11-83-0000

Marine Band FM

Search and Rescue Transceiver

PRODUCT MANUAL

Version 1.00

June 2017

Salcom Product Documentation

This document is designed to familiarise you with Salcom products and guide you through the hardware, configuration, installation and overall system management.

Salcom is an environmentally conscious company and in an effort to conserve paper no longer prints manuals with shipped products. All relevant documentation can be downloaded in PDF form from our website www.salcom.com

Warranty and Disclaimer

Salcom products are warranted for a period of 12 months from the date of purchase against faulty materials and workmanship. Should any fault occur the unit should be returned to the vendor, freight pre-paid. Please include a description of the fault to assist with prompt return. Any unauthorised alterations or repairs will invalidate the warranty.

All information provided in this document is carefully prepared and offered in good faith as a guide in the installation, use and servicing of Salcom products. Installers must ensure that the final installation operates satisfactorily within the relevant regulatory requirements. Salcom accept no responsibility for incorrect installation. We reserve the right to change products, specifications and installation data at any time without notice.

Product Overview

The 11-83 SAR FM Marine Communicator is a low cost, simple to use, fully immersible emergency radio. The unit provides a means of communication from **personnel** in a distress situation to an **aircraft or ship** where they cannot be reached and no alternative communication method exists.

The unit is ruggedly constructed, is fully sealed and can safely withstand water immersion. The single channel radio can be pre-programmed to operate on any of the internationally recognised marine channels or factory fixed on one channel.

Each unit is supplied with a tough hard fronted pouch providing safe storage without the likelihood of accidental activation. To reduce the possibility of loss, it can be secured by a lanyard fitted to the loop on the pouch or case.

A lithium battery is supplied with the 11-83 providing a shelf life of five years and an endurance of approximately twelve hours when the unit is activated.

The 11-83 is simple to operate. All controls are identified on the front panel by English language labels and international symbols.

Battery test information and foreign language translations are provided on the back of each unit. The front of the pouch also contains foreign language translations identifying the product.

Operation

The radio is stored in a hard fronted PVC pouch to protect the unit from damage and to prevent the accidental operation of the push buttons. The radio should always be replaced with the pouch writing to the front, ensuring the hard front is placed correctly.

To remove the radio from the pouch, release the strap and break any seal that may be through the pouch eyelet. Pull out the radio by the aerial and turn on by pressing the ON button until a bleep is heard. A green LED on the front panel will indicate the receiver is operating.

To transmit your voice, press the PRESS TO TALK button and speak into the front panel in the area labelled SPEAK HERE. The red LED on the front panel will come on.

To turn the radio off press the OFF button until a bleep is heard.

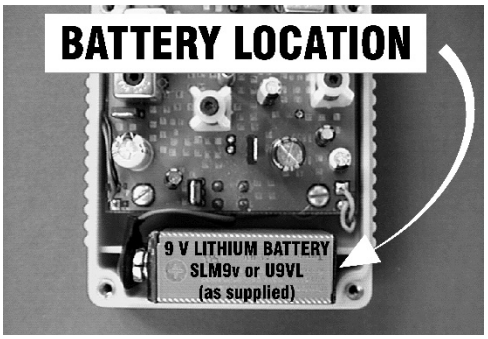
Batteries

Battery Testing

The unit will not transmit if the low battery condition is detected. However, the unit will stay in receive mode until the battery is exhausted. *If the battery voltage falls to approximately 7.5 volts the green power LED will flash.*

Replacement

Although we *strongly* recommend that owners return units to SALCOM for battery replacement, it is recognised there are cases where it is not practical or convenient. To replace the battery, the following procedures should be followed:



The middle two case screws may be sealed as an indicator to show that the unit has not been opened. If this is the case, remove the seal from these two screws. Remove the 6 stainless steel M3 slotted case screws and remove the back cover. Replace the battery with the designated type (see *Battery Type* below) ensuring the battery connector contacts are both tight.

Perform the battery test detailed above and check for any ingress of water or humidity into the case.

Check that the seal is in good condition. Replacement batteries and seals are available from SALCOM (see “Spares”). The seal should be eased into the retaining slot taking care not to stretch it, with the join adjacent to a central fixing point. At the joint position place a small amount of silicon sealer (RTV).

Replace the rear cover using the original screws, taking care not to trap the battery wires in the case join. The Battery Change Date label must be updated to reflect the new shelf life period. If possible, re-seal one of the two middle screws.

Battery Type

The Marine Band SARC radio is designed to run on a nominal 9v PP3 type battery. To realise the shelf life and operational endurance stated in the specification, the battery must be of the same type as supplied new with the unit.

However, other types of batteries may be used, but a change in performance may be experienced.

Type	Type Number	Shelf Life	Operational life
Lithium	SLM9V or U9VL	5 years	approx 12 hours
Alkaline	MN1604 or PP3	2 years	approx 6 hours

Internal Test

The unit performs an internal test each time it changes between Transmit and Receive. If a fault is detected, a series of four descending bleeps will be heard. This condition can only be rectified by SALCOM or its authorised service agent.

Spares

Spares

Spare parts can be ordered from SALCOM. The product identification numbers (IPNs) should be quoted to ensure that the correct part is supplied.

Description	Salcom IPN
Lithium Battery	39-39-0004
Rubber Seal	55-69-0001
Replacement Pouch	56-29-0002

Programming Instructions

(Not applicable to special units programmed on SINGLE FIXED FREQUENCIES)

The 1183 can be made to operate on any of the FM marine band channels. Channel changing would normally be performed by SALCOM or its authorised agent. However, the procedure can be performed by the owner with no special tools need.

To change the channel proceed as follows.

1. With the unit off, press the OFF button and hold down whilst the ON button is pressed. The unit will bleep twice, and the green LED will flash slowly to indicate programming mode.

2. Use the OFF button to increment the channel number in steps of ten, use the Press To Talk (PTT) button to increment the channel number in units.

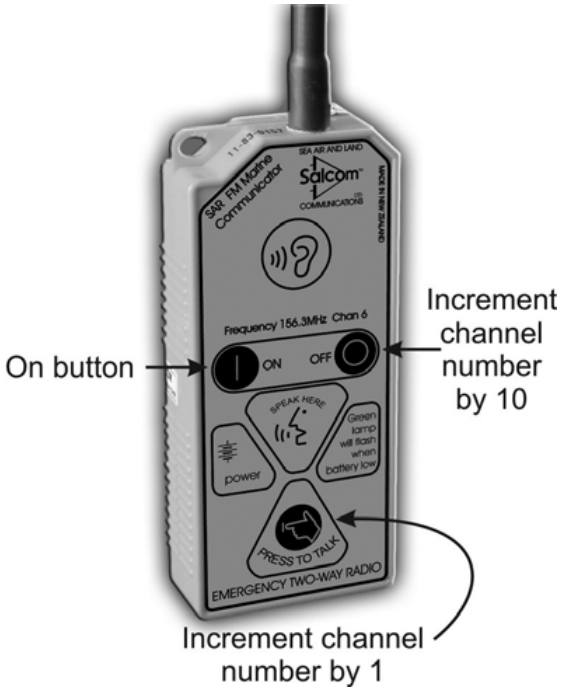
3. Examples:

   (a) To set to channel 08, press the PTT button 8 times.

   (b) To set to channel 67, press the OFF button 6 times, and the PTT button 7 times.

   (c) To set to channel 16, press the OFF button once, and the PTT button 6 times. Alternatively, press the PTT button 16 times.

4. To exit the programming mode press the ON button until a high pitched bleep is heard. The unit is now in the operational mode.



Programming functions of buttons

5. Notes:

   (a) If a mistake is made in entering a channel number, exit the programming mode, turn off and start again.

   (b) If the programming mode is entered accidentally, pressing the ON button (exit) with no OFF or PTT will exit with no channel change.

   (c) The unit is receiving when the channel is being selected, so a transmitter or signal generator on the required frequency will verify the correct channel selection. A limited scan facility is therefore available, sequential channels can be scanned by channel increment using the PTT button.

   (d) Channels 29 through 59 are not available, as per ITU international regulations.

Technical Specification

Receiver	
Channels available	01 thru 28 and 60 thru 88 or pre-programmed fixed one-channel only
Sensitivity for 12dB SINAD with 3kHz mod @ 1KHz	-115dBm ±3dB
Spurious emissions	>-47dBm
Spurious response (for 6dB SINAD with 3kHz mod @ 1KHz)	-53dBm
Bandwidth	±8KHz @ -6dB
IF frequency	10.7MHz
Audio output	50mW max
Typical distortion @ 1KHz 15dB SINAD	5% @ 3kHz deviation
Transmitter	
Channels available	01 thru 28 and 60 thru 88 or pre-programmed fixed one Channel only
Output into 50ohms	500mW ±2dB
Spurious outputs (relative to carrier)	-40dB max
Typical distortion @ 1KHz	3% @ 3kHz mod
Supply current	170mA approx
General	
Temperature operating range	-30 deg C to +60 deg C
Immersion	Pressure tested at 2ppsi.1 metre/water
Indicators	Power -green, Low battery power green (flashing), Sound “Beeps” on switch on/off and transmit.
Battery type	9 Volt PP3 case size, Lithium
Environment protection standard	IP675
Weight	290 grams
Size (not including aerial)	165mm x 70mm x 30mm
Aerial length	153mm

How to Contact Us

Sea Air and Land Communications (Salcom) Ltd
10 Vanadium Place
Addington
Christchurch 8024
New Zealand
T: +64 (0)3 379 2298
W: www.salcom.com
E: support@salcom.com