

- ◇ This cloning software is designed for data entry, settings, and cloning of the ID-5100A/ID-5100E VHF/UHF TRANSCEIVER.
- ◇ The CS-5100 has a Help file to describe functions and operation.

■ System requirements

To use this cloning software, the following computer systems and items are required:

• Operating System (OS)

- Microsoft® Windows® XP (32 bit)
 - Microsoft® Windows Vista® (32/64 bit)
 - Microsoft® Windows® 7 (32/64 bit)
 - Microsoft® Windows® 8 (32/64 bit)*
 - Microsoft® Windows® 8.1 (32/64 bit)*
- *Except for Microsoft® Windows® RT.

NOTE:

These instructions are based on using Microsoft® Windows® 7.

• Others

- Cloning cable + USB port
- Cloning cable + RS-232C port
- OR
- SD card + a memory card reader or memory card slot

<Cloning cable + USB port>

- Optional OPC-478UC* CLONING CABLE
- USB 1.1 or 2.0 port

<Data cable + USB port>

- Optional OPC-2218LU* DATA CABLE
- USB 1.1 or 2.0 port

* The OPC-478UC and OPC-2218LU cannot be used with the Windows® 8.1. (As of March 2014)

<Data cable + RS-232C port>

- Optional OPC-1529R DATA CABLE
- RS-232C port

<SD card + a memory card reader or memory card slot>

- SD card (purchase separately)
- Memory card reader or Memory card slot to read the SD card (purchase separately)

■ Usable SD cards

The SD and SDHC cards are not available from Icom. Purchase locally.

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

(As of March 2014)

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

- Through the rest of this document, the SD card and a SDHC card are simply called SD cards.
- The above list does not guarantee the card's performance.

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■ USB driver installation

To use the OPC-478UC CLONING CABLE or OPC-2218LU DATA CABLE, you must install a USB driver. The latest USB driver and installation guide can be downloaded from the Icom website. Read the guide carefully, before installing the driver.

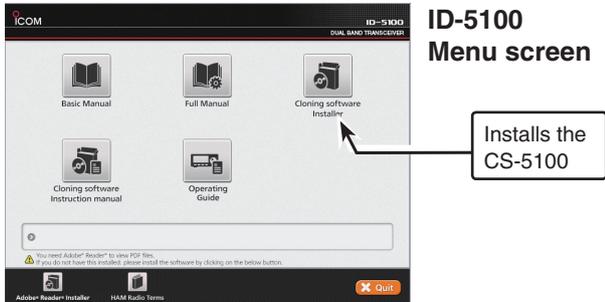
CAUTION:

- **NEVER** connect the transceiver to the PC with the OPC-478UC or OPC-2218LU until the USB driver installation has been completed.
- The driver is not supported by the Windows® automatic recognition system.

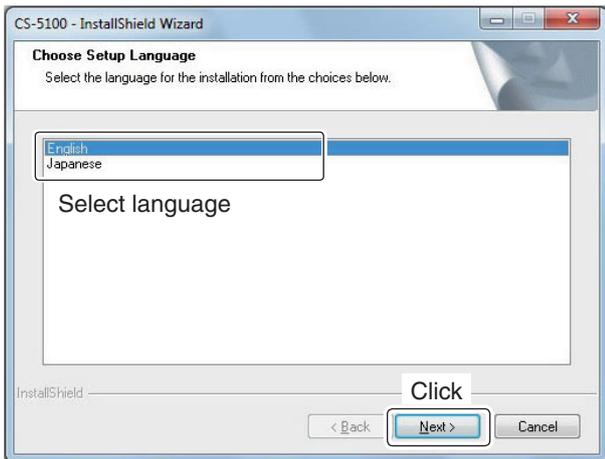
■ Software installation

When installing the software, log in as the **administrator**.

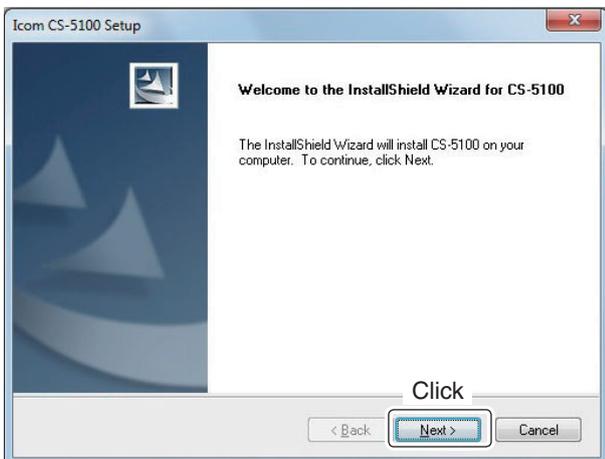
- ① Make sure Windows has completed its startup, and no other applications are running.
- ② Insert the CD into a CD drive.
- ③ Double-click “Menu.exe” on the CD.
Depending on the PC setting, the Menu screen shown below is automatically displayed.



- ④ Click [Cloning software Installer].
• If “User Account Control” appears, click [Yes] to continue.
- ⑤ “Choose Setup Language” appears. Select ‘English’ or ‘Japanese,’ and then click [Next>].
• In this document, the ‘English’ option is used.



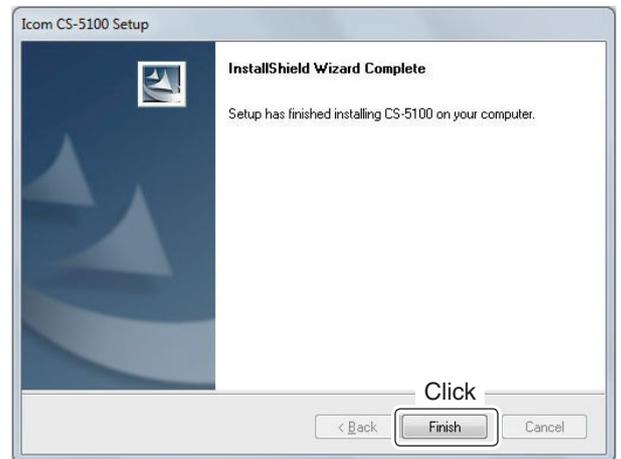
- ⑥ “Welcome to the InstallShield Wizard for CS-5100” appears, and then click [Next>].



- ⑦ “Choose Destination Location” appears, and then click [Next>].
• If desired, click [Browse...] to select another destination folder before clicking [Next >].



- ⑧ After the installation is completed, “InstallShield Wizard Complete” appears, and then click [Finish].



- ⑨ Click [Quit] on the main menu.
- ⑩ Eject the CD.
- ⑪ A program group ‘CS-5100’ appears on the program menu, and a ‘CS-5100’ shortcut icon appears on your desktop.
• You can uninstall the cloning software using “Uninstall a program” in the Windows Control Panel.

Please refer to the Help file of the cloning software for assistance with the functions or settings. To open the Help file, click [Help] in the top menu of the cloning software and select “Contents,” or simply push the [F1] key of the PC’s keyboard.

Cloning from a PC using an SD card

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

Step 1 Insert an SD card into your PC's card reader or card slot

Step 2 Make the initial set up

Step 3 Cloning (page 4)

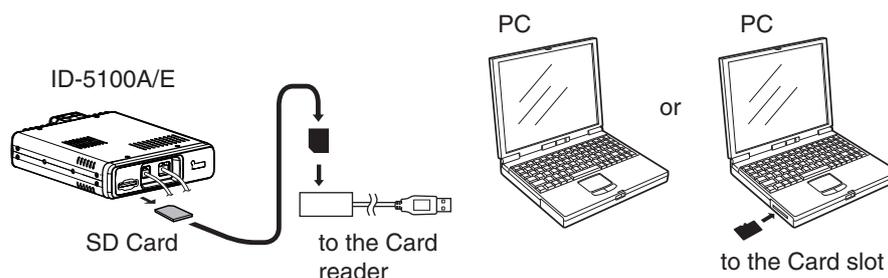
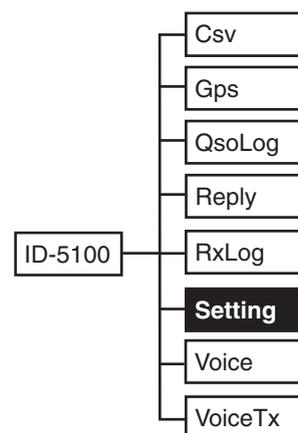
■ SD card and a PC connection

NOTE: If you use a brand new SD card, first format the card. See the section 9 of the full manual for details.

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

◇ About the SD card's folder composition

The folder composition on the SD card is as shown to the right. The transceiver's setting data (ICF file) is stored in the [Setting] folder.

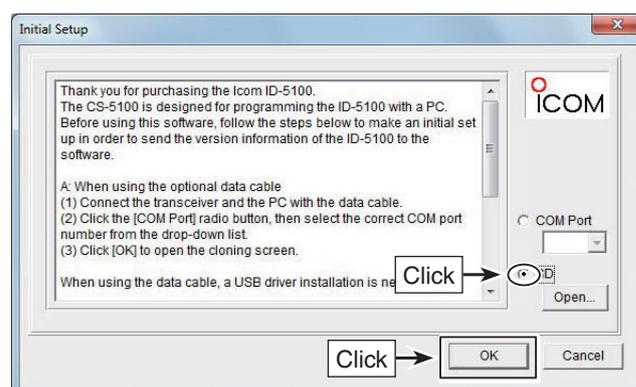


■ Initial setup window

Before using this software, read the instructions thoroughly, and follow the steps below to make the initial setup in order to send the transceiver version information.

NOTE: When the transceiver version information is not correctly sent to the software, some items may not appear on the software sheets.

- ① Click the [SD] radio button.
- ② Click [Open...] to show the data file selection window. Select the ICF file, saved in "SD card and a PC connection," as described above.
- ③ Click [OK] to read the selected file, and open the cloning window.



■ Programming information

- To prevent data loss, you should first copy the settings data (ICF file) of the card to the PC. After copying, read the data into the cloning software, before editing or entering new software parameters.
- Before editing or entering new data, make a backup file onto your PC. A backup file allows easy restoring even if the setting data in the SD card is accidentally deleted.
- Be sure to turn OFF the power before inserting or removing the SD card.
- **NEVER** remove the SD card, detach the battery pack/case, or power OFF the transceiver, while reading or writing data to or from the SD card. It will cause the data to be corrupted or damage the card.

■ Cloning operation

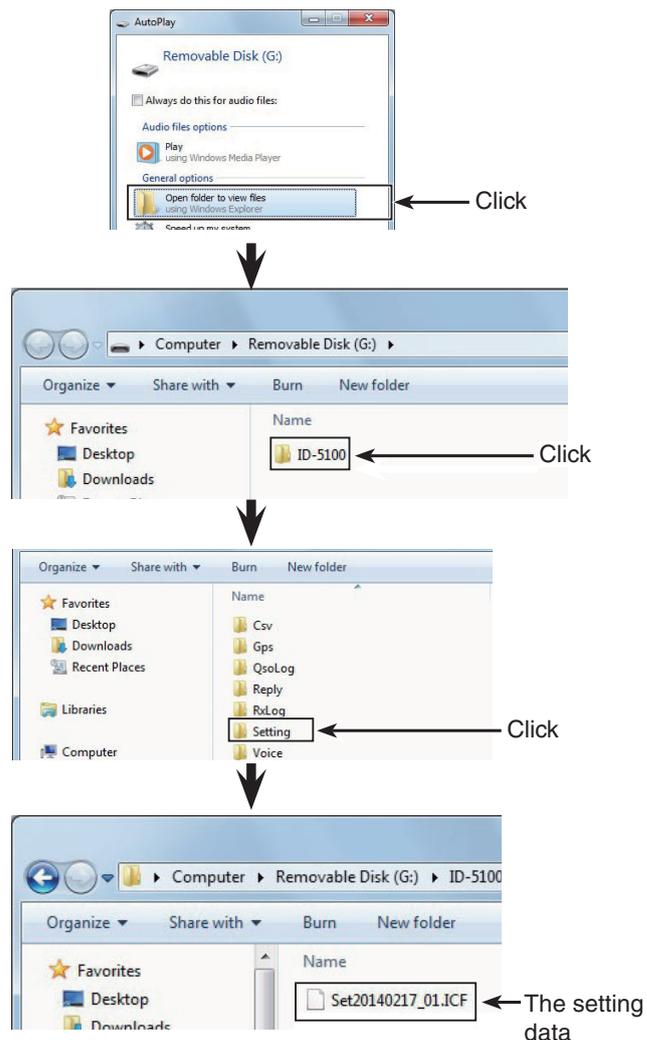
To clone the memory channels, MENU item settings and repeater list, input the CS-5100 CLONING SOFTWARE, using an SD card, follow the steps below.

- ① Set the desired memory channels, MENU item settings and the repeater list in the CS-5100 CLONING SOFTWARE, and then save them in an "icf" file format in a folder on your PC.
 - Name the file of up to 20 characters and symbols.
- ② Copy the ICF file into the [Setting] folder in the [ID-5100] folder on the SD card.
- ③ Insert the SD card that includes the ICF file into the slot of the transceiver, then load it to complete the cloning.
(MENU > SD card > **Load Setting**)

NOTE:

- After loading, the contents of the ICF file will overwrite the current data.
 - The loading contents can be selected between "ALL," "Except My Station," and "Repeater List Only." Select "Repeater List Only" to load only the repeater list into the transceiver.
 - The original skip settings in your repeater list can be kept when loading. When "Keep 'SKIP' setting in Repeater List?" appears, select "YES" to keep the skip settings in the repeater list.
 - See the section 9 of the full manual for details.
- ④ Turn OFF the power, then turn it ON again to operate the transceiver with the loaded data.

Copying the ICF file in the PC into the SD card



Cloning from a PC using the optional cables

To clone from a PC using the OPC-478UC, OPC-2218LU or OPC-1529R cable, follow the steps below.

Step 1 Connect the transceiver and PC using the cables

Step 2 Make the initial set up

Step 3 Cloning (page 6)

NOTE:

Before reading or writing cloning data, the "DV Data TX" setting of the transceiver must be set to 'PTT.' Otherwise, when data is input from a PC through the [DATA] jack, the transceiver automatically transmits it.
(MENU > DV Set > DV Data TX)

■ Transceiver and a PC connection using the optional cables

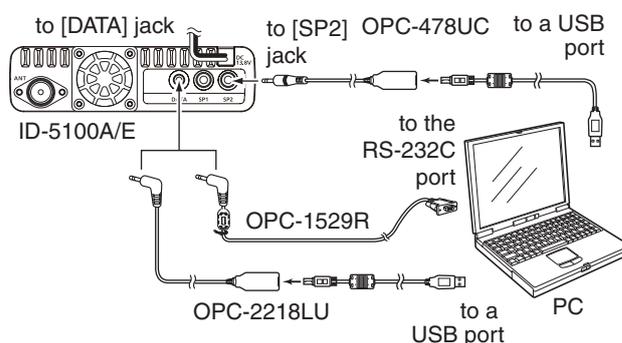
① Install the USB driver.

- Download and install the latest OPC-478UC or OPC-2218LU USB driver from the Icom website. See the OPC-478UC or OPC-2218LU instruction manual for details.
- The installation is not necessary when using the OPC-1529R.

② Make sure the transceiver power is OFF.

③ Connect the cable as illustrated to the right.

④ Turn ON the transceiver.



■ Initial setup window

Before using this software, read the instructions thoroughly, and follow the steps below to make the initial setup in order to send the version information of the ID-5100A/E to the software.

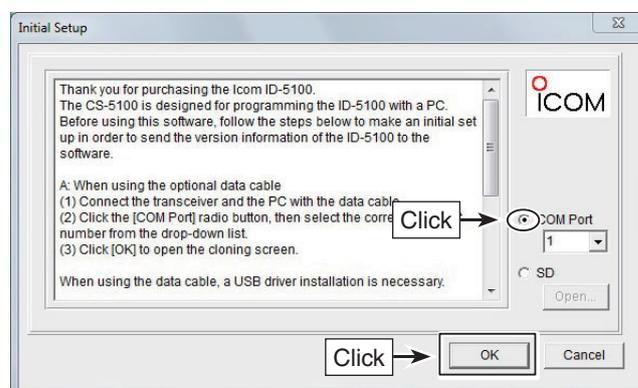
NOTE: When the version information of the transceiver is not correctly sent to the software, some items may not appear on the sheets.

① Click the [COM Port] radio button.

② Select the correct COM port number from the drop-down list, or directly enter the COM port number into the box.

- See the "Driver Installation Guide" to check the COM port.

③ Click [OK] to open the cloning screen.



■ Programming information

- To prevent data loss, you should first read (download) all the transceiver's data before entering or editing parameters using the cloning software.
- Before editing or entering, make a backup file onto your PC. A backup file allows easy restoring even if the setting data in the transceiver is accidentally deleted.
- While reading or writing (uploading) cloning data, **NEVER** turn OFF the transceiver or the PC, and **NEVER** disconnect the cable. Otherwise, the data could be lost or deleted.

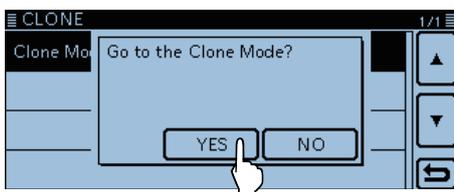
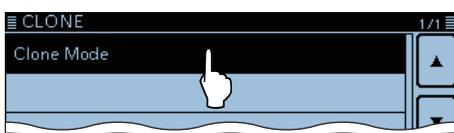
■ Cloning operation

To clone the memory channels, MENU item settings and repeater list using the optional cables, follow the steps described below.

- If the OPC-478UC CLONING CABLE is used, skip the step ①.

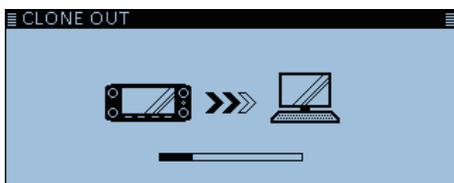
- ① Touch [MENU] on the ID-5100A/E, and then follow the steps described below to display the cloning mode.

(MENU > Others > Clone > Cloning Mode)



The Clone Mode display.

- ② Click , or select "Read <- TR" in the [Clone] menu to start reading the data from the transceiver. Also, click , or select "Open Ctrl+O" in the [File] menu to open the ICF file to write to the transceiver.



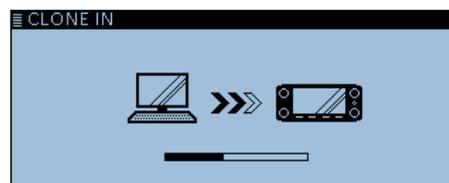
The display while reading.

- ③ Program each setting for each function, using the CS-5100.

- See the Help file of the CS-5100 for assistance.

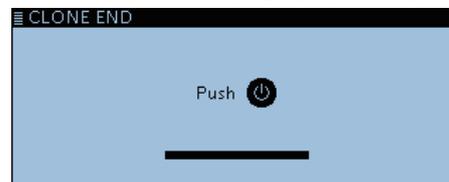
- ④ Click , or select "Write -> TR" in the [Clone] menu to write the new or edited data into your transceiver.

NOTE: After writing, the new or edited data will overwrite the current data.



The display while writing.

- ⑤ Turn OFF the power, then turn it ON again to operate the transceiver with the loaded data.



The display when the writing is completed.

Latest settings file and repeater list downloading

The latest settings file and repeater list can be downloaded from the Icom website.

Access the following URL to download the latest data.
<http://www.icom.co.jp/world/support/download/firm/index.html>

① Decompress the downloaded file.

A "5100_USA_140220" folder will be created on the same place where the downloaded file is saved.

• **File Name:** 5100_USA_140220.zip

Depending on the updated file date.

Depending on the transceiver version.

/// This instruction manual describes when the file name is "5100_USA_140220.zip," for example.

For your reference:

The latest settings file (ICF file) and repeater list (CSV; Comma Separated Values file) are contained in the downloaded ZIP file.

<Settings file (ICF file)>

All setting data of the transceiver is stored in the ICF file.

- How to program (See to the right)
- How to clone (See pages 4 and 6)

File Name: 5100_USA_140220.icf

Depending on the updated file date.

Depending on the transceiver version.

<Repeater list (CSV file)>

The Repeater list is stored in only the CSV file.

- How to program (See page 9)
- How to import (See page 8)
- How to export (See page 9)

File Name: 5100_USA_Rpt_140220.csv

Depending on the updated file date.

Depending on the transceiver version.

② Copy the settings file (ICF file) and repeater list (CSV file) contained in the downloaded ZIP file to a folder on your PC.

Entering data in the settings file

This section describes how to enter data in the downloaded settings file (ICF file).

1. Settings file (ICF file) editing

Before starting to enter, make an initial set up in order to send the version information of the ID-5100A/E to the software. (pp. 3, 5)

① Click  or select "Open Ctrl+O" in the [File] menu of the CS-5100 to open the ICF file, saved in "Latest settings file and repeater list downloading" as described to the left.

② Program each setting for each function, using the CS-5100.

- See the Help file of the CS-5100 for assistance.

2. Settings file (ICF file) saving

➔ Click  or select "Save Ctrl+S" or "Save As..." in the [File] menu of the CS-5100 to save the edited file (ICF file) to a folder on your PC.

/// See pages 4 and 6 for about how to write the saved ICF file to the transceiver.

NOTE:

The ICF (Icom Cloning Format) file, including the default values, can be downloaded from the Icom website.

To reset the settings of the transceiver to their default values, copy the downloaded ICF file to a local PC folder, and then write it to the transceiver.

Importing the repeater list in a CSV format file

Please read this section before importing the repeater list in a Comma Separated Values (CSV) format file to write the repeater information to the transceiver.

When the cables are used to clone:
The setting contents, except the repeater list, can be retained by doing the following procedures.

1. Reading the data from the transceiver

➔ Click , or select “Read <- TR” in the [Clone] menu to start reading the data from the transceiver.

Before importing, make a backup file of all the transceiver’s data onto your PC to prevent data loss.

2. Repeater list import

① Select the “Repeater List” folder or each repeater group on the tree view screen of the CS-5100.

② Click “Import” in the [File] menu, and then click “All...”.

The repeater information in a CSV file will be imported, and sorted into all groups, according to the group number.

NOTE: When “Group...” is selected, all repeater information in the file will be imported into the repeater group, selected in step ①.

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

③ The [Open] screen appears.

Select the CSV file, saved in “Latest settings file and repeater list downloading” described on page 7, and then click [Open].

④ The “Import from the file” dialog appears, and then click [OK].

If [Cancel] is selected, the importing will be cancelled.

⑤ The “Keep ‘USE(FROM)’ setting in Repeater List?” dialog box appears, and then click [Yes] or [No] to start importing.

Yes : If the repeater call sign in your original repeater group is in the CSV file format, the original “USE(FROM)” settings will be kept when importing.

No : Even if the repeater call sign in your original repeater group is in the CSV file format, the original “USE(FROM)” setting will be replaced when importing.

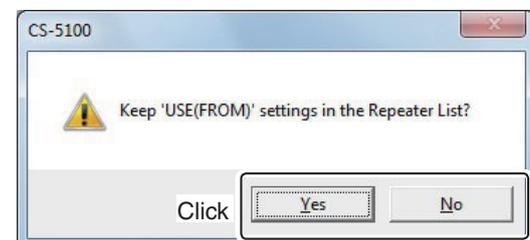
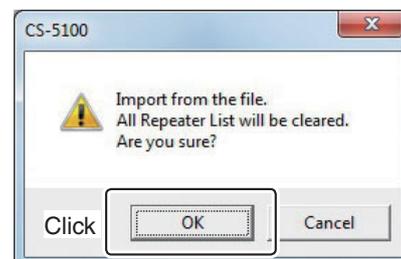
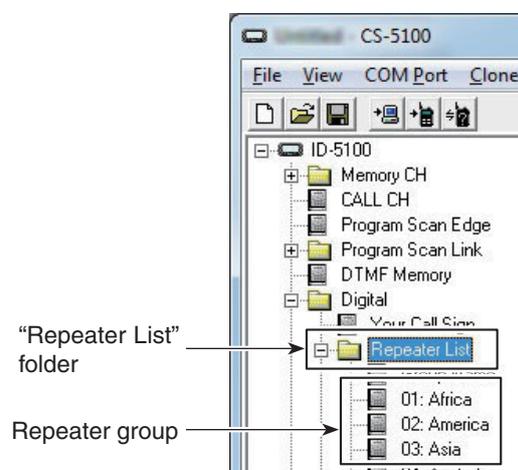
⑥ The repeater information of the repeater list is read to the CS-5100.

Import is complete.

See page 6 for details about how to write the imported repeater list to the transceiver.

See page 9 for details about how to program or export the repeater list.

<Tree view screen of the CS-5100>



About the “USE(FROM)” setting

Select whether or not the repeater can be selected as an access repeater (FROM), when you rotate [DIAL]. If “NO” is selected, the repeater does not appear in the “FROM” selection, and is skipped during a DR mode scan.

Programming and Exporting the repeater list in a CSV format file

Please read this section before programming and exporting the repeater list in a Comma Separated Values (CSV) format file.

1. Programming the Repeater list

- ① Select the desired repeater group in the “Repeater List” folder on the tree view screen of the CS-5100.
- ② Program each item of the repeater list, using the CS-5100.
 - See the Help file of the CS-5100 for assistance.

2. Exporting the Repeater list

- ① Select the “Repeater List” folder or each repeater group on the tree view screen of the CS-5100.
- 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 programmed in only the selected group.
 - **All...** : Exports repeater information programmed in all groups.
- ③ When the “Save as” window appears, save the data in a CSV format using a individual file name. Then save it in a CSV format file to a folder on your PC, and the exportation is completed.

<Tree view screen of the CS-5100>

