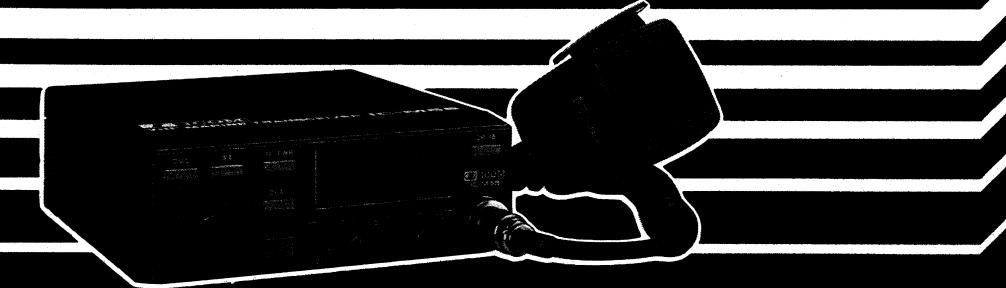


VHF FM MARINE TRANSCEIVER IC-M55

OWNER'S MANUAL



ICOM INCORPORATED

FOREWORD

Thank you for choosing the IC-M55, one of the finest VHF FM Marine Transceivers on the market today. It was designed and built by ICOM INCORPORATED, a long-time leader in the field of VHF communication. This transceiver incorporates state-of-the-art technology, and it was built specifically for Marine applications using experience gained over a long period of time.

Please read this owner's manual carefully before using your IC-M55 transceiver. With proper care, the IC-M55 will provide many years of dependable and enjoyable communication.

TABLE OF CONTENTS

SECTION	1	FEATURES	1
SECTION	2	SPECIFICATIONS	2
SECTION	3	INSTALLATION	3
SECTION	4	CONTROL FUNCTIONS	9
SECTION	5	OPERATION	
		RECEIVING	
		TRANSMITTING	16
		MEMORY CHANNELS	17
		Programming the Memory Channels	17
		Using the Memory Channels	18
		LOCK-OUT FUNCTION	19
		Locking-Out a Channel,	19
		Cancelling a Locked-Out Channel	20
		Cancelling All Locked-Out Channels (Resetting the CPU)	21
		SCANNING	
		All Channel Scanning	22
		Memory Channel Scanning	
		Weather Channel Scanning	
		Lock-Out Scanning	
		DUAL WATCH (SEA WATCH)	26
		CHANNEL 16 AUTO-MONITOR	27
		DISPLAY LIGHT and LIGHT DIMMER	28
SECTION	6	OPERATING RULES AND GUIDELINES	
SECTION	7	MARINE VHF TRANSCEIVER CHANNEL CHART	
SECTION	8	SAMPLE LOGS35~	~36
SECTION	9	MINOR TROUBLESHOOTING	
SECTION	10	EMERGENCIES	39

SECTION 1 FEATURES

- * All marine and weather channels pre-programmed.
- * 10 user-programmable memory channels with a backup lithium battery.
- * 4 different channel scanning systems.
- * Dual watch mode for monitoring channel 16 while listening on a different channel.
- * Auto-monitor for channel 16.
- * Advanced RF front end circuitry with helical resonators, MOSFETs and both crystal and ceramic filters for improved adjacent channel and intermodulation rejection.
- * Mounting bracket with adjustable viewing angle.

SECTION 2 SPECIFICATIONS

GENERAL

Dimensions : $50.5mm(H) \times 140mm(W) \times 163mm(D)$

Weight : 1.3kg

Number of channels : All U.S.A. and International channels

10 Memory channels 10 Weather channels

Frequency stability : 0.001%

Temperature range : -10° C $\sim +60^{\circ}$ C

Channel spacing : 25kHz
Power supply requirement : 13.8V DC
Antenna impedance : 50 ohms

RECEIVER

Frequency range : $156 \sim 163 \text{MHz}$

Sensitivity : Less than $0.3\mu V$ for 12dB SINAD

Intermediate frequencies : 1st IF: 21.4MHz 2nd IF: 455kHz
Audio output : 3W to a 4 ohm speaker @ 10% ditortion

TRANSMITTER

Frequency range : $156 \sim 157.5 \text{MHz}$ Maximum deviation : $\pm 5 \text{kHz}$ (16F3)

RF power output : High: 25W Low: 1W

Microphone : 600 ohm microphone

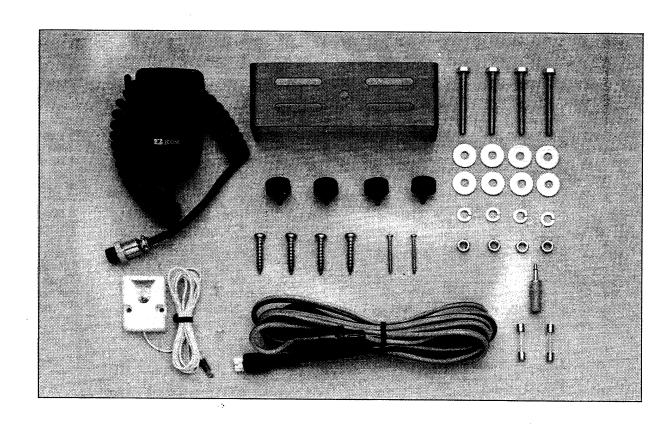
Current drain : High power: 5.5A (LCD light ON)

SECTION 3 INSTALLATION

UNPACKING

Carefully remove your transceiver from the packing carton and examine it for signs of shipping damage. Notify the delivering carrier or dealer immediately, stating full details, should any damage be apparent. We recommend you keep the shipping carton for storing, moving or reshipping the transceiver if necessary. Accessory hardware, cables, etc. are packed with the transceiver. Make sure you have removed all equipment and parts before discarding the packing material.

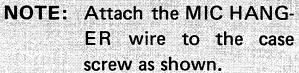
Accessories included with the IC-	M	55	5:
1. Microphone			1
2. Microphone hanger			1
3. Microphone hanger screws			2
4. DC power cable			1
5. Fuses (10A)			2
6. External speaker plug			1
7. Mounting bracket			1
8. Mounting bracket screws			4
9. Mounting screws			4
10. Mounting bolts			4
11. Mounting washers			8
12. Mounting nuts			4
13. Mounting lockwashers			4
14. Hole plugs			2
15. Owner's manual			1

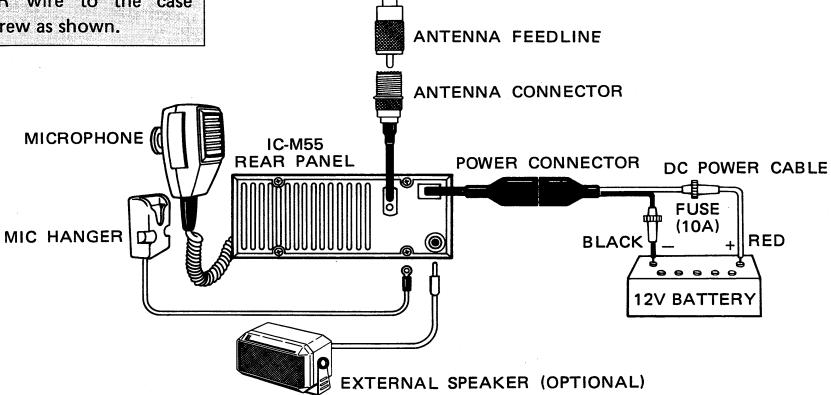


MOUNTING LOCATION

Select a location for the IC-M55 which allows easy access to the front panel controls, good air circulation and rear clearance for connecting or removing cables.

Avoid long cable runs to the antenna and power source. Also, keep the cables as far as possible from electrical pumps, generators, alternators and other electrical apparatus. In particular, do not run the cables in the vicinity of magnetic compasses or near electronic instruments.



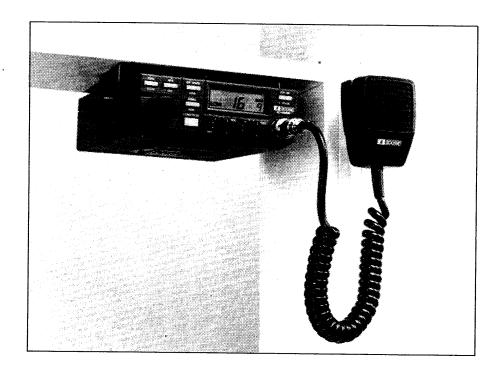


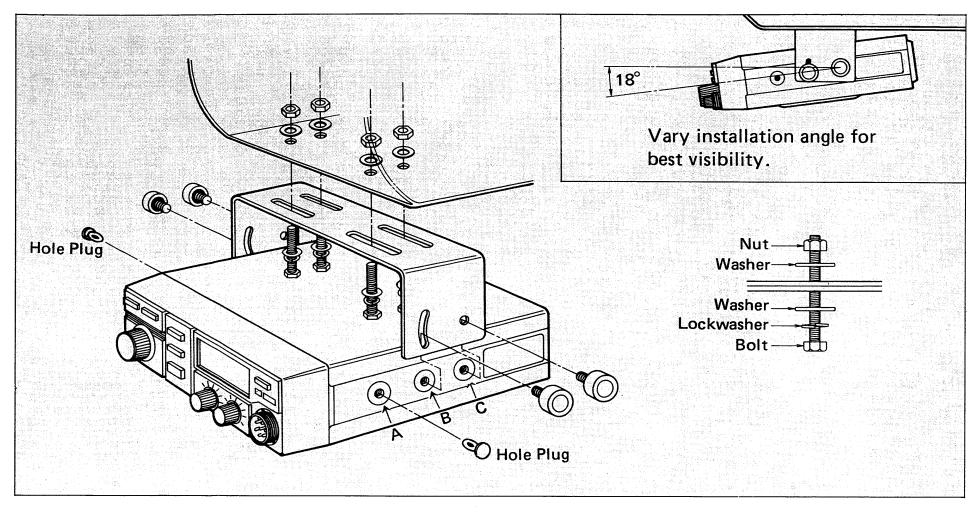
MOUNTING THE TRANSCEIVER

The universal bracket supplied with your transceiver allows "over" or "under" mounting. Install the bracket so the unit is adequately supported, thus protecting it from wave shock and excessive vibration.

The mounting hardware supplied is suitable for most installations, but if you need special hardware, any good marine store should be able to assist. As in any marine installation, it is recommended that only high quality marine hardware be used. Try to avoid drilling new mounting holes in the bracket as balance of the transceiver may be affected.







- 1. The installation angle of the IC-M55 can be varied by about 18 degrees to provide the best visibility.
- 2. Loosen one screw on each side of the mounting bracket nearest the faceplate of the transceiver, and tilt the unit to the best angle.
- 3. Install the IC-M55 using mounting holes B and C, or holes A and B. Insert hole plugs into the unused holes.



ICOM INCORPORATED

1-6-19. KAMIKURATSUKURI HIRANO KU