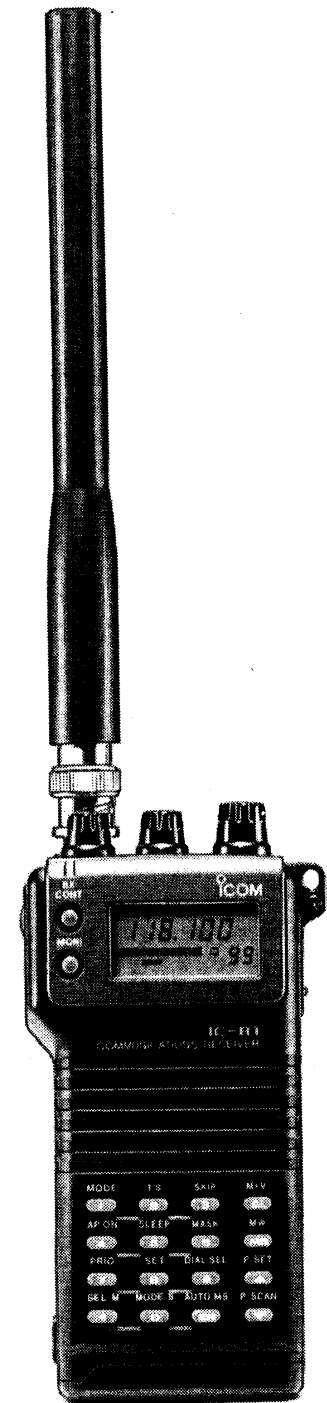# iCOM

INSTRUCTION MANUAL

WIDEBAND RECEIVER
IC-R1

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the IC-R1.

SAVE THIS INSTRUCTION MANUAL – This instruction manual contains important safety and operating instructions for the IC-R1.

The use of non-Icom battery packs/chargers may impair transceiver performance and invalidate the warranty.

OPERATING NOTES

Information overheard through the IC-R1, but not intended for you, cannot be lawfully used in any way.

The IC-R1 may receive its own oscillated frequency, resulting in no reception or only noise reception, on some frequencies.

The IC-R1 may receive interference from extremely strong signals on different frequencies or when using an external high-gain antenna.

CAUTIONS

NEVER connect a non-recommended charger. This may result in a fire hazard or an electric shock.

NEVER connect more than a 16 V DC power source to the receiver. This will ruin the receiver.

DO NOT use or place the receiver in areas with temperatures below $-10\,°C$ ($+14\,°F$) or over $+60\,°C$ ($+140\,°F$).

AVOID the use of strong chemical agents such as benzine or alcohol when cleaning, as they may damage the receiver surfaces.

EXPLICIT DEFINITIONS

The following explicit definitions apply to this manual:

WORD	DEFINITION
CAUTION	Equipment damage and/or personal injury could occur.
NOTE	If disregarded, inconvenience only. No risk of personal injury or equipment damage.
Push [x] + [y]	While pushing switch 'x', push switch 'y.'

TABLE OF CONTENTS

FOREWORD

Thank you for purchasing the **IC-R1 WIDEBAND RECEIVER**, a state-of-the-art handheld receiver made with Icom's most advanced technology.

The **IC-R1** has the following features:

* Incredibly compact size and weight including the internal NiCd battery.

* Wideband frequency coverage
  0.1~1300 MHz[1][2] in AM, FM and Wide FM modes.
  [1] Guaranteed range: 2~905 MHz. Some versions do not have the full range because of frequency restrictions.
  [2] MHz is an abbreviation of megahertz or 1,000,000 hertz, where hertz is a unit of frequency.

INFO

Electromagnetic radiation which has frequencies of 20,000 Hz (20 kHz) and above is called radio frequency (RF) energy because it is useful in radio transmissions. The IC-R1 receives RF energy and converts it into audio frequency (AF) energy which in turn actuates a loudspeaker to create sound waves. AF energy is in the range of 20~20,000 Hz.

UNPACKING

Accessories included with the IC-R1:

	Qty.
① Handstrap	1
② Antenna (FA-4B)	1
③ Wall charger	1
④ Belt clip and screws	1 set
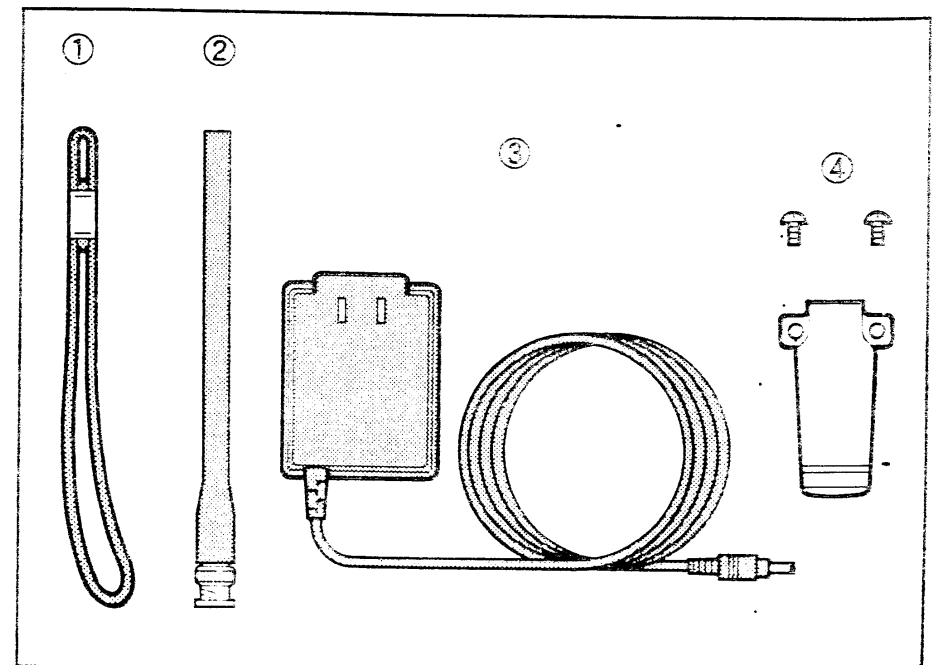
1 Charge the battery.

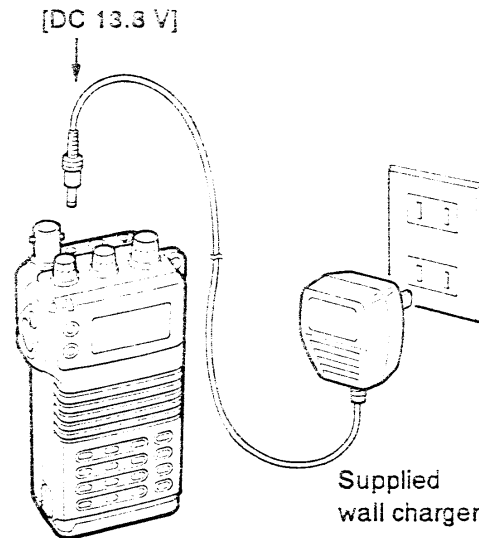Connect the supplied wall charger as illustrated in the diagram below.

● The CPU backup battery will also be fully charged.
● See p. 9 for details on safety and use of a desktop charger.

[DC 13.3 V]

Supplied
wall charger

● **NEVER** attempt to charge a battery case containing dry cell (i.e. non-rechargeable) batteries.

2 Reset the receiver.

When first applying power, the internal rechargeable backup battery may be empty. In this case, before you can operate the receiver, the following reset procedure must be performed. While pushing [F] and [CL] , rotate [PWR/VOL] to turn power ON.

[F]   [PWR/VOL]   [CL]
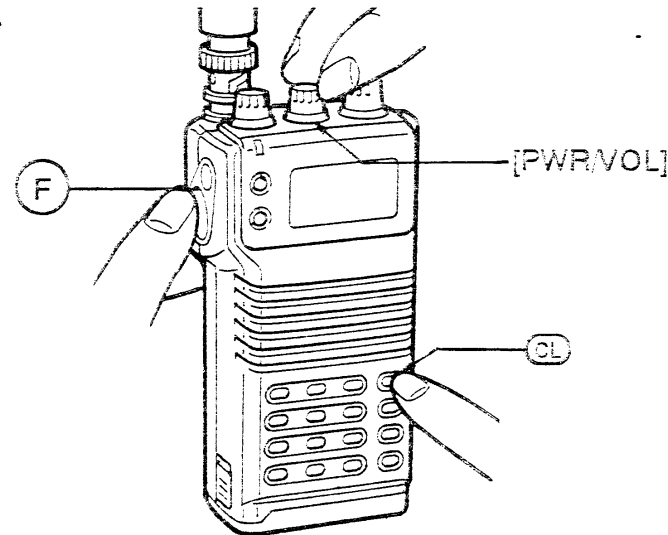
● The display returns to its factory-shipped default settings. (see p. 51)

CAUTION: Resetting the CPU will clear and initialize all memory channel contents, programmed scan edge frequency bands, SET mode settings and clock and timer settings.

3 Connect the antenna.

Insert the supplied antenna into the antenna connector and rotate the antenna as shown in the diagram below. Do not remove the attached rubber cap as it helps prevent dust from entering the receiver.
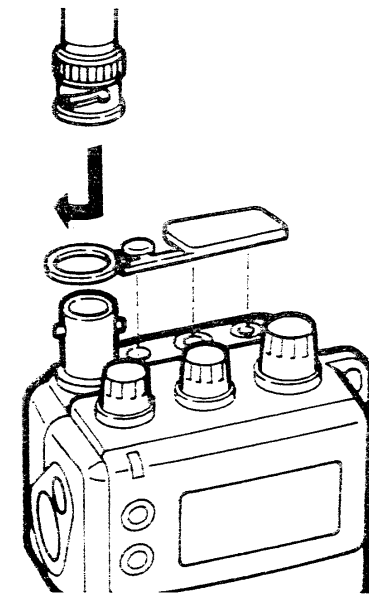
■ Front and side panels

WATCH SWITCH [W]
Used to activate CLOCK mode. (see p. 41)

FUNCTION SWITCH [F]
While pushing [F], the secondary functions of switches and controls can be accessed. (see pgs. 5, 6)
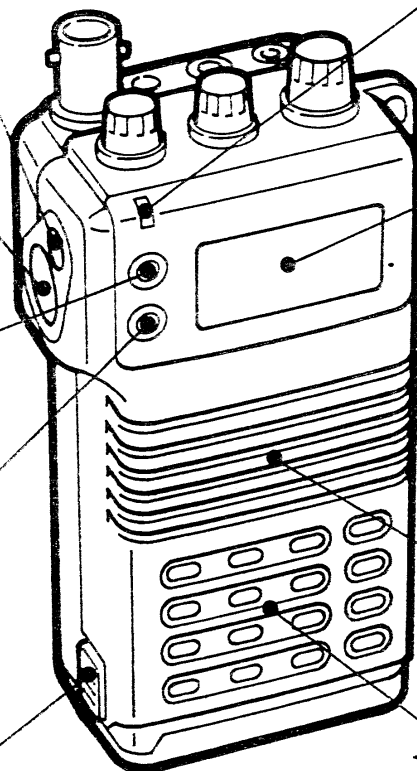
CONTRAST SWITCH [CONT]
Adjusts the function display contrast. (see p. 45)

MONITOR SWITCH [MONI]
Opens the squelch fully for reception of weak signals under certain conditions. (see pgs. 12, 45)

BATTERY PACK RELEASE BUTTON
Opens the latch for bottom cap or optional battery cap removal. (see p. 11)

RECEIVE INDICATOR [RX]
Lights up in green while receiving. Indicates that the squelch needs adjustment if it lights while receiving no signal. (see p. 12)

FUNCTION DISPLAY
Indicates the operating condition. (see pgs. 7, 8)

LIGHT SWITCH [LIGHT]
Used to backlight the function display. Lights the display for approximately 5 sec. except when the light function is activated. (see p. 45)

SPEAKER
Emits the receive audio.

KEYBOARD
Numeral and other function keys for tuning and activating functions. (see pgs. 5, 6)

■ Top panel

EXTERNAL DC POWER JACK [DC 13.8 V]
Connects the supplied wall charger for charging the internal batteries or attached battery pack. (see p. 9)

Be careful of overcharging!
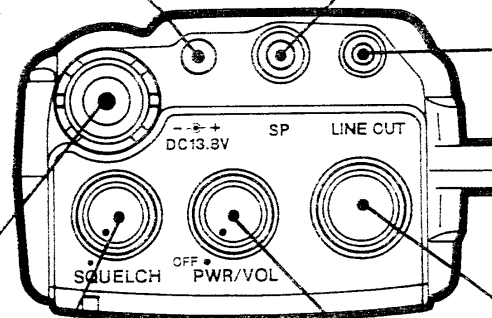Operation with an external DC power source simultaneously charges the battery pack.

ANTENNA CONNECTOR
Connects the supplied flexible antenna. Be careful when connecting an external antenna. (see p. 2 and OPERATING NOTES on p. i)

SQUELCH CONTROL [SQUELCH]
Varies the squelch threshold point for audio mute. (see p. 12)
• Pushing [MONI] opens the squelch fully.

EXTERNAL SPEAKER JACK [SP]
Connects an 8 Ω optional speaker or earphone, if desired.
• The internal speaker will not function when either option is connected.

LINE OUT JACK [LINE OUT]
Use a submini plug to connect to a tape recorder in order to record the signal being received.
• Use the volume control to adjust the recording level.
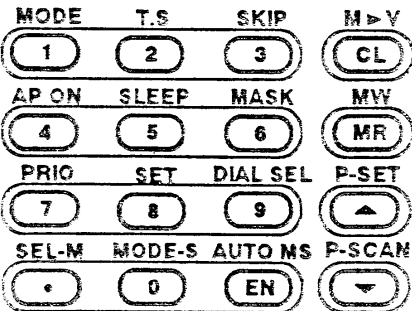
TUNING CONTROL
Used to set an operating frequency (see p. 16) or a memory channel (see p. 22).

VOLUME CONTROL [PWR/VOL]
Turns power ON and adusts the audio level. (see p. 12)

4

■ Keyboard

KEY	PRIMARY FUNCTION	SECONDARY FUNCTION (while pushing [F])
MODE (1)		In VFO mode: selects a receive mode, FM, AM or W FM. (see p. 13)
T.S (2)		In VFO mode: selects a tuning step. Use together with the tuning control for selection. (see p. 14)
SKIP (3)		In MEMORY mode: designates skip channels for memory scan. (see p. 32)
AP ON (4)		In CLOCK mode: starts the power-on timer. (see p. 43)
SLEEP (5)		Starts the sleep timer. (see p. 44)
MASK (6)	• When selecting VFO mode: enter a digit for the receive frequency. (see p. 15)	In MEMORY mode: turns the memory mask function ON and OFF. (see p. 24)
PRIO (7)		Starts/stops priority watch. (see pgs. 39, 40)
SET (8)	• When selecting MEMORY mode: enter a memory channel number. (see p. 22)	In VFO mode: activates SET mode. (see p. 48)
DIAL-SEL (9)		In VFO mode: selects a dial select step. (see p. 17)
MODE-S (0)		In MEMORY mode: starts/stops mode select scan. (see p. 36)

Count on us!
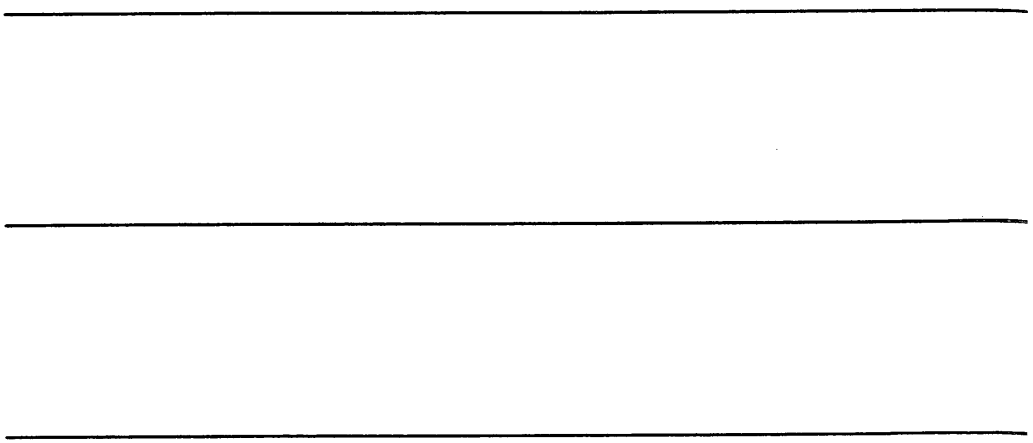
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