IC-7100

Firmware update instructions

Thank you for using the Icom Download Service.

■ General

If desired, you can update your IC-7100's firmware. Updating the firmware adds new function(s) and improves performance.

▨ **NOTE:**
The descriptions in this guide are based on Windows 8.

◇ **System requirement**
One of the following operating systems and other items are required:

• **Operating System (OS)**
  Microsoft® Windows® 8 (32/64bit)
  (Except for Microsoft® Windows® RT)
  Microsoft® Windows® 7 (32/64bit)
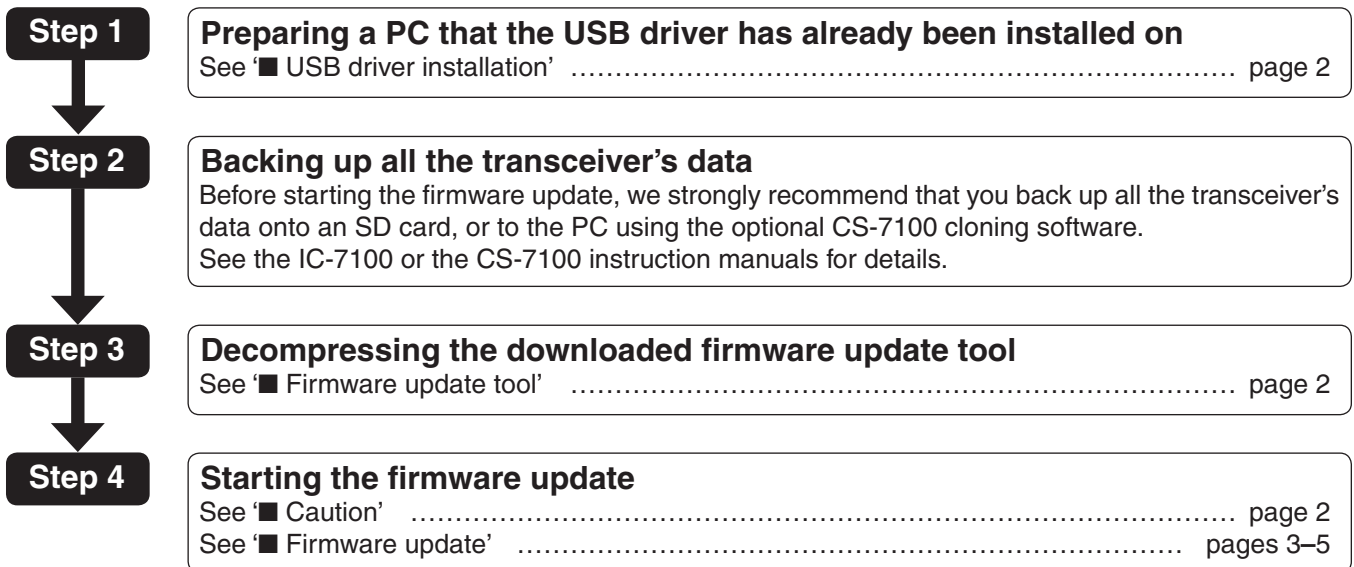 Microsoft® Windows Vista® (32/64bit)
  Microsoft® Windows® XP (32bit)

• **Others**
  USB cable (supplied with IC-7100)
  A USB 1.1, 2.0 or 3.0 port

■ Procedures

These instructions describe the firmware update procedures assuming that the update tool has already been downloaded from the Icom website ([Support]→"Firmware Updates/Software Downloads")*.
*The locations may change without notice or obligation.

Step 1

Preparing a PC that the USB driver has already been installed on
See '■ USB driver installation' ……………………………………………………………… page 2

Step 2

Backing up all the transceiver's data
Before starting the firmware update, we strongly recommend that you back up all the transceiver's data onto an SD card, or to the PC using the optional CS-7100 cloning software.
See the IC-7100 or the CS-7100 instruction manuals for details.

Step 3

Decompressing the downloaded firmware update tool
See '■ Firmware update tool' ……………………………………………………………… page 2

Step 4

Starting the firmware update
See '■ Caution' ……………………………………………………………………………… page 2
See '■ Firmware update' ………………………………………………………………… pages 3–5
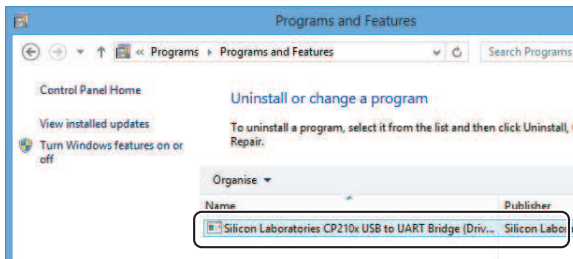
■ USB driver installation

CAUTION:
- **NEVER** connect the transceiver to the PC with the USB cable until the USB driver installation has been completed.
- The driver is not supported by the Windows® automatic recognition system.

To use the USB cable between the transceiver and the PC, you must first install a USB driver.
- The USB driver comes with the CS-7100, CS-9100 or RS-BA1. Or you can download it from the Icom website.

NOTE: When you use a PC with a USB 3.0 port for the firmware update, confirm the driver name. If you find the name, "Silicon Laboratories CP210x USB to UART Bridge (Driver Removal)" on the Control Panel screen, as shown below, uninstall it and then install the latest driver.

You can download the latest driver and installation guide from the Icom website:

http://www.icom.co.jp/world/index.html

Read the installation guide before installing the driver.

■ Firmware update tool

Decompress the "7100_firmup_release_e∗.zip" that you downloaded from the Icom website.
A "7100_firmup_release_e∗" folder will be created in the same place where the downloaded file is saved, and the "7100_fu_release_e∗.exe" file will be included.
- "∗" stands for the release number.

■ Caution

CAUTION: NEVER turn OFF the transceiver power while updating the firmware.
If you turn OFF the transceiver power, or if a power failure occurs while updating, the transceiver firmware will be corrupted. In that case, try to update the firmware again, referring the '■ **Update failure**' on page 7. If the transceiver's firmware is still corrupted, you will have to send the transceiver back to the nearest Icom distributor for repair. This type of repair is considered out of warranty, even if the transceiver warranty period is still valid.


✓ *Recommendation!*
Before starting the firmware update, we strongly recommend that you back up all the transceiver's data onto an SD card, or to the PC.
Settings and/or memory contents will be lost or returned to their default settings when the firmware update is performed.

A-7085-4EX

■ Firmware update

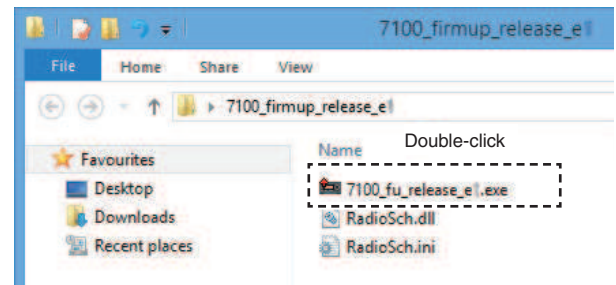▨ Make sure Windows has completed its start-up, and no other applications are running.

① Double-click the "7100_firmup_release_e∗" folder that contains the firmware update tool.
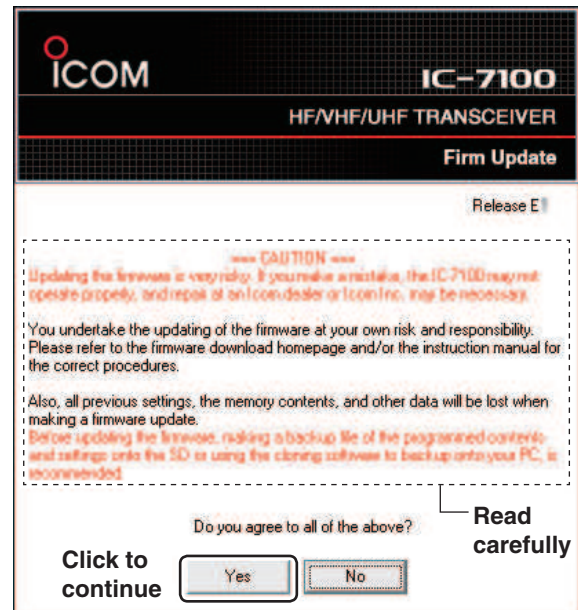 • "∗" stands for the release number.
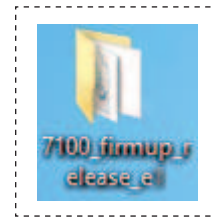
Double-click

② Double-click "7100_fu_release_e∗.exe" to start up the firmware update tool.
  • The window appears as shown to the lower right.

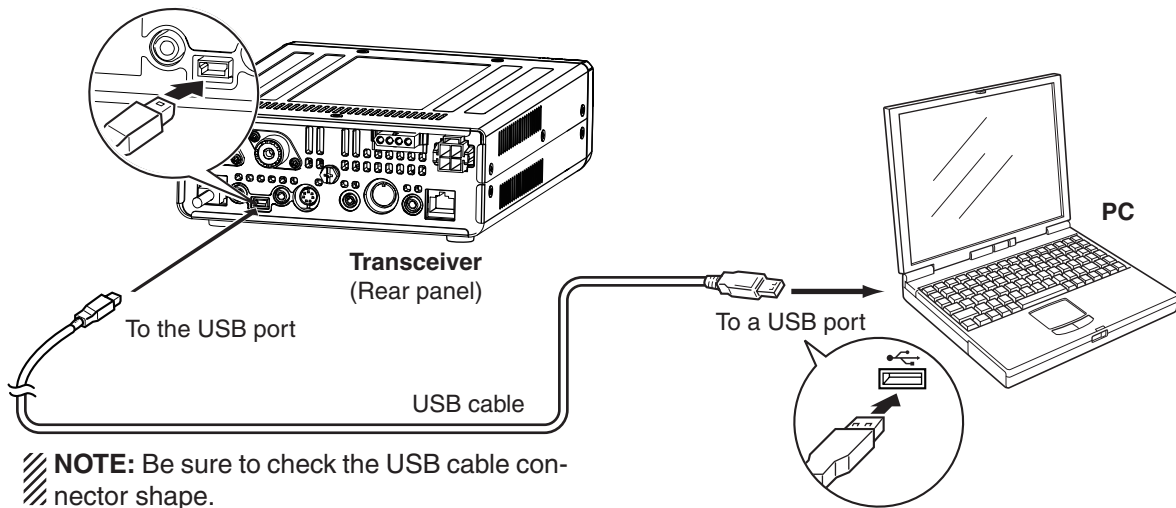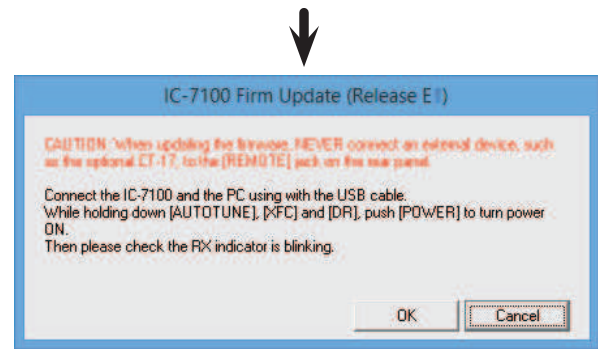③ Carefully read the caution in the window. If you agree, click [Yes] to continue the firmware update.

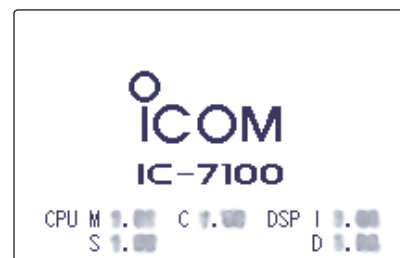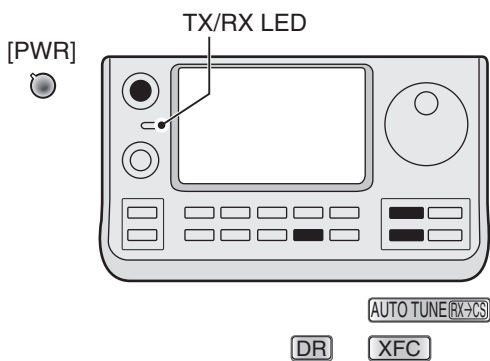☞ Continued on the next page.

A-7085-4EX

■ Firmware update (Continued)

④ The dialog box to the right appears.
First, turn OFF the transceiver power, and then con-
nect the USB cable between the transceiver and the
PC, as shown below.

▨ **CAUTION:** When updating the firmware, **NEVER**
▨ connect anything to the [REMOTE] jack. This may
▨ damage the transceiver.

IC-7100 Firm Update (Release E)

CAUTION 'when updating the firmware, NEVER connect an external device, such
as the optional CT-17, to the [REMOTE] jack on the rear panel.

Connect the IC-7100 and the PC using with the USB cable.
While holding down [AUTOTUNE], [XFC] and [DR], push [POWER] to turn power
ON.
Then please check the RX indicator is blinking.

OK   Cancel

Transceiver
(Rear panel)

To the USB port

USB cable

PC

To a USB port

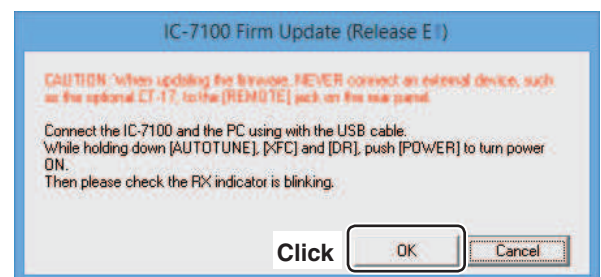▨ **NOTE:** Be sure to check the USB cable con-
▨ nector shape.

⑤ While holding down [AUTO TUNE RX→CS], [XFC] and [DR], push
[PWR]◉ to turn ON the power.
• The display shows the Firmware update mode, and the
TX/RX LED blinks green.

TX/RX LED

[PWR]

[AUTO TUNE RX→CS]

[DR]   [XFC]

ⒾCOM
IC-7100

CPU M 1. C 1. DSP I 1.
S 1. D 1.

Firmware update mode display

⑥ Click [OK] in the dialog box, as shown to the right.
• If "No Answer from the IC-7100" dialogue box appears,
see '■ If "No Answer from the IC-7100" appears' on page
6 for details.

IC-7100 Firm Update (Release E)

CAUTION 'when updating the firmware, NEVER connect an external device, such
as the optional CT-17, to the [REMOTE] jack on the rear panel.

Connect the IC-7100 and the PC using with the USB cable.
While holding down [AUTOTUNE], [XFC] and [DR], push [POWER] to turn power
ON.
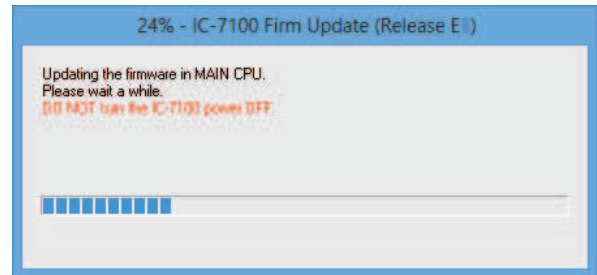Then please check the RX indicator is blinking.

Click   OK   Cancel

■ Firmware update (Continued)

⑦ The dialog box to the right appears.
Click [Yes], if you want to start the firmware update.

⚠**WARNING! NEVER** turn OFF the transceiver power or disconnect the cable until the update is completed.
The transceiver firmware will be corrupted.
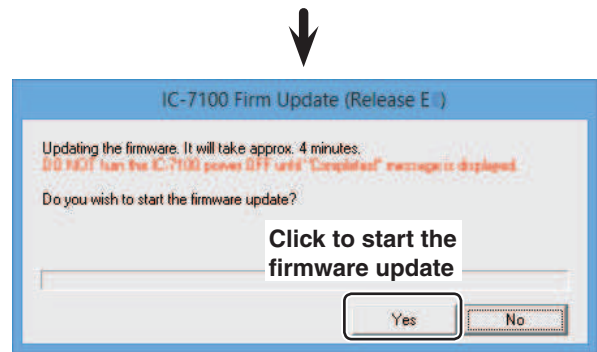
⑧ The window shows the firmware updating.

MAIN CPU firmware update window

Depending on the firmware, the number of windows that sequentially appear may differ.

⑨ The dialog box to the right appears.
Click [OK] to finish the update.
• The transceiver automatically reboots. After turning OFF the transceiver, disconnect the USB cable.

◇ **Version confirmation**

You can confirm the firmware version by doing the following steps.

① Push SET to enter the Set mode.
② Touch the "Version" item of the "Others" Set mode.
Others > Information > *Version*
• If the specified item is not displayed, touch [▲] or [▼] one or more times to select the page.
③ Confirm the current version is as shown in the screen to the right.
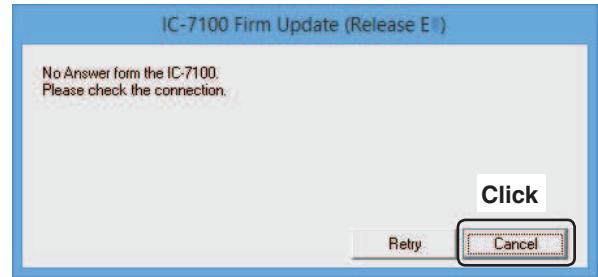④ Push SET to exit the Set mode.
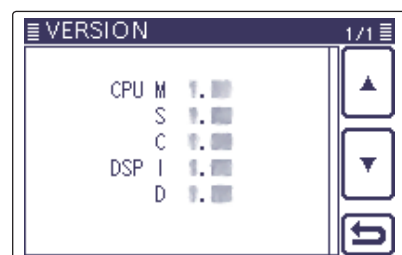
■ If "No Answer from the IC-7100" appears

If the screen as shown to the right appears, click [Cancel] to cancel the firmware update tool. Then, check the following, and repeat step ② on page 3 of these instructions.

• Is the USB driver correctly installed?
• Is the USB cable correctly connected to the transceiver and the PC?
• Does the transceiver enter the Firmware update mode?
• Do you use a PC with USB 3.0 port for the firmware update? If so, you must install a latest USB driver. See page 2 '■ USB driver installation' for details.

  Before installing the latest driver, read "Before installation" described on page 2 of the installation guide.

IC-7100 Firm Update (Release E)

No Answer form the IC-7100.
Please check the connection.

Click

Retry   Cancel

■ If the transceiver is already updated

If the screen as shown to the right appears, click [OK] to cancel the firmware update tool.
• The transceiver exits the Firmware update mode, and then automatically reboots. Turn OFF the transceiver, and then disconnect the USB cable.

IC-7100 Firm Update (Release E)

This update is not needed.

Click

OK
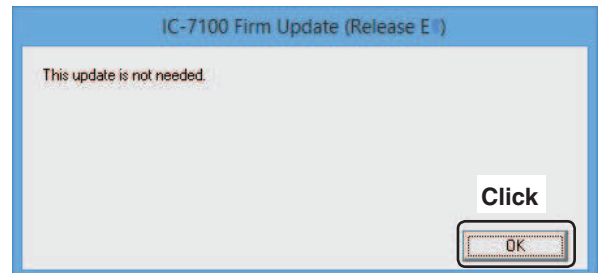
■ Update failure

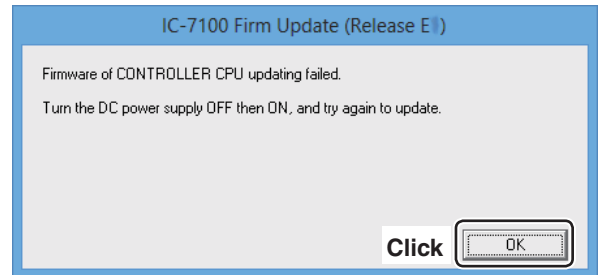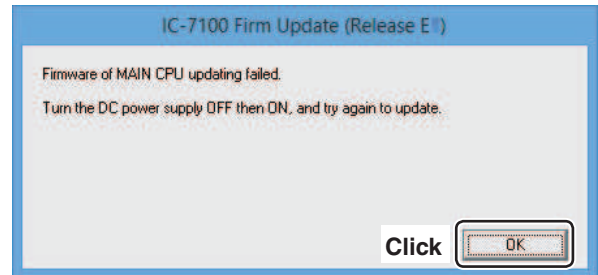## • MAIN CPU or CONTROLLER CPU update failure

1 If a power failure or loose cable connection occurs while updating the MAIN CPU or CONTROLLER CPU firmware, one of the dialog boxes to the right appears.

2 Turn OFF the DC power supply of the transceiver, and then turn it ON again.
  • The transceiver automatically turns ON with a blank display, and the TX/RX LED blinks. (Firmware update mode)

3 Click [OK] to finish the firmware update, then restart the IC-7100 Firmware update tool again.

4 Repeat '■ **Firmware update**' on pages 3 to 5.
  • Follow the procedures from step ②.
  • The USB cable is already connected, so skip the USB cable connection in step ④.
  • The transceiver is already powered ON with the Firmware update mode, so skip step ⑤.

IC-7100 Firm Update (Release E▌)

Firmware of MAIN CPU updating failed.

Turn the DC power supply OFF then ON, and try again to update.

Click [OK]

IC-7100 Firm Update (Release E▌)

Firmware of CONTROLLER CPU updating failed.

Turn the DC power supply OFF then ON, and try again to update.

Click [OK]

• SUB CPU or DSP update failure

1 If a power failure or loose cable connection occurs while updating the SUB CPU or DSP firmware, one of the dialog boxes to the right appears.

2 Turn OFF the DC power supply to the transceiver, and then turn it ON again.

3 Hold down [PWR]◉ for 1 second to turn OFF the power.

4 Click [OK] to finish the firmware update, then restart the IC-7100 Firmware update tool again.

5 Repeat '■ **Firmware update**' on pages 3 to 5.
  • Follow the procedures from step ②.
  • The USB cable is already connected, so skip the USB cable connection in step ④.

IC-7100 Firm Update (Release E▌)

Firmware of SUB CPU updating failed.

Turn the DC power supply OFF then ON, and try again to update.

Click [OK]

IC-7100 Firm Update (Release E▌)

Firmware of IF DSP updating failed.

Turn the DC power supply OFF then ON, and try again to update.

Click [OK]

IC-7100 Firm Update (Release E▌)

Firmware of DV DSP updating failed.

Turn the DC power supply OFF then ON, and try again to update.

Click [OK]