ICOM

INSTRUCTION MANUAL

COMMUNICATIONS RECEIVERS

IC-PCR1500
IC-PCR2500

Icom Inc.

FOREWORD

Thank you for purchasing this Icom receiver. The IC-PCR1500/PCR2500 COMMUNICATIONS RECEIVERS is designed and built with Icom's state of the art technology and craftsmanship. With proper care, this receiver should provide you with years of trouble-free operation.

◇ *FEATURES*

[Common to both models]

- ❍ *Wide frequency coverage with all mode receive*
- ❍ *Real-time bandscope function*
- ❍ *IF shift function*
- ❍ *ANF and NR functions are available*
  (Only when the DSP unit is installed.)

[For IC-PCR2500 only]

- ❍ *Dualwatch operation/Diversity operation*
- ❍ *DV and P25 Digital modes are available*
  (Only when the specific digital unit is installed.)

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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-PCR1500/PCR2500.

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.

MOUSE PROPERTY SETTING

Depending on the 'Mouse Property' setting in the control panel, main and sub mouse button functions are swapped.

In this instruction manual, the operation is described with the default setting.

SYSTEM REQUIREMENTS

PC

- Microsoft® Windows® XP/2000/Me/98SE installed
- USB 2.0 or 1.1
- Intel Pentium® III 450 MHz or faster (Pentium® 4 recommended)
- At least 128 MB of memory or higher (256 MB or more recommended)
- At least 50 MB or higher hard disk space
- At least 1024 × 768 pixel resolution, high color display

- CD-ROM or DVD drive is required for software installation.
- Mouse or other compatible pointing device is required.
- USB audio dropouts or gaps may occur, because of a lack of PC power.
- Additional hard disk space is required for;
  - Recording sound (at high quality): max 300 MB (approx.)
  - Storing scope data
    - Frequency mode : max 5 MB (approx.)
    - Time mode : max 1.5 MB (approx.)
  - Memory channel data : max 500 kB (approx.)

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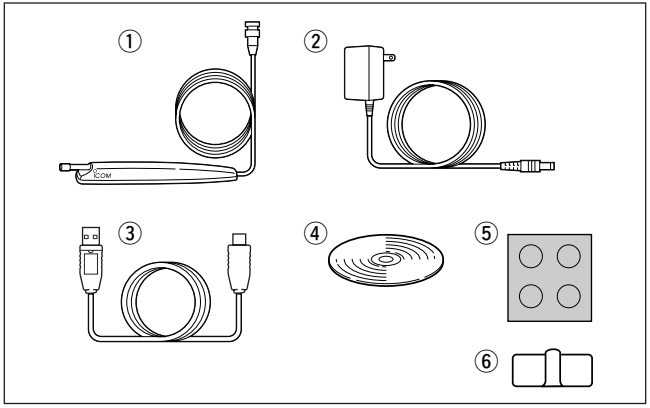
Pentium is a registered trademark of Intel Corporation.
All other products or brands are registered trademarks or trademarks of their respective holders.

SUPPLIED ACCESSORIES



① Antenna 1
② AC adapter* 1
③ USB cable 1
④ CD 1
⑤ Foot pad sheet..... 1
⑥ Cable hanger 1
*Not supplied with some versions.

PRECAUTIONS

⚠**WARNING! NEVER** connect the OPC-254L to an AC outlet. This may pose a fire hazard or result in an electric shock.

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.

AVOID using or placing the receiver in direct sunlight or in areas with temperatures below 0°C (+32°F) or above +60°C (+140°F).

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

DO NOT use the supplied CD for any other devices.
The CD is for the IC-PCR1500/R1500, IC-PCR2500/R2500 only.

DO NOT turn the main unit power OFF or disconnect the USB cable between the main unit and PC while IC-PCR1500 or IC-PCR2500 control software is running. This may result in the computer hang up.

DO NOT start vehicle engine while the IC-PCR1500 or IC-PCR2500 control software is running off of the vehicle's cigarette lighter socket (optional CP-12L required). This may result in the computer hang up.

DO NOT leave the main unit powered ON and connected to a vehicle's electrical system. The main unit draws approx. 550 mA. This will eventually drain the vehicle's battery.

For DC power operation

(while connecting an OPC-254L or CP-12L)

NEVER connect the receiver to a power source of more than 14 V DC. This will damage the receiver.

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

NEVER cut the DC power cable between the DC plug and fuse holder. If an incorrect connection is made after cutting, the receiver may be damaged.

If a connection cable is disconnected or has a loose connection during operation, an error may occur. Connect the connectors correctly, and **DO NOT** touch the connectors during operation.

For the operation of PC and peripheral devices, follow the instructions provided in the manuals which come with the PC and peripheral devices.

This device may cause signal interference when used in a domestic setting. When interference occurs, move this unit as far as possible away from the affected device.

All copyrights associated with this manual and all intellectual property rights associated with the hardware and software of the IC-PCR1500/PCR2500 are held by Icom Inc.

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The content of this manual, the hardware and software associated with the IC-PCR1500/PCR2500, and the appearance of the IC-PCR1500/PCR2500 are all subject to change without notice.

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.

ABOUT APCO PROJECT 25

This device made under license under one or more of the following US patents: #4,590,473, #4,636,791, #5,148,482, #5,185,796, #5,271,017, #5,377,229.

The IMBE™ voice coding technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc. This voice coding technology is licensed solely for use within this communications equipment. The user of this technology is explicitly prohibited from attempting to decompile, reverse engineer, or disassemble the object code, or in any other way convert the object code into a human-readable form. U.S. Pat. nos. #5,870,405, #5,826,222, #5,754,974, #5,701,390, #5,715,365, #5,649,050, #5,630,011, #5,581,656, #5,517,511, #5,491,772, #5,247,579, #5,226,084, #5,195,166.

P25 digital mode is available when the optional UT-122 DIGITAL UNIT is installed to IC-PCR2500 or IC-R2500.

TABLE OF CONTENTS

FOREWORD i
IMPORTANT i
EXPLICIT DEFINITIONS i
MOUSE PROPERTY SETTING i
SYSTEM REQUIREMENTS ii
SUPPLIED ACCESSORIES ii
PRECAUTIONS iii
ABOUT APCO PROJECT 25 iv
TABLE OF CONTENTS v

1 INSTALLATION 1–3
- ■ Hardware installation 1
- ■ TNC connection 2
- ■ DC power supply connection 2
- ■ Accessory attachments 3

2 DRIVER INSTALLATION 4–24
- ■ Microsoft® Windows® XP 4
- ■ Microsoft® Windows® 2000 10
- ■ Microsoft® Windows® 98SE 16
- ■ Microsoft® Windows® Me 20

3 APPLICATION INSTALLATION 25–29
- ■ Installation 25
- ■ Launching the IC-PCR1500_2500 27
- ■ Uninstall 28

4 PANEL DESCRIPTION 30–43
- ■ Application screens (on PC screen) 30
- ■ Main unit 42

5 BASIC RECEIVE FUNCTIONS 44–67
- ■ Starting the control software 44
- ■ Changing the control screen 44
- ■ Closing the control screen 46
- ■ Quitting the control software 46
- ■ Receiving 47
- ■ Setting a frequency 48
- ■ Setting a tuning step 50
- ■ Audio level setting 52
- ■ Squelch level setting 53
- ■ Receive mode selection 54
- ■ Automatic mode selection 55
- ■ Monitor function 56
- ■ Mute function 56
- ■ Duplex operation 57
- ■ IF filter selection 58
- ■ AFC function 59
- ■ Attenuator function 59
- ■ NB function 60
- ■ AGC function 60
- ■ VSC function 61

■ IF shift function 61
■ Weather channel operation
(USA and CANADA versions only) 62
■ Squelch delay setting 63
■ Single band/Dualwatch operation
(IC-PCR2500 only) 64
■ Diversity operation (IC-PCR2500 only) 66
■ Main/Sub band selection (IC-PCR2500 only) ... 67

6 MEMORY CHANNELS 68–79
■ General 68
■ Memory channel selection 68
■ Memory channel programming 70
■ Editing the memory list 72
■ Memory channel clearing 76
■ Saving memory channel data 78
■ Opening memory channel data 78
■ Creating new memory channel data file 78
■ Printing a memory channel 78
■ Importing a CSV file 79
■ Exporting a CSV file 79

7 SCAN OPERATION
(Multi function receiver/Component screens only)
..... 80–91
■ Scan types 80
■ Programmed scan 81
■ Auto memory write scan 84
■ Memory/bank scan 86
■ Versatile memory scan 88
■ Scan resume condition 90
■ Scan speed setting 91

8 PRIORITY SCAN
(Multi function receiver/Component screens only)
..... 92–93
■ Priority scan type 92
■ Priority scan operation 92

9 TONE SQUELCH OPERATION
(Multi function receiver/Component screens only) **94–97**
■ Tone/DTCS operation 94
■ DTCS polarity setting 96
■ Pocket beep operation 96
■ Tone scan operation 97

10 BAND SCOPE
(Multi function receiver/Component screens only) **98–103**
■ Operation 98
■ Pick up signal function 100
■ Saving the sweep data 100
■ Changing the automatic sweep step limit ... 102
■ Wide band scope function 103
■ Band scope options 103

TABLE OF CONTENTS (Continued)

11 OTHER FUNCTION 104–116
■ DTMF Operation 104
■ Audio setting screen 106
■ Multi channel monitor 110
■ Recording operation 112
■ Sampling Rate setting 114
■ Remote recording function 115
■ Short cut key operation 116

12 DSP OPERATION
(Available only when the UT-106 is installed) **..... 117**
■ ANF function 117
■ NR function 117

13 DIGITAL MODE OPERATION
(IC-PCR2500 Main band only) **..... 118–124**
■ Digital mode operation 118
■ DV mode setting 119
■ DV digital squelch function 120
■ P25 mode setting 121
■ P25 digital squelch function 122
■ Digital menu indication 123

14 OPTIONAL UNIT INSTALLATION AND OTHER 125–128
■ Opening the top cover 125
■ UT-106 installation 125
■ UT-108/UT-118/UT-122 installation (IC-PCR2500/R2500 only) 127

15 USB PORT SETTING 128–129
■ USB port setting 128
■ USB audio setting 129

16 CLONING OPERATION (Available only when the IC-R1500 or IC-R2500 is connected) **..... 130–134**
■ Launching the cloning software 130
■ Cloning operation 131
■ Data convert 132

17 TROUBLESHOOTING 135

18 SPECIFICATIONS AND OPTIONS 136–137
■ Specifications 136
■ Options 137

19 DOC 138–139

In this instruction manual, the screen shot contents may be different from the actual one.

■ Hardware installation

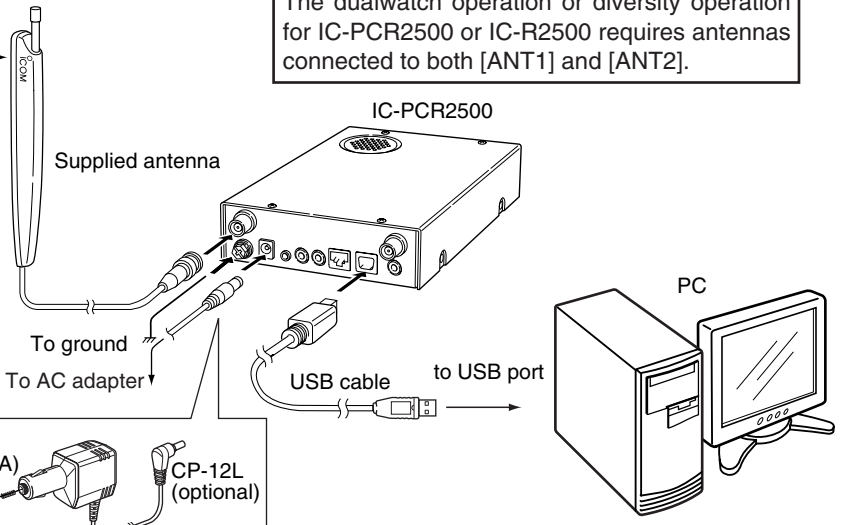
Refer to the diagram below for connections.

CAUTION: Icom Inc. assumes no responsibility for the receiver's operation resulting from the use of any other USB cable other than the one supplied by Icom in the original IC-PCR1500 or IC-PCR2500 package.

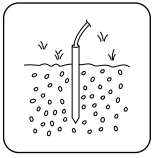
NOTE: The antenna's double sided tape may not adhere to all items. Additionally, the tape is not intended for multiple uses. Lastly, some items may be damaged by trying to remove the antenna holder once it has been taped into place. Icom Inc cannot accept any responsibility for any damage to any item caused by the supplied tape.

The antenna holder is backed with double-sided tape.
Remove the protective paper when the antenna is fixed to any places.

The dualwatch operation or diversity operation for IC-PCR2500 or IC-R2500 requires antennas connected to both [ANT1] and [ANT2].

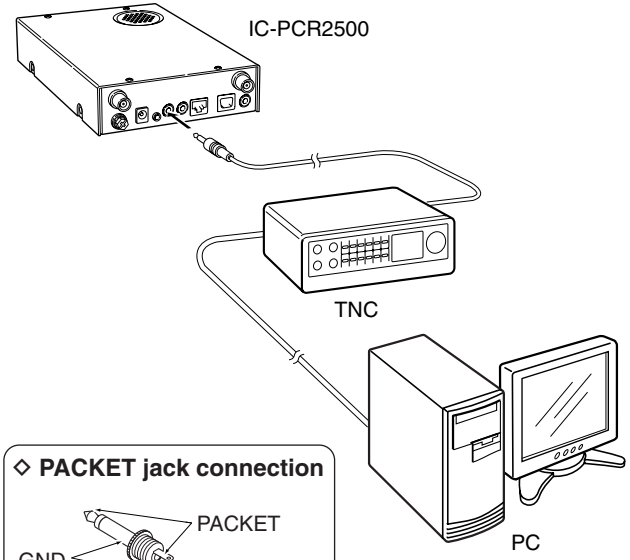


⚠ **WARNING!: NEVER** use a gas pipe or electrical conduit pipe for grounding.

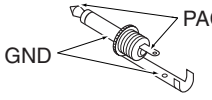


■ TNC connection

The IC-PCR1500/PCR2500 can receive 9600 bps packet communication (AFSK) with the use of a TNC (not supplied). Connect the TNC (Terminal Node Controller) as illustrated below. (Other connections are same as page 1.)



◇ **PACKET jack connection**

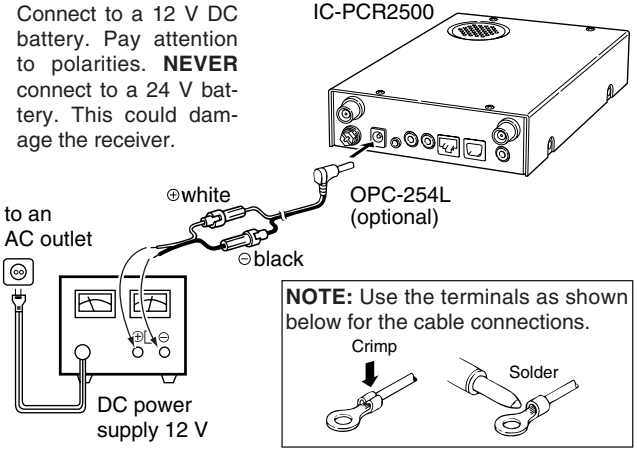


2-conductor 3.5 (d) mm (⅛″)/100 kΩ

■ DC power supply connection

Use a 12 V DC power supply with at least 1.2 A capacity. Make sure the ground terminal of the DC power supply is grounded.

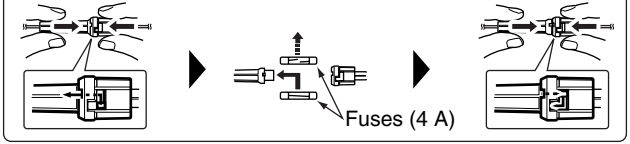
Connect to a 12 V DC battery. Pay attention to polarities. **NEVER** connect to a 24 V battery. This could damage the receiver.



NOTE: Use the terminals as shown below for the cable connections.

⚠ **CAUTION! NEVER** remove the fuse-holders from the DC power cable.

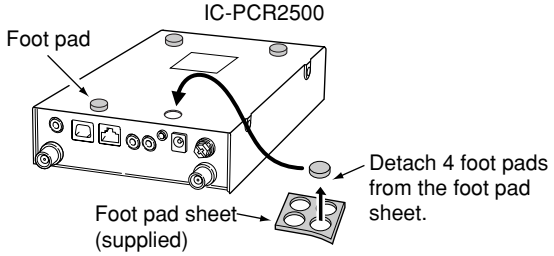
◇ **Fuse replacement**



■ Accessory attachments

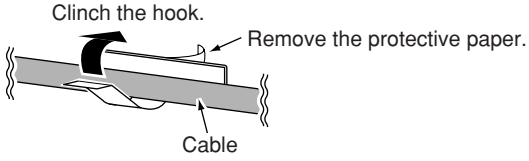
◇ Foot pad

Attach 4 foot pads to the bottom of the IC-PCR1500/ PCR2500 as below.



◇ Cable hanger

The cable hanger is convenient for fixing a cable to the wall, etc.



The displayed dialog boxes or indications may differ slightly from the following instructions according to your system conditions, or environment.

■ Microsoft® Windows® XP

NOTE: Driver installation with CD is required when an additional Main unit is connected to the PC (i.e. 2 or more IC-PCR1500 or IC-PCR2500s (same model only) are connected to the PC). In such a case, install the driver as shown below.

①Quit all applications when Windows is running.
②Connect the Main unit to the desired PC's USB port with the supplied USB cable.

CAUTION: Icom Inc. assumes no responsibility for the receiver's operation resulting from the use of any other USB cable other than the one supplied by Icom in the original IC-PCR1500 or IC-PCR2500 package.

③Insert the CD into the appropriate CD drive.
④Turn the Main unit power ON.
- The power indicator lights.
- "Found New Hardware" appears as below.

⑤The CP2101 USB device is detected automatically, and the "Found New Hardware Wizard" will come up as below. Select "Install from a list or specific location (Advanced)," then click [Next>].

Count on us!

IC-PCR1500
#22 Europe

IC-PCR2500
#22 Europe

<Intended Country of Use>			
■ GER	□ FRA	■ ESP	■ SWE
■ AUT	■ NED	■ POR	■ DEN
□ GBR	■ BEL	■ ITA	■ FIN
■ IRL	■ LUX	■ GRE	■ SUI
■ NOR			

IC-PCR1500
#23 U.K.

IC-PCR2500
#23 U.K.

<Intended Country of Use>			
□ GER	□ FRA	□ ESP	□ SWE
□ AUT	□ NED	□ POR	□ DEN
■ GBR	□ BEL	□ ITA	□ FIN
□ IRL	□ LUX	□ GRE	□ SUI
□ NOR			

IC-PCR1500
#26 France

IC-PCR2500
#26 France

<Intended Country of Use>			
□ GER	■ FRA	□ ESP	□ SWE
□ AUT	□ NED	□ POR	□ DEN
□ GBR	□ BEL	□ ITA	□ FIN
□ IRL	□ LUX	□ GRE	□ SUI
□ NOR			

A-6469H-1EX-④
Printed in Japan
© 2005–2007 Icom Inc.
Printed on recycled paper with soy ink.

Icom Inc.
1-1-32 Kamiminami, Hirano-ku, Osaka 547-0003, Japan