

YAESU
The radio

FT2DR/DE

DSP Firmware Update Instruction Manual

DSP固件升级说明手册

由BG5CNL整理

YAESU MUSEN CO., LTD.

Introduction

This application is a software tool for updating the firmware of transceivers manufactured by Yaesu Musen Co., Ltd.

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® 7, Windows® 8, Windows® 8.1, and Windows® 10 are registered trademarks in the United States and other countries.

System Requirements (Operating Environment)

In order 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)
- Microsoft® Windows® 8 (32 bit / 64 bit)
- Microsoft® Windows® 7 (32 bit / 64 bit, Service Pack 1 or later)

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.

Necessary PC peripheral interfaces

USB interface (USB Port)

Overview of the DSP Firmware Update

Update the firmware by following the procedures below:

1. Download the YAESU Amateur Digital DSP Firmware Update Program (page 4)
2. Install a Device Driver (page 4)
3. Update the DSP Firmware (page 11)

Downloading the YAESU Amateur Digital DSP Firmware Update Program

Download the “YAESU Amateur Digital DSP Firmware Update Program”; with this software, you can update the FT2DR/DE DSP firmware.

1. Download the update program from the Yaesu web site.
2. Extract the downloaded zip file, and save the data contained inside the zip file to any desired location.

Installing a Device Driver 安装设备驱动程序

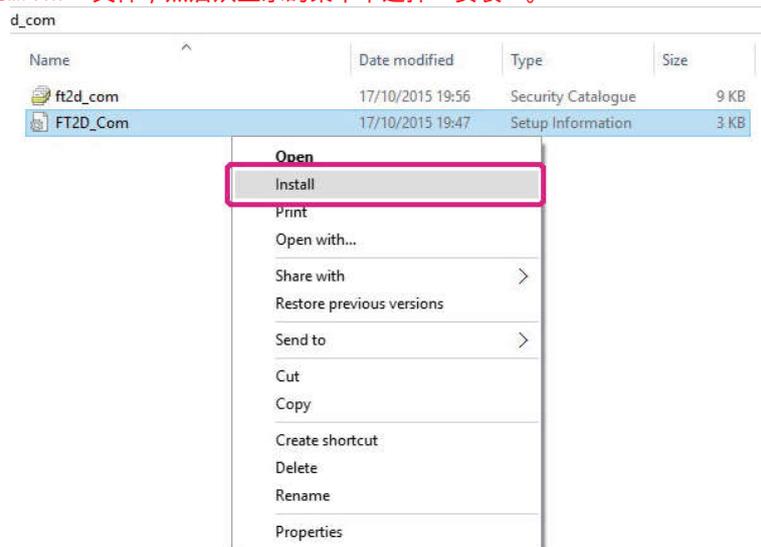
Before updating the FT2DR/DE DSP firmware, install the device driver. Follow the appropriate procedure below for your version of Windows.

For Windows 10, Windows 8.1, and Windows 8

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

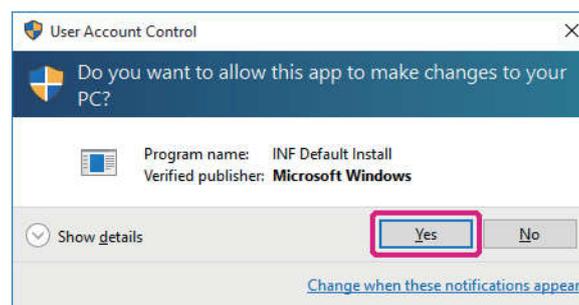
* The procedure to install the driver on a Windows 10 computer is shown below for the purpose of explanation.

1. Open the folder in which you saved the data in step 2 of “Downloading the YAESU Amateur Digital DSP Firmware Update Program” instructions on page 4.
2. Right-click the “FT2D_Com.inf” file, and then select [Install] from the menu displayed.
右键单击“FT2D_Com.inf”文件，然后从显示的菜单中选择“安装”。



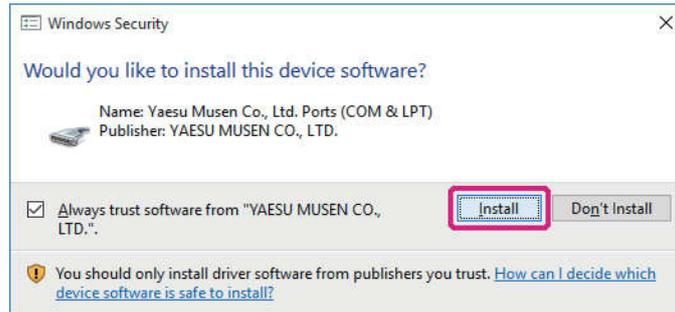
The “User Account Control” screen appears. 出现用户帐户控制屏幕

3. Click the [Yes] button. 点击YES按钮



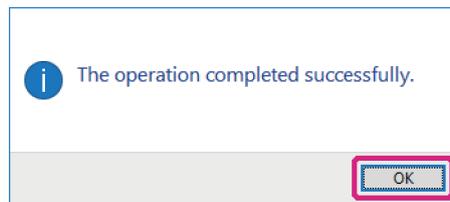
The “Windows Security” screen appears. 出现WINDOWS安全屏幕

4. Click the [Install] button. 点击安装按钮



The device driver installation begins. When the installation completes, the message "The operation completed successfully." appears. 驱动程序安装开始，安装完成后出现操作成功完成界面

5. Click the [OK] button. 点击OK按钮



6. 执行第11页升级DSP固件第1-7步（这一步非常重要，在进行下列步骤前先跳到11页完成1-7步）

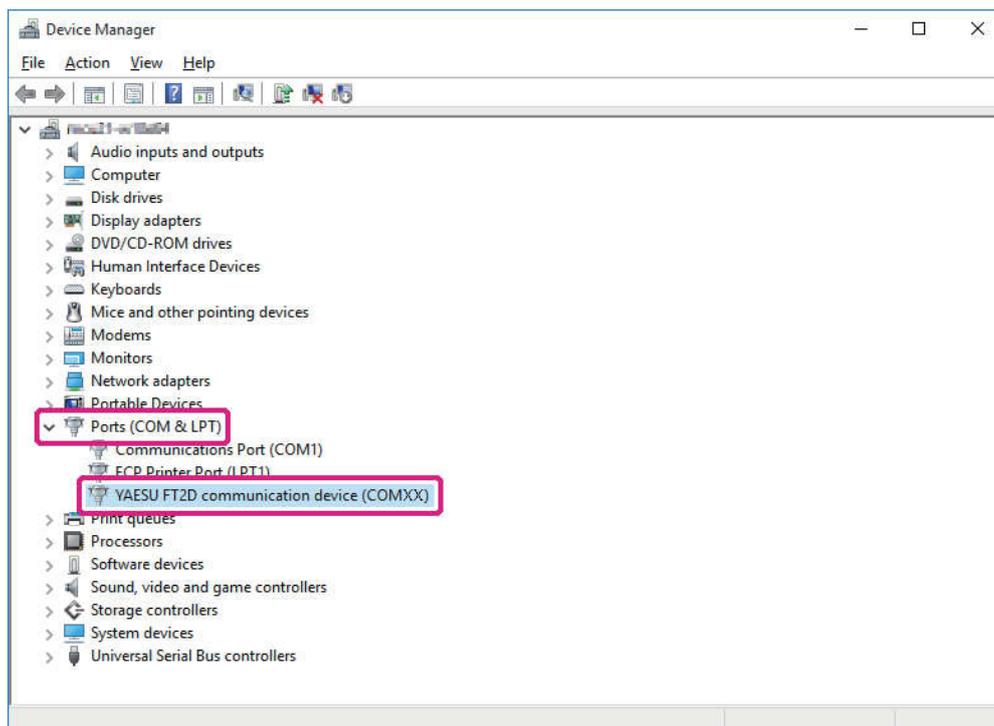
6. Perform steps 1 to 7 in "Updating the DSP Firmware" on page 11.
Installs the device driver installation.

7. [Click [Start] > [Control Panel]]. 点击 开始-控制面板
"Control Panel" appears.

8. Click [Device Manager]. 点击设备管理器
"Device Manager" appears.

9. Check that "YAESU FT2D communication device (COMXX)" appears under "Ports (COM & LPT)", and then close "Device Manager".

* "XX" refers to a port number. Since "COMXX" is required when updating the DSP firmware, write down the port number. XX指的是端口号，因为在更新DSP固件时需要填入端口号码，务必记住。



For Windows 7

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

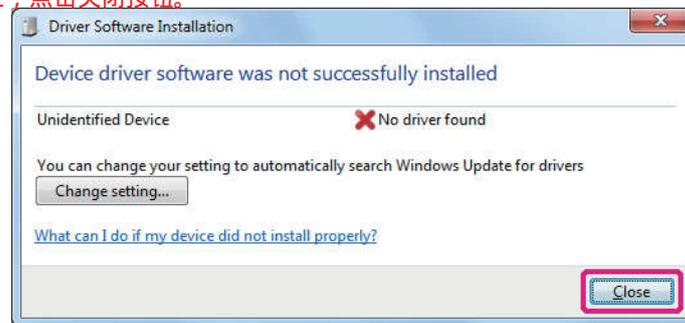
1. 执行第11页升级DSP固件第1-7步（这一步非常重要，在进行下列步骤前先跳到11页完成1-7步）

1. Perform steps 1 to 7 in “Updating the DSP Firmware” on page 11.

* At this time, FT2DR/DE is recognized as an unknown device and the “Driver Software Installation” screen appears on the computer. Follow the procedure below to install the device driver onto your Windows 7 computer. 现在，FT2DR被认为是一个未知的设备，驱动软件安装界面将会出现在电脑显示屏上，按照下面的步骤将设备驱动程序安装到你的WINDOWS7电脑上

2. On the “Driver Software Installation” screen, click the [Close] button.

在驱动软件安装界面上，点击关闭按钮。



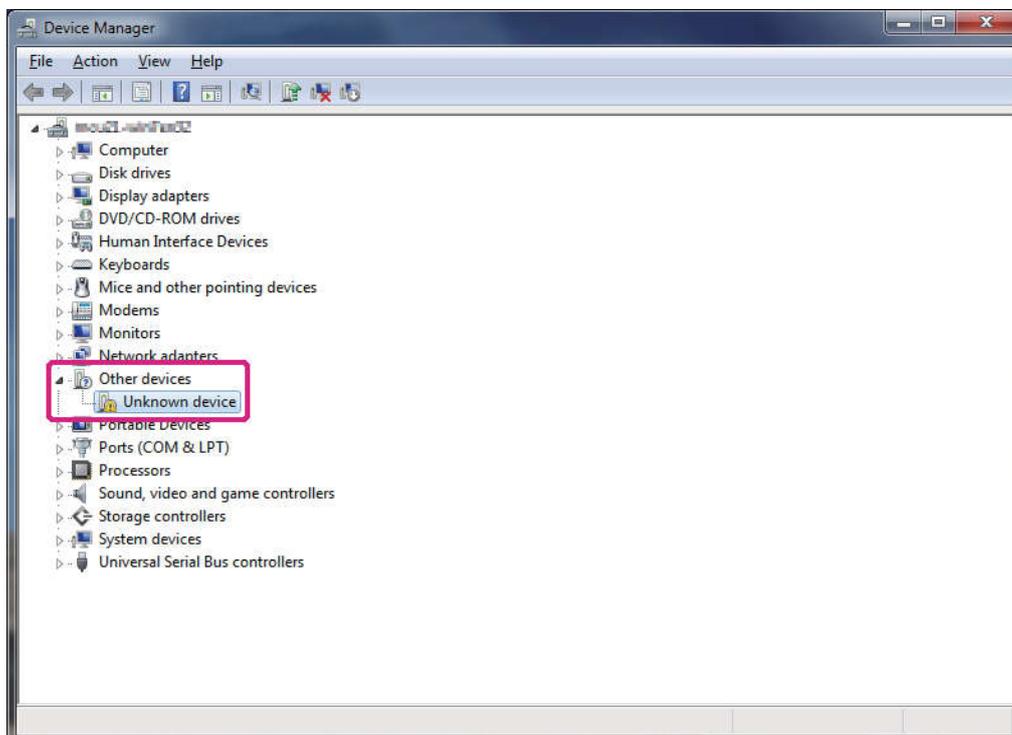
3. [Click [Start] > [Control Panel]]. 点击 开始-控制面板

“Control Panel” appears. 控制面板

4. Click [Device Manager]. 点击设备管理器

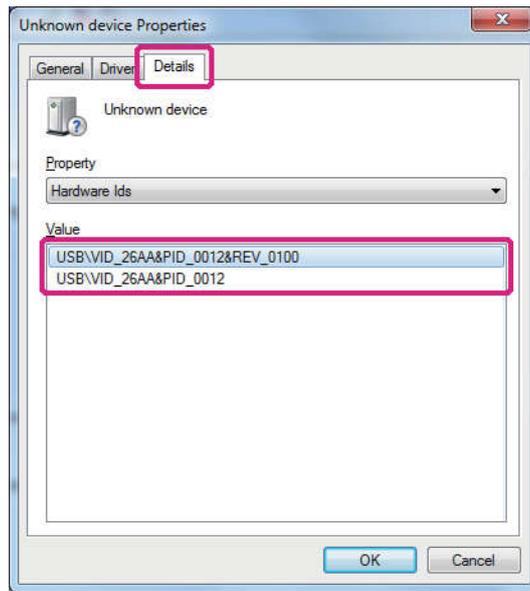
“Device Manager” appears. 设备管理器

5. Under “Other devices” double-click [Unknown device]. 在其它设备下双击未知设备

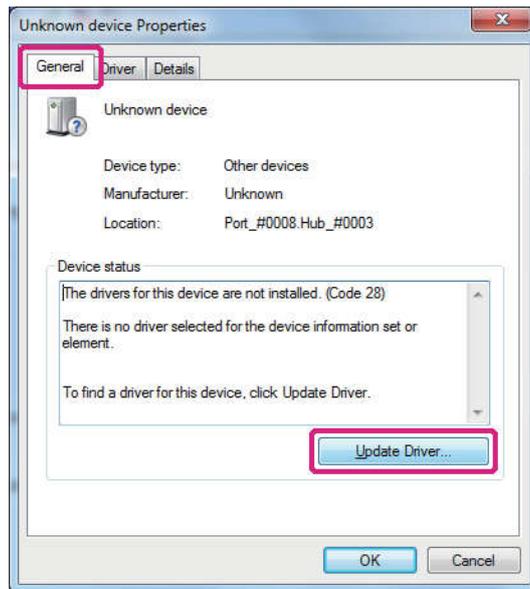


The “Unknown Device Properties” screen appears. 出现未知设备属性界面

6. Click the [Details] tab and check that the information (value) shown on the screen below appears. 单击详细信息选项卡并检查下面屏幕显示的信息（值）

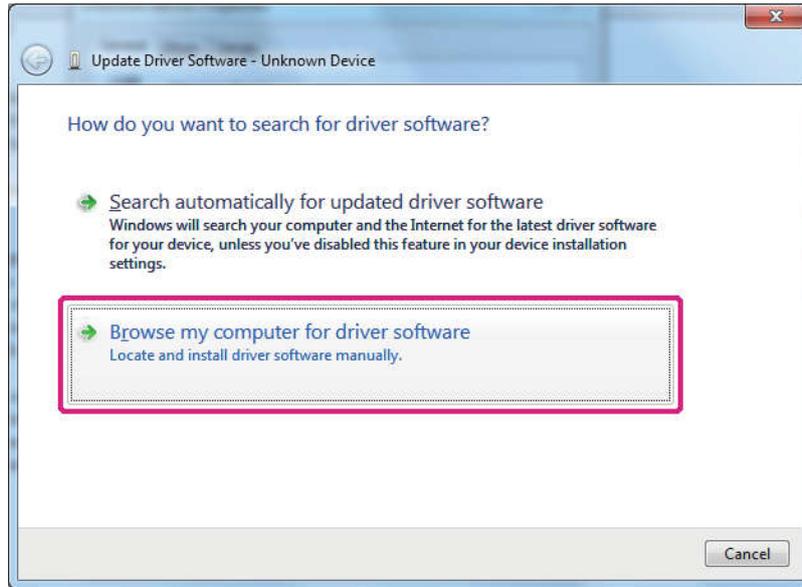


7. Click the [General] tab and then click the [Update Driver] button. 单击常规选项卡然后单击更新驱动程序



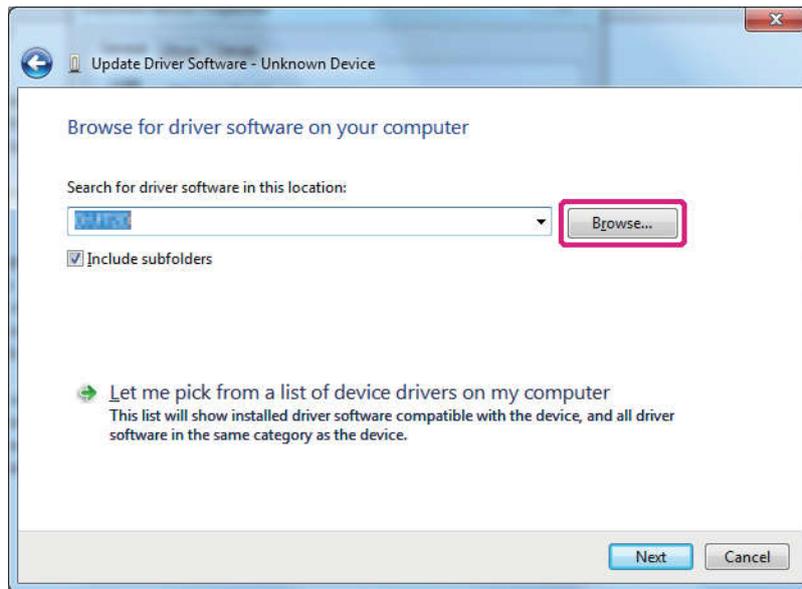
The "Update Driver Software - Unknown Device" screen appears.

8. Click [Browse my computer for driver software]. 点击浏览我的计算机以查找驱动程序



On the screen displayed, you can search for driver software.

9. Click the [Browse] button. 点击浏览按钮

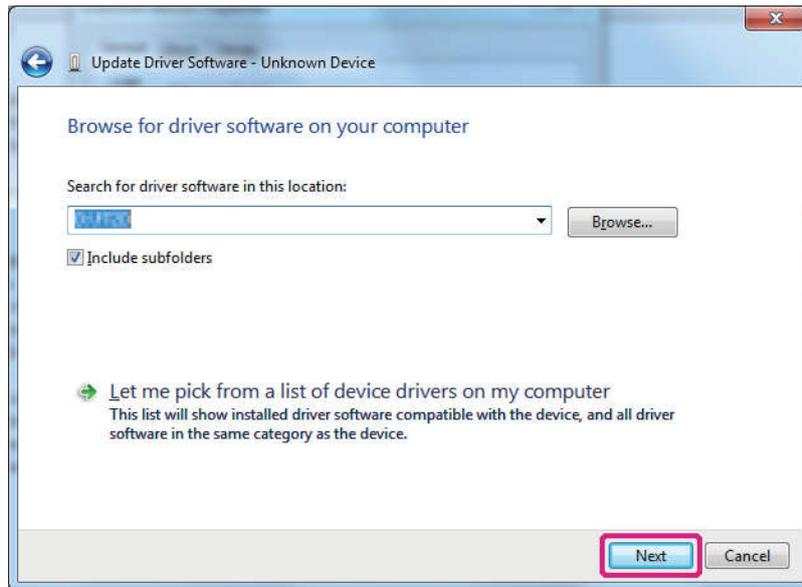


The "Browse Folders" screen appears.

10. Select the folder in which you saved the data in step 2 of "Downloading the YAESU Amateur Digital DSP Firmware Update Program" instructions on page 4, and then click the [OK] button. 选择你下载的固件更新程序文件夹，然后点击OK

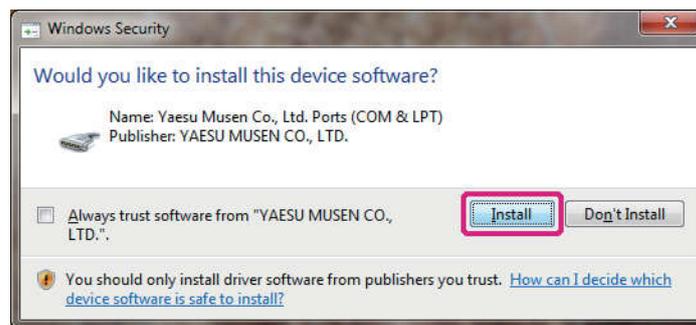
The "Browse Folders" screen closes and returns to the "Update Driver Software - Unknown Device" screen.

11. Click the [Next] button. 点击下一步按钮



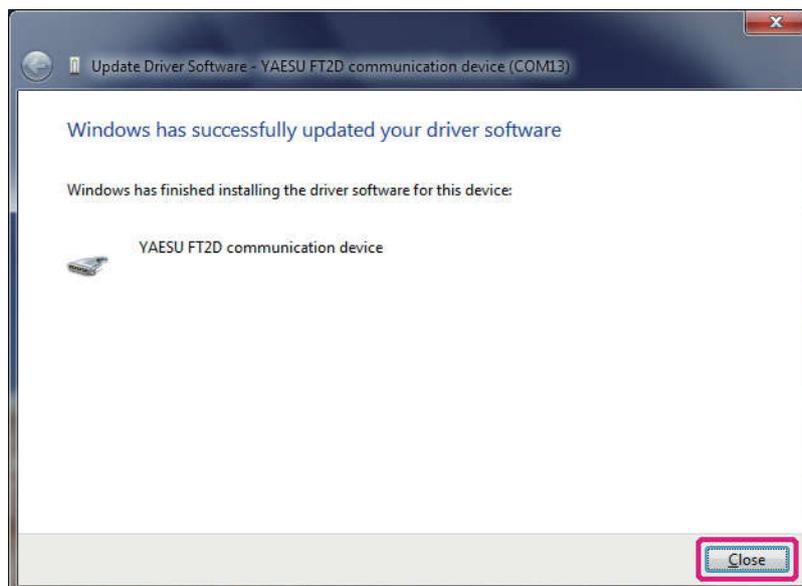
The "Windows Security" screen appears.

12. Click the [Install] button. 点击安装



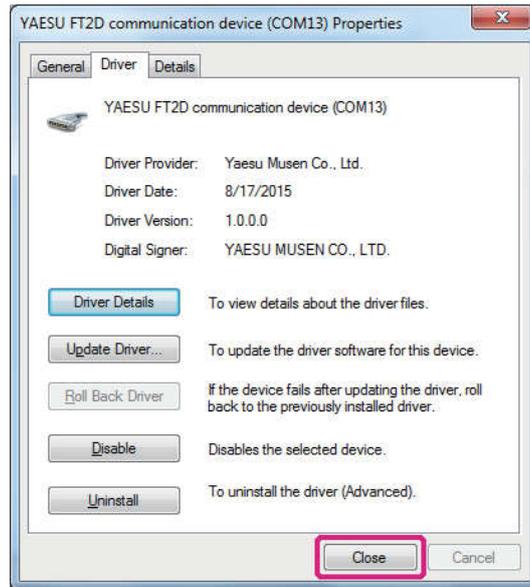
The device driver installation begins. When the installation completes, the message "Windows has successfully updated your driver software" will appear.

13. Click the [Close] button. 点击关闭按钮



The "YAESU FT2D communication device (COMXX) Properties" screen will appear.

14. Click the [Close] button. 点击关闭按钮

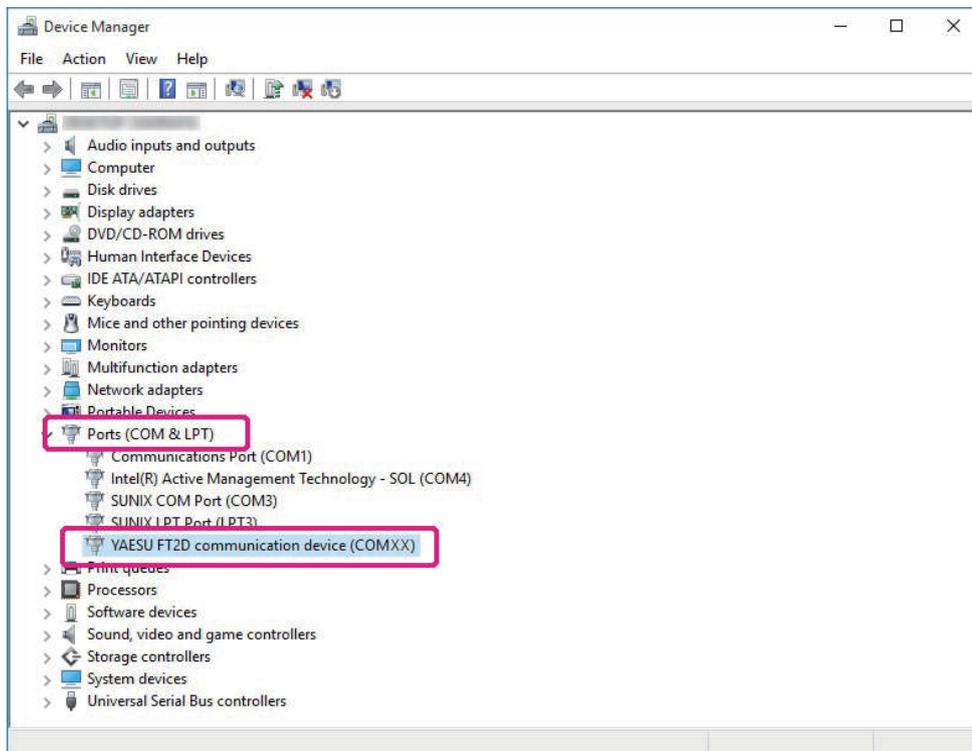


Returns to "Device Manager".

15. Check that "YAESU FT2DR/DE communication device (COMXX)" appears under "Ports (COM & LPT)" and then close "Device Manager". 检查FT2D设备 (COMXX) 出现在端口COM和LPT下面, 然后关闭设备管理器

* "XX" refers to a port number. Since "COMXX" will be required when updating the DSP firmware, write down the port number.

XX指的是端口号, 因为在更新DSP固件时需要填入端口号码, 务必记住。



Updating the DSP Firmware

Execute the FT2DR/DE DSP firmware update.

* * If you have just completed the device driver installation, proceed to step 8.

1. Remove the battery pack from the transceiver. 从对讲机上取下电池
2. Connect the AC adaptor to a wall outlet and then insert the DC connector to the FT2DR/DE EXT DC IN terminal. 将交流电源适配器连接到电源，然后将DC插头插入对讲机DC输入插座



3. Press and hold  for over one second to turn the power ON. 按住电源按键超过1秒，打开对讲机电源
4. While the power is ON, disconnect the AC adaptor from the transceiver. 当对讲机打开时，断开交流电源适配器与电台的连接



5. Use the supplied cable to connect the FT2DR/DE DATA terminal to the computer.
使用随机附带的USB连接电缆将FT2DR对讲机连接到电脑



6. While pressing down **A/B**, connect the AC adaptor connector to the FT2DR/DE EXT DC IN terminal. 按住A/B键，将交流电源适配器连接到对讲机



The power turns ON and you will hear a “beep-boop-bop” sound. On the FT2DR/DE display, “---DSP WRITE MODE---” and “Push DISP Key!” will appear.
电源接通，你会听到“哔哔哔”的声音，在对讲机显示屏上将会显示 DSP WRITE MODE和push di sp key



7. Press **DISP**. 按DISP按键

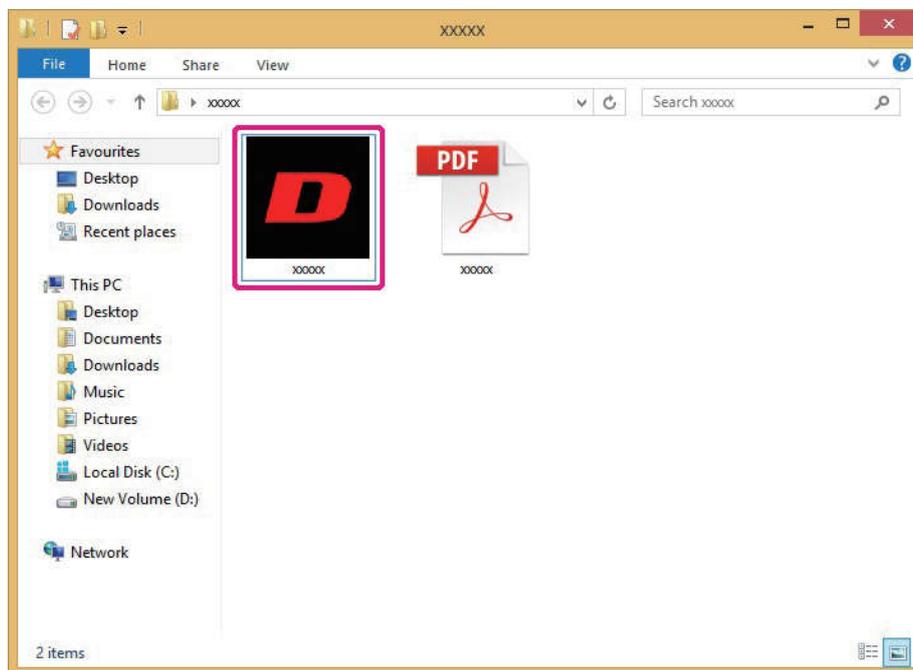


“---Loading---” will appear on the display. 显示屏上将出现Loading

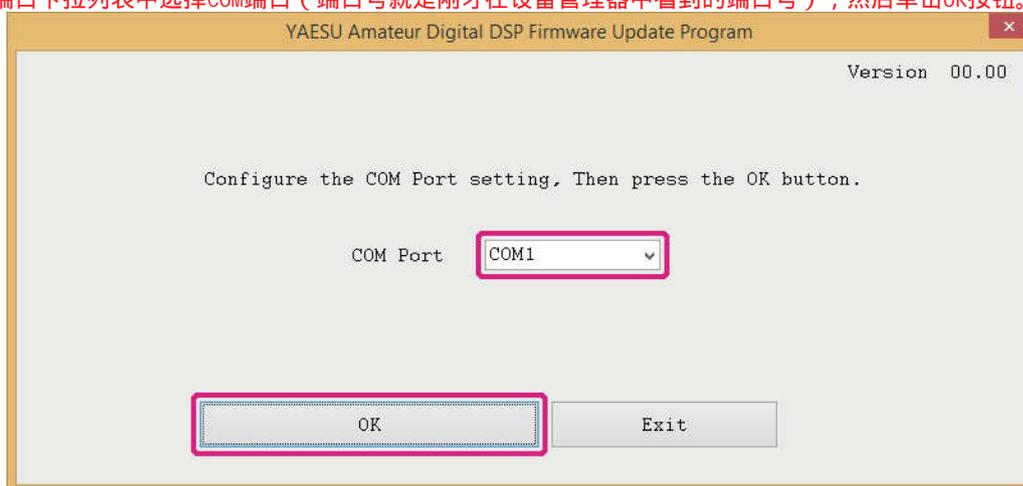


跳到第5页完成7-9条，记录端口号，然后再进行下一步

8. Open the folder in which you saved the data in step 2 of “Downloading the YAESU Amateur Digital DSP Firmware Update Program”, as instructed on page 4; and then double-click “PCTOOL_vXXXX.exe” (D icon). 打开下载的DSP固件升级程序，双击PCT00Le_v0430.exe图标
- * “XXXX” refers to a version number.

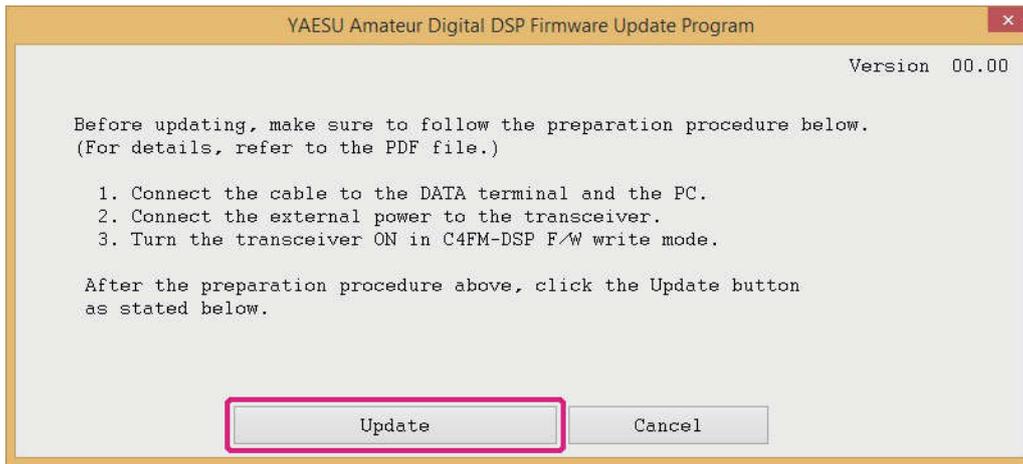


9. If the “Security Alert” screen appears, click the [Run] button. 出现安全警告屏幕，点击运行按钮。
The “YAESU Amateur Digital DSP Firmware Update Program” will open.
10. From the [COM Port] drop-down list, select the COM port, which you have checked in the “Device Manager” when you installed the device driver, and then click the [OK] button.
从COM端口下拉列表中选择COM端口（端口号就是刚才在设备管理器中看到的端口号），然后单击OK按钮。



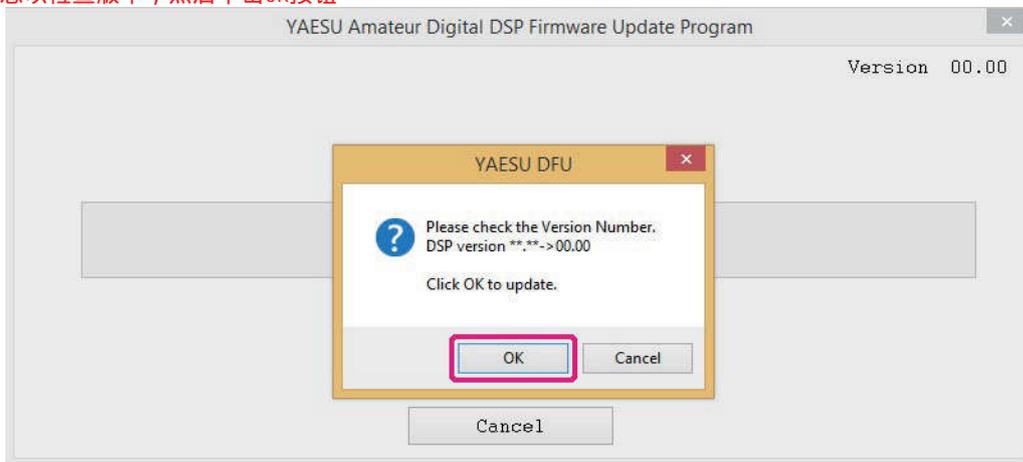
The update preparation procedure for the transceiver will appear.
将会出现升级准备程序的界面

11. Click the [Update] button. 点击Update按钮



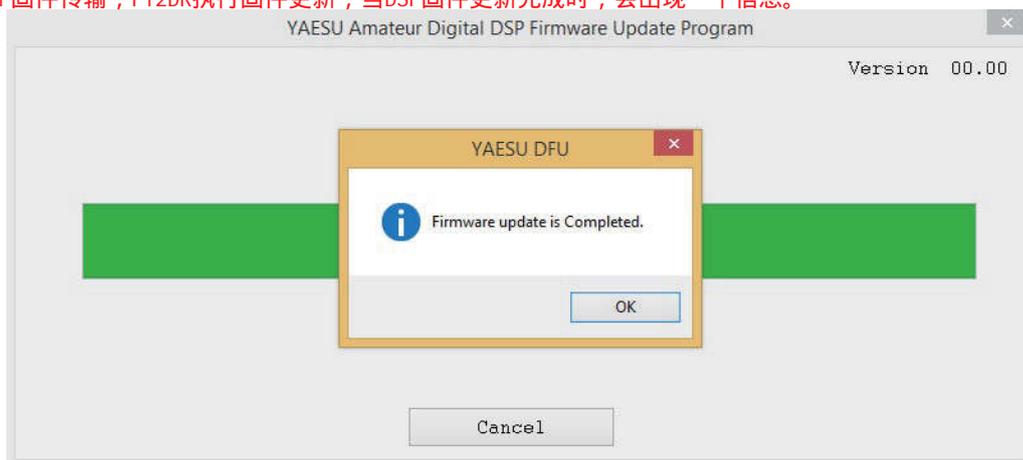
A confirmation message appears. 出现一个确认信息

12. Read the message to check the version and then click the [OK] button. 读取信息以检查版本，然后单击OK按钮

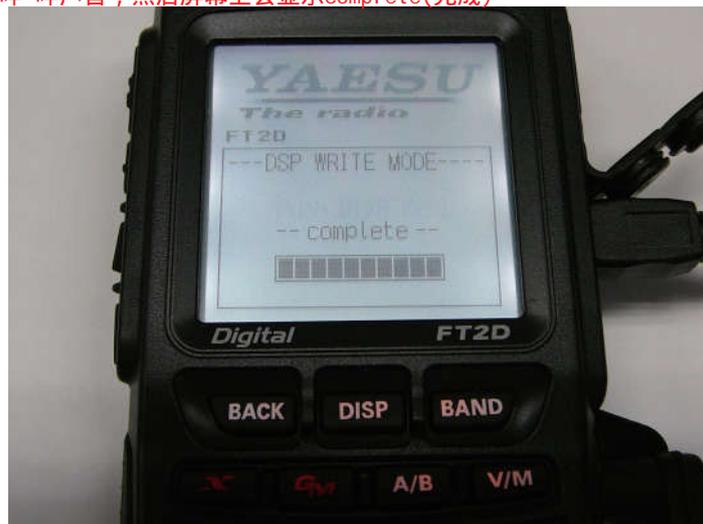


The DSP firmware transfer will begin, and the FT2DR/DE DSP firmware update executes. When the DSP firmware update completes, a message appears.

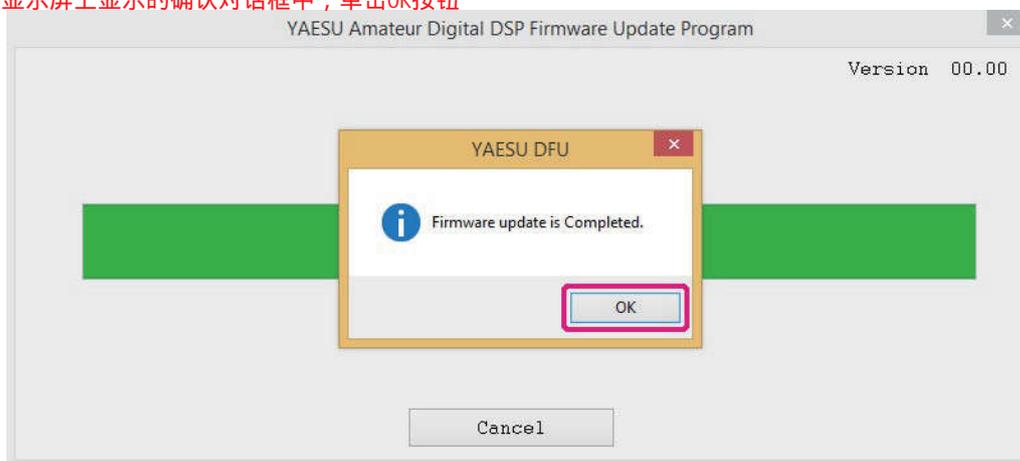
开始DSP固件传输，FT2DR执行固件更新，当DSP固件更新完成时，会出现一个信息。



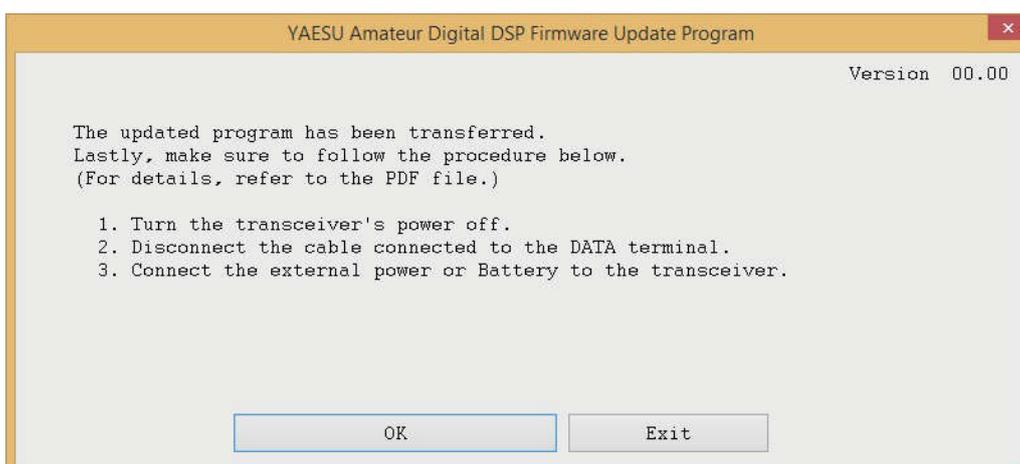
You will hear a “beep-boop-bop” sound from the FT2DR/DE and “- complete -” appears on the display.
你会听到来自FT2DR的哔 哔声音，然后屏幕上会显示complete(完成)



13. In the confirmation dialog box displayed on the computer screen, click the [OK] button.
在电脑显示屏上显示的确认对话框中，单击OK按钮

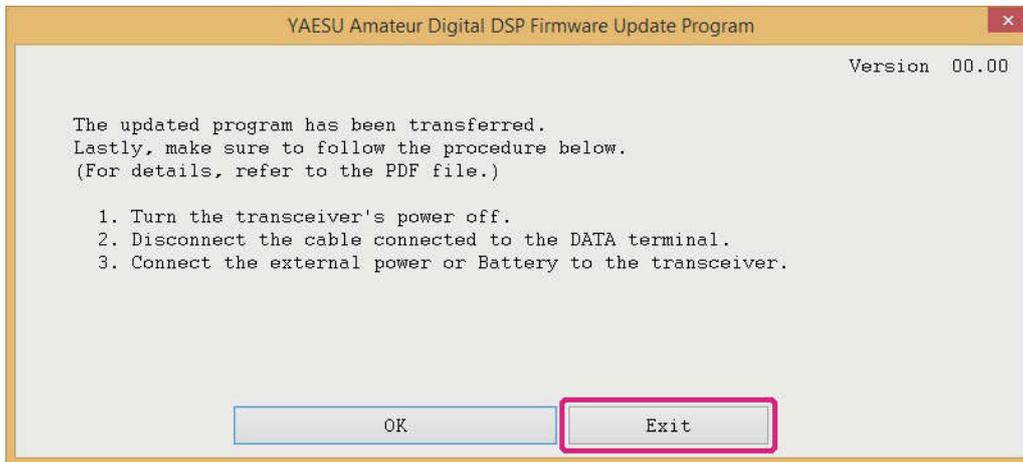


The DSP firmware post-update procedure appears.



14. Press and hold  for over one second to turn the power OFF. 按电源按键1秒以上关闭电源
15. Disconnect the supplied cable. 断开USB电缆
16. Attach the battery pack. 装上电池
17. Press and hold  for over one second to turn the power ON. 按电源按钮1秒以上打开电源
18. Check the firmware version. Touch [MODE] to select the digital mode.
检查固件版本。触摸MODE选择数字模式

19. Press and hold the **[DSP]** key for over one second. **按DSP按键1秒以上**
The transceiver mode switches to set mode. **收发模式切换到设置模式**
20. Touch **[DISPLAY]**. **触摸DISPLAY**
Setting items appear. **设置项出现**
21. Rotate the DIAL and touch **[11 SOFTWARE VERSION]**. **旋转DIAL然后触摸11. SOFTWARE VERSION**
The software versions of “Main”, “Sub”, and “DSP” appear. **出现Main、Sub和DSP软件版本**
22. Check the firmware version and click the **[Exit]** button on the “YAESU Amateur Digital DSP Firmware Update Program” screen. **检查固件版本并点击升级软件的EXIT按钮。**



The YAESU Amateur Digital DSP Firmware Update Program finishes. **DSP固件更新完成。**

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