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.)

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.

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.)

Microsoft, Windows and Windows Media are registered trademarks of Microsoft Corporation in the U.S.A and other countries. Screen shots produced with permission from Microsoft Corporation.
Pentium is a registered trademark of Intel Corporation.
All other products or brands are registered trademarks or trademarks of their respective holders.

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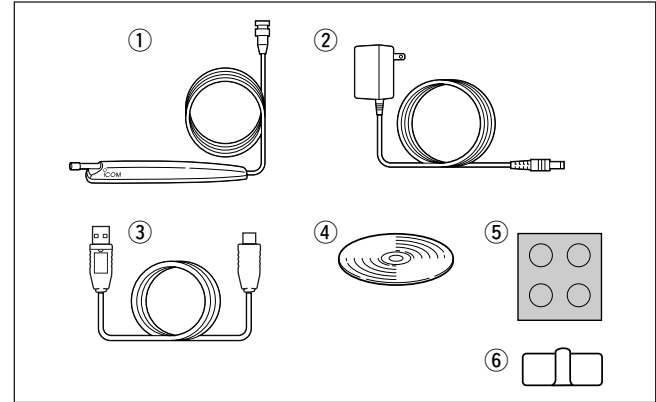
① Antenna 1
② AC adapter* 1
③ USB cable 1
④ CD 1
⑤ Foot pad sheet.. 1
⑥ Cable hanger 1
*Not supplied with some versions.

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.

Unauthorized reproduction or transmission of this manual, or any part hereof, is prohibited.

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.

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

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19

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

■ Hardware installation
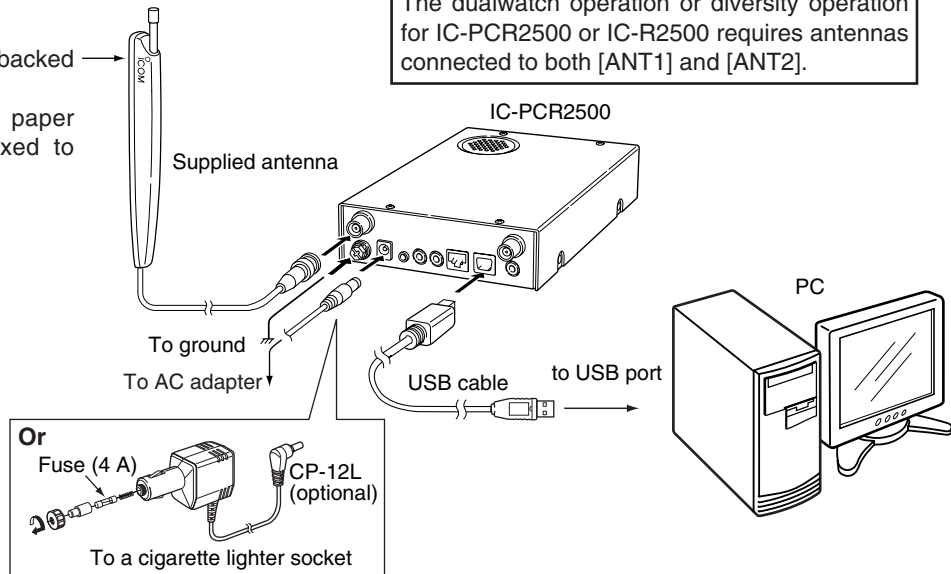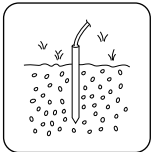
Refer to the diagram below for connections.

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].

IC-PCR2500

Supplied antenna

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

To ground

To AC adapter

USB cable

to USB port

PC

Or
Fuse (4 A)

CP-12L (optional)

To a cigarette lighter socket

■ 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.)

IC-PCR2500

TNC

PC

◇ **PACKET jack connection**

PACKET

GND
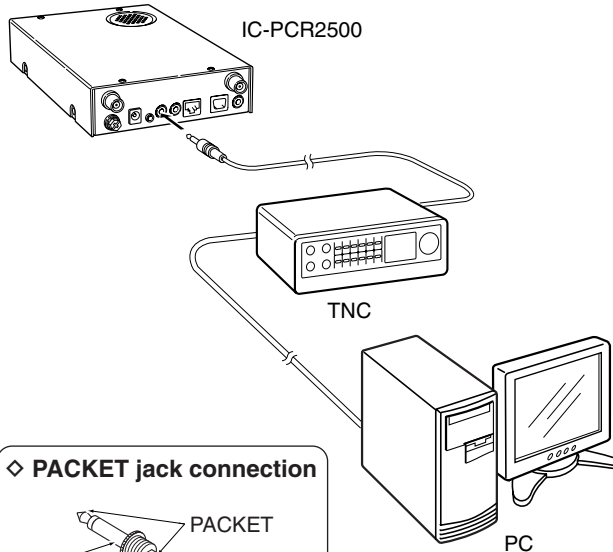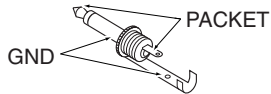
2-conductor 3.5 (d) mm (⅛˝)/100 kΩ

■ 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.

IC-PCR2500

to an AC outlet

⊕white

⊖black

OPC-254L (optional)

DC power supply 12 V

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

Crimp
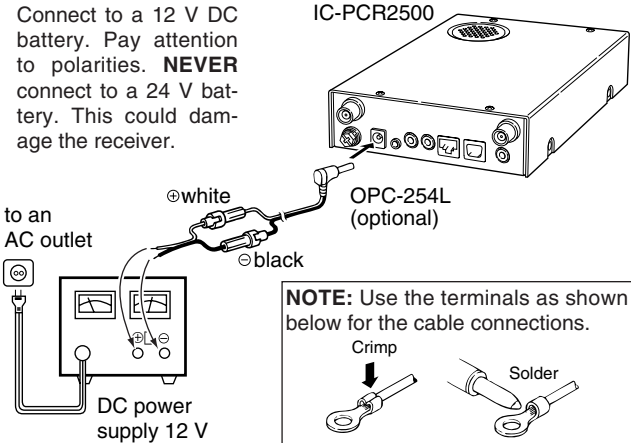
Solder

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

◇ **Fuse replacement**

Fuses (4 A)

2
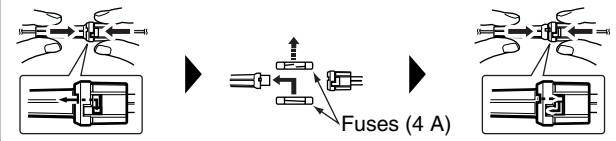
■ Accessory attachments

◇ Foot pad

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

IC-PCR2500

Foot pad

Detach 4 foot pads from the foot pad sheet.

Foot pad sheet (supplied)
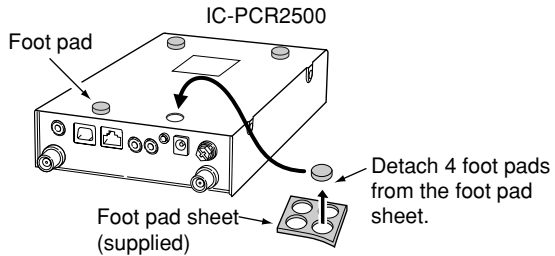
◇ Cable hanger

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

Clinch the hook.

Remove the protective paper.

Cable

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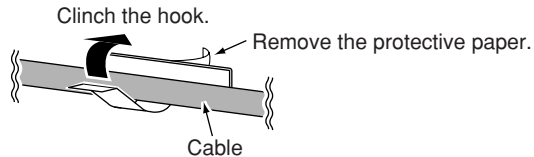
The displayed dialog boxes or indications may differ slightly from the following instructions according to your system conditions, or environment.

■ 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.

① Quit all applications when Windows is running.
② Connect 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.

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

⑤ The 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>].
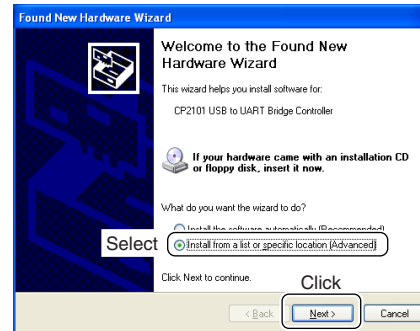
2

⑥Select "Search for the best driver in these locations." then select "Include this location in the search," click [Browse].

Select
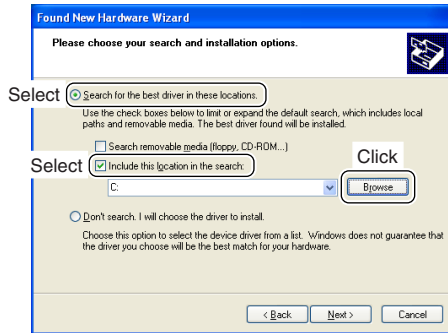
Click

Select

⑦Click " " of the CD drive folder in "My Computer."
• The CD drive folder name (e.g. "D") is depending on a PC.
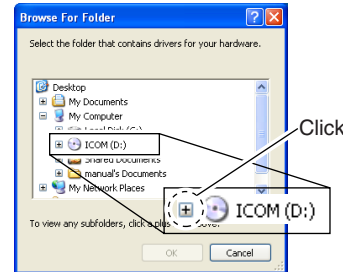
Click

⑧Click " " of the "Driver" folder in the CD drive folder, then select "Win" folder.
Click [OK].

Select

Click

⑨ Click [Next>].
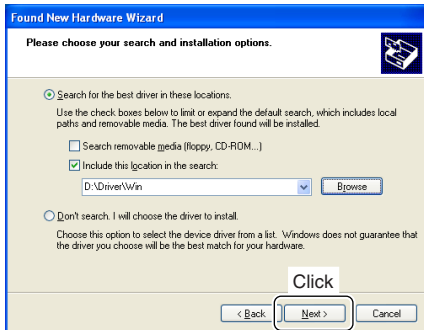
⑩ The Wizard starts searching for the driver and shows the dialog below during search.
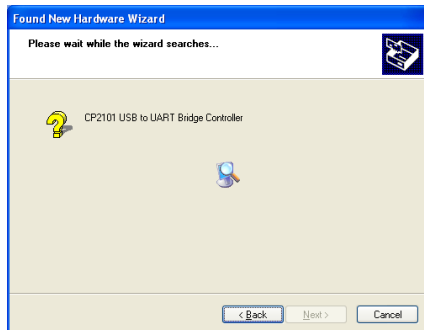
⑪ After the driver is found, the "Hardware Installation" dialog box appears as below.
Click [Continue Anyway] to start the installation.

⑫ Windows starts installing the USB driver.

2

⑬ After the installation is completed, click [Finish].

Click

⑭ The "Found New Hardware Wizard" will come up again to install the USB serial port driver.
Select "Install from a list or specific location (Advanced)," then click [Next>].

Select

Click
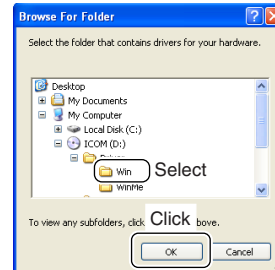
⑮ Select "Search for the best driver in these locations." then select "Include this location in the search:", click [Browse].

Select

Select

Click

Click

⑯ Click "+" of the CD drive folder in "My Computer."
• The CD drive folder name (e.g. "D") is depending on a PC.

Click

7

2 DRIVER INSTALLATION

⑰Click "⊞" of the "Driver" folder in the CD drive folder, then select "Win" folder.
Click [OK].

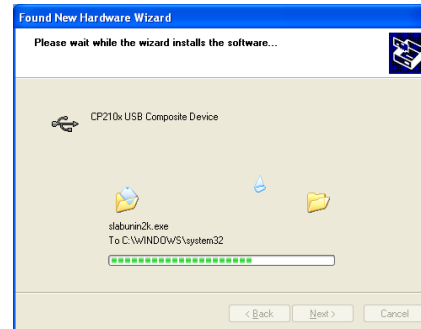⑱Click [Next>].

⑲The Wizard starts searching for the driver and shows the dialog below during search.

⑳After the driver is found, the "Hardware Installation" dialog box appears as below.
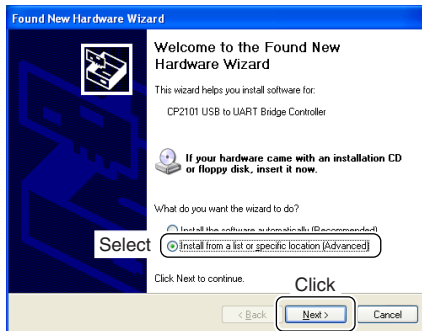Click [Continue Anyway] to start the installation.
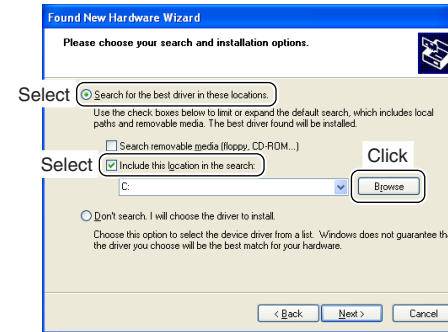
2

21 Windows starts installing the USB driver.

Found New Hardware Wizard

Please wait while the wizard installs the software...

CP210x USB to UART Bridge Controller

slabcmnt.sys
To C:\WINDOWS\system32\DRIVERS

< Back   Next >   Cancel

22 After the installation is completed, click [Finish].

Found New Hardware Wizard

Completing the Found New
Hardware Wizard

The wizard has finished installing the software for:

CP210x USB to UART Bridge Controller

Click Finish to close the wizard.   **Click**

< Back   Finish   Cancel

23 After clicking [Finish], the dialog appears as below.
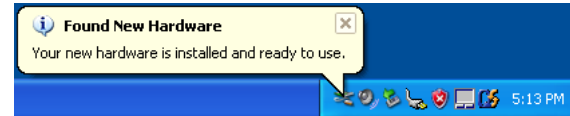
Found New Hardware

Your new hardware is installed and ready to use.

5:13 PM

24 Eject the CD.
• Restarting the PC is recommended.

■ Microsoft® Windows® 2000

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) 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. Click [Next>].

⑥Select "Search for a suitable driver for my device (recommended)," then click [Next>].

⑦Select "Specify a location," then click [Next>].

No check marks ✔
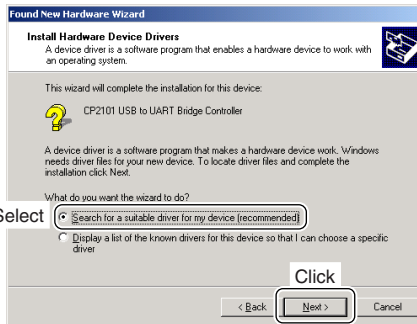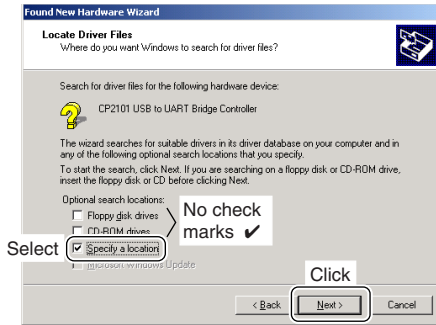
Select

Click

⑧Click [Browse...].
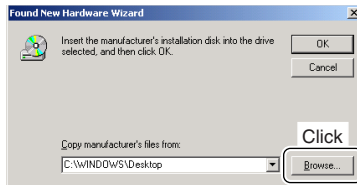
Click

⑨Select the CD drive in "My Computer," then click [Open].
• The CD drive folder name (e.g. "D") is depending on a PC.
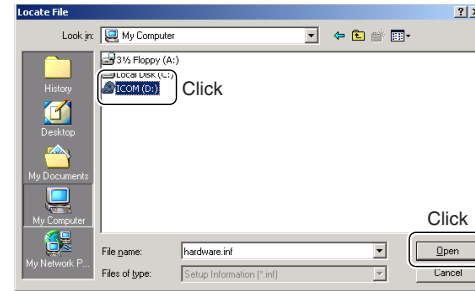
Click

Click

⑩Select the "Driver" folder in the CD drive, then click [Open].
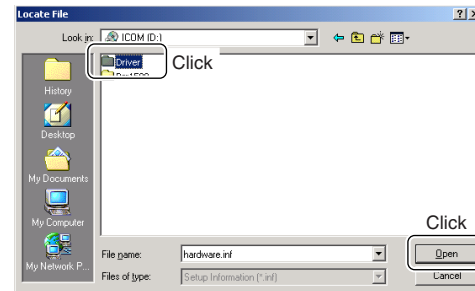
Click

Click

2 DRIVER INSTALLATION

⑪ Select "Win" in the "Driver" folder, then click [Open].
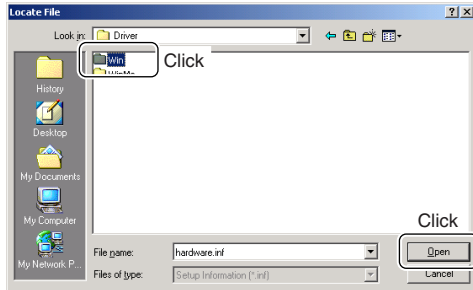
⑫ Select "Slabbus" in the "Win" folder, then click [Open].

⑬ Click [OK].

⑭ When the driver is found, the following dialog is displayed. Click [Next>] to start the installation.

2

⑮ After the installation is completed, click [Finish].

Click

⑯ The "Found New Hardware Wizard" appears again. Click [Next>].

Click

⑰ Select "Search for a suitable driver for my device (recommended)," then click [Next>].

Select

Click

⑱ Select "Specify a location," then click [Next>].

No check marks ✔
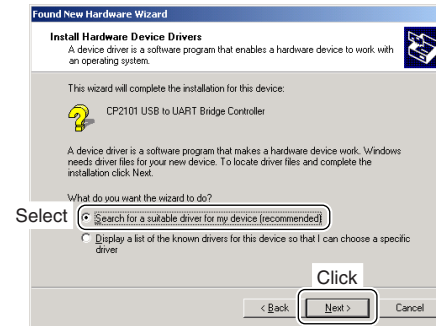
Select

Click

2 DRIVER INSTALLATION

⑲ Click [Browse...].

Click

⑳ Select the CD drive in "My Computer," then click [Open].
• The CD drive folder name (e.g. "D") is depending on a PC.

Click
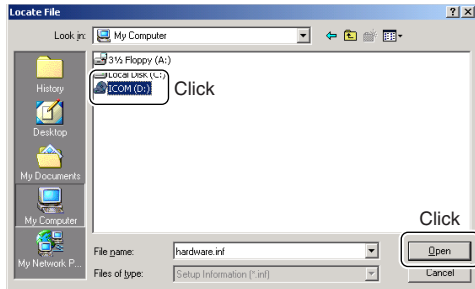
Click

㉑ Select the "Driver" folder in the CD drive, then click [Open].

Click

Click

㉒ Select "Win" in the "Driver" folder, then click [Open].

Click

Click

2

㉓Select "Slabw2k" in the "Win" folder, then click [Open].
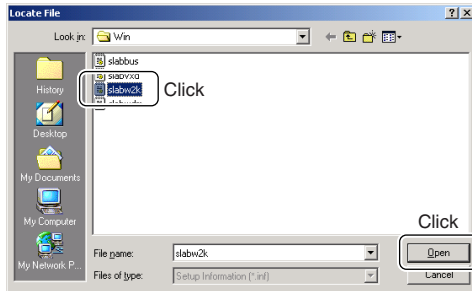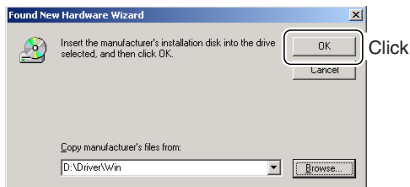
Click

Click

㉔Click [OK].

Click

㉕When the driver is found, the following dialog is displayed. Click [Next>] to start the installation.
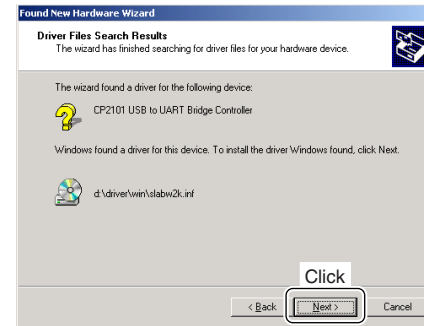
Click

㉖After the installation is completed, click [Finish].

Click
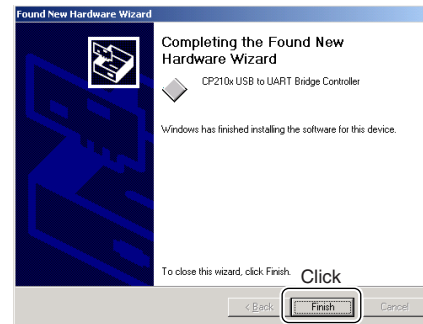
㉗Eject the CD.
• Restarting the PC is recommended.

■ Microsoft® Windows® 98SE

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.

⑤The CP2101 USB device is detected automatically, and the "Add New Hardware Wizard" will come up as below. Click [Next>].

Add New Hardware Wizard

This wizard searches for new drivers for:

CP2101 USB to UART Bridge Controller

A device driver is a software program that makes a hardware device work.

Click

< Back   Next >   Cancel

⑥Select "Search for the best driver for your device. (Recommended)," then click [Next>].

Add New Hardware Wizard

What do you want Windows to do?

Select ⦿ Search for the best driver for your device. (Recommended).

○ Display a list of all the drivers in a specific location, so you can select the driver you want.

Click

< Back   Next >   Cancel

⑦Select "Specify a location:", click [Browse...].

Add New Hardware Wizard

Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.

☐ Floppy disk drives

☐ CD-ROM drive   No check

☐ Microsoft Windows Update   marks ✔

Select ☑ Specify a location:

C:\WINDOWS\Desktop

Click Browse...

< Back   Next >   Cancel

16

⑧ Click "▢" of the CD drive folder in "My Computer".
• The CD drive folder name (e.g. "D") is depending on a PC.

⑨ Select "Win" in the "Driver" folder, click [OK.]

⑩ Click [Next▷].

⑪ When the driver is found, the following dialog is displayed. Click [Next▷] to start the installation.

⑫After the installation is completed, click [Finish].

Click

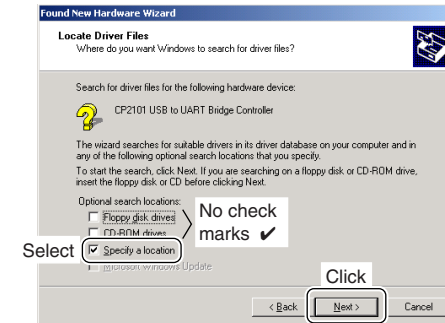⑬The "Add New Hardware Wizard" appears again. Click [Next>].

Click

⑭Select "Search for the best driver for your device. (Recommended)," then click [Next>].

Select

Click

⑮Select "Specify a location:", click [Browse...].

No check marks ✔

Select

Click

2

⑯ Click "⊞" of the CD drive folder in "My Computer."
• The CD drive folder name (e.g. "D") is depending on a PC.

Click

⑰ Select "Win" in the "Driver" folder, click [OK].

Select

Click

⑱ Click [Next>].

Click

⑲ When the driver is found, the following dialog is displayed. Click [Next>] to start the installation.

Click

⑳After the installation is completed, click [Finish].

Add New Hardware Wizard

CP210x USB to UART Bridge Controller

Windows has finished installing the software that your new hardware device requires.

Click

< Back   Finish   Cancel

㉑Eject the CD.
• Restarting the PC is recommended.

■ Microsoft® Windows® Me

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.
• "New Hardware Found" appears as below.
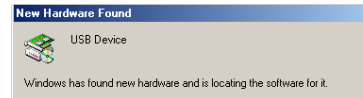
New Hardware Found

USB Device

Windows has found new hardware and is locating the software for it.

ⓑThe CP2101 USB device is detected automatically, and the "Add New Hardware Wizard" will come up as below.
Select "Specify the location of the driver (Advanced)," then click [Next>].

ⓒSelect "Search for the best driver for your device. (Recommended)," then select "Specify a location:", click [Browse].
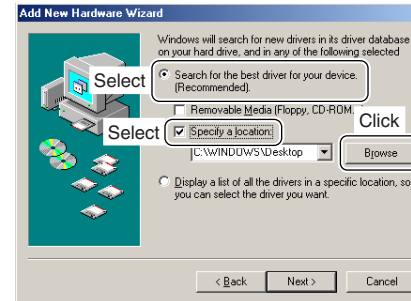
ⓓClick "⊞" of the CD drive folder in "My Computer."
• The CD drive folder name (e.g. "D") is depending on a PC.
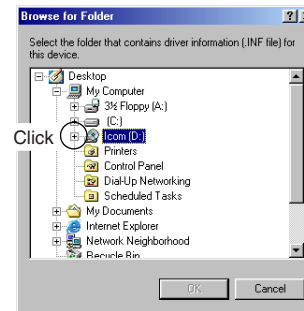
2 DRIVER INSTALLATION

⑧Select "WinMe" in the "Driver" folder, click [OK].
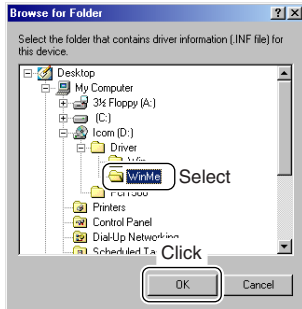
⑨Click [Next>].

⑩When the driver is found, the following dialog is displayed. Click [Next>] to start the installation.

⑪After the installation is completed, click [Finish].

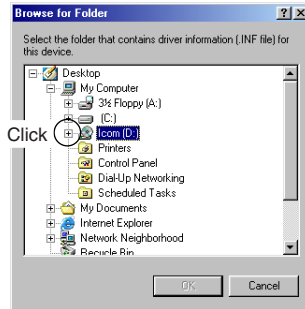�12 The "Add New Hardware Wizard" appears again. Select "Specify the location of the driver (Advanced)," then click [Next>].

Click

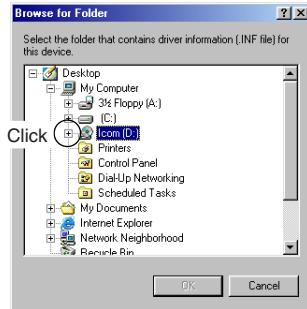�13 Select "Search for the best driver for your device. (Recommended)," then select "Specify a location:", click [Browse].

Select

Select   Click

�14 Click "⊞" of the CD drive folder in "My Computer."
• The CD drive folder name (e.g. "D") is depending on a PC.
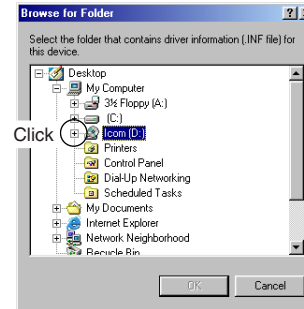
Click

�15 Select "WinMe" in the "Driver" folder, click [OK].

Select
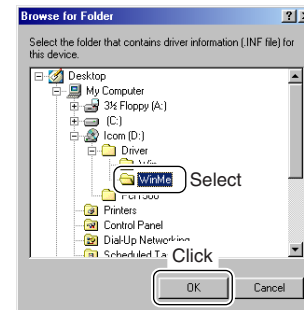
Click

⑯ Click [Next>].

⑰ When the driver is found, the following dialog is displayed. Click [Next>] to start the installation.

⑱ After the installation is completed, click [Finish].

⑲ Eject the CD.
• Restarting the PC is recommended.

■ Installation

①Quit all applications when Windows is running.
②Insert the CD into the CD drive.
③Open the CD drive contents via "My computer" or "Windows Explorer."
  • "Driver" and "Pcr1500_2500" folders are included.
④Double click "Setup.exe" file in "Pcr1500_2500" folder.
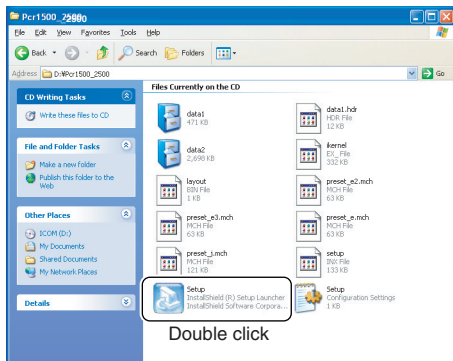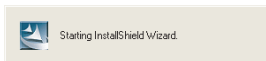
Double click

• The "InstallShield® Wizard" starts preparing the installation.

⑤Select the display language type from "English" or "Japanese." Click [Next>].
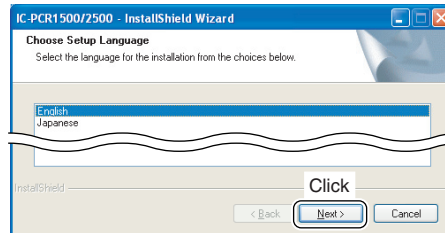
Click

⑥After the preparation, the following dialog is displayed. Click [Next>].
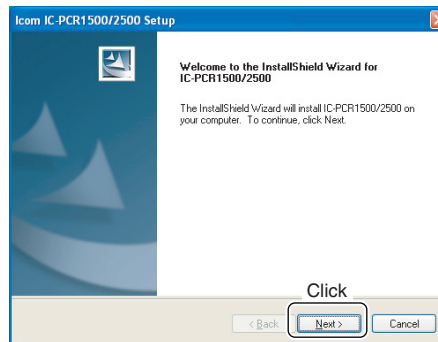
Click

3 APPLICATION INSTALLATION

⑦Confirm the location, then click [Next>] to start the installation.
  • Click [Browse...] then type the desired location if you specifying the installation location.
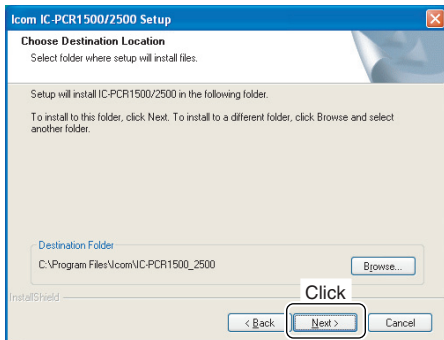
Click

  • The installation starts.
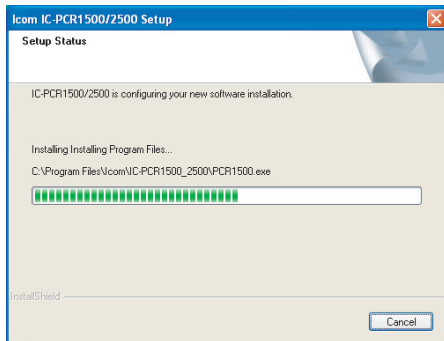
⑧After the installation is completed, click [Finish].

Click
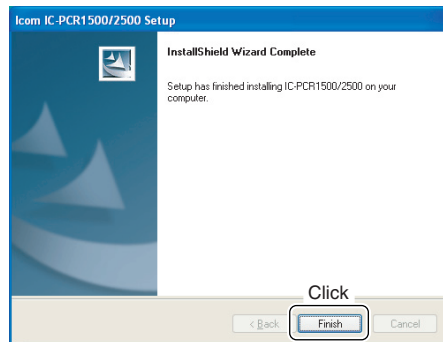
⑨Eject the CD.
  • The IC-PCR1500_2500 shortcut icon is created on the desktop.
  • Restarting the PC is recommended.

■ Launching the IC-PCR1500_2500

◇ Microsoft® Windows® XP

①Before launching the program, please be sure the Main unit is turned ON.
　• The power indicator lights green.
②Click the [Start] button and point to [All Programs].
③Point to the "IC-PCR1500_2500" folder.
④Click the "IC-PCR1500_2500" program.
　(or simply double click the desktop short cut icon as below, which was automatically created during application installation.)
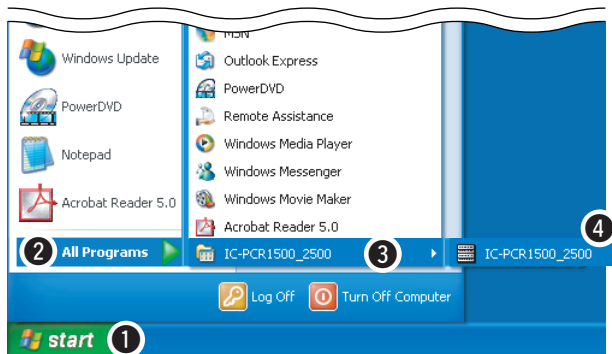
Short cut icon

NOTE: If you see a "Communication error" note, wait approx. 20 seconds before lanunching the program.

◇ Microsoft® Windows® 98SE/Me/2000

①Before launching the program, please be sure the Main unit is turned ON.
　• The power indicator lights green.
②Click the [Start] button and point to [Programs].
③Point to the "IC-PCR1500_2500" folder.
④Click the "IC-PCR1500_2500" program.
　(or simply double click the desktop short cut icon as below, which was automatically created during application installation.)
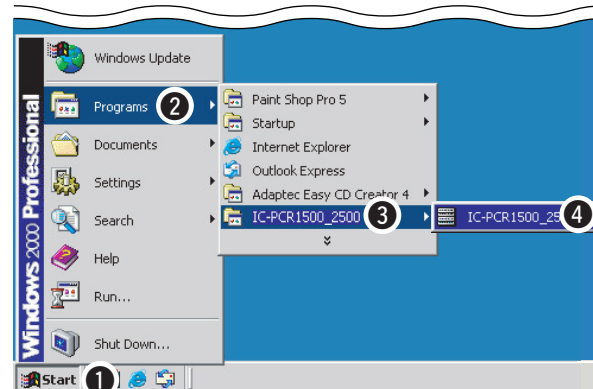
Short cut icon

NOTE: If you see a "Communication error" note, wait approx. 20 seconds before lanunching the program.

■ Uninstall

In this section, screen shots of Windows XP are used for the instruction example. However, the instructions are similar to the other operating systems, Windows 98SE, Me and 2000.

① Start up Windows.
② Select the "Control Panel" in the Start menu.
  • The control panel appears as shown in the next step below.
③ Click the "Add or Remove Programs."
  • The "Add or Remove Programs" menu appears.
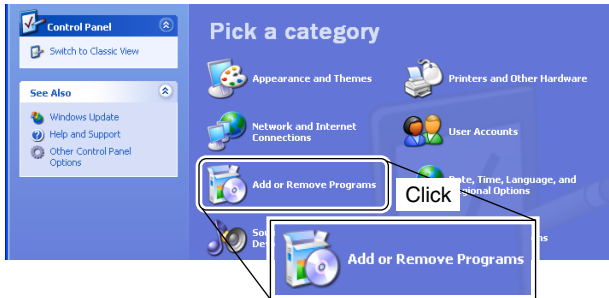
④ Click the "Icom IC-PCR1500/2500," then click [Change/Remove].
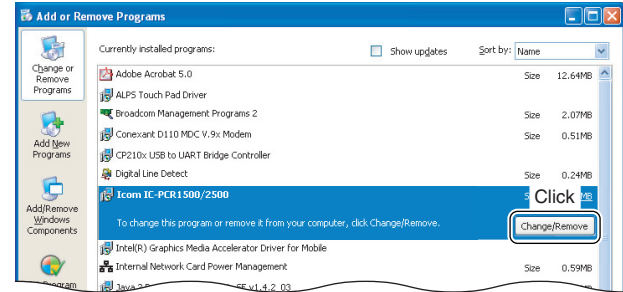
  • The "InstallShield® Wizard" starts preparing the installation.
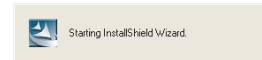
⑤ Select the display language type from "English" or "Japanese," click [Next>].

3
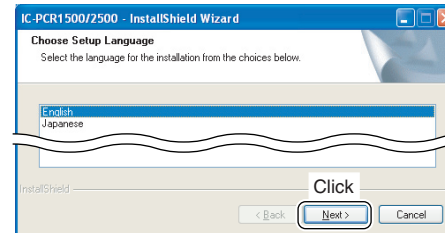
⑥After the preparation, "Confirm Uninstall" appears, click [OK] to remove the program from the PC.
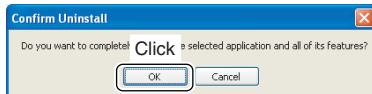
Click

• The uninstallation starts.
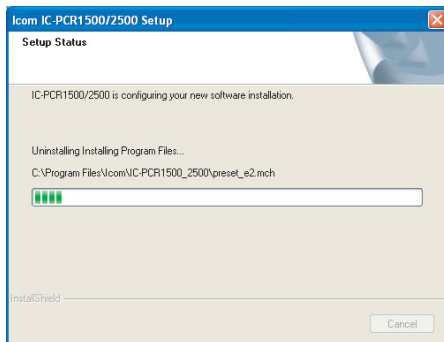
⑦After the uninstall is completed, click [Finish].

Click

4 PANEL DESCRIPTION
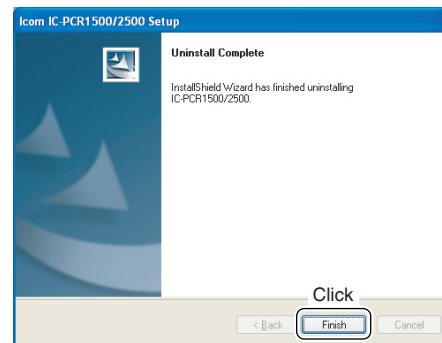
■ Application screens (on PC screen)

◇ Tool bar
The application screen can be seen after the application installation. See page 25 for details.

IC-PCR2500   IC-PCR1500
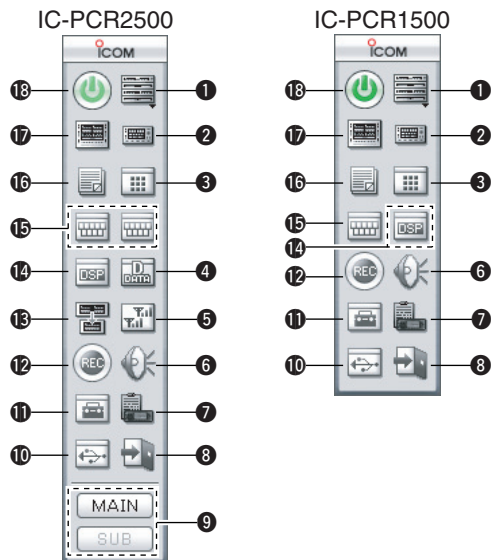
q **COMPONENT BUTTON** (pgs. 37, 45)
Click to display the Component screen.

w **SIMPLE BUTTON** (pgs. 36, 46)
Click to display the Simple screen.

e **MULTI CHANNEL MONITOR BUTTON** (p. 110)
Click to make the multi channel monitor screen appear/disappear.

r **DIGITAL MENU BUTTON** (p. 118)
Click to select the DV digital menu or P25 digital menu.

t **DIVERSITY OPERATION BUTTON** (p. 66)
Click to make the diversity reception mode ON and OFF.

y **AUDIO SETTING BUTTON** (p. 106)
Click to make the audio setting screen appear/disappear.

u **CLONE BUTTON** (p. 130)
Click to make the cloning screen appear/disappear.

i **EXIT BUTTON** (p. 46)
Click to quit the control program.

o **MAIN/SUB BUTTONS** (p. 67)
Click to select the Main band/Sub band during dualwatch operation.

!0 **USB PORT SETTING BUTTON** (p. 128)
Click to make the USB setting screen appear.

⑪ **SETTING BUTTON**
  For IC-PCR1500 (pgs. 55, 116)
  Click to make the auto mode setting list, short cut key list and etc. screen appear/disappear.
  For IC-PCR2500 (pgs. 55, 116, 119, 121)
  Click to make the auto mode setting list, short cut key list, DV*1 mode setting, P25*2 mode setting and etc. screen appear/disappear.
    *1: The optional UT-118 is required.
    *2: The optional UT-122 is required.
      Some versions already come with the UT-122 installed.

⑫ **RECORDING BUTTON** (p. 112)
  Click to make the recording screen appear/disappear.

⑬ **SINGLE BAND/DUALWATCH BUTTON** (p. 64)
  Click to toggle the single band operation and dualwatch operation.

⑭ **DSP DIGITAL FILTER BUTTON** (pgs. 117)
  Click to make the DSP digital filter screen appear/disappear.

⑮ **DTMF REMOTE COMMANDER BUTTON** (p. 104)
  For IC-PCR1500
  Click to make the DTMF remote commander screen appear/disappear.

For IC-PCR2500
Click to make the DTMF remote commander screen appear/disappear for main band (right button) and sub band (left button). The DTMF remote commander screen for sub band can not be accessed when optional UT-108 is not installed or during single band operation or diversity receive mode.

⑯ **MEMORY CHANNEL BUTTON** (pgs. 69, 112)
  Click to make the memory channel screen appear/disappear.

⑰ **MULTI-FUNCTION RECEIVER BUTTON** (pgs. 32, 44)
  Click to display the Multi-function receiver screen.

⑱ **POWER BUTTON** (p. 44)
  Click to make the control program connection to Main unit connect/disconnect.

◇ **[Receiver] (Multi-function receiver) screen**

IC-PCR2500
single band operation
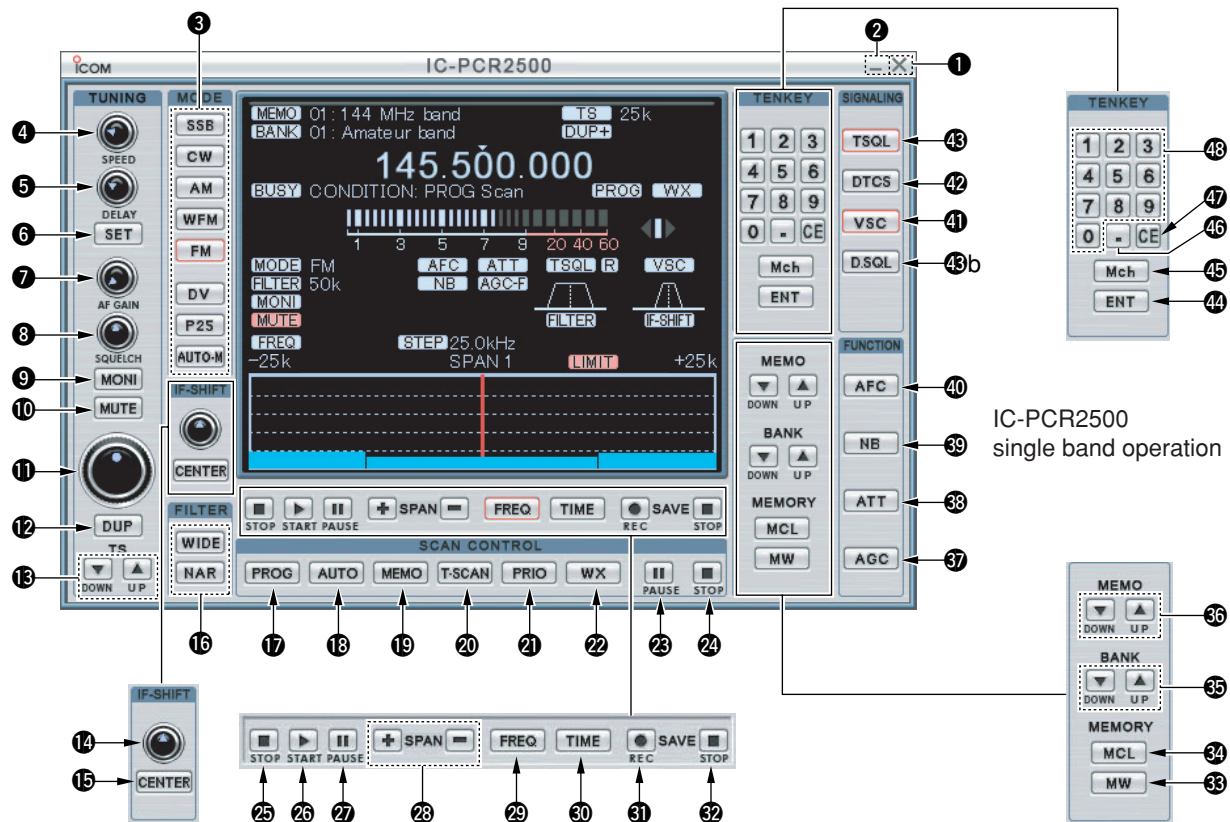
q CLOSE BUTTON (p. 46)
Click to quit and exit the application screen.

w MINIMIZE BUTTON
Click to minimize the application screen.

e RECEIVE MODE BUTTONS ([SSB], [CW], [AM], [WFM], [FM], [DV][*1]**, [P25]**[*2] **and [AUTO-M])** (pgs. 54, 55)
Click to select a receive mode.
• When using [AUTO-M] (automatic mode), a receive mode, IF filter passband width, tuning step, etc., are selected automatically after inputting a frequency.
[*1, *2] : For IC-PCR2500 only.
[*1]   : The optional UT-118 is required.
[*2]   : The optional UT-122 is required.
       Some versions already come with the UT-122 installed.

r SCAN SPEED CONTROL [SPEED] (p. 91)
Click to set the scan speed at which channels or frequencies are searched during scan operation.
• Right-click to increase the speed level. (Scan is faster)
• Left-click to decrease the speed level. (Scan is slower)

t SCAN DELAY TIME CONTROL [DELAY]
Click to set the period in which a scan pauses after receiving a signal.
• Right-click to increase the period.
• Left-click to decrease the period.

y SET BUTTON [SET] (p. 90)
Click to show the [Scan Delay] screen.
This screen is used for the settings of the scan delay details.

u AUDIO FREQUENCY GAIN CONTROL [AF GAIN] (p. 52)
Click to adjust the audio output level.
• Right-click to increase the audio output level.
• Left-click to decrease the audio output level.

i SQUELCH CONTROL [SQUELCH] (p. 53)
Click to adjust the squelch threshold level.
The squelch removes noise output from the speaker (closed condition) when no signal is received.
• Right-click to close the squelch.
• Left-click to open the squelch.

o MONITOR BUTTON [MONI] (p. 56)
Click to turn the monitor function ON or OFF.
The monitor function is used to temporarily open the squelch to listen for a weak signal.

!0 MUTE BUTTON [MUTE] (p. 56)
Click to turn the mute function ON or OFF.
This function is used to temporarily mute the audio output.

!1 TUNING DIAL (p. 48)
Click to set the receive frequency with the selected tuning step.
• Right-click to increase the frequency.
• Left-click to decrease the frequency.

!2 DUPLEX BUTTON [DUP] (p. 57)
➥ Right-click to display the offset frequency setting screen.
➥ Left-click to set the duplex direction from OFF (no indication), DUP –, and DUP +.

!3 TUNING STEP UP/DOWN BUTTONS [▲]/[▼] (p. 50)
➥ Right-click to display the tuning step setting screen.
➥ Left-click to select the tuning steps in order.

4

⑭ **IF-SHIFT CONTROL** (p. 61)

Click to set a signal passband position.
• Right-click to increase the signal passband position.
• Left-click to decrease the signal passband position.

⑮ **CENTER KEY [CENTER]** (p. 61)

After setting a signal passband position with clicking the IF-shift control, click to return to the center position.

⑯ **IF FILTER BUTTONS [WIDE]/[NAR]** (p. 58)

Click to change the IF filter in use.
• Click [WIDE] to select a wide filter.
• Click [NAR] to select a narrow filter.
*Usable IF filter is according to the receive mode.

⑰ **PROGRAMMED SCAN BUTTON [PROG]** (p. 81)

Click to start/stop a programmed scan.
• "PROG Scan" blinks during scanning.

⑱ **AUTO MEMORY WRITE SCAN BUTTON [AUTO]** (p. 84)

Click to start/stop an auto memory write scan.
• "AUTO MW Scan" blinks during scanning.

⑲ **MEMORY SCAN BUTTON [MEMO]** (pgs. 86, 88)

Click to start/stop a memory scan.
• "MEMO Scan" blinks during scanning.

⑳ **TONE SCAN BUTTON [T-SCAN]** (p. 97)

Click to start/stop a tone scan.
• "TONE Scan" blinks during scanning.

㉑ **PRIORITY SCAN BUTTON [PRIO]** (p. 92)

Click to start/stop a priority scan.
• "PRIO Scan" blinks during scanning.

㉒ **WEATHER ALERT BUTTON [WX]** (p. 62)

Push to start the weather alert function. (USA and CANADA versions only)
• "WX" appears.

㉓ **SCAN PAUSE BUTTON [ⅠⅠ]**

Push to pause/resume a scan.
• "Pause" blinks during scan is pausing.

㉔ **SCAN STOP BUTTON [■]**

Push to cancel a scan operation.

㉕ **SWEEP STOP BUTTON [■]** (p. 98)

Click to cancel a band scope operation.

㉖ **SWEEP START BUTTON [▶]** (p. 98)

Click to start the band scope operation which is used to observe signal conditions around the receive frequency.

㉗ **SWEEP PAUSE BUTTON [ⅠⅠ]** (p. 98)

Click to pause/resume a band scope sweeping.
NOTE: While using the band scope function, audio is disabled in SSB and CW modes. To monitor the frequency, push [ⅠⅠ] to pause the function, or push [■] to cancel the function.

㉘ **SPAN (TIME) UP/DOWN BUTTON [+]/[–]**

When "FREQUENCY" mode is displayed;
Click to select the band scope edge frequency. (p. 98)
When "TIME" mode is displayed;
Click to select the time interval to show the receiving signal. (p. 98)

㉙ FREQUENCY BUTTON [FREQ] (p. 98)
Click to show the receiving signal relative to signal strength while sweeping.

㉚ TIME BUTTON [TIME] (p. 98)
Click to show the received signal strength in the specified time period while sweeping.

㉛ REC BUTTON [●] (p. 100)
Click to start saving the sweep data.

㉜ STOP BUTTON [■] (p. 100)
Click to stop saving.

㉝ MEMORY WRITE BUTTON [MW] (p. 70)
Click to write the current receive frequency into the selected memory channel.

㉞ MEMORY CLEAR BUTTON [MCL] (p. 76)
Click to clear the displayed memory channel contents.

㉟ BANK UP/DOWN BUTTONS [▲]/[▼] (p. 68)
Click to change the memory bank.

㊱ MEMORY CHANNEL UP/DOWN BUTTONS [▲]/[▼]
(p. 68)
Click to change a memory channel.

㊲ AUTOMATIC GAIN CONTROL BUTTON [AGC] (p. 60)
Click to toggle the AGC (Automatic Gain Control) time constant between slow and fast.
• "AGC-F" appears when the AGC fast is selected.

㊳ ATTENUATOR BUTTON [ATT] (p. 59)
Click to turn the ATT (Attenuator) function ON or OFF.
• "ATT" appears when the ATT function is turned ON.

㊴ NOISE BLANKER BUTTON [NB] (p. 60)
Click to turn the NB (Noise Blanker) function ON or OFF.
• "NB" appears when the NB function is turned ON.

㊵ AUTOMATIC FREQUENCY CONTROL BUTTON [AFC]
(p. 59)
Click to turn the AFC (Automatic Frequency Control) function ON or OFF.
• "AFC" appears when the AFC function is turned ON.

㊶ VOICE SQUELCH CONTROL BUTTON [VSC] (p. 61)
Click to turn the VSC (Voice Squelch Control) function ON or OFF.
• "VSC" appears when the VSC function is turned ON.

㊷ DTCS SETTING BUTTON [DTCS] (p. 95)
➥ Click to turn the DTCS squelch ON or OFF.
  • "DTCS" appears when the DTCS squelch is turned ON.
  • Available only when FM mode is selected.
➥ When the DTCS squelch is turned ON, right-click to display the [DTCS] screen.

㊸ TSQL SETTING BUTTON [TSQL] (p. 94)
➥ Click to turn the tone squelch ON or OFF.
  • "TSQL" appears when the tone squelch is turned ON.
  • Available only when FM mode is selected.
➥ When the tone squelch is turned ON, right-click to display the [TSQL] screen.

㊸b DSQL SETTING BUTTON [DSQL]
➥ Click to turn the digital squelch ON or OFF.
• Available only when DV *¹ or P25 *² mode is selected.
➥ When the digital squelch is turned ON, right-click to display the [DV Digital SQL] or [P25 Digital SQL] screen.
*¹, *² : For IC-PCR2500 only.
*¹   : The optional UT-118 is required.
*²   : The optional UT-122 is required.
          Some versions already come with the UT-122 installed.

㊹ ENTER KEY [ENT]
Click to enter the frequency when the desired receive frequency is input via the 10-keypad (㊽) or PC keyboard.

㊺ MEMORY CHANNEL KEY [Mch]
Click to call the memory channel when the desired channel number is input via the 10-keypad (㊽) or PC keyboard.

㊻ TENKEY— DECIMAL BUTTON [.]
Click to set the MHz digit when inputting a frequency via the 10-keypad.

㊼ TENKEY— CLEAR BUTTON [CE]
Click to clear the mistake while inputting a receive frequency or memory channel number via the 10-keypad (㊽) or PC keyboard.

㊽ TENKEY— 10-KEYPAD [1] to [0]
The 10-keypad can be used for several functions as below:
• Direct receive frequency input.
• Memory channel input.

◇ [Simple] screen
The Simple screen buttons, controls, etc. operate the same as the Multi-function receiver screens. Please refer to the explanations on pages 33 to 36.

Busy indicator
(p. 40)
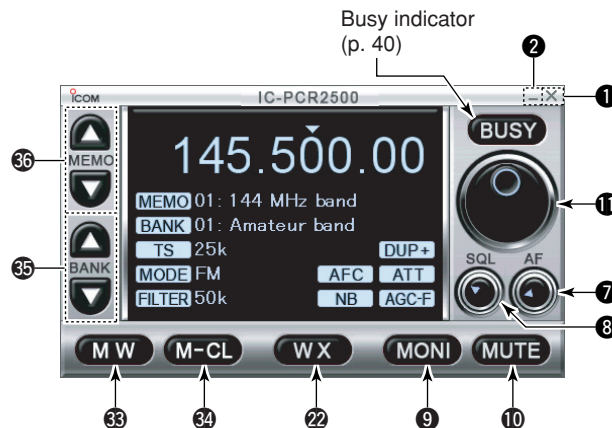
IC-PCR2500 single band operation

◇ **[Compo] (Component) screen**

The Component screen buttons, controls, etc. operate the same as the Multi-function receiver screens. Please refer to the explanations on pages 33 to 36.
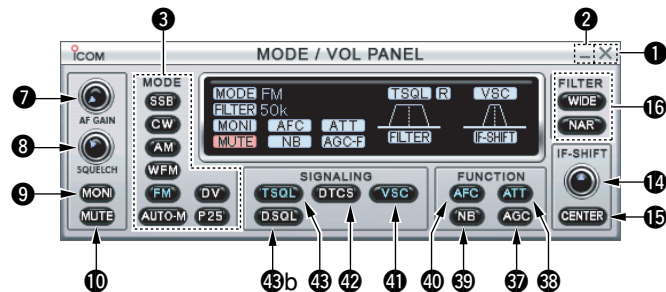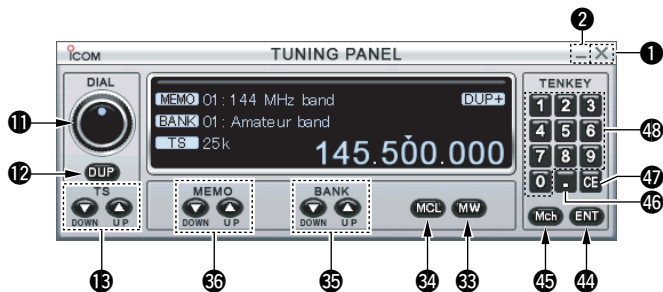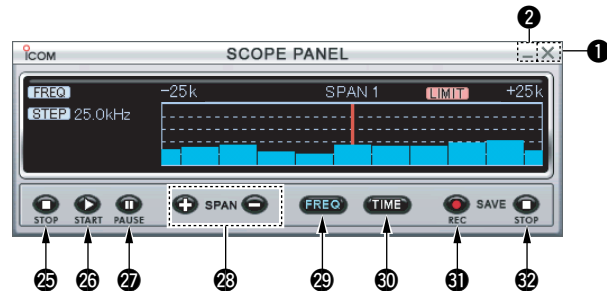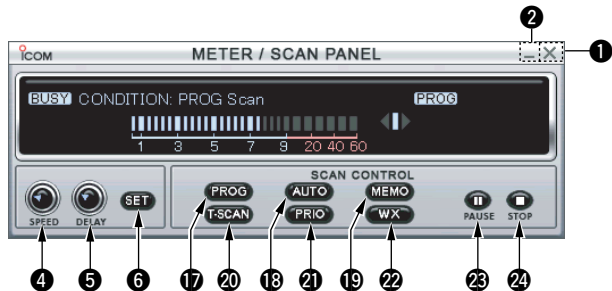
IC-PCR2500 single band operation

◇ Function display (on Multi-function receiver screen)
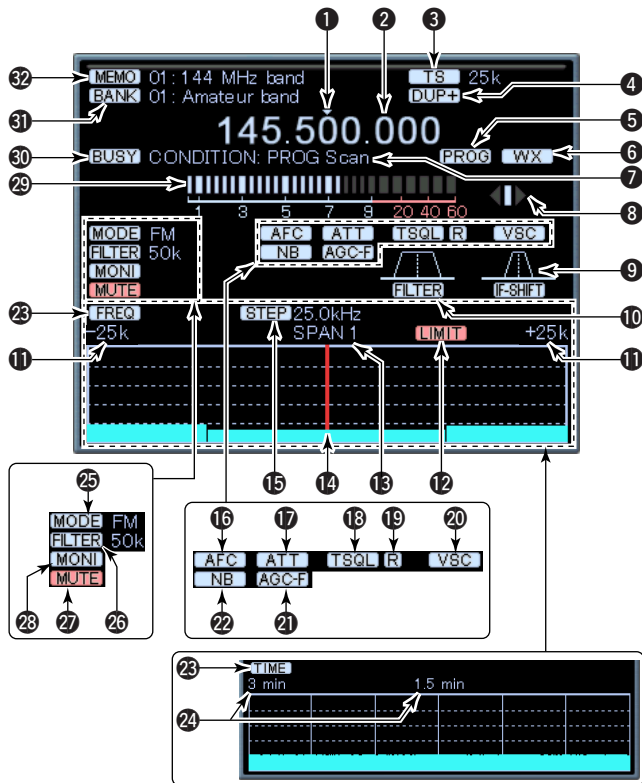
❶ TUNING STEP INDICATOR
Indicates the tuning step digit.

❷ FREQUENCY READOUT
Indicates the receive frequency and data as it is being input such as memory channel numbers, etc.

❸ TUNING STEP INDICATOR (p. 50)
This is the frequency increment used when selecting a frequency using the tuning dial and when searching for signals using a scan function.

❹ DUPLEX INDICATOR (p. 57)
"DUP+" appears when plus duplex, "DUP–" appears when minus duplex operation is selected.

❺ SCAN INDICATOR (pgs. 82, 85, 87, 89, 93, 97)
"PROG," "AUTO," "MEMO," "T-SCAN" or "PRIO" appears during scanning.

❻ WEATHER INDICATOR (pgs. 62, 63)
Appears when weather function is turned ON. (USA and CANADA versions only)

❼ CONDITION INDICATOR
Indicates the receiver's condition.

❽ FM CENTER INDICATORS
➥ "◀" or "▶" appears when the received signal is not tuned to its center frequency; or the squelch is closed.
➥ "▮" appears when the received signal is tuned to its center frequency.

38

9 IF-SHIFT INDICATOR (p. 61)
Indicates the received signal passband position.

10 IF-FILTER PASSBAND WIDTH INDICATOR (p. 58)
Indicates the current signal passband width.

11 MAXIMUM FREQUENCY SPAN INDICATORS (p. 99)
➥ Indicates the upper and lower observable frequency limits around a receive frequency.
➥ In the diagram, the upper and lower limits are ± 500 kHz.

12 LIMIT/PAUSE INDICATOR (p. 99)
➥ "LIMIT" appears when the tuning step (**3**) is larger than the automatic sweep step (**13**) setting.
  • The limit indicator is not indicated when the tuning step and the sweep step width are the same.
➥ "PAUSE" appears while the band scope is pausing.

13 FREQUENCY SPAN INDICATOR (p. 99)
Indicates the frequency span selected with the [SPAN +] or [SPAN –] button.

14 CENTER FREQUENCY INDICATOR (p. 99)
Indicates the center frequency of the frequency span; this is for the currently received frequency.

15 SWEEP STEP INDICATOR (p. 99)
Indicates band scope sweep step.

16 AFC INDICATOR [AFC] (p. 59)
Appears when the AFC (Automatic Frequency Control) function is ON.

17 ATTENUATOR INDICATOR [ATT] (p. 59)
Appears when the ATT (Attenuator) function is ON.

18 TSQL/DTCS INDICATOR [TSQL]/[DTCS]
➥ "TSQL" appears when the tone squelch frequency is set. (p. 94)
➥ "DTCS" appears when DTCS code and the polarity are set. (p. 95)

19 REVERSE/POCKET BEEP INDICATOR [R]/
➥ "[R]" appears when the reverse action is set. (pgs. 94, 95)
➥ "" appears when the pocket beep function is set. (p. 96)

20 VSC INDICATOR [VSC] (p. 61)
Appears when the VSC (Voice Squelch Control) function is ON.

21 AGC INDICATOR [AGC-F] (p. 60)
"AGC-F" appears when the AGC fast is selected.

22 NB INDICATOR [NB] (p. 60)
Appears when the NB (Noise Blanker) function is ON.

23 FREQUENCY/TIME INDICATOR [FREQ]/[TIME] (p. 99)
➥ "FREQ" appears when Frequency mode is selected in the band scope operation.
➥ "TIME" appears when Time mode is selected in the band scope operation.

24 TIME INTERVAL INDICATORS (p. 99)
Indicates the time interval to sweep the receiving signal.

㉕ **RECEIVE MODE INDICATORS** (p. 54)
Indicate the current receive mode.

㉖ **IF FILTER INDICATOR** (p. 58)
Indicates the selected IF filter.

㉗ **MUTE INDICATOR** (p. 56)
Appears when the squelch circuit mutes the received audio signal.

㉘ **MONITOR INDICATOR** (p. 56)
Appears during monitoring the operating frequency.

㉙ **S (SIGNAL) METER** (pgs. 47, 53)
➥ Indicates the receive signal strength.
➥ Indicates the S-meter squelch receive level set via the [SQUELCH] control.

㉚ **BUSY INDICATOR [BUSY]**
Appears when receiving a signal or when signal noise opens the squelch.

㉛ **MEMORY BANK INDICATOR** (p. 68)
Indicates the memory bank number (and name if it is set) being received.

㉜ **MEMORY CHANNEL INDICATOR** (p. 68)
Indicates the memory channel number (and name if it is set) being received.

◇ **Function display (on Simple screen)**
The function display indicators on the Simple screen operate the same as on the Multi-function receiver screens. Please refer to the explanations on pages 38 to 40.
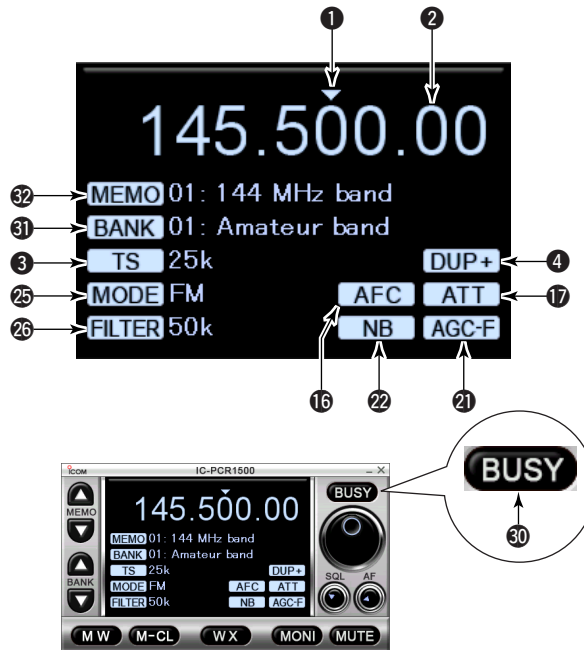
◇ Function display (on Component screen)
The function display indicators on the Component screen operate the same as on the Multi-function receiver screens. Please refer to the explanations on pages 38 to 40.

■ Main unit

◇ Front panel

Speaker
Power switch
Rear
Top
Front
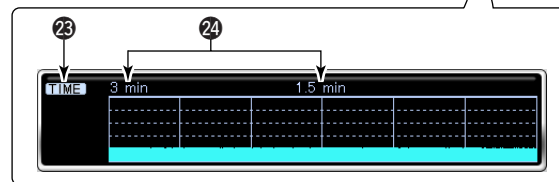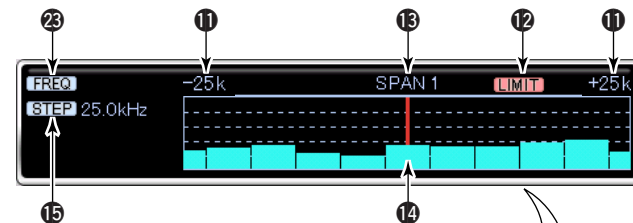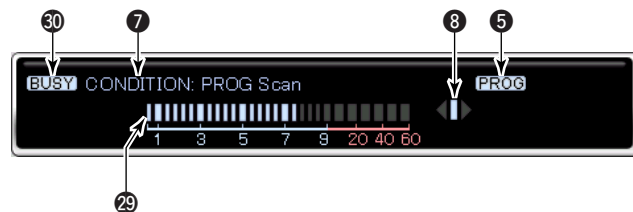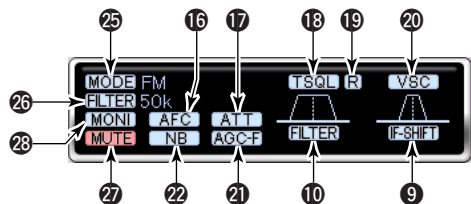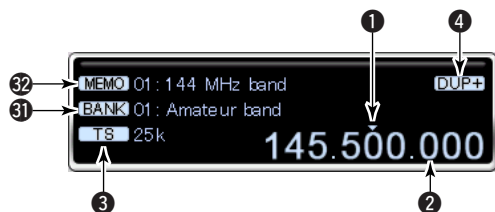
Front
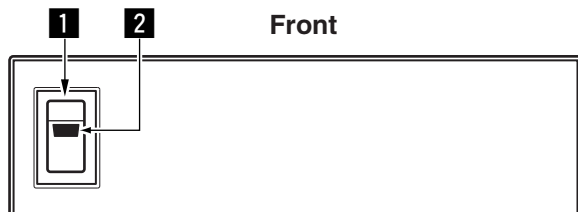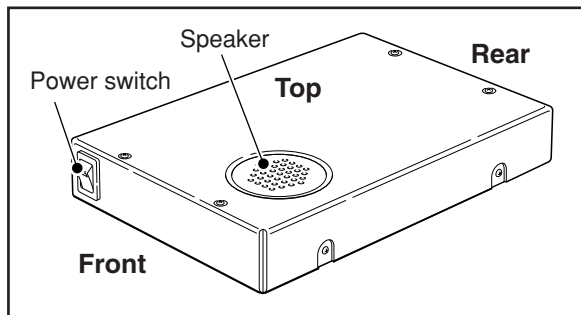
❶ POWER SWITCH [POWER]
Turn the Main unit power ON and OFF.

❷ POWER INDICATOR
Lights green when the Main unit is turned ON.

◇ Rear panel

IC-PCR2500 Rear

ANT 1   DC IN   PACKET 1   PACKET 2   CONTROLLER   USB   EXT SP   ANT 2
GND   DATA

PACKET jack connection
AUDIO
GND
2-conductor 3.5 (d) mm (⅛″)/100 kΩ

EXT SP jack connection
AUDIO
GND
2-conductor 3.5 (d) mm (⅛″)/8 Ω

IC-PCR1500 Rear

ANT   DC IN   PACKET   CONTROLLER   USB   EXT SP
GND

42
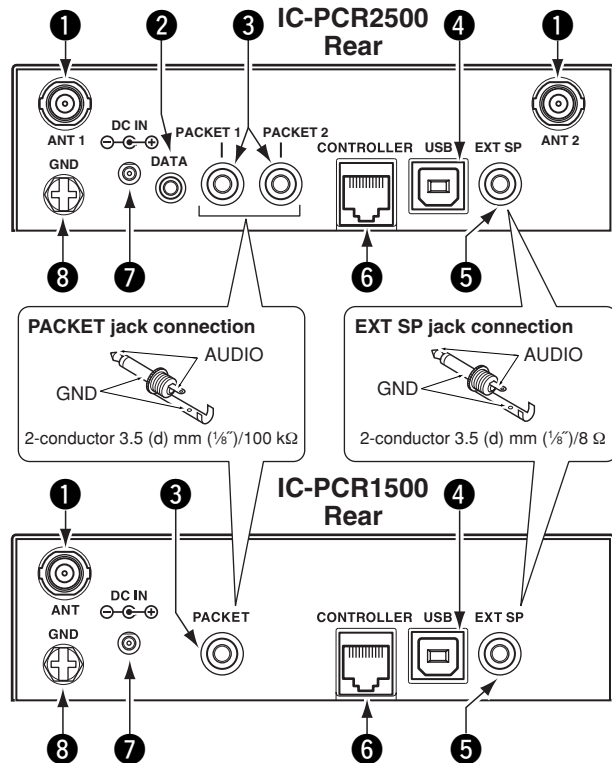
q ANTENNA CONNECTORS
Connect a 50 Ω antenna with a BNC connector and a 50 Ω coaxial cable.
For IC-PCR2500
[ANT1] for Main band, [ANT2] for Sub band.

> **For IC-PCR2500**
> Two antennas must be connected to [ANT1] and [ANT2] during dualwatch operation or diversity operation.
> Diversity operation requires two antennas of the same performance in suitable places. Ask your antenna dealer for installation details.

w DATA JACK [DATA]
Connect to a PC via an RS-232 cable (D-sub 9 pin) for DV*[1] mode data communication in RS-232 format.
*[1] : The optional UT-118 is required.

Pin 2 (RxD), Pin 5 (GND)

to [DATA] jack
GND
RxD
2.5(d) mm
Less than 10(d) mm
RS-232 (DB-9 female)
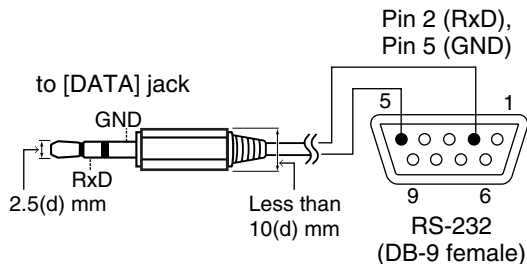
e PACKET JACKS [PACKET]
Connect a TNC (Terminal Node Controller), etc. for data communications. The receiver can support 9600 bps packet communication (AFSK).

r USB CONNECTOR [USB]
Connects to a PC via a supplied USB cable. This connector is only used for control software operation.

CAUTION: NEVER insert any other object than a USB cable, such as a metallic object, otherwise Main unit may be damaged.

t EXTERNAL SPEAKER JACK [EXT SP]
Connects an 8 Ω external speaker.
• Audio output power is more than 0.5 W.

y CONTROLLER [CONTROLLER]
Connects to a controller via an extension cable. This connector is only used for IC-R1500 or R2500's controller operation.
• No connection is necessary when the control software is in use.

CAUTION: NEVER insert any other object than the controller cable, such as a metallic object, otherwise Main unit may be damaged.

u POWER JACK [DC IN]
Accepts 12 V DC ±15% via the supplied DC power cable.

i GROUND TERMINAL [GND]
Connect this terminal to a ground.

5 BASIC RECEIVE FUNCTIONS

■ Starting the control software

① Before launching the program, please make sure the Main unit is powered ON.
  • The power indicator lights green.
② Launch the IC-PCR1500_2500 program. (p. 27)
③ Click the 【Power】 icon on the tool bar to connect the control software and Main unit.
④ Click the desired icon, 【Receiver】, 【Compo】 or 【Simple】 on the tool bar to select the control screen that you want to use.

【Power】

【Compo】
(Component screen)

【Receiver】
(Multi-function receiver screen)

【Simple】
(Simple screen)
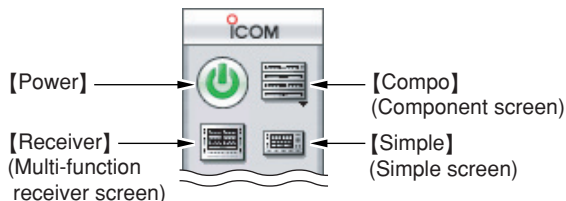
◇ USB port confirmation

After the software connection is turned ON (step ③ as above), the following dialog box appears at the first time. Please confirm the connected PC's USB port number and serial number of your Main unit, then click [OK].
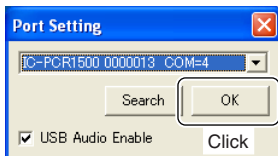
Click

■ Changing the control screen

Click the desired control screen's icon on the tool bar.

➥ Click the 【Receiver】 icon for the Multi-function receiver screen.

IC-PCR1500
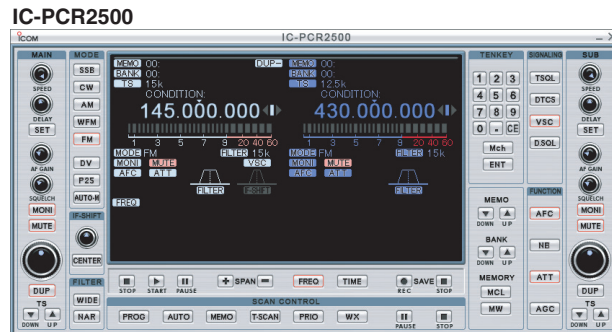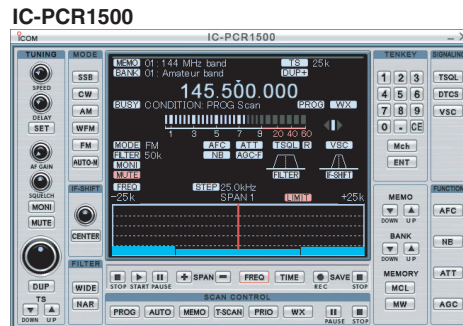
IC-PCR2500

➥ Click the 【Compo】 icon for the Component screen.

IC-PCR1500

IC-PCR2500

➥ Click the 【Simple】 icon for the Simple screen.

IC-PCR1500

IC-PCR2500

◇ Component screen selection

Click the 【Compo】 icon to display the Component screen, then click again to display the Component screen menu. Select the each panel for indication.

Check mark "✔" indicates that the each panel is selected.

- Tuning → **TUNING** panel
- Mode → **MODE/VOL** panel
- Meter/Scan → **METER/SCAN** panel
- Scope → **SCOPE** panel
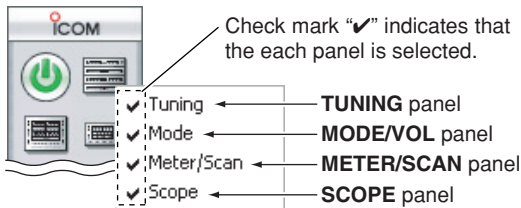
■ Closing the control screen

Click the close button (【**X**】) to close the control screen.
• Click the close button (**X**) in each [TUNING PANEL], [MODE/VOL PANEL], [METER/SCAN PANEL] and [SCOPE PANEL] when the Component screen is displayed.

Close button
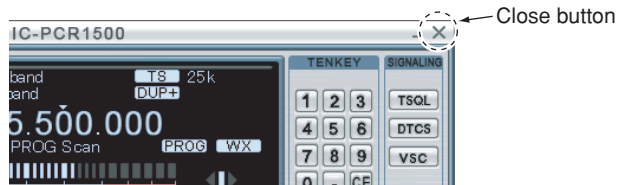
■ Quitting the control software

Click the 【Exit】 icon on the tool bar to quit the control software.

IC-PCR1500   IC-PCR2500

【Exit】
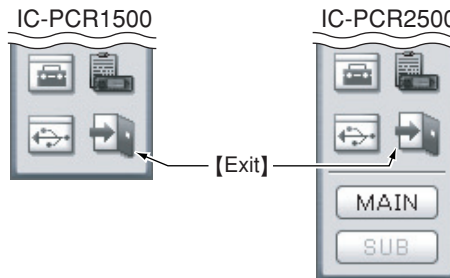
■ **Receiving**

Make sure the hardware installation is finished (p. 1) and the Main unit is turned ON (p. 42).

① Click the 【Power】 icon on the tool bar to turn power ON.
② Click the desired icon, 【Receiver】, 【Compo】 or 【Simple】 on the tool bar to select the displayed receiver screen type that you want to use.
③ Click 【AF GAIN】 (【AF】)* to set the audio level.
   • Right-click to increase the audio level.
   • Left-click to decrease the audio level.
   • When clicking and holding 【AF GAIN】 (【AF】)*, the audio level scrolls up or down.
   • Push the PC's [↑] (UP) or [↓] (DOWN) key also sets the audio level.
④ Click 【SQUELCH】 (【SQL】)* to set the squelch level.
   • Right-click to increase the squelch level (tight squelch).
   • Left-click to decrease the squelch level (loose squelch).
   • When clicking and holding 【SQUELCH】 (【SQL】)*, the squelch level scrolls up or down.
⑤ Set the receive frequency and mode. (pgs. 48, 54)
⑥ When receiving a signal on the set frequency, squelch opens and the receiver emits audio.
   For [Receiver]/[Compo] screen
   • "BUSY" appears and the S-meter indicator shows the relative signal strength for the received signal.
   For [Simple] screen
   • "BUSY" indicator lights green.

*Available only when [Simple] screen is displayed.
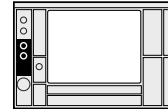
• **[Receiver] screen**

IC-PCR1500   IC-PCR2500   【AF GAIN】
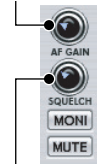
                    MAIN   SUB

【SQUELCH】

• **[Compo] screen**
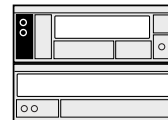
IC-PCR1500   IC-PCR2500   【AF GAIN】

MODE/VOL PANEL   MAIN   SUB
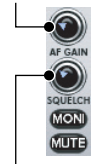
【SQUELCH】

• **[Simple] screen**   Lights → BUSY

IC-PCR1500   IC-PCR2500

                    MAIN   SUB

                    【SQL】   【AF】

■ Setting a frequency

Depending on the situation, the receive frequency can be set using the following methods. Frequencies can be set from 0.010 to 3299.9999 MHz.

◇ Using the PC keyboard

➡ Enter the desired frequency using the 10-keypad on the PC keyboard, then push [Enter] to set the frequency.
  • When inputting from the keyboard, click anywhere in the receiver screen first, then begin inputting the frequency.
  • If you make a mistake while inputting a frequency, click [CE] on the receiver screen to clear the input and return to the previous frequency.
  • When you want to change the 100 kHz digit and below, push [•] first, then the 10-keypad and then [Enter].
  • When you want to set the 100 kHz digit and below to 0, input the MHz digits and then push [Enter].
  • When inputting a frequency outside of the allowed receive frequency range, the previously selected frequency is automatically selected after clicking [Enter].

◇ Using the tuning dial

➡ Click 【DIAL】 to set the receive frequency with the selected tuning step.
  • Right-click to increase the frequency.
  • Left-click to decrease the frequency.
  • When clicking and holding 【DIAL】, the frequency scrolls up or down.
  • The frequency changes according to the preset tuning steps. See pgs. 50 and 51 for selecting the tuning step.

◇ Using the 10-keypad

Using [Receiver]/[Compo] screen

➡ Click the desired 10-keypad, then click 【ENT】 to set the frequency.
  • If you make a mistake while inputting a frequency, click 【CE】 to clear the input and return to the previous frequency.
  • When you want to change the 100 kHz digit and below, click 【•】 first, then the 10-keypad and then 【ENT】.
  • When you want to set the 100 kHz digit and below to 0, input the MHz digits and then click 【ENT】.
  • When inputting a frequency outside of the allowed receive frequency range, the previously selected frequency is automatically selected after clicking 【ENT】.

• [Receiver] screen
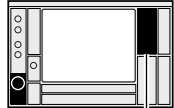
IC-PCR1500 **IC-PCR2500**

MAIN   SUB

10-KEYPAD   10-KEYPAD

【DIAL】

DUP
TS
DOWN   UP

10-KEYPAD

1 2 3
4 5 6
7 8 9
0 · CE ─── 【CE】
Mch
【·】
ENT ─── 【ENT】

Active band only

• [Compo] screen

IC-PCR1500 **IC-PCR2500**

TUNING   MAIN   SUB

10-KEYPAD   10-KEYPAD

【DIAL】

DUP
TS
DOWN   UP

10-KEYPAD
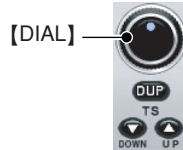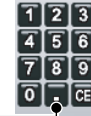
1 2 3
4 5 6
7 8 9
0 · CE ─── 【CE】
【·】
Mch ENT ─── 【ENT】

Active band only

• [Simple] screen

IC-PCR1500 **IC-PCR2500**

MAIN   SUB

【DIAL】

BUSY

SQL   AF

5

49

■ Setting a tuning step

When using the tuning dial to change the frequency, or when a scan function is activated, the frequency changes in increments determined by the set tuning step. The tuning step is adjustable.

The following tuning step are available:
• 1 Hz   • 10 Hz   • 20 Hz   • 50 Hz   • 100 Hz
• 500Hz   • 1 kHz   • 2.5 kHz   • 5 kHz   • 6.25 kHz
• 8.33 kHz • 9 kHz   • 10 kHz   • 12.5 kHz   • 15 kHz
• 20 kHz   • 25 kHz   • 30 kHz   • 50 kHz   • 100 kHz
• 125 kHz • 150 kHz   • 200 kHz   • 500 kHz   • 1 MHz
• 10 MHz   • USER*

*When "USER" is selected, the user programmed tuning step (default: 5 kHz) in "User TS" screen is selected. (p. 51)

◇ Tuning step selection

Using [Receiver]/[Compo] screen
➥ Right-click **[▲]**(TS) or **[▼]**(TS) to display a tuning step list, then select the desired tuning step.
➥ Left-click **[▲]**(TS) or **[▼]**(TS) to set the desired tuning step in order.
  • The selected tuning step is displayed in the function display.
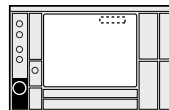
• **[Receiver] screen**
IC-PCR1500   IC-PCR2500
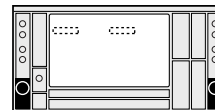
MAIN   SUB

1	8.33k	125k
10	9k	150k
20	10k	200k
50	12.5k	500k
100	15k	1M
500	• 20k	10M
1k	25k	USER
2.5k	30k	USER TS Setting...
5k	50k	
6.25k	100k	

Tuning step inidication
TS 15k

Tuning step list

Tuning step buttons

• **[Compo] screen**
IC-PCR1500   IC-PCR2500

TUNING   MAIN   SUB

1	8.33k	125k
10	9k	150k
20	10k	200k
50	12.5k	500k
100	15k	1M
500	• 20k	10M
1k	25k	USER
2.5k	30k	USER TS Setting...
5k	50k	
6.25k	100k	

Tuning step inidication
TS 15k

Tuning step list

Tuning step buttons

Using [Simple] screen
Click 【TS】 to display a tuning step list, then select the desired tuning step.

• **[Simple] screen**

IC-PCR1500   **IC-PCR2500**

MAIN   **SUB**

Tuning step indication

—Tuning step list

◇ **Setting the user tuning step**
Right-click 【▲】(TS) or 【▼】(TS) (or click 【TS】 indication)* to display a tuning step list, then select "USER TS Setting...".
You can edit the desired tuning step from 0.001–9999.999 kHz (in 0.001 step) directly.
*Available only when [Simple] screen is displayed.
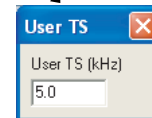
Click

User tuning step setting screen

■ Audio level setting

Using [Receiver]/[Compo] screen
Click 【AF GAIN】 to set the audio level.
• Right-click to increase the audio level.
• Left-click to decrease the audio level.
• When clicking and holding 【AF GAIN】, the audio level scrolls up or down.
• Push the PC's [↑] (UP) or [↓] (DOWN) key also sets the audio level.

• **[Receiver] screen**
IC-PCR1500   IC-PCR2500   【AF-GAIN】
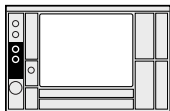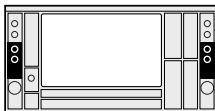
MAIN   SUB

• **[Compo] screen**
IC-PCR1500   IC-PCR2500   【AF-GAIN】

MODE/VOL PANEL   MAIN   SUB

Using [Simple] screen
Click 【AF】 to set the audio level.
• Right-click to increase the audio level.
• Left-click to decrease the audio level.
• When clicking and holding 【AF】, the audio level scrolls up or down.
• Push the PC's [↑] (UP) or [↓] (DOWN) key also sets the audio level.

• **[Simple] screen**
IC-PCR1500   IC-PCR2500

MAIN   SUB

【AF】

■ Squelch level setting

The squelch function sets a minimum receive signal level below which no audio is sent to the speaker. This prevents static or hiss from being heard through the speaker between transmissions.

A higher squelch setting removes weak signals. The remove level is displayed on the S-meter (S-meter squelch). The squelch does not open if a signal below the set S-meter level is received.

Using [Receiver]/[Compo] screen
Click 【SQUELCH】 to set the squelch level.
• Right-click to increase the squelch level (tight squelch).
• Left-click to decrease the squelch level (loose squelch).
• When clicking and holding 【SQUELCH】, the squelch level scrolls up or down.
• The S-meter squelch level is displayed in the function display.

Using [Simple] screen
Click 【SQL】 to set the squelch level.
• Right-click to increase the squelch level (tight squelch).
• Left-click to decrease the squelch level (loose squelch).
• When clicking and holding 【SQL】, the squelch level scrolls up or down.
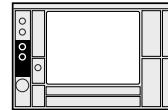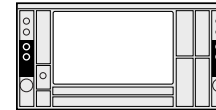
• **[Receiver] screen**
IC-PCR1500   **IC-PCR2500**

MAIN   **SUB**

【SQUELCH】

• **[Compo] screen**
IC-PCR1500   **IC-PCR2500**

MODE/VOL PANEL   **MAIN**   **SUB**

【SQUELCH】

• **[Simple] screen**
IC-PCR1500   **IC-PCR2500**

MAIN   **SUB**

【SQL】

■ Receive mode selection

Receive modes are determined by the physical properties of the radio signals. The receiver has 5 receive modes: USB LSB, CW, AM, WFM and FM modes. The mode selection is stored independently in each memory channel.
Additionally, IC-PCR2500 has a DV or P25 mode when the optional UT-118 or UT-122 units are installed, respectively. The IC-PCR2500's Sub band can select AM, FM and WFM mode only.

Typically, AM mode is used for the AM broadcast stations (0.495–1.620 MHz), air band (118–135.995 MHz), and short-wave broadcasts. WFM is used for FM broadcast stations (76–107.9 MHz). WFM mode can be selected on 1300 MHz band or below.

When using 【AUTO-M】 (automatic mode), a receive mode, IF filter passband width, tuning step, etc., are selected automatically after inputting a frequency. (p. 55)

Using [Receiver]/[Compo] screen
Click 【SSB】, 【CW】, 【AM】, 【WFM】, 【FM】 or 【AUTO-M】 to select the desired receive mode.
• Clicking 【SSB】 toggles between the USB and LSB mode.

Using [Simple] screen
Click 【MODE】 indication to display a mode list, then select the desired receive mode.

• **[Receiver] screen**

IC-PCR1500　　　　IC-PCR2500

Active band only

• **[Compo] screen**

IC-PCR1500　　　　IC-PCR2500

MODE/VOL PANEL

Active band only

• **[Simple] screen**

IC-PCR1500　IC-PCR2500

Mode indication

MAIN　**SUB**

Receive mode list　Receive mode list

IC-PCR1500　　IC-PCR2500
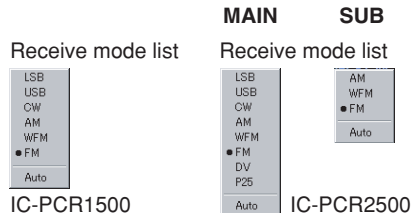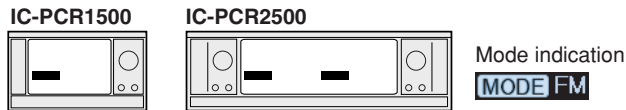
■ Automatic mode selection

An automatic mode function is available to automatically set the receive mode, IF filter passband width, tuning step, etc. after inputting a frequency.
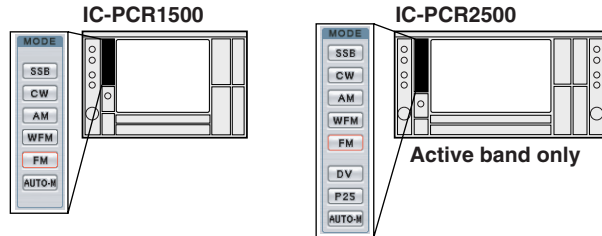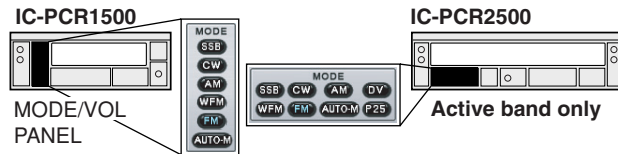
Using [Receiver]/[Compo] screen
Each click of 【AUTO-M】 toggles the automatic mode function ON and OFF.

Using [Simple] screen
Click 【MODE】 indication to display a receive mode list, then select [AUTO] to turn the automatic mode function ON.

◇ Setting the automatic mode function
The default setting for the automatic mode function can be added to, changed or deleted. Up to 100 ranges can be memorized into the automatic mode function settings.

① Click the 【Setting】 icon on the tool bar to call up the [Setting] screen if it is not displayed.

IC-PCR1500

【Setting】

IC-PCR2500
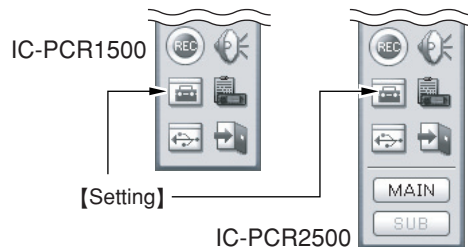
② Click the [Auto Mode] tab to display the automatic mode list.
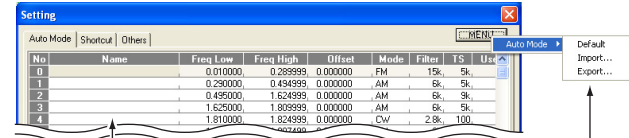
Edit the desired memory name (up to 32 characters)

Click [MENU], then point to [Auto Mode]. Select the desired item from the list.
Default: Return the Auto Mode setting list contents to default.
Import : Import the CSV file.
Export : Export the CSV file.

③ Click a cell in the [Freq Low] column and the desired line.
④ Input the lower frequency of the frequency range from the keyboard, then push [Enter].
  • When nothing is input into the [Freq Low] or [Freq High] column, settings for other columns cannot be made.
  • When inputting a new frequency, other data automatically appears in the other column.
  • To delete a frequency range setting, enter [0] or [Space] into the [Freq Low] column from the keyboard.
⑤ Input the higher frequency of the frequency range into the [Freq High] column, push the [Enter] key.
⑥ Set other data such as mode, tuning step, etc., if desired.
  • Double-click the desired cell, select the desired item and double-click the selection.
⑦ Click the close button ([**X**]) to close the setting screen.

■ **Monitor function**

This function is used to listen to weak signals without disturbing the squelch setting or to open the squelch manually even when mute functions such as the tone squelch are in use.

Click 【MONI】 to monitor the operating frequency.
• "MONI" appears when [Receiver]/[Compo] screen is displayed.
• "MONI" button lights green when [Simple] screen is displayed.

■ **Mute function**

This function is used to mute the received audio signal.

Click 【MUTE】 to temporarily mute audio output.
• "MUTE" appears when [Receiver]/[Compo] screen is displayed.
• "MUTE" button lights green when [Simple] screen is displayed.
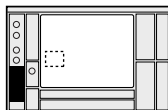
• **[Receiver] screen**

IC-PCR1500   IC-PCR2500

【MONI】 — MONI
【MUTE】 — MUTE

DUP

MAIN   SUB

Indicators
MONI — MONI
MUTE — MUTE

Indicators
MONI — MONI   MUTE — MUTE

• **[Compo] screen**

IC-PCR1500   IC-PCR2500

【MONI】 — MONI
【MUTE】 — MUTE

MODE/VOL PANEL   MAIN   SUB

Indicators
MONI — MONI
MUTE — MUTE

• **[Simple] screen**

IC-PCR1500   IC-PCR2500

【MUTE】

MONI   MUTE

MAIN   SUB

【MONI】
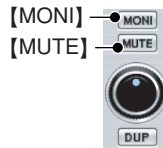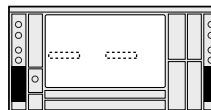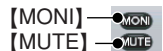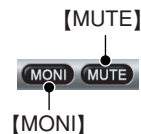
■ Duplex operation

Duplex communication uses one frequency for transmit, and a different frequency for receive. Generally, duplex is used in communication through a repeater, some utility communications, etc.

During duplex operation, the transmit station frequency is shifted from the receive station frequency by the offset frequency. Repeater information (offset frequency and shift direction) can be programmed into memory channels. (p. 68)

① Set the receive frequency (repeater output frequency). (p. 48)
② Right click 【DUP】 to display the [DUP Offset] screen.
③ Set the desired offset frequency within 0.000000–1000.000000 MHz range, then click the close button ([X]) to close the setting screen.
④ Left click 【DUP】 to toggle the duplex direction from OFF (simplex), DUP– or DUP+.
  • " DUP– " or " DUP+ " appears when the duplex direction is set.
⑤ Click 【MONI】 to monitor the transmit station frequency (repeater input frequency).
  The displayed frequency shifts the offset frequency when monitor function is in use.

• [Receiver] screen
IC-PCR1500   IC-PCR2500
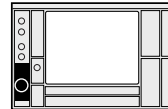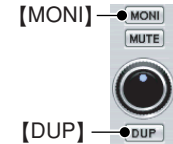
【MONI】

MAIN   SUB   【DUP】

• [DUP Offset] screen

DUP Offset
DUP Offset Frequency (MHz)
0.6

• [Compo] screen
IC-PCR1500   IC-PCR2500

【DUP】

【MONI】

TUNING PANEL   MAIN   SUB
MODE/VOL PANEL

• [Simple] screen
IC-PCR1500   IC-PCR2500

【DUP】

DUP+
AFC   ATT
NB   AGC-F

MAIN   SUB

MONI MUTE

【MONI】

57
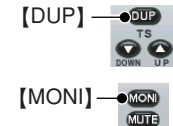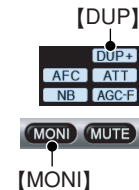
■ IF filter selection

The receiver has 2 to 4 IF passband filter widths for each mode. Selectable passband widths are 3, 6, 15, 50 and 230 (depending on the selected mode).

· **Selectable passband width for each mode.**
   SSB mode : 2.8 kHz or 6 kHz
   CW mode   : 2.8 kHz or 6 kHz
   AM mode   : 2.8 kHz, 6 kHz, 15 kHz or 50 kHz
   WFM mode : 50 kHz or 230 kHz
   FM mode   : 6 kHz, 15 kHz or 50 kHz

Using [Receiver]/[Compo] screen
Click 【WIDE】 or 【NAR】 to select the desired IF filter widths.

• **[Receiver] screen**

IC-PCR1500   **IC-PCR2500**   【WIDE】
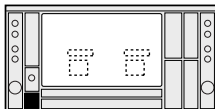
Active band only   【NAR】

Filter indicators   FILTER 50k

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**   【WIDE】

MODE/VOL PANEL   **Active band only**   【NAR】

Using [Simple] screen
Click 【FILTER】 to display a filter list, then select the desired filter widths.

• **[Simple] screen**

IC-PCR1500   **IC-PCR2500**

MAIN   **SUB**

Filter indication

FILTER 50k

Filter list

6k
15k
● 50k

■ AFC function

The AFC (Automatic Frequency Control) function tunes the displayed frequency automatically when an off-center frequency is received. It activates in FM mode and IF filter setting is 6 or 15 kHz only.

Click 【AFC】 to turn the AFC (Automatic Frequency Control) function ON or OFF.
• "AFC" appears when the AFC function is turned ON

■ Attenuator function

Strong signals (such as from broadcast stations, pocket beepers, nearby amateur radio stations, etc.) can cause distortion of receive signals. The attenuator reduces signal strength by about 20 dB and this function can be activated on 1300 MHz or below.

Click 【ATT】 to turn the ATT (Attenuator) function ON or OFF.
• "ATT" appears when the ATT function is turned ON.

• **[Receiver] screen**

IC-PCR1500   IC-PCR2500

Active band only

Indicators
AFC — AFC ATT — ATT
NB AGC-F

【AFC】 — AFC
【ATT】 — ATT

• **[Compo] screen**

IC-PCR1500   IC-PCR2500

MODE/VOL PANEL   **Active band only**

Indicators
AFC — AFC ATT — ATT
NB AGC-F

【AFC】 【ATT】
AFC ATT
NB AGC

• **[Simple] screen**

IC-PCR1500   IC-PCR2500

MAIN   SUB

【ATT】
DUP+
AFC ATT
NB AGC-F
【AFC】
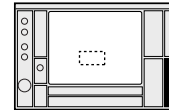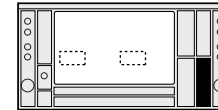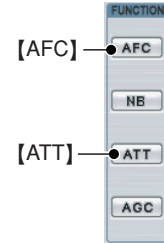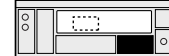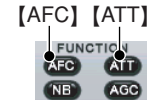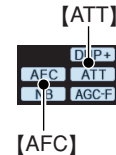
■ NB function

The NB (Noise Blanker) function removes pulse-type noise when USB, LSB, CW or AM mode is selected. Note that the noise blanker is not effective against natural noise such as atmospheric static.

Click 【NB】 to turn the NB (Noise Blanker) function ON or OFF.
• "NB" appears when the NB function is turned ON.

■ AGC function

The AGC (Automatic Gain Control) function controls receiver gain to produce a constant audio output level even when the received signal strength varies from fading, etc. A slow-re-sponse AGC function is selectable for SSB, CW or AM mode.

Click 【AGC】 (【AGC-F】)* to toggle the time constant of the AGC circuit between slow and fast.
• "AGC-F" appears when fast is selected.
*Available only when [Simple] screen is displayed.
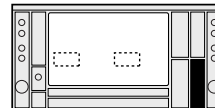
• **[Receiver] screen**
IC-PCR1500   **IC-PCR2500**

Active band only

Indicators

NB — AFC / ATT / NB / AGC-F — AGC

【NB】

【AGC】

• **[Compo] screen**
IC-PCR1500   **IC-PCR2500**

MODE/VOL PANEL   **Active band only**

Indicators

NB — AFC / ATT / NB / AGC-F — AGC

【NB】 【AGC】

• **[Simple] screen**
IC-PCR1500   **IC-PCR2500**

MAIN   **SUB**

【NB】【AGC】
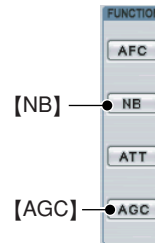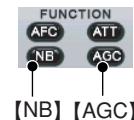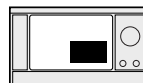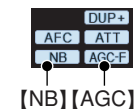
■ VSC function

The VSC (Voice Squelch Control) function opens the squelch only when receiving a modulated voice signal.
• Not modulated signal (contain no voice or music, etc. components) are muted.

Using [Receiver]/[Compo] screen
Click 【VSC】 to turn the VSC (Voice Squelch Control) function ON or OFF.
• "VSC" appears when the VSC function is turned ON.

• [Receiver] screen
IC-PCR1500   **IC-PCR2500**
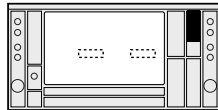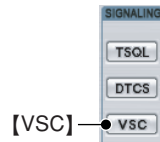
Active band only   【VSC】

Indication

• [Compo] screen
IC-PCR1500   **IC-PCR2500**

MODE/VOL PANEL   **Active band only**

【VSC】

■ IF shift function

The IF shift function electronically changes the center of the IF (intermediate frequency) passband frequency to reject interference. It activates in SSB/CW modes only.

Using [Receiver]/[Compo] screen
① Adjust the 【SHIFT】 control for a minimum interference signal level.
  • The audio tone may be changed while the IF shift is in use.
② Click 【CENTER】 to set the shift control to its center position when there is no interference.

• [Receiver] screen
IC-PCR1500   **IC-PCR2500**   【SHIFT】 control

MAIN band only
Indication   【CENTER】

• [Compo] screen
IC-PCR1500   **IC-PCR2500**

MODE/VOL panel   **MAIN band only**

【SHIFT】 control   【CENTER】
【CENTER】

61

■ **Weather channel operation** (USA and CANADA versions only)

NOAA broadcast stations transmit weather alert tones before important weather announcements. When the weather alert function is turned ON, the selected weather channel is monitored each 5 sec. for the announcement. When the alert signal is detected, the "WX Alert" blinks and the WX channel is displayed, and sounds a beep tone until a change is made within the control screen, or the 【WX】 button is clicked. The previously selected weather channel is checked periodically during standby or while scanning.

①Right-click the 【WX】 button to call up the [WX Alert] screen.
②Select the desired weather channel in [WX Alert Channel].
  • Click 【CHECK】 to monitor the selected weather channel.
③Click the close ([**X**]) button to close the [WX Alert] screen.
④ Click the 【WX】 button to turn the weather alert function ON.
⑤ When the alert is detected, a beep sounds and the indication will be displayed as at right.
⑥ Click the 【WX】 button to turn the weather alert function OFF.

☞ **NOTE:** While receiving a signal (on a frequency other than the weather alert ON frequency), the receiving signal or audio will be interrupted momentarily every 5 sec. (approx.) in case the alert function is turned ON. This is caused by the WX alert function. To eliminate the interruptions, set the weather alert function to OFF.

• **[Receiver] screen**
IC-PCR1500   IC-PCR2500
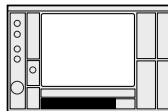
【WX】
Active band only

PROG   AUTO   MEMO   T-SCAN   PRIO   WX   ❚❚   ■
                                            PAUSE STOP

• **[Compo] screen**
IC-PCR1500   IC-PCR2500

METER/SCAN   **MAIN   SUB**
PANEL

PROG   AUTO   MEMO
T-SCAN   PRIO   WX
                    【WX】

• **[WX Alert] screen**

WX Alert   ❸ Click
WX Alert Channel
WX-01   CHECK   Click to mon-
WX-01   itor the se-
WX-02   lected weath-
WX-03   ❶ Click   er channel.
WX-04
WX-05
WX-06   ❷ Select
WX-07
WX-08
WX-09
WX-10

• **[Simple] screen**
IC-PCR1500   IC-PCR2500

                    MAIN   SUB

M W   M-CL   W X   W X   M W   M-CL   M W   M-CL   W X

IC-PCR1500   IC-PCR2500
        【WX】   【WX】   【WX】

• [Receiver] screen

IC-PCR1500 **IC-PCR2500**

MAIN SUB

MEMO WX-01 ← Appears

Appears

CONDITION WX Alert ← Blinks

WX

• [Compo] screen

IC-PCR1500 **IC-PCR2500**

MAIN SUB

MEMO WX-01

Appears

Appears

WX
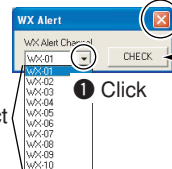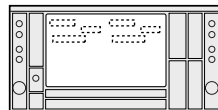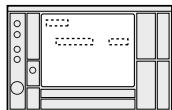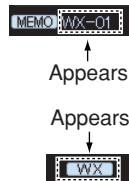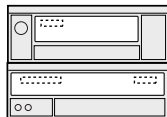
TUNING PANEL
METER/SCAN
PANEL

CONDITION WX Alert

Blinks

• [Simple] screen

IC-PCR1500 **IC-PCR2500**

MAIN SUB

MEMO WX-01 WX Alert ← Blinks

Appears
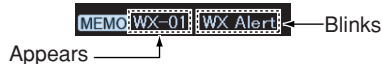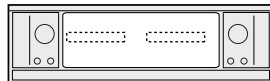
■ Squelch delay setting

Select squelch delay from short and long to prevent repeated opening and closing of the squelch during reception of the same signal.
 • Short : Short squelch delay.
 • Long : Long squelch delay.

① Click the 【Setting】 icon on the tool bar to call up the [Setting] screen if it is not displayed.
② Click the 【Others】 tab to display the squelch delay setting.
③ Click the 【Short】 or 【Long】 radio button to set the squelch delay.
④ Click the close button ([X]) to close the [Setting] list screen.

IC-PCR1500 IC-PCR2500

【Setting】

❶ Click ❸ Click

Setting

Auto Mode | Shortc | Others MENU

Squelch Delay
 ⦿ Short
 ○ Long

❷ Select
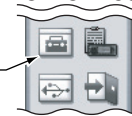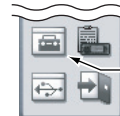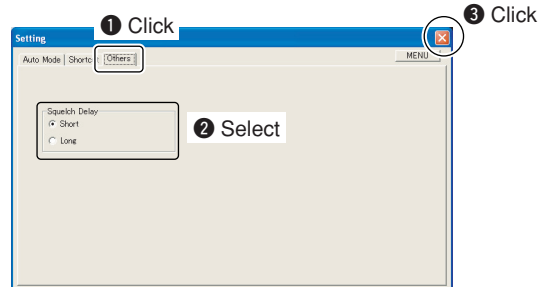
■ Single band/Dualwatch operation (IC-PCR2500 only)

Dualwatch operation monitors two frequencies simultaneously. The IC-PCR2500 has two independent receiver circuits: Main band, and Sub band (available frequencies, operating mode and functions are different depending on bands).
Single band operation is useful when only one frequency is being watched. The Sub band can be inhibited. The single band operation's control screens are similar as the IC-PCR1500.

Click the 【Single】 icon on the tool bar to toggle between the single band operation and the dualwatch operation.
• Even when click the 【Single】 icon during Sub band operation, the control screen switches to the Main band frequency automatically.
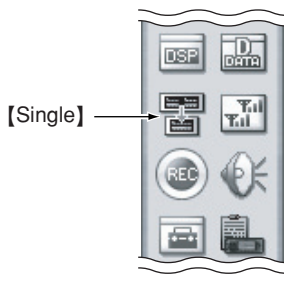
【Single】

▨ When the dualwatch operation is in use, IC-PCR2500 must
▨ be connected to two antennas. ([ANT1] and [ANT2])

• [Receiver] screen
Dualwatch operation
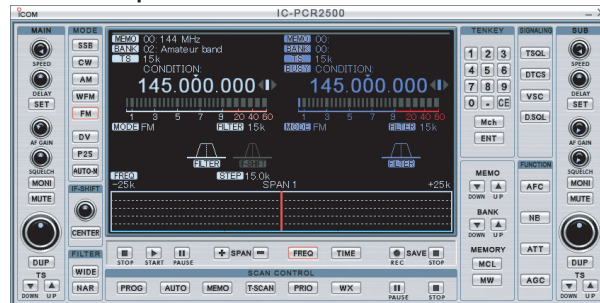
Single band operation
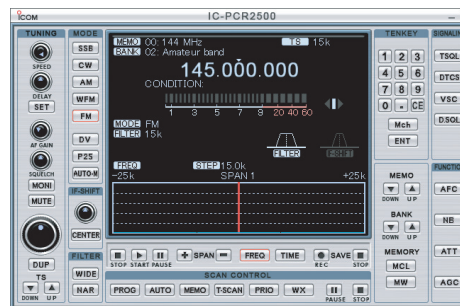
• **[Compo] screen**
Dualwatch operation

Single band operation

• **[Simple] screen**
Dualwatch operation

Single band operation

■ **Diversity operation** (IC-PCR2500 only)

The diversity receiving compares the receiving signal strength from two different antennas, ANT1 and ANT2, and automatically selects the strongest signal. This feature is useful when you are listening in a moving vehicle or the transmitting station itself is moving. Diversity receiving is available from 50 MHz to 1300 MHz on FM, P25 and DV mode only.

- With the squelch open in FM mode while receiving a weak signal, diversity receiving does not work properly.
- AGC is disabled during diversity receiving.
- Two antennas must be connected to [ANT1] and [ANT2] during diversity operation. Diversity operation requires two antennas of the same performance in suitable places. Ask your antenna dealer for installation details.

① Click the 【Single】 icon on the tool bar to select single band operation.
  - Even when click the 【Single】 icon during Sub band operation, the control screen switches to the Main band frequency automatically.
② Click the 【Diversity】 icon on the tool bar to turn the diversity function ON and OFF.

【Single】　　　【Diversity】
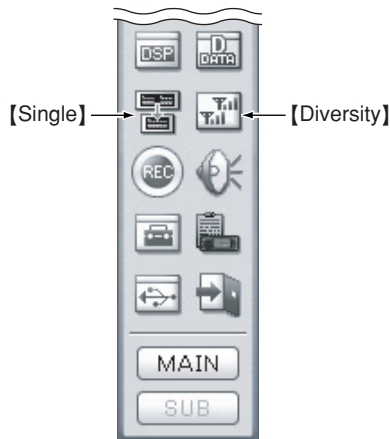
• **[Receiver] screen**
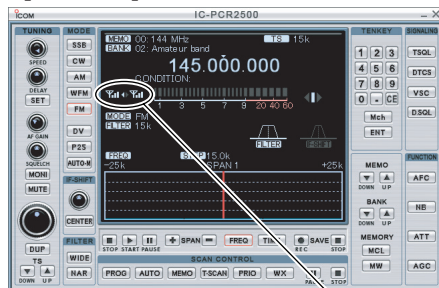
• **[Compo] screen**
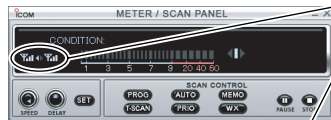
• **[Simple] screen**

Diversity indicator

While [ANT1] is selected;

While [ANT2] is selected;

■ **Main/Sub band selection**

(IC-PCR2500 only)

Some functions can be set to active band only depending on the control screen. Then you must select the desired band, Main band or sub band, to active band.

➥ Click the 【MAIN】 (or 【SUB】) icon on the tool bar to toggle the active band as Main band (or Sub band).

【MAIN】

【SUB】
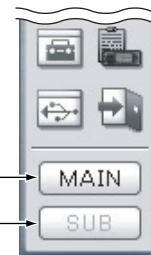
➥ Or click the display indication of Main band or Sub band that you want to select the active band.

6 MEMORY CHANNELS

■ General

The receiver has 2600 memory channels for storage of often-used frequencies. There are total of 26 memory banks for usage by group, etc., and up to 100 channels can be assigned to a bank.

◇ Memory channel contents

The following information can be programmed into memory channels:

- Memory channel name (p. 73)
- Sub name (p. 73)
- Operating frequency (p. 48)
- Duplex direction (p. 57)
- Offset frequency (p. 57)
- Receive mode (p. 54)
- IF filter selection (p. 58)
- Attenuator ON/OFF (p. 59)
- Tuning step (p. 50)
- Select memory scan setting (p. 88)
- Memory skip scan setting (p. 88)
- Squelch control system ON/OFF and its frequency or code (p. 94, 120, 122)
- Remark (memory channel comment) (p. 73)

■ Memory channel selection

◇ Selecting with the control screen
• Using [▲]/[▼] buttons
① Click **[▲]**(BANK) or **[▼]**(BANK) to select the desired memory bank.
② Click **[▲]**(MEMO) or **[▼]**(MEMO) to select the desired memory channel.
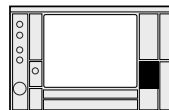
• **[Receiver] screen**

IC-PCR1500   IC-PCR2500

MEMO   BANK
[▲]/[▼] [▲]/[▼]

Active band only

• **[Compo] screen**

IC-PCR1500   IC-PCR2500

MEMO   BANK
[▲]/[▼] [▲]/[▼]
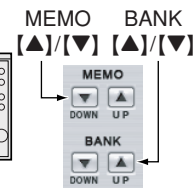
TUNING PANEL   MAIN   SUB

• **[Simple] screen**

MEMO
[▲]/[▼]

IC-PCR1500   IC-PCR2500

BANK
[▲]/[▼]
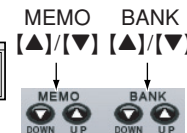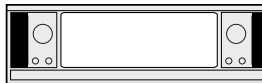
MAIN   SUB
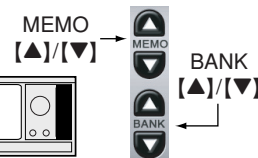
• **Direct channel number input on the [Receiver]/[Compo] screen**

Use the 10-keypad to input the desired memory channel number, then click 【Mch】 to select the memory channel.

• If a mistake is made when inputting a memory channel, click 【CE】 to clear the input and return to the previous frequency indication.

• **[Receiver] screen**

IC-PCR1500   **IC-PCR2500**   10-KEYPAD

Active band only

【Mch】   【CE】

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**   10-KEYPAD

TUNING   **Active band only**

【Mch】   【CE】

◇ **Selecting with the memory channel screen**

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.

② Click 【▲】(BANK) or 【▼】(BANK) to select a memory bank.

③ Select the desired memory channel.

④ Click 【RX Entry】, or right-click a cell then click 【RX Entry】 in the edit menu.

• The selected channel data is displayed on the receiver screen.

❶ Select a memory bank.   ❸ Click

❸ Click

【Memory Edit】   ❷ Select a memory channel.

■ **Memory channel programming**

100 memory channels can be assigned to a memory bank. There are 26 memory banks. Any of the following information can be stored.

• Bank name, memory name, frequency, duplex direction, offset frequency, mode, filter, attenuator, tuning step, select memory scan, skip channel, squelch control setting and remark.

◇ **Programming from the receiver screen**

• *Using [Receiver]/[Compo] screen*

① Click **[▲]**(BANK) or **[▼]**(BANK) to select a memory bank to be programmed.

② Click **[▲]**(MEMO) or **[▼]**(MEMO), or use the 10-keypad to input the desired memory channel number, then click **【Mch】** to select a memory channel to be programmed.

③ Set a frequency, mode, etc. that you want to memorize.

④ Click **【MW】** for 1 sec. to program the setting information into the selected memory channel.

• **[Receiver] screen**

IC-PCR1500　　　IC-PCR2500

Active band only

10-KEYPAD

【Mch】

MEMO **[▲]**/**[▼]**

BANK **[▲]**/**[▼]**

【MW】

• **[Compo] screen**

IC-PCR1500　　　IC-PCR2500

TUNING　　　**MAIN**　**SUB**

10-KEYPAD

【Mch】

Active band only

MEMO **[▲]**/**[▼]**　BANK **[▲]**/**[▼]**　**【MW】**

MEMO **[▲]**/**[▼]**　BANK **[▲]**/**[▼]**　**【MW】**
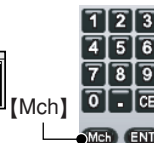
IC-PCR1500　　　IC-PCR2500

• Using [Simple] screen

① Click **[▲]**(BANK) or **[▼]**(BANK) to select a memory bank to be programmed.

② Click **[▲]**(MEMO) or **[▼]**(MEMO) to select a pre-programmed memory channel to be programmed.

※**NOTE:** During [Simple] screen, you cannot set or change a receive frequency on a blank channel.

③ Set a frequency, mode, etc. that you want to memorize.

④ Click **[MW]** for 1 sec. to program the setting information into the selected memory channel.

• [Simple] screen

IC-PCR1500   **IC-PCR2500**

MAIN   **SUB**

MEMO
[▲]/[▼]

BANK
[▲]/[▼]   **[MW]**
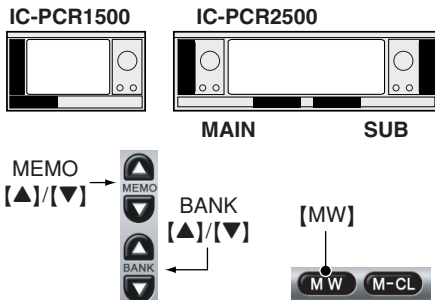
◇ **Initializing the memory channel contents**

The memory channel contents can be initialized using the "preset_e.mch" file (which is saved in mch format).

① Click the **[**Memory Edit**]** icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.

② Click [Open...] in the [File] menu, then select "preset_e.mch" that is contained in the "IC-PCR1500_2500" folder to load.

• If the "preset_e.mch" file is overwritten or lose, copy it from the supplied CD into the "IC-PCR1500_2500" folder.

 - Right-click the copied file and select [Properties]. Then click [Read-only] check box (no check mark) to cancel the read protection.

❶ Click

❷ Select the specific folder.
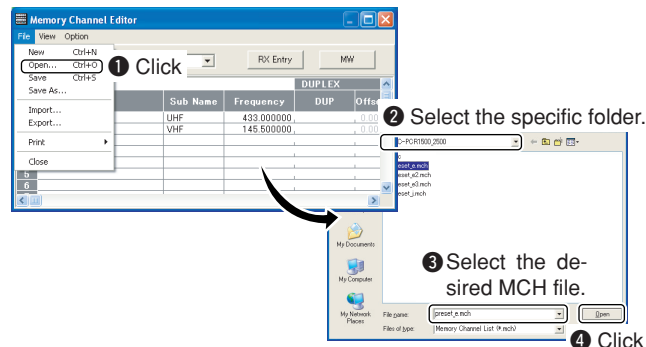
❸ Select the desired MCH file.

❹ Click

■ Editing the memory list

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.

② Click 【▲】(BANK) or 【▼】(BANK) to select the desired memory bank.

③ Click the [Frequency] cell of the desired memory channel, then input the receive frequency from the keyboard. After inputting, push 【Enter】.

░ Program the receive frequency first, otherwise no set-
░ ting can be made except for the name.

④ Double-click the desired cell directory, or right-click the cell then click [Edit... Enter] from the displayed menu to set other items such as duplex direction, mode, tuning step, etc., if desired.

• Click the desired setting item in the pull down menu to select or change the channel setting, or edit it directly depends on the item.

⑤ Click the 【RX Entry】 to write the edited memory contents to the receiver.

⑥ Click the close button ([X]) to close the [Memory Channel Editor] screen.

【Memory Edit】

❶ Select a memory bank.
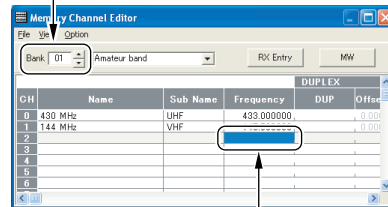
❷ Input the receive frequency, then set other items.

❸ Click

❹ Click

❸ Click

Edit menu
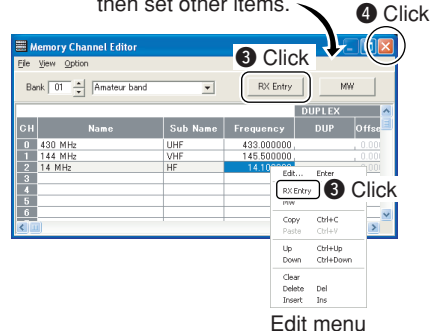
◇ About the [View] menu

The indicated character size, sub name, TSQL/DTCS setting, DV setting, P25 setting indication can be set in [View] menu.

Click to turn the Sub Name, TSQL/DTCS, DV and P25 indication ON and OFF.
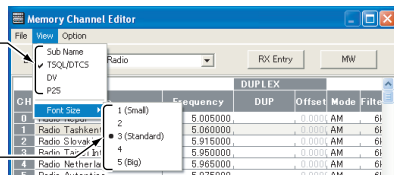
Click to select the indicated character size.

DV or P25 setting indication does not appear for IC-PCR1500, or for IC-PCR2500 that is depending on version or option installation.

◇ About the [Option] menu

Click [Preset TV CH] in [Option] menu to display the preset TV channel group. Then select the desired channel group. All available TV frequencies and channel numbers in the selected group are listed in the memory channel screen automatically.

Click to display the preset TV channel group.
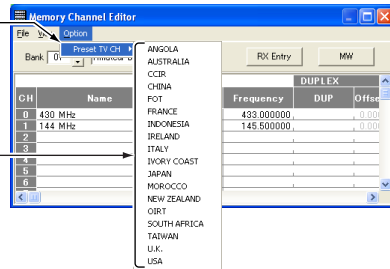
Click to select the desired channel group.

◇ Editing the memory channel name

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click 【▲】(BANK) or 【▼】(BANK) to select the desired bank.
③ Select the desired channel, then double-click the [Name] or [Sub Name] cell.
 • A cursor starts blinking.
 • [Name] (up to 64 characters) is used for the memory name of the control software.
 • [Sub Name] (up to 6 characters) is used for the memory name of the IC-R1500 or IC-R2500' controller.
④ Edit the desired memory name from the PC keyboard, then push [Enter] to input.

◇ Editing the channel remark (channel comment)

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click 【▲】(BANK) or 【▼】(BANK) to select the desired memory bank.
③ Select the desired channel, then double-click [Remark] cell.
 • A cursor starts blinking.
④ Edit the channel comment (up to 64 characters) from the PC keyboard, then push [Enter] to input.

◇ Calling up the memory channel data from the control screen

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click 【▲】(BANK) or 【▼】(BANK) to select the desired memory bank.
③ Select the desired memory channel to call up the operating channel data on the control screen.
④ Click 【MW】, or right-click a cell then click [MW] in the edit menu.
• The operating channel data is called up to the [Memory Channel Editor] screen.

【Memory Edit】

❶ Select a memory bank. ❷ Click
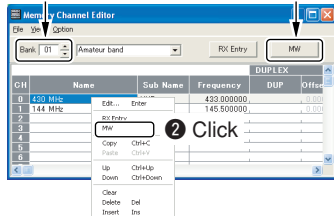
❷ Click

◇ Copying a memory contents

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click 【▲】(BANK) or 【▼】(BANK) to select the desired memory bank.
③ Right click any cell of the desired memory channel to be copied, then select [Copy (Ctrl+C)] from the displayed menu.
• After selecting a cell of the desired memory channel, push [C] key while pushing and holding the [Ctrl] key— these key actions are the same as the mouse operation above.
④ Right click any cell of the desired memory channel to be pasted to, then select [Paste (Ctrl+V)].
• After selecting a cell of the desired memory channel, push the [V] key while pushing and holding the [Ctrl] key— these key actions are the same as the mouse operation above.

❶ Select a memory bank.
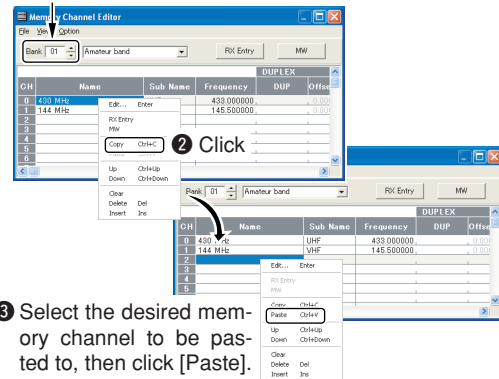
❷ Click

❸ Select the desired memory channel to be pasted to, then click [Paste].

◇ Memory channel insert/delete

Insert:
New blank channels can be inserted into the channel list.
Channels below the cursor are shifted down automatically.
Delete:
Unnecessary channels can be deleted from the list.
Channels below the cursor are shifted up automatically.

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click 【▲】(BANK) or 【▼】(BANK) to select a memory bank.
③ Right-click a cell on the desired channel that you want to insert/delete, then click [Insert] or [Delete] from the list to insert/delete the channel at the selected position.

◇ Memory channel up/down

Up:
The selected channel contents moves up one step.
Down:
The selected channel contents moves down one step.

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click 【▲】(BANK) or 【▼】(BANK) to select a memory bank.
③ Right-click a cell on the desired channel that you want to up/down, then click [Up] or [Down] from the list to move up/down the channel to one step.

◇ Bank name programming

Each memory bank can be programmed with an alphanumeric bank name for easy recognition and can be indicated independently. Names can be set with a maximum of 64 characters.

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click 【▲】(BANK) or 【▼】(BANK) to select a memory bank.
③ Click the bank name dialog box.
 • A cursor starts blinking.
④ Program the desired bank name (up to 64 characters) from the PC keyboard, then push [Enter].
⑤ After programming, click the close button ([**X**]) to close the [Memory Channel Editor] screen.

❶ Select a memory bank.　❸ Click

【Memory Edit】

❷ Program a bank name (up to 64 characters.)
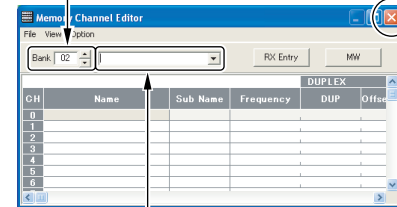
◇ Selecting a bank with the programmed name

Each memory bank can be selected with the programmed name from a bank name dialog box.

① Click the 【Memory Edit】 icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click [▼] to display a memory bank name list as below.
③ Click the desired bank name to select the bank.
  • The [Memory Channel Editor] screen contents changes to the selected bank's.
④ After selection, click close button ([X]) to close the memory channel list screen.

[Memory Edit]

❸ Click
❶ Click
❷ Select
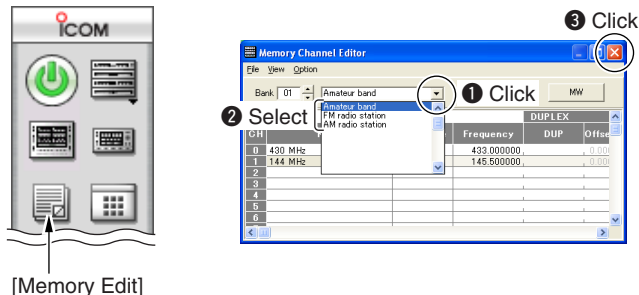
■ Memory channel clearing

◇ Clearing from the receiver screen
① Click 【▲】(BANK) or 【▼】(BANK) to select the memory bank, including the unneeded memory channel.
② Click 【▲】(MEMO) or 【▼】(MEMO) to select the unneeded memory channel to be cleared.
③ Click [MCL] ([M-CL])* for 1 sec. to clear the memory channel contents.
*Available only when [Simple] screen is displayed.

• [Receiver] screen

IC-PCR1500   **IC-PCR2500**

Active band only

MEMO
【▲】/【▼】

BANK
【▲】/【▼】

【MCL】

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**

TUNING   **MAIN   SUB**

MEMO   BANK   MEMO   BANK
【▲】/【▼】 **【▲】/【▼】** **【MCL】** **【▲】/【▼】** **【▲】/【▼】** **【MCL】**

IC-PCR1500   IC-PCR2500

• **[Simple] screen**

IC-PCR1500   **IC-PCR2500**

MAIN   SUB
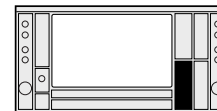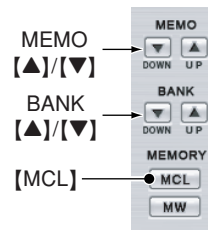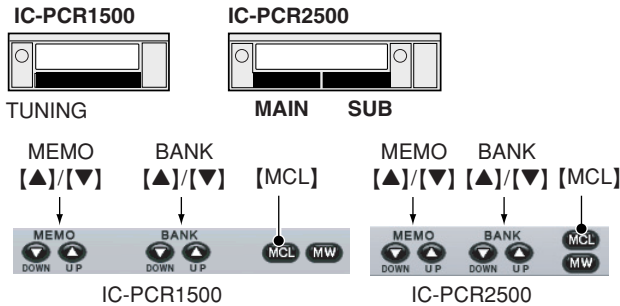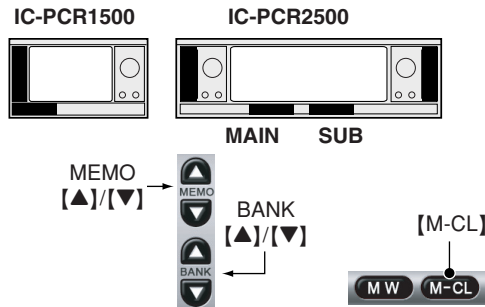
MEMO
【▲】/【▼】

BANK
【▲】/【▼】   **【M-CL】**

◇ **Clearing from the memory list**
① Click the **【**Memory Edit**】** icon on the tool bar to call up the [Memory Channel Editor] screen if it is not displayed.
② Click **【▲】**(BANK) or **【▼】**(BANK) to select a memory bank.
③ Right click the cell of the unneeded memory channel to be cleared, then click [Clear] from the displayed menu.
④ Click [OK] in the displayed dialog box to clear the selected memory channel contents.

[Memory Edit]

➊ Select a memory bank.

➋ Click

➌ Click

77
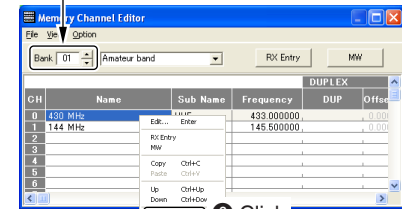
■ Saving memory channel data

The memory channels can be stored as a PC file.

Click [Save] or [Save As...] in the [File] menu to back up memory channel data.
• Save : Saves current project as a PC file. Overwritten if previously saved file of the same name exist.
• Save As... : Saves with a different file name.

■ Opening memory channel data

The stored memory channel data in the PC can be loaded.

Click [Open...] in the [File] menu, then select the desired memory channel data file that is saved previously.
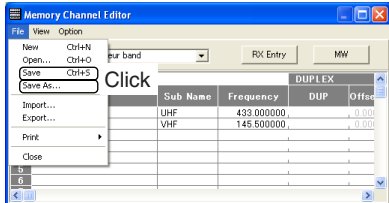
■ Creating new memory channel data file

The new memory channel data file can be created.

Click [New] in the [File] menu to make a new memory channel data file.
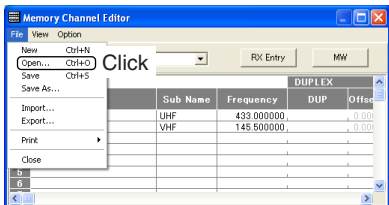
■ Printing a memory channel

A memory channel screen can be printed out.

Click [Print] in the [File] menu to print the displayed memory channel screen.
• Current Bank... : Print a currently displayed bank settings.
• All Banks... : Print all banks settings.
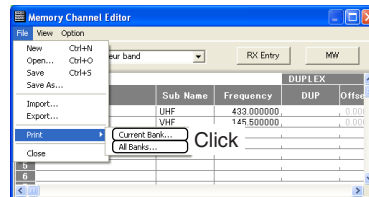
■ Importing a CSV file

The CSV (Comma Separated Values) format file (which is saved in CSV format) can be imported and overwrite to the selected bank contents.

NOTE: Save the current contents as a PC file (p. 68) before importing a CSV file. Once the imported CSV file is over-written, previously set contents are no longer available.

① Click [Import...] in the [File] menu.
② Select the desired drive that the CSV file is saved in, then click [Open].
③ Select the desired folder in which the CSV file is saved, then click [Open].
④ Select the desired CSV file that you want to import, then click [Open].
  • The selected CSV file is imported.

❶ Click
❷ Select the desired folder.
❸ Select the de-sired CSV file.
❹ Click
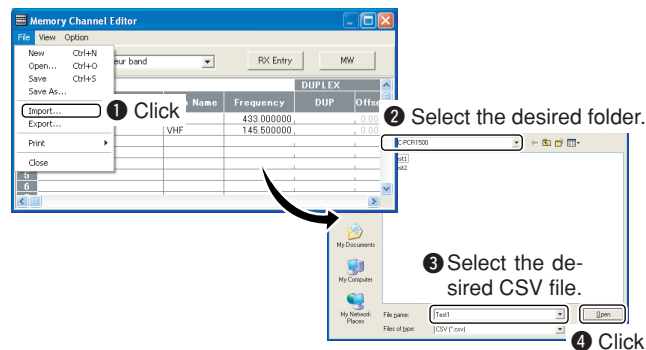
■ Exporting a CSV file

The selected bank contents are exportable in CSV (Comma Separated Values) file format.

① Click [Export...] in the [File] menu.
② Select the desired drive to which the CSV file is saved, then click [Open].
③ Select the desired folder in which the CSV file is saved, then click [Open].
④ Type a name for the file in the [File name] box, then push [Save] to save the selected bank contents in CSV format.

❶ Click
❷ Select the desired folder.
❸ Type a name for the file
❹ Click

SCAN OPERATION (Multi-function receiver/Component screens only)

■ Scan types

Up to 50 programmed scan ranges, memory scan, memory select scan, memory skip scan, mode select memory scan and auto memory write scan provide scanning versatility.
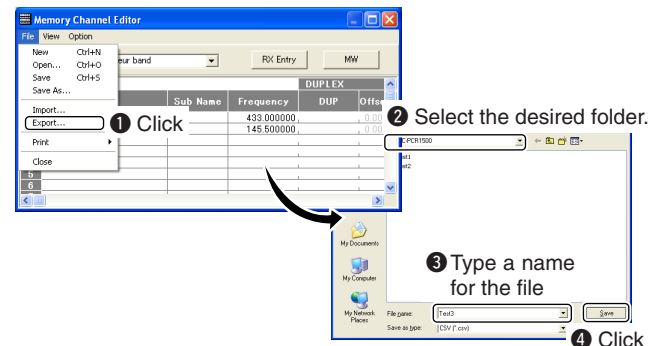
PROGRAMMED SCAN
(p. 81)
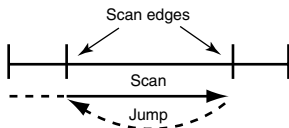
Repeatedly scans between two user-programmed frequencies. Used for checking for frequencies within a specified range such as repeater output frequencies, etc.

MEMORY SCAN
(p. 86)
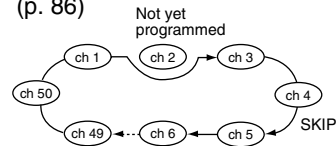
Repeatedly scans memory channels within a memory bank (0 – 25).

SELECT MEMORY SCAN
(p. 88)
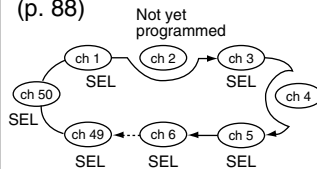
Repeatedly scans only select memory channels within a memory bank. This function can be turned ON/OFF in the [Memory Scan] screen. Select channels can be set in the memory list screen.

MEMORY SKIP SCAN
(p. 88)
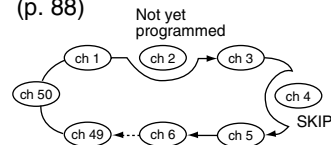
Skips unwanted memory channels that inconveniently stop scanning. This function can be turned ON/OFF in the [Memory Scan] screen. Skip channels can be set in the memory list screen.

MODE SELECT MEMORY SCAN (p. 88)
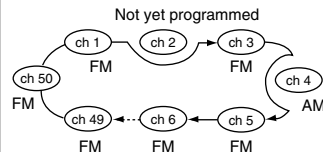
Repeatedly scans only selected mode channels within a memory bank. This function can be set in the [Memory Scan] screen.

AUTO MEMORY WRITE SCAN (p. 84)
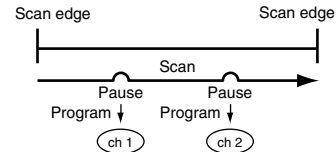
The frequencies that the programmed scan stops on are automatically programmed into a selected memory bank.

■ Programmed scan

Programmed scan automatically searches for signals within a specified frequency range.

For programmed scan, scan edges must be programmed in advance.

◇ Programming scan edge channels

Set the scan edge channel name, frequency range and ATT in advance. Up to 50 settings can be programmed.

①Right-click the 【PROG】 button to call up the [Program Scan] setting screen if it is not displayed.
②Click the [Program Scan] tab to show the program list.
③Input the start frequency into the [Freq Low] cell from the keyboard, then push [Enter].
  • Set other data (e.g. name, end frequency into [Freq High] or attenuator) if desired.

  Program the start frequency first, otherwise no setting can be done except for the name.

④Enter the desired scan edge channel number, then click the close ([**X**]) button to close the setting screen.

◇ Edit menu details

Editing the memory list with the edit menu is the same as the memory channels. See the following pages for details.
  • Copying a memory contents (p. 74)
  • Memory channel insert/delete (p. 75)
 • Memory channel up/down (p. 75)
  • Clearing from the memory list (p. 77)

• **[Receiver] screen**

IC-PCR1500   **IC-PCR2500**

Active band only

【PROG】

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**   【PROG】

METER/SCAN   **MAIN   SUB**

• **[Program Scan] screen**

❶ Click   ❸ Click
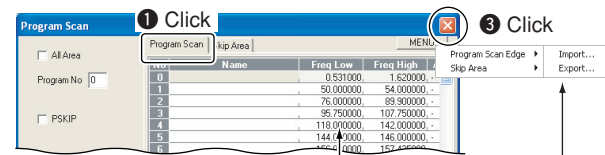
❷ Input the start frequency first, then set other data.

Click 【MENU】, and point to [Program Scan Edge]. Then, select the desired item from the list.
Import : Import the CSV file.
Export : Export the CSV file.

Edit menu

◇ Skip area setting

The skip area setting is available for skipping unwanted frequencies that inconveniently stop scanning.

①Right-click the 【PROG】 button to call up the [Program Scan]screen if it is not displayed.
②Click the [Skip Area] tab to show the skip area list.
③Input the skip start frequency into the [Freq Low] cell from the keyboard, then push [Enter].
　• Set other data (e.g. name or skip end frequency into [Freq High]) if desired.
　▨Program the start frequency first, otherwise no setting ▨can be done except for the name.
④Select "ON" in [Enable] to enables the set skip area.
⑤Click [PSKIP] to turn the skip area function ON, then click the close ([**X**]) button to close the setting screen.

❷Input the start frequency first, then set other data.

❸Select "ON" to enables the set skip area.
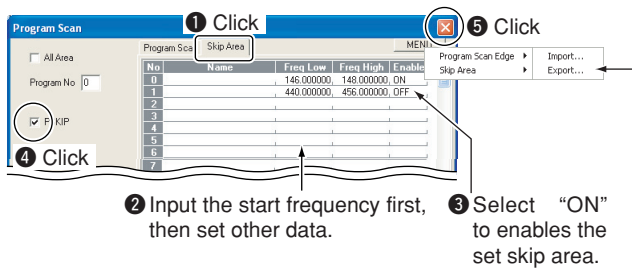
Click 【MENU】, and point to [Skip Area]. Then, select the desired item from the list.
Import : Import the CSV file.
Export : Export the CSV file.

◇ Starting a programmed scan

①Make sure the squelch is set to the threshold point (closed condition).
②Right-click the 【PROG】 button to call up the [Program Scan] setting screen if it is not displayed.
③Click the [Program Scan] tab to show the program list.
④Enter the programmed scan range number to be scanned in [Program No], then click the close ([**X**]) button to close the setting screen.
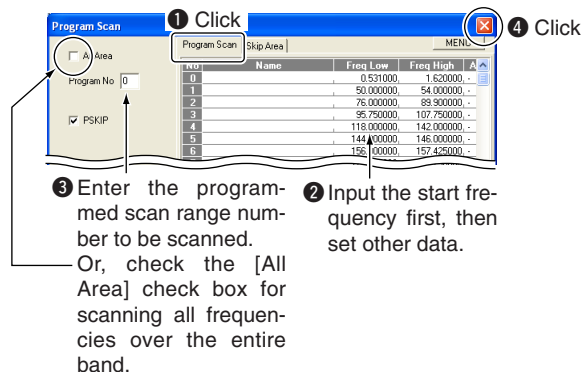
❸Enter the programmed scan range number to be scanned. Or, check the [All Area] check box for scanning all frequencies over the entire band.

❷Input the start frequency first, then set other data.

⑤ Click the 【PROG】 button to start programmed scan.
  • "PROG Scan" blinks and [PROG] appears while scanning.
⑥ To stop the scan, click 【STOP】 or 【PROG】.
  • When the frequency is changed after cancelling a scan and a new scan is activated, scanning starts from the starting frequency of the specified frequency range. When the frequency is not changed, scan starts from the previously stopped frequency.

• [Receiver] screen
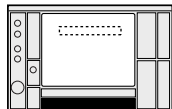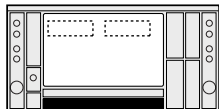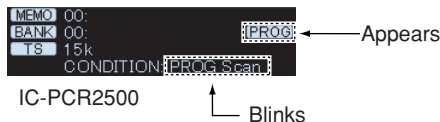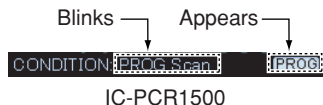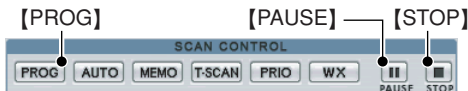
IC-PCR1500   **IC-PCR2500**

Active band only

【PROG】   【PAUSE】 — 【STOP】

Blinks — Appears —

IC-PCR1500

IC-PCR2500

Appears

Blinks

• [Compo] screen

IC-PCR1500   **IC-PCR2500**

METER/SCAN   **MAIN   SUB**

【PROG】   【PAUSE】

【STOP】

Appears

Blinks

7

■ Auto memory write scan

The auto memory write scan does the same as the programmed scan and then writes paused signal frequencies into memory channels of a specified memory bank. Scan edges must be programmed in advance. (p. 81)

◇ Starting an auto memory write scan

① Make sure the squelch is set to the threshold point (closed condition).
② Right-click 【AUTO】 to call up the [AutoMW Scan] setting screen if it is not displayed.

• [Receiver] screen

IC-PCR1500　　　**IC-PCR2500**

【AUTO】　**Active band only**

SCAN CONTROL
PROG | AUTO | MEMO | T-SCAN | PRIO | WX | ‖ | ■
　　　　　　　　　　　　　　　　　　 PAUSE STOP

• [Compo] screen

IC-PCR1500　　　**IC-PCR2500**

METER/SCAN 【AUTO】　**MAIN**　**SUB**

PROG AUTO MEMO ‖ ■
T-SCAN PRIO WX PAUSE STOP

③ Enter the programmed scan range number to be scanned in [Program No].
④ Select a memory bank to be written, then click the close ([**X**]) button to close the setting screen.
・To clear the selected memory bank contents, click [All Clear].

❷ Enter the programmed scan range number to be scanned.

❹ Click

❶ Click

Click to turn the skip area function ON.
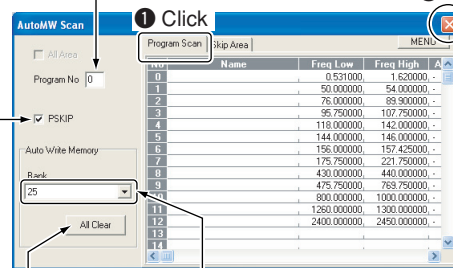
Click to clear the selected memory bank contents.

❸ Select a memory bank to be written.

No	Name	Freq Low	Freq High	A
0		0.531000,	1.620000,	-
1		50.000000,	54.000000,	-
2		76.000000,	89.900000,	-
3		95.750000,	107.750000,	-
4		118.000000,	142.000000,	-
5		144.000000,	146.000000,	-
6		156.000000,	157.425000,	-
7		175.750000,	221.750000,	-
8		430.000000,	440.000000,	-
9		475.750000,	769.750000,	-
10		800.000000,	1000.000000,	-
11		1260.000000,	1300.000000,	-
12		2400.000000,	2450.000000,	-
13				
14				

AutoMW Scan
Program Scan / Skip Area　　　MENU
☐ All Area
Program No 0
☑ PSKIP
Auto Write Memory
Bank
25
All Clear

⑤ Click 【AUTO】 to start auto memory write scan.
  • "AUTO Scan" blinks and [AUTO] appears while scanning.
⑥ To stop the scan, click 【STOP】 or 【AUTO】.

• **[Receiver] screen**
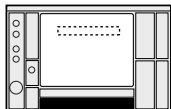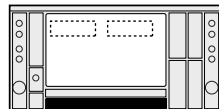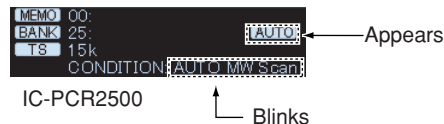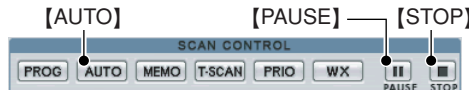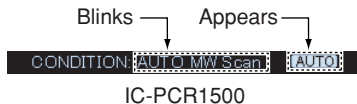
IC-PCR1500　　　**IC-PCR2500**

Active band only

【AUTO】　　　　　　　　【PAUSE】　　【STOP】

SCAN CONTROL
PROG AUTO MEMO T-SCAN PRIO WX PAUSE STOP

Blinks　　　Appears

CONDITION: AUTO MW Scan 【AUTO】

IC-PCR1500

MEMO 00:
BANK 25:
TS 15k
CONDITION: AUTO MW Scan 【AUTO】 ← Appears

IC-PCR2500　　　　　　　　Blinks

• **[Compo] screen**

IC-PCR1500　　　**IC-PCR2500**

METER/SCAN　　　**MAIN**　　**SUB**

【AUTO】　【PAUSE】

PROG AUTO MEMO
T-SCAN PRIO WX PAUSE STOP　　【STOP】

CONDITION: AUTO MW Scan 【AUTO】 ← Appears

Blinks

■ Memory/bank scan

This function searches all memory channels in a selected memory bank.

◇ Starting a memory/bank scan

① Make sure the squelch is set to the threshold point (closed condition).

② Click 【▲】(BANK) or 【▼】(BANK) to select the desired memory bank.

③ Right-click the 【MEMO】 button to call up the [Memory Scan] setting screen if it is not displayed.

• **[Receiver] screen**

IC-PCR1500   **IC-PCR2500**
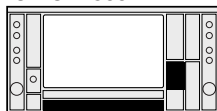
Active band only
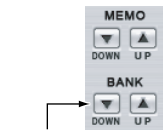
BANK
【▲】/【▼】

【MEMO】

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**
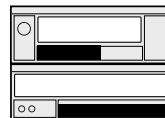
METER/SCAN   **MAIN   SUB**

BANK
【▲】/【▼】

【MEMO】

④ Select the bank scan condition from 'Current Bank', 'Select Bank' or 'All Bank.'

(a) **'Current Bank'**

Scans memory channels within the current bank.

(b) **'Select Bank'**

Scans memory channels within the selected bank ("Sel" setting is turned ON).

(c) **'All Bank'**

Scans memory channels within all banks.

⑤ Make sure the check boxes are not checked (✔), then click the close ([**X**]) button to close the setting screen.

❶ Select   ❷ Click

No check marks "✔"
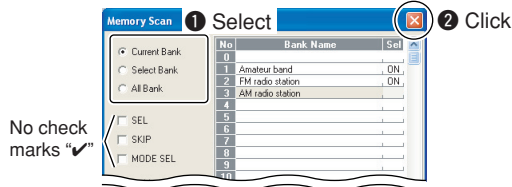
⑥ Click the 【MEMO】 button to start memory scan.
  • "MEMO Scan" blinks and [MEMO] appears while scanning.
⑦ To stop the scan, click 【STOP】 or 【MEMO】.

• **[Receiver] screen**
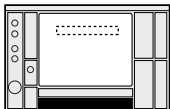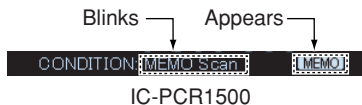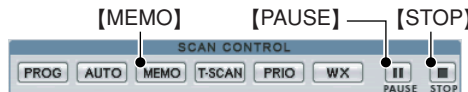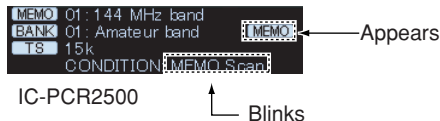
IC-PCR1500   **IC-PCR2500**

Active band only

【MEMO】   【PAUSE】   【STOP】

SCAN CONTROL

PROG   AUTO   MEMO   T-SCAN   PRIO   WX   PAUSE   STOP

Blinks ⎯ Appears ⎯

CONDITION: MEMO Scan   [MEMO]

IC-PCR1500

MEMO 01: 144 MHz band
BANK 01: Amateur band   [MEMO] ←⎯ Appears
TS 15k
CONDITION: MEMO Scan

IC-PCR2500

⎯ Blinks

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**

METER/SCAN   **MAIN**   **SUB**

【MEMO】 【PAUSE】

PROG   AUTO   MEMO
T-SCAN   PRIO   WX   PAUSE   STOP   ⎯ 【STOP】

CONDITION: MEMO Scan   [MEMO] ⎯ Appears

Blinks ⎯

7

87
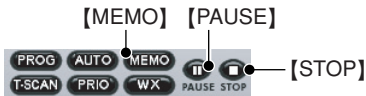
■ **Versatile memory scan**

You can set the memory scan conditions using the [Memory Scan] setting screen.

① Right-click the 【MEMO】 button to call up the Memory Scan setting screen if it is not displayed.

• **[Receiver] screen**

IC-PCR1500   **IC-PCR2500**

Active band only

【MEMO】

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**
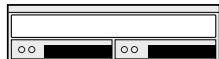
METER/SCAN   **MAIN**   **SUB**

【MEMO】

② Check the desired check boxes, then click the close ([**X**]) button to close the setting screen.

- When selecting the [SEL] box (select memory scan), repeatedly scans memory channels these "SEL" settings are turned ON in [Memory Channel Editor] screen.
- When selecting the [SKIP] box (memory skip scan), repeatedly scans memory channels except "SKIP" setting is turned ON in [Memory Channel Editor] screen.
- When selecting the [MODE SEL] box (mode select memory scan), repeatedly scans all memory channels with the selected operating mode (in [Select Mode] as below).
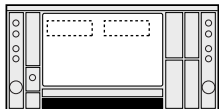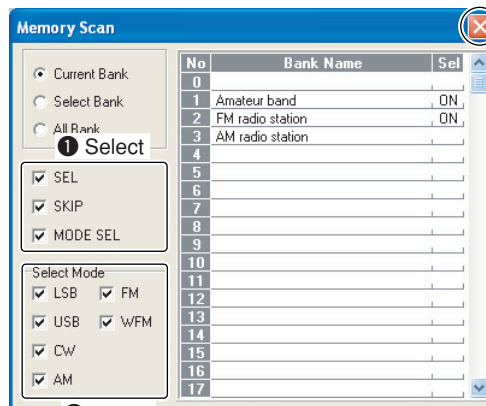
③Click the 【MEMO】 button to start the desired memory scan.
  • "MEMO Scan" blinks and [MEMO] appears while scanning.
④To stop the scan, click 【STOP】 or 【MEMO】.

• All settings can be used simultaneously.
• SEL, SKIP and receive mode can be set in the memory list screen.
• At least 2 memory channels must be programmed with the desired condition for scan to proceed.
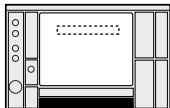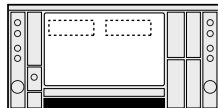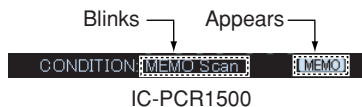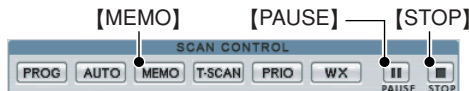
7

• [Receiver] screen

IC-PCR1500   IC-PCR2500

Active band only

【MEMO】   【PAUSE】 — 【STOP】

SCAN CONTROL
PROG AUTO MEMO T-SCAN PRIO WX ▮▮ ■
                                    PAUSE STOP

Blinks — Appears —

CONDITION: MEMO Scan 【MEMO】

IC-PCR1500

MEMO 01: 144 MHz band
BANK 01: Amateur band   【MEMO】 ← Appears
TS 15k
       CONDITION: MEMO Scan

IC-PCR2500   └ Blinks

• [Compo] screen

IC-PCR1500   IC-PCR2500

METER/SCAN   MAIN   SUB

【MEMO】 【PAUSE】

PROG AUTO MEMO ▮▮ ■ ← 【STOP】
T-SCAN PRIO WX PAUSE STOP

CONDITION: MEMO Scan 【MEMO】 ← Appears
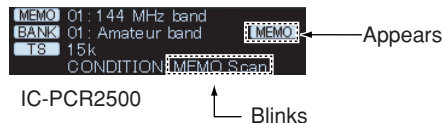
Blinks ┘

■ Scan resume condition

When receiving a signal, scanning automatically pauses on that signal. The scan resume condition sets the time that the scan pauses before resuming or whether scan stops instead of pausing.

①Click the 【SET】 button to call up the [Scan Delay] screen if it is not displayed.
②Select the scan delay condition from 'Pause until Signal Disappears,' 'Delay Volume' or 'Scan Stop.'

• **[Receiver] screen**
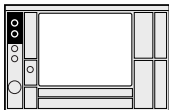
IC-PCR1500   IC-PCR2500
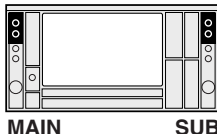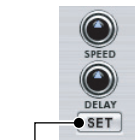
MAIN   SUB

【SET】

• **[Compo] screen**

IC-PCR1500   IC-PCR2500   【SET】

METER/SCAN   MAIN   SUB

• **[Scan Delay] screen**
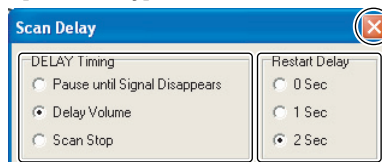
❸ Click

❶ Select   ❷ Select

(a) 'Pause until Signal Disappears'
Scan pauses when receiving a signal and remains paused until the signal disappears.

(b) 'Delay Volume'
When setting a delay time using the [DELAY] control (on [Receiver] screen or Component screen), scan pauses when receiving a signal and then resumes after the specified delay.

(c) 'Scan Stop'
When a signal is received during scan, scan stops and does not resume.

③Select a restart delay time in [Restart Delay]. This setting is valid when (a) or (b) is selected in step ②.
 • **0 Sec. :** Scan resumes immediately after the signal disappears.
 • **1 Sec. :** Scan resumes 1 sec. after the signal disappears.
 • **2 Sec. :** Scan resumes 2 sec. after the signal disappears.
④Click the close ([**X**]) button to close the setting screen.

■ Scan speed setting

The searching speed of frequencies or memory channels is variable.

Click the 【SPEED】 control to set the speed at which scans search through frequencies/memories for signals.
• Right-click to increase the speed level.
• Left-click to decrease the speed level.
• When clicking and holding 【SPEED】, the scan speed scrolls up or down.
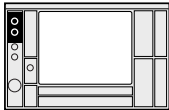
• [Receiver] screen

IC-PCR1500   **IC-PCR2500**   【SPEED】
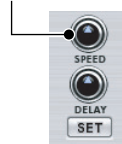
MAIN   SUB

• [Compo] screen

IC-PCR1500   **IC-PCR2500**   【SPEED】

METER/SCAN   MAIN   SUB

■ Priority scan type

The priority scan checks for signals on the frequency every 5 sec. while operating on a scanning memory channel or scanning.

The scan resumes according to the selected scan resume condition. See p. 90 for details.

NOTE: If the pocket beep function is activated, the receiver automatically selects the tone squelch function when priority scan starts.

MEMORY CHANNEL SCAN

While operating on a frequency, priority scan checks for a signal on the selected memory channel every 2 to 60 sec.
• A memory channel with skip information can be scanned.

5 sec.

Scanning memory channel ⟷ Priority setting memory channel
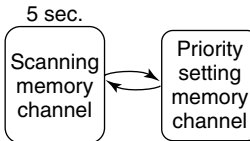
■ Priority scan operation

① Set the receive frequency. (p. 48)
② Right-click the 【PRIO】 button to call up the [Priority Scan] setting screen if it is not displayed.

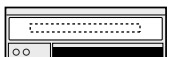• **[Receiver] screen**

IC-PCR1500   IC-PCR2500

Active band only   【PRIO】

• **[Compo] screen**

IC-PCR1500   IC-PCR2500

METER/SCAN   **MAIN   SUB**   【PRIO】

• **[Priority Scan] screen**

❺ Click

❸ Set the scanning interval

❹ Click

❷ Select a memory channel.

❶ Select a memory bank.

③Set the scanning channel and bank in [Scan Channel].
④Set the scanning interval from 2 to 60 sec in [Priority Interval], then click the close ([X]) button to close the setting screen.
　• Click 【CHECK】 to monitor the selected priority channel.
　• Click 【OFF】 to stop monitoring the priority channel.

⑤ Click 【PRIO】 button to start priority scan.
　• "PRIO Scan" blinks and [PRIO] appears while scanning.
　• The receiver checks the memory channel according to the setting interval.
　• The scan resumes according to the selected scan resume condition. (p. 90)
　• While the scan is pausing, pushing the pause button (【II】) resumes the scan manually.
⑥ To stop the scan, click 【STOP】 or 【PRIO】.

• **[Receiver] screen**
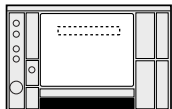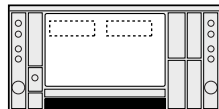
IC-PCR1500　**IC-PCR2500**

Active band only

IC-PCR1500

Blinks

CONDITION: PRIO Scan ──── 【PRIO】 ←── Appears

【PAUSE】 ── 【STOP】

SCAN CONTROL

PROG AUTO MEMO T-SCAN PRIO WX [II] [■]
PAUSE STOP

【PRIO】

IC-PCR2500

MEMO 00:
BANK 00:　　　　　　　PRIO ←── Appears
TS 15k
CONDITION: PRIO Scan ──── Blinks

• **[Compo] screen**

IC-PCR1500　**IC-PCR2500**

METER/SCAN　　**MAIN**　　**SUB**

Blinks

CONDITION: PRIO Scan　　【PRIO】 ←── Appears

【PAUSE】

PROG AUTO MEMO [II] [■] ── 【STOP】
T-SCAN PRIO WX PAUSE STOP

【PRIO】

93
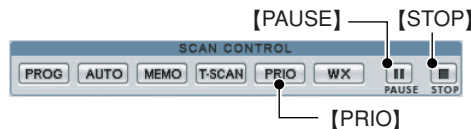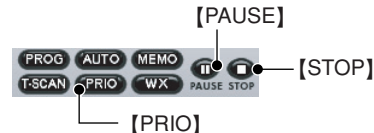
■ Tone/DTCS operation

The tone or DTCS opens only when receiving a signal with the same pre-programmed subaudible tone or DTCS code, respectively in FM mode. You can silently wait for the specified signal using the same tone.

◇ Tone squelch frequency setting

① Click 【FM】 to select FM mode.

② Click 【TSQL】 to turn the tone squelch ON.
  • "TSQL" appears in the function display.

③ Right-click 【TSQL】 to display the [TSQL] setting screen.

④ Click 【▼】 to select the desired tone squelch frequency.
  • 51 tone frequencies from 67.0 to 254.1 Hz are available.

⑤ Check the [Reverse Action] check box to mute the received audio signal when the received signal's tone is matched.
  • "R" appears in the function display.

⑥ Click the close button ([**X**]) to close the [TSQL] setting screen.

⑦ When the received signal includes a matching tone, squelch opens and the signal can be heard.
  • When the [Reverse Action] check box is checked in step ⑤, the received audio signal is muted.
  • When the received signal's tone is not matched, tone squelch does not open, however, the S-indicator shows signal strength.

⑧ Click 【TSQL】 again to cancel the tone squelch.
  • "TSQL" disappears.

• **[Receiver] screen**
IC-PCR1500   IC-PCR2500
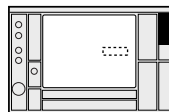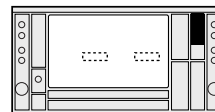
【TSQL】

Active band only

Indicators ← Reverse Action indicator

Tone squelch indicator
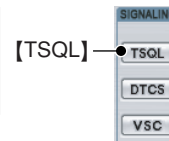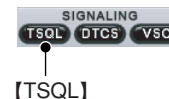
• **[Compo] screen**
IC-PCR1500   IC-PCR2500

MODE/VOL PANEL   **Active band only**

【TSQL】
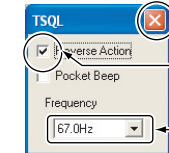
• **[TSQL] screen**

❸ Click

❷ Check the check box to turn the Reverse Action ON.

❶ Select the desired tone squelch frequency.

• **Available tone squelch frequencies list   (Hz)**

67.0	79.7	97.4	118.8	146.2	167.9	186.2	206.5	241.8
69.3	82.5	100.0	123.0	151.4	171.3	189.9	210.7	250.3
71.0	85.4	103.5	127.3	156.7	173.8	192.8	218.1	254.1
71.9	88.5	107.2	131.8	159.8	177.3	196.6	225.7	
74.4	91.5	110.9	136.5	162.2	179.9	199.5	229.1	
77.0	94.8	114.8	141.3	165.5	183.5	203.5	233.6	

◇ DTCS code setting

① Click 【FM】 to select FM mode.

② Click 【DTCS】 to turn the DTCS squelch ON.
  • "DTCS" appears in the function display.

③ Right-click 【DTCS】 to display the [DTCS] setting screen.

④ Click 【▼】 to select the desired DTCS code.
  • 104 DTCS code from 023 to 754 are available.

⑤ Check the [Reverse Action] check box to mute the received audio signal when the received signal's tone is matched.
  • [R] appears in the function display.

⑥ Click the close button ([X]) to close the [DTCS] setting screen.

⑦ When the received signal includes a matching code, squelch opens and the signal can be heard.
  • When the [Reverse Action] check box is checked in step ⑤, the received audio signal is muted.
 • When the received signal's code does not match, tone squelch does not open, however, the S-indicator shows signal strength.

⑧ Click 【DTCS】 again to cancel the DTCS squelch.
  • "DTCS" disappears.

• Available DTCS code list

023	054	125	165	245	274	356	445	506	627	732
025	065	131	172	246	306	364	446	516	631	734
026	071	132	174	251	311	365	452	523	632	743
031	072	134	205	252	315	371	454	526	654	754
032	073	143	212	255	325	411	455	532	662	
036	074	145	223	261	331	412	462	546	664	
043	114	152	225	263	332	413	464	565	703	
047	115	155	226	265	343	423	465	606	712	
051	116	156	243	266	346	431	466	612	723	
053	122	162	244	271	351	432	503	624	731	

• [Receiver] screen

IC-PCR1500   **IC-PCR2500**
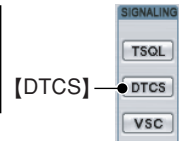
Active band only

【DTCS】

Indicators — Reverse Action indicator
— DTCS squelch indicator
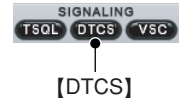
• [Compo] screen

IC-PCR1500   **IC-PCR2500**

MODE/VOL PANEL   **Active band only**

【DTCS】

• [DTCS] screen

❸ Click

❶ Select the desired DTCS code.

❷ Check the check box to turn the Reverse Action ON.

9
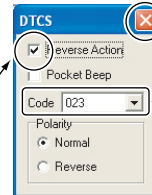
■ DTCS polarity setting

As well as a code setting, the polarity setting is also available for the DTCS operation. When a different polarity is set, the DTCS never releases audio mute even when a signal with a matching code number is received.
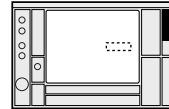
①Click 【FM】 to select FM mode.
②Click 【DTCS】 to turn the DTCS squelch ON.
　• "DTCS" appears in the function display.
③Right-click 【DTCS】 to display the [DTCS] setting screen.
④Select the DTCS polarity from "Normal" and "Reverse" in [Polarity].
⑤Click the close button ([**X**]) to close the [DTCS] setting screen.

• [DTCS] screen

➋ Click

➊ Select the DTCS polarity.
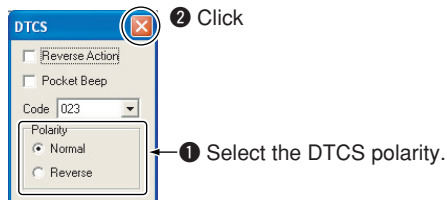
■ Pocket beep operation

This function uses subaudible tones for calling and can be used as a "common pager" to inform you that someone has called while you were away from the receiver.
Pocket beep emission type can be set in the [Audio Setting] screen. (p. 107)

①Click 【FM】 to select FM mode.
②Click 【TSQL】 (or 【DTCS】) to turn the tone (or DTCS) squelch ON.
　• "TSQL" or "DTCS" appears in the function display.
③Right-click 【TSQL】 (or 【DTCS】) to display the [TSQL] (or [DTCS]) setting screen.
④Check the [Pocket Beep] check box to turn the pocket beep function ON.
　• " " appears in the function display.
⑤Click the close button ([**X**]) to close the [TSQL] (or [DTCS]) setting screen.

• [TSQL] screen　　**• [DTCS] screen**

➋ Click　　➋ Click
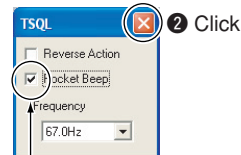
➊ Check the check box to turn [Pocket Beep] ON.
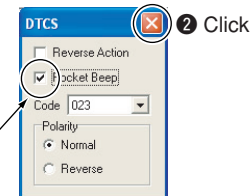
■ **Tone scan operation**

By monitoring a signal using with pocket beep, tone or DTCS squelch, you can determine the tone frequency or DTCS code necessary to open the squelch.

①Click 【FM】 to select FM mode.
②Select the tone type, tone squelch or DTCS to be scanned, then set the desired tone squelch frequency or DTCS code. (pgs. 94, 95)
③Click 【T-SCAN】 to start the tone scan.
  • "AUTO Scan" blinks and 【AUTO】 appears while scanning.
④When the TSQL tone frequency or 3-digit DTCS code is matched, the squelch opens and the tone frequency is temporarily programmed into the selected memory channel.
  • The tone scan pauses when a TSQL tone frequency or 3-digit DTCS code is detected.
  • The decoded TSQL tone frequency or 3-digit DTCS code is used for the tone encoder or tone encoder/decoder depending on the selected tone condition or type in step ②.
⑤To stop the scan, click 【STOP】 or 【T-SCAN】.

☞ **NOTE:** The decoded tone frequency is programmed temporarily when a memory or call channel is selected. However, this will be cleared when the memory/call channel is re-selected.

• **[Receiver] screen**
IC-PCR1500   **IC-PCR2500**

Active band only

【STOP】

SCAN CONTROL
PROG | AUTO | MEMO | T-SCAN | PRIO | WX | PAUSE | STOP
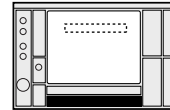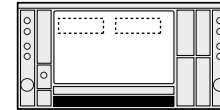
【T-SCAN】   【PAUSE】

IC-PCR1500   Appears
CONDITION: TONE Scan   T-SCAN

Blinks

Appears

IC-PCR2500   Blinks
MEMO 01 : 144 MHz band
BANK 02: Amateur band   T-SCAN
TS 15k
CONDITION: TONE Scan

• **[Compo] screen**
IC-PCR1500   **IC-PCR2500**

METER/SCAN   **MAIN   SUB**

【PAUSE】

PROG | AUTO | MEMO
T-SCAN | PRIO | WX | PAUSE STOP

【STOP】

【T-SCAN】

Blinks
CONDITION: TONE Scan   T-SCAN   Appears

9

■ Operation

The band scope function has 2 modes, Frequency and Time modes.

When Frequency mode is selected, the band scope function sweeps in the specified span from the displayed frequency and allows you to visually check the received signal strength on the function display.

When Time mode is selected, the band scope function displays the received signal strength in the specified time period on the function display while sweeping.

• When SSB or CW mode is selected, receive audio is muted while monitoring the band scope.
• According to the setting combination of the sweep width and sweep tuning step, some signals may not be displayed on the function display during sweeping.
• During IC-PCR2500's dualwatch operation, band scope function is available on Main band only.

◇ Using Frequency mode

① Click 【FREQ】 to select Frequency mode.
 • Time mode is selected when 【TIME】 is clicked.
② Click the sweep start button (【▶】) to begin a sweep; signal conditions appear starting from the center of the range.
 • Conditions over the entire set frequency span can be observed around the center frequency of the currently received frequency.
 • When a strong signal is received, the waveform is indicated small.

③ Click 【SPAN +】 or 【SPAN –】 to select the sweep width through SPAN1 (±25.0 kHz) to SPAN5 (±500 kHz).*
 • Choose SPAN1 when band conditions are crowded (many signals are present); choose SPAN5* when few signals are present.
 *When the wide band scope function is selected, sweep width expands to SPAN8 (±5 MHz). (p. 103)
④ Click 【▲】(TS) or 【▼】(TS) to select the sweep tuning step.
 • "LIMIT" appears when a selected sweep tuning step is outside the automatic sweep step setting. (p. 102)
⑤ Click the waveform to select the frequency of the signal.
 • Click 【❙❙】 to pause a sweep and monitor the frequency. Repeat to resume the sweep. ("PAUSE" is displayed.)
 • While pausing the band scope, you can also select the displayed signal frequency by clicking the waveform.
  In this case, the selected frequency does not move, and the previously received frequency is kept to center. So you can select the previously received frequency simply by clicking a center.
⑥ Click the sweep stop button (【■】) to stop a sweep.

◇ Using Time mode

① Click 【TIME】 to select Time mode.
 • Frequency mode is selected when 【FREQ】 is clicked.
② Click the sweep start button (【▶】) to begin a sweep; the received signal strength is displayed.
③ Click 【TIME +】 or 【TIME –】 to select the time scale for indication through 100 min, 30 min, 10 min and 3 min.
④ Click the sweep stop button (【■】) to stop a sweep.

◇ **About the limit indicator**

When a selected sweep tuning step is outside the automatic sweep step setting (p. 102), "LIMIT" appears in the band scope display during the band scope operation.

• **[Receiver] screen**
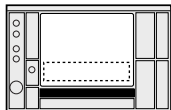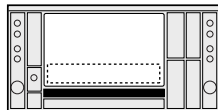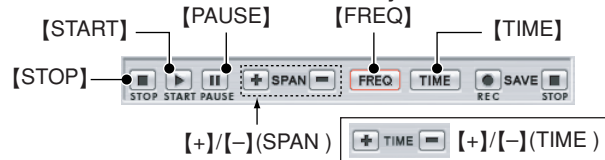
IC-PCR1500   IC-PCR2500

Active band only

【START】 【PAUSE】 【FREQ】 【TIME】

【STOP】

【+】/【−】(SPAN)   【+】/【−】(TIME)

• **[Compo] screen**

IC-PCR1500   IC-PCR2500

METER/SCAN   Active band only

【STOP】 【PAUSE】 【FREQ】 【TIME】

【START】   【+】/【−】(SPAN)   【+】/【−】(TIME)

• **[Receiver] screen**
Frequency

Sweep step indicator

LIMIT indicator

Center frequency

Time   Time interval

• **[Compo] screen**
Frequency   Center frequency   LIMIT indicator

Sweep step indicator

Time   Time interval

10
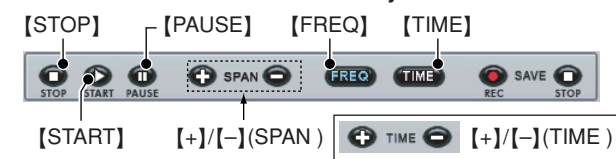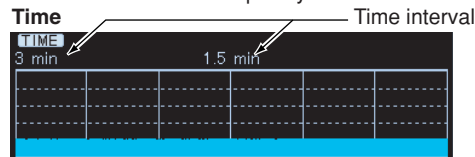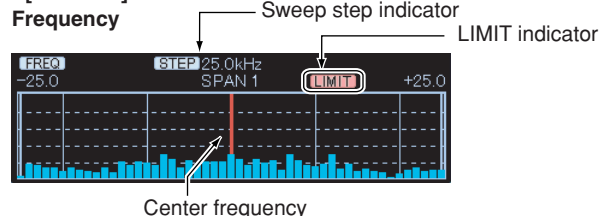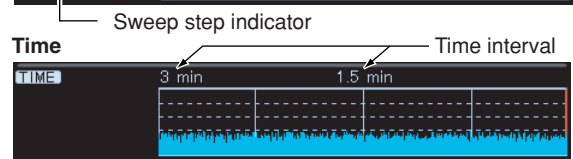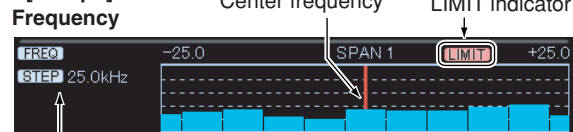
■ Pick up signal function

The pick up signal function provides quick frequency setting during the band scope operation. By clicking the desired waveform, the clicked point frequency is set to the receive frequency.

While pausing the band scope, you can also select the displayed signal frequency by clicking the waveform.
In this case, the selected frequency does not move, and the previously received frequency is kept to center. So you can select the previously received frequency simply by clicking a center.

• **[Receiver] screen**
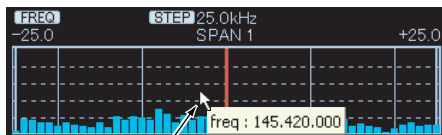
Click

• **[Compo] screen**
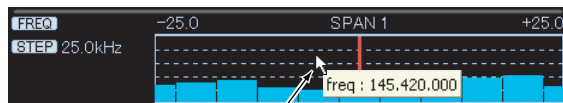
Click

■ Saving the sweep data

The band scope sweep data can be saved in CSV (Comma Separated Values) file format.

①Click the sweep start button (【▶】) to begin a sweep. (p. 98)
  • Frequency mode is selected when 【FREQ】 is clicked, and Time mode is selected when 【TIME】 is clicked.
②Click the recording start button (【●】) to start saving the receiving signal contents while sweeping.
  • When Time mode is selected in step ①, the save time interval can be selected— right click the 【TIME】 button to indicate the [Scope (TIME)] setting screen, then select the desired save time interval. (e.g. when "1.0 Sec" is selected, time scope data is saved every 1 sec.)
  • You can save the sweeping contents with the desired file name in the [File Name] box.
  • The following data are saved.
   - Recording start day and time
   - Center frequency
   - Sweeping frequency
   - Sweeping time
   - Electrolytic strength
③Click the recording stop button (【■】) to stop recording.

• **[Receiver] screen**

IC-PCR1500   **IC-PCR2500**

Active band only

【TIME】   【STOP】

【START】   【REC】 Click

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**

METER/SCAN   **Active band only**

【TIME】   【STOP】

【START】   【REC】 Click
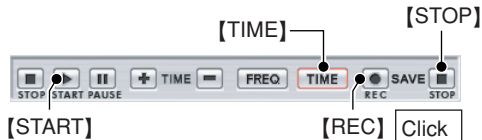
When Time mode is selected.

Right click 【TIME】
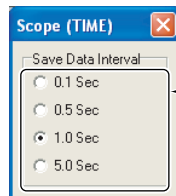
Scope (TIME)

Save Data Interval
- ○ 0.1 Sec
- ○ 0.5 Sec
- ● 1.0 Sec
- ○ 5.0 Sec

Click to select the desired save time interval.

Save As

❶ Select the desired folder.

Save in: IC-PCR1500

Test1
Test2

❷ Type a name for the file   ❸ Click

File name: Test3
Save as type: CSV (*.csv)

Save
Cancel

■ Changing the automatic sweep step limit

The frequency steps used while sweeping are automatically set according to the tuning step. However, these steps can be defined using the [Scope (FREQ)] setting screen on the setting screen.

①Right-click the 【FREQ】 button to call up the [Scope (FREQ)] setting screen if it is not displayed.
②Click the desired frequency step range in the [Automatic Sweep Step Limit].
  • The sweep step range can be selected from one of 1–100 kHz, 1–50 kHz or 1–25 kHz.
③Click the close ([**X**]) button to close the setting screen.

• **[Scope (FREQ)] screen**

Scope (FREQ)

Automatic Sweep Step Limit
  ● 1kHz - 100kHz
  ○ 1kHz - 50kHz
  ○ 1kHz - 25kHz

Wide Band Scope
  ☑ Enable
  ☑ AF Monitor

  ☐ WFM Monitor   ☐ Step = 1/2 TS
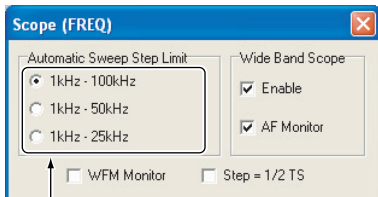
Click to the desired sweep step.

• **[Receiver] screen**

IC-PCR1500   **IC-PCR2500**

Active band only

STOP START PAUSE   ＋ SPAN ー   FREQ   TIME   ● SAVE ■
                                                    REC   STOP

【FREQ】 Right click

• **[Compo] screen**

IC-PCR1500   **IC-PCR2500**

METER/SCAN   **Active band only**

STOP START PAUSE   ＋ SPAN ー   FREQ   TIME   ● SAVE ■
                                                    REC   STOP

【FREQ】 Right click

■ Wide band scope function

The wide band scope function is available to sweep a wide band scope (±1, 2 or 5 MHz.)
While sweeping the band scope, AF monitor function is also available.

① Right-click the 【FREQ】 button to call up the [Scope (FREQ)] setting screen if it is not displayed.
② Check the [Enable] check box in [Wide Band Scope] to enable the wide band scope function.
  • Check the [AF Monitor] check box to monitor the receiving frequency.
③ Click the close ([**X**]) button to close the setting screen.

• **[Scope (FREQ)] screen**

❸ Click
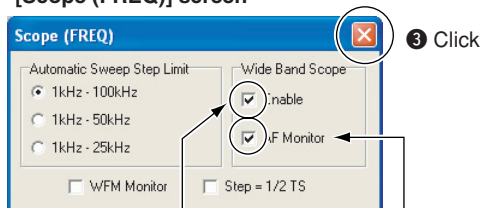
❶ Check the check box to turn [Wide Band Scope] ON.

❷ Check the check box to turn [AF Monitor] ON.

■ Band scope options

The following optional functions are available for the band scope function. These settings can be defined using the [Scope (FREQ)] screen.

● **WFM Monitor function**
  The WFM monitor function allows spectrum inidication of the occupied bandwide for rhe received WFM signal.
● **1/2 sweep step function**
  This function sets the sweep step in half of the tuning step, doubling the sweep resolution.

① Right-click the 【FREQ】 button to call up the [Scope (FREQ)] setting screen if it is not displayed.
② Check the desired check boxes in [Option], then click the close ([**X**]) button to close the setting screen.

• **[Scope (FREQ)] screen**

❷ Click
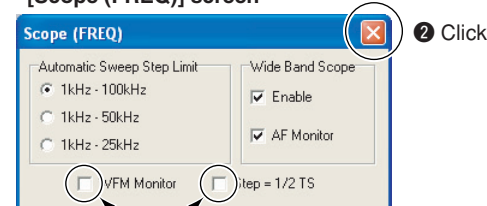
❶ Check the check boxes.

11 OTHER FUNCTIONS

■ DTMF Operation

The control software can be remotely controlled using DTMF codes in FM mode. When receiving a programmed DTMF code, the control software displays a message, activates a program/screen saver or plays a Windows sound file.

Only the IC-PCR2500 or IC-R2500 can be installed optional UT-108 DTMF DECODER unit. When the IC-PCR2500 or IC-R2500 is installed the optional UT-108, DTMF operation for sub band is available.

①Click 【FM】 to select FM mode.
② Click the 【DTMF】 icon on the tool bar to call up the [DTMF Remote Commander] screen if it is not displayed.
③Click 【ON/OFF】 on the [DTMF Remote Commander] screen to toggle the DTMF decoder circuit ON and OFF.
  • The indicator lights when the function is ON.
④Click the 【REMOTE】 button to toggle the DTMF remote function ON and OFF.
  • The indicator lights when the function is ON.

NOTE: When receiving a signal including a DTMF code, the received code is displayed in the DTMF indicator window. Up to 24 digits of the latest received DTMF code are displayed.

IC-PCR1500   IC-PCR2500

【DTMF】

【DTMF】
for Main band
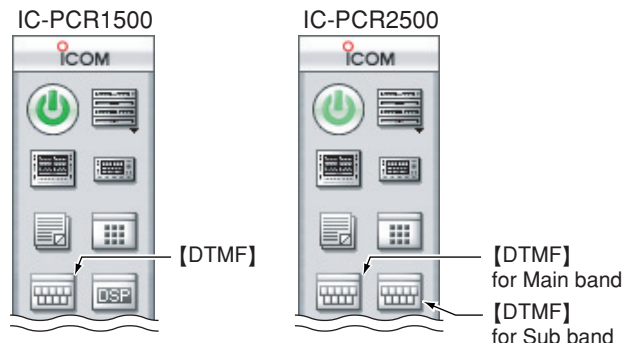
【DTMF】
for Sub band

• [DTMF Remote Commander] screen
IC-PCR1500
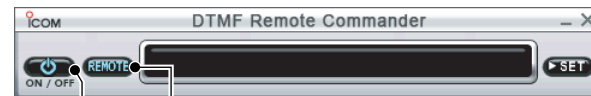
【ON/OFF】 【REMOTE】

IC-PCR2500 for Main band
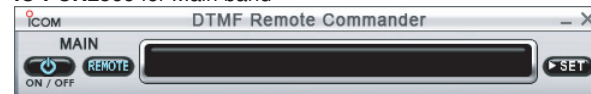
For Sub band
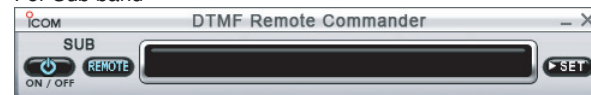
◇ **Setting the DTMF receive code**

① Click the 【DTMF】 icon on the tool bar to call up the [DTMF Remote Commander] screen if it is not displayed.

② Click 【SET】 to call up the receive code setting screen.

③ Click the desired tab from 【1】 to 【5】 for the receive code setting, then enter the desired key code in the [Receive CODE] field using the keyboard.

• 0 to 9, A, B, C, D, E (∗) and F (#) can be used.

④ Select the desired action from 'Display Message', 'Action Execute File' or 'Play.WAV File' when the received code is matched to the [Receive CODE] setting.

(a) 'Display Message'

To display a entered message in the text box.

(b) 'Action Execute File'

To execute a file, enter the file name, including full path name, or select a desired file after pushing the 【...】 button.

(c) 'Play.WAV File'

To play a file, enter the file name, including full path name, or select a desired file after pushing the 【...】 button.

⑤ Click the close button ([**X**]) to close the [DTMF Remote Commander] screen.

• **[DTMF Remote Commander] screen**

The received DTMF code is displayed.

❶ Click

❺ Click

IC-PCR2500 Main band screen

❷ Select

❸ Enter

❹ Select
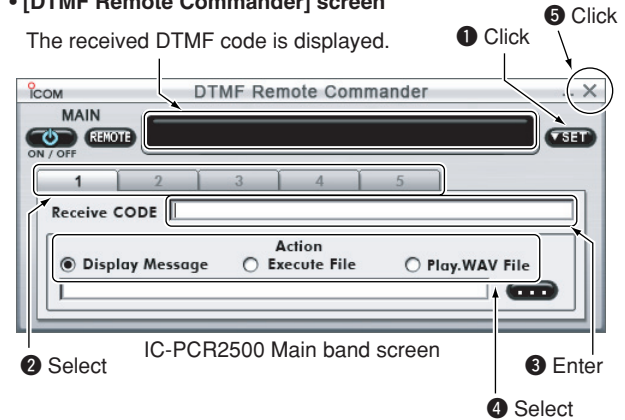
■ Audio setting screen

The Audio Setting screen adjusts the audio level and mute condition of the Main unit and the connected PC, and also, the confirmation beep ON/OFF, the pocket beep emission type and the pocket beep repeating times can be set.

◇ The AF gain/mute setting

① Click the 【Audio Setting】 icon on the tool bar to call up the [Audio Setting] screen if it is not displayed.

② Click the [Receiver] or [PC] radio button to select the AF gain setting for the Main unit or PC.

③ Click 【◄】/【►】 to adjust the AF gain level.
   • IC-PCR2500 can be adjusted the AF gain level for Main band or Sub band independently.

④ Check the [Mute] check box to turn the mute function ON or OFF.
   When this function is turned ON, the received audio signal is muted.
   • "MUTE" appears.

⑤ Click the close button ([**X**]) to close the Audio Setting screen.

IC-PCR1500   IC-PCR2500

【Audio Setting】

• **[Audio setting] screen**
IC-PCR1500

❸ Click

Check the check box to turn the mute function ON.

❷ Click 【◄】/【►】 to set the audio volume.

❶ Click the radio button for the Main unit or PC's AF gain setting.

IC-PCR2500

❸ Click

❷ Click 【◄】/【►】 to set the audio volume.

Check the check box to turn the mute function ON.

Check the check box to turn the MAIN/SUB Mix function ON.

❶ Click the radio button for the Main unit or PC's AF gain setting.
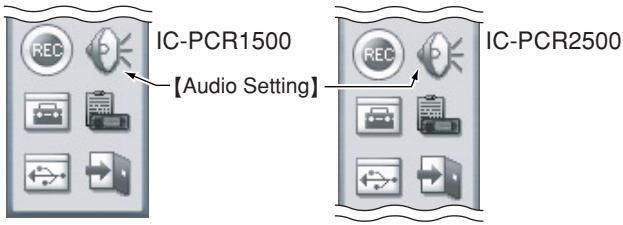
◇ Beep settings

● **Confirmation Beep**
This function sets the confirmation beep ON or OFF.
● **Pocket Beep**
This function sets the pocket beep emission type.
● **Repeat (1–60)**
This function sets the number of times for pocket beep re-peating.

① Call up the [Audio Setting] screen if it is not displayed as at left.
② Check the [Confirmation Beep] check box to turn the con-firmation beep emission ON.
③ Enter the wave file name in the [Pocket Beep] text box di-rectly, or click [...] to select the desired wave file to set the pocket beep emission type.
④ Enter the beep repeat times from 1 to 60 in [Repeat (1–60)].
⑤ Click the close button ([**X**]) to close the [Audio Setting] screen.

• **[Audio setting] screen**   ❹ Click

Audio Setting

AF GAIN VR / MUTE Button Control
⊙ Receiver

Beep
☑ Confirmation Beep

Pocket Beep

| pocket.wav | ... |

Repeat (1-60) 30

❷ Enter the wave file name, or click [...] to se-lect the desired wave file.

❸ Enter the beep repeat times

❶ Check the check box to turn the confirmation beep emission ON.

11
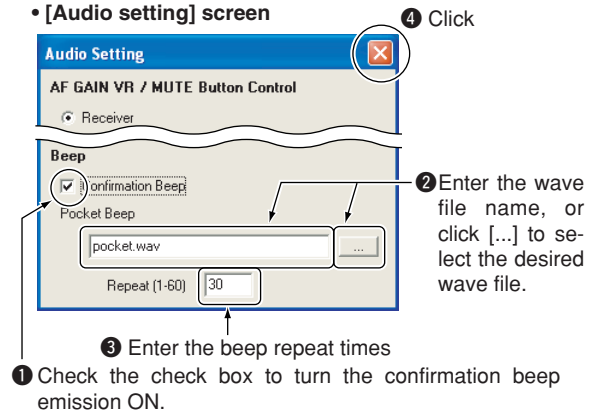
11 OTHER FUNCTIONS

◇ When playing through the computer's speaker

The [Audio Device] setting is necessary when the audio is emitted via the built-in or connected PC speaker whenever the USB cable is connected.

NOTE: The sound board should be installed into the PC to hear sound via the PC speaker. Please refer to your PC's instruction manual for details.

① Click the 【Power】 icon on the tool bar to disconnect the Main unit, then turn the Main unit's power OFF.
  • The power indicator of the Main unit goes out.

● **Microsoft® Windows® XP**
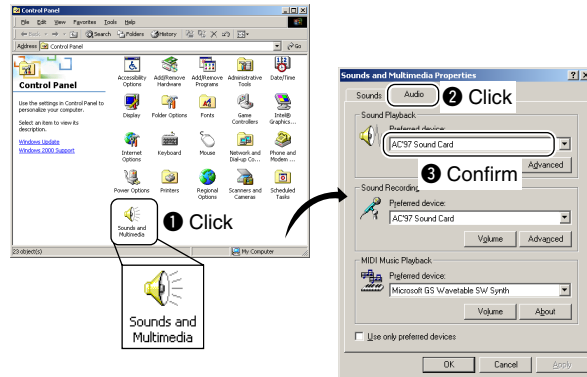
② Click the [Start] button and click [Control Panel] in [My computer].

③ Click [Sounds, Speech, and Audio Devices], then click [Sounds and Audio Devices].

④ Click the [Audio] tab, and confirm the "Default device" in [Sound playback].
  • Making a note is recommended.

⑤ Click the close button ([**X**]) to close the [Sounds and Audio Devices Properties] screen.

● **Microsoft® Windows® 2000/Me**

②Click the [Start] button and click [Control Panel] in [Settings].

③Double click on [Sounds and Maltimedia], then click the [Audio] tab.

④Confirm the "Preferred device" in [Sound Playback].
　• Making a note is recommended.

⑤Click the close button ([**X**]) to close the [Sounds and Multi-media Properties] screen.
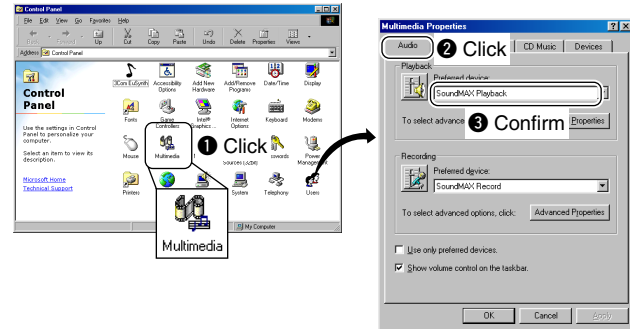

☞ Continued to step ⑥ (as right)

● **Microsoft® Windows® 98SE**

②Click the [Start] button and click [Control Panel] in [Settings].

③Double click on [Multimedia], then click the [Audio] tab.

④Confirm the "Preferred device" in [Sound Playback].
　• Making a note is recommended.

⑤Click close button ([**X**]) to close the [Sounds and Maltime-dia Properties] screen.

☞ Continued to step ⑥ (as below)

⑥ Turn the receiver's main unit ON, then click the [Power] icon on the tool bar to turn the IC-PCR1500/PCR2500 ON.
　• The power indicator of the main unit lights green.

⑦ Repeat steps ② to ③ according to your PC's OS.

⑧ Select the confirmed device, click [OK].

NOTE: The folder, item names may differ depending on the PC. Please refer to your PC's instruction manual for details.

■ Multi channel monitor

The receiver has 250 multi channels. A total of 10 memory banks are available for usage by group, etc., and 25 channels are assigned into a bank.

The multi channel monitor function scans the programmed multi channels, and makes you to check the received signal strength level on the channels visually.
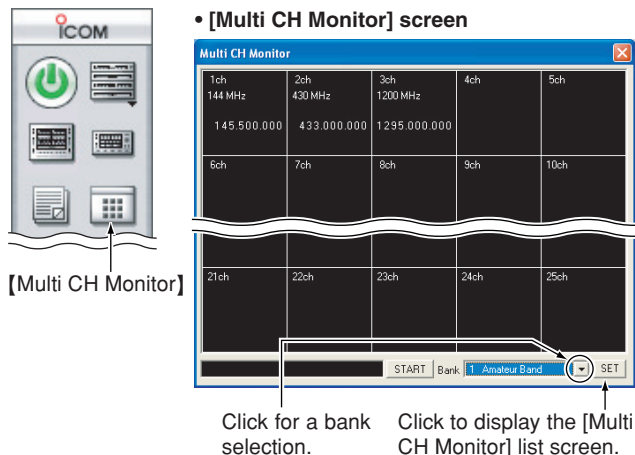
◇ Multi channel programming

① Click the 【Multi CH Monitor】 icon on the tool bar to call up the [Multi CH Monitor] screen if it is not displayed.

② Click 【SET】 to display the [Multi CH Monitor] list screen, then program the desired items.

③ Click the close button ([X]) to close the [Multi CH Monitor] list screen.

　• The channel name and frequency are displayed on the programmed channel.

④ Click the close button ([X]) to close the [Multi CH Monitor] screen.

• Multi channel programming details

The multi channel programming is the same as the memory channel programming. See the following pages for the multi channel programming details.

　• Bank name programming (p. 75)
　• Editing the memory list (p. 72)
　• Saving memory channel data (p. 78)
　• Opening memory channel data (p. 78)
　• Creating a new memory channel data file (p. 78)
　• Printing a memory channel (p. 78)
　• Importing/Exporting a CSV file (p. 79)

【Multi CH Monitor】

• [Multi CH Monitor] screen

Click for a bank selection.

Click to display the [Multi CH Monitor] list screen.

• [Multi CH Monitor] list screen
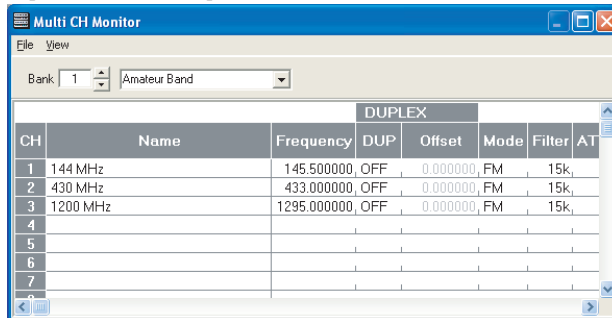
◇ Multi channel monitor operation

① Click the 【Multi CH Monitor】 icon on the tool bar to call up the [Multi CH Monitor] screen if it is not displayed.
　・The channel name and frequency are displayed on the programmed channel.
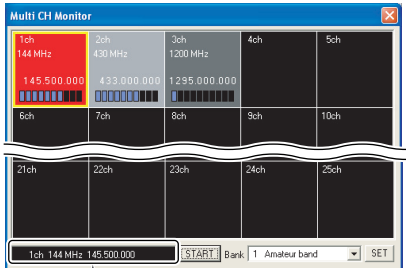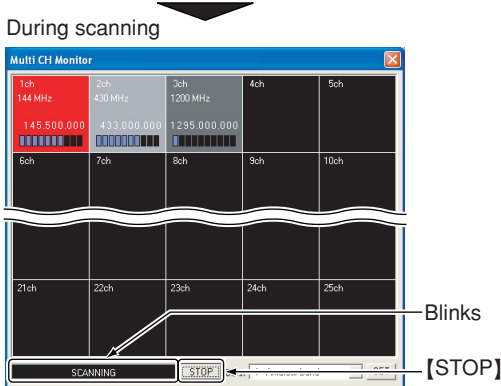② Click 【▼】 to select the desired bank to monitor.
③ Click the 【START】 button to start scan.
　▨ While scanning, the receive audio is muted.
　・"SCANNING" blinks in the information box.
　・The 【START】 button changes to the 【STOP】 button while scanning.
　・The background color changes according to the receiving signal strength level.
　　- Black　　 : Non programmed or no signal channel.
　　- Dark gray : S-meter level is below S3.
　　- Pale gray : S-meter level is above S3/below S9.
　　- Red　　　 : S-meter level is above S9.
④ Click the desired channel screen to monitor.
　・Scan is cancelled.
⑤ Click the 【STOP】 button to stop the scan.

【START】
Click for a bank selection.

During scanning

Blinks
【STOP】

The selected channel information is displayed.
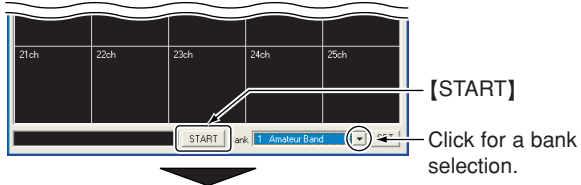
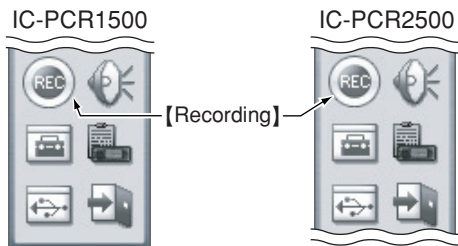## ■ **Recording operation**

The receiver has a recorder function that enables you to record a signal. The recording data can be saved into the PC.
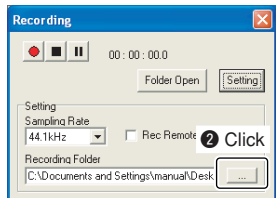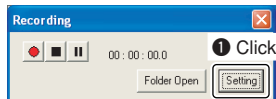
◇ **Recording a receiving signal**

① Receive a signal. (p. 47)

② Click the 【Recording】 icon on the tool bar to call up the [Recording] screen if it is not displayed.

IC-PCR1500   IC-PCR2500

【Recording】

③ Click 【Setting】 to display the setting menu.

④ Click [...], then select the desired folder in which the recording data is saved.

   After the folder selection, click [OK].

⑤ Click the recording start button (【●】) to start recording the receiving signal.

   • IC-PCR2500 can record the receiving signal for Main band or Sub band independently.
   • While recording, the recording counter and a file name are displayed.
   • Click [Ⅱ] to pause a recording. Repeat to resume recording.
   • The recording data is saved in WAVE format.

⑥ Click the recording stop button (【■】) to stop recording.

• [Recording] screen

IC-PCR1500   IC-PCR2500

❶ Click

❶ Click

❷ Click

❷ Click

Browse For Folder

Select Recording Folder

Desktop
  My Documents
  My Computer
  My Network Places
  New Folder   ❸ Select

❹ Click

Make New Folder   OK   Cancel

• **[Recording] screen** (While recording)
IC-PCR1500

【PAUSE】 — Recording counter

【REC】

00 : 00 : 03.5   051216_001.wav — File name

【STOP】

Setting
Sampling Rate
44.1kHz   □ Rec Remote
Recording Folder
C:\Documents and Settings\manual\Des

IC-PCR2500

【PAUSE】 — Recording counter

【REC】

MAIN   00 : 00 : 30.3   060416_001.wav
SUB   00 : 00 : 27.3   060416_002.wav

【STOP】   Folder Open   Setting   File name

Setting
□ MAIN/SUB Stereo Recording
Sampling Rate
MAIN 44.1kHz   □ Rec Remote
Sampling Rate
SUB   44.1kHz   □ Rec Remote
Recording Folder
C:\Documents and Settings\manual\Desktop\IC-

◇ **Stereo Recording (IC-PCR2500 only)**
You can record the receiving signal as stereo sound. The Main and Sub bands must be set to the same frequency.

• **[Recording] screen**
IC-PCR2500   ➋ Click the 【REC】 button.
(Only Main side is enabled.)

MAIN   00 : 00 : 00.0
SUB   00 : 00 : 00.0

Folder Open   Setting

Setting
□ MAIN/SUB Stereo Recording

➊ Check the box to turn the stereo recoding function ON.
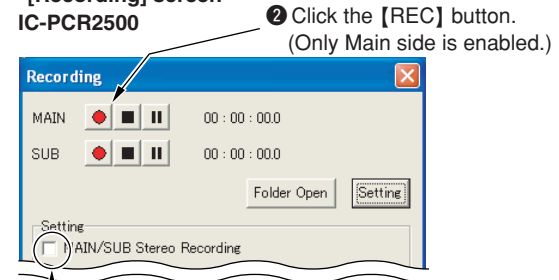
◇ **Playing the recording data**
You can play back the recorded signal with the installed media player (e.g. Windows Media® Player, etc.) in the PC. Please refer to the media player's instruction manual for details.

■ Sampling Rate setting

Sampling Rate setting is expressed in samples per second, and determines the sound quality.

Although a higher sampling rate provides a better quality sound than a lower sampling rate, the file size becomes larger.

① Receive a signal. (p. 47)

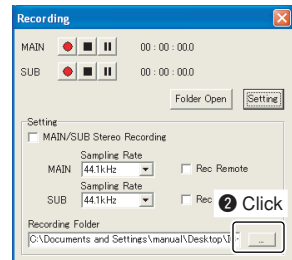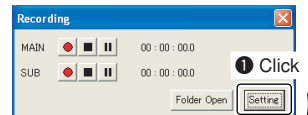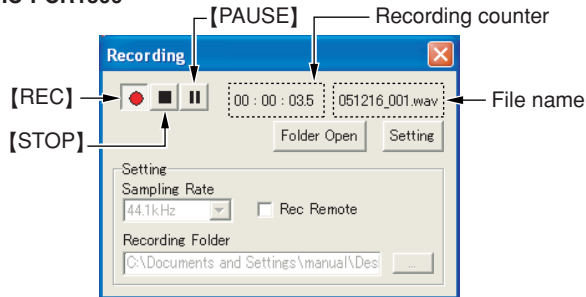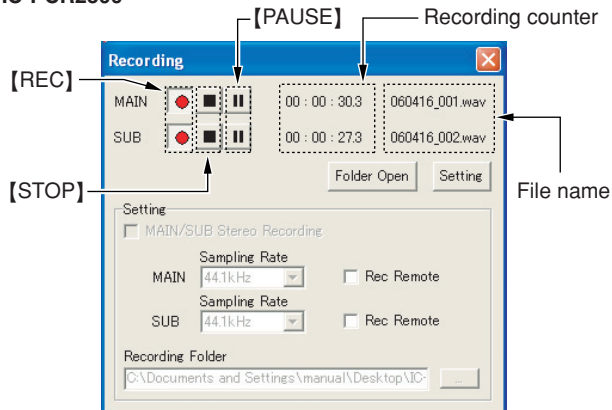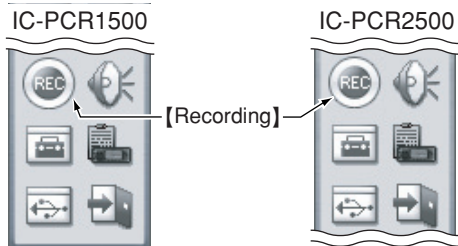② Click 【Recording】 icon on the tool bar to call up the [Recording] screen if it is not displayed.

IC-PCR1500   IC-PCR2500

【Recording】

③ Click 【Setting】 to display the setting menu.

④ Click [▼] in [Sampling Rate], then select the desired rate from the displayed menu.

• The higher rate setting enables High-quality sound.

• **[Recording] screen**

  IC-PCR1500   **IC-PCR2500**

  ❶ Click
  ❷ Click
  ❸ Select

■ Remote recording function

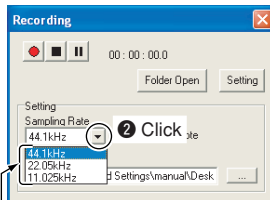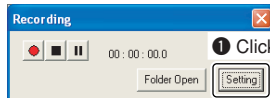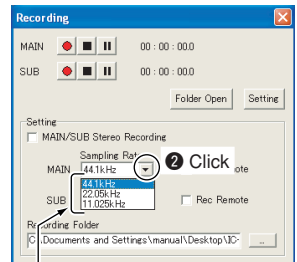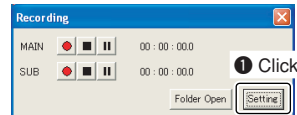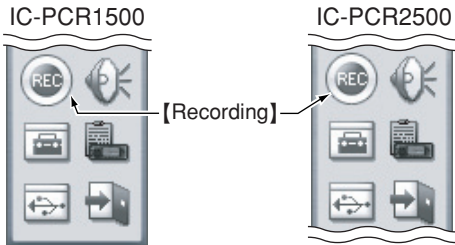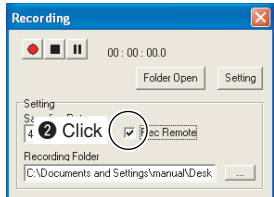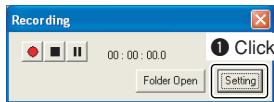The remote recording function pauses recording automatically when no signal is received, and resumes after the signal appears.

① Receive a signal. (p. 47)
② Click the 【Recording】 icon on the tool bar to call up the [Recording] screen if it is not displayed.

IC-PCR1500   IC-PCR2500

【Recording】

③ Click 【Setting】 to display the setting menu.
④ Click the [Rec Remote] check box to turn the remote recording function ON and OFF.
  • "✔" appears when the remote recording function is turned ON.

• **[Recording] screen**

IC-PCR1500   **IC-PCR2500**

Recording

● ■ II   00 : 00 : 00.0   ❶ Click
                    Folder Open   Setting

Recording

MAIN   ● ■ II   00 : 00 : 00.0
SUB   ● ■ II   00 : 00 : 00.0   ❶ Click
                    Folder Open   Setting

Recording

● ■ II   00 : 00 : 00.0
                    Folder Open   Setting
Setting
Sa...   ❷ Click   ☑ Rec Remote
Recording Folder
C:\Documents and Settings\manual\Desk   ...

Recording
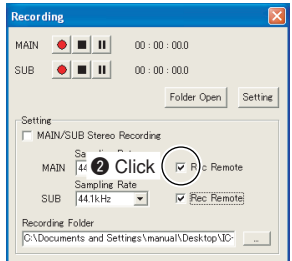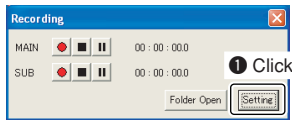
MAIN   ● ■ II   00 : 00 : 00.0
SUB   ● ■ II   00 : 00 : 00.0
                    Folder Open   Setting
Setting
☐ MAIN/SUB Stereo Recording
                    Sa...
MAIN   44   ❷ Click   ☑ Rec Remote
        Sampling Rate
SUB   44.1kHz   ▼   ☑ Rec Remote
Recording Folder
C:\Documents and Settings\manual\Desktop\IC-   ...

■ Short cut key operation

Shortcut keys give you faster and easier operation from a PC key board.

◇ A shortcut key assignment

① Click the 【Setting】 icon on the tool bar to call up the [Setting] screen if it is not displayed.

② Click the 【Shortcut】 tab to display the shortcut key list.

③ Select the category from 'General,' 'Tuning,' 'Mode,' 'Scan' and 'Recording' in [Category].

④ Select the desired action in [Action].
  • Selectable items are differ according to [Category] setting.

⑤ Enter the desired shortcut key or combination of keys that executes a specific function in [Key].
  • [Ctrl], [Shift] and [Alt] keys act as shortcut keys with another key combination.
  • Some keys cannot be set as shortcut key.

⑥ Click [Add] to add the shortcut key or combination of keys to the list.

⑦ Click close button ([**X**]) to close the [Setting] screen.

IC-PCR1500   IC-PCR2500

【Setting】
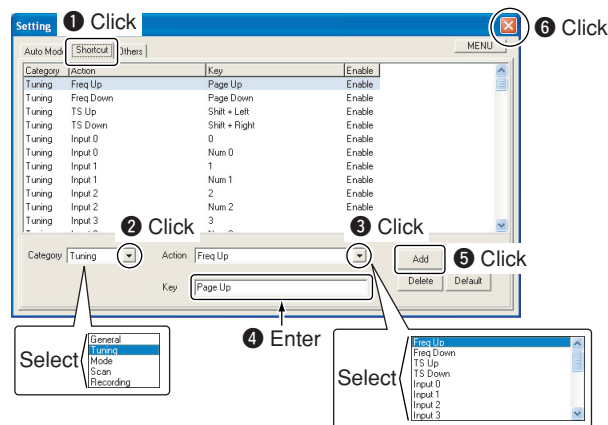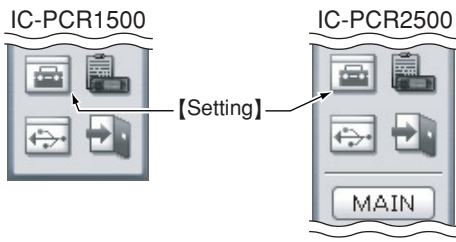
[Example]: Assign "AM mode selection" to [Ctrl] + [A] key
① Select 'Mode' in [Category].
② Select 'AM' in [Action].
③ Click [Key] text box, then push [Ctrl] and [A] key.
  • "Ctrl + A" is indicated in the [Key] text box.
④ Click [Add] to add the shortcut combination keys to the list.
  • [Add]   : Add the assigned shortcut key to the list.
  • [Set]   : Set the changing of the shortcut key content.
  • [Delete] : Delete the shortcut key from the list.
  • [Default]: Reset the shortcut list to the default setting.

■ ANF function

The ANF (Automatic Notch Filter) function automatically attenuates beat tones, tuning signals, etc., even if they are moving. This function can be activated in SSB, AM, FM modes.

① Click the 【DSP】 icon on the tool bar to call up the [DSP Digital Filter] screen if it is not displayed.
② Click 【ON/OFF】 to turn the DSP (Digital Signal Processor) function ON.
  • "ON/OFF" indicator lights.
③ Click 【ANF】 to turn the ANF function ON.
  • ANF indicator lights.

IC-PCR1500   IC-PCR2500

【DSP】

• **[DSP Digital Filter] screen**

【ON/OFF】   【ANF】

■ NR function

The NR (Noise Reduction) function reduces noise components and picks out desired signals which are buried in noise. The received AF signals are converted to digital signals and then the desired signals are separated from the noise. This function is available for all operating modes.

The NR function may result in audio signal masking. Set the noise reduction level for maximum readability.

① Click the 【DSP】 icon on the tool bar to call up the [DSP Digital Filter] screen if it is not displayed.
② Click 【ON/OFF】 to turn the DSP (Digital Signal Processor) function ON.
  • "ON/OFF" indicator lights.
③ Click 【NR】 to turn the NR function ON.
  • NR indicator lights.

• **[DSP Digital Filter] screen**
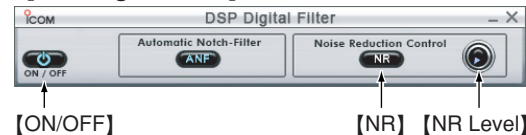
【ON/OFF】   【NR】 【NR Level】

During IC-PCR2500's dualwatch operation, DSP functions are available on Main band only.
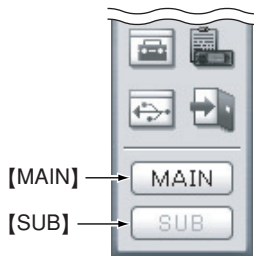
11
12

■ Digital mode operation

The IC-PCR2500 can operate in DV*1 mode or P25*2 mode when the optional UT-118 or UT-122 is installed.

*1: The optional UT-118 is required.

*2: The optional UT-122 is required.
　　Some versions come with the UT-122 installed.

➡ Click the 【MAIN】 icon on the tool bar to select the Main band.

【MAIN】

【SUB】

Using [Receiver]/[Compo] screen
➡ Click 【DV】 or 【P25】 to select the desired digital mode.

Using [Simple] screen
➡ Click 【MODE】 indication to display a mode list, then select the desired digital mode.

• [Receiver] screen
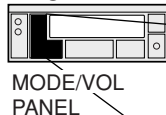
Single band　　　**Dualwatch**

Main band only

MODE
SSB
CW
AM
WFM
FM
DV
P25
AUTO-M

• [Compo] screen

Single band　　　**Dualwatch**

MODE/VOL PANEL

Main band only

MODE
SSB
CW
AM
WFM
FM　DV
AUTO-M　P25
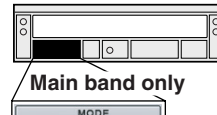
MODE
SSB　CW　AM　DV
WFM　FM　AUTO-M　P25

• [Simple] screen

Single band　　　**Dualwatch**
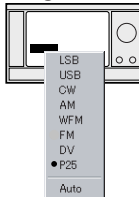
Main band only

Mode indication

MODE FM

LSB
USB
CW
AM
WFM
FM
DV
● P25
Auto

LSB
USB
CW
AM
WFM
FM
DV
● P25
Auto
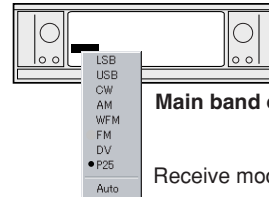
Receive mode list

■ DV mode setting

The IC-PCR2500 can receive the signals in DV* mode and low-speed data. If the transmit signal is included the GPS data, position data receiving is available.
*The optional UT-118 is required.

① Click the 【Setting】 icon on the tool bar to call up the [Setting] screen if it is not displayed.
② Click the 【DV】 tab to display the DV setting.

【Setting】

• **[Setting] screen**
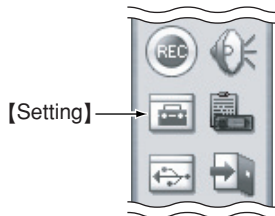
❶ Click

❸ Click

❷ Set the setting

Select the optional unit power setting.

Set the transffer setting for slow speed data to Com port.

Select the communication speed between receiver and PC for low speed data communication.

Select the monitor setting for DV mode.

Check the check box to turn the stanby beep emission ON.

Check the check box to turn the RX call sign and Message indication ON, when received.

13

■ DV digital squelch function

While in DV mode operation, the digital call sign (DSQL) or digital code squelch opens only when receiving a voice signal with the same pre-programmed digital call sign or code, respectively.

◇ Digital squelch setting

①Click 【DV】 to select DV mode.

②Click 【DSQL】 to turn the digital squelch ON.
   • "DSQL" (or "CSQL") appears in the function display.

③Right-click 【DSQL】 to display the [DV Digital SQL] setting screen.

④Check the [DSQL] (or [CSQL]) check box to select the desired squelch type.

⑤Edit the specific call sign for DSQL (or desired code for CSQL).
   • 0 to 99 code are available for CSQL.

⑥Check the [Pocket Beep] check box to turn the pocket beep function ON, if desired.
   • "(())" appears in the function display.

⑦Click the close button ([X]) to close the [DV Digital SQL] setting screen.

⑧When the received signal includes a maching call sign (or code), squelch opens and the signal can be heard.
   • When the received signal's call sign (or code) is not matched, digital squelch does not open, however, the S-indicator shows signal strength.

⑨Click 【DSQL】 again to cancel the digital squelch.
   • "DSQL" (or "CSQL") disappears.

Multi-function receiver/Component screens only

• [Receiver] screen

Single band   Dualwatch
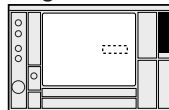
                     Main band only

Indicators

DSQL ← Digital call sign squelch indicator

CSQL ← Digital code squelch indicator
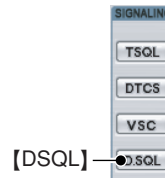
【DSQL】

• [Compo] screen

Single band   Dualwatch

MODE/VOL PANEL   Main band only

【DSQL】

• [DV Digital SQL] screen

Digital call sign squelch   Digital code squelch
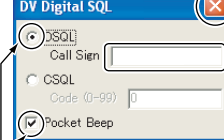
❹ Click   ❹ Click

❸ Check the check box to turn the [Pocket Beep] ON.   ❸ Check the check box to turn the [Pocket Beep] ON.
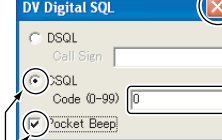
❷ Enter the call sign.   ❷ Enter the digital code.

❶ Click to select the squelch type.   ❶ Click to select the squelch type.

■ P25 mode setting

The IC-PCR2500 can receive in P25* mode.
*The optional UT-122 is required. Some versions already come with
 the UT-122 installed.

① Click the 【Setting】 icon on the tool bar to call up the [Set-
ting] screen if it is not displayed.
② Click the 【P25】 tab to display the P25 setting.

【Setting】

• **[Setting] screen**

❸ Click

❶ Click

Auto Mode | Shortcut | DV | P25 | Others | MENU

RX ID Display
Hex
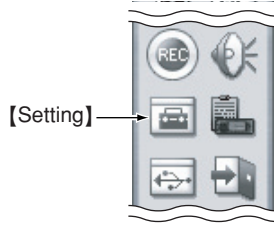
❷ Set the setting

Option Unit Power
Auto
ON

Select the optional unit
power setting.

Check the check box to turn the hexadecimal indication ON

Check the check box to turn the RX ID indication ON,
when received.

13

■ P25 digital squelch function

Multi-function receiver/Component screens only

While in P25 mode operation, 2 types of digital squelch, NAC or Selective, are available.

◇ Digital squelch setting

① Click 【P25】 to select P25 mode.

② Click 【DSQL】 to turn the digital squelch ON.
  • "NAC" (or "SEL") appears in the function display.

③ Right-click 【DSQL】 to display the [P25 Digital SQL] setting screen.

④ Check the [NAC] (or [SEL]) check box to select the desired squelch type.

⑤ Edit the desired digital code.
  • 0 to FFF code are available for NAC.

⑥ Check the [Pocket Beep] check box to turn the pocket beep function ON, if desired.
  • "((•))" appears in the function display.

⑦ Click the close button (【X】) to close the [P25 Digital SQL] setting screen.

⑧ When the received signal includes a matching digital code, squelch opens and the signal can be heard.
  • When the received signal's call sign (or code) is not matched, digital squelch does not open, however, the S-indicator shows signal strength.

⑨ Click 【DSQL】 again to cancel the digital squelch.
  • "NAC" (or "SEL") disappears.

• [Receiver] screen

Single band   **Dualwatch**

Indicators   **Main band only**   【DSQL】

NAC ←— NAC squelch indicator
SEL ←— Selective squelch indicator

• [Compo] screen

Single band   **Dualwatch**

MODE/VOL PANEL   **Main band only**

【DSQL】

SIGNALING
TSQL
DTCS
VSC
D.SQL 【DSQL】

SIGNALING
TSQL DTCS VSC
DSQL
【DSQL】

• [P25 Digital SQL] screen
NAC squelch

❹ Click

Enter the digital code.

❸ Check the check box to turn the [Pocket Beep] ON.

❶ Click to select the squelch type.

Selective squelch

❹ Click

Enter the digital code.

❸ Check the check box to turn the [Pocket Beep] ON.

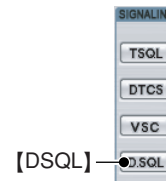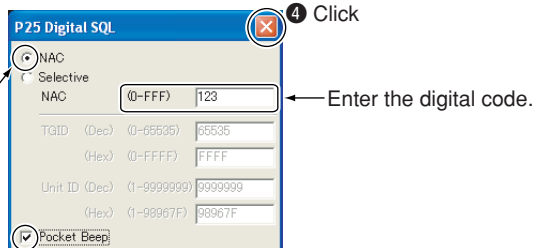❶ Click to select the squelch type.

■ Digital menu indication

Click the 【Digital】 icon on the tool bar to display the DV digital menu and/or P25 digital menu.

【Digital】

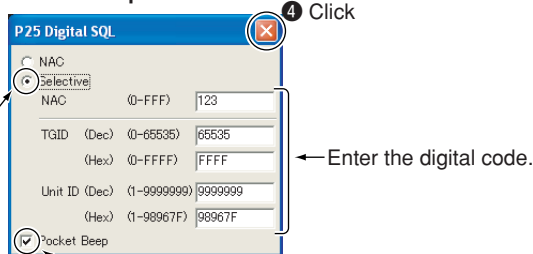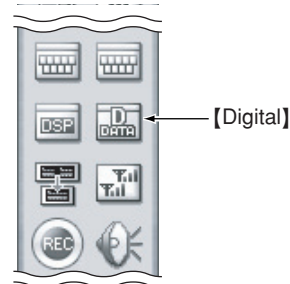Check mark "✔" indicates that the each screen is displayed.

DV Received call record screen
DV Message screen
DV Terminal Window screen

P25 Record call record screen
P25 Record call record screen

13 DIGITAL MODE OPERATION (IC-PCR2500 Main band only)

◇ DV Digital menu

• [DV Received call record] screen
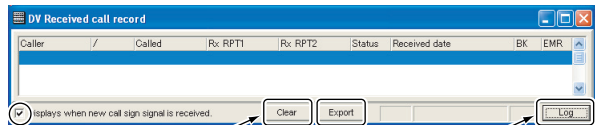
Click to clear the received call record.

Click to creat the log file in CSV format.

Click to export the CSV format file.

Check the box to turn the DV Received call record screen automatically, when the signal with a new call sign is received.

• [DV Message] screen

Check the box to turn the DV message screen automatically, when the signal with a new message is received.

Click to clear the DV message.

• [DV Terminal Window] screen

Displays the received DV data for the low speed data communication.

◇ P25 Digital menu

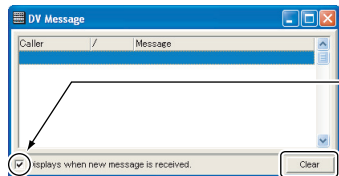### • [P25 Received call record] screen
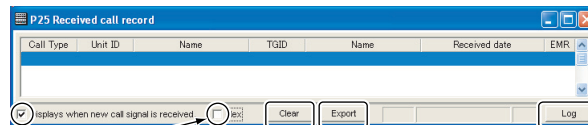
Click to clear the received call record.

Click to creat the log file in CSV format.

Click to export the CSV format file.

Check the box to turn the hexadecimal indication ON.

Check the box to turn the P25 Received call record screen automatically, when the signal with a new ID call is received.

• [P25 ID List] screen
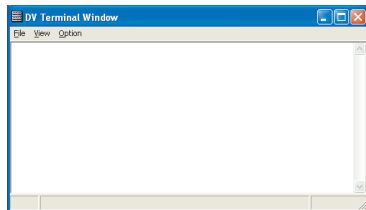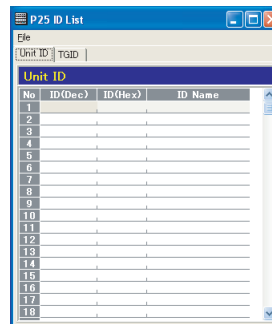
Displays the received unit IDs.

■ Opening the top cover

CAUTION: DISCONNECT the AC adaptor or DC power cable from the receiver Main unit before performing any work on the receiver.

qTurn the receiver Main unit power OFF, then disconnect the AC adaptor or DC power cable.
wUnscrew the 8 screws and disconnect the connected cables, then remove the top cover.
  •Be careful not to lose the screws.

Top cover

Power switch
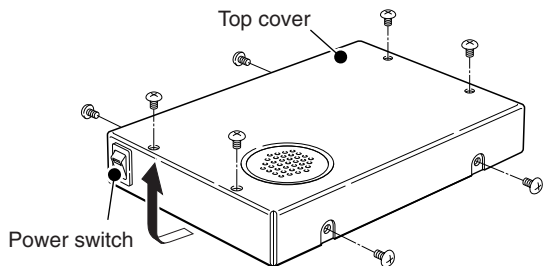
eAfter installing the optional unit or any internal setting is finished, replace the top cover, cables and screws to the original position.

■ UT-106 installation

The optional UT-106 DSP RECEIVE UNIT provides AF DSP (Digital Signal Processor) functions such as ANF (Auto Notch Filter) and NR (Noise Reduction).

qRemove the top cover as shown at left.
wInsert the UT-106 to the supplied soft case. (q)
eDisconnect P1 (4 pin) from J16 of the LOGIC board (w), then connect to J1 of the UT-106 (e).

UT-106

Soft case

J1

P1

J16

13
14
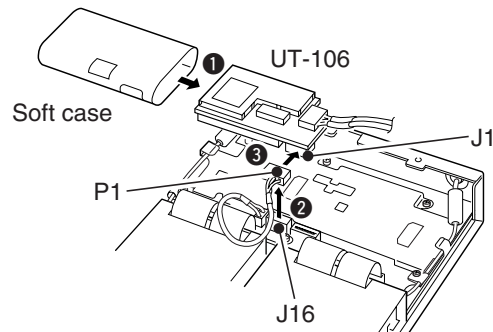
④Connect P1 (4 pin) of the UT-106 to J16 of the LOGIC board.

UT-106

J16

P1
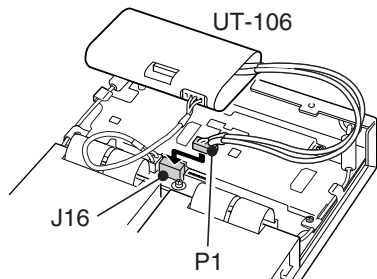
⑤Connect the supplied flat cable between J3 of the UT-106 and J15 of the LOGIC board.
• Be sure not upside down.

Flat cable

J3

J15
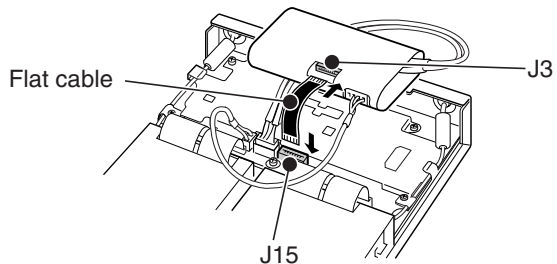
⑥Remove the protective paper from the supplied velcro®, then attach it to the UT-106 and the shield case of MAIN board.

Protective paper

Velcro

UT-106

Velcro

MAIN board
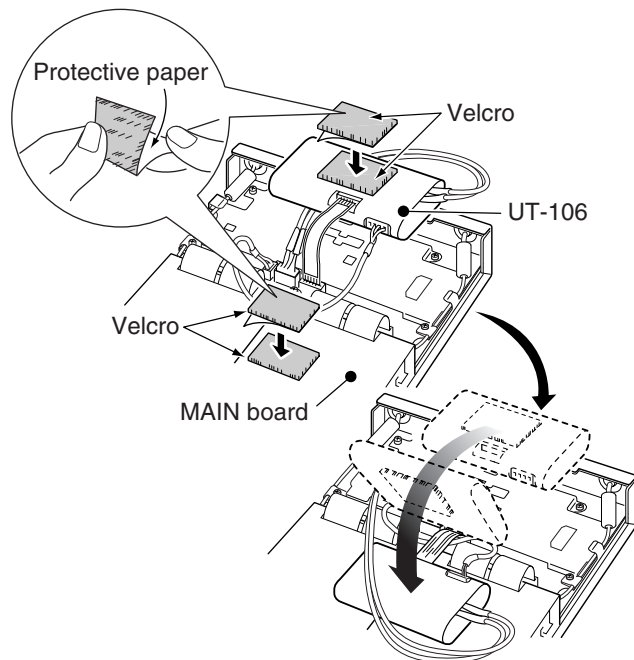
⑦Replace the top cover, cables and screws to the original position.

Velcro® is a registered trademark of Velcro Industries B.V.

■ UT-108/UT-118/UT-122 installation

(IC-PCR2500/R2500 only)

①Remove the top cover as shown on p. 126.
②Connect the UT-108, UT-118 or UT-122 as shown below.

UT-122

UT-118 (or UT-108)
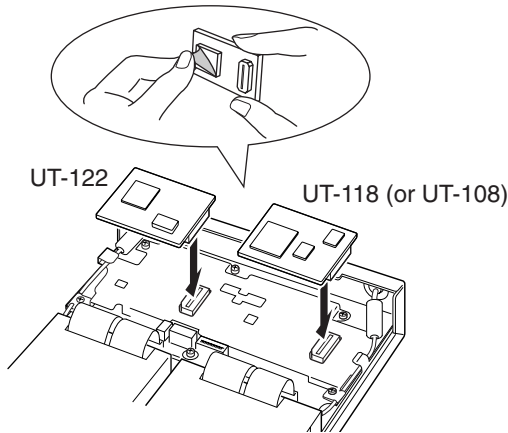
③Replace the top cover, cables and screws to the original position.

■ INTERNAL AUDIO SWITCH

The internal switch must be set properly to use an external speaker, headphones or earphone.

①Remove the top cover as shown on p. 126.
②Set the switch as shown below.
  • Set the switch to [SPEAKER] when an external speaker is connected to the receiver. (default)
  • Set the switch to [PHONES] when headphones or earphone are/is connected to the receiver.
③Replace the top cover, cables and screws to the original position.

SPEAKER   PHONES

switch

14
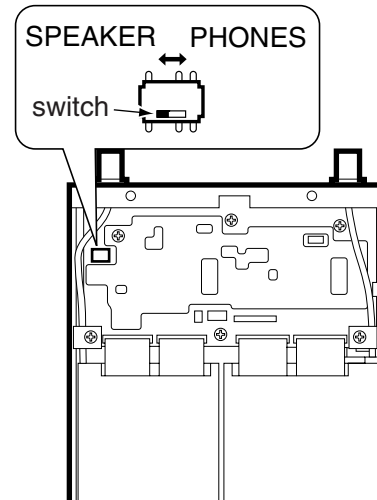
■ USB port setting

The connected PC's USB port number and the serial number of the Main unit can be selected/confirmed in [Port Setting] screen.
If some receiver's main units are connected to your PC, select the desired USB port and serial number when the IC-PCR1500/PCR2500 power is OFF. The only one Main unit can be operated. 2 or more Main units cannot be operated simultaneously.

◇ USB port confirmation

①Click 【Port Setting】 icon on the tool bar to call up the [Port Setting] screen. (See illustration at right.)
 • The connected PC's USB port number and serial number of the Main unit are displayed.
 • During the control software is connected to Main unit, USB port selection in inhibited.
② Confirm the connected USB port and serial number, click 【OK】.

• **[Port setting] screen**

Serial number   Port number

❶ Confirm
❷ Click
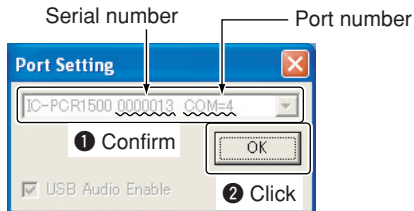
◇ USB port selection

①Click 【Power】 icon on the tool bar to disconnect the Main unit.
② Click 【Port Setting】 icon on the tool bar to call up the [Port Setting] screen.
③ Click 【Search】 to display the connected PC's USB port and serial number of the Main unit, if it is not displayed.
④ Click 【▼】 to select the desired USB port and serial number of the Main unit to be controlled.
⑤ After selection, click 【OK】.

IC-PCR1500   IC-PCR2500

【Power】

【Port Setting】

• **[Port setting] screen**

Serial number   Port number

❷ Click to select.

❶ Click   ❸ Click
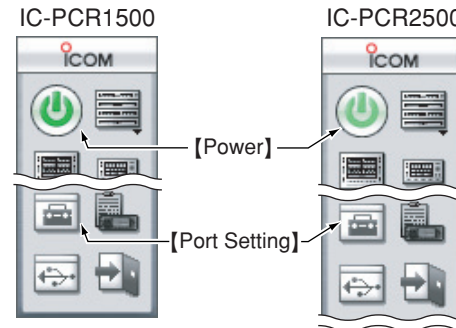
■ USB audio setting

USB audio output function can be turned ON or OFF in [Port Setting] screen when the IC-PCR1500/PCR2500 power is OFF.
When the USB audio output function is OFF, the audio/mute setting for PC, recording function (pgs. 106, 112) are disabled, but the computer running speed will be faster than when the USB audio output function is ON.

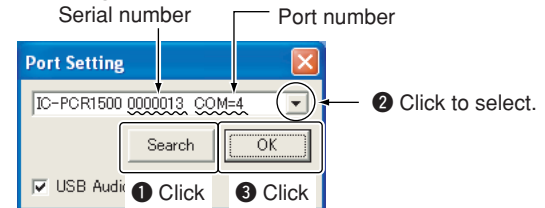①Click 【Power】 icon on the tool bar to disconnect the Main unit.
② Click 【Port Setting】 icon on the tool bar to call up the [Port Setting] screen.
③ Check the [USB Audio Enable] check box to turn the USB audio output function ON.
④ Click 【OK】.

IC-PCR1500   IC-PCR2500

【Power】

【Port Setting】

• **[Port setting] screen**

❷ Click

❶ Click

15
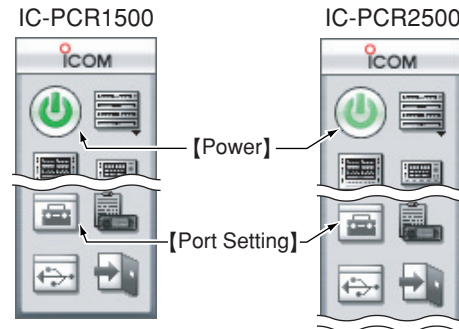
16 CLONING OPERATION

(Available only when the IC-R1500 or IC-R2500 is connected)

■ Launching the cloning software

① Launch the IC-PCR1500_2500 program. (p. 27)
② Click the 【Power】 icon on the tool bar to connect the control software and Main unit, if it is disconnected.
③ Click the 【Clone】 icon on the tool bar to call up the Cloning screen (described left).

IC-PCR1500   IC-PCR2500

【Power】

【Clone】
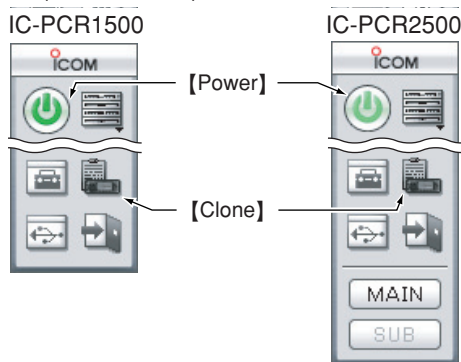
Note for the controller operation after cloning:
After cloning, click the 【Power】 icon on the tool bar to disconnect the control software and Main unit. Then, push **[PWR]** on the controller to turn the controller power ON.

◇ Cloning screen description
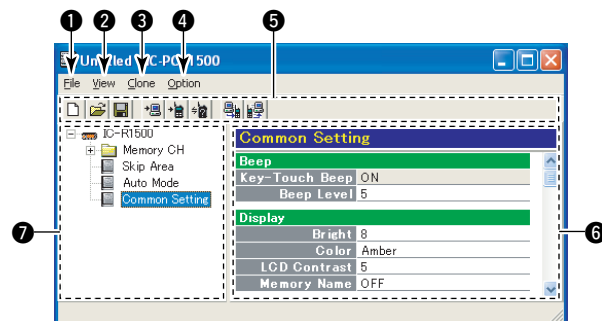
❶ **FILE MENU [File]**
Used for saving memory channel contents, printing the pre-programmed information or exiting the program, etc.

> **NOTE:** When you print the current project settings, "Current Sheet..." and "All..." can be selected.
> • Current Sheet... : Prints the currently shown sheet on the PC monitor screen.
> • All... : Prints all sheets.

❷ **VIEW MENU [View]**
• Set the indicated character size and TSQL/DTCS setting, DV setting, P25 setting indication.
• Turn the tool bar ON or OFF.

DV or P25 setting indication does not appear for IC-PCR1500, or for IC-PCR2500 that is depending on version or option installation.

❸ **CLONING MENU [Clone]**
- Click to display the cloning menu.
- Click [Information] to display the cloning information dialog box.

❹ **OPTION MENU [Option]**
Click to display the convert menu.

❺ **TOOL BAR**
Shortcut buttons appear on the tool bar when the tool bar indication is turned ON in the [View] menu.

	Creates a new setting project.		Indicates the connected Main unit information.
	Loads a saved ICF (Icom Cloning Format) file.		Converts the PC operation's data to the controller operation's data.
	Saves current project as an ICF file.		Converts the controller operation's data to the PC operation's data.
	Reads the data from the Main unit.		
	Writes the data to the Main unit.		

❻ **CONTENTS LIST SCREEN**
Display the contents list (Memory CH, Common Setting, etc.).

❼ **TREE VIEW SCREEN**
Click the folder icon which you want to edit.

- See the Memory CH (p. 68), Skip Area (p. 82) and Auto Mode (p. 55) programming for details.
- See the IC-R1500 instruction manual (☞ Section 9 [SET MODE]) or the IC-R2500 instruction manual (☞ Section 10 [SET MODE]) for details of the Common Setting.

■ Cloning operation

Click " " or select [Read <- Receiver] in [Clone] menu to start to read the programmed data from the connected Main unit.

During cloning operation, the following screen is displayed.
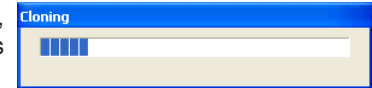
◇ Clone information
You can program a comment (up to 16 characters) in the [Common Setting] screen for quick identification of a Main unit's contents.
When you connect the Main unit to a PC using the supplied USB cable, you can check the Main unit's comment without reading all programmed data.
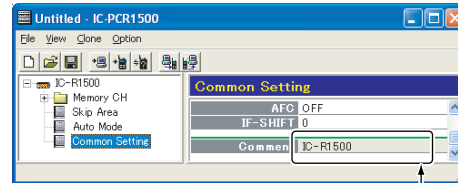
After cloning, click [Information] in the [Clone] menu or click " " to display the clone information dialog box.

Program [Comment], then clone to the Main unit.

16

131
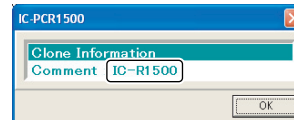
■ Data convert

◇ Converting the PC operation's data to the controller operation's data

① Click [Convert] in the [Option] menu to display the convert menu. Then select [PC -> Receiver] (or click " 🖳 ".)

② Set the option items (Ⓐ to Ⓖ), click [START] to start converting.
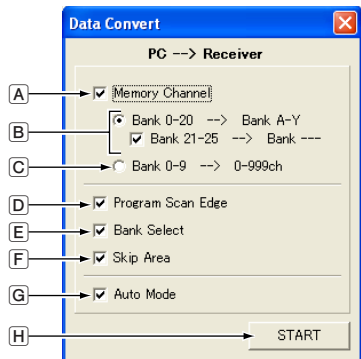
Ⓐ Check the check box to convert the PC operation's memory channel data to the controller operation's data.
  • The [Sub Name] setting of the PC operation's data is converted to the controller operation's memory name.

Ⓑ ➡ Check the radio button to convert the PC operation's Bank 0 to 20 data to the Bank A to Y in the controller operation.
  ➡ Check the check box to convert the PC operation's Bank 21 to 25 data to the no Bank setting channels in the controller operation.

Ⓒ Check the radio button to convert the PC operation's Bank 0 to 9 memory channel data to the channels 0 to 999 (no Bank setting) in the controller operation.

🗱 **NOTE:** More than 1000 memory channels cannot be converted.

Ⓓ Check the check box to convert the Program Scan Edge settings.

Ⓔ Check the check box to convert the Bank Select settings.

Ⓕ Check the check box to convert the Skip Area settings.

Ⓖ Check the check box to convert the Auto Mode settings.

Ⓗ Click to start converting.

◊ **Converting the controller operation's data to the PC operation's data**

① Click [Convert] in the [Option] menu to display the convert menu. Then select [Receiver -> PC] (or click " 🖳 ".)

② Set the option items (**A** to **P**), click [START] to start converting.
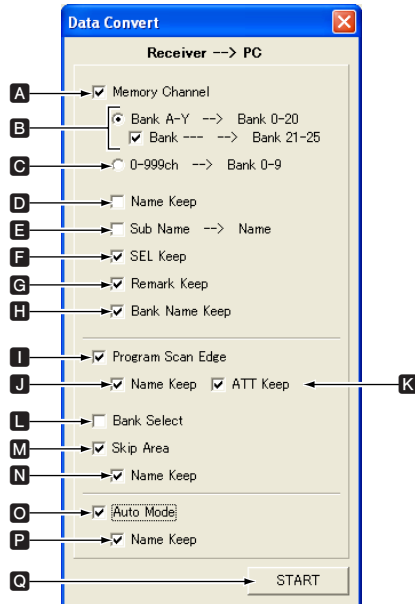
A Check the check box to convert the controller operation's memory channel data to the PC operation's data.

B ➡ Check the radio button to convert the controller operation's Bank A to Y data to the Bank 0 to 20 in the PC operation.

➡ Check the check box to convert the controller operation's no Bank setting channels data to the Bank 21 to 25 in the PC operation.

NOTE: More than 500 no Bank setting memory channels cannot be converted.

C Check the radio button to convert the controller operation's channels 0 to 999 data to the Bank 0 to 9 in the PC operation.

D Check the check box to keep the PC operation's [Name] settings.

• If it is not checked, the [Name] settings will be blanked after converting.

• The controller operation's memory name is converted to the [Sub Name] settings in the PC operation.

E Check the check box to convert the PC operation's [Sub Name] settings to the [Name] settings.

F Check the check box to keep the PC operation's [SEL] settings.

• If it is not checked, the [SEL] settings will be blanked after converting.

G Check the check box to keep the PC operation's [Remark] settings.

• If it is not checked, the [Remark] settings will be blanked after converting.

16

133

H Check the check box to keep the PC operation's Bank name settings.
• If it is not checked, the Bank name settings will be blanked after converting.

I Check the check box to convert the Program Scan Edge settings.

J Check the check box to keep the PC operation's Program Scan name settings.
• If it is not checked, the Program Scan name settings will be blanked after converting.

K Check the check box to keep the PC operation's Program Scan ATT settings.
• If it is not checked, the Program Scan ATT settings will be "–" after converting.

L Check the check box to convert the Bank Select settings.

M Check the check box to convert the Skip Area settings.

N Check the check box to keep the PC operation's Skip Area name settings.
• If it is not checked, the Skip Area name settings will be blanked after converting.

O Check the check box to convert the Auto Mode settings.

P Check the check box to keep the PC operation's Auto Mode name settings.
• If it is not checked, the Auto Mode name settings will be blanked after converting.

Q Click to start converting.

While operating with the controller the memory data or any other settings are stored into the Main unit. While operating with the control software, the memory data or any other settings are stored into the PC.
When you want to use the edited memory data from the PC (control software) operation in the controller operation, or vice versa, cloning is required.

If your receiver seems to be malfunctioning, please check the following points before sending it to a service center.

PROBLEM	POSSIBLE CAUSE	SOLUTION	REF.
Does not turn on.	• The AC adapter is not fully seated in the power jack on the Main unit's rear panel. • An AC adapter is connected to the same AC outlet with a PC, printer, etc.	• Check the connection. • Check the connection.	p. 1 p. 1
No sound comes from the speaker.	• Volume is too low. • The audio mute function is activated. • Squelch is set too high. • Band scope function is activated in SSB or CW mode.	• Right click [AF GAIN]. • Push [MUTE] to turn the mute function OFF. • Set the squelch level to the threshold. • Pause or cancel the band scope function in SSB or CW mode.	p. 52 p. 56 p. 53 p. 98
Sensitivity is low and only strong signals are audible.	• Antenna feedline or the antenna connector has a poor contact or is short circuited. • Squelch attenuator function is activated.	• Check, and if necessary, replace the feedline or solder the antenna connector again. • Push [ATT] to turn the Attenuator function OFF.	p. 1 p. 59
Frequency cannot be set via the PC key board.	• The receiver screen is not selected.	• Click anywhere in the receiver screen first, then input the frequency.	p. 48
Program scan does not operate.	• The squelch is open. • The start and end frequencies are the same.	• Set the squelch to the threshold point. • Set the different frequencies.	p. 53 p. 71
Memory scan does not operate.	• The squelch is open. • Only 1 memory channel is programmed or other channels are set as skip channel.	• Set the squelch to the threshold point. • Program other memory channels or cancel the memory skip function in the desired channels.	p. 53 pgs. 70, 86
The Communication error occurs after launching the IC-PCR1500_2500 program.	• The computer does not recognize the connected Main unit. • The protector circuit of the power supply is activated.	• Launch the program after approx. 20 sec. has passed. • Use the supplied AC adapter, or a stabilized power supply with large capacity.	p. 27 pgs. 1, 2

16
17

18 SPECIFICATIONS AND OPTIONS

■ Specifications

◊ GENERAL

• Frequency coverage (MHz)

U.S.A. : 0.010000–809.999999 *1, *2
851.000–866.999999
896.000–1300.000000
1300.000001–1810.999999 *1
1852.000–1867.999999 *1
1897.000–2305.899999 *1
2357.000–2811.999999 *1
2853.000–2868.999999 *1
2898.000–3109.799999 *1, *2
3136.000–3154.799999 *1, *2
3181.000–3299.999999 *1, *2

France : 0.010000–29.999999 *1, *2
50.200–51.200000
87.500–107.999999
144.000–146.00000
430.000–440.00000
1240.000–1300.00000

Other than above
: 0.010–3299.999999 *1, *2

*1 : For IC-PCR2500/R2500. Available on Main band only. Sub band does not cover outside of frequency range; 50 to 1300.000000 MHz.

*2 : Guaranteed: 0.495–3000.000 MHz range only

• Mode : FM, AM, WFM, USB *1, LSB *1 , CW *1
DV *1, *2, P25 *1, *3

*1 : For IC-PCR2500/R2500. Available on Main band only.

*2 : For IC-PCR2500/R2500. Available when optional UT-118 is installed.

*3 : For IC-PCR2500/R2500.
Available when optional UT-122 is installed depending on versions.

• Number of memory channels
Main unit : 2600
Controller [R1500/R2500]
: 1100 (incl. 100 scan edges)

• Tuning steps : 1 Hz*, 10 Hz, 20 Hz, 50 Hz, 100 Hz, 500 Hz, 1 kHz, 2.5 kHz, 5 kHz, 6.25 kHz, 8.33 kHz, 9 kHz, 10 kHz, 12.5 kHz, 15 kHz, 20 kHz, 25 kHz, 30 kHz, 50 kHz, 100 kHz, 125 kHz, 150 kHz, 200 kHz, 500 kHz, 1 MHz, 10 MHz*, USER TS*

*PC operation only

• Operating temperature range
PC operation : 0°C to +60°C; +32˚F to +140˚F
Controller operation [R1500/R2500]
: –10°C to +60°C; +14˚F to +140˚F

• Frequency stability : ±3 ppm (–10°C to +60°C)
• Power supply requirement : 12.0 V DC ±15%
• Current drain (at 12.0 V DC: approx.)

[1500]
While using controller (R1500): plus 50 mA with below current value.

Power ON	: Standby	650 mA (typical)
	Max. audio	Less than 1.2 A
Power OFF	: PC (USB VBAS-ON)	550 mA (typical)
	PC (USB VBAS-OFF)	15 mA (typical)
	Controller (R1500)	15 mA (typical)

[2500]
While using controller (R2500): plus 110 mA with below current value.

Single band	: Standby	650 mA (typical)
	Max. audio	Less than 1.2 A
Dualwatch	: Standby	850 mA (typical)
	Max. audio	Less than 1.5 A
Power OFF	: PC (USB VBAS ON)	550 mA (typical)
	PC (USB VBAS OFF)	15 mA (typical)
	Controller (R2500)	15 mA (typical)

• Antenna connector : BNC (50 Ω)
• Dimensions (proj. not included)
Main unit
: 146(W) × 41(H) × 206(D) mm
5¾(W)×1⅝(H)×8⅛(D) in
Controller
[R1500] : 111(W) × 40(H) × 26.5(D) mm
4⅜(W)×1⁹⁄₁₆(H)×1¹⁄₃₂(D) in
[R2500] : 140(W) × 50(H) × 27.5(D) mm
5½(W)×1³¹⁄₃₂(H)×1³⁄₃₂(D) in

• Weight (approx.)
Main unit
[1500] : 1.2 kg; 2 lb 10 oz
[2500] : 1.35 kg; 2 lb 15 oz
Controller
[R1500] : 0.2 kg; 7¹⁷⁄₃₂ oz
[R2500] : 0.25 kg; 8¹³⁄₁₆ oz

◊ RECEIVER

• Receive system :
Triple-conversion superheterodyne and down converter
• Intermediate frequencies :
1st: 266.700 MHz, 2nd: 10.700 MHz
3rd: 450 kHz (except for WFM mode)

• Sensitivity:
FM (1 kHz/3.5 kHz Dev.; 12 dB SINAD)

28.000–29.999 MHz	: Less than 0.63 μV
30.000–49.999 MHz	: Less than 0.63 μV
50.000–239.999 MHz	: Less than 0.5 μV
240.000–279.999 MHz	: Less than 0.5 μV
280.000–299.999 MHz	: Less than 0.5 μV
300.000–699.999 MHz	: Less than 0.5 μV
700.000–1300.000 MHz	: Less than 0.63 μV
1300.000001–2299.999 MHz	: Less than 5.6 μV
2300.000–3000.000 MHz	: Less than 18 μV

WFM (1 kHz/52.5 kHz Dev.; 12 dB SINAD)

50.000–699.999 MHz	: Less than 1.4 μV
700.000–1300.000 MHz	: Less than 1.8 μV
1300.000001–2299.999 MHz	: Less than 18 μV
2300.000–3000.000 MHz	: Less than 56 μV

AM (1 kHz/30% MOD.; 10 dB S/N)

0.495–1.799 MHz	: Less than 25 μV
1.800–14.999 MHz	: Less than 2.5 μV
15.000–49.999 MHz	: Less than 2.5 μV
50.000–299.999 MHz	: Less than 2 μV
300.000–699.999 MHz	: Less than 2 μV
700.000–1300.000 MHz	: Less than 2.5 μV

SSB/CW (10 dB S/N)

0.495–1.799 MHz	: Less than 5 μV
1.800–14.999 MHz	: Less than 0.5 μV
15.000–49.999 MHz	: Less than 0.5 μV
50.000–699.999 MHz	: Less than 0.4 μV
700.000–1300.000 MHz	: Less than 0.5 μV

• Squelch sensitivity (threshold) :
FM (1 kHz/3.5 kHz Dev.)

28.000–29.999 MHz	: Less than 0.63 μV
30.000–49.999 MHz	: Less than 0.63 μV
50.000–239.999 MHz	: Less than 0.5 μV
240.000–279.999 MHz	: Less than 0.5 μV
280.000–299.999 MHz	: Less than 0.5 μV

300.000–699.999 MHz	: Less than 0.5 μV
700.000–1300.000 MHz	: Less than 0.63 μV
1300.000001–2299.999 MHz:	Less than 5.6 μV
2300.000–3000.000 MHz	: Less than 18 μV

WFM (1 kHz/52.5 kHz Dev.)

50.000–699.999 MHz	: Less than 5.6 μV
700.000–1300.000 MHz	: Less than 7.1 μV
1300.000001–2299.999 MHz:	Less than 71 μV
2300.000–3000.000 MHz	: Less than 220 μV

AM (1 kHz/30% MOD.)

0.495–1.799 MHz	: Less than 18 μV
1.800–14.999 MHz	: Less than 0.89 μV
15.000–49.999 MHz	: Less than 0.89 μV
50.000–299.999 MHz	: Less than 0.71 μV
300.000–699.999 MHz	: Less than 0.71 μV
700.000–1300.000 MHz	: Less than 0.89 μV

SSB/CW

0.495–1.799 MHz	: Less than 71 μV
1.800–14.999 MHz	: Less than 7.1 μV
15.000–49.999 MHz	: Less than 7.1 μV
50.000–699.999 MHz	: Less than 5.6 μV
700.000–1300.000 MHz	: Less than 7.1 μV

• Selectivity (typical) :

SSB/CW/AM	More than 2.8 kHz/–6 dB
SSB/CW/AM/FM	More than 6.0 kHz/–6 dB
AM/FM	More than 15 kHz/–6 dB
AM/FM/WFM	More than 50 kHz/–6 dB
WFM	More than 230 kHz/–6 dB

• AF output power (at 12.0 V DC) : More than 0.5 W at 10% distortion with an 8 Ω load
• Ext. speaker connector : 2-conductor 3.5 (d) mm (⅛″)/8 Ω
• Packet connector : 2-conductor 3.5 (d) mm (⅛″)
• Data connector : 3-conductor 2.5 (d) mm (¹⁄₁₀″)
• IF shift variable range : More than ±1.2 kHz

■ Options

UT-106 DSP UNIT
Provides AF DSP functions such as noise reduction and auto notch.

CP-12L CIGARETTE LIGHTER CABLES
For operation via a 12 V cigarette lighter socket.

OPC-254L DC POWER CABLES
For operation via an external power supply.

SP-10 EXTERNAL SPEAKER
For mobile or base operation. Cable length: 1.5 m; 4.9 ft

[For IC-PCR2500/IC-R2500]
UT-108 DTMF DECODER UNIT
Provides DTMF decode function for sub band.

UT-118 DIGITAL UNIT
Provides DV (digital) mode operation.

UT-122 DIGITAL UNIT
Provides P25 (digital) mode operation.

18

ICOM

DECLARATION OF CONFORMITY

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

Declare on our sole responsibility that this equipment complies with the essential requirements of the Radio and Telecommunications Terminal Equipment Directive, 1999/5/EC, and that any applicable Essential Test Suite measurements have been performed.

Kind of equipment: **COMMUNICATIONS RECEIVER**

Type-designation: **IC-PCR1500/R1500**

Version (where applicable):

This compliance is based on conformity with the following harmonised standards, specifications or documents:

i) Article 3.1a   EN 60950-1 (2001):A11:2004
ii) Article 3.1b   EN 301489-1 and EN 301489-15
iii) Article 3.2   EN 301 783-2
iv)
v)

CE

Düsseldorf 5th Dec.2005
Place and date of issue

Icom (Europe) GmbH
Himmelgeister straße 100
D-40225 Düsseldorf
Authorized representative name

H. Ikegami
General Manager

Signature

Icom Inc.

DECLARATION OF CONFORMITY

$C\,\epsilon$

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

Declare on our sole responsibility that this equipment complies with the essential requirements of the Radio and Telecommunications Terminal Equipment Directive, 1999/5/EC, and that any applicable Essential Test Suite measurements have been performed.

Kind of equipment: **COMMUNICATIONS RECEIVER**

Type-designation: IC−PCR2500/R2500

Version (where applicable):

This compliance is based on conformity with the following harmonised standards, specifications or documents:

i)   Article 3.1a   EN 60950-1 (2001):A11:2004
ii) Article 3.1b   EN 301489-1 and EN 301489-15
iii) Article 3.2   EN 301 783-2

Düsseldorf 24th Mar.2006
Place and date of issue

Icom (Europe) GmbH
Himmelgeister straße 100
D−40225 Düsseldorf
Authorized representative name

H. Ikegami
General Manager

Signature

Icom Inc.

19

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			

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