TS-2000(X) /TS-B2000

Firmware updating procedure

Last updated : September 6, 2007

The TS-2000(X)/B2000 firmware is stored in the main CPU chip which contains a built-in flash ROM.
This manual describes the method of updating the firmware of the TS-2000(X)/B2000.

1. Requirements

1) A personal computer. (IBM PC or compatible)
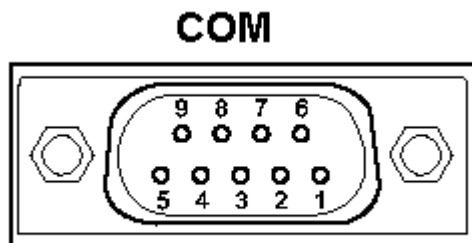
2) The firmware updating program.

This program runs on Windows® 2000 (SP4 or later), Windows® XP (SP2 or later), or Windows Vista™.
About 1MB of free hard disk space is needed to install this program.At least 5MB of memory is required to run this program.

Note : When installing, running and uninstalling this program, you must have administrative privileges.

3) An RS-232C straight cable.

(With 9-pin female connector for the TS-2000(X)/B2000 COM connector)

TS-2000(X)/B2000 rear panel view

COM Pin No.	COM Pin Name Ref. : Computer	Function Ref. : Transceiver	I/O Ref. : Transceiver
1	NC	-	-
2	RXD	Transmit data	Output
3	TXD	Receive data	Input
4	NC	-	-
5	GND	Signal ground	-
6	NC	-	-
7	RTS	Receive enable	Input
8	CTS	Transmit enable	Output
9	NC	-	-

2. Firmware updating program installation

1) Execute the downloaded file (self-extracting) and extract the installation program into a designated folder.

2) In the designated folder, a folder labeled "disk1" will be created.

3)

Execute the "Setup.exe" file within the "disk1" folder to begin installation.
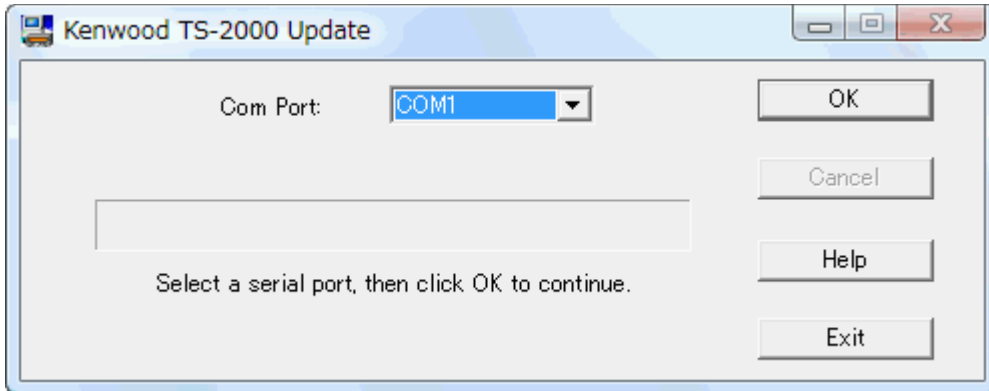
4) Once installation begins, follow the instructions that appear on the screen.
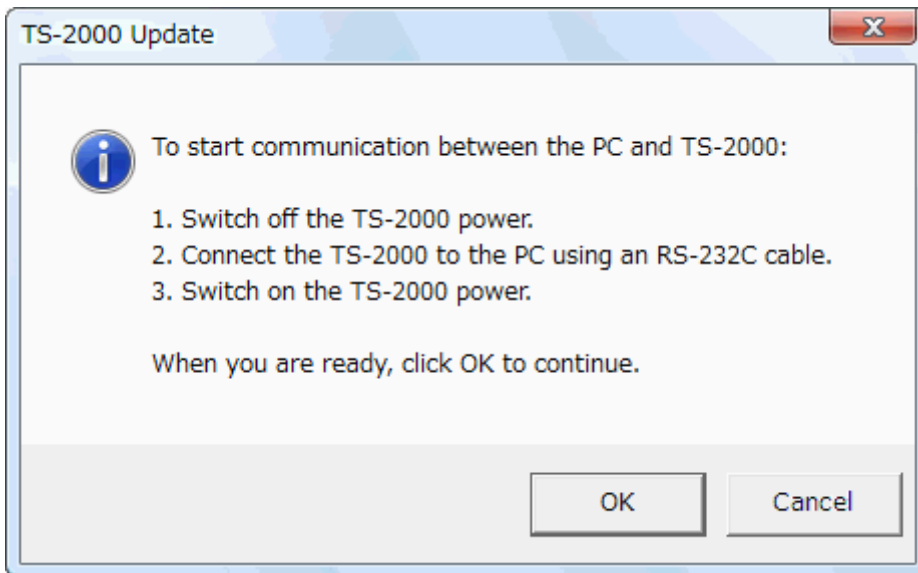
3. TS-2000(X)/B2000 baud rate setting

1) Press **[⏻]** (Power) to turn the transceiver ON.

2) Set the communication baud rate of your TS-2000(X)/B2000 to 9600bps (Menu 56).

4. Start TS-2000(X)/B2000 firmware updating program

1) Start the TS-2000 firmware updating program
   [Start] ⟹ [Programs] ⟹ [KENWOOD] ⟹ [TS-2000 Update] ⟹ [TS-2000 Update]
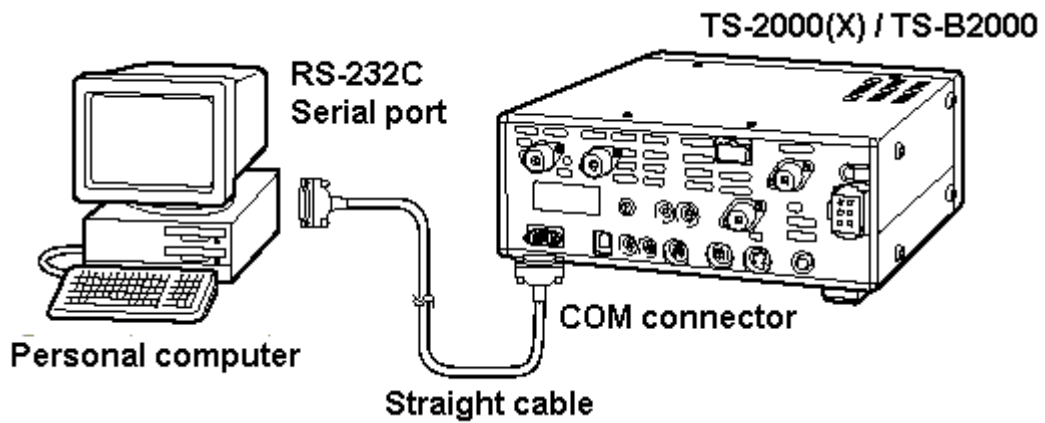
2) Select the serial port you will use.

3) To start communication between the PC and the TS-2000(X)/B2000, click OK.
   The following dialog box will appear.

5. Transceiver recognition steps

1) Press **[⏻]** (Power) to turn the transceiver OFF.

RS-232C Serial port

TS-2000(X) / TS-B2000

Personal computer

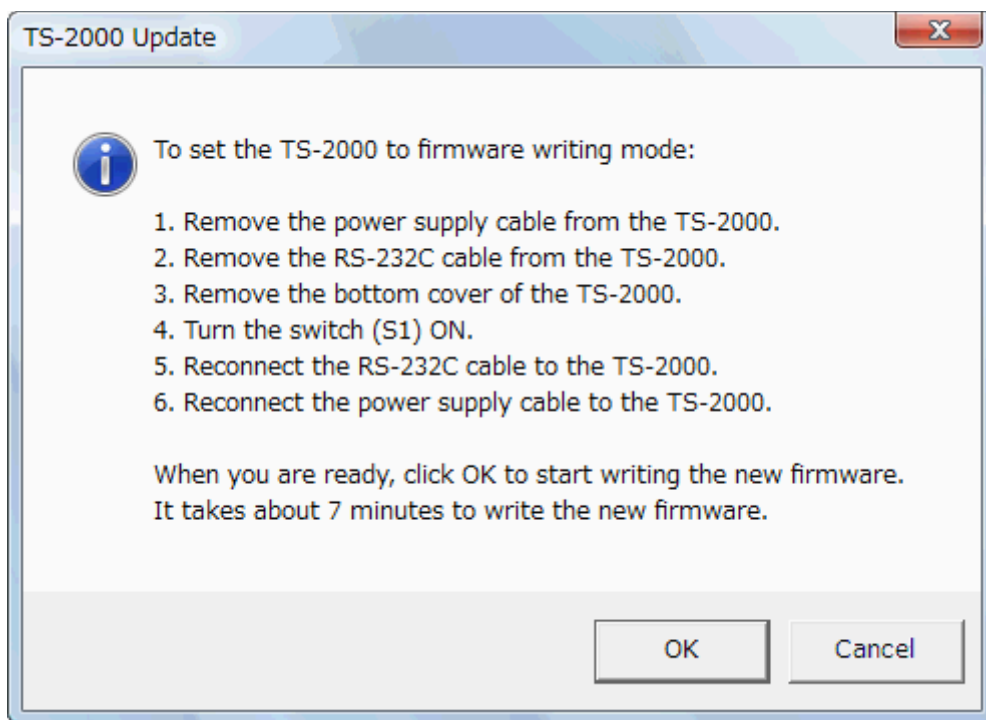COM connector

Straight cable

2) Connect the TS-2000(X)/B2000 to the PC using an RS-232C straight cable as shown above.

3)
Press [⏻] (Power) to turn the transceiver ON.
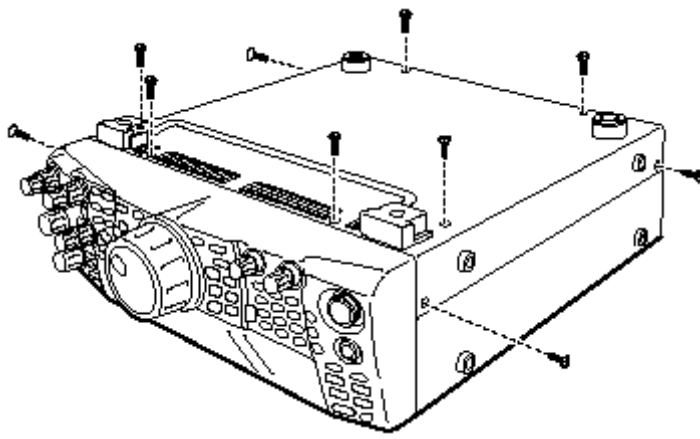
Click OK.

The following dialog box will appear.

TS-2000 Update

To set the TS-2000 to firmware writing mode:

1. Remove the power supply cable from the TS-2000.
2. Remove the RS-232C cable from the TS-2000.
3. Remove the bottom cover of the TS-2000.
4. Turn the switch (S1) ON.
5. Reconnect the RS-232C cable to the TS-2000.
6. Reconnect the power supply cable to the TS-2000.

When you are ready, click OK to start writing the new firmware.
It takes about 7 minutes to write the new firmware.

OK   Cancel

Note : This transceiver recognition step is required only in the 1st execution after installation.

6. Firmware writing procedures

1) Remove the DC power supply cable from the TS-2000(X)/B2000.

2) Remove the RS-232C cable from the TS-2000(X)/B2000.

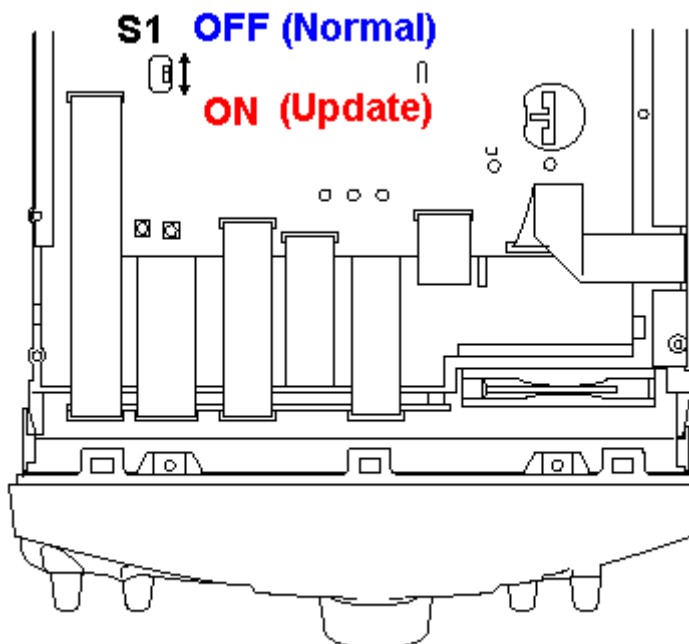3) Remove the bottom cover of the TS-2000(X)/B2000.

4) Turn the switch (S1) ON.

The switch is located on the PC board as shown below.

Notes : 1) The DC power supply cable must be removed before the switch (S1) is turned ON.
2) Move the tab of the switch (S1) gently; Rough handling may cause it to break.

S1 OFF (Normal)
ON (Update)

Bottom side view

5) Reconnect the RS-232C cable to the TS-2000(X)/B2000.

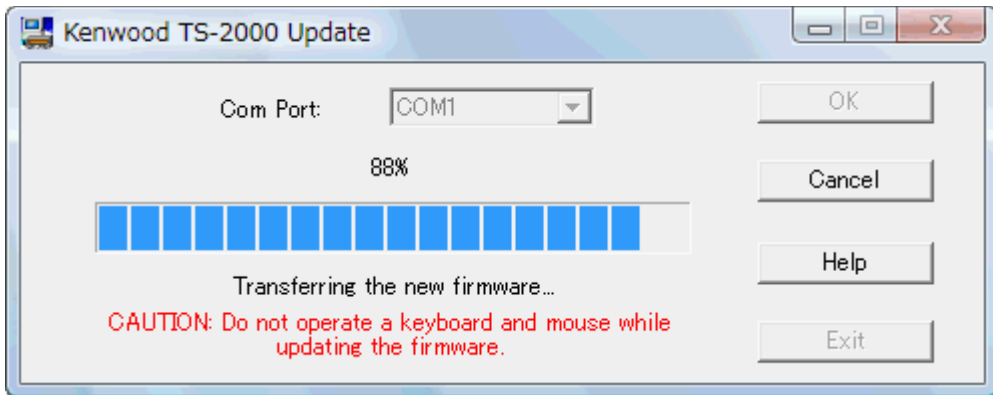6) Reconnect the DC power supply cable to the TS-2000(X)/B2000.
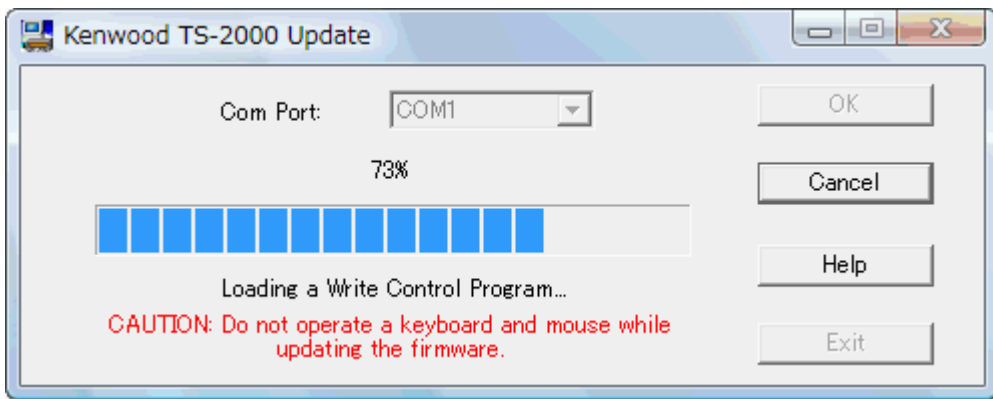
Note : The transceiver does not turn on any indicators, but it is ready to rewrite firmware.

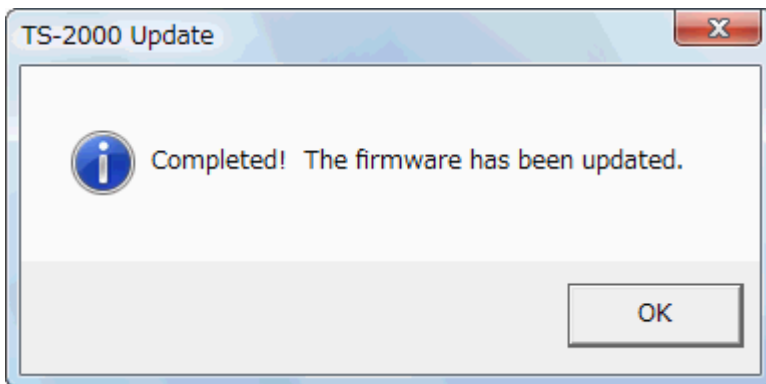Do not operate [⏻] (Power) switch during the firmware writing mode.

When you are ready, click OK.
The new firmware will be transferred into the main CPU flash ROM.
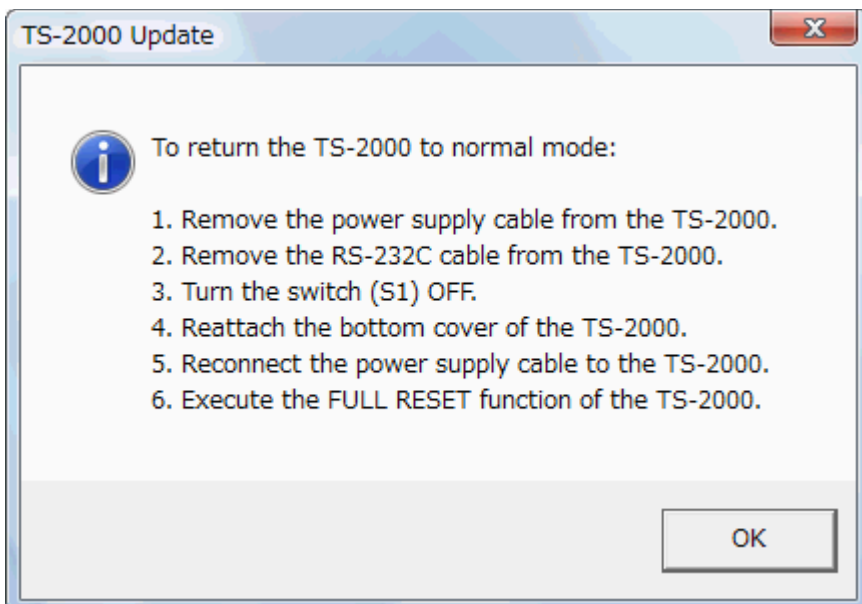It takes about 7 minutes to write the new firmware.

After the firmware writing step is completed, the following confirmation dialog box will appear.

Click OK.

The following information dialog box will appear.

Notes : 1) Do not operate the power switch of the transceiver during the firmware writing mode.

7. Post Updating steps

1) Remove the power supply cable from the TS-2000(X)/B2000.

2) Remove the RS-232C cable from the TS-2000(X)/B2000.

3) Turn the switch (S1) OFF.

4) Reattach the bottom cover of the TS-2000(X)/B2000.

5) Reconnect the power supply cable to the TS-2000(X)/B2000.

6) Execute the FULL RESET function of the TS-2000(X)/B2000 as follows.

8. FULL RESET

a: TS-2000(X)

1) Press [⏻] (Power) to turn the transceiver on while pressing and holding [A=B].

2) "FULL RESET PUSH A=B SW" message will appear.

3) Press [A=B] to perform the FULL RESET.

b: TS-B2000

1) Press [⏻] (Power) to turn the transceiver on.

2) Press [Reset] button on the front panel to perform the FULL RESET.

9. Uninstalling the firmware updating program

Delete "Kenwood TS-2000 Update" by executing [Control Panel]-[Add/Remove Programs].