



INSTRUCTION MANUAL

COMMUNICATIONS RECEIVER **IC-R5**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Icom Inc.



FOREWORD

Thank you for purchasing this Icom product. The IC-R5 COMMUNICATIONS RECEIVER is designed and built with Icom's superior technology and craftsmanship. With proper care, this product should provide you with years of trouble-free operation.

We want to take a couple of moments of your time to thank you for making your IC-R5 your radio of choice, and hope you agree with Icom's philosophy of "technology first." Many hours of research and development went into the design of your IC-R5.

◆ FEATURES

- *Covers 0.150–1309.995 MHz* wide frequency range*

*Some frequency bands are inhibited according to version


- *External power supply operation*
- *1250 memory channels* with 18 banks available*
*200 auto write and 50 scan edge channels are included.
- *Built-in bar-antenna*
- *New DMS (Dynamic Memory Scan) System*


IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the receiver.

SAVE THIS INSTRUCTION MANUAL— This instruction manual contains important operating instructions for the IC-R5.

EXPLICIT DEFINITIONS

WORD	DEFINITION
 WARNING!	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	Recommended for optimum use. No risk of personal injury, fire or electric shock.

 Versions of the IC-R5 which display the "CE" symbol on the serial number seal, comply with the essential requirements of the European Radio and Telecommunication Terminal Directive 1999/5/EC, and that any applicable Essential Test Suite measurements have been performed.

Icom, Icom Inc. and the ICOM logo are registered trademarks of Icom Incorporated (Japan) in the United States, the United Kingdom, Germany, France, Spain, Russia and/or other countries.

PRECAUTION

⚠ WARNING! NEVER operate the receiver with a earphone, headphones or other audio accessories at high volume levels. Hearing experts advise against continuous high volume operation. If you experience a ringing in your ears, reduce the volume level or discontinue use.

⚠ WARNING! NEVER connect the receiver to an AC outlet. This may pose a fire hazard or result in an electric shock.

⚠ WARNING! NEVER operate the receiver while driving a vehicle. Safe driving requires your full attention—anything less may result in an accident.

⚠ WARNING! NEVER throw a battery cell into a fire since as internal battery gas can cause explosion.

⚠ WARNING! NEVER disassemble the battery cell. If the battery cell's internal material (electrolyte liquid) gets into your eyes, wash your eyes with water and obtain treatment from an eye doctor immediately.

NEVER connect the receiver to a power source of more than 6 V DC directly. This will damage the receiver.

NEVER connect the receiver to a power source using reverse polarity. This will damage the receiver.

NEVER expose the receiver to rain, snow or any liquids. The receiver may be damaged.

NEVER operate or touch the receiver with wet hands. This may result in an electric shock or damage the receiver.

NEVER solder the battery cell. This may damage the battery.

AVOID using or placing the receiver in direct sunlight or in areas with temperatures below -10°C ($+14^{\circ}\text{F}$) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$).

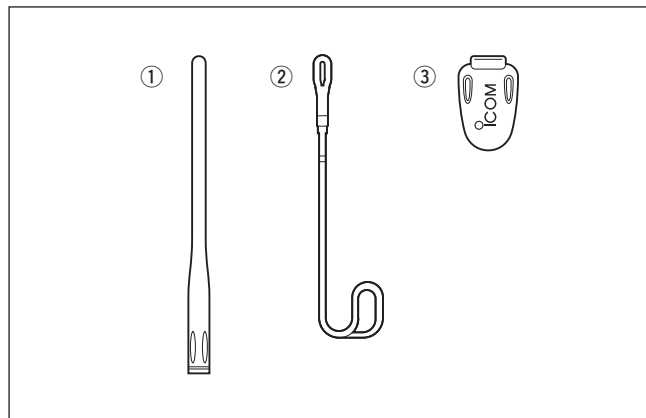
AVOID the use of chemical agents such as benzine or alcohol when cleaning, as they can damage the receiver's surfaces.

Even when the receiver power is OFF, a slight current still flows in the circuits. Remove batteries from the receiver when not using it for a long time. Otherwise, the installed batteries will become exhausted, and will need to be recharged.

For U.S.A. only

CAUTION: Changes or modifications to this device, not expressly approved by Icom Inc., could void your authority to operate this device under FCC regulations.

SUPPLIED ACCESSORIES



- | | |
|--------------------|---|
| ① Antenna | 1 |
| ② Hand strap | 1 |
| ③ Belt clip | 1 |

OPERATING THEORY

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-R5 receives RF energy from 0.150 MHz* to 1309.995 MHz 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 to 20,000 Hz.

*kHz is an abbreviation of kilohertz or 1000 hertz, MHz is abbreviation of megahertz or 1,000,000 hertz, where hertz is a unit of frequency.

OPERATING NOTES

The IC-R5 may receive its own oscillated frequency, resulting in no reception or only noise reception, on some frequencies.

The IC-R5 may receive interference from extremely strong signals on different frequencies or when using an external high-gain antenna.

TABLE OF CONTENTS

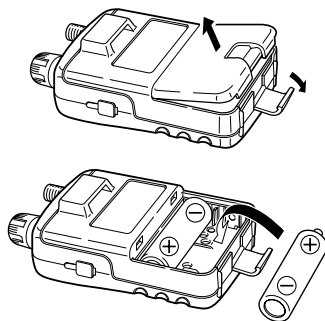
FOREWORD	i	■ Receive mode selection	12	■ DTCS polarity setting.....	37
IMPORTANT	i	■ Monitor function	13	■ Tone scan	38
EXPLICIT DEFINITIONS	i	■ Attenuator function	13	9 SET MODE	39–47
PRECAUTION	ii	■ Duplex operation	14	■ General	39
SUPPLIED ACCESSORIES	iii	■ Dial select step	15	■ Set mode items.....	40
OPERATING THEORY	iii	5 MEMORY CHANNELS	16–24	10 OTHER FUNCTIONS	48–53
OPERATING NOTES	iii	■ General description	16	■ Antenna selection	48
TABLE OF CONTENTS	iv	■ Memory channel programming.....	16	■ [DIAL] function assignment.....	49
QUICK REFERENCE GUIDE	I–VI	■ Memory bank setting	17	■ Weather channel operation	49
■ Preparation	I	■ Memory bank selection.....	18	■ Data cloning	51
■ Receiving a signal	III	■ Programming memory/bank name	19	■ Auto power-off function.....	52
■ Memory programming	IV	■ Selecting display type	20	■ Partial reset	53
■ Programmed scan operation.....	V	■ Copying memory contents	21	■ All reset	53
1 PANEL DESCRIPTION	1–4	■ Memory clearing.....	22	11 FREQUENCY TABLE	54–61
■ Front, top and side panels	1	■ Transferring memory contents.....	23	■ TV channels.....	54
■ Function display	3	■ Erasing/transferring bank contents.....	24	■ VHF marine channels	57
2 BATTERY CHARGING	5–6	6 SCAN OPERATION	25–31	■ Weather channels.....	57
■ Battery installation	5	■ Scan types.....	25	■ Other communications in the USA	58
■ Caution	5	■ Full/band/programmed scan.....	26	■ Other communications— other countries	60
■ Battery charging	6	■ Scan edges programming	27	12 MAINTENANCE	62–63
3 FREQUENCY AND CHANNEL SETTING	7–10	■ Memory/bank/all bank scan.....	28	■ Troubleshooting	62
■ VFO and memory channels.....	7	■ Auto memory write scan	29	■ CP-18A/E fuse replacement.....	63
■ Operating band selection.....	7	■ Skip channel/frequency setting.....	30	13 SPECIFICATIONS	64
■ Setting a frequency.....	9	■ Scan resume condition	31	14 OPTIONS	65
■ Setting a tuning step.....	9	7 PRIORITY WATCH	32–34	15 POCKET GUIDE	66–67
■ Selecting a memory channel.....	10	■ Priority watch types	32	16 CE	68
■ Lock function	10	■ Priority watch operation	33		
4 BASIC OPERATION	11–15	8 TONE SQUELCH AND POCKET BEEP	35–38		
■ Receiving	11	■ Tone/DTCS squelch operation.....	35		
■ Setting audio volume	11	■ Tone squelch frequency/DTCS code setting.....	36		
■ Squelch level setting.....	12				

QUICK REFERENCE GUIDE

■ Preparation

◇ Battery installation

- ① Remove the battery cover from the receiver.
- ② Install 2 R6(AA) size Ni-Cd, Ni-MH or alkaline cell batteries.
 - Be sure to observe the correct polarity.
 - Charge Ni-Cd or Ni-MH batteries before use. (See the right page for charging instructions.)

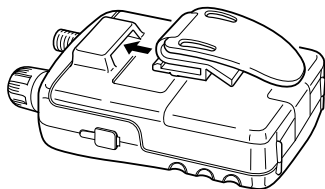


Keep battery the contacts clean. It's a good idea to clean the battery terminals once a week.

◇ Belt clip

Conveniently attaches to your belt.

Slide the belt clip into the plastic loop on the back of the receiver.

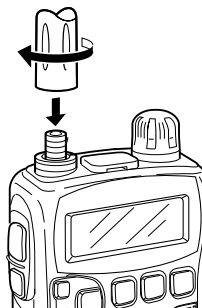


◇ Antenna

Insert the supplied antenna into the antenna connector and screw down the antenna as shown at right.

NEVER hold the antenna when carrying the receiver.

Keep the jack cover attached when jack is not in use to protect the connectors from dust and moisture.

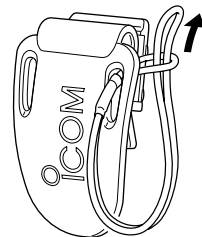


✓ For your information

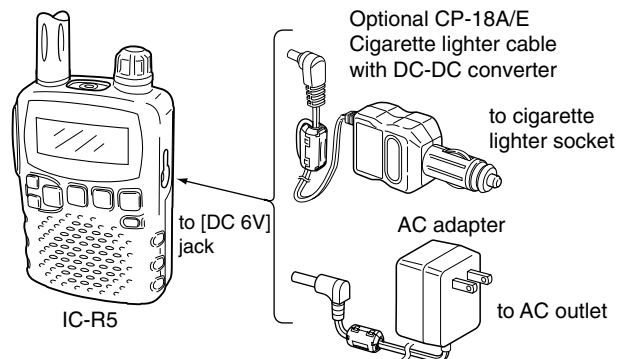
Third-party antennas may increase receiver performance.
An optional AD-92SMA ANTENNA CONNECTOR ADAPTER is available to connect an antenna with a BNC connector.

◇ Handstrap

Slide the handstrap through the loop on the side of the belt clip as illustrated at right. Facilities carrying.



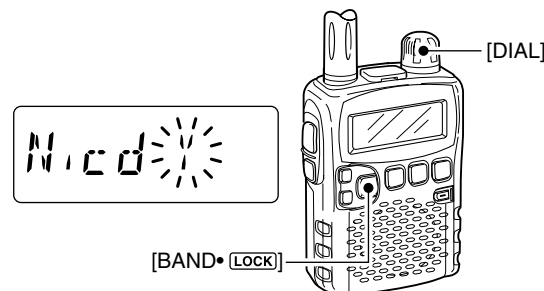
◆ Charging the battery



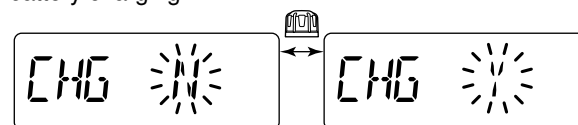
- ① Install the Ni-Cd batteries.
 - Ni-MH batteries can also be charged.
- ② Plug the AC adapter into an AC outlet.
- ③ Insert the adapter plug into the [DC 6V] of the receiver.
- ④ The battery confirmation is displayed as above right.

⚠ WARNING!:
NEVER charge the alkaline batteries.

- ⑤ Rotate [DIAL] to select “Y” then push [BAND•LOCK].



- ⑥ The charging confirmation is displayed as below.
- ⑦ Rotate [DIAL] to select “Y” then push [BAND•LOCK] to start battery charging.



- The battery indicator scrolls during charge as below.



- Both segments blink when completely charged.

QUICK REFERENCE GUIDE

■ Your first scanning experience

Now that you have your IC-R5 ready, you are probably excited to start listening. We would like to take you through a few basic operation steps to make your first “Scanning Experience” enjoyable.

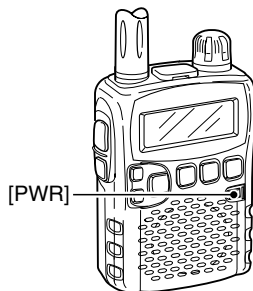
◇ About default setting

The [DIAL] control function can be traded with [▲]/[▼] keys function in set mode. However, in this QUICK REFERENCE GUIDE, the factory default setting ([DIAL] sets operating frequency) is used for simple instruction.

◇ Basic operation

1. Turning ON the receiver

- ➔ Push [PWR] for 1 sec. to turn the power ON.

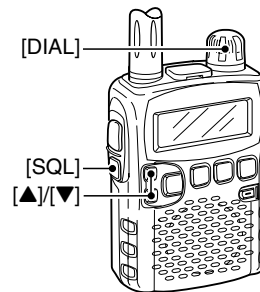


2. Adjusting audio level

- ➔ Push [▲]/[▼] to set the desired audio level.

3. Adjusting squelch level

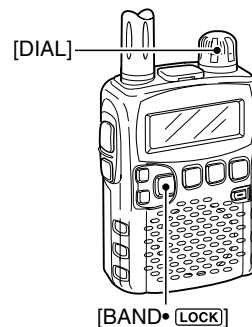
- ➔ While pushing [SQL], rotate [DIAL] to set the squelch level.



4. Tune the desired frequency

The tuning dial will allow you to dial in the frequency you want to operate. Pages 9 and 15 will instruct you on how to set the tuning speed.

- ① Push [BAND•LOCK] several times to select the desired frequency band.
 - While pushing [BAND•LOCK], rotate [DIAL] also select frequency band.
- ② Rotate [DIAL] to set the desired receive frequency.
 - While pushing [FUNC], rotate [DIAL] to select frequency in 1 MHz step.



Count on us!

#02 Europe

#03 U.K.

#05 Italy

#08 Spain

<Intended Country of Use>

☒ GER ☐ FRA ☒ ESP ☒ SWE
☒ AUT ☒ NED ☒ POR ☒ DEN
☒ GBR ☒ BEL ☒ ITA ☒ FIN
☒ IRL ☒ LUX ☒ GRE ☐ SUI
☐ NOR

#07 France

<Intended Country of Use>

☐ GER ☒ FRA ☐ ESP ☐ SWE
☐ AUT ☐ NED ☐ POR ☐ DEN
☐ GBR ☐ BEL ☐ ITA ☐ FIN
☐ IRL ☐ LUX ☐ GRE ☐ SUI
☐ NOR

A-6198H-1EX-⑤

Printed in Japan

© 2002–2007 Icom Inc.

Printed on recycled paper with soy ink.

Icom Inc.

1-1-32 Kamiminami, Hirano-ku, Osaka 547-0003, Japan