



McMURDO LDT61A & LDT62A

Emergency Position Indicating Radio Beacon

INSTRUCTION MANUAL

795-PAT-0-001 Iss 5

CATEGORY 1/2, Class 2

406 MHz EPIRB

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This manual describes installation, operation and maintenance instructions for the McMURDO LOCAT LDT61A and LDT62A 406 MHz Emergency Position Indicating Radio Beacons.

2.1 DESCRIPTION

The LDT61A/LDT62A EPIRB consists of a moulded polycarbonate body containing the electronics and battery pack. When installed, it is protected by a two-part polyethylene housing which is removable from its mounting bracket for security purposes.

The housing of the LDT61A Category 1 float-free EPIRB is additionally fitted with a Hydrostatic Release Unit which releases the beacon when it is submerged.

Both LDT61A and LDT62A beacons will automatically transmit when in water and out of the housing, and they may also be manually activated.

On activation, the beacon signal can be received, identified and located anywhere in the world by the COSPAS-SARSAT satellite system. Each beacon is individually coded and identified by either a registered serial number or the vessel call sign.

2.2 APPROVALS

The LDT61A/LDT62A EPIRB is approved to:

COSPAS-SARSAT CS T001/T007
UK MPT 1259

The LDT61A complies with the requirements of IMO for Automatic Release Beacons, Float-free Type, as adopted by GMDSS.

3.1 BEACON

Frequency	406.025 MHz and 121.5 MHz ITU emission class: 16K0GID for 406 MHz,3K20A3N for 121.5 MHz.
Radiated Output:	5W at 406.025 MHz 50mW +/- 3dB at 121.5 MHz
Frequency Stability	Complies with Cospas/Sarsat T001
Temperature Range	Operation -20° C/ +55° C Storage -40° C / +70° C
Endurance	Minimum 48 hours at -20° C
Strobe	Min. 20 Flashes per minute
Antenna	Dual Frequency Helical Omni Directional Length 200mm
Battery	Long Life Lithium Cells easily replaceable every 5 years.
Material	Orange UV resistant high impact PC
Size	296 mm x 118.5 mm (excluding antenna)
Weight	1.5kg
Identification Code	In memory the beacon has an identification code which includes: The Nationality Type of Beacon The Manufacturer Number Serial Number or Radio Call Sign

3.2 HOUSING

Material	White UV-resistant Polyethylene
Size	643 mm x 174 mm x 164 mm
Weight	3.0kg
Hydrostatic Release Unit (LDT61A only)	Hammar H20 Replace every 2 years from date of manufacture of Mechanism.

4.1 HOUSING INSTALLATION

The housing should be deck or bulkhead mounted in an area free from any obstructions which could hinder the release of the beacon.

The Beacon is separated from the housing either manually or (LDT61A only) by the action of a hydrostatic release unit.

To mount the housing, spot through mounting bracket holes to bulkhead and tap 4 holes M6, affix the 4 screws with springs attached to bulkhead. Offer assembly up to screws and press screw heads through keyhole slots in mounting bracket & slide down fully. Use spring pins provided to retain bracket in position.

4.2 BEACON

With the housing horizontal, place the beacon into the base section with the switch facing upwards. Making sure the beacon is correctly located, replace the top section of the housing thread the strap through the buckle and pull tight.

4.3 HYDROSTATIC RELEASE UNIT (LDT61A only)

Release and unthread strap from buckle, pull strap through old HRU and replace with new unit. In the event of the HRU being operated, the lower strap must be replaced. This is held in place by a screw on the base of the housing.

5.1 AUTOMATIC OPERATION

A magnet within the housing holds the beacon in the OFF condition. On removal from the housing the beacon becomes ARMED and will operate within approximately 3 seconds if immersed in water, irrespective of the switch position. It will cease transmitting when removed from the water if the switch is not in the ON position

5.2 MANUAL OPERATION

The beacon may be activated manually, either in or out of the housing, by pulling the switch guard clear, then moving the switch upwards until it locks in the ON position.

5.3 FLOAT-FREE OPERATION (LDT61A only)

The two part housing is held closed by a polyester strap and alloy buckle. When the Hydrostatic Release Unit is submerged to a depth of 2 to 4 metres, it activates and severs the strap. A stainless steel spring then forces the beacon clear of the housing, allowing it to float to the surface and transmit.

WARNING

MIS-USE LIABLE TO PROSECUTION

GENERAL

The LDT61A has been designed for a minimum maintenance requirement.

Please Note: When performing maintenance inspection, check that the TEST OFF/ON switch is in the OFF position. Ideally all maintenance checks should be carried out in a screened room and with a suitable EPIRB tester, such as the McM5411 Programmer/Tester.

6.1 SELF-TEST PROCEDURE

It is recommended that the beacon is removed from the housing for test.

Move the switch on the beacon downwards and hold it in this position for approximately 5 seconds. You should see alternating green and red indicators on the beacon, accompanied by a flash from the strobe light. At the end of the test the beacon should show a steady green indication.

If a steady red light is displayed, this may be due to the time needed for the temperature-controlled crystal oscillator to reach a stable operating condition. Move the switch downwards and hold it down for approximately five (5) minutes. Release the switch and repeat the test.

If a steady red colour is still displayed, the beacon has failed its self-test sequence and you should release the switch and consult your service agent.

The switch will automatically return to its central position when released.

***DO NOT REMOVE THE SWITCH GUARD DURING
SELF-TEST***

6.2 INSPECTION CHECKS

1. Check antenna for any signs of damage or corrosion, chafing, wear or cracks.
2. Check antenna cap for any signs of looseness.
3. Check the lanyard for signs of damage, chafing or looseness.
4. Check screws and sealing around the joint of the beacon.
5. Check the float-free capsule for any signs of damage or corrosion, chafing, wear or cracks.

6.3 BATTERY CHECK

Batteries must be replaced on or before the replacement date shown on the beacon, or immediately after emergency use. This can be carried out by a McMurdo approved service agent.

6.4 HYDROSTATIC RELEASE UNIT CHECK (LDT61A only)

Ensure that the hydrostatic release unit is not past its replacement date. The hydrostatic release must be replaced on or before the date shown on its side.

7.1 REGISTRATIONS

Radiocommunications Agency (UK registered vessels):

You should apply for a radio license for your EPIRB (in just the same way as for VHF) from:

Ship Radio Licensing Section
Radiocommunications Agency
Room 613
Waterloo Bridge House
Waterloo Road
London SE1 8UA

Tel: 0171 215 2047

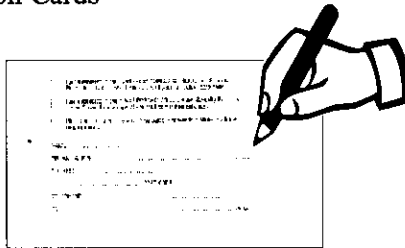
Fax: 0171 620 2793

FCC

You should update your FCC ship's station license to include the EPIRB operating frequencies of 121.5 and 406 MHz.

IMPORTANT!

1. Fill in Registration Cards



2. Send first postcard to:

McMurdo Limited
Marine Registrations
Rodney Road
Fratton, Portsmouth
Hampshire
PO4 8SG
England

**3. ONLY if vessel is UK registered
send second postcard to:**

Marine Safety Agency
EPIRB Registrations
Spring Place
105 Commercial Road
Southampton
SO15 1EG
England

**4. If vessel is NOT UK registered
address blank postcard to the correct local maritime authority:**

7.2 SHIPPING OF EPIRBs

KEEP YOUR PACKAGING MATERIAL ...

EPIRBs contain lithium batteries, and are classified as hazardous material for shipping purposes.

The packaging must be certified to DOT-E-7052 for US shipments and to UN 3091 for international. The EPIRB battery contains 12 grams of lithium. Most passenger air carriers will not accept this product as cargo. Consult your carrier before attempting to carry your EPIRB on an aircraft.

For additional information regarding shipment of EPIRBs, consult your carrier or McMurdo Ltd.

7.3 LIMITED WARRANTY

McMurdo Ltd warrants that its EPIRB products will be free from defects in material and workmanship for a period of eighteen (18) months from the date of manufacture and that they will comply with McMurdo Ltd's product specifications published at the date of manufacture.

Where any valid claim in respect of any of the products which is based on any defect in the quality or condition of the products of their failure to meet specification is notified to McMurdo Ltd within the Warranty period in accordance with this Warranty, McMurdo Ltd shall be entitled to replace the products (or the part in question) free of charge or, at McMurdo Ltd's sole discretion, refund to the Buyer the price of the products (or a proportionate part of the price), but McMurdo Ltd shall have no further liability to the Buyer.

McMurdo Ltd shall be under no liability in respect of any defect arising from fair wear and tear, wilful damage, negligence, abnormal working conditions, failure to follow the manufacturer's instructions (whether oral or in writing), misuse or alteration or repair of the product without McMurdo Ltd's approval.

The above Warranty does not extend to parts, materials or equipment not manufactured by McMurdo Ltd, in respect of which the Buyer shall only be entitled to the benefit of any such warranty or guarantee as is given by the manufacturer to McMurdo Ltd. The battery storage life is specifically excluded from this warranty.

The benefit of this Warranty shall extend to subsequent purchases of the products provided that such transfer in ownership is notified in writing to McMurdo Ltd within fourteen (14) days of such transfer.

EXCEPT IN RESPECT OF DEATH OR PERSONAL INJURY CAUSED BY McMURDO LTD'S NEGLIGENCE, McMURDO LTD SHALL NOT BE LIABLE TO THE BUYER BY REASON OF ANY REPRESENTATION, OR ANY IMPLIED WARRANTY, CONDITION OR OTHER TERM, OR ANY DUTY AT COMMON LAW, OR UNDER THE EXPRESS TERMS OF THE CONTRACT. FOR ANY CONSEQUENTIAL LOSS OR DAMAGE (WHETHER FOR LOSS OF PROFIT OR OTHERWISE) COSTS, EXPENSES OR OTHER CLAIMS FOR CONSEQUENTIAL COMPENSATION WHATSOEVER (AND WHETHER CAUSED BY THE NEGLIGENCE OF McMURDO LTD, ITS EMPLOYEES OR AGENTS OR OTHERWISE) WHICH ARISE OUT OF OR IN CONNECTION WITH THE SUPPLY OF THE PRODUCTS OR THEIR USE OR RESALE BY THE BUYER, EXCEPT AS EXPRESSLY PROVIDED IN THIS WARRANTY.

McMurdo Ltd shall be under no liability under the above Warranty (or any other warranty condition or guarantee) if the total price for the products has not been paid by the due date for payment.

Any claim by the Buyer which is based on any defect in the quality or condition of the products or their failure to correspond with specification shall be notified to McMurdo Ltd in writing within a reasonable time after discovery of the defect of failure, and in any event during the Warranty period. The product shall be returned at the Buyer's expense to McMurdo Ltd's address as below or an authorised repair facility as determined by McMurdo Ltd following notification.

Any enquiries regarding service under this Warranty should be directed to McMurdo Ltd at the following address:

McMurdo Ltd
Rodney Road, Portsmouth
Hampshire, PO4 8SG
United Kingdom