

TRANSCEIVER
PORTABLE
2 METER FM

INSTRUCTION MANUAL



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SECTION I INTRODUCTION

FM Portable Transceiver

Small and light. Handy for use any time, whether outdoors, in a car or at home. With 3W output and a sensitive receiver, it can work as well as large transceivers when used in good locations or with high-performance antenna.

Aluminum Die-cast Frame

The IC-215 chassis and frame are integrated into an aluminum die-casting. It's light but resistant to vibration or shock when carried. High mechanical performance is insured.

15 Channels

The unit incorporates 15 channels to select from; 12 by channel selector and 3 by Function switch. Each channel (TX and RX) uses the standard ICOM crystal configuration.

Dual Power Level

Transmitter output can be switched easily in 2 steps; 3W output HI for long distances, and 0.5W LOW for short distances. Battery consumption is minimized in the Low Power Mode.

Dial Illumination

The dial can be illuminated to facilitate night operation. This is controlled by a selector switch.

Power Pilot Lamp

If the power source voltage drops under the required value, the pilot lamp goes out as an indication the batteries are almost exhausted or external power is inadequate.

External Power and Antenna Terminals

For fixed stations or car mounted use, terminals for both external power and antenna are provided.

IC-20L and IC-3PS

Our ten-watt linear amplifier IC-20L and AC power supply IC-3PS can be used in combination as a completed fixed station.



SECTION II SPECIFICATIONS

General:

Number of semi-Conductors Transistors 36

FET 3 IC 3 (2)

Diodes 51

Frequency Coverage 144~146 MHz (146~148 MHz)

Antenna Impedance 50 ohms unbalanced

Power Supply Requirements DC 13.8V±15% Negative Ground 800mA max

Current Drain Transmitting: HI: approx. 750mA

LOW: approx. 350mA

Receiving: At max audio approx. 270mA

Squelched approx. 55mA

Dial Light: Approx. 40mA increase

Dimensions 183mm(H) x 61mm(W) x 162mm(D)

Net Weight 2.0KGs including batteries.

TRANSMISSION:

Transmitting Frequency 15 channels in 144 MHz band

Emission F3

Transmission Power HI : 3W LOW : 0.5W

Max. Frequency Deviation 5 KHz

Modulation System Variable reactance phase modulation

Multiplication 8 Times

Spurious Emission -60dB below carrier

Microphone Impedance: 600 ohms

Input level: 10mV typic

Input level: 10mV typical

Dynamic or optional Electret condenser microphone

RECEPTION:

Receiving Frequency 15 channels in the 144MHz band

Modulation Acceptance 16 F3

Receiving System Double super heterodyne
Intermediate Frequency First IF 10.7 MHz
Second IF 455 KHz

Sensitivity Less than $0.5\mu V$ for 20dB Noise quieting

Better than 30dB S+N+D/N+D at 1µV

Squelch Sensitivity Less than $0.3\mu V$

Spurious Response Rejection Ratio More than 60dB

Selectivity ± 7.5 KHz At the -6dB point

± 15KHz At the -60dB point

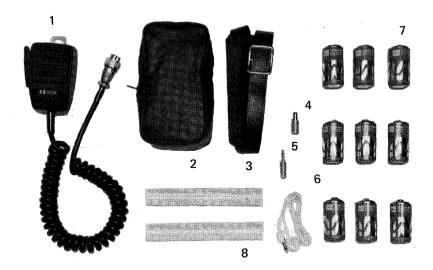
Audio Output More than 1W

Audio Output Impedance 8 ohms

Note: () Values for USA version.

SECTION III ACCESSORIES

Various accessories are packed with your transceiver. Be sure not to overlook anything. Also it's a good idea to keep packing cartons in case of moving or if return for service is necessary.



- Dynamic Microphone
- 2. Microphone Case
- Shoulder Strap 3.
- Power Supply Plug

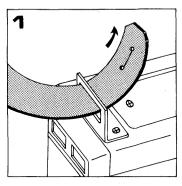
- 5. Ext. Speaker Plug
- 1 6. Earphone 1
- Dry Cells Type "C" 7.

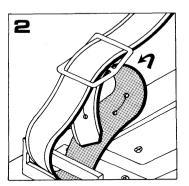
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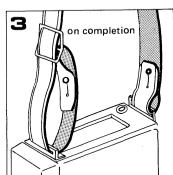
2 **Battery Tubes**

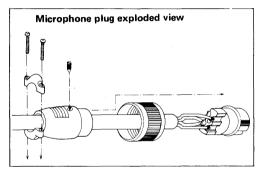
How to fit the shoulder strap

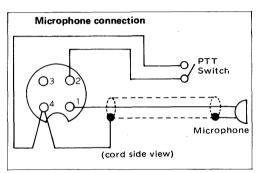
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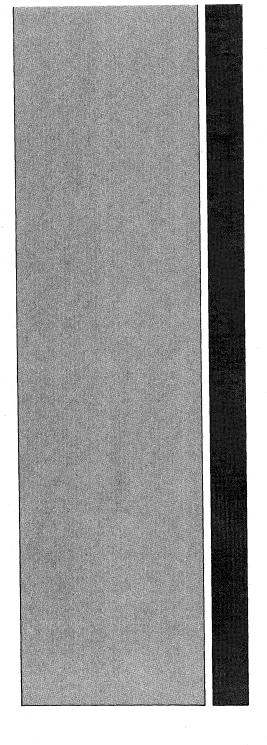












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