MARINE VHF/FM RADIOTELEPHONE

COMPACT 66

OPERATION MANUAL

INTRODUCTION

This instruction manual provides information necessary for proper operation of your VHF/FM radiotelephone.

To avoid problems and obtain the best results, please read this instruction manual carefully before operating the unit.

You should become familiar with the FCC rules and regulations regarding the proper operating procedures, channels assigned for your type of operation, and restrictions that apply to the use of United States channels.

WARRANTY INFORMATION

The warranty certificate provided with this unit outlines the limited warranty provisions. Water damage is specifically EXCLUDED from the limited warranty. It is therefore important to protect the equipment from water spray and rain.

IMPORTANT NOTICE

This space is provided to record a description of your VHF/FM radiotelephone equipment. Enter the information for a permanent record.

Manufacturer : Description :	VHF/FM Radiotelephone
Model Number :	
Serial Number:	
Date of Purchase	:
Station License N	Number:
Call Sign:	

FCC LICENSE AND REGULATION INFORMATION

The FCC requires a ship station license for any vessel on which a radiotelephone is installed. The following procedures should be followed to obtain the ship station license.

- 1. It is necessory for you to fill out FCC Form 506 an application for ship station license, sign it and mail to FEDERAL COMMUNICATIONS 17325.
 - COMMISSION, GETTYSBURG, PENNSYLVANIA 2. You may operate your VHF/FM marine radio under a temporary license Form 506A. You should read FCC Form 506A carefully to determine whether you meet all the requirements for holding a temporary permit. After reading Form 506A, you should sign the form and indicate the date of mailing of Form 506. DO NOT MAIL THE TEMPO-RARY PERMIT. Keep it in your possession until notification is received from the FCC that the
 - regular license application has been approved. This temporary form is valid for 60 days. 3. Determine a temporary call sign to be used with the temporary permit, and enter this call sign in the appropriate place on Form 506A.

SPECIFICATIONS

TRANSMITTER

Channels : 48

Frequency Range : 156.050 to 157.425 MHz.

Frequency Stability : 0.001% Channel Spacing : 25 KHz.

Temperature Range : -20°C to +50°C

Antenna Impedance : 50 ohms

Spurious and Harmonics

Emission : -60 dB

Transmit Power : Low 1 W / High 25 W

Modulation : 16F3

Power Requirements : 12V DC, Negative ground

Current Drain : Low power : 1.5 A

High power: 6 A

Microphone type : Dynamic

RECEIVER

: 59 Channels

Frequency Range : 156.050 to 163.275 MHz.

: 0.25 uV at 12 dB Sensitivity

SINAD

Squelch Sensitivity : Threshold 0.35 uV

Tight 1.0 uV

Spurious and Image

: -60 dB or better Rejection

Intermodulation Rejection: -60 dB

Audio Output : 2.5 Watts into 8 ohms

10% distortion

: 1.0 amps at 12V DC Receiver Current

Weight

Dimensions : 2.0" H x 5.5" W x 6.5" D

THIS MARINE VHF/FM RADIOTELEPHONE IS FCC TYPE ACCEPTED FOR MARINE/MOBILE USE UNDER PART 80, FOR VOLUNTARILY FITTED VESSELS. NO LICENSED TECHNICIAN REQUIRED FOR INSTAL-LATION PROVIDING PRE-TUNING IS NOT CHANGED.

GENERAL DESCRIPTION

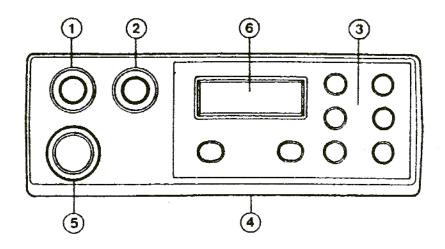
This unit is an all solid state VHF/FM marine radiotelephone. It contains 48 transmit channels and 59 receive channels which includes 8 U.S. weather channels and 2 Canadian weather channels. These channels are designated for marine VHF/FM operations in United States territorial waters.

This unit is completely factory calibrated and does not require the services of a licensed technician for installation.

Front panel indicators display each mode of operation in the highly visible liquid crystal display (LCD).

The unit is rugged and reliable. With normal care and protection it will provide many years of dependable operation.

FRONT PANEL AND CONTROLS



I. ON-OFF/VOLUME CONTROL

Applies power to the unit and adjusts desired level of sound.

2. SQUELCH CONTROL

Turn the Squetch Control clockwise until the back-

ground noise disappears. When a signal is received it will be clear of background noise.

3. PROGRAM KEY PAD

Use to select desired channel and mode selectors.

4. SPEAKER

Located on bottom of radio.

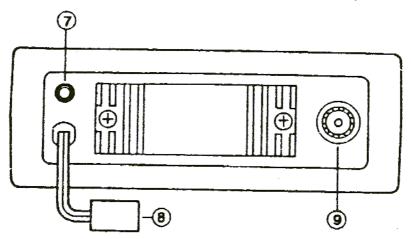
5. MICROPHONE JACK

Allows microphone plug to be connected.

6. LCD CHANNEL/FUNCTION DISPLAY

Shows channel number, power level, SEEK, WX and TX modes.

REAR PANEL CONNECTORS



7. EXTERNAL JACK

Connect external speaker into jack. 8-ohm, 2.5W.

8. POWER CORD CONNECTOR

Connect power cable.

9. ANTENNA CONNECTOR

Connect VHF/FM marine antenna.

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INSTALLATION

Refer to the installation and connection diagrams. Your radiotelephone is designed for easy installation, however, certain recommendations should be followed.

Location

Choose a convenient location for easy access and operation. Choose a location that will provide protection from extreme conditions such as rain, direct spray of salt or fresh water and from extreme heat.

Mounting the Radio

A universal mounting bracket is supplied and can be used for bulkhead, overhead or table top mounting. Use the mounting bracket as a template to locate holes for mounting the unit.

Antenna Location and Mounting This radio requires a 50 ohm VHF/FM marine antenna

(NOT SUPPLIED). Consult with your marine dealer to determine the best type of antenna for your type of boat. Mount the antenna as high as possible, on the mast head or cabin top. It should be as high as practical for the best performance and longest range.

Antenna Connection

After installing the antenna, route the cable to the back of the radio and connect it to the ANT connector.

CAUTION: Do not press the transmit switch (on the microphone) unless the antenna is connected. Damage can result and your warranty may be void.

Power Connection

This unit is designed to operate from a 12V NEGATIVE GROUND system only. Do not connect the unit to

a positive ground or a floating ground. The power cable provided with the unit contains an in-line fuse to protect both the unit and the power source. In addition, the unit contains a special protective circuit to prevent excessive damage in case of reversed polarity or improperly wired unit. The fuse will normally blow when polarity is reversed.

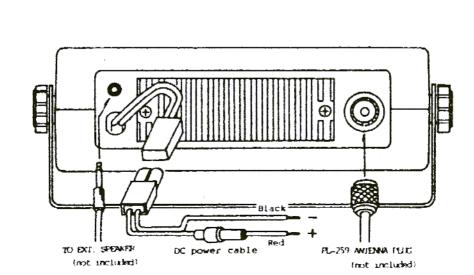
NOTE: When a fuse blows, check the protective circuit to be sure that it is not damaged.

Do not install a higher rated fuse. Use a 7 amp 3 AG type of use.

The power cable is color coded for easy identification.

Connect the Red wire to the (+) positive terminal and the Black wire to the (-) negative terminal of the battery. If necessary to extend the power cable, be sure to use #10 AWG stranded wire with a similar color code for easy identification.

INSTALLATION DIAGRAM



OPERATION

RECEIVING

- 1. Rotate the VOLUME control clockwise. When you hear a click, the power is on. Adjust the control to the desired volume.

 If you do not hear any sound, proceed to next step.
- 2. Turn the SQUELCH completely counter-clockwise. When sound comes from the speaker, adjust the VOLUME control to the desired listening level. Set the channel to an unused channel, then adjust the SQUELCH control clockwise until the backgound noise is just eliminated. This is called threshold adjustment. Further rotation of the squelch control can block out weaker signals.
- 3. Select the channel desired with up or down key of keypad. If channel 16 is to be used, select with CH 16 key.

TRANSMITTING

Caution: NEVER TRANSMIT UNLESS THE ANTENNA IS CONNECTED TO THE UNIT. SEVERE INTERNAL DAMAGE WILL OCCUR.

Transmission is controlled by the "Push to Talk" switch on the microphone. When the switch is pressed, the transmitter is turned on and the receiver is turned OFF. When the switch is released, the receiver is turned ON again and the transmitter is turned off. TX will appear in the LCD display when the PTT switch is pressed.

1. Before transmitting, choose the desired channel for operation. Be sure that the channel is clear and not occupied by another party.

- 2. If your transmission is to be short range or in a harbor area, set to LOW power. When the communication range is longer, set to HI power. HI or LOW power is indicated in the LCD display. Low power is I watt, high power is 25 watts.
- NOTE: Channel 13 and 67 are automatically set to 1W low power when they are selected. 25W high power for these two channels is available by pressing the HI/LO key. The transmitter will not operate on CH15 and on weather channels.
- 3. Do not use obscene language in your communications. It is a violation of the rules and regulations and your license can be revoked.
- 4. The transmitter is automatically turned off after five(5) continuous minutes (except Public channels) and the receiver is put in action. At the same time, A beep sound is heard from speaker.

USING THE KEYPAD

16 16 KEY

Press to automatically select from any other mode to CH 16. Pressing again makes the unit return to the last channel set before the key was pressed.



Pressing the "UP" key increase the channel numbers.



Pressing the "DOWN" key decrease the channel numbers

HI/LO POWER KEY

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The transmit power is switched from "LO" to "HI" or "HI" to "LO" each time the key is pressed. The word "HI" or "LO" appears on the LCD display. "HI" power is 25 watts. "LO" power is 1 watt.

S SEEK/SCAN KEY

Pressing the key starts the all channel SEEK or scanning operation. "SEEK" is displayed in the LCD display. The scanning speed is 3 channels per second and stops at any active channel. To start scanning again while the unit is stopped on an active channel, keep pressing the "SEEK" key for 0.5 seconds or more. When the active channel goes OFF, the scanning starts again. To stop the SEEK or scanning operation, operate the keys as follows.

- A) Re-press the "UP" or "DOWN" key. The SEEK or scanning operation stops at the last channel displayed.
- B) Pressing the "16" key stops the SEEK or scanning operation, and selects the channel 16.

MEMORY KEY

Use to add or delete channels from the scan memory. While performing the scan function this switch will toggle between all channel scan and programmed memory scan.

W WX KEY

Pressing the key during reception in any other channel selects the channel WX01. "WX" is displayed in the LCD display. Repeat pressing advances the channel to WX02, WX03 - WX10, WX01 in this sequence. When selecting other channels, operate the key as follows:

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scan.

program.

- A) Pressing the "UP" or "DOWN" key returns the unit to the last channel selected before the "WX" channel was selected.
- B) Pressing the "16" key automatically selects CH 16.

MEMORY PROGRAMMING

Select the channel number you want to enter into the scan memory. Press "MEM" key. This selected channel is now in memory. If you want to add additional channels to the memory scan, repeat the above operation. The scan memory is available for all U.S.

To activate the scan memory function on the unit, press the scan key after you have programmed the channels you wish to monitor. Use the "M" key to toggle between all channel scan and program memory scan.

MEMORY CHANNEL DELETION

To remove a channel from memory, select the channel to be deleted and press the "MEM" key. After reactivating the scan memory function, you will notice the channel deleted will not be part of the programed

In the event no channels are programed into memory, the LCD display will show "CL" to indicate a clear

channels with the exception of the weather channels.

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Providing you present a valid proof of purchase, SI-TEX Marine Electronics Inc. warrants all parts of each new product against defects in material and workmarship under normal use and will repair or exchange any parts proven to be defective at no charge for a period of two years for parts and one year for labor from the date of purchase, except as provided below under Limited Warranty Exceptions.

Detects will be corrected during normal working hours by an authorized SI-TEX Marine Electronics Inc. dealer, service center, or at the SI-TEX office in Clearwater, Florida. There will be no charge for labor for a period of one year from the date of purchase, except as provided below under Limited Warrarty Exceptions.

This Warranty and Proof of Purchase must be made available to the authorized SI-TEX Marine Electronics linc, service location or dealer at the time of service.

LIMITED WARRANTY EXCEPTIONS

SI-TEX Marine Electronics Inc. will not be responsible for equipment which has been subjected to water or lightning damage, accident, abuse, or misuse nor any equipment on which the senal number label has been removed, altered, or mutilated.

SI-TEX Marine Electronics Inc. assumes no responsibility for damage incurred during installation. This Limited Warranty is effective only with respect to the original purchaser.

Any cost associated with transducer replacement, other than the cost of the transducer isself, is specifically excluded from this Limited Warranty. Travel cost incurred will not be accepted for SI-TEX Manne Electronics Inc. products.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF.

SPECIFIC EXCLUSIONS

Charges for overtime, stand-by, holiday, and per diem are specifically excluded from the Limited Warranty.

Charf paper, stylus, stylus belt, lamps, and fuses are consumable items and are not covered by this Limited Warranty Installation workmanship or materials except as provided directly by SI-TEX Marine Electronics (inc. are not covered by this Limited Warranty, SI-TEX Marine Electronics Inc. equipment or parts thereof which have been repaired or altered except by an authorized SI-TEX Marine Electronics Inc. dealer or service center are not warranted in any respect.

Transducer, software update, battery, microphone, magnetron, and microwave components and water damage on water resistant VHF radio are items excluded from the two-year warranty and are covered by warranty for a period of one year for both parts and labor.

SETEX Marine Electronics inc. will not, at any time, assume any costs or labor charges for checkout or external line fuse replacement or problems not found to be at fault in the equipment itself.

THERE ARE NO WARRANTIES OR GUARANTEES EXPRESSED OR IMPLIED WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. SI-TEX MARINE ELECTRONICS INC. HAS NO OTHER LIABILITY TO PURCHASE FOR DIRECT OR CONSEQUENTIAL DAMAGE OR ANY THEORY INCLUDING ABSOLUTE LIABILITY, TORT, OR CONTRACT. THIS LIMITED WARRANTY CANNOT BE ALTERED OR MODIFIED IN ANY WAY AND SHALL BE INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF FLORIDA. THIS WARRANTY IS LIMITED TO THE CONTINENTAL U. S. A., ALASKA, HAWAII, AND CANADA.

Mailing Address:

SI-TEX Marine Electronics Inc.

P.O. Box 6700

Clearwater, Florida 34618

813-535-4681

HOW TO OBTAIN SERVICE UNDER THIS WARRANTY

To provide greater flexibility, SETEX Marine Electronics Inc. gives you the option of obtaining service under this warranty by either:

(a) Contacting an authorized SHTEX Marine Electronics Inc. service station (The closest service station, may be found by contacting your dealer of purchase.)

OR

- (b) Shipping your equipment prepaid via UPS or truck with insurance prepaid to SI-TEX Marine Electronics Inc. at the address provided below. SI-TEX Marine Electronics Inc. will, whenever possible, make all repairs covered by Limited Warranty within two weeks of receiving the equipment in Florida and return same to you, treight prepaid. For parcel post shipment, use post office box address given above.
- (c) You must present a copy of your Purchase Sales Slip at the time you request warranty service.

Shipping Address
SI-TEX Marine Electronics Inc.
14000 Roosevelt Boulevard
Clearwater, Florida 34622

SETEX Marine Electronics Inc. is a leader of quality Digital Instruments, LCD and Video Fish Finders, Loran, GPS, VHF Radio, Marine Stereo, and Radar. For more information, contact your SETEX dealer or the main office, located in Cleanwater, Florida.

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INSTALLED MARINE CHANNELS AND THEIR USAGE

CAUTION: While it is possible to select channel such as channels WX1 ~ WX10 and 15, the transmitter is disabled since no communication is authorized on these channels.

INSTALLED CHANNELS	FREQU	ENCY (MHz)	TYPE TRAFFIC	FUNCTION	
	TX	RX		SHIP TO SHIP	SHIP TO SHORE
01	156.050	156.050	Port Op	Yes	<u> </u>
02	156.100	156.100	Port Op	Yes	Yes
03	156.150	156.150	Port Op	Yes	Yes
04	156.200	156.200	Port Op		Yes
05 (A)	156.250	156.250	Port Op	Yes Yes	Yes
06	156.300	156.300	Safety		Yes
07 (A)	156.350	156.350	Com'I	Yes	No
08	156,400	156.400	Com'l	Yes	Yes
09	156.450	156.450	Com'l & Non Com'l	Yes	No
10	156.500	156.500	Com'l	1	Yes
11	156.550	156.550	Com'l	Yes	Yes
12	156,600	156.600	Port Op	Yes	Yes
13	156.650	156.650		Yes	Yes
14	156.700	156.700	Nav.	Yes	Yes
15		156.750	Port Op	Yes	Yes
16	156.800	į.	Distress, Safety C	Receive Only	Receive Only
17	156.850	156.800	Safety C	Yes	Yes
18 (A)	156.900	156.850	State Con	Yes	Yes
	156.950	156.900	Com'l	Yes	Yes
19 (A)		156.950	Com'l	Yes	Yes
20	157.000	161.600	Port Op	Yes	Yes
21 (CG)	157.050	157.050	Coast Ga'd	Yes	Yes
22 (CG)	157.100	157.100	Coast Ga'd	Yes	Yes
23 (CG)	157.150	157.150	Coast Ga'd	Yes	Yes
24	157.200	161.800	Public C	No	Yes
25	157.250	161.850	Public C	No	Yes
26	157.300	161.900	Public C	No	Yes
27	157.350	161.950	Public C	No	Yes
28	157.400	162.000	Public C	No	Yes
65 (A)	156.275	156.275	Port Op	Yes	Yes
66 (A)	156.325	156.325	Port Op	Yes	Yes
67	156.375	156.375	Com'i	Yes	No.
68	156.425	156.425	Non Com'l	Yes	Yes
69	15 6 .475	156.475	Non Com'l	Yes	Yes
71	156.575	156.575	Non Com'l	Yes	Yes
72	156.625	156.625	Non Com'l	Yes	1
73	156.675	156.675	Port Op	Yes	No.
74	156.725	156.725	Port Op	Yes	Yes
77	156.875	156.875	Port Op		Yes
78 (A)	156.925	156.925	Non Com'l	Yes Yes	No
79 (A)	156.975	156.975	Com'i	Yes	Yes
80	157.025	157.025	Com'i	Yes	Yes
81	157.075	157.075	Coast Ga'd		Yes
82 (CG)	157,125	157.125	Coast Ga'd	Yes	Yes
83 (CG)	157.175	157.175	Coast Ga'd A	Yes	Yes
84	157.225	161.825	Public C	Yes	Yes
85	157.275	161.875	Public C	No	Yes
86	157.325	161.925		No	Yes
87	157.375	161.975	Public C	No	Yes
	157,425		Public C	No	Yes
88 (A) WX1		157.425 162.550	Com'I	Yes	No
WX2	_	162.400	NOAA Weth	Receive Only	Receive Only
WX3	_	162.475	NOAA Weth	Receive Only	Receive Only
WX4		162.475	NOAA Weth	Receive Only	Receive Only
WX5	_	162.450	NOAA Weth	Receive Only	Receive Only
WX6			NOAA Weth	Receive Only	Receive Only
WX7	_	162.500	NOAA Weth	Receive Only	Receive Only
	i	162.525	NOAA Weth	Receive Only	Receive Only
WX8		161.650	Canadian Weth	Receive Only	Receive Only
WX9	_	161.775	Canadian Weth	Receive Only	Receive Only
WX10		163.275	NOAA Weth	Receive Only	Receive Only

CAUTION: OPERATION OF CHANNELS NOT DESIGNATED FOR USES BY YOUR CLASSIFICATION OF CRAFT OR ON INTERNATIONAL CHANNELS WHEN WITHIN UNITED STATES TERRITORIAL WATERS IS A VIOLATION OF FEDERAL COMMUNICATIONS COMMISSION RULES AND REGULATIONS AND MAY RESULT IN SEVERE PENALTIES.