GME

ACCUSAT
EMERGENCY BEACONS

MT610G PLB

PERSONAL LOCATOR BEACON

AUSTRALIAN MADE

INSTRUCTION MANUAL

OWNER DETAILS:

Name .....

Address .....

.....

Tel: .....

UIN (Hex ID) # .....

DISTRIBUTED BY:

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INTRODUCTION

Congratulations on purchasing your new Accusat Pocket Series Personal Locator Beacon (PLB). A GPS equipped GME Accusat MT610G is one of the most advanced 406 MHz digital satellite beacons available today. Using new digital frequency generation technology, GME have developed and approved world wide, a new family of affordable high performance 406 MHz Personal Locator Beacons.

GENERAL INFORMATION

The GME MT610G beacon is designed for use when life is endangered and you have no other means of communication. The beacon can save your life and the lives of others by leading an air, land or sea rescue to your precise location. Beacons are an excellent choice to provide added safety while participating in any outdoor or remote area activity.

The MT610G beacons are fully sealed units and will not sink in water, making them equally suitable for use on land, marine and aviation applications.

The PLB is distinctively different to an EPIRB and the requirement for either is determined by personal situation and intended usage. The MT610G PLB is not designed to operate in water. However, in the event that PLB operation in water is unavoidable, ensure that the antenna is vertically oriented and kept clear of the water's surface. In addition, ensure that the GPS has unobstructed exposure to the sky.

KEY FEATURES OF THE MT610G PLB

- Suitable for aviation and land applications
- GPS-equipped
- 7-year battery life*, 6-year warranty
- Typical GPS accuracy: better than 100 m
- High visibility flashing light
- No warm-up period
- Feather-weight, compact and robust construction
- Digital 406 MHz, 5 watt transmission plus 121.5 MHz homing signal
- COSPAS-SARSAT worldwide operation
- National and international approvals
- Buoyant and waterproof design (exceeds IP67)

- Simple two-step activation
- MT610G PLB comes with a lanyard and Instruction Manual

*Prolonged storage at temperatures higher than 20°C will result in reduced useful life of the battery.

For Approval Certificates, please visit
https://www.gme.net.au/beacon-information

GLOSSARY

This section provides a list of acronyms and their expansions/descriptions that are used in this manual.

Term	Meaning
COSPAS-SARSAT	An international satellite-aided search and rescue system to detect and locate radio beacons activated in distress.
DG Declaration	Dangerous Goods Declaration
EPIRB	Emergency Position Indicating Radio Beacon
GALILEO	Global Navigation Satellite System (GNSS); created by the European Union.
GPS	Global Positioning System
IATA	International Air Transport Association
LUT	Local User Terminal
MCC	Mission Control Centre
PLB	Personal Locator Beacon
RCC	Rescue Coordination Centre
UIN	Unique Identification Number

HOW THE PLB WORKS

Your MT610G PLB is a self-contained 406 MHz digital radio transmitter that emits an internationally-recognized distress signal on a frequency monitored by the COSPAS-SARSAT satellite system. The MT610G contains a unique identity code which can be cross-referenced to a database of registered 406 MHz beacons, allowing the beacon's owner to be immediately identified in the event of an emergency. The PLB includes a high-performance, solid-state light and 121.5 MHz VHF homing signal to assist in leading rescuers to your precise location.

The MT610G also features an integrated GPS Receiver which when activated, will automatically acquire a position and relay the latitude and longitude of the PLB along with the personal identifier and emergency signal.

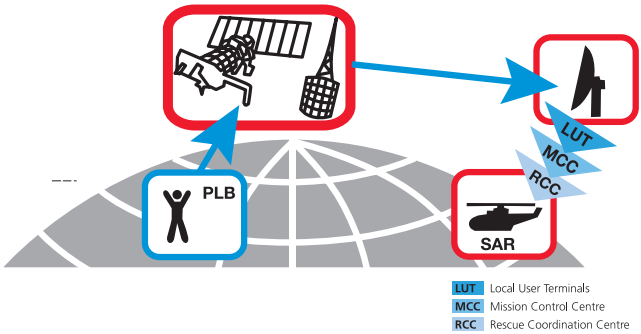
The section below explains how your PLB utilizes the COSPAS-SARSAT system to identify your exact location in case of an emergency.

ABOUT THE COSPAS-SARSAT SYSTEM

[1]The COSPAS-SARSAT is an international, humanitarian search and rescue system that uses satellites to detect and locate emergency beacons carried by ships, aircraft or individuals. The system consists of a network of satellites, ground stations, mission control centres, and rescue coordination centres.

When an emergency beacon is activated, the signal is received by a satellite and relayed to the nearest available ground station. The ground station, called a Local User Terminal, processes the signal and calculates the position from which it originated. This position is transmitted to a mission control centre where it is joined with identification data and other information on that beacon. The mission control centre then transmits an alert message to the appropriate rescue coordination centre based on the geographic location of the beacon. If the location of the beacon is in another country's area of responsibility, then the alert is transmitted to that country's mission control centre.

The COSPAS-SARSAT system provides a tremendous resource for protecting the lives of aviators and mariners that was unthinkable prior to the space age. With a 406 MHz beacon, a distress message can be sent to the appropriate authorities from anywhere on earth, 24 hours a day, 365 days a year.



REGISTRATION AND TRANSFER OF OWNERSHIP

Your MT610G PLB has been programmed with a unique identifying code which will be transmitted by the PLB in an emergency.

You must register your PLB to provide authorities with immediate access to your details when the PLB is detected. Registering your PLB also allows authorities to identify you and your emergency contacts. In situations where the PLB may be accidentally activated, the authorities can also contact you before eliminating your PLB activation as an emergency signal.

REGISTERING YOUR PLB

Registration of your 406 MHz satellite PLB with the Registration Section of your National Authority is important, and now mandatory in most countries because of the global-alerting nature of the COSPAS-SARSAT system.

- Fill in your Owner Registration Forms: These forms are generally supplied with your PLB package. You can also contact your National Authority to access the correct forms, which are often available online. The information provided in the registration is used for search and rescue purposes only.
- Mail, fax or email your Owner Registration Form to your National Authority. If you need to use the PLB immediately, it is recommended that you fax or email the completed form.
- You can complete Australian Registration of your PLB online at www.beacons.amsa.gov.au

TRANSFERRING OWNERSHIP OF A PLB

If you transfer ownership of your PLB, you must inform your National Authority by email, fax, letter, telephone or online of the following details:

- Name of new owner
- Address of new owner

The new owner is also required to provide their National Authority with the information as required on the registration form. This obligation transfers to all subsequent owners.

For Approval Certificates, please visit https://www.gme.net.au/beacon-information.

REGISTRATION CONTACTS

Australian Users	New Zealand Users
Beacon Registration Section, 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**: 406registry@maritimenz.govt.nz **Fax**: +64 4 577 8041 **Phone (Local)**: 0800 406 111 **International**: +64 4 577 8042

Ensure information is current. Notify the appropriate authority if ownership of the beacon is transferred.

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

NOTE: It is highly important to store and handle PLBs responsibly. Most cases of accidental transmission result from poor/inappropriate storage or failure to totally disable an old model PLB before disposal.

The MT610G will not commence transmitting until approximately 50 seconds after activation, providing a period of visual warning. If the PLB is flashing while it is being carried or stowed, you may still be able to deactivate it during this time period without actually transmitting a distress signal. If in doubt, it is best to report the incident to your local authorities.

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

1. Follow the self-testing procedures.
2. Educate your traveling companions on how and when to correctly operate the PLB.
3. Avoid stowing the PLB where it will be exposed to continuous direct sunlight. This could cause the internal temperature of the PLB 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 exposure.
4. Do not allow children to interfere with the PLB.

CONTACTS FOR REPORTING ACTIVATIONS

If you suspect that a PLB has been activated inadvertently, you MUST turn it off and report it immediately to your National Authority's Rescue Coordination Centre to prevent an unnecessary search.

When reporting, you should include the following:

- 15 character Unique Identifier Number (UIN), which is marked on the unit body (e.g. "UIN: XXXXXXXXXXXXXX)
- Date, time and duration of activation
- Cause of activation
- Location at time of activation

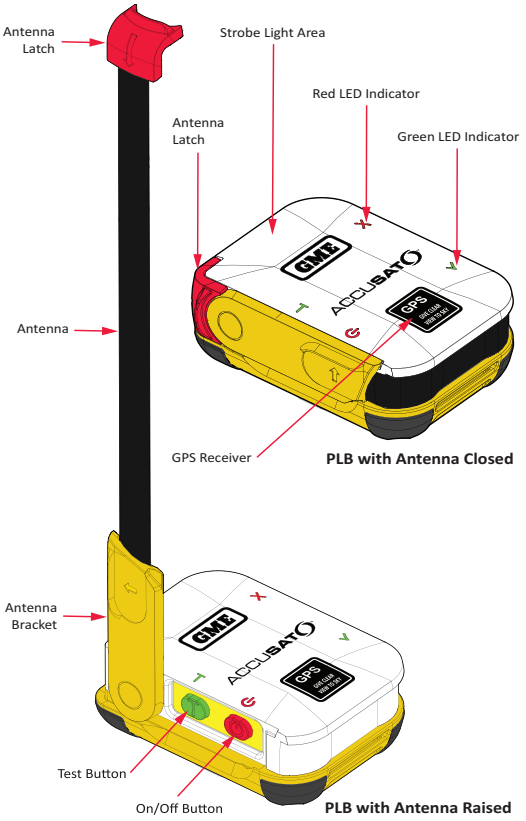
Search and Rescue authorities will not penalize a beacon owner or operator in cases of genuine accidental activation.

CONTACT NUMBERS:

Country	Contact Number
Australia	1800 641 792
New Zealand	0508 472 269
United States of America	1800 851 3051
United Kingdom	01326 211 569

PARTS OF THE PLB

The graphics below display the main parts of the PLB with the antenna closed (undeployed) and raised (deployed).



PLB PARTS & FUNCTIONS

The table below provides details about the functions of specific PLB parts.

Part	Function
Antenna Latch	Holds the antenna in a locked position. When unclipped, the antenna can be raised, revealing the **Test** and **On/Off** buttons.
Antenna	Wraps around the PLB unit, covering/protecting the **Test** and **On/Off** buttons from damage and accidental use.
Strobe Light	Activates when the PLB is turned on, and at the beginning of each self-test.
Red LED Indicator	Visual indicator of PLB activity.
Green LED Indicator	Visual indicator of PLB activity.
GPS/Galileo Receiver	Location of the GPS/Galileo receiver antenna. Keep the GPS/Galileo receiver unobstructed with a clear exposure to the sky.
On/Off Button	Activates the PLB when pressed for 2 seconds. Turns the PLB off when pressed for 5 seconds.
Test Button	Used to initiate test on the PLB. For details, refer the section 'Testing your PLB'.

OPERATION AND STORAGE CONDITIONS

OPERATION

- The MT610G PLB is guaranteed* to operate for a minimum of 24 hours.
- It is recommended that PLB be operated at a temperature between -20°C to +55°C (-4°F to +131°F).

*If used in accordance with the general/GPS self-tests, storage and maintenance instructions provided in this manual.

STORAGE

- The MT610G PLB must be stored at a temperature between -30°C to +70°C (-22°F to +158°F).
- Avoid exposure to the chemicals and organic solvents listed below (this list includes but is not limited to the listed items):
    - Fuel
    - Engine oil
    - Exhaust gas
    - Hand cream
    - Sunscreen
    - Paint

MAINTENANCE

The MT610G PLB is generally maintenance-free. However, it is recommended that you routinely follow the steps below to ensure that your PLB is operationally ready when required:

- Test the PLB at the recommended interval. For details, refer to the section 'Testing the PLB'.
- Ensure that the device is not past its expiration date.
- Inspect the MT610G PLB for physical damage or deterioration.
- To keep the unit clean, first wipe the PLB over with a damp cloth (warm water is suitable), and then allow it to dry.

NOTE: **DO NOT OPEN YOUR PLB.**
Your PLB does not contain user-serviceable parts. Opening the PLB will void the warranty.

BATTERY REPLACEMENT

The MT610G is fitted with the very latest in high capacity primary lithium battery technology. These non-rechargeable batteries are designed to operate within a temperature range of -20°C to +55°C.

The batteries have a finite shelf life, and full operational capability of your beacon may not be available if the batteries have exceeded their replacement date, which is clearly marked inside the booklet label on the bottom of the unit.

Prior to reaching this date, make arrangements to have your PLB returned for service. Service includes replacement of the battery and o-ring(s), testing the water seal and electrical properties, and inspection of overall unit integrity.

If the red and green LED lights flash simultaneously three times when you run the Self-Test, the PLB has detected that battery capacity may be insufficient for continuous 24 hours operation. It is recommended that you make arrangements to have your PLB returned for service and battery replacement as soon as possible.

	NOTE: The MT610G batteries are not user replaceable. Battery replacement requires that the beacon be returned to a manufacturer-approved service facility. The replacement of batteries due to expiry or after usage is not covered by the product's warranty.

If there is any doubt as to the PLB's serviceability, contact your local dealer, authorised service centre or GME Customer Support (GME Pty Ltd, PO Box 96, Winston Hills NSW 2153, Australia; Tel: (02) 8867 6000, Fax: (02) 8867 6199, Email: *servadmin@gme.net.au*) for advice.

TESTING YOUR PLB

By testing your PLB, you can ensure that your unit is fully functional, particularly prior to an extended journey. This section details the 2 tests that you can perform on your MT610G PLB.

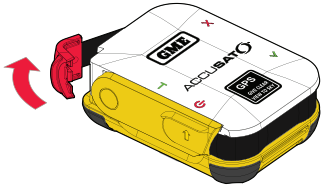
- **General Self-Test**
  Checks the digital message and memory integrity, 121.5 MHz and 406 MHz carrier RF power, communication with GPS receiver, and the battery health.
- **GPS Self-Test**
  Switches the GPS receiver on, performs the real-time position acquisition and transmits the position data (coordinates) in the digital self-test message.

The sections that follow explain the procedures for the tests in detail.

GENERAL SELF-TEST PROCEDURE

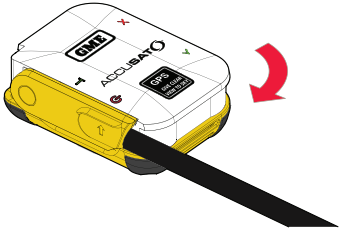
Follow the steps below to perform a self-test on your PLB:

1. Push the antenna latch at the top of the PLB to release the antenna. Refer the image that follows.



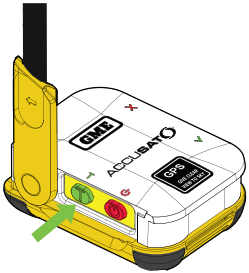
NOTE:
- GME recommends a maximum of 2 self-tests per month.
  Do not over-test as each test consumes battery power.

2. Unwrap the antenna until fully extended.



3. Lift the antenna until it clicks into place (at a 90°angle perpendicular to the body of the PLB).

4. Briefly press and release the **Test** button (marked ‘T’) to begin the test.



a. The strobe light will light up briefly to indicate that the test has begun.

b. During the test, a green LED will flash twice to indicate that 121.5 MHz and 406 MHz RF power is being emitted.

c. Next, a long green LED flash indicates that the test is successful.

For more details on the test indication scheme, refer the 'General Self-Test Indication Table'.

GENERAL SELF-TEST INDICATION SCHEME

Visual Indicator	Description	Indication
☆	Short strobe light at the beginning of the test.	PLB is undergoing a General Self-Test.
OR		
☆ and ★	Long strobe together with red LED at the beginning of the test.	PLB is undergoing a General Self-Test. However, this PLB was previously activated. Contact GME for advice.
★ ★ ★ ★ ★ ★	Red and Green LEDs flash 3 times simultaneously.	PLB is undergoing a General Self-Test; however, the PLB has detected that Battery Capacity is insufficient for continuous 24 hours operation. You should limit further Self-Tests to the recommended intervals to conserve battery capacity.
★ or ★	2 Green or Red LED flashes during the test indicate the status of 121.5 MHz and 406 MHz signals.	1st light Green = 121.5MHz is emitted; 1st light Red = 121.5 MHz is not emitted; 2nd light Green = 406 MHz is emitted; 2nd light Red = 406 MHz is not emitted;
★	Long Green LED flash at the end.	Long Green LED flash indicates the PLB has passed all the tests and is OK to use.

Visual Indicator	Description	Indication
	Long Red LED flash at the end.	Long Red LED flash indicates the PLB has failed one or more tests and may require servicing. Contact GME for advice.

GPS SELF-TEST PROCEDURE

A GPS self-test allows you to perform a complete GPS satellite acquisition check of your PLB. It is recommended that you perform a GPS self-test up to 2 times per year. Testing more than 2 times a year is not recommended as each test consumes battery power.

While the general self-test verifies the GPS receiver's circuitry, the full test will include the operation of the special GPS antenna as well.

As the GPS Self-Test consumes significantly more power than a general self-test, choose a test location with good visibility of the open sky above. A quick satellite acquisition means a short test, and less power consumed from the PLB battery.

1. Perform steps 1-4 of the 'General self-test'.
2. Press and hold the Test (marked '**T**') button for 4 seconds. When the green LED light appears, release the Test button.
3. Your PLB will continue to flash the red LED while it searches for satellites. This may continue for up to 2 minutes depending on the number and location of the satellites in view. Note that distress signals are NOT emitted as part of this test.
4. Once the GPS position is acquired, the green LED will flash 8 times to indicate successful completion of the test and a digital self-test message with actual location will be transmitted.

For details on the GPS test indication scheme, refer the 'GPS Self-Test Indication Scheme' that follows.

GPS SELF-TEST INDICATION SCHEME

Visual Indicator	Description	Indication
	Short green flash after pressing and holding the Test button for 4 seconds.	PLB is undergoing a GPS Self-Test.
	Red LED flashing in regular time intervals of 1.5 seconds.	During the GPS acquisition mode (searching for position fix), PLB will keep flashing the red LED indicator.
	OR	
	Long red LED flash after the green LED.	Indicates the GPS Self-Test limit has been reached. No further GPS tests can be performed .
	8 short green LED flashes at the end.	Test Summary: GPS Self-Test is successful. Eight short green flashes at the end of the test indicates that the PLB has obtained the GPS position.
	8 short red LED flashes at the end.	Test Summary: GPS Self-Test has failed. Eight short red flashes at the end of the test indicate that the PLB has not obtained the GPS position. Ensure that you follow the GPS self-test instructions, and repeat the test. If the test continues to fail, contact GME for advice.

ACTIVATING THE PLB

This section details the ideal conditions and procedure to activate your PLB.

IDEAL CONDITIONS FOR ACTIVATION

- For best performance, activate the PLB in an area with a clear view of the sky. Deploying the PLB within an enclosure, particularly one which is electrically conductive such as under a car roof, will reduce the signal strength and may mean that it cannot be detected by rescue satellites or overflying aircrafts. If you find yourself in a narrow valley or ravine, you can greatly increase the chances of your PLB signal being detected by placing it on higher ground.
- Activate the PLB in an upright position with the antenna vertical and clear of any surrounding obstructions such as trees or rocks.
- Do not cover the GPS receiver, and ensure that the PLB has an unobstructed view to the sky to ensure best conditions for obtaining the GPS position.
- Where on-person operation is unavoidable, choose an elevated position that also achieves good local clearance around the antenna.
- Your PLB is not designed to operate in water. While it is waterproof and buoyant, the PLB must be above the water surface to operate properly.
- If the PLB has been activated in an emergency/distress situation, leave it switched on. A continuous signal is needed for rescue authorities to determine your location.

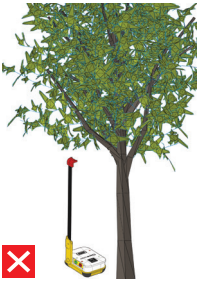
BEST PRACTICES WHEN USING YOUR PLB

The images below describe best practices to follow when using the PLB.

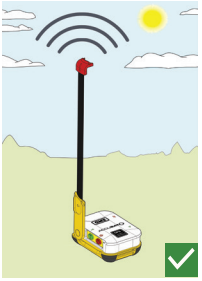
Avoid deploying the PLB in water.

The antenna must point towards the sky.

Do not cover the
GPS receiver area of the PLB.



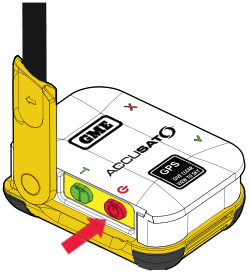
Avoid placing the PLB without
clear exposure to the sky.



Ensure clear exposure to the sky without obstruction,
whether on land or water.

PLB ACTIVATION PROCEDURE

1. Push the antenna latch at the top of the PLB to release the antenna.
2. Unwrap the antenna until fully extended.
3. Lift the antenna until it clicks into place (at a 90° angle perpendicular to the body of the PLB).
4. Press and hold the **On/Off** button for at least 2 seconds.
   You have successfully activated your PLB if the strobe light AND the red LED flashes immediately.



PLB ACTIVATION INDICATORS

Indicator	Detail
Strobe light and red LED flashes every 2 seconds	Indicates that the PLB is active.
Red LED is replaced by the green LED.	Indicates that the PLB has successfully acquired a GPS position (coordinates), and is now transmitting your position within the 406 MHz distress message.

NOTE: PLBs should only be activated in situations of grave and imminent danger. Deliberate misuse of the PLB can result in unnecessary deployment of valuable Search & Rescue resources, and could incur a severe penalty.

RF Exposure Warning: The PLB emits low-levels of radio frequency energy. Avoid handling the antenna after it has been activated.

DEACTIVATING THE MT610G

The steps below explain how to deactivate or turn off your PLB.

1. Press and hold the **On/Off** button for more than 5 seconds.
2. The red and green LEDs will flash together to indicate that your PLB has been deactivated.

The PLB will now be turned off, and all visual alerts will cease.

NOTE: In case of accidental activation, follow the steps below:
- Deactivate your PLB, as described in the section above.
- Notify your nearest RCC (Rescue Coordination Centre) of accidental activation.

IN CASE OF UNSUCCESSFUL DEACTIVATION:

If your PLB does not deactivate the first time, repeat the deactivation process.

In the event that deactivation fails the second time round, proceed with the following steps to permanently disable the PLB:

1. Open the PLB by removing the 4 retaining screws at the rear of the device. Note: The screws are under the 'anti-tamper' plastic plugs.
2. Separate the two parts (top and bottom) of the PLB plastic case to access the battery area.
3. Remove the battery.

Contact the GME service team for technical support.

TRANSPORTING / TRAVELLING WITH PLBS

The MT610G PLB contains 2 lithium metal battery packs with less than 2 gms of lithium content. They are not classified as hazardous products for transportation. However, you are advised to contact the nearest dealer or the GME service team prior to shipping, as regulations may change.

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 PLB for transportation. Prior to shipping your PLB, inform your carrier about the lithium batteries contained in the PLB to ensure they label your package properly.

Check with your transport carrier for any specific restrictions that may apply to you.

DISPOSAL

Special precautions must be taken when disposing your PLB at the end of its life. Legislation may determine the specific requirements which apply to you for disposal. In the first instance, contact your National Authority for advice. The section that follows details how you can permanently disable your PLB before disposal.

To permanently disable the PLB:

1. Open the PLB by removing the 4 retaining screws at the rear of the device. Note: The screws are under the 'anti-tamper' plastic plugs.
2. Separate the two parts (top and bottom) of the PLB plastic case to access the battery area.
3. Unplug the battery leads at the base of the circuit board.

Lithium batteries are generally not considered as hazardous waste when fully discharged. Qualified personnel may be able to slowly and safely discharge the cells for you. The MT610G contains many recyclable parts.

Contact the GME service team for technical support.

SPECIFICATIONS*

MODES OF OPERATION

Type	Description
Activated	UHF (406) and VHF (homer) complete with high intensity light.
Self-Test	Comprehensive internal diagnostics with visual operator feed-back. UHF test message (inverted synchronisation compatible with portable beacon testers).
GPS Self-Test	Comprehensive diagnostics of GPS circuitry and real-time position acquisition test with visual operator feedback.

OPERATION

Type	Description
Activation	2-step activation process. Refer the section 'Activating your PLB'.
Duration	In excess of 24 hours at -20°C. Longer at higher ambient temperatures.
Transmission	121.5 MHz and 406 MHz
Delay	50 seconds (+/- 2.5 sec) to deactivate prior to distress transmission.
Warm Up	None required
VHF	121.5 MHz, 50 mW ±3 dB, swept tone AM (analogue)
UHF	406.03 MHz, 5 W ± 2 dB, PSK (digital)
Light	> 20 flashes/minute High intensity white LED

COSPAS-SARSAT

Type	Description
Certification	Certified to C/S T.001 (Class 2) requirements.
Operation Protocol	Supports Standard Location and National Location operation protocols.
Repetition Period	50 seconds mean, digitally generated randomization.

BATTERY

Type	Description
Useful Battery Life	7 years**
Replacement Method	By service centre or factory only. Not user-replaceable.
Battery Chemistry	$LiMnO_2$ (0.6 g Lithium per cell)
Battery Configuration	2 electronically isolated batteries, each consisting of 2 cells type CR123A

PHYSICAL

Type	Description
Operating	-20 to +55°C
Storage	-30 to +70°C
Weight	160g ± 2g
Compass Safe Distance	1 m (3.3 ft)
Dimensions (mm)	88 (h) x 66 (w) x 36 (d)
Buoyant	Will float in fresh/salt water.
Waterproof	IP68 (10m of salt-water for 1h)
Materials	High visibility yellow chassis with translucent cap. UV stabilised high-impact plastic chassis with energy absorption over-moulded bumpers.

GPS/GALILEO RECEIVER

Type	Description
Type	Ultra-high sensitivity GPS L1C/A, Galileo E1B/C
Channels	72-channel, GPS/GALILEO Search Engine.
Antenna	Ceramic Patch Antenna.
Acquisition	Cold start 30 seconds typical. Hot start 1 second typical.

OTHER FEATURES

Type	Description
Standards & Approvals	COSPAS-SARSAT T.001 & T.007; AS/NZS 4280.2
Transport	Meets UN requirements for transport as non-hazardous cargo onboard passenger aircrafts.
Antenna	SUS631 Hardened Stainless Steel.
Accessories	Protective carry pouch with aluminum carabiner.

*Standard factory setting, subject to national requirements. Distributor re-programmable via optical data interface. Specifications are subject to change without notice or obligation.

**Prolonged storage at temperatures higher than 20°C would result in reduced useful life of the battery.

REFERENCES

- https://www.sarsat.noaa.gov/cospas_sarsat.html
- https://cospas-sarsat.int/en/

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WARNING

Emergency beacons should only be used in situations of grave and imminent danger. It is important that you read this manual thoroughly.

GME WARRANTY AGAINST DEFECTS FOR AUSTRALIAN CUSTOMERS

This warranty against defects is given by GME Pty Ltd, A.C.N. 000 346 814 (We, Us, Our or GME). Our contact details are set out in clause 2.g. This warranty statement only applies to products purchased in Australia. For products sold outside of Australia, please contact your local GME distributor the details of which can be found at www.gme.net.au/export.

1. Consumer guarantees

a. 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 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.

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

2. Warranty against defects

a. 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).

b. Nothing in this warranty excludes, restricts or modifies any condition, warranty, guarantee, implied term, right or remedy pursuant to the Australian Consumer Law and which may not be so excluded, restricted or modified. For such conditions, terms, guarantees and warranties that cannot be excluded, restricted or modified, We limit the remedies available to the extent permitted in the relevant legislation.

c. You are entitled to a replacement product or repair of the product at our discretion according to the terms and conditions of this document and provided your product is found to be faulty within the Warranty Period.

d. Our products are manufactured using new or equivalent to new materials. Replacement parts may be new or equivalent to new. We warrant any replacement parts to be free from defects in material or workmanship for the remainder of the period of warranty for the products in which they are installed. During the Warranty Period, We will, where possible, repair and if not, replace the faulty product or part thereof.

e. All component parts removed under this Warranty become the property of GME.

f. 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 at our discretion:
   the replacement of the goods or the supply of equivalent goods;
   the repair of the goods;
   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 at our discretion:
   the supplying of the services again;
   the cost of having the services supplied again.

g. For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three (3) months from the date of the original repair. We agree to re-repair or replace, at our discretion, any materials or workmanship which we are satisfied are defective.

h. 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.

3. Warrranty

a. If you believe the product to be defective, to make a claim under this Warranty, you must, before the end of the applicable Warranty Period (see Warranty Table), at your own cost (including postage, delivery, freight, transportation or insurance of the product) send to us:
   - a copy of your proof of purchase or any such document evidencing this (please keep your original copy);
   - the faulty product, including all accessories;
   - written details of why you believe the product to be defective; and details of how We can contact you.

b. You should 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

c. If we determine that your product is defective, we will pay the costs of returning the repaired or replaced product to you, and reimburse you for your reasonable expenses of sending your warranty claim to us.

d. If we determine that your product does not qualify for return, this warranty does not apply to your product.

4. What this warranty does not cover

We will not be liable under this Warranty, and to the extent permitted by law, will not be liable for any defect, loss, damage or injury arising out of in connection with

(i) failure by you to adhere to the warnings and follow the instructions set out in this user guide for the proper installation and use of the product;

(ii) willful misconduct or deliberate misuse by you of the product;

(iii) the modification or alteration of the product in any way;

(iv) defects and damage caused by use of the products with non-GME products;

(v) modification to the product or services carried out on the product by anyone other than GME or GME's authorised service provider;

(vi) any external cause beyond Our control, including but not limited to power failure, lightning or over voltage; or

(vii) goods where the serial number has been removed or made illegible.

WARRANTY PERIOD

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
PLBs	6 years

NATIONAL AUTHORITY INFORMATION

Australia	New Zealand
24 Hour Emergency Contact Ph: 1800 641 792, or Int: +61 2 6230 6811	**24 Hour Emergency Contact** Ph: 0508 472 269, or Int: +64 4 577 8030

gme.net.au

GME Pty Ltd

17 Gibbon Road, Winston Hills NSW 2153, Australia

Part Number: 311126-01 Drawing Number: 51460-4