

The CS-905 is a software application to setup the IC-905 from your PC. This manual shows system requirements and how to use the software.

## System requirements

(As of February 2023)

To use the software, you will need the following:

### Operating System (OS)

- Windows 11 (64 bit)
  - Windows 10 (32/64 bit)
- ① Except for Windows on ARM.

① The instructions are based on using Windows 10.

## About an SD card

**NOTE:** The SD and SDHC cards are not supplied by Icom. (User supplied)

Icom has checked the compatibility with the following SD and SDHC cards.

(As of February 2023)

Brand	Type	Memory size
SanDisk	SD	2 GB
	SDHC	4/8/16/32 GB

- ① Through the rest of this document, the SD card and SDHC card are simply called SD cards.
- ① The SD cards listed above are usable with the IC-905, but their specifications are not guaranteed by Icom.

## USB driver installation

To use the USB cable between the transceiver and a PC, you must first install a USB driver. The latest USB driver and installation guide can be downloaded from the Icom website.

Carefully read the guide, before installing the driver.  
<https://www.icomjapan.com/support/>

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Select either of the following programming methods:

### With a memory card

- SD card (User supplied)
- ① A memory card reader or memory card slot is required for reading.

### Through a USB Cable

- USB Cable (USB Type-C connector for the transceiver)  
Use a proper cable for data communication according to your PC's USB port.
- USB Port (USB 1.1, 2.0, or 3.0 port)

## Programming information

- To prevent data loss, you should first read the transceiver setting data into the CS-905, or copy the setting data (ICF file) of the SD card to the PC, and read the data into the CS-905. Then edit or enter new software parameters.
- Before editing or entering new data, make a backup file onto your PC. A backup file enables easy restoring even if the setting data is accidentally deleted.
- While reading or writing (uploading) the data through the USB cable, **NEVER** turn OFF the transceiver or the PC, and **NEVER** disconnect the USB cable. Otherwise, the data could be lost or deleted.
- While reading or writing the data to or from the SD card, **NEVER** remove the SD card or turn OFF the transceiver. Otherwise, the data could be corrupted or the SD card could be damaged.

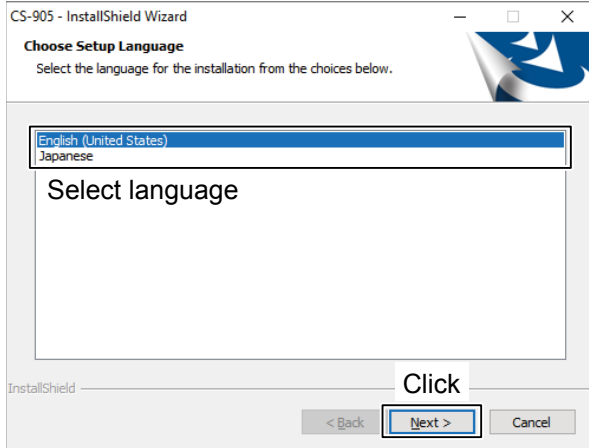
### Updating the CS-905

The firmware and programming software may be updated for expansion or improvement of functions. You can update the programming software to the latest version by downloading the update program from the Icom website and installing it.  
<https://www.icomjapan.com/support/>

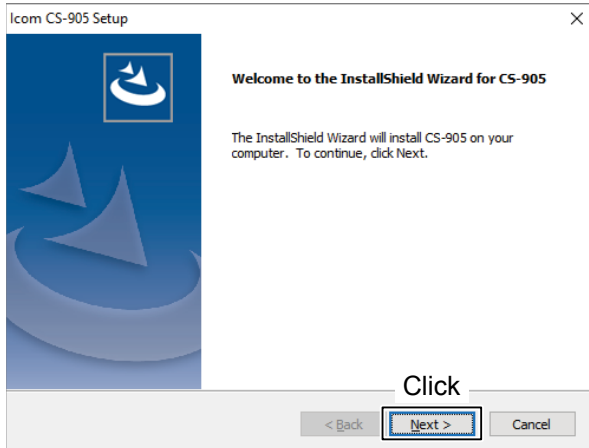
- ① If an error dialog is displayed that indicates the versions of the transceiver's firmware and the programming software do not match, update the transceiver's firmware and the programming software to the latest version.

# Installing the programming software

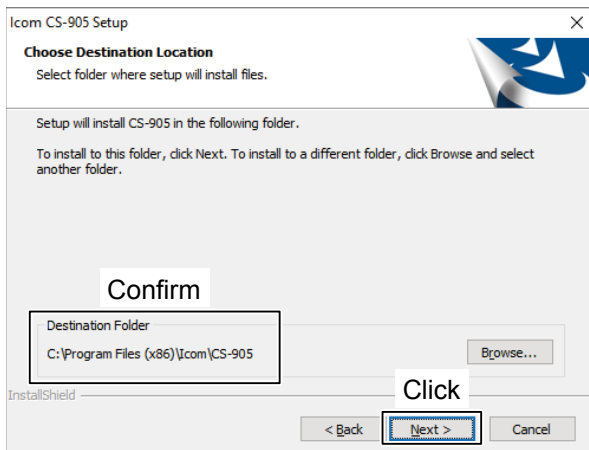
1. Sign in to the PC as an administrator.  
① Confirm that no other applications are running.
2. Download and unzip the file.
3. Double-click “setup.exe.”  
① If the “User Account Control” dialog is displayed, click <Yes>.  
• “Choose Setup Language” is displayed.
4. Select “English” (or “Japanese”) and then click <Next>>.  
① In this document, “English” is selected.



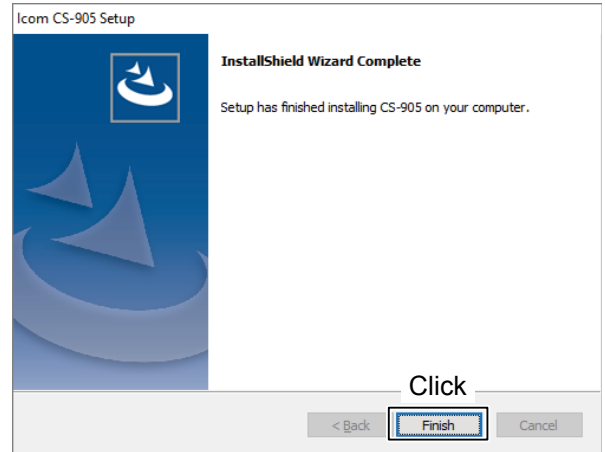
5. On the “Welcome to the InstallShield Wizard for CS-905” screen, click <Next>>.



6. On the “Choose Destination Location” screen, click <Next>>.  
① If desired, click <Browse...> and select another destination folder before clicking <Next >>.



7. After the installation has been completed, click <Finish>.



8. An “Icom CS-905” item is created in the Windows Start menu, and a shortcut icon is added to your desktop.



## TIP:

- See the Help file of the programming software for assistance with the functions or settings. To open the Help file, click “Help” in the top menu of the programming software and select “Contents,” or simply push the [F1] key of the PC’s keyboard.
- You can uninstall the programming software using the “Apps & features” in the “Apps.” Go to Start > Settings > Apps > Apps & features.

# Setting up from a PC using an SD card

To setup from a PC using an SD card, follow the steps described below.

**Step 1** Saving the setting data onto a PC

**Step 2** Making the Initial setup

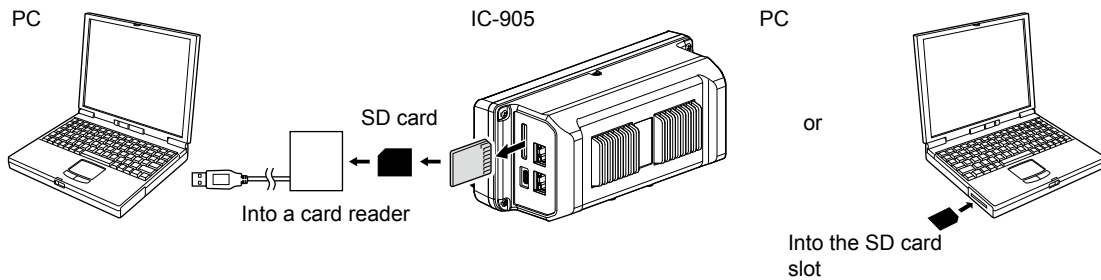
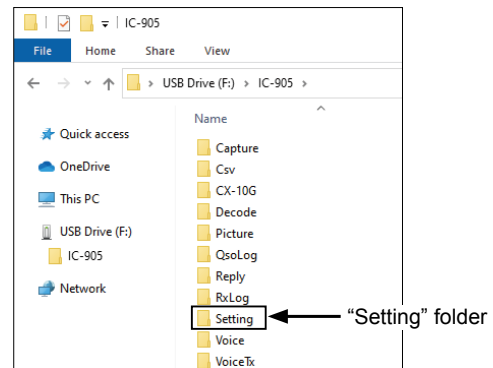
**Step 3** Editing the parameters (p. 4)

**Step 4** Writing the setting data to the transceiver (p. 4)

**NOTE:** If you use a brand new SD card, first format the card using the transceiver. See the IC-905 Basic Manual for details on the formatting procedure.

## Step 1 Saving the setting data onto a PC

1. Save the transceiver's setting data onto the SD card.
  - ① Insert an SD card into the transceiver, and save the setting data from "Save Setting" on the transceiver's MENU screen.  
( **MENU** > SET > SD Card > **Save Setting** )
2. Turn OFF the transceiver, and remove the SD card.
3. Insert the card into the PC's card slot or an external card reader, as shown below.
4. Copy the transceiver's setting data (ICF file), stored in the "Setting" folder of the card to a PC local folder.



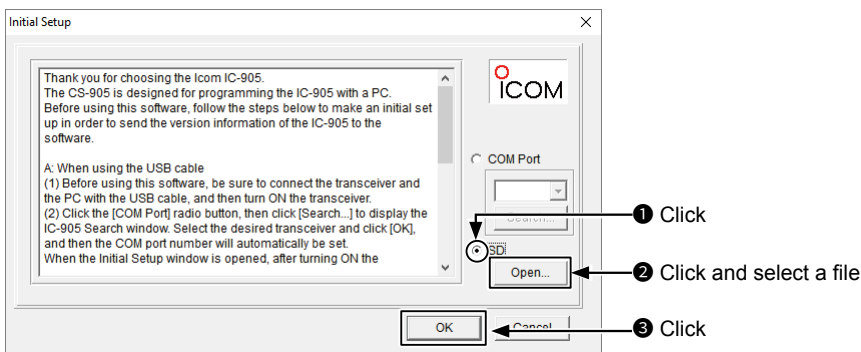
## Step 2 Making the Initial setup

When you start the CS-905, the Initial Setup window is displayed. Before using the software, you need to make the initial setup to send the transceiver version information to the software.

1. Click the "SD" radio button.
2. Click <Open...> to display the data file selection window.
3. Select the setting data (ICF file) copied from the transceiver in step 4 of "Saving the setting data onto a PC," as described above.
4. Click <OK> to open the programming screen and read the selected file.


**NOTE:**

- When the transceiver version information is not correctly sent to the software, some items may not be displayed on the software.
- If you want to make the initial setup again, select "Initial Setup" in the <Option> menu.



## Step 3 Editing the parameters

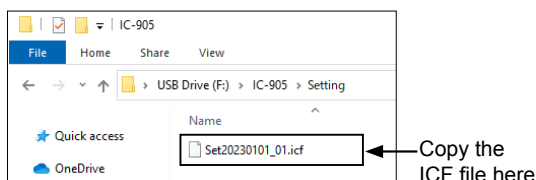
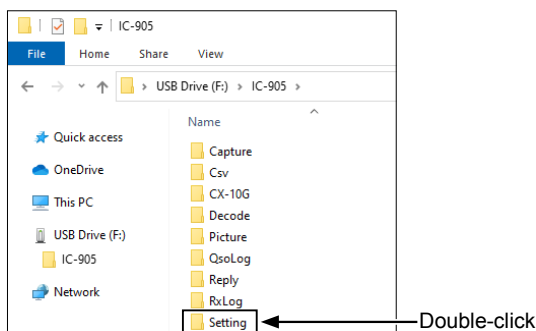
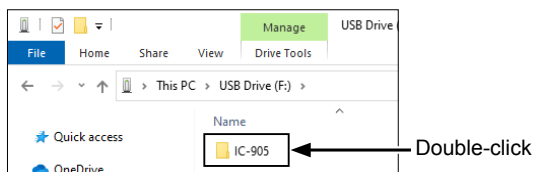
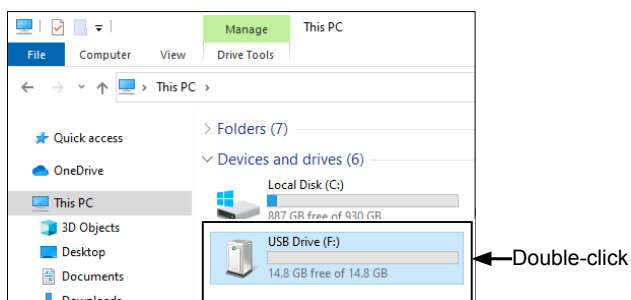
1. Enter Memory channels, call signs, repeater list, set scan and other settings using the CS-905.
2. Save the setting data in the Icom Cloning Format (ICF) file format in a folder on your PC.  
① See the software's Help file for assistance.

**TIP:** If you have an ICF file to write to the transceiver, click  or select "Open... Ctrl+O" in the <File> menu, and then select the file.

## Step 4 Writing the setting data to the transceiver

Copy the saved setting data in Step 3 above to the SD card, and write it to the transceiver.

1. Copy the setting data (ICF file) into the "Setting" folder in the "IC-905" folder on the SD card, as shown below:



2. Remove the SD card from the PC and insert it into the transceiver.
3. Write the setting data to the transceiver.  
( **MENU** > SET > SD Card > **Load Setting** )
  - The loaded setting data overwrites the current settings.
- ① Refer to the IC-905 Advanced Manual for details on loading the setting data.
4. Turn OFF the transceiver, then turn it ON again to operate the transceiver with the loaded settings.

### NOTE:

- The loading contents can be selected between "ALL," "Select," and "Repeater List Only." When you want to load only the repeater list into the transceiver, select "Repeater List Only."
- The original Skip settings in your repeater list can be kept when loading. When "Keep 'USE (FROM)' settings in the Repeater List?" is displayed, select <Yes> to keep the Skip settings in the repeater list. See the IC-905 Advanced Manual for details.

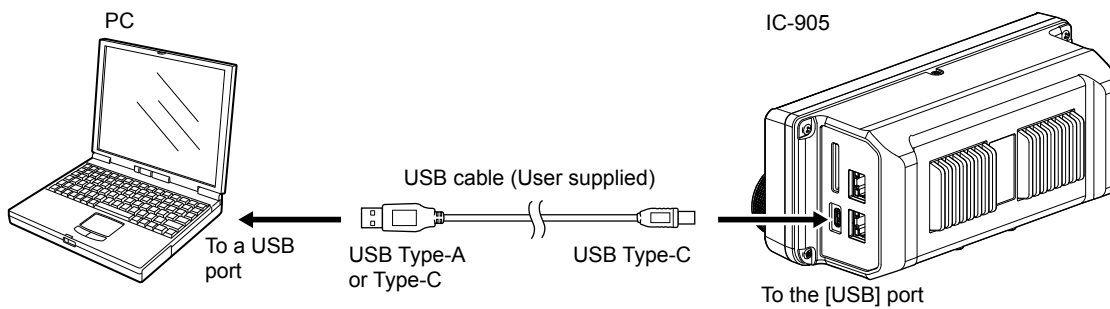
# Setting up from a PC using a USB cable

To setup from a PC using a USB cable, follow the steps described below.

- Step 1** Connecting the transceiver and PC using a USB cable
- Step 2** Making the Initial setup
- Step 3** Reading the settings from the transceiver (p. 6)
- Step 4** Editing the parameters (p. 6)
- Step 5** Writing the setting data to the transceiver (p. 6)

## Step 1 Connecting the transceiver and PC using a USB cable

1. Install the USB driver.
  - ① The latest USB driver and “USB Driver Installation Guide” can be downloaded from the Icom website.
2. Turn OFF the transceiver.
3. Connect the USB cable, as shown below.
4. Turn ON the transceiver.



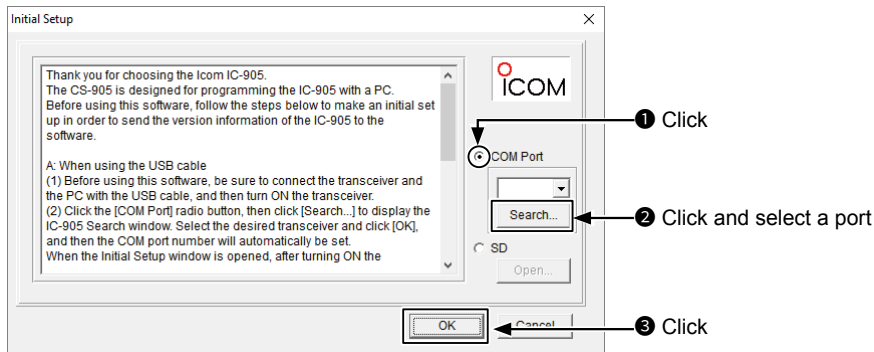
## Step 2 Making the Initial setup

When you start the CS-905, the Initial Setup window is displayed. Before using the software, you need to make the initial setup to send the transceiver version information to the software.

1. Click the “COM Port” radio button.
2. Click <Search...> to display the IC-905 Search window.  
Select the appropriate transceiver and click <OK>.
  - The COM port number will be set in the input field.
3. Click <OK> to open the programming screen.


### NOTE:

- When the transceiver version information is not correctly sent to the software, some items may not be displayed on the software.
- If you want to make the initial setup again, select “Initial Setup” in the <Option> menu.



### Step 3 Reading the settings from the transceiver

Follow the steps below to write the setting data that is edited with the CS-905 to the transceiver using a USB cable.

- Click , or select “Read ← TR” in the <Clone> menu to read the data from the transceiver.


**NOTE:** Make a backup copy of the original setting data on the PC before editing.



While reading from the transceiver

### Step 4 Editing the parameters


- Enter Memory channels, call signs, repeater lists, set scan and other settings using the CS-905.
  - ① See the software's Help file for assistance.
  - ① Save the setting data in the Icom Cloning Format (ICF) file format in a folder on your PC.

**TIP:** If you have an ICF file to write to the transceiver, click  or select “Open... Ctrl+O” in the <File> menu, and then select the file.

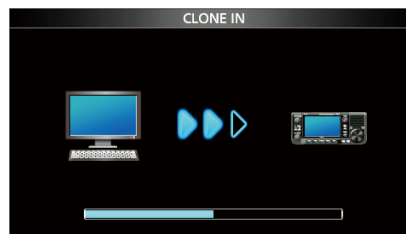
### Step 5 Writing the setting data to the transceiver

You can write the edited Memory channels, call signs, repeater list, scan and other settings to the transceiver.

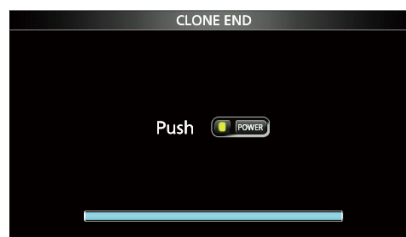
**NOTE:** Writing the setting will overwrite the current setting data on the transceiver.

1. Click , or select “Write → TR” in the <Clone> menu to write the setting data to your transceiver.
2. Check the items you want to write to the transceiver, and then click <OK>.

3. Click <OK> on the confirmation dialog.
  - Starts writing to the transceiver.



While writing to the transceiver



Writing completed

4. After the writing is completed, turn OFF the transceiver, then turn it ON again to operate it with the edited setting data.

## Downloading the latest ICF file and CSV files

Download the Zip file containing the latest Comma Separated Values (CSV) files and the ICF file from the Icom website:

[https://www.icomjapan.com/support/firmware\\_driver/](https://www.icomjapan.com/support/firmware_driver/)

1. Right-click on the downloaded compressed file and select "Extract All..." to unzip it.
  - A "905\_USA\_yymmdd"\* folder, for example, will be created in the same place where the downloaded file is saved.

**File name (Example):**

905\_USA\_yymmdd.zip

↑                    ↑  
Shows the       Shows the  
version           date of update

2. Save the unzipped file in a folder on your PC.

### Contents of the downloaded ZIP file

(as of February 2023)

- **Settings file** (ICF file)  
Example: 905\_USA\_yymmdd.icf

All setting data of the transceiver is saved in the ICF file. See pages 4 and 6 to set up.

- **GPS memory** (CSV file)  
Example: 905\_USA\_GPS\_yymmdd.csv
- **Repeater list** (CSV file)  
Example: 905\_USA\_Rpt\_yymmdd.csv

The name of a CSV file represents the content.


- See page 9 to edit.
- See page 8 to import.
- See page 9 to export.

# Importing the Repeater list

Read this section before importing the repeater list in a Comma Separated Values (CSV) format file into the CS-905.

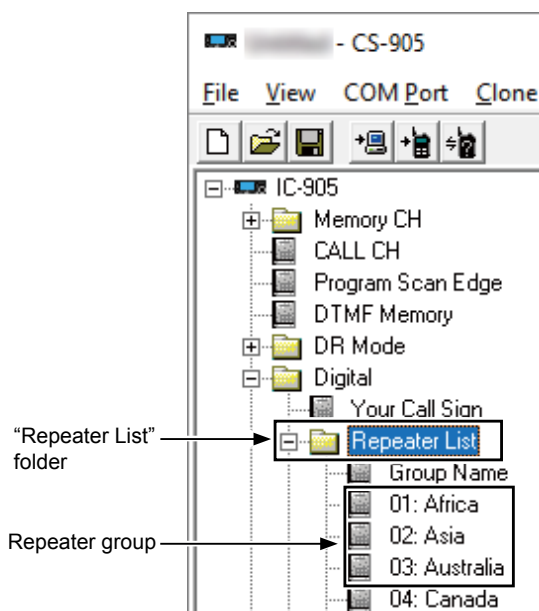
**NOTE:** When a cable is used, the settings, except the repeater list, can be kept by doing the following procedures.

## 1. Reading the setting data from the transceiver

- Click , or select “Read ← TR” in the <Clone> menu to read the data from the transceiver. (pp. 4, 6)
- ① Before editing, make a backup file of all the transceiver’s data onto your PC to prevent data loss.

## 2. Importing a Repeater list

1. Select the “Repeater List” folder or double-click on it to show each repeater group on the tree view screen.

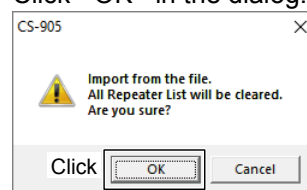


2. Click “Import...” in the <File> menu, and then click “All...”
  - ① The repeater information in a CSV file is imported, and sorted into groups according to the group number.

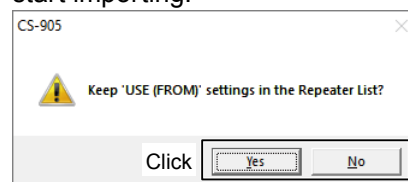
**NOTE:** When you select “Group...”, all repeater information in the file is imported into the repeater groups, selected in step 1. If you select the “Repeater List” folder in step 1, “Group...” cannot be selected.

3. Select the CSV file, saved in “Downloading the latest ICF file and CSV files” described on the previous page, and then click <Open>.

4. Click <OK> in the dialog.



5. In the “Keep ‘USE (FROM)’ settings in the Repeater List?” dialog, click <Yes> or <No> to start importing.



- Yes: The original “USE (FROM)” settings set in the CS-905 are kept.
- No: All the “USE (FROM)” settings are replaced with the imported CSV files.

### TIP:

#### About the “USE (FROM)” setting

Select whether or not the repeater can be selected as an access repeater (FROM), when you rotate **(MAIN DIAL)**.

If you select <NO>, the repeater is not displayed in the “FROM” selection, and is skipped during a DR scan.

#### Importing the GPS Memory (CSV file)

When you import the GPS Memory, select “GPS Memory” folder or each GPS group on the tree view screen in step 1.



# Editing and Exporting the Repeater list

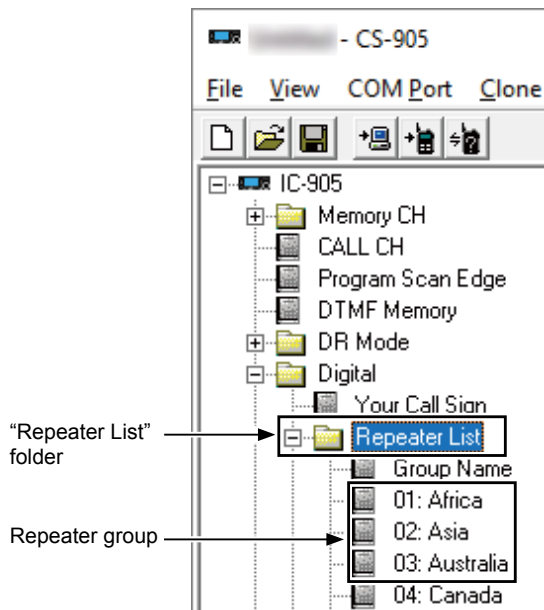
Read this section before editing and exporting the repeater list.

## 1. Editing the Repeater list

1. Select a repeater group in the “Repeater List” folder on the tree view screen of the CS-905.
2. Edit the necessary items in the repeater list.  
① See the software’s Help file for details.

## 2. Exporting the Repeater list

1. Select the “Repeater List” folder, or each repeater group on the tree view screen.



2. Click “Export” in the <File> menu, and then click “Group...” or “All...”

**NOTE:** If you select the “Repeater List” folder in step 1, “Group...” cannot be selected.

- Group...: Exports repeater information entered in only the selected group.
  - All...: Exports repeater information entered in all groups.
3. Save the data in a CSV format file to a folder on your PC.

**TIP:** The “GPS Memory” folder or each GPS group on the tree view screen can be exported in the same procedure.