

GME

Electrophone

INSTRUCTION MANUAL

GX560 VHF HANDHELD TRANSCEIVER



COMPLIES WITH SMAS 274B

Issue 01

**STANDARD COMMUNICATIONS
PTY. LTD.**

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FEATURES

The GME Electrophone GX560 is a high quality VHF marine hand held transceiver with construction and features specifically designed to meet the needs of users in Australia and NZ.

The case is extra rugged to withstand the accidental bumps and shocks which are sometimes unavoidable on board ship. All external parts are corrosion resistant and the unit is sealed to make it splash and shower proof. Note, however, that it is not designed to withstand complete inundation or immersion in water.

The GX560 electronic circuitry incorporates the latest semiconductor devices which include a microprocessor to control all functions and drive the liquid crystal display.

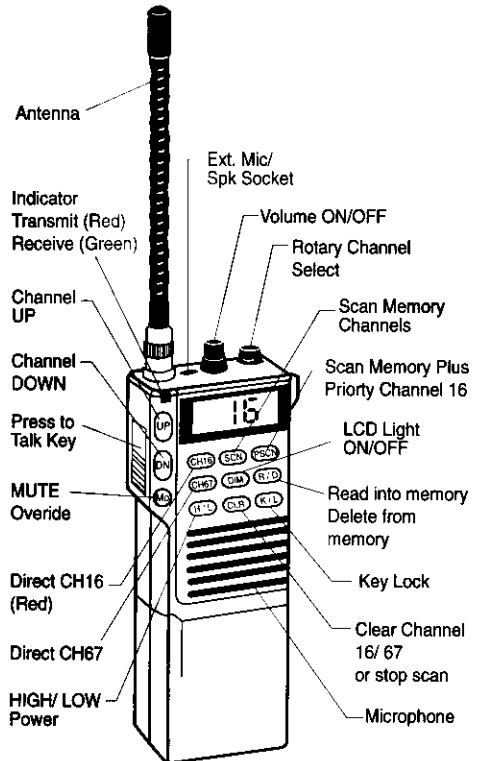
Internal construction utilises surface mount technology which is able to withstand severe vibration and shock and gives better reliability than previously used assembly methods.

The heavy duty 700 mAh rechargeable nicad battery gives long periods of operation between charges. A special battery saver circuit operates automatically when the unit is on receive standby to greatly extend battery life. Battery recharging can be from the mains using the BC560 charger provided or from the ships 12V DC supply, using the LE560 lead and connector supplied. Direct operation from the ship's 12V supply via the LE560 lead is also possible in an emergency.

A high contrast, wide viewing angle liquid crystal display (LCD) indicates the channel number selected, whether the channel is stored in memory and if the unit is switched to high or low power. The LCD can be viewed in full sunlight or back lit for nighttime use by pressing the DIM button.

Channel selection is by a rotary control on top of the unit or by up/down buttons alongside the LCD display. In addition, a red button gives direct access to emergency channel 16 and a second button directly selects secondary distress and working channel 67 for reception of weather forecasts, navigation warnings and traffic lists etc.

A dual function scanning circuit provides either sequential scanning of all channels placed in memory (SCN) or priority scanning with emergency channel 16 inserted between each memorised channel scanned (PSCN) so no important safety messages will be missed.



SPECIFICATIONS

Frequency range	156.025 to 162.025 MHz
Frequency Control	Fully synthesised phase locked loop.
Channels	All currently allocated Australian, New Zealand and International Channels.
RF Power Output	3.5 W (high) nominal 0.8 W (low) nominal
Audio Output Loud Speaker	250mW (min.) 40mm Mylar cone
Operating Voltage	9.6 V.D.C.
Current Drain Standby – Receive Transmit	Sleep 70mA/On 105mA 0.9 A (high power) 0.5 A (low power)
Transmitter and Receiver Performance	Complies with Australian Spectrum Management Agency 274B and New Zealand Standard RFS33
Dimensions	195 (H) x 75 (W) x 35 (D) mm
Weight	0.65 Kg

FIRST APPLYING POWER AND RESETTING THE GX560 TRANSCIEVER

The GX560 includes nicad batteries and a rechargeable backup battery. If the batteries are low at the time you purchase the GX560, the transceiver may not operate properly.

If the transceiver malfunctions, RESET it as follows:-

1. Connect the supplied wall charger to the CHARGE socket on battery pack.
2. Turn OFF transceiver and charge battery pack for 12/24 hours.

3. While pushing **DN** and **CLR**, rotate **VOL** to turn ON power.
4. Release **DN** and **CLR** keys.

The internal batteries should be fully charged before using the transceiver.

OPERATION

RECEIVING

1. Install the antenna on the radio, by pressing the base downwards and turning clockwise to lock in position.
2. Turn ON-OFF/VOLUME switch clockwise to turn the radio on. Press the **(DIM)** key to turn the backlight on. The display will show the last channel the transceiver was on before power was turned off. If backlight is not necessary, press the **(DIM)** key to turn it off. This will reduce battery consumption.

NOTE: The battery pack should be fully charged before using the radio. Refer to pages 4 and 6 for battery charging and transceiver resetting information.

3. Press the **(UP)** or **(DN)** key or turn the CHANNEL SWITCH to select the desired channel.
4. To lock the channel in the operating mode so that it is not accidentally changed, press the **(K/L)** (key lock) key. This locks the **(UP)** / **(DN)** keys and all the keys on the front of the radio. Press the **(K/L)** key again to unlock the channel and other keys. Note that if any button is pressed whilst key lock is selected a double beep will be heard.
5. Set the volume control to mid position.
6. Turn the SQUELCH CONTROL fully counter-clockwise and make sure that

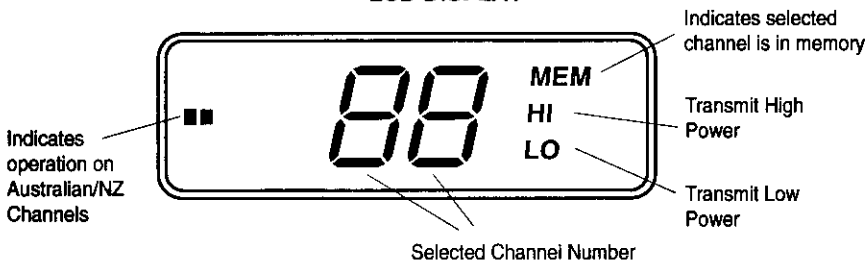
background noise is heard.

7. Adjust the SQUELCH CONTROL clockwise to the threshold point where background noise just disappears.
8. When a message is received, adjust the volume to the desired listening level. The TX/RX (BUSY) LED will light green to indicate that a signal is present on the channel.

SCANNING

1. Select a desired channel to be scanned by using the **(UP)** or **(DN)** key or turn the CHANNEL SWITCH. Press the **(R/D)** key to READ the channel into the radio's memory. "MEM" will appear on the LCD.
2. Repeat step 1 for each of the desired channels to be scanned.
3. To DELETE a channel from the radio's memory, press the **(R/D)** key again while the memorised channel is displayed on the LCD. The "MEM" will disappear from the LCD.
4. The channels programmed into the radio's memory will remain even if the power is turned off. See section following on how to clear the radio's memory.
5. To start scanning press the **(SCN)** key. Scanning will advance from the lowest to the highest channel number in memory and will stop when a signal is received on any of the channels being scanned.
6. To stop scanning press the **(CLR)** key.

LCD DISPLAY



PRIORITY SCANNING

To start priority scanning press the **PSCN** KEY. Scanning will switch between the channels stored in memory and channel 16. Channel 16 is the priority channel and will be scanned between each channel stored in memory.

CLEARING THE RADIO'S MEMORY

To erase all the channels that are stored in memory for scanning:

1. Press and hold the **CLR** key and the **DN** key while the radio is switched on.

TRANSMITTING

1. Before transmitting, be sure that the channel is clear.
2. Heavy squelch action can be overridden to check for weak signals on the channel by pressing the "Mo" key.
3. Select desired power by pressing the **H/L** key. The display will show "HI" for high power or "LO" for low power. Some channels are preset at low power and when these are selected pressing the **H/L** key will not alter the power setting.
4. Press the PTT (push-to-talk) switch on the radio. The TX indicator (red LED) will light while transmitting. Speak slowly and clearly into the microphone aperture below the **K/L** button.
5. When receiving a call, wait until the incoming transmission finishes before transmitting. The radio cannot transmit and receive simultaneously.
6. Always release the PTT key immediately upon completion of transmission.

EMERGENCY CHANNEL 16

1. To select the emergency channel, press the **CH16** key from any channel.
2. If you cannot contact anyone on channel 16, switch to secondary emergency channel 67 and try again.
3. To revert to previous channel from channel 16 or 67 press the **CLR** key.

CARE AND MAINTENANCE

The quality of the solid-state components used in this radio will provide many years of continuous use. Take the following precautions to prevent damage to the radio.

- Keep the Mic/sp. jack covered at all times with the rainproof cap to prevent corrosion of electrical contacts.
- Never press the PTT key without an antenna connected to the antenna socket.
- Use only approved GME Electrophone battery packs, accessories and replacement parts.
- Take care of the battery pack as suggested below.
- Do not connect the transceiver via the (CHARGE) jack to an AC outlet or to a DC power source of more than 12 V. Excessive input voltages will seriously damage the battery pack and transceiver.

USING THE BATTERY PACK WISELY

The battery pack is designed to occasionally withstand recharging periods of a week or more and can be fully discharged. However, regular overcharging or complete discharging shorten the life of a battery. The average life of a battery pack is about 300 charge/discharge cycles but this can be extended to about 500 times as follows:-

- Avoid overcharging. Charging times should normally be between 24 and 48 hours.

- When the battery is approaching a fully discharged condition the radio will cease to operate on transmit. When this occurs DO NOT continue using it on receive only, but switch off and recharge when next convenient.

BATTERY REMOVAL

To remove the battery, perform the following:

1. Turn the power off.
2. With radio facing you, slide the battery pack to the left.
3. The data stored in the GX560 radio's memory will be lost if the battery is removed from the radio for more than two minutes.

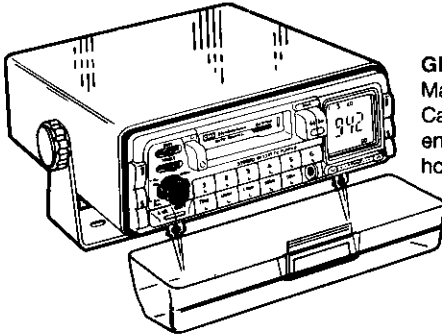
BATTERY STORAGE

Store the battery in a cool place to maximise storage life. Since batteries are subject to self-discharge, avoid high storage temperatures that cause large self-discharge rates. After an extended storage period a full recharge is recommended.

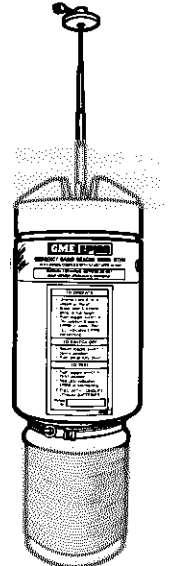
MEMORY CYCLING

Partially discharging a nickel-cadmium battery and then recharging it repeatedly causes a phenomenon called "memory". When a battery pack establishes a memory, its available capacity is reduced. To ensure that the GX560 nickel-cadmium battery pack retains its full capacity, it should be "cycled" once or twice per year by continuing to use it to the point where transmission ceases and then fully recharging before using again.

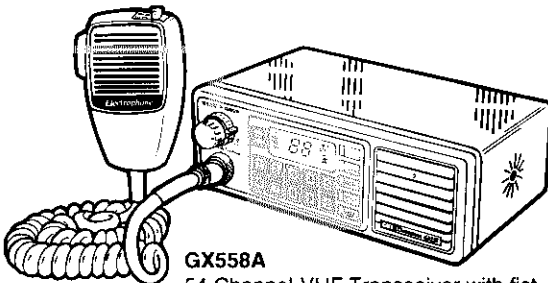
OTHER GME ELECTROPHONE PRODUCTS



GR940A
Marine AM/FM Stereo
Cassette with fully
enclosed weatherproof
housing.



MT250C
Cospas/Sarsat Satellite
Coherent EPIRB. Mot
approved for all classes of
vessels.



GX558A
54 Channel VHF Transceiver with fist
microphone and built-in Seaphone.

WARRANTY

GME ELECTROPHONE limit this warranty to the original purchaser of the equipment.

GME ELECTROPHONE warrant this product to be free from defects in material and workmanship for a period of twelve (12) months from the date of purchase from their authorised dealer. GME ELECTROPHONE also warrant the rechargeable Nicad battery pack to be free from defects in material and workmanship for a period of (90) days from the date of purchase from their authorised dealer.

Should the product require servicing during this period, all labour and parts used to effect repairs will be supplied free of charge. GME ELECTROPHONE reserve the right to determine whether damage has been occasioned by accident, misuse or improper installation whereby the warranty would be void, including:

- (a) Incorrect or reverse polarity connection to a battery or power supply;
- (b) Connection to incorrect supply voltage.

(c) Operation without an antenna or by connection to an antenna which has been incorrectly installed, resulting in damage to the transceiver's output transistors.

(d) Effects of water or moisture penetration.

(e) Non-factory modifications.

Procedure to be followed by claimant:

In the event of a defect occurring during the twelve (12) month warranty period, Ninety (90) days for rechargeable Nicad battery packs, the original Purchaser may return the defective unit along with suitable proof of purchase date (i.e. receipt, docket, credit card slip etc.) and a full description of the defect to the Dealer from whom the unit was purchased.

All freight charges incurred for transportation by the Dealer or GME ELECTROPHONE are the Purchaser's responsibility.

The Dealer will forward it to the closest authorised GME ELECTROPHONE Service Depot in your particular State.

GME ELECTROPHONE AFTER SALES SERVICE

Your ELECTROPHONE transceiver is especially designed for the environment encountered in portable installations and incorporates the latest "State-of-the-Art" Technology to give you many years of reliable service. Should failure occur however, GME ELECTROPHONE maintain a fully equipped service facility and spare parts stock to meet the customer's requirements long after expiry of the warranty period. Your GME ELECTROPHONE transceiver should firstly be returned to your local dealer who can obtain the correct replacement part from GME ELECTROPHONE, or alternatively, return the unit for service.

GME *Electrophone*

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