FTDX3000
Firmware Upgrade Manual

This software is personal computer software, used to update the firmware of a FTDX3000 transceiver after connecting it to a personal computer.

Important

Before downloading this software, please read the “Important Notes” carefully.
Downloading or installing this software will be taken as indicating your agreement with the contents of the “Important Notes”.
“Transceiver” is used hereafter to refer to FTDX3000 transceiver.

Important Notes

- All responsibility for the usage of this software lies with the customer. We cannot be held responsible in any way for any damages or losses which may be incurred by the customer as a result of using this software.
- Copyrights and all other intellectual property rights for the software, as well as the software manual, are the property of YAESU MUSEN CO., LTD.
- The revision, modification, reverse engineering, and decompiling of this software is prohibited. Redistribution, transfer, and resale of downloaded files are also prohibited.
- This software is for use with transceivers for use in Japan only. It cannot be used with transceivers for use overseas.
- Downloaded files may only be used for personal use.
- If you cannot perform firmware upgrading yourself, please consult with one of our sales sites or service centers.

System Requirements (Operating Environment)

Supported Operating Systems

- Microsoft® Windows® 7
- Microsoft® Windows Vista™ (Service Pack 1 or later)
- Microsoft® Windows® XP (Service Pack 3 or later)

※ To upgrade the TFT Firmware on your FTDX3000, you must first install "Microsoft .NET Framework 3.5" onto the personal computer before beginning the firmware upgrade process.

CPU

CPU which satisfies OS (operating system) requirements

RAM (System Memory)

Amount of RAM (system memory) meeting or exceeding OS (operating system) requirements

HDD (Hard Disk)

HDD (hard disk) with capacity meeting or exceeding OS (operating system) requirements
In addition to having sufficient free space for the OS to operate, the program requires 20 Mbyte or more of free space.

Ports

USB port (USB1.1/USB2.0) or RS-232C interface (COM port)
Do not connect the USB cable to your personal computer and FTDX3000 until after the "virtual COM port driver" installation is completed, because the wrong driver may be installed.

USB Driver (for Performing Version Upgrade via the USB Port)

Install the FTDX3000 virtual COM port driver in the personal computer before beginning the firmware upgrade process.
Please see the FTDX3000 USB Driver (Virtual COM Port Driver) on the Yaesu Website for details (http://www.yaesu.com/).

Cables

USB cable (AB type) or RS-232C straight cable
Please have a commercially available cable ready.

Regarding this Firmware

MAIN, DSP, TFT, and FFT firmware are available for FTDX3000 transceiver. Check your firmware version, and perform firmware upgrading when needed.

How to Confirm the Firmware Version (see below)

How to Update the MAIN Firmware (see p3)

Downloading the MAIN Firmware

Transfer Software: FSW018

Firmware: AH046H_V****.SFL

How to Update the DSP Firmware (see p5)

Downloading the DSP Firmware

Transfer Software: FW-DSP

Firmware: AH046H_v****.dat

How to Update the TFT Firmware (see p8)

Downloading the TFT Firmware

Transfer Software: TFW

Firmware: TFT_V**-**.bin

How to Update the FFT Firmware (see p10)

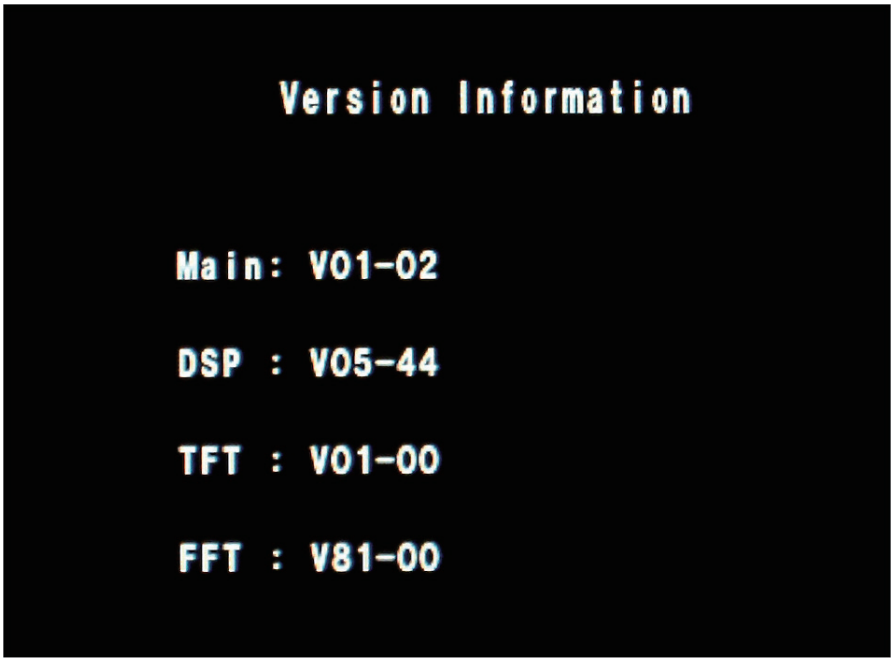
Downloading the FFT Firmware

Transfer Software: FW-FFT

Firmware: AH046Hfft_v****.dat

How to Confirm the Firmware Version

Press and hold the [POWER] key to turn on the transceiver, while pressing and holding the [SCOPE] key, [GEN] key, [50] key, and [ENT] key on the transceiver's main panel.
The versions of each firmware will be displayed on the TFT screen.

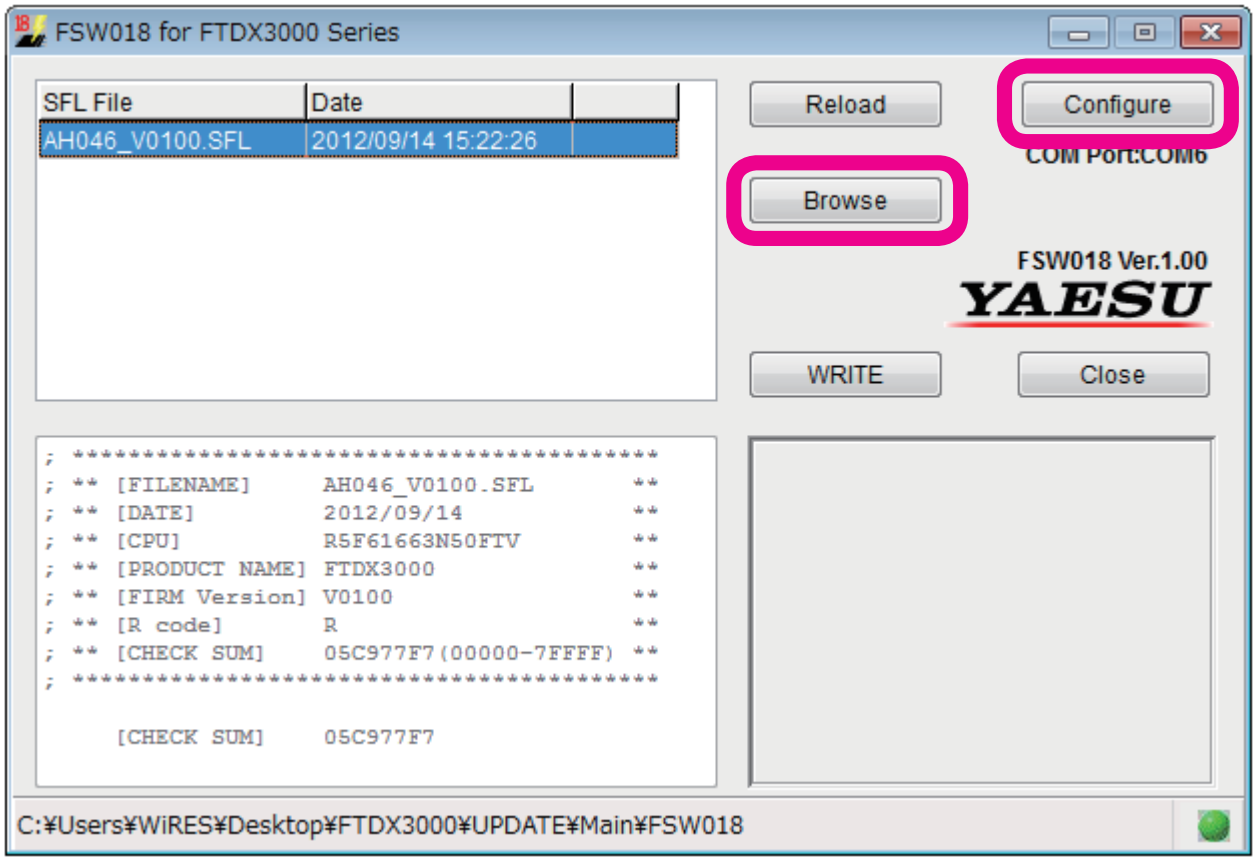


How to Update the MAIN Firmware

Preparation: Download the **FSW018** transfer software and **AH046_V01**.SFL** firmware to the same folder, and Unzip the downloaded zip file.

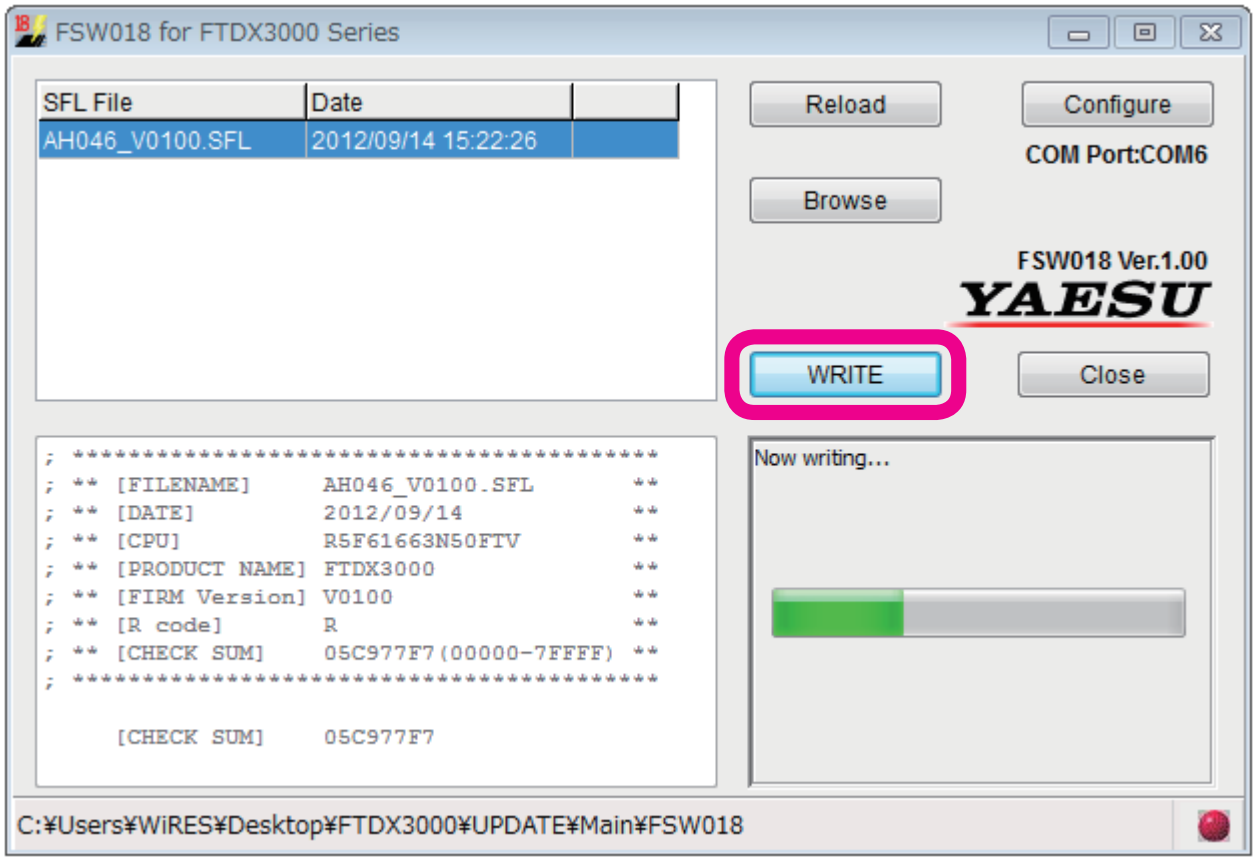
The example below is for Windows® 7.

1. Confirm that the radio is turned off then disconnect DC cable and all other cables from the transceiver unit.
2. Connect the transceiver unit USB terminal and personal computer USB port via a standard, commercially available cable.
   (The FTDX3000 virtual COM port driver must be installed in advance.)
   Alternatively, connect the transceiver unit CAT terminal and personal computer COM port with an RS-232C straight cable.
   (No driver installation is required when connecting via an RS-232C cable.)
3. Confirm that the external power supply's power is turned off, and connect the DC cable to the transceiver. While pressing and holding the [UP] (↑) and [DOWN] (↓) keys on the transceiver unit panel, turn on the external power supply. (Do not touch the transceiver's POWER switch.)
   NOTE: This puts the radio into program mode and the display will be blank.
4. Execute the FSW018.exe transfer software.

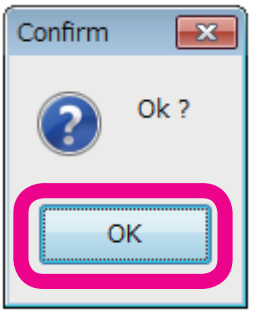


   Click the “Configure” button and set the COM port number.
   (Use an Enhanced COM port when using a USB cable. Please see the FTDX3000 Virtual COM Port Driver on the Yaesu Website for details (http://www.yaesu.com/).)
5. Click the “Browse” button on the FSW018 transfer software screen, and select the firmware to be transferred (SFL file).

6. Click the “WRITE” button on the FSW018 transfer software screen. The firmware transfer process will begin.



Please wait until the process has been completed.



When “OK?” is displayed on-screen, the update has been completed.

7. Click the “OK” button.
8. Turn off the external power supply unit's power.
9. Disconnect the USB cable connecting the transceiver to the personal computer.
   Alternatively, disconnect the RS-232C cable connecting the transceiver to the personal computer.
10. Turn on the external power supply unit's power.
11. Press and hold the [POWER] key while pressing the [FAST] + [LOCK] keys on the transceiver's main panel, turning on the transceiver's power (Reset procedure).
12. Confirm that the unit's power has turned on, and press and hold the [POWER] to turn it off.
    This completes the firmware upgrading process.

If there is a problem during the upgrading process, disconnect the DC cable from the transceiver, and turn off the external power supply, then close the FSW018 transfer software, and try again.

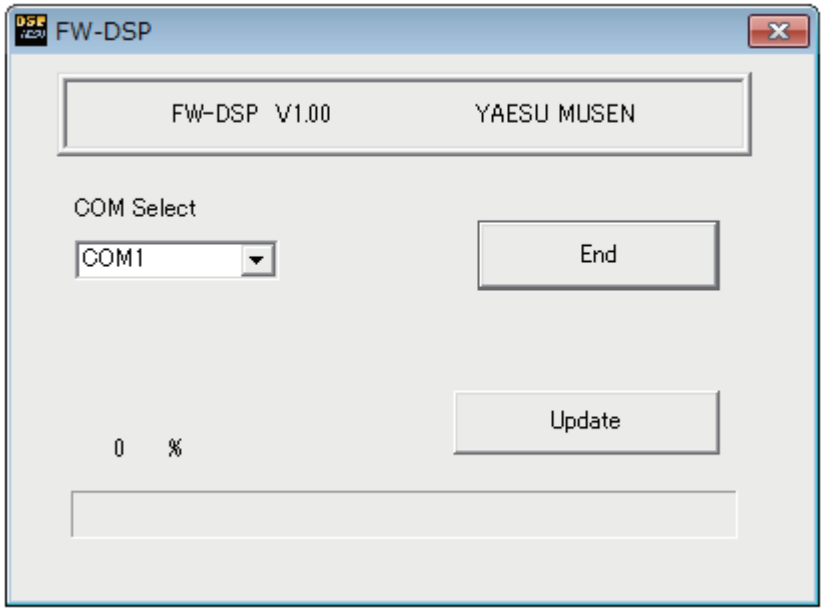
How to Update the DSP Firmware

Preparation: Download the **FW-DSP** transfer software and **AH046H_V**.dat** firmware to the same folder, and Unzip the downloaded zip file.

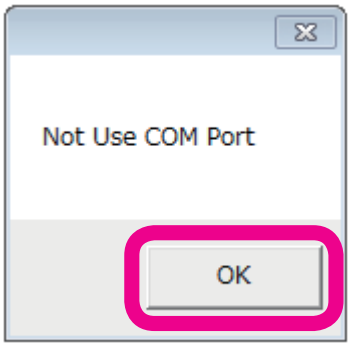
The example below is for Windows® 7.

1. Confirm that the radio is turned off then disconnect DC cable and all other cables from the transceiver unit.
2. Connect the transceiver unit USB terminal and personal computer USB port via a standard, commercially available cable.
   (The FTDX3000 virtual COM port driver must be installed in advance.)
   Alternatively, connect the transceiver unit CAT terminal and personal computer COM port with an RS-232C straight cable.
   (No driver installation is required when connecting via an RS-232C cable.)
3. Connect the DC cable to the transceiver, and turn the external power supply unit power on.
   Press and hold the [POWER] key while pressing the [MOX] + [BK-IN] keys on the transceiver's main panel, turning on the transceiver's power.
   The transceiver's frequency display will appear as below, and the unit will switch to DSP write mode.

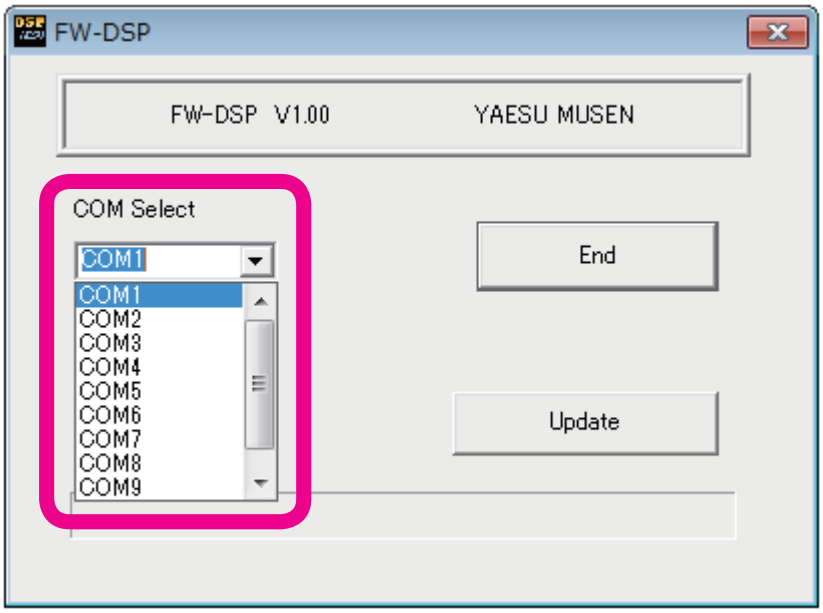
4. Execute the FW-DSP.exe transfer software.



When the following screen appears, click the “OK” button.

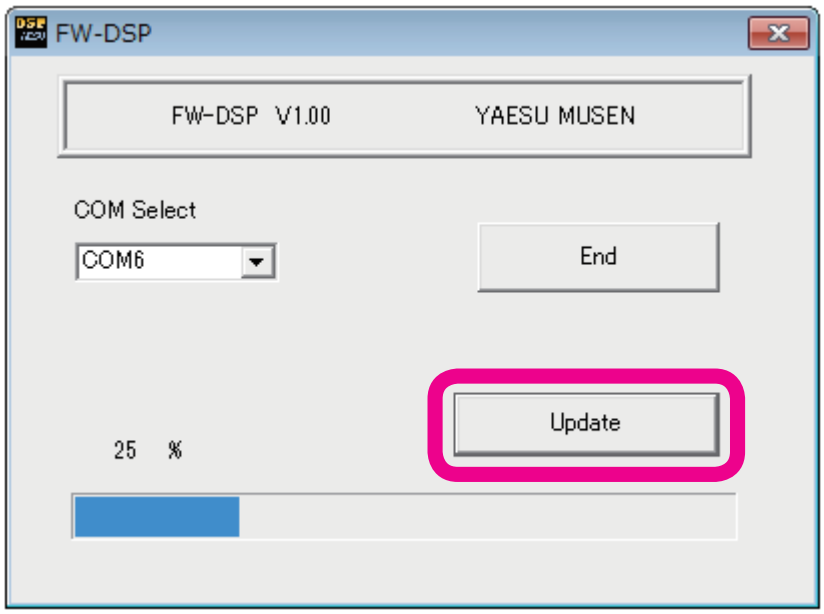


On the FW-DSP COM Select screen, set the COM port number.



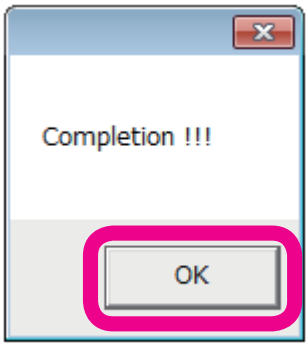
The COM port number may vary from computer to computer.
(Use an Enhanced COM port when using a USB cable. Please see the FTDX3000 Virtual COM Port Driver for details on the Yaesu Website (http://www.yaesu.com/).)

Click the “Update” button on-screen, select the firmware to be transferred (dat file), and click the “Open” button.



Please wait until the process has been completed.

When the progress bar is full, and “Completion!” is displayed on screen, the update has been completed.



5. Click the “OK” button displayed on-screen.
6. Press and hold the [POWER] key on the transceiver's main panel, turning on the transceiver's power.
7. Click the "End" button on the transfer software screen.
8. Disconnect the USB cable connecting the transceiver to the personal computer.
   Alternatively, disconnect the RS-232C cable connecting the transceiver to the personal computer.
   This completes the firmware upgrading process.

   If there is a problem during the upgrading process, disconnect the DC cable from the transceiver, and turn off the external power supply; then close the FW-DSP transfer software, and try again.

How to Update the TFT Firmware

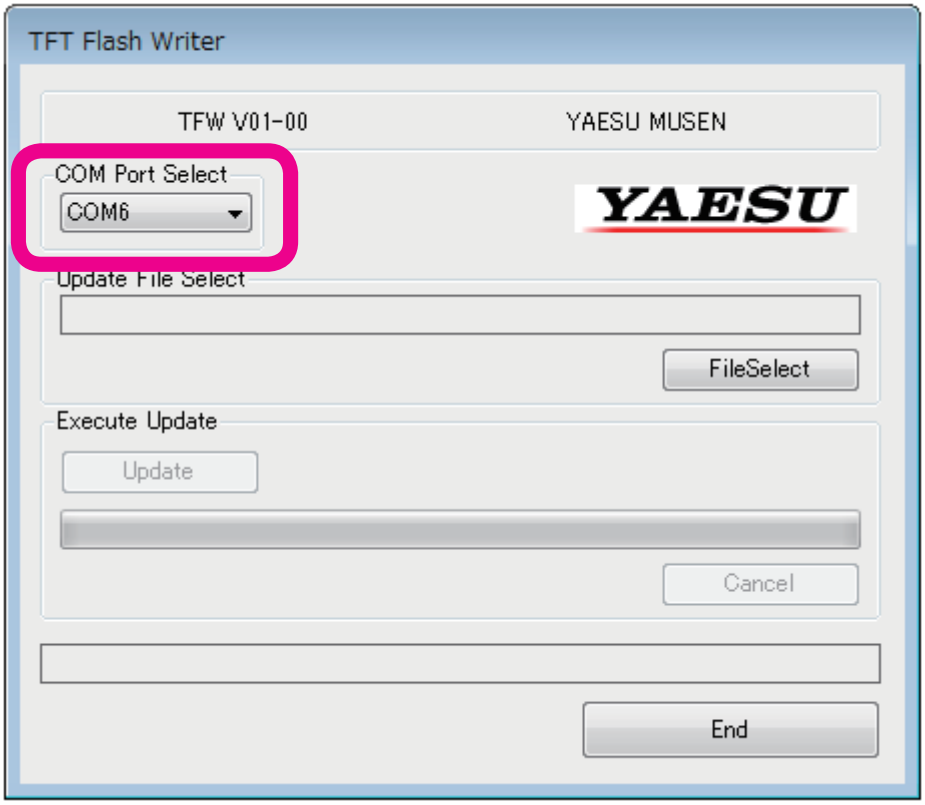
Preparation: Download the **TFW** transfer software and **TFT_V01-**.bin** firmware to the same folder, and Unzip the downloaded zip file.

※ To upgrade the TFT Firmware on your FTDX3000, you must first install "Microsoft .NET Framework 3.5" onto the personal computer before beginning the firmware upgrade process.

The example below is for Windows® 7.

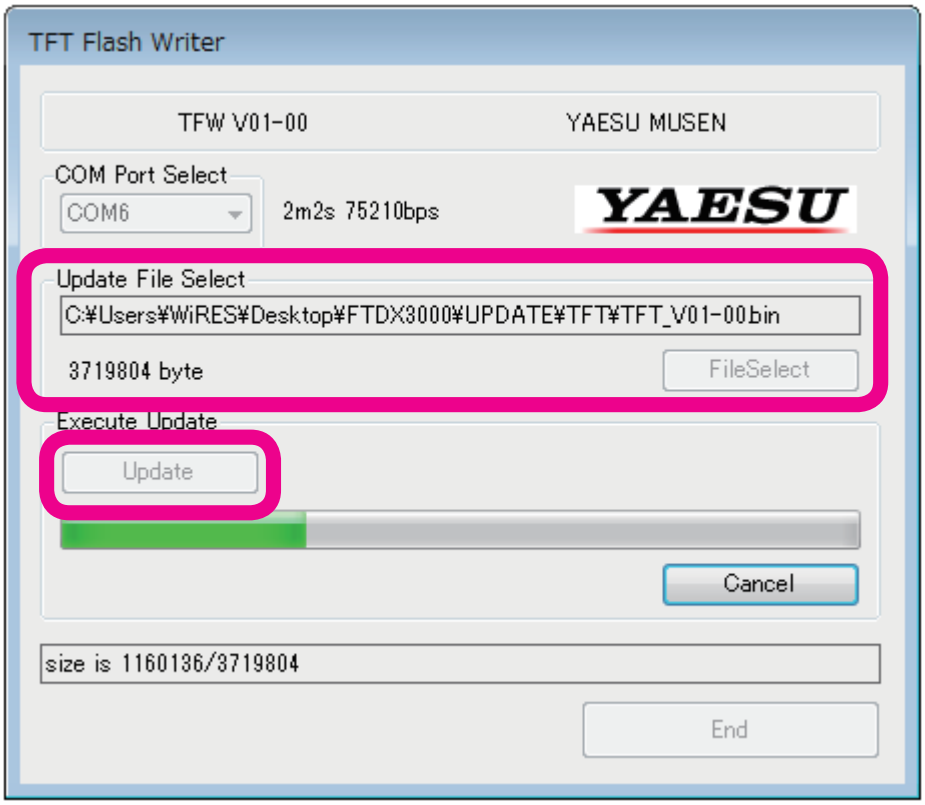
1. Confirm that the radio is turned off then disconnect DC cable and all other cables from the transceiver unit.
2. Connect the transceiver unit USB terminal and personal computer USB port via a standard, commercially available cable.
   (The FTDX3000 virtual COM port driver must be installed in advance.)
   Alternatively, connect the transceiver unit CAT terminal and personal computer COM port with an RS-232C straight cable.
   (No driver installation is required when connecting via an RS-232C cable.)
3. Connect the DC cable to the transceiver, and turn the external power supply unit power on.
   Press and hold the [POWER] key while pressing the [NOTCH] + [CONT/APF] keys on the transceiver's main panel, turning on the transceiver's power.
   The transceiver's frequency display will appear as below.

4. Execute the TFW.exe transfer software.



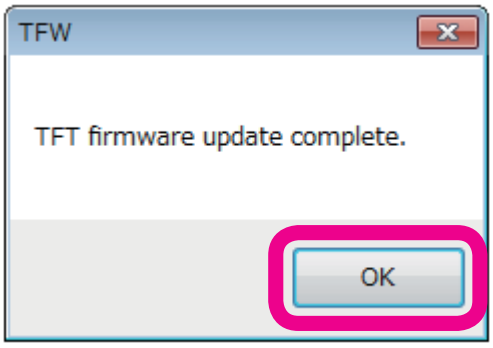
On the TFW COM Port Select screen, set the COM port number.
The COM port number may vary from computer to computer.
(Use an Enhanced COM port when using a USB cable. Please see the FTDX3000 Virtual COM Port Driver for details on the Yaesu Website (http://www.yaesu.com/).)

Click the “File Select” button, select the firmware to be transferred (bin file), and click the “Open” button.
Click the “Update” button. The firmware transfer process will begin.



Please wait until the process has been completed.

“TFT firmware complete” will be displayed on-screen, as shown below.



Click the “OK” button.

6. Press and hold the [POWER] key to turn off the power.
7. Click the “End” button on the transfer software screen.
8. Disconnect the USB cable connecting the transceiver to the personal computer.
   Alternatively, disconnect the RS-232C cable connecting the transceiver to the personal computer.
   This completes the firmware upgrading process.

   If there is a problem during the upgrading process, disconnect the DC cable from the transceiver, and turn off the external power supply; then close the TFW transfer software, and try again.

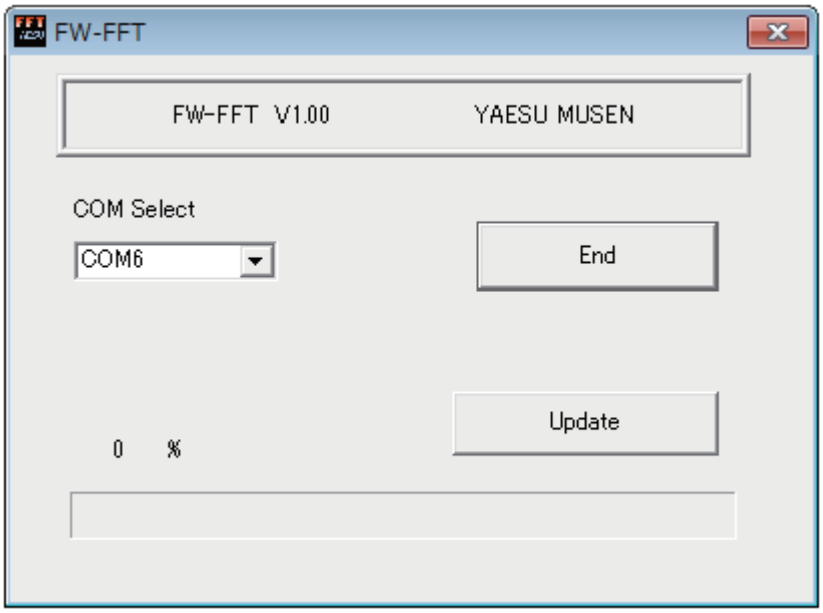
How to Update the FFT Firmware

Preparation: Download the **FW-FFT** transfer software and **AH046Hfft_V****.dat** firmware to the same folder, and Unzip the downloaded zip file.

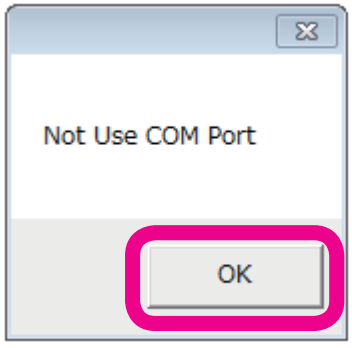
The example below is for Windows® 7.

1. Confirm that the radio is turned off then disconnect DC cable and all other cables from the transceiver unit.
2. Connect the transceiver unit USB terminal and personal computer USB port via a standard, commercially available cable.
   (The FTDX3000 virtual COM port driver must be installed in advance.)
   Alternatively, connect the transceiver unit CAT terminal and personal computer COM port with an RS-232C straight cable.
   (No driver installation is required when connecting via an RS-232C cable.)
3. Connect the DC cable to the transceiver, and turn the external power supply unit power on.
   Press and hold the [POWER] key while pressing the [BK-IN] + [MONI] keys on the transceiver's main panel, turning on the transceiver's power.
   The transceiver's frequency display will appear as below, and the unit will switch to FFT write mode.

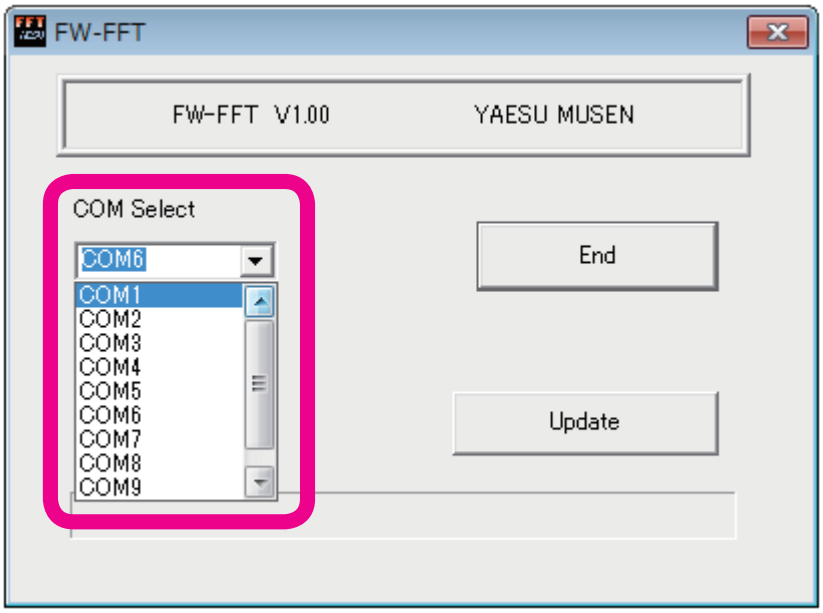
4. Execute the FW-FFT.exe transfer software.



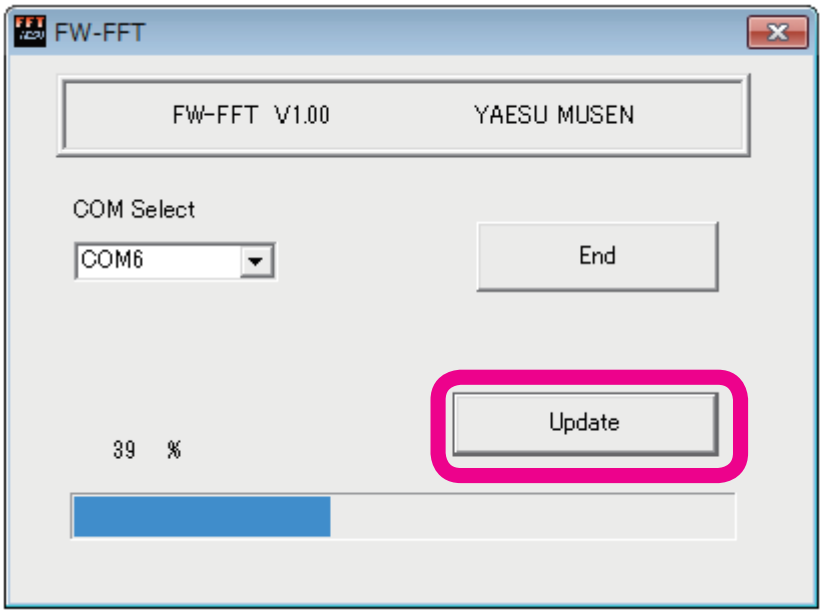
When the following screen appears, click the “OK” button.



On the FW-DSP COM Select screen, set the COM port number.

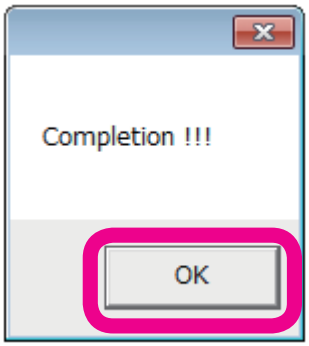


The COM port number may vary from computer to computer.
(Use an Enhanced COM port when using a USB cable. Please see the FTDX3000 Virtual COM Port Driver for details on the Yaesu Website (http://www.yaesu.com/).)
Click the “Update” button on-screen, select the firmware to be transferred (dat file), and click the “Open” button.
The firmware transfer process will begin.



Please wait until the process has been completed.

When the progress bar is full, and “Completion!” is displayed on screen, the update has been completed.



5. Click the “OK” button displayed on-screen.
6. Press and hold the [POWER] key on the transceiver's main panel, turning on the transceiver's power.
7. Click the “End” button on the transfer software screen.
9. Disconnect the USB cable connecting the transceiver to the personal computer.
   Alternatively, disconnect the RS-232C cable connecting the transceiver to the personal computer.
   This completes the firmware upgrading process.

   If there is a problem during the upgrading process, disconnect the DC cable from the transceiver, and turn off the external power supply; then close the FW-FFT transfer software, and try again.