



FT2000 Firmware upgrade instructions

These instructions if followed exactly will enable you to upgrade your FT2000 radio to the latest version of the firmware available as of 1st Feb 07.

This software requires a PC running Windows (XP recommended) & a real DB-9 or DB-25 serial port. This software is NOT certified for use with a USB Serial port adaptor.

This process will reset the radio to manufacturing defaults, so users should note any special menu settings before this procedure is started.

The upgrade process involves two separate steps.

Part 1: Download and install the flash programming software on your PC.

Part 2: Prepare your radio for the Firmware upgrade, connect it to your PC and download the firmware into the radio.

PART 1 Installing the Flash Programming Software onto a PC

- (1) From your computer desktop locate the file "AH025_121_1-25-07.zip" and double click it to open it.
- (2) In Windows XP double click the folder AH025_V0121_1-25-14.
- (3) A new window should open with three files. AH025_V0121.sfl, FSW003 and FSW003.ini.
- (4) Select all these files and save to a location on your drive and folder of choice. All files must be in the same folder.
- (5) In other versions of Windows you will need a unzip program to open the archive. WinZip is a popular program available free of charge on the Internet..
- (6) Click on the WinZip icon or select the program from your desktop or File manager.
- (7) The WinZip application should open and show 3 files.
- (8) Point to the "Extract" icon and double click.
- (9) In the next WinZip Extract Window note the path to the drive and folder where the files will be stored, (You may change the location if desired.) and click the WinZip Extract button.

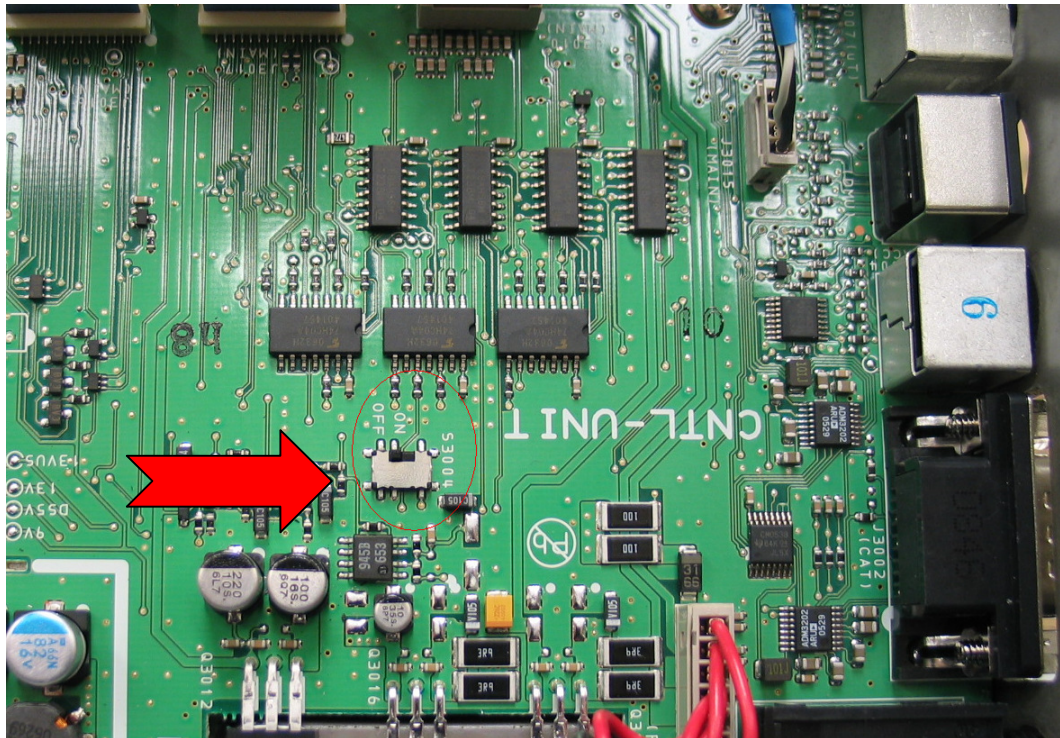
The programmer and software are now stored on your computer in the drive and folder designated in the last step ready to update your FT-2000 Transceiver.

This completes Part 1.

PART 2 FT-2000 Software Update Procedure

This procedure is used to upload new firmware into the FT2000 Transceiver.

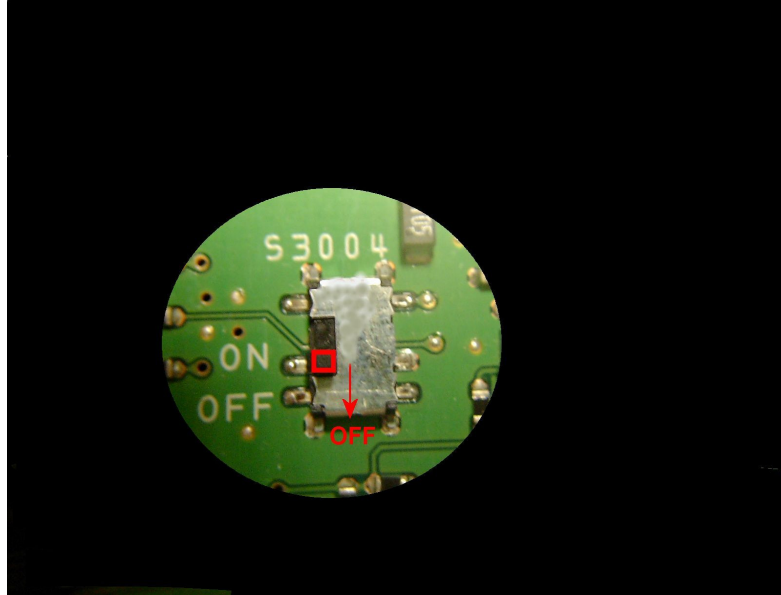
- (1) Turn off the main power switch located on the back of the FT-2000 (or turn off the power supply for FT-2000D) and remove the AC power cord. ***It is very important to remove the power cable before next step.***
- (2) You must access the programming switch S3004.
- (3) This switch is located on the Control PC Board on the underside of the radio.
- (4) You can access this switch either by:
 - a. removing the covers completely or
 - b. removing the Left rear foot (recommended)
- (5) ***Remove the Covers:***
Disconnect all cables from the radio.
Remove the top cover (9 black screws), Remove the bottom cover (seven black screws). Remove the bottom shield (15 silver screws). Carefully Place the Transceiver bottom side up on a sturdy cleared worktable. Find the micro-switch on the pc board near the rear right hand corner when looking down at the bottom of the FT-2000.



The black rectangle in the switch above is the switch lever in the OFF position.

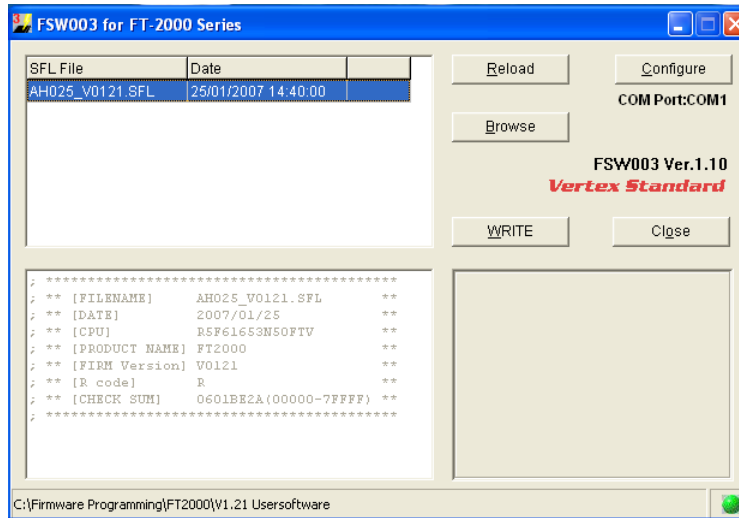
- (6) Go to Step 8

- (7) *Remove the Left Rear Foot:*
Disconnect all cables from the radio.
Carefully place the transceiver bottom side up, with the front panel towards you. Using a Hex Screwdriver remove the Rear RIGHT foot. You will see a small hole through which you can operate the switch.

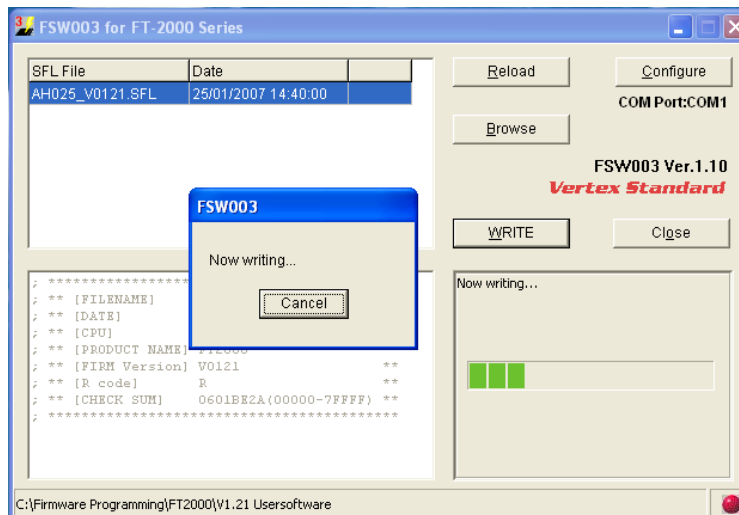


- (8) Carefully move the programming micro switch S3004 to the **ON** position.
- The switch is a surface mount configuration switch and can be easily damaged if not treated carefully. It does not need excessive force to move.
- The switch has a small vertical lever that can be moved with a small flat blade screwdriver. This is indicated by the small red square on the picture above when the switch is in the OFF position. Illuminating the area with a flashlight will greatly improve visibility.
- The ON position is when the switch lever is towards the rear panel of the radio.
- (9) Connect a **D-sub 9-pin straight through modem cable** to the **COM1 connector** of your computer and the **9-pin CAT connector** on the rear of the transceiver. Straight through cable is Pin1 to Pin1, Pin 2 to Pin 2 etc.
- (10) Connect the AC power cable. (in the case of the FT-2000D connect the power supply cables)
- (11) Turn on the main power switch. (Located on the rear panel of the FT-2000 or on the front of the power supply for the FT-2000D) . The radio will not power up with the front panel power switch when S3004 is in the ON position.
- (12) Close all other user applications on your PC and then go to the drive and folder where you stored the firmware software. Locate and double click on the file FSW003 (the icon has a lightning bolt on it).

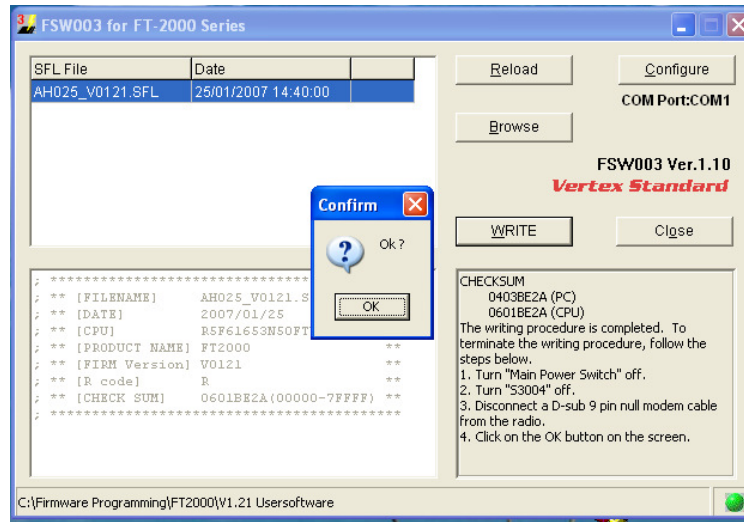
- (13) When the program opens, confirm that the file AH025_V0121.SFL is highlighted; if not, click on it to highlight it.



- (14) Click on CONFIGURE if the serial port indicated is not the same as the port to which you have connected your DB-9 cable. Note that this software has not been tested and not is not certified to work with any USB<>RS232 port adaptors, although it may do with certain types of USB port adaptors.
- (15) Click on WRITE in the program window. A green status bar will appear below the WRITE button to show the progress of the download. Do not interrupt the process until it completes.



- (16) When the loading process is complete, click on the [OK?] box as shown.



NB: The null Modem cable shown on this screen is incorrect.

- (17) Turn off the main power switch located on the back of the FT-2000 (or on front of PSU of FT-2000D).
- (18) Disconnect the AC power cable. (FT-2000D also disconnect the PSU cables.)
- It is very important to remove the AC power cable before the next step***
- (19) **Switch the programming micro switch S3004 to the off position.**
The off position is when the switch lever is towards the front of the radio.
- (20) Remove DB-9 cable from the CAT connector on the rear of the transceiver.
- (21) Depending on which step you followed in Step 4 either:
- (22) Replace the Rear Foot or
- (23) Replace the bottom shield panel (15 screws). Replace the bottom case (7 black screws). Replace the top case (9 black screws)
- (24) Reconnect the power cord, (or power supply and connectors for FT-2000D)
- (25) Turn on the main power switch located on the back of the FT-2000 (or on front of PSU for FT-2000D)
- (26) Press and hold in the [FAST] and [LOCK] keys while turning the radio back on. (This resets the radio and locks in the new software.)
- (27) Confirm that the radio resets to 7.0MHz on both VFO A & B.

The updating process is now complete.



What to do if something goes wrong

This is a robust procedure so most problems are related to the computer, serial ports and leads or not following the procedure correctly.

Ensure that no other user applications are running on your PC that may interrupt the writing process.

If there is no Green progress bar within 15 seconds of pressing the WRITE button, then you should check your serial port and leads are OK.

This can be done by following Steps 17 to 20 above and then connect power cable and confirm radio will power up from front panel power switch. Run a terminal emulator and set the speed on the computer and FT2000 radio to 4800 8N2 with menu 29 CAT TOT to 1000. Press Return and you should see ?; response. Enter FA; and radio should respond with FAXXXXXX where XXXX.XX represents the VFO A frequency. If this works then that confirms that your serial port cable and connections are OK.

If the radio will not power up after the WRITE procedure is completed. then carefully check the position of SW3004. The switch must be in the OFF position for normal operation. The switch is in the OFF position when the switch lever is towards the front of the radio.

Paul Bigwood G3WYW Yaesu UK Ltd,
Unit 12 Sun Valley Business Park, Winnall Close, Winchester SO23 0LB UK.