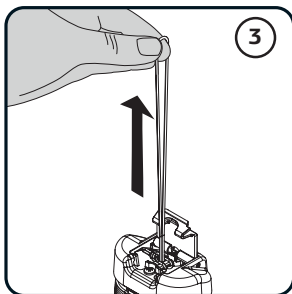
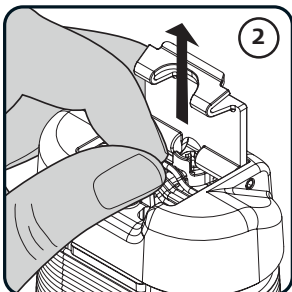
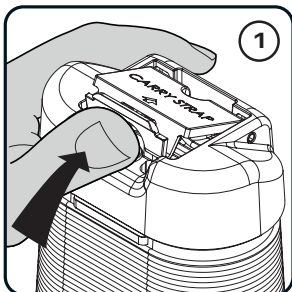
INSTRUCTION MANUAL



MT606G EPIRB ACTIVATION



HANDS-FREE EPIRB TRANSPORT



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IMPORTANT:

To ensure the EPIRB is fully functional, test it at regular intervals and prior to an extended journey as described on page 17 of this manual.

OWNER DETAILS

Name:

Address:

Phone:

Beacon UIN/15-HEX ID:

Congratulations on purchasing your new Accusat™ EPIRB.

The Accusat™ MT606G and MT606FG are the most advanced 406 MHz, AIS equipped digital satellite beacons available today. GME have developed and approved internationally a new family of affordable high-performance 406 MHz beacons.

A CAUTIONARY NOTE: The satellite EPIRB is the most significant advance in search and rescue technology in many years. However, it is not a substitute for a marine radio. Mariners should not be over-reliant on any single system. Wise, safe mariners plan carefully, ensure that shore contacts know their sail plan, carry a marine radio and the correct range of other safety equipment and operate their craft sensibly to suit conditions at sea.

FEATURES

- Compact, lightweight, easy-to-mount design.
- Integrated multi-constellation GNSS receiver with ultra-high sensitivity ceramic patch antenna for better than 100 metre accuracy. Uses GPS L1 C/A, Galileo E1 B/C.
- 121.5 MHz VHF homing beacon to assist in guiding rescuers to your precise location.
- AIS Distress Broadcast (Automatic Identification System) with high resolution location data
- Zero warm-up digital technology.
- Automatically activated on immersion in water when free of the mounting bracket or housing, or can be manually activated if required.
- Ultra high performance solid state white and Infra-red strobe.
- Quick and easy test facility with audio/visual indication.
- Cospas-Sarsat Class 2(C/S T.001) approved, worldwide operation.
- Meets or exceeds the applicable requirements of: IEC 61097-2 Ed.4, AS/ NZS 4280.1 and C/S T.001 and T.007 standards.
- Antenna deploys automatically when the unit is removed from the bracket.
- 10 year battery life.
- 6 year warranty.
- The MT606G Includes a quick release mounting bracket.
- The MT606FG includes an auto-release housing.

GENERAL DESCRIPTION

The Accusat™ MT606G and MT606FG Emergency Position Indicating Radio Beacons (EPIRB) are designed to be used when the safety of your craft and crew is endangered and you have no other means of communication. The EPIRB can save your life and the lives of others on board by leading an air/sea rescue to your precise location. Your EPIRB features an integrated Global Navigation Satellite System (GNSS) receiver (GPS and Galileo). Therefore, the EPIRB can automatically acquire the coordinates of its position.

NOTE: Ensure that the GNSS antenna has unobstructed exposure to the sky.

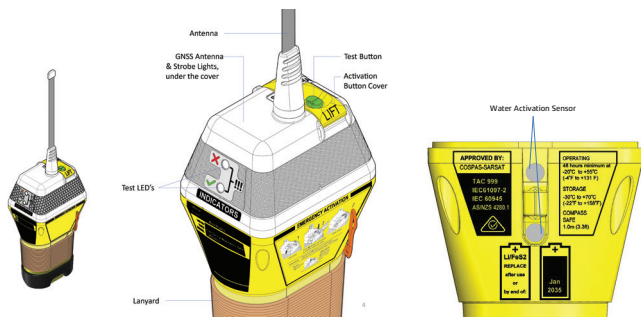
The MT606G is the basic fully-functional EPIRB. The MT606FG model comprises an MT606G in a housing with an automatic release mechanism which opens and releases the EPIRB clear when submerged to water from 1 m to 4m depth. (capsizing or sinking vessel).

Your GME EPIRB contains three radio transmitters. A 406 MHz transmitter emits an internationally recognised distress signal, which includes position information, on this frequency, which is globally monitored by the Cospas-Sarsat satellite system. Your EPIRB has a unique identity code which can be cross referenced to a database of registered 406 MHz beacons, allowing the EPIRB's owner and vessel to be immediately identified in the event of an emergency.

An AIS transmitter that broadcast emergency transmissions on 2 channels in VHF marine radio band (AIS1 and AIS2). These digital emergency messages that can contain EPIRB position, can be received and decoded by nearby marine vessels in equipped with AIS receivers. In some cases of emergency, the quickest assistance can be received from your fellow mariners.

A 121.5 MHz VHF homing beacon assists in guiding rescuers to your precise location.

Additionally, each unit includes ultra high performance white and infra-red solid state strobe lights for visual identification.



WARNING: USE ONLY IN SITUATIONS OF GRAVE AND IMMINENT DANGER MISUSE MAY RESULT IN A SEVERE PENALTY

REGISTRATION AND TRANSFER OF OWNERSHIP

EPIRB PURCHASE OR TRANSFER ADVICE

Registration of 406 MHz satellite EPIRBs with the national authority is mandatory because of the global alerting nature of the Cospas-Sarsat system. The information provided for registration is used only for search and rescue purposes. If your EPIRB is activated in an emergency, it will transmit its unique identifying code that will give the authorities immediate access to your details when the transmission is detected. In situations where the EPIRB may be accidentally activated, the authorities can also contact you before eliminating your EPIRB activation as an emergency signal.

In Australia the preferred method of registration is online at: www.beacons.amsa.gov.au. Alternatively, fill in the owner registration form available online upon completion of the sale and mail, fax or email the registration form to the relevant national authority.

NOTE: You must register your EPIRB. GME cannot do this for you.

TRANSFERRING OWNERSHIP

If the EPIRB is transferred to a new owner, it is the responsibility of the current owner to inform the national authority of the new owner's name and address by email, fax, letter or phone.

The new owner of the EPIRB is required to register it under their own name. This obligation transfers to all subsequent owners.

Failure to register your beacon may result in a fine and could result in unnecessary delays in the rescue process and possible loss of life.

REGISTRATION CONTACTS

Australian Users	New Zealand Users
Australian Maritime Safety Authority GPO Box 2181, Canberra Act 2601 Online: www.beacons.amsa.gov.au Email: ausbeacon@amsa.gov.au Fax Local: 1800 406 329 International: +61 2 9332 6323 Phone Local: 1800 406 406 International: +61 2 6279 5766	Rescue Co-ordination Centre (RCCNZ) PO Box 30050, Lower Hutt 5040, New Zealand Online: www.beacons.org.nz Email: contact.beacons@maritimenz.govt.nz Fax: +64 4 577 8041 Phone Local: 0800 406 111 International: +64 4 577 8042

Other areas: Please contact your Country Distributor. If you have a beacon coded with a foreign country code, or if you do not know what country code has been used, then you will need advice. Please contact the relevant authority on one of the numbers shown above, or visit <https://www.406registration.com/>

PREVENTING ACCIDENTAL ACTIVATION

The signal from an EPIRB is regarded by authorities as an indication of distress and is given an appropriate response. It is the responsibility of every owner of an EPIRB to ensure that it is not activated unintentionally or in situations that do not justify its use.

Most cases of accidental transmission are the result of poor or inappropriate storage or failure to totally disable an old EPIRB before disposal.

The need to handle EPIRBs responsibly cannot be too highly emphasized.

Once the MT606G has been activated, it will not commence transmitting until approximately 50 seconds after activation, providing a safety period of audible and visual warning. If you hear the EPIRB beeping or see the EPIRB lights flashing while it is being carried or stowed, you may still be able to deactivate it during this time without actually transmitting a distress signal. If in doubt, report the incident to your local authorities just in case.

To minimize the possibility of accidental activation, EPIRB owners are urged to pay careful attention to the following points:

- **Always** stow the EPIRB in its bracket or auto-release housing with the switch cover closed. The switch cover is designed specifically to prevent accidental activation.
- The yellow collar on the MT606G bracket and the internal mechanism of the MT606FG auto-release housing contain special features which inhibit automatic water activation of the EPIRB whilst in the bracket or housing respectively.
- If transporting the EPIRB out of the bracket or housing, ensure that it remains dry at all times, including avoiding contact with wet clothing etc.
- Avoid stowing the EPIRB where it may lie in water or be in contact with moisture. Follow the self-testing procedures.
- Do not allow children to interfere with the EPIRB.
- Educate others on board your vessel regarding the consequences of beacon activation.

INSTALLATION

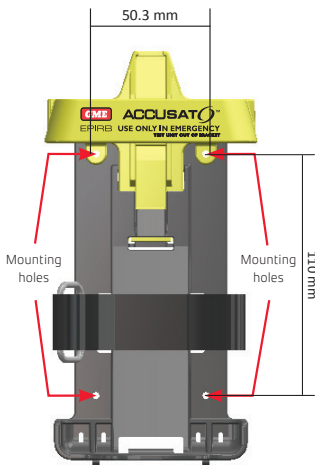
The EPIRB can be mounted upright or horizontally against a panel or bulkhead. When selecting a location, consider the following:

- Select a location that is readily accessible in an emergency.
- Ensure the EPIRB is protected against the environment. Avoid locations where it will be subject to water spray.
- Ensure the unit is NOT installed near or exposed to oil, fuel, fuel vapor, exhaust, sunscreen, or insect repellent. Exposure to chemicals may degrade or compromise the plastic housing reducing the useful service life or rendering the unit inoperable.
- Avoid mounting the EPIRB where it will be subjected to continuous direct sunlight. This could cause the EPIRB's internal temperature to exceed the maximum storage temperature of +70°C. Long term stowage under these conditions could result in reduced battery life, poor performance or degradation of the plastics due to excessive UV light.
- Mount the EPIRB in a location where it will be safe from physical damage.
- Inspect the EPIRB and bracket for damage, or deterioration. The top cover should be clear, transparent and free of cracking or hazing.
- A beacon that shows signs of damage or degradation, may not be fit for use in an emergency. Contact GME or your local distributor for further advice.
- The specifications section contains the 'Compass Safe Distance' for your particular model EPIRB.
This is the minimum distance that must be maintained between an inactive stowed EPIRB and any magnetic navigational device.
- Do not allow the EPIRB to be otherwise exposed to strong magnetic fields, nor to high intensity RF fields (such as emitted by radar or communications antennas).
- The location must allow sufficient clearance to remove the EPIRB from the bracket when required.

INSTALLING THE MT606G

1. Remove the EPIRB from the bracket.
2. Hold the mounting bracket in place and mark the location of the mounting holes.
3. Screw the bracket to the panel or bulkhead using the stainless steel screws supplied.
4. Replace the EPIRB in the bracket. (See 'RELEASE AND STOWAGE' on page 11 below).

NOTE: The locations of the mounting holes for the mounting bracket are identical to those used on the earlier MT400 and MT600 series EPIRBs. Once the bracket is fixed in place, fit the EPIRB to the bracket.



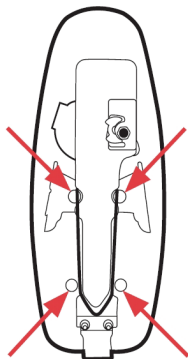
INSTALLING THE MT606FG

In addition to the points listed on page 9, consider the following:

- In the case of an emergency auto-release the EPIRB must be able to float to the surface freely without becoming trapped by the sinking vessel or entangled within the rigging etc.
- Locate the housing externally to the vessel in a clear, open space remembering the craft may list or roll during submersion.
- It is recommended to select a location high on the vessel. This will ensure auto-release in the event of a capsized without sinking.

TO INSTALL THE MT606FG EPIRB

1. Remove the EPIRB from the housing.
2. Hold the housing rear cover in place and mark the location of the 4 mounting holes.
3. Screw the housing to the panel or bulkhead using the stainless steel screws (not supplied).
4. Replace the EPIRB and front cover, verifying that the cover can be freely removed and replaced (See 'RELEASE AND STOWAGE' on page 11 below).
5. Using a sharp implement, mark (x) on the Hydrostatic Release Replacement Date label on the front cover with the replacement month and year.



HYDROSTATIC RELEASE UNIT SERVICE (HRU)

The MT606FG comprises of an EPIRB housed within a protective enclosure. This enclosure is designed to automatically open and release the EPIRB once a defined depth of submersion is reached.

It is the Hydrostatic Release Unit (HRU) which senses the pressure and causes the release. The HRU is a replaceable item and has a limited rated service life of 2 years.

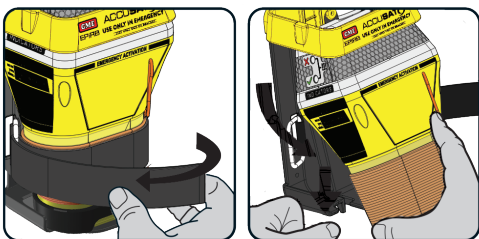
Replacement HRU Part Number: MT401FFSVC.

Instructions for HRU service are provided with the MT401FFSVC kit.

TO REMOVE THE MT606G EPIRB

NOTE: DO NOT remove the beacon from the housing if it is wet, it may automatically activate. Ensure the unit is thoroughly dry before removal.

1. Undo the retention strap.
2. Grasp the EPIRB with the other hand and pull it outwards and downwards.
3. The antenna will release automatically and spring to the upright position.



TO STOW THE MT606G EPIRB

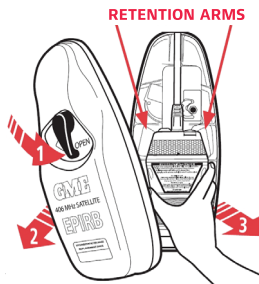
1. Hold the EPIRB upright with the antenna towards the front.
2. Insert the EPIRB, antenna first, upwards into the bracket.
3. Press the tip of the antenna against the bottom of the three ridges in the antenna slot and slide the EPIRB upwards into the yellow collar of the bracket so that the antenna folds over.
4. Push the EPIRB base firmly into the bracket until the release lever clicks upwards.
5. Connect the strap.

MT606FG

To Remove the MT606FG EPIRB from the Auto-release Housing.

NOTE: DO NOT remove the beacon from the housing if it is wet since it may automatically activate. Ensure the unit is thoroughly dry before removal.

1. With one hand hold the front cover, whilst using the other hand to rotate the yellow lever anti-clockwise as shown.
2. Without releasing the lever, remove the front cover completely away from the rear cover.
3. Firmly grasp the EPIRB and withdraw it from the housing.



TO STOW THE MT606FG EPIRB

1. Orientate the beacon such that the side displaying the ‘EMERGENCY ACTIVATION’ instructions faces outwards. This is necessary for the EPIRB to engage with the base of the auto-release housing.
2. Insert the head of the beacon between the two retention arms ensuring that the base of the beacon also engages into the housing supports.
3. Now commence replacement of the outer cover, firstly engaging it at the base over the metal retention tongue.
4. Apply firm pressure above the yellow lever to press the cover home. If necessary, partially and momentarily rotate the yellow lever anti-clockwise whilst applying pressure to ensure full and proper engagement of the cover.
5. Verify that the outer cover is securely retained.

IN AN EMERGENCY

The EPIRB should only be used where grave and imminent danger threatens your craft and assistance is required.

If an emergency occurs, you should first try to use your radio to summon assistance. If contact is made, it may not be necessary to use the EPIRB. Notify that you have an EPIRB and that you will turn it on upon their instructions.

USING THE BEACON AS A LAST RESORT

If dire emergency threatens life and you have been unable to make radio contact or have lost radio contact, use the EPIRB. The distress signal transmitted by your EPIRB identifies you as a craft in distress and will initiate an air/sea search and rescue.

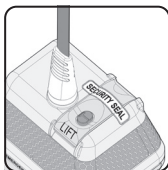
EPIRB ACTIVATION INDICATORS

INDICATOR	DETAIL
Strobe light and red LED flash. The EPIRB beeps every 3 seconds.	The EPIRB is active.
The red LED is replaced by the green LED. A musical chime sounds.	The EPIRB has successfully acquired a position and is now transmitting it in 406 MHz distress messages.
The green LED is replaced by a red LED.	The GNSS position has not been updated for 5 minutes. However, the EPIRB continues transmitting the last available position in 406 MHz and AIS distress messages.

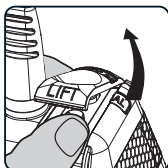
MANUAL ACTIVATION

1. Remove the EPIRB from its bracket.

2. Check the security seal

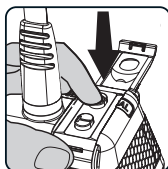


3. Lift the switch cover (marked 'LIFT') breaking the safety seal label over the switch cover.

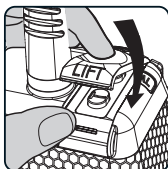


4. Press and hold the On/Off button for at least 2 seconds.

The unit will initially beep once and the red LED and the strobe will flash. The flashing strobe and beeps will continue every 3 seconds to indicate that the EPIRB is operating.



5. Close the cover to secure the EPIRB against accidental deactivation.



WATER ACTIVATION

1. Remove the beacon from its bracket or housing.

2. Deploy the beacon in water if sea conditions permit.

NOTE: The EPIRB has been designed to maintain continuity of operation even when the unit's sensors leave the water for 3 to 4 seconds at a time. Uninterrupted operation is however always best ensured by also manually activating the unit.

The unit will initially beep once and the red LED and the strobe will flash. The flashing strobe and beeps will continue every 3 seconds to indicate that the EPIRB is operating.

Once activated, the EPIRB will begin acquiring GNSS satellites. When a position is obtained, a musical chime will be heard and the green LED will flash rapidly for a few seconds. The green LED will then flash in sync with the strobe light to confirm a valid GNSS position is being used.

The beacon's first transmission will occur approximately 50 seconds after activation even if the position is not acquired.

MANUAL DEPLOYMENT

There are steps you can take to improve the functioning of the EPIRB.

Unwind the lanyard and secure the EPIRB to prevent loss. An activated, EPIRB will transmit the strongest signal to the satellites when:

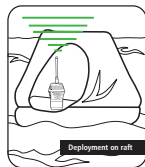
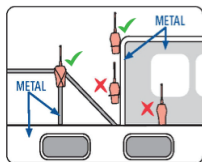
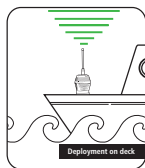
- It is floating in water.
- It is well clear of surrounding and overhanging objects.
- The antenna is vertical.

It is recommended that the EPIRB should ideally be operated clear of any cover or canopy.

However, in extreme sea conditions you should not float the EPIRB free of the vessel or the life raft if there is a possibility of loss or damage to the EPIRB.

By observing the following guidelines satisfactory operation should still be achieved when operating the EPIRB out of water:

- The EPIRB signal will not pass through metal but will pass through fibreglass, wood or fabric with some loss when wet.
- The body of the EPIRB can be attached to metal fittings, but the antenna must be vertical and clear of the metal. You must not attach it to the vessel using the lanyard.
- If the cabin is metallic (such as steel or aluminium), the EPIRB should be mounted outside on a clear space with the antenna vertical and clear of surrounding objects.



WARNING: Switching a beacon on and off interferes with the satellites' ability to determine your location. Once you have activated the beacon in an emergency, allow it to operate without interruption until your rescue.

NOTE: Once battery capacity is depleted, normal 406 MHz transmissions will cease along with the strobe and audible beeps. However, the EPIRB will direct any remaining battery capacity towards extended operation of the AIS and 121.5 MHz homing transmitters and the red and green LEDs will flash every 10 seconds.

If after a long period of deployment your beacon appears to cease functioning, leave the beacon switched on as it is likely that the AIS and homing signals are still being transmitted.

RF EXPOSURE WARNING: The EPIRB emits low levels of radio frequency radiation. Avoid handling the antenna once the EPIRB has been activated.

TURNING THE EPIRB OFF

After you have been rescued, it is important that you turn the EPIRB off as soon as possible. If you leave the EPIRB running when it is no longer needed it may make it difficult for the satellites to detect other beacons that may be transmitting in the area.

1. Remove the beacon from the water.
2. Lift the switch cover (marked 'LIFT').
3. Press and hold the On/Off switch (red button) for more than 5 seconds until the red and green LEDs flash together to indicate that your EPIRB has been deactivated.
4. Close the cover to secure the buttons.
5. To cancel water activation, dry the beacon or re-stow in the bracket or housing. It may take a few seconds for the EPIRB to de-activate.
6. Check that both the strobe light and the 'beep' have stopped.
7. At this point, when the EPIRB has been deployed and has facilitated a rescue, it must not be used further. Contact GME or your local distributor for assistance.

IN THE EVENT OF ACCIDENTAL ACTIVATION

If you suspect that an EPIRB has been activated inadvertently, you **MUST** turn it off and report it immediately to your National Authority's Rescue Co-ordination Centre to prevent an unnecessary search.

If at sea, call your local VHF coast station or Rescue Co-ordination Centre.

In international waters contact a Maritime Rescue Co-ordination Centre or Coast Radio Station (CRS) by any available means.

When reporting you should include the following:

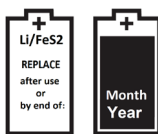
1. Your EPIRB's 15-character Unique Identifier Number (HEX ID) which is marked on the unit body.
2. Date, time and duration of activation.
3. Cause of activation.
4. Location at time of activation.

Search and Rescue authorities will not penalize an EPIRB owner or operator in cases of genuine accidental activation.

Contact numbers for various authorities are provided on page 25 of this manual.

BATTERIES AND MAINTENANCE

The EPIRB is fitted with high-capacity lithium batteries. These batteries can operate within a temperature range of -40°C to $+60^{\circ}\text{C}$.



The full operational capability of your EPIRB may not be available if the batteries fitted have passed their replacement of 10 years from the date of beacon manufacture, as shown on the body of the unit. (see label above). Prior to reaching this date, make arrangements to have your EPIRB returned for service.

If the red and green LED lights flash 3 times simultaneously accompanied with 3 high beeps during the Self Test, the EPIRB battery may not have sufficient energy to support continuous 48h operation of your EPIRB. Refer to General Self Test Table on Page 18.

NOTE: The replacement of batteries due to expiry or usage is not covered by the product's warranty. EPIRB maintenance operations, including battery replacement, require that the beacon be returned to a manufacturer-approved service facility. The EPIRB expiry label is updated as part of the battery replacement procedure. Although the EPIRB is otherwise maintenance-free, routinely following these few simple steps will help ensure that your beacon will be operationally ready if called upon.

1. Test the EPIRB at the recommended interval.
(Refer to 'TESTING THE EPIRB' on page 17.)
2. Confirm that the SAFETY SEAL has not been broken.
3. Check that the batteries have not passed their replacement date.
4. Inspect the EPIRB and the bracket or housing for damage or deterioration.
5. A beacon that shows signs of damage or degradation, may not be fit for use in an emergency. Contact GME for further advice.
6. Keep the unit clean by wiping over with a damp cloth (warm water and mild detergent are suitable) – while the unit is in the bracket or housing – and then dry it.
7. Verify that the unit releases correctly from the bracket or housing and is securely retained when returned to it.

If there is any doubt as to the EPIRB's serviceability, immediately contact your authorised dealer or service centre for advice.

NOTE: Some installations may be covered by state, national or international carriage requirements. Such legislation may impose additional inspection and maintenance requirements beyond those listed above.

Annual Test and Inspection:

If required by SOLAS or national regulation, perform annual test according to IMO's MSC/Circ.1040 of 406 MHz satellite EPIRBs as required by SOLAS IV/15.9.

Shore Based Maintenance (SBM):

If the EPIRB is installed on a vessel which requires GMDSS compliant equipment, the EPIRB shall be serviced, tested and approved as required by SOLAS regulation IV/15.9.2 of SOLAS 1974 as amended with, in accordance with MSC/Circ.1039 guidelines for shore-based maintenance of Satellite EPIRBs within 5 years, or by the date of battery expiry, whichever comes first.

CAUTION: Do not dismantle the EPIRB. It contains no user-serviceable parts. Any changes and modifications not expressly approved by manufacturer could void the user's authority to operate the equipment.

Contact the relevant national authority for further information.

SAFETY SEAL

The safety seal label, applied across the switch cover is designed to tear in the event of (2-step) EPIRB activation (1. Lift cover, 2. Press 'ON' button). A safety seal that is not broken, serves to indicate that the beacon has never been manually activated.

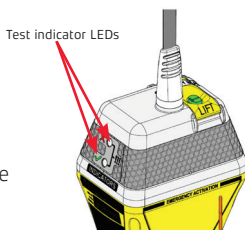
NEVER remove or break the seal unless deploying the EPIRB in an emergency.

TESTING THE EPIRB

It is recommended that you test the EPIRB at regular monthly intervals or prior to an extended journey. (Up to 24 times per year).

TEST INDICATOR LEDs

During the test the unit will beep. Red and green LEDs on the side of the unit will indicate the test status.



GENERAL SELF TEST

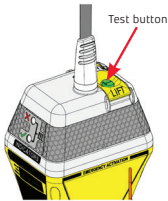
Note: The 'General' Self Test function does not test GNSS acquisition. The 'GNSS Satellite Acquisition Test' is done separately.

Important: Do not over test. Testing consumes a small amount of battery power. If this happens you can still continue to perform self tests, but you should limit testing to the recommended monthly intervals or just prior to an extended journey.

You may test the EPIRB using the following procedure

1. Ensuring the unit is dry, remove the EPIRB from the bracket or housing. (refer to page 11).

2. Keep the antenna well clear of metallic objects during testing.
3. Hold the EPIRB in position so that the two test indicator LEDs are clearly visible.
4. Briefly press and release the green TEST button (marked 'T'). Do not hold the test button longer than 2 seconds.



If the EPIRB repeatedly fails the testing process (long red LED and low beep at the end) you should contact the GME service department for advice.

5. Once testing is completed, return the EPIRB to the bracket. This table summarises the progress of the test.

GENERAL SELF TEST TABLE		
INDICATOR	DESCRIPTION	INDICATION
	Short strobe light at the beginning of the test.	The EPIRB is undergoing a general self-test.
	Long strobe together with red LED at the beginning of the test.	The EPIRB is undergoing a general self-test. However, the EPIRB was previously activated. Contact GME for advice.
	Red and green LEDs flash 3 times simultaneously, each flash accompanied with a high beep.	The EPIRB is undergoing a general self-test. However, the EPIRB has detected that battery capacity is insufficient for 48 continuous hours of operation. You should arrange battery replacement. Contact GME for advice.
	3 green or red LED flashes and 3 high or low beeps during the test indicate the status of 121.5 MHz, AIS and 406 MHz signals.	• 1st LED green, high beep: 121.5MHz is emitted. • 1st LED red, low beep: 121.5MHz is not emitted. • 2nd LED green, high beep: AIS is emitted. • 2nd LED red, low beep: AIS is not emitted. • 3rd LED green, high beep: 406MHz is emitted. • 3rd LED red, low beep: 406MHz is not emitted.
	Long green or red LED flash and a long beep at the end.	Long green LED flash and high beep: the EPIRB has passed all the tests and is OK to use. Long red LED flash and low beep indicates the EPIRB has failed one or more tests and may require servicing. Contact GME for advice.

GNSS SATELLITE ACQUISITION TEST

The general self-test procedure is more than sufficient to perform a comprehensive check of your beacon without consuming too much battery capacity. The general self-test also includes a general GNSS check to ensure the GNSS circuitry is functioning.

However, on occasions, and no more frequently than twice per year, you may wish to also perform a full GNSS satellite acquisition check which includes the operation of the special GNSS antenna. This test consumes much more power than a general self-test. So before you begin, choose an outside test location with good visibility of the open sky above. A fast satellite acquisition means a shorter test and less wasted power consumption.

NOTE: Once the GNSS test has started, you cannot terminate the test.

TO TEST THE GNSS

Note that distress signals are not radiated as part of this test.

1. Ensuring the unit is dry, remove the EPIRB from the bracket or housing. (Refer to page 11.)
2. Ensure you are outside with good visibility of the open sky above.
3. Keep the antenna well clear of metallic objects during testing.
4. Press and hold the green TEST button (marked 'T') for 4 seconds. When the green LED flashes, release the TEST button.
5. The beacon will now attempt to acquire a GNSS position. During this time the red LED will flash at one second intervals accompanied by a single beep.

Your EPIRB will flash the red LED while it searches for satellites.

The time taken to acquire a position will vary depending on the number and location of satellites present in your location. Under normal conditions, acquisition should take around 30 to 40 seconds but it may continue for up to 5 minutes depending on the number and locations of the satellites in view.

6. Once GNSS testing is completed, return the beacon to its bracket or housing

IMPORTANT: DO NOT over-test. GNSS testing consumes additional battery power. To conserve the battery the EPIRB will only allow a total of 20 GNSS tests during its lifetime.

- If the available GNSS test count expires, any further attempts to perform a GNSS test will result a single red LED flash accompanied by a low beep and the test will not start. As long as the GNSS is tested at the recommended average of twice per year, the test count should not expire during the lifetime of the beacon.

IMPORTANT: Although in this situation the EPIRB has reached the limit of

This table summarises the progress and result of the GNSS test.

GNSS SATELLITE ACQUISITION TEST TABLE		
INDICATOR	DESCRIPTION	INDICATION
	Short green LED flash after you press and hold the TEST button for 4 seconds.	EPIRB is undergoing a GNSS self-test
	After the green LED flash, a long red LED flash accompanied by a low beep	The GNSS test count has reached its limit. No further GNSS tests can be performed.
	After the green LED flash, the red LED flashes and the internal buzzer beeps at regular time intervals of 1.5 seconds.	The EPIRB is in acquisition mode (that is, it is searching for a position fix). It will keep flashing the red LED.
	The green LED flashes for around 15 seconds	The AIS transmission is ongoing as a result of successful GNSS self test. Note: This will not happen when GNSS self-test fails.
	8 short green LED flashes and a three-tone musical chime.	Test summary: The GNSS self-test was successful. The 8 short green flashes indicate that the EPIRB has obtained its position.
	8 short red flashes and 8 short low beeps.	Test summary: The GNSS self-test failed. The EPIRB has not obtained its position after 5 minutes.

the available number of GNSS tests, the GNSS circuitry will still be powered if the EPIRB is used in an emergency. Alternatively, the EPIRB can be returned to GME for battery replacement (not covered under warranty) and the GNSS test counter will be reset.

UNACCOMPANIED TRANSPORTATION

Your EPIRB contains lithium batteries. Some transportation or courier companies may have special requirements for transporting devices containing lithium batteries. We recommend you retain the original packaging in which you received your EPIRB for transportation.

If returning your EPIRB to your dealer or GME branch office for repair or scheduled battery replacement, you should inform the transportation company beforehand that your EPIRB contains lithium batteries.

DO NOT send your MT606G or MT606FG through the postal system.

DISPOSAL

Special precautions must be taken when finally disposing of your EPIRB at the end of its useful life. Legislation may determine the specific requirements which apply to you. In the first instance contact your national authority for advice. See page 25.

The following information may also be helpful:

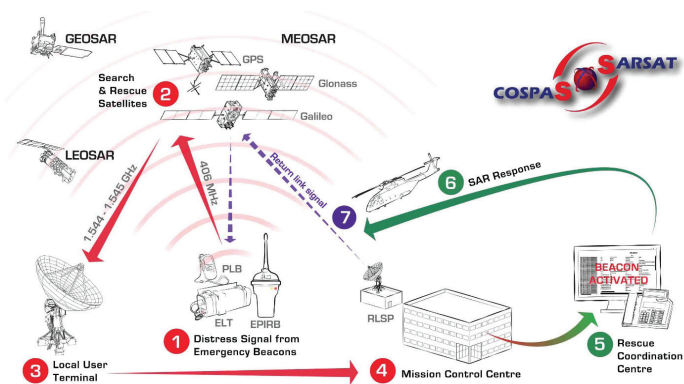
- To permanently disable the EPIRB, remove the 4 screws retaining the cover, open the unit, unplug the battery leads, and then reseal.
- Lithium batteries are generally not considered to be hazardous waste when fully discharged. Qualified personnel may be able to slowly and safely discharge the cells for you.

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

ABOUT THE COSPAS-SARSAT SYSTEM

The Cospas-Sarsat system is a complete global search and rescue service using geostationary and polar orbiting satellites. Many countries provide ground facilities known as Local User Terminals (LUTs).

Polar orbiting satellites provide complete coverage of the earth (although it is non-continuous due to the fact that these satellites can only view a portion of the earth at any given time) and can accurately resolve an active beacon's location. Additionally, geostationary satellites can give an immediate alerting function in many regions of the world.



The basic Cospas-Sarsat concept is illustrated in the diagram above. *

*The image provided as a courtesy of COSPAS-SARSAT

MODES OF OPERATION

Activated:	VHF(AIS and homer) and UHF(406) complete with high intensity strobe and audible activation alert.
General Self Test:	Comprehensive internal diagnostics with visual and audible operator feedback. VHF(AIS) and UHF(406) test message (inverted synchronisation compatible with portable beacon testers).
GNSS Self Test:	GNSS acquisition test with visual and audible operator feedback UHF(406) and VHF(AIS) test messages containing GNSS co-ordinates.

OPERATION

Activation:	Can be activated manually or by contact with water: MT606G is activated by water when manually released from the bracket MT606FG is activated by water when manually released or automatically freed from the housing through hydrostatic release
Duration:	48 hours minimum
Transmission Delay:	406 MHz distress signal commences ~50 seconds after activation, AIS distress signal and 121.5MHz commence within 5 minutes.
Repetition Period:	406 MHz at 50 seconds mean, with digitally generated randomization
UHF:	406.031 MHz, 5 W $\pm$ 2 dB, PSK (digital)
Strobe:	20 flashes/minute at greater than 0.75 cd effective intensity
Cospas-Sarsat:	Certified to C/S T.001 (Class 2) requirements
UHF-Protocol/ Data:	Standard Location Protocol and National Location Protocol
VHF:	121.5 MHz, 25 mW. Min PERP@25°C 162 MHz AIS 1W

BATTERY

Replacement Period:	Prior to expiry date marked on the case
Replacement Method:	Service centre, or factory only (non-user replaceable)
Chemistry:	Li/FeS ₂ (Less than 1g of Lithium per cell)
Configuration:	4 batteries each consists of 2 'AA' cells in series

NOTE: Batteries are not user replaceable. After emergency activation or upon reaching the marked expiry date, the EPIRB must be returned to GME or its authorised service centre for battery replacement.

PHYSICAL

Operating Temperature:	-20°C to +55°C
Storage Temperature:	-30°C to +70°C
Weight:	695 g (including bracket)
Compass Safe Distance:	1m from magnetic navigational device
EPIRB unit dimensions:	260 mm (H) x 102 mm (W) x 83 mm (D) (including bracket)
Materials:	UV stabilized plastic chassis
Performance:	AS/NZ 4280.1

AUTO-RELEASE HOUSING ONLY (MT606FG)

Release:	-Automatically before reaching 4 metres water depth or manually by operator
Protection:	Impact resistant housing fully encloses EPIRB for environmental protection
Mounting:	On flat surface fixed at four (4) points to vessel – refer to manual for placement
Housing weight:	1.3 kg (nominal)
Dimensions:	396 mm (H) x 159 mm x 104 mm (D)
Materials:	Marine grade stainless steel and long-life UV stabilized ASA plastic enclosure

OTHER FEATURES

GNSS:	Integrated GNSS receiver (supports GPS and Galileo)
Retention Lanyard:	Buoyant type approximately 5.5 metres long
Reflector:	SOLAS retro-reflective tape encircling unit above waterline
Solid-state Strobe:	High reliability solid state design exceeds IMO requirements
Antenna:	Flexible self-straightening stainless steel design
Mounting:	Four (4) vessel fixing points moulded into the housing
Routine Service:	Fully user-replaceable HRU at 2 year

USEFUL LIFE

MT606G MT606FG	Not exceed 10 Years from date of manufacture.
Battery Service	Not more than 2 battery replacements. Must not extend use of beacon beyond 10 years.
Mounting Bracket	Not exceed 10 years.

*Standard factory setting, subject to national requirements.

Distributor-reprogrammable via optical data interface.

Specifications are subject to change without notice or obligation.

NATIONAL AUTHORITY REGISTRATION DETAILS

Australian Users	New Zealand Users
24 hour emergency contact within Australia: 000 International: +61 2 6230 6811 Registration Beacon Registration Section, Australian Maritime Safety Authority GPO Box 2181, Canberra ACT 2601. Phone: Freecall 1 800 406 406 local only. +61 2 6279 5766 business hours only. Fax: 1800 406 329 local only. Email: ausbeacon@amsa.gov.au Online registration: www.amsa.gov.au/beacons Local or international calls from a mobile attract connection charges.	24 hour emergency contact within NZ: 0508 472 269 International: +64 4577 8030 Registration 406 Beacons Rescue Co-ordination Centre New Zealand PO Box 30050, Lower Hutt 5040 Phone: +64 4577 8042 Fax: +64 4577 8041 Email: 406registry@maritimenz.govt.nz Online registration: www.beacons.org.nz

GME CONTRACT WARRANTY AGAINST DEFECTS

This warranty against defects is given by GME Pty Ltd ACN 000 346 814 (We, us, our or GME). Our contact details are set out in clause 2.7. This warranty statement only applies to products purchased in Australia. Please contact your local GME distributor for products sold outside of Australia. Local distributor details at www.gme.net.au/export.

1. Consumer guarantees

- 1.1 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.
- 1.2 To the extent we are able; we exclude all other conditions, warranties and obligations which would otherwise be implied.

2. Warranty against defects

- 2.1 This warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.
- 2.2 We warrant our goods to be free from defects in materials and workmanship for the warranty period (see warranty table) from the date of original sale (or another period we agree to in writing). Subject to our obligations under clause 1.2, we will at our option, either repair or replace goods which we are satisfied are defective. We warrant any replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.
- 2.3 To the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited.
 - (a) In the case of goods we supply, to any one of the following as we decide -
 - (i) The replacement of the goods or the supply of equivalent goods;
 - (ii) The repair of the goods;
 - (iii) The cost of repairing the goods or of acquiring equivalent goods;
 - (b) In the case of services we supply, to any one of the following as we decide
 - (i) The supplying of the services again;
 - (ii) The cost of having the services supplied again.
- 2.4 For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three months from the date of the original repair. We agree to re-repair or replace (at our option) any materials or workmanship which we are satisfied are defective.

- 2.5 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty (to the extent permitted at law), we agree to supply those services again at no extra charge to you.
- 2.6 To make a warranty claim you must before the end of the applicable warranty period (see warranty table), at your own cost, return the goods you allege are defective, provide written details of the defect, and give us an original or copy of the sales invoice or some other evidence showing details of the transaction.
- 2.7 Send your claim to:
GME Pty Ltd.
PO Box 96 Winston Hills, NSW 2153, Australia.
Tel: (02) 8867 6000 Fax: (02) 8867 6199
Email: servadmin@gme.net.au
- 2.8 If we determine that your goods are defective, we will pay for the cost of returning the repaired or replaced goods to you, and reimburse you for your reasonable expenses of sending your warranty claim to us.

3. What this warranty does not cover

- 3.1 This warranty will not apply in relation to:
- (a) Goods modified or altered in any way;
 - (b) Defects and damage caused by use with non GME products;
 - (c) Repairs performed other than by our authorised representative;
 - (d) Defects or damage resulting from misuse, accident, impact or neglect;
 - (e) Goods improperly installed or used in a manner contrary to the relevant instruction manual; or
 - (f) Goods where the serial number has been removed or made illegal.

4. Warranty period

- 4.1 We provide the following warranty on GME and Kingray products. No repair or replacement during the warranty period will renew or extend the warranty period past the period from original date of purchase.

PRODUCT TYPE	WARRANTY PERIOD
EPIRBs	6 years



gme.net.au
GME Pty Ltd

17 Gibbon Road, Winston Hills NSW 2153, Australia
Part Number: 311156 Drawing Number: 52534-4