

FTM-300DR/DE

Main/Sub Firmware Update Instruction Manual

Introduction

This application is a software tool for updating the firmware of transceivers manufactured by Yaesu Musen Co., Ltd. Currently there are two different destination versions of the FTM-300DR/DE: USA and EXP (including EU and CHN).

You must check which version radio you have and use the correct update software. The destination is marked on the box serial number label.

■ Main Firmware

- **DST: USA** version covers North and South America, Australia and New Zealand
Main Firmware: [FTM-300D_MAIN_verXXX(USA)]
- **DST: EU / DST: EXP / DST: CHN** version covers all other countries except USA
Main Firmware: [FTM-300D_MAIN_verXXX(EXP)]

■ Sub Firmware

- **DST: USA / DST: AUS / DST: EXP / DST: EU / DST: CHN** version covers all countries
Sub Firmware: [FTM-300D_SUB_verXXX(ENG)]

CAUTION!

*Be sure to confirm the model and the version of your transceiver before starting the update.
Writing incorrect firmware to the transceiver may cause abnormal operation or failure.*

Important Notes

- All responsibility for the use of this software lies with the customer. Yaesu 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.
- Revision, modification, reverse engineering, and decompiling of this software is prohibited. Redistribution, transfer, and resale of downloaded files are also prohibited.
- Downloaded files may only be used for personal use.
- If you cannot perform the firmware upgrade yourself, please consult with one of our sales sites or service centers.

Trademarks

Microsoft®, Windows®, Windows® 8.1, and Windows® 10 are registered trademarks in the United States and other countries.

System Requirements (Operating Environment)

To use this program, a personal computer (PC) with one of the following Windows operating systems, and a USB data connection cable are required

Supported Operating Systems

One of the following operating system environments:

- Microsoft® Windows® 10 (32 bit / 64 bit)
- Microsoft® Windows® 8.1 (32 bit / 64 bit)

CPU

The performance of the CPU must satisfy the operating system requirements.

RAM (System Memory)

The capacity of the RAM (system memory) must be more than sufficient to satisfy the operating system requirements.

HDD (Hard Disk Drive)

The capacity of the HDD must be more than sufficient to satisfy the operating system requirements.

In addition to the memory space required to run the operating system, about 50 MB or more of additional memory space is required to run the program.

USB interface

USB interface (USB Port)

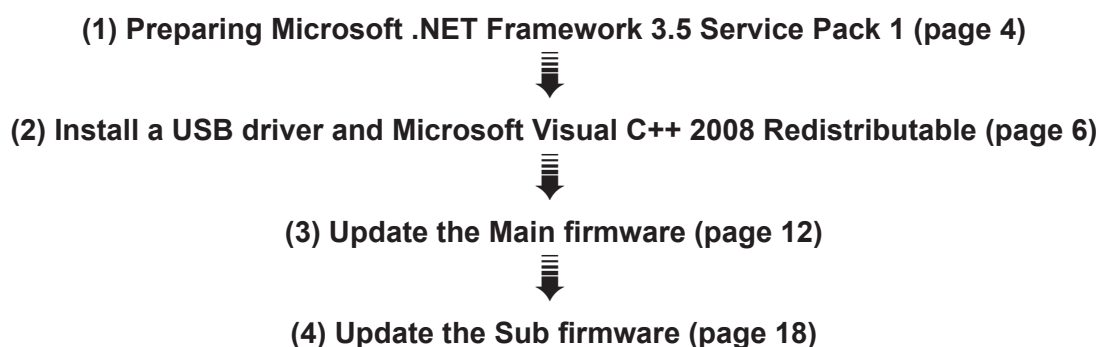
Cable

Supplied USB cable

Overview of Firmware Update

Update the firmware by following the procedures below:

NOTE: Step (1) and (2) are required only once for the first time. Steps (1) and (2) are not necessary if the PC is already prepared or if the PC was used to update the firmware of FT2D or FT3D. Proceed to step (3) or step (4).



Displaying the Firmware Version

To display the transceiver firmware version:

1. Press and hold the **[F(SETUP)]** key.
2. Rotate the **DIAL** knob to select Set-up menu **[DISPLAY]**, then press the **DIAL** knob.
3. Rotate the **DIAL** knob to select **[5 SOFTWARE VERSION]**, then press the **DIAL** knob.
4. The software versions of “Main”, “Sub” and “DSP” are shown.

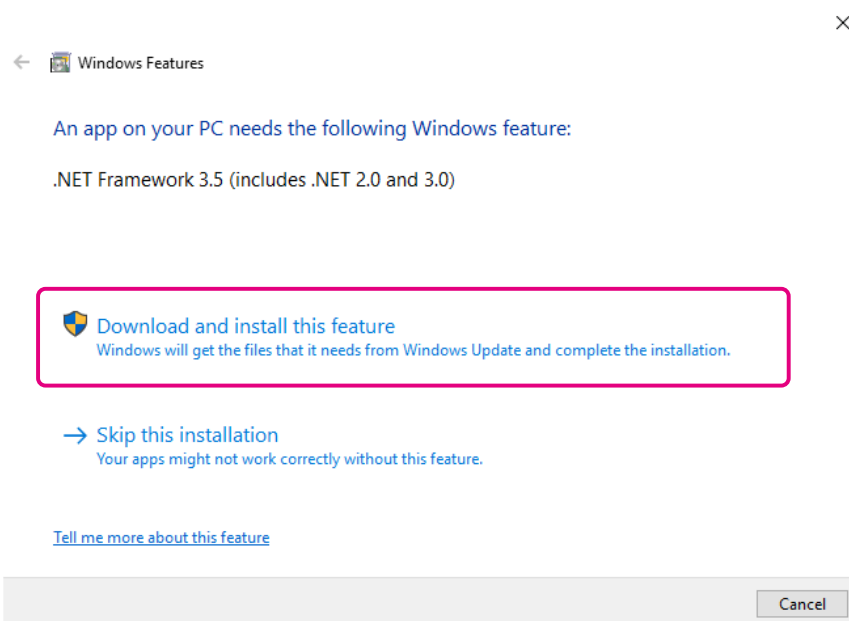
Main Ver. : X.X
Sub Ver. : X.X
DSP Ver. : X.XX

(1) Preparing Microsoft .NET Framework 3.5 Service Pack 1

For the FTM-300DR/DE firmware update, Microsoft .NET Framework 3.5 Service Pack 1 is required. According to the Windows version you use, follow the procedure below.

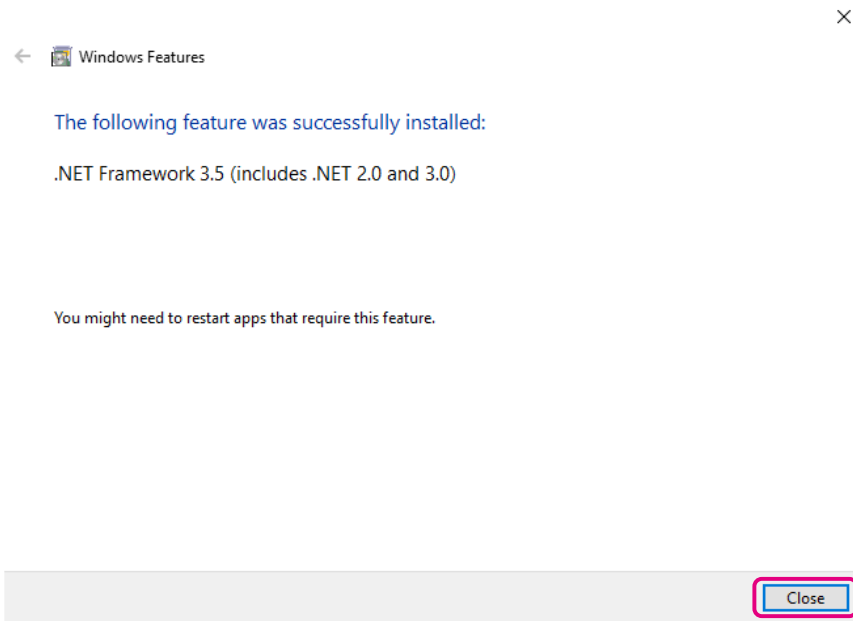
- * The following procedure must be performed only when using the firmware update tool for the first time. When Microsoft .NET Framework 3.5 Service Pack 1 is already installed on your computer, skip this following procedure.
 - * Operations on a Windows 10 computer are shown in the procedure below for the purpose of explanation.
1. In the web browser, open <http://www.microsoft.com/en-US/download/details.aspx?id=22> and click the **[Download]** button and then follow the on-screen instructions to download “**dotnetfx-35setup.exe**”.
 2. Execute the downloaded “**dotnetfx35setup.exe**”.
 - * If the “**User Account Control**” screen appears, click the **[Yes]** button.

“An app on your PC needs the following Windows feature:” appears on the “Windows Features” screen.
 3. Click **[Download and install this feature]**.



Necessary files will be downloaded, and Microsoft .NET Framework 3.5 Service Pack 1 will be installed. When the installation completes, “The following feature was successfully installed:” appears on the “Windows Features” screen.

4. Click the **[Close]** button.



(2) Installing a USB Driver and Microsoft Visual C++ 2008 Redistributable

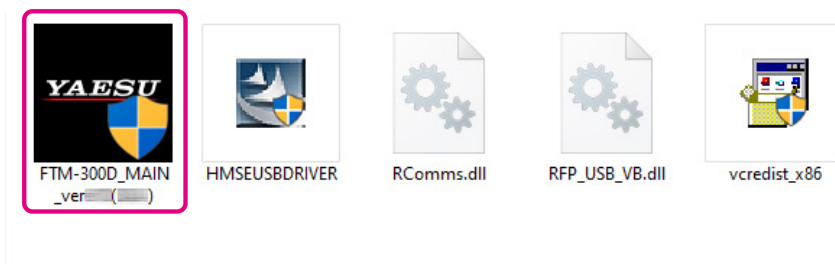
Start the “**YAESU Firmware Update Program**” to install a USB driver.

After the USB driver installation completes, install “**Microsoft Visual C++ 2008 Redistributable**”.

* The following procedure must be performed only when using installation application for the first time. When the USB driver is already installed on your computer, skip the following procedure.

1. Extract the downloaded zip file.
The destination folder opens automatically.
2. Double-click “**FTM-300D_MAIN_verXXX(YYY).exe**” (YAESU icon).

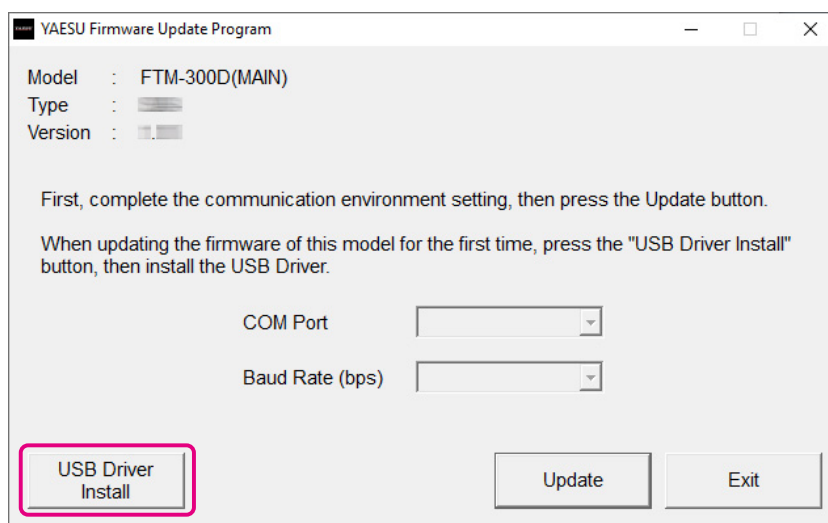
* “XXX” refers to the version number and “YYY” refers to the destination versions.



* If the “**User Account Control**” screen appears, click the [Yes] button.

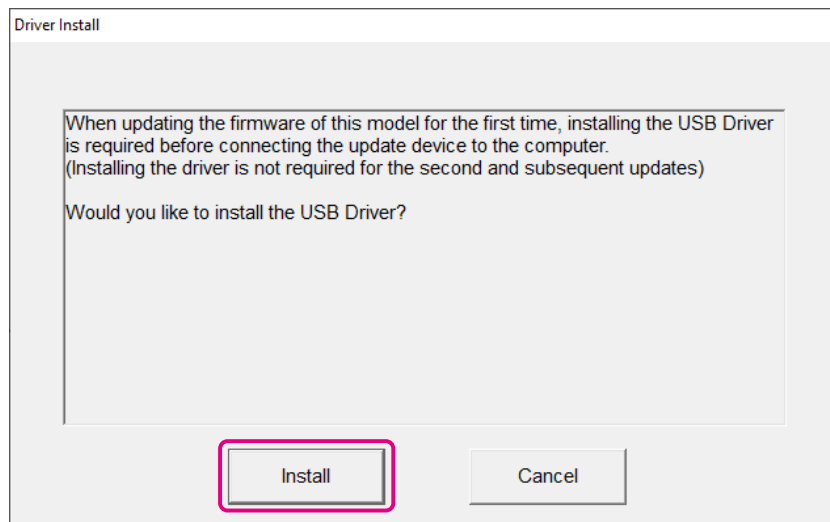
The “**YAESU Firmware Update Program**” will start.

3. Click the [USB Driver Install] button.



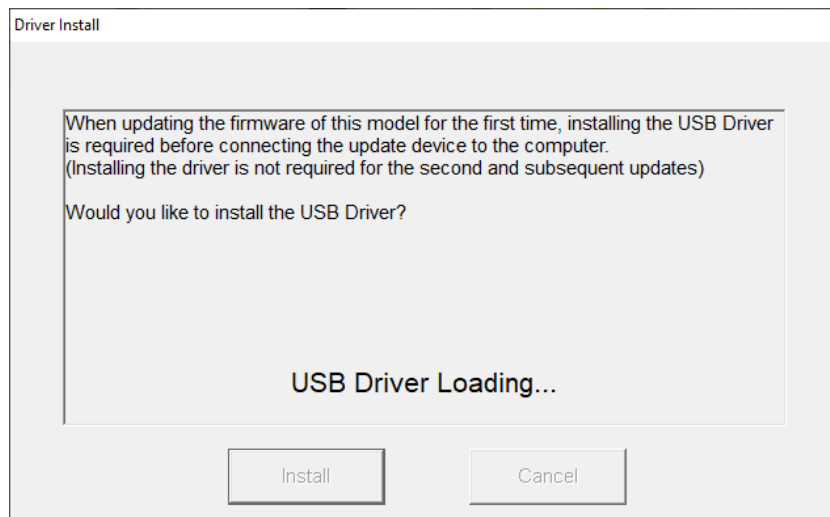
The “**Driver Install**” screen appears.

4. Click the [Install] button.



* If the “**Windows Security**” screen appears, click the [Install] button.

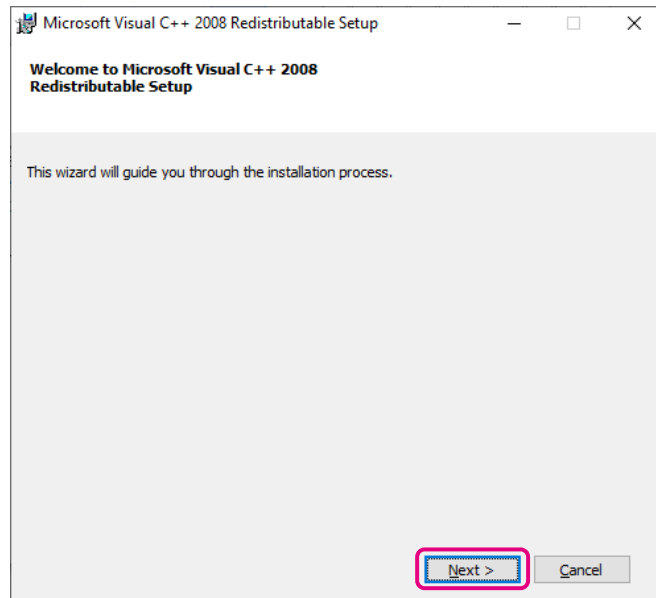
The USB driver will be installed, and the “**USB Drive Loading...**” display will blink on the “Driver Install” screen.



* If the “**Windows Security**” screen appears, click the [Install] button.

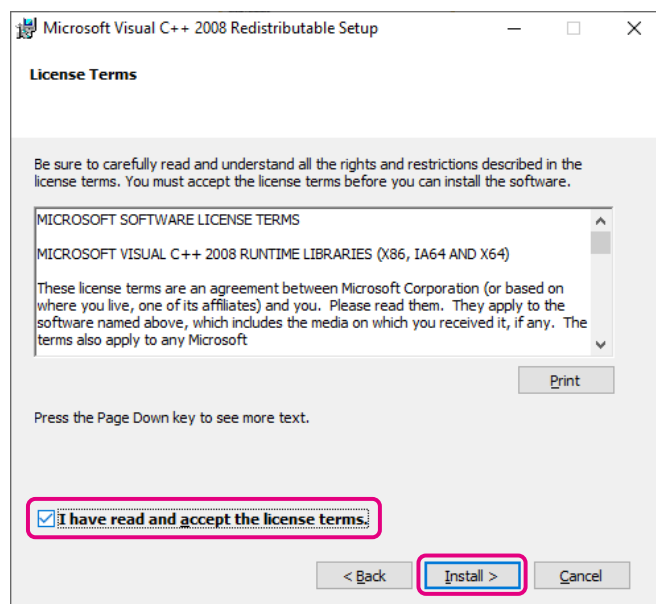
After a while, the “**Microsoft Visual C++ 2008 Redistributable Setup**” screen appears.

5. Click the [Next] button.



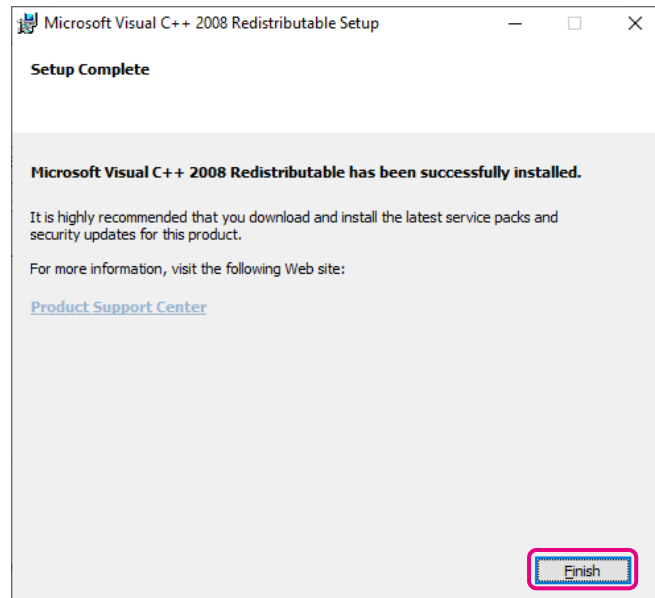
“License Terms” appears.

6. Check the **[I have read and accept the license terms.]** checkbox and click the **[Install]** button.



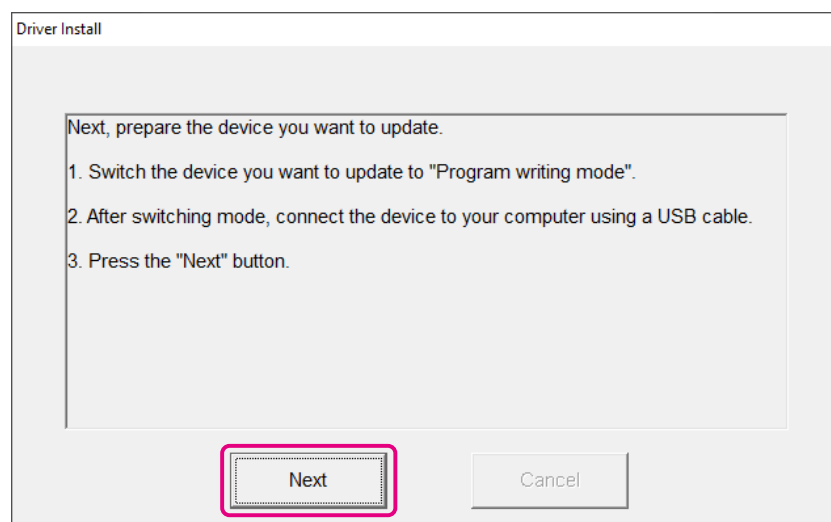
Microsoft Visual C++ 2008 Redistributable will be installed. When the installation completes, “**Setup Complete**” appears on the “**Microsoft Visual C++ 2008 Redistributable Setup**” screen.

7. Click the **[Finish]** button.



Returns to the “**Driver Install**” screen of the YAESU Firmware Update Program.

8. Click the **[Next]** button.

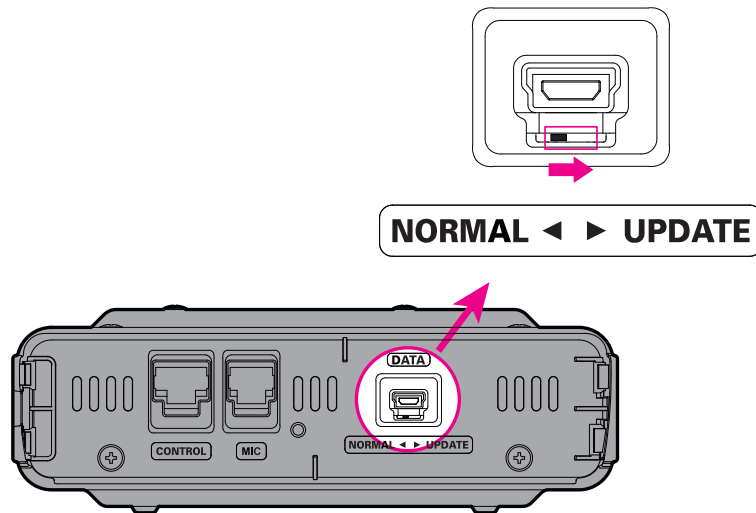


9. When the power of FTM-300DR/DE is ON, press and hold the **[POWER]** switch to turn it **OFF**.
10. Disconnect the DC power cable from the transceiver.

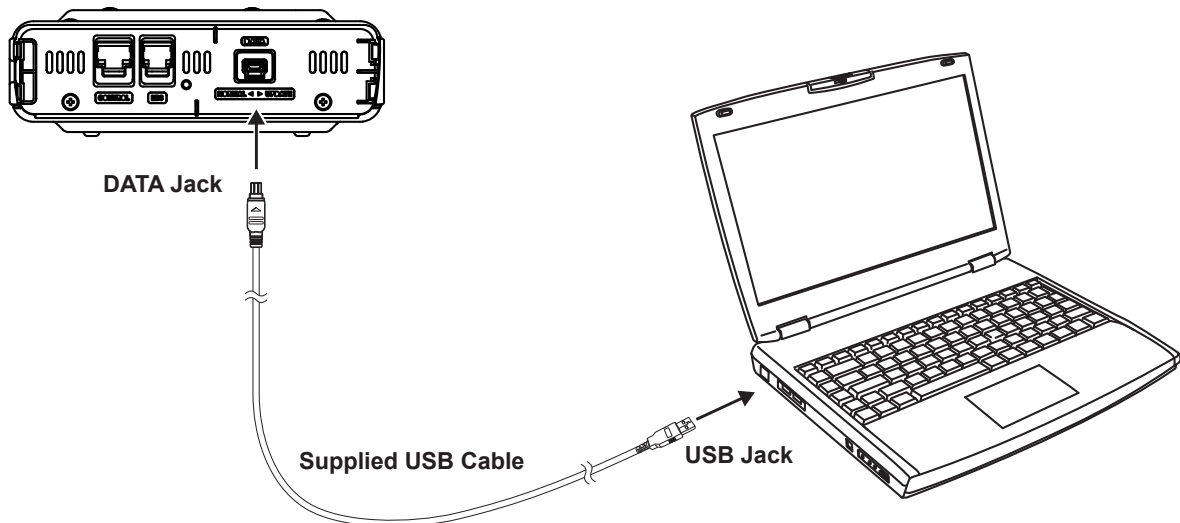
11. Move the “**firmware update**” switch to the right, into the MAIN firmware writing mode, and then connect the FTM-300DR/DE to the PC with the supplied USB cable.

Note: The driver will not be displayed in the device manager if the FTM-300DR/DE and PC are not connected by the USB cable.

To access the firmware update switch, remove the controller (front panel) from a main body. The firmware update switch is located through the front of a main body, directly below the DATA jack.



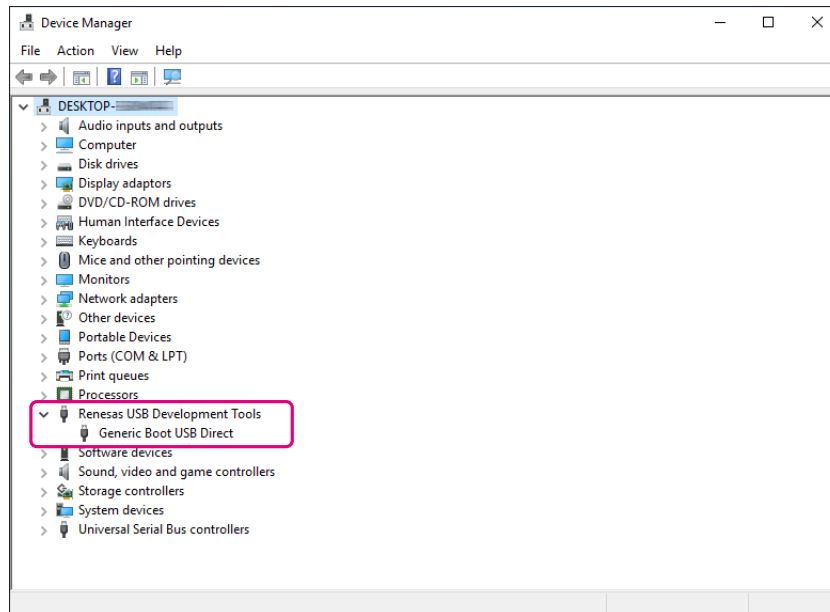
12. Use the supplied USB cable to connect the FTM-300DR/DE DATA jack to the computer.



13. Connect the DC power cable to the FTM-300DR/DE.

14. Right click **[Start]** and click Device Manager in the displayed menu.

To verify that the driver has been successfully installed on the computer, confirm “**Generic Boot USB Direct**” appears under “**Renesas USB Development Tools**” in the computer Device Manager listing.



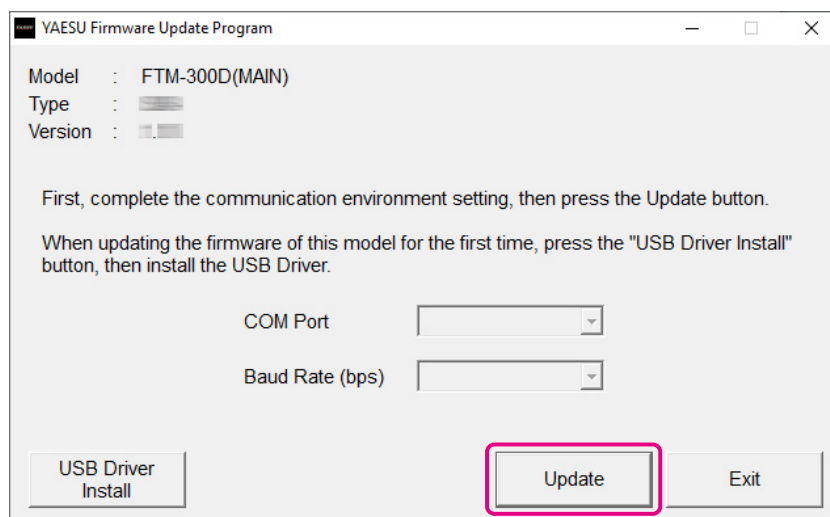
IMPORTANT NOTICE!

If “**Renesas USB1653 USB Boot Mode Device**” appears in the Universal Serial Bus controllers, as shown in the Device Manager, the PC will incorrectly recognize the driver.

Refer to the instructions “(2) Installing a USB Driver and Microsoft Visual C++ 2008 Redistributable” (Page 6)”, to install the correct driver “**Generic Boot USB Direct**”.

Returns to the “**YAESU Firmware Update Program**” screen.

15. Click the **[Update]** button.



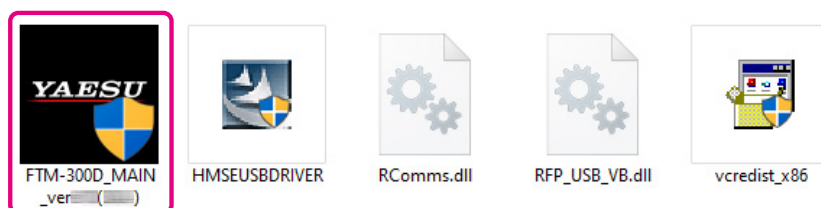
16. To update the main firmware, proceed to **step 8** (page 14) of “(3) Updating the Main Firmware”.

(3) Updating the Main Firmware

Caution

After updating the Main firmware, reset-all will be executed for FTM-300DR/DE. The reset will delete all saved data. Be sure to back up your registered memory channel data using a microSD memory card or write it down. For details on “Saving/Loading Memory Channel Information to/from microSD Memory Card”, refer to the “FTM-300DR/DE Advance Manual”.

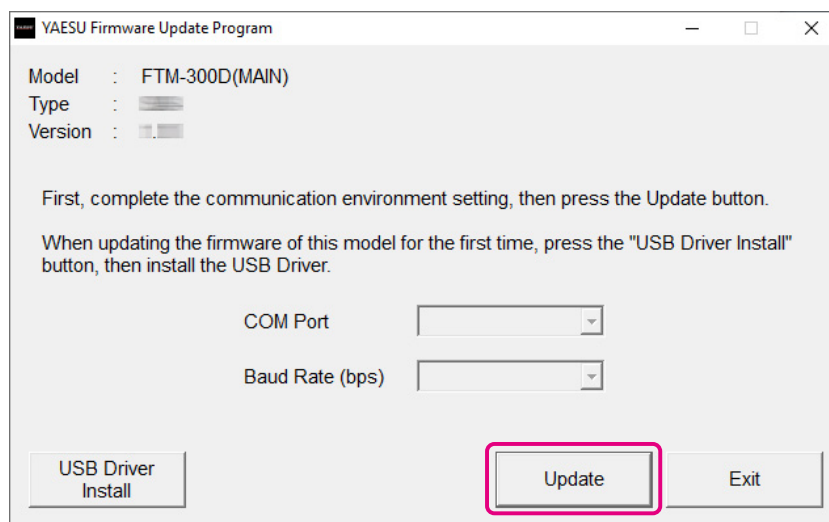
1. Double-click “FTM-300D_MAIN_verXXX(YYY).exe” (YAESU icon).
* “XXX” refers to the version number and “YYY” refers to the destination versions.



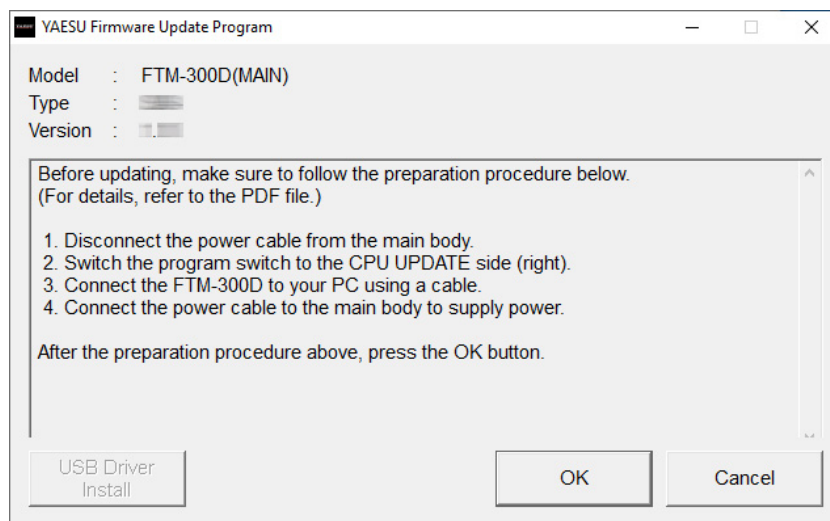
* If the “User Account Control” screen appears, click the [Yes] button.

The “YAESU Firmware Update Program” starts.

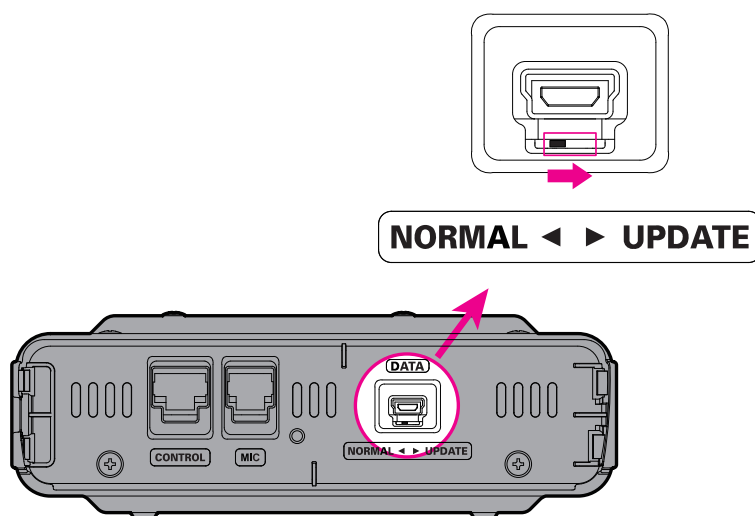
2. Click the [Update] button.



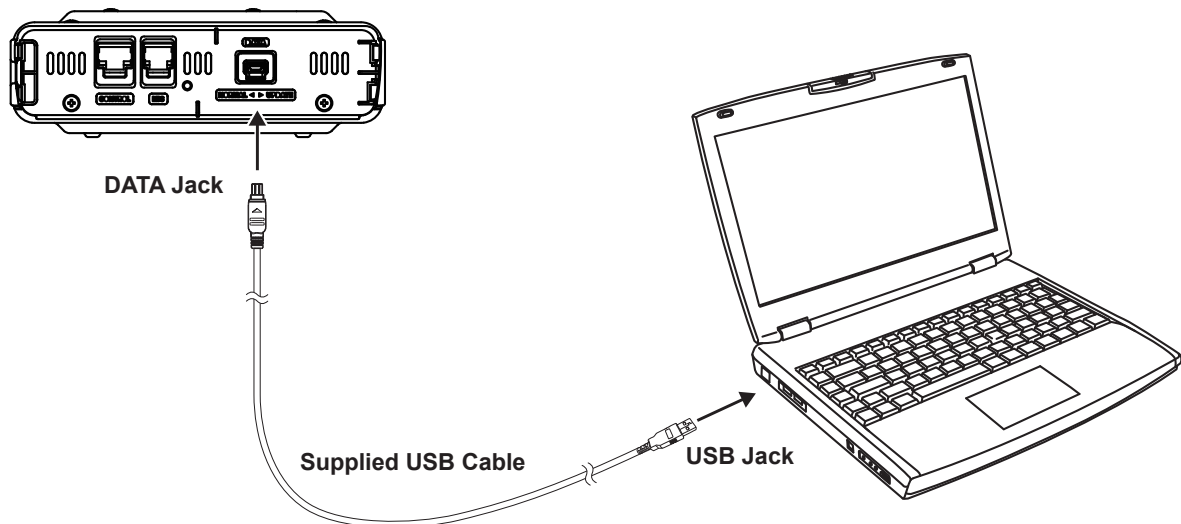
The update preparation procedure appears. Follow the on-screen instructions to make FTM-300DR/DE ready for the update.



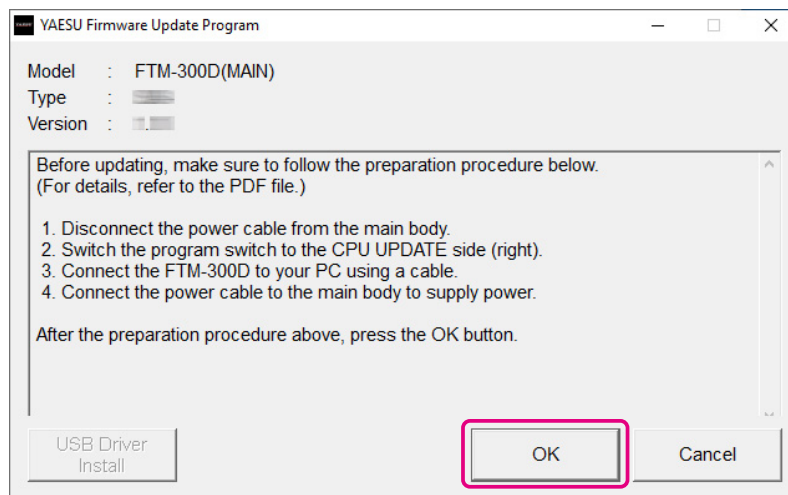
3. When the power of FTM-300DR/DE is **ON**, press and hold the **[POWER]** switch to turn it **OFF**.
4. Disconnect the DC power cable from the transceiver.
5. Move the **Firmware update** switch to the right to the MAIN firmware writing mode, and then connect the FTM-300DR/DE to the PC with the supplied USB cable.
To access the “**firmware update**” switch, remove the controller (front panel) from a main body. The firmware update switch is located through the front of a main body, directly below the DATA jack.



6. Use the supplied cable to connect the FTM-300DR/DE DATA jack to the computer.

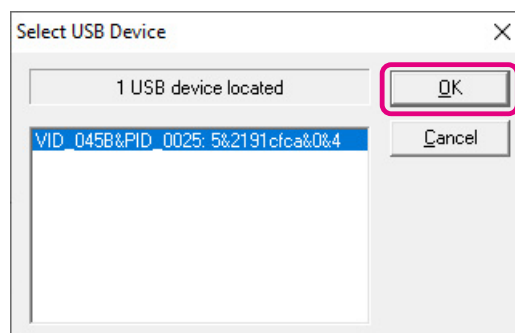


7. Connect the DC power cable to the FTM-300DR/DE.
8. On the YAESU Firmware Update Program screen, press the **[OK]** button.



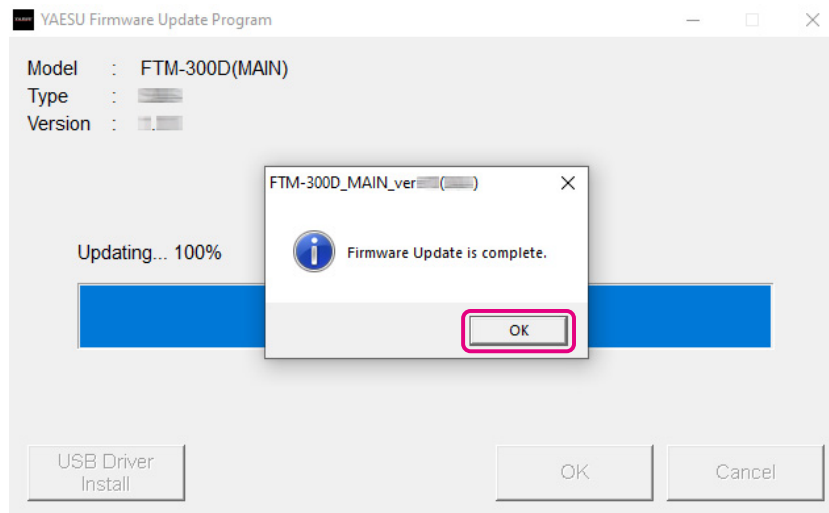
The "Select USB Device" screen appears.

9. Click the **[OK]** button.

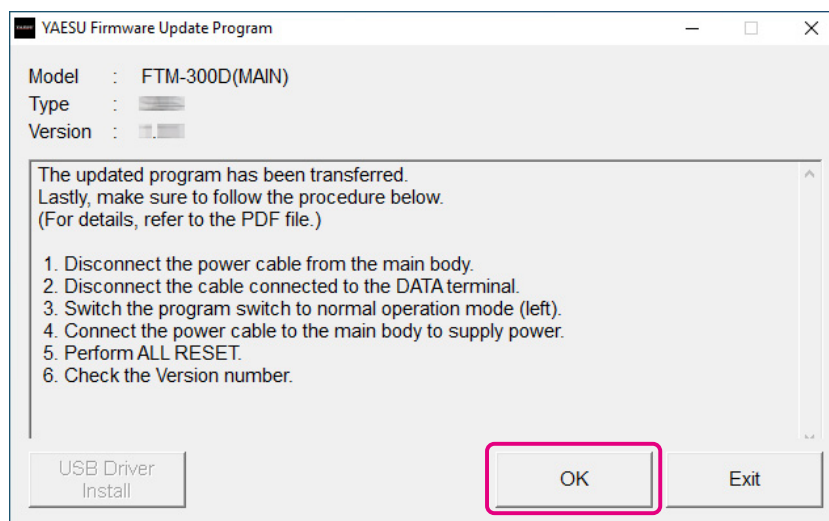


The firmware transfer starts and the FTM-300DR/DE MAIN firmware update executes (it takes about 10 seconds to complete the update). When the MAIN firmware update completes, a message appears.

10. Click the [OK] button.



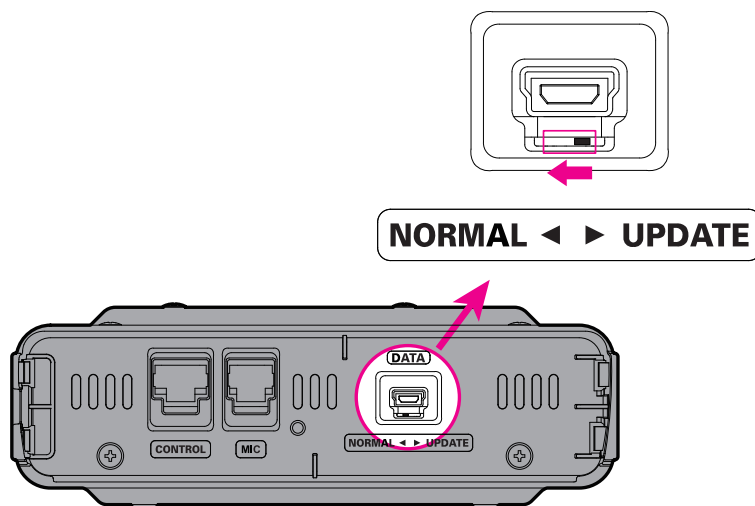
The post-update procedure appears. Follow the on-screen the post-update procedure.



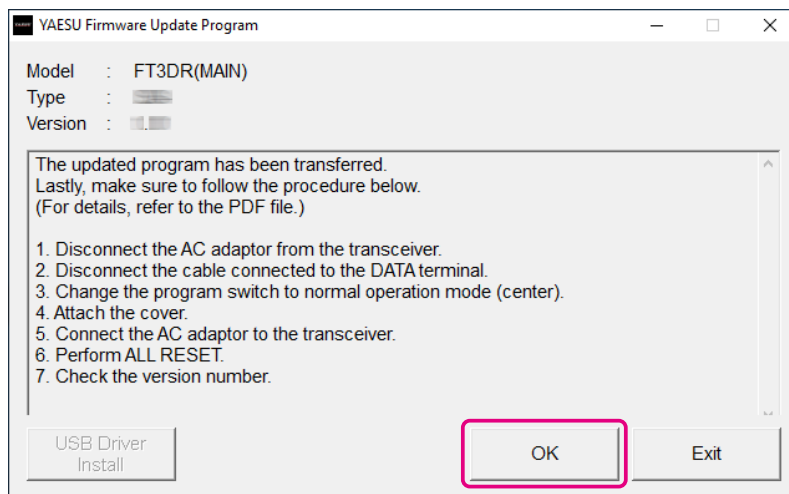
11. Disconnect the DC power cable from the transceiver.

12. Disconnect the USB cable from the DATA jack and the PC.

13. Use a pointed object such as a pin to change the “**firmware update**” switch position to “**normal operation mode (left)**”.

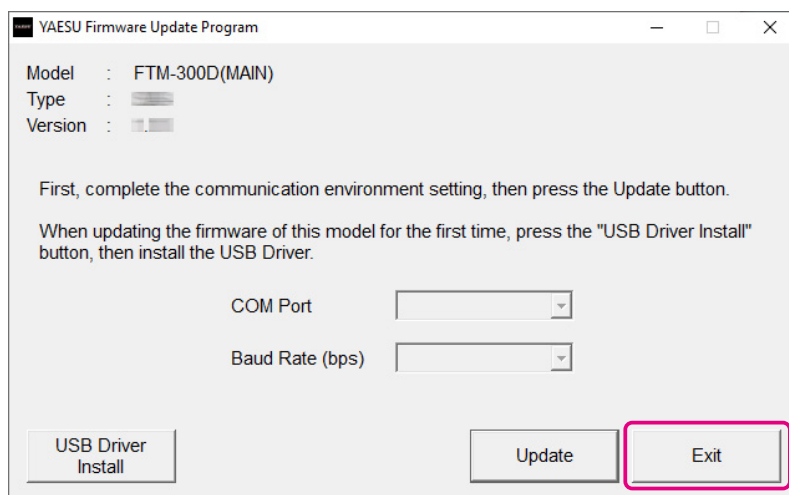


14. Connect the DC power cable to the transceiver.
15. Press and hold the [**POWER**] key to turn the power **ON**.
16. Press and hold the [**F(SETUP)**] key.
The set-up menu screen appears.
17. Rotate the **DIAL** knob to select [**RESET**], then press the **DIAL** knob.
18. Rotate the **DIAL** knob to select [**1 FACTORY RESET**], then press the **DIAL** knob.
“**FACTORY RESET**” appears on the LCD.
19. Rotate the **DIAL** knob to select [**OK**].
20. Press the **DIAL** knob to reset all.
21. Press and hold the [**POWER**] switch to turn the power **OFF**.
22. Click the [**OK**] button on the “YAESU Firmware Update Program” screen.



Returns to the YAESU Firmware Update Program startup screen.

23. Click the **[Exit]** button.



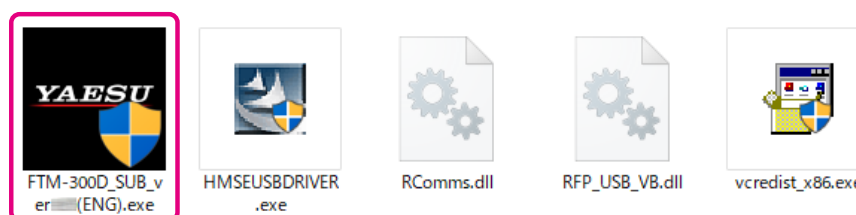
(4) Updating the Sub Firmware

Caution

After updating the Main firmware, reset-all will be executed for FTM-300DR/DE. The reset will delete all saved data. Be sure to back up your registered memory channel data using a microSD memory card or write it down. For details on “Saving/Loading Memory Channel Information to/from microSD Memory Card”, refer to the “FTM-300DR/DE Advance Manual”.

1. Double-click “FTM-300D_SUB_verXXX(ENG).exe” (YAESU icon).

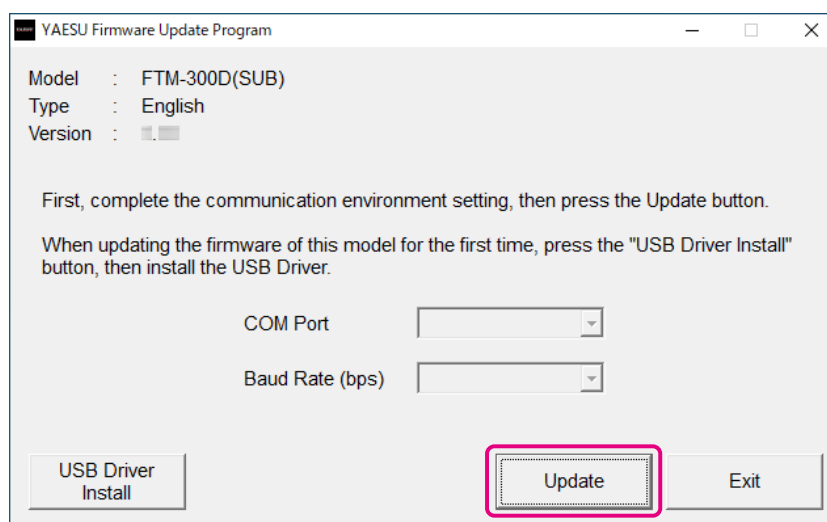
* “XXX” refers to the version number.



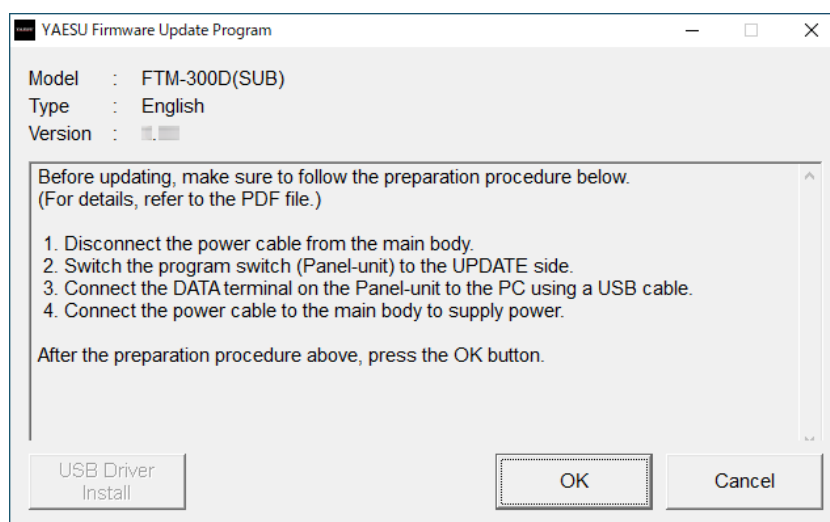
* If the “User Account Control” screen appears, click the [Yes] button.

The “YAESU Firmware Update Program” starts.

2. Click the [Update] button.

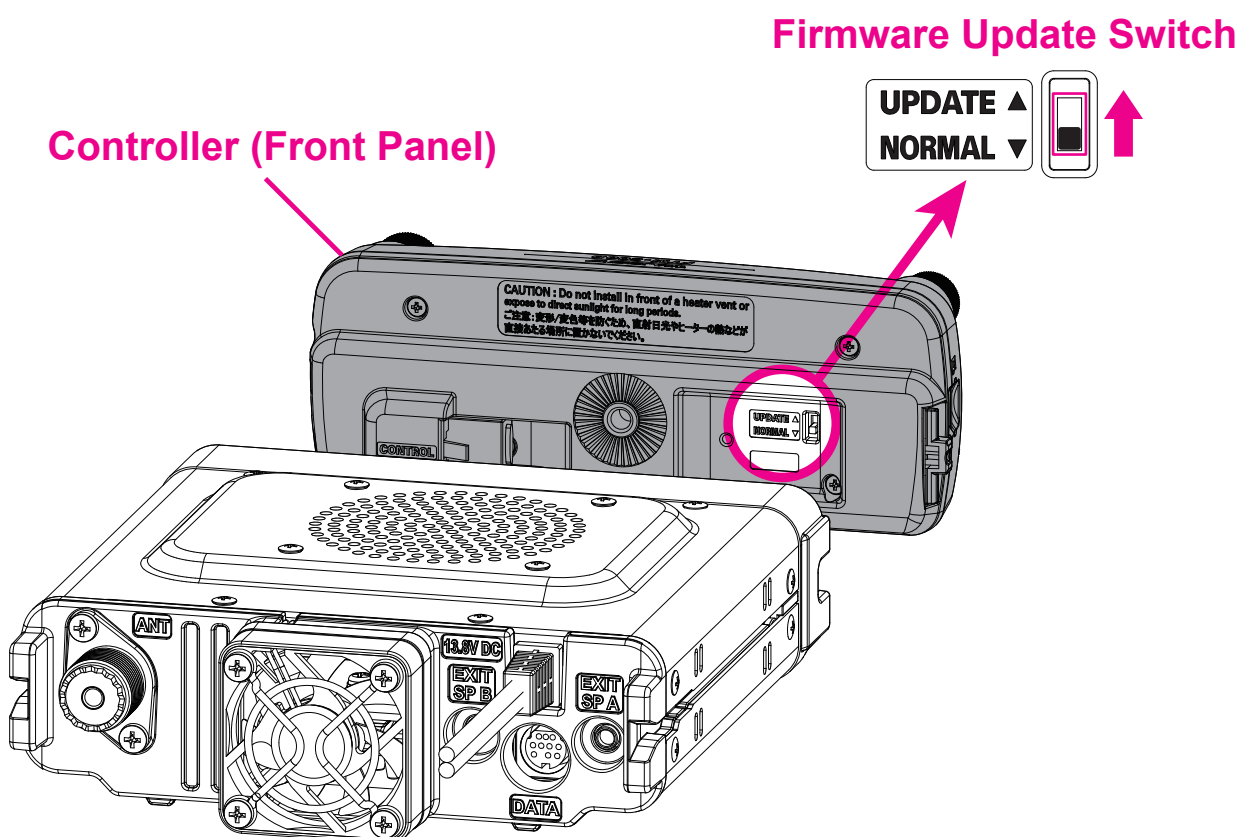


The update preparation procedure appears. Follow the on-screen instructions to make FTM-300DR/DE ready for the update.

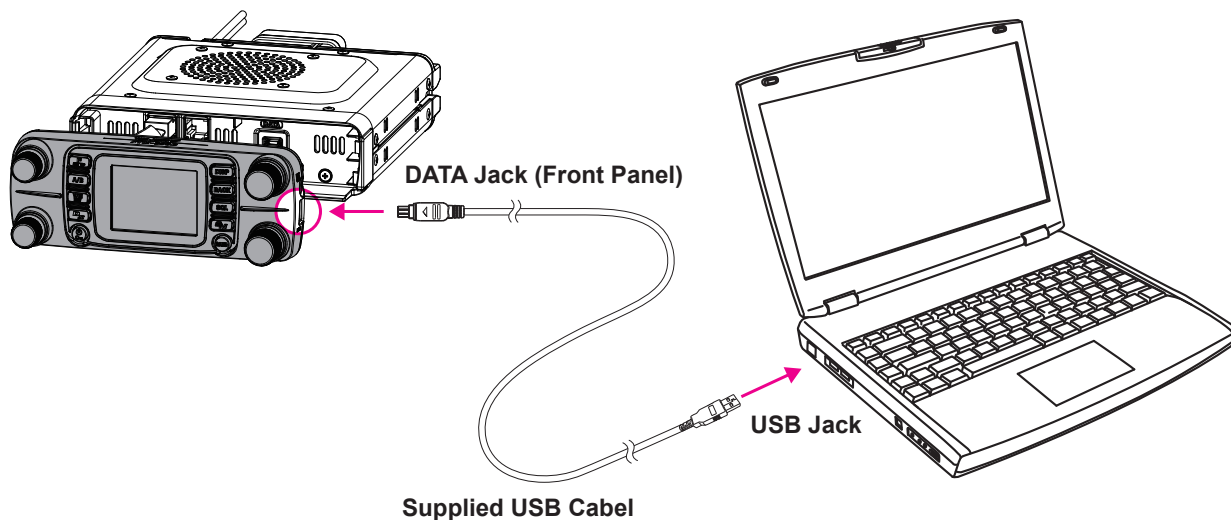


3. When the power of FTM-300DR/DE is **ON**, press and hold the **[POWER]** switch to turn it **OFF**.
4. Disconnect the DC power cable from the transceiver.
5. Move the “**Firmware update**” switch to the up to the SUB firmware writing mode, and then connect the DATA Jack of the FTM-300DR/DE front panel to the PC with the supplied USB cable.

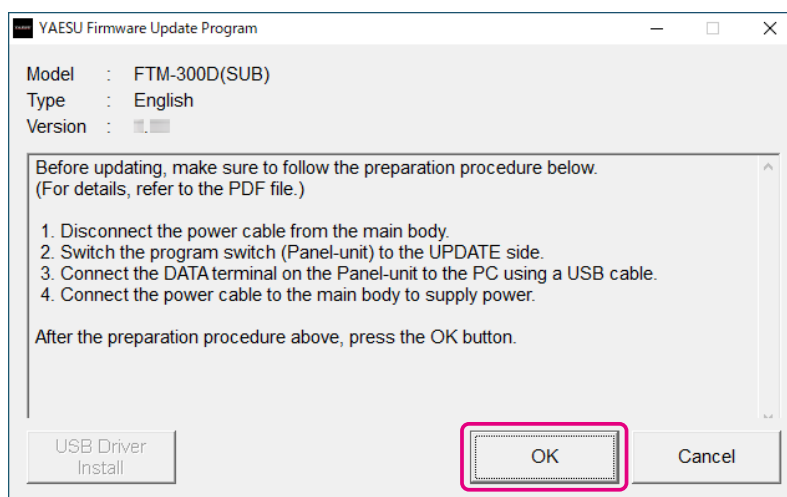
To access the “**Firmware Update**” switch, remove the controller (front panel) from a main body. The firmware update switch is located through the rear of a front panel.



6. Connect the FTM-300D main unit and controller (front panel) with a control cable.
7. Use the supplied USB cable to connect the DATA jack of the FTM-300DR/DE Front Panel to the computer.

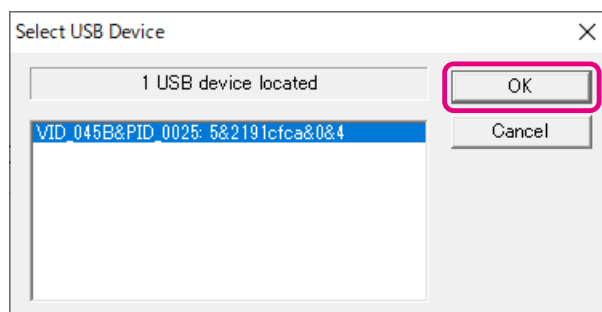


8. Connect the DC power cable to the FTM-300DR/DE.
9. On the YAESU Firmware Update Program screen, press the **[OK]** button.



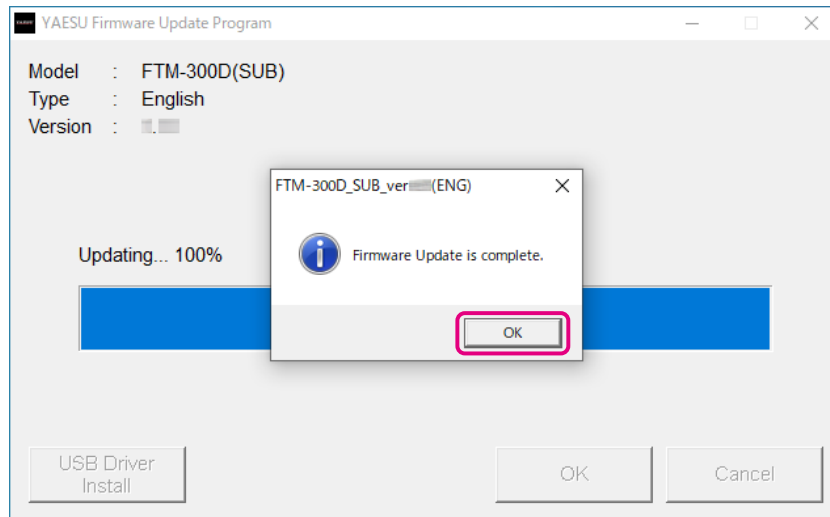
The “Select USB Device” screen appears.

10. Click the **[OK]** button.

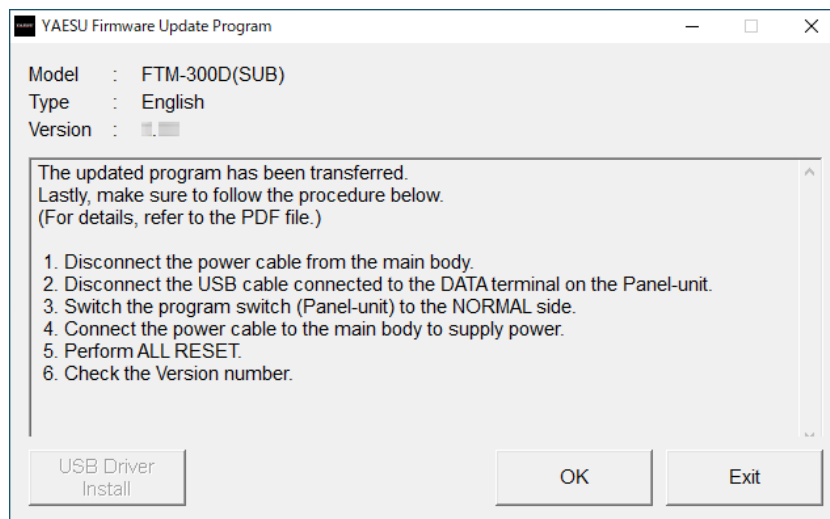


The firmware transfer starts and the FTM-300DR/DE SUB firmware update executes (it takes about 90 seconds to complete the update). When the SUB firmware update completes, a message appears.

11. Click the [OK] button.



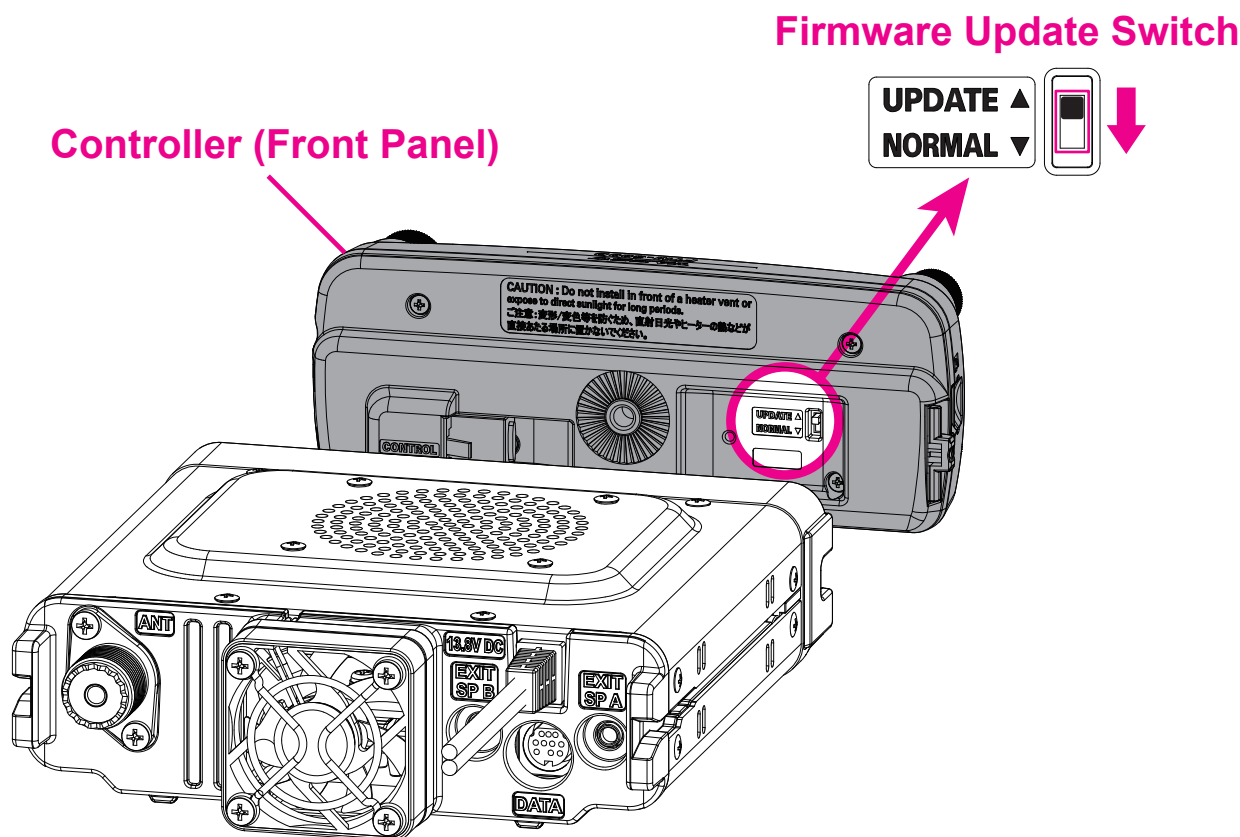
The post-update procedure appears. Follow the on-screen the post-update procedure.



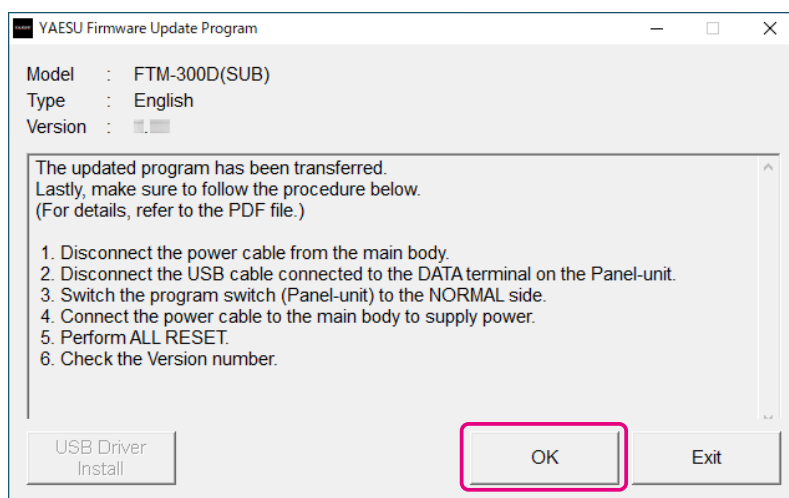
12. Disconnect the DC power cable from the transceiver.

13. Disconnect the USB cable from the DATA jack and the PC.

14. Use a pointed object such as a pin to change the “**firmware update**” switch position to “**normal operation mode (down)**”.

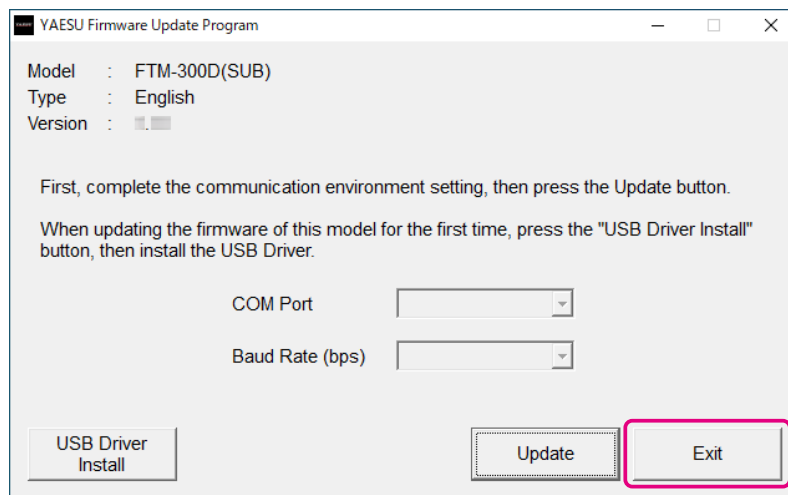


15. Connect the DC power cable to the transceiver.
16. Press and hold the **[POWER]** key to turn the power **ON**.
17. Press and hold the **[F(SETUP)]** key.
The set-up menu screen appears.
18. Rotate the **DIAL** knob to select **[RESET]**, then press the **DIAL** knob.
19. Rotate the **DIAL** knob to select **[1 FACTORY RESET]**, then press the **DIAL** knob.
“**FACTORY RESET**” appears on the LCD.
20. Rotate the **DIAL** knob to select **[OK]**.
21. Press the **DIAL** knob to reset all.
22. Press and hold the **[POWER]** switch to turn the power **OFF**.
23. Click the **[OK]** button on the “YAESU Firmware Update Program” screen.



Returns to the YAESU Firmware Update Program startup screen.

24. Click the **[Exit]** button.





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