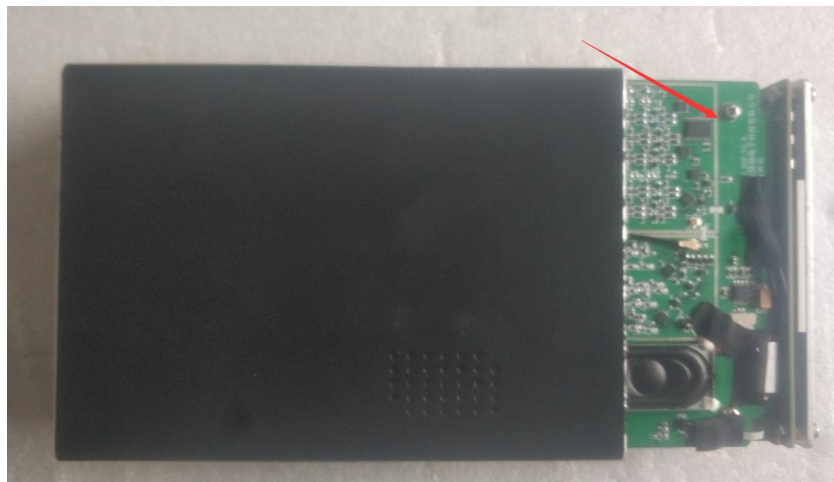


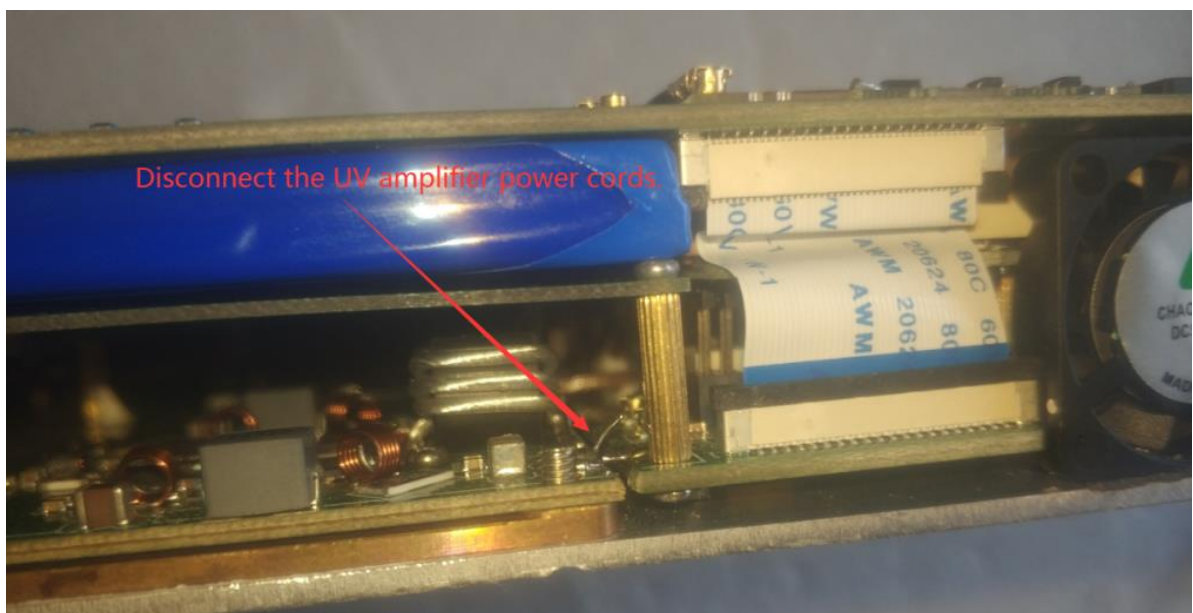
**Step 1:** Remove the four screws of the shell.



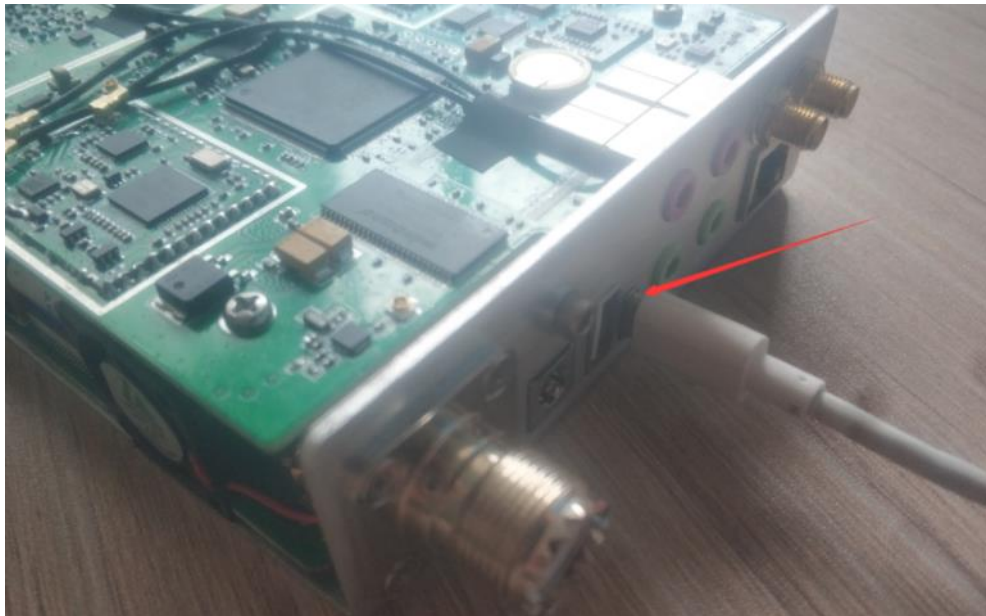
**Step 2:** Pull out the movement horizontally. Be careful not to pull diagonally.




**Step 3:** Disconnect the UV amplifier power cords.

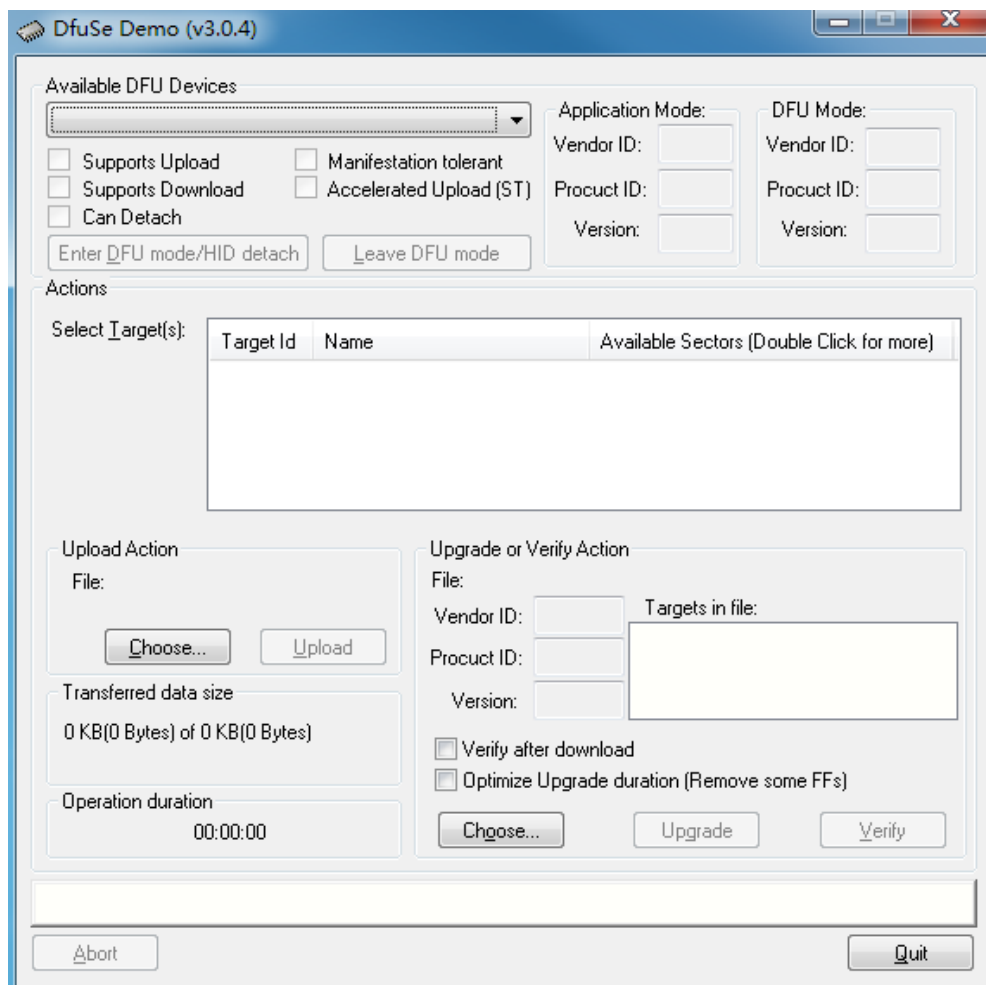


**Step 4:** Use a USB cable to connect the radio to the computer.

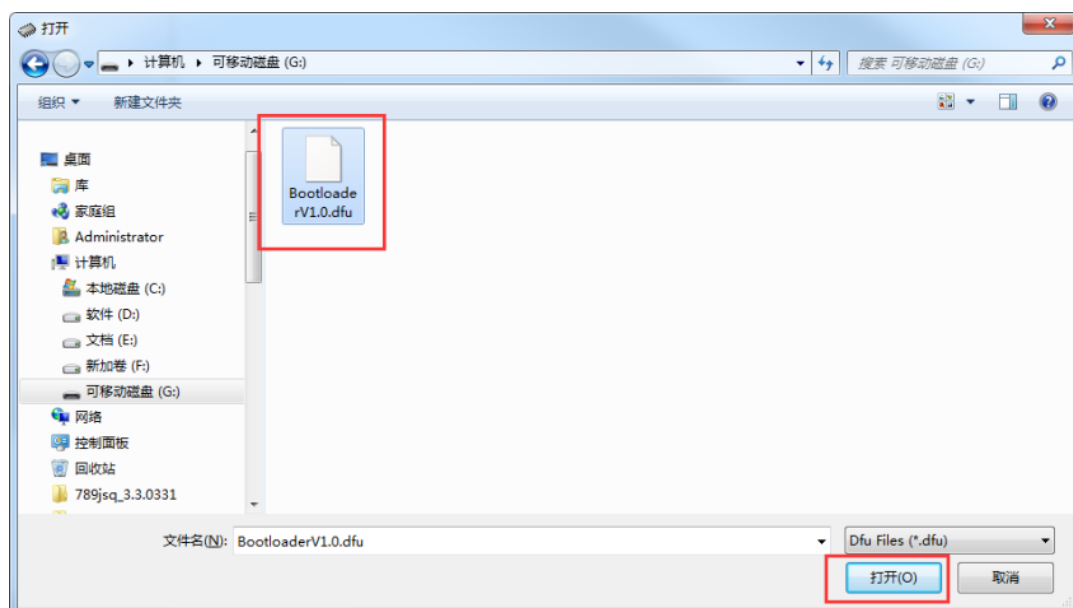
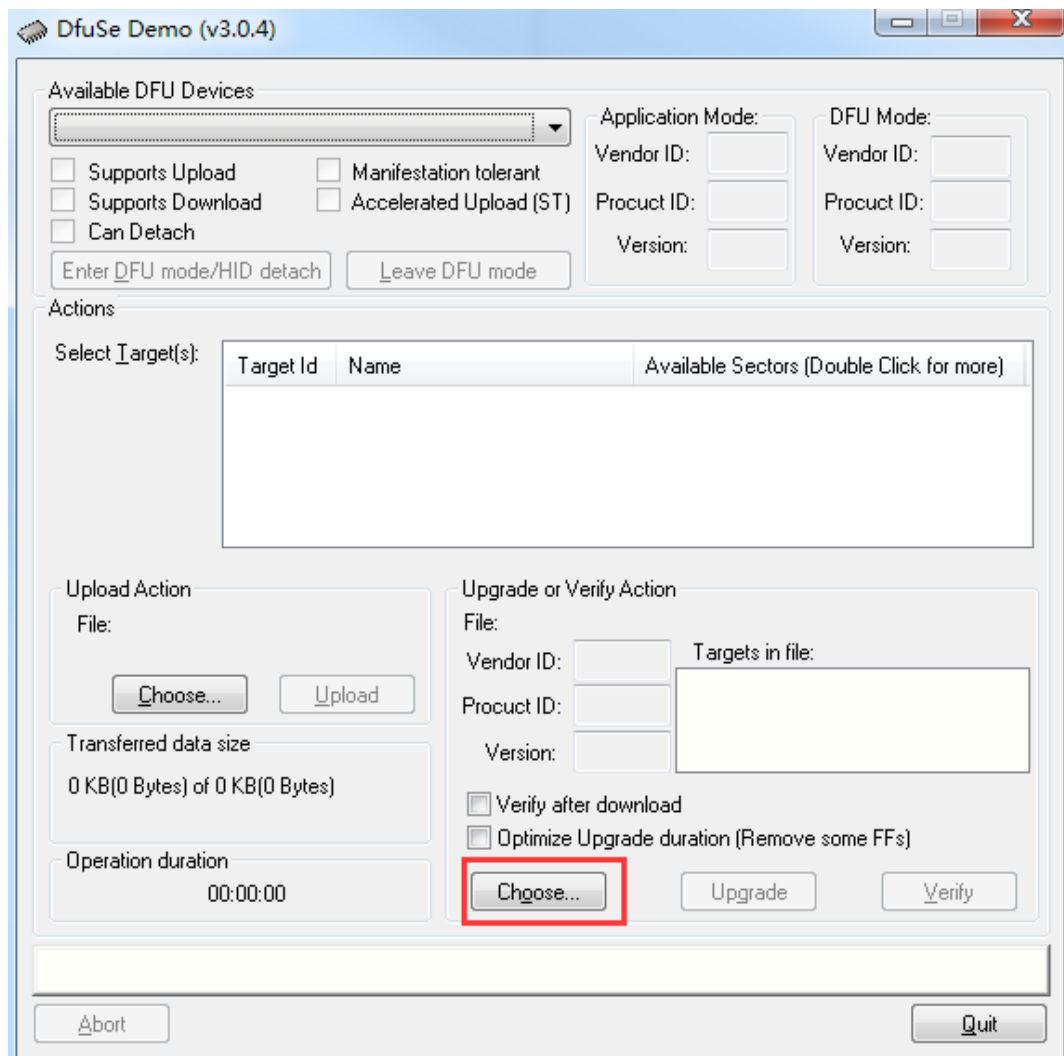


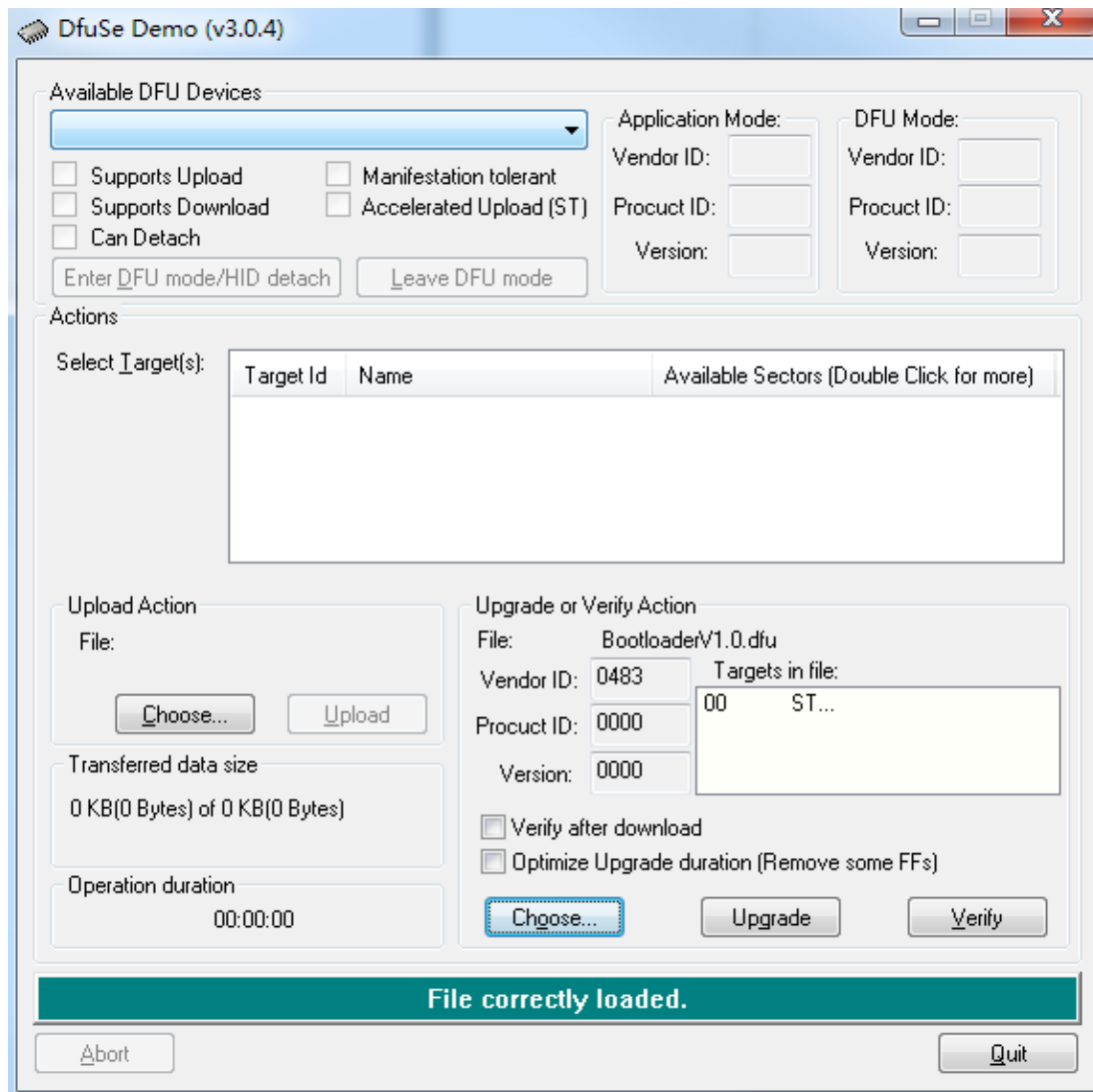
**Step 5:** Install and open the Dfuse Demo software.

 BootLoader Software.exe



**Step 6:** Click the choose button to select the BootLoader file, and after finding the file, click Open and wait for the file to load to complete.





### Step 7: Download BootLoader.

Turn off the power of the radio, firstly press the BAND button of the radio, and then press the power button, the DfuSeDemo software will recognize the DUF device at this time. After clicking Upgrade, select Y in the pop-up to start downloading the BootLoader file. Please don't release the power button during the downloading process. The upgrade progress will be displayed below when downloading the software. When Upgrade Successful is displayed, the upgrade is completed. Release the power button at this time, and the BootLoader download is completed.

**Note:** Every step suggested here is very important, please read it carefully before operating.

1. Only the internal battery can be used during downloading the BootLoader, and the DC port power supply cannot be connected. To download BootLoader, you need to disconnect the power of the UV amplifier, refer to the diagram, otherwise the radio will be damaged. Before downloading BootLoader, please fully charge the internal battery of the radio and charge it through the USB cable instead of DC port. The charging power of the radio is 5V2A, and a battery charging management circuit is designed in the radio. The adapter with an output voltage of 5V and a current greater than or equal to 2A can be used to charge the radio. Built-in 2S polymer

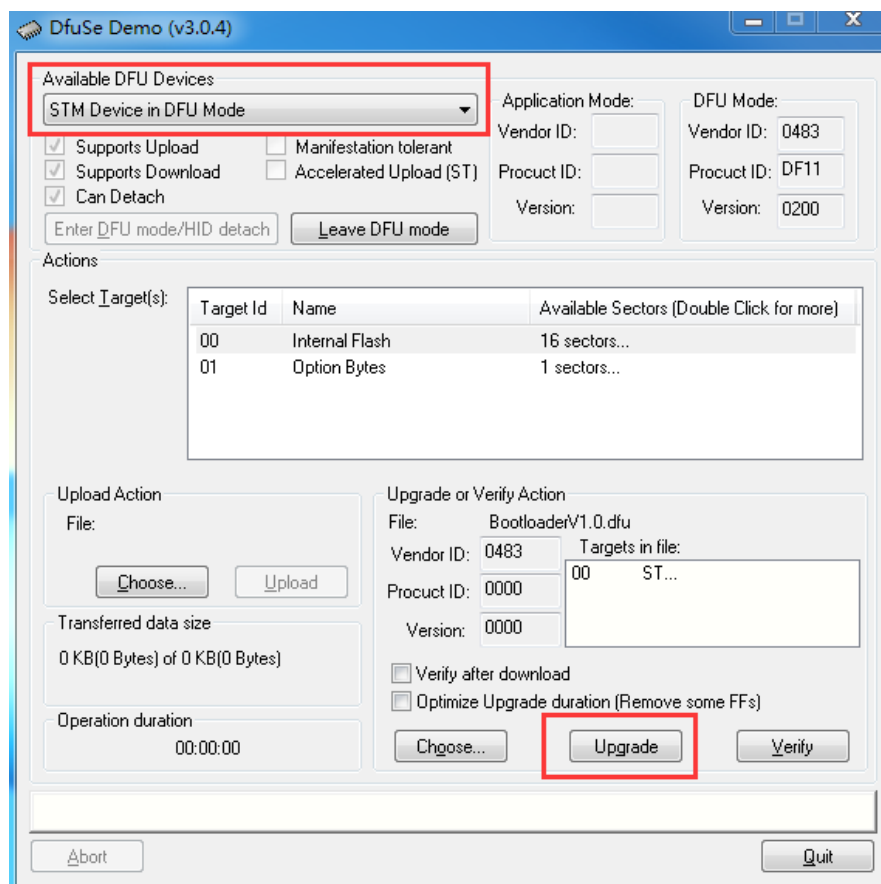
battery, the battery capacity is actually 4.9AH, the charging time is more than 3 hours, and the full charged voltage is about 8.4V. Try to charge the battery when it is turned off. Because the internal power management circuit may not charge the battery when it is turned on.

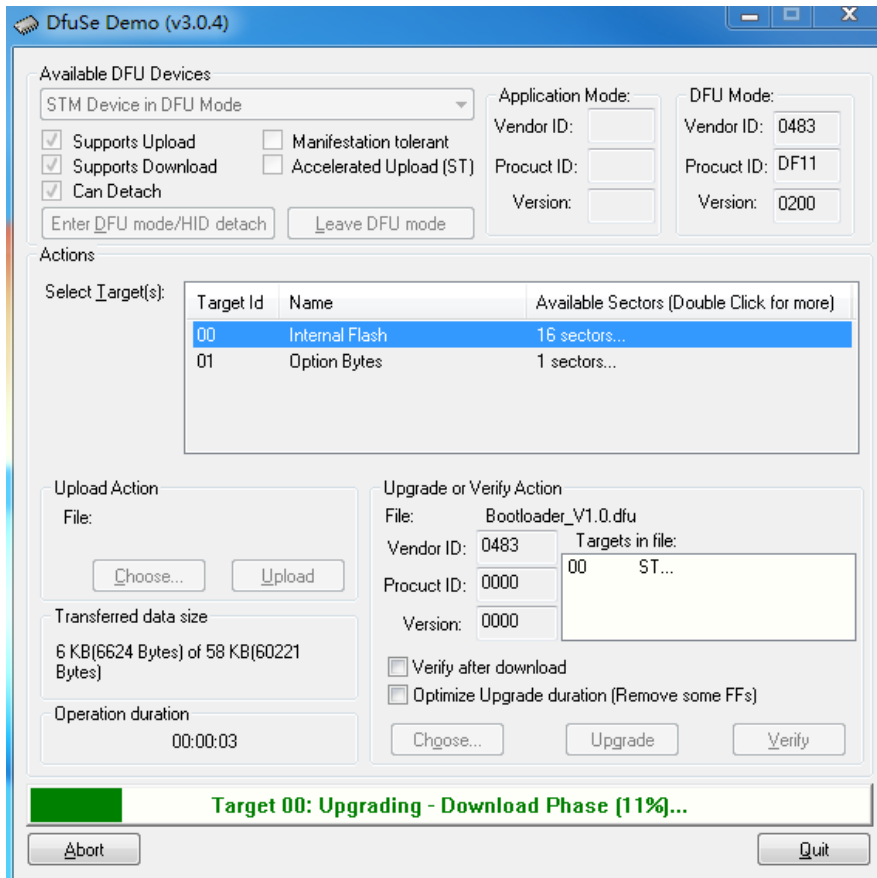
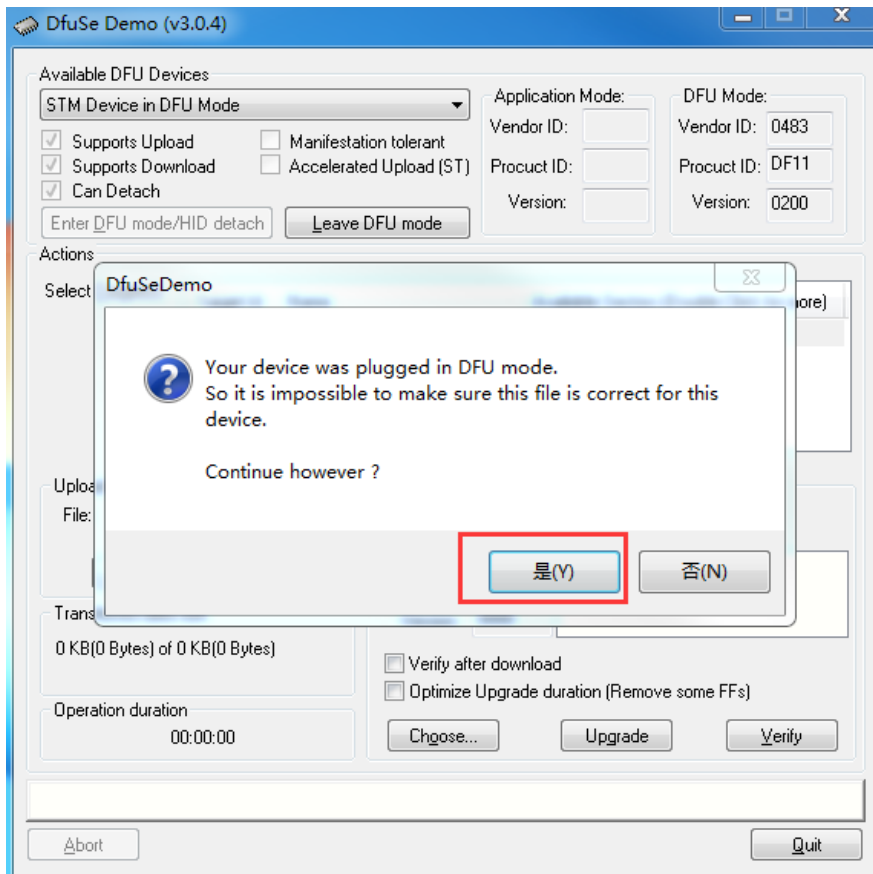
2. Press the BAND button and then press the power button to download the BootLoader, and the time interval cannot be too long. Press the button and click Upgrade immediately after the DfuSeDemo software recognizes the DUF device. Do not hold down the BAND button and the power button for a long time, otherwise the radio will be damaged. Release the button immediately after it displayed Upgrade Successful. Press the BAND key and then press the power button, and the time interval can not exceed 10 seconds.

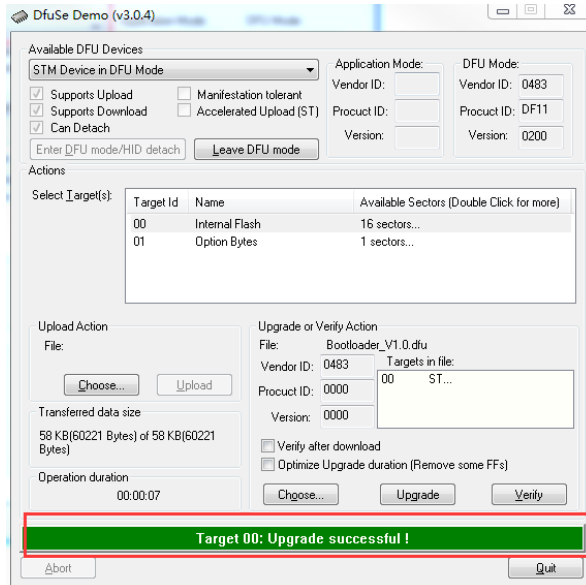
3. Press the BAND button and then the power button. Please release all the buttons immediately when the DfuSeDemo software cannot recognize the DUF device. It cannot be pressed all the time. Generally, it will be automatically recognized within 3 seconds after pressing. If it cannot be recognized, it is divided into two cases.

The first case is that the driver is not installed. If you use it for the first time, you will be prompted to install the driver. For the driver installation, please refer to the radio driver installation document and video "Installation of Radio Driver". When the computer prompts to install the driver, you can release the button. Please do not keep pressing. Press the BAND key and then press the power button, and the time interval can not exceed 10 seconds.

The second case is that the internal battery cannot allow the radio to enter the DFU mode. At this time, please refer to the first precautions in this section which is the precautions of power usage.







### Step 8: Updates the application of the radio

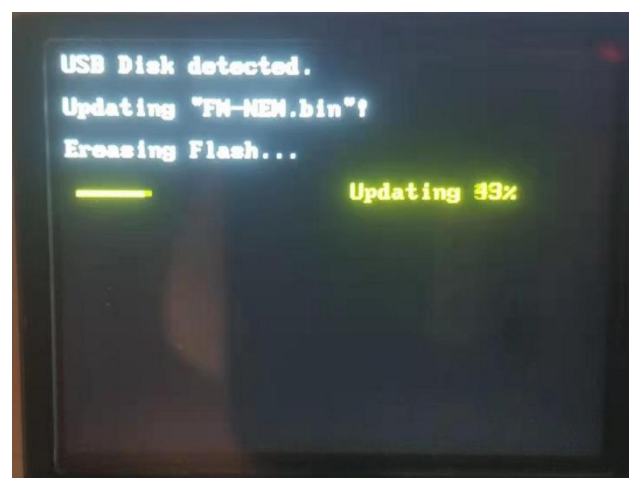
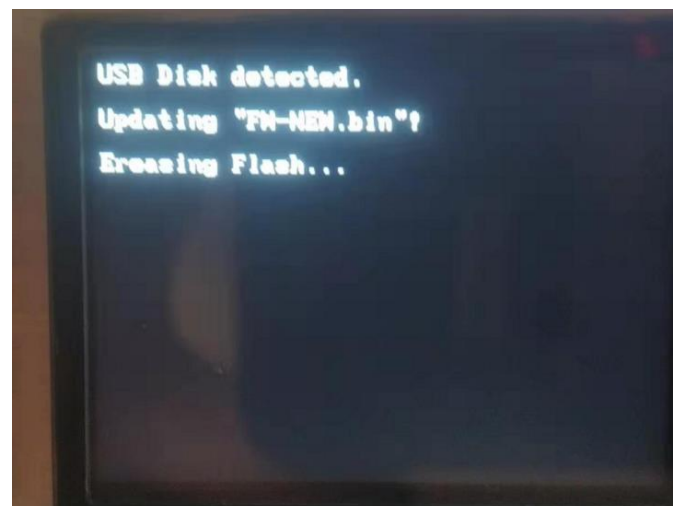
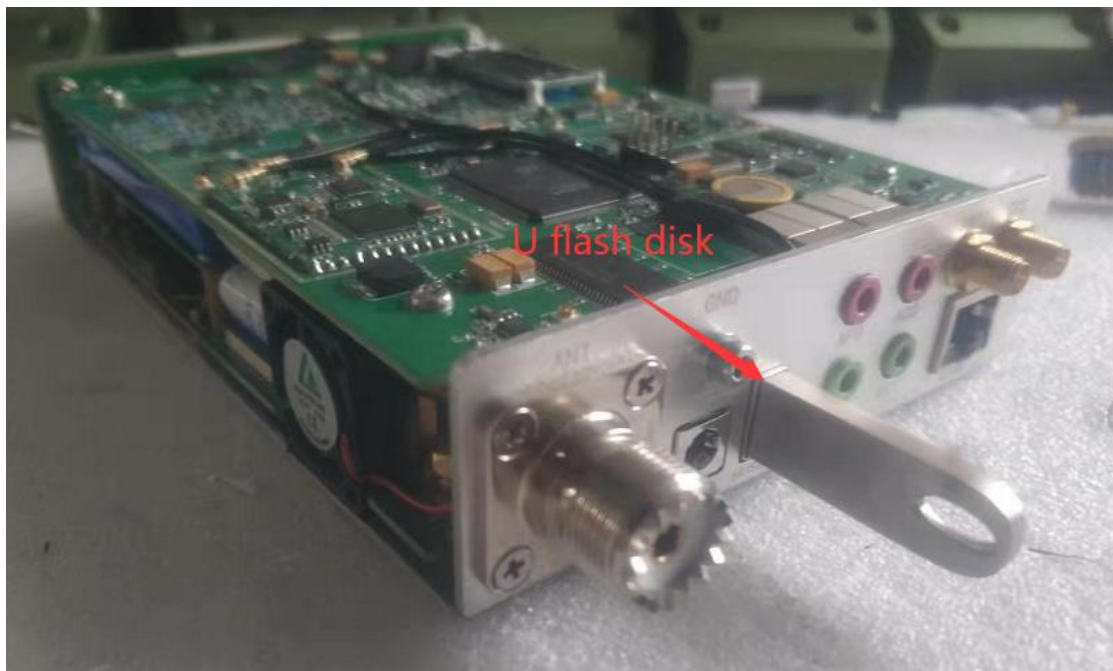
Copy the BIN file FW-NEW.bin to the U FALASH DISK.

Insert the U FALASH DISK which storing the application program FW-NEW.bin into the HUSB port of the radio. Long press the power button, and the radio's BootLoader will automatically recognize the application in the U FALASH DISK and update it automatically. The radio screen will prompt the update progress. When "updating 100% and remove USB drive to reboot" are displayed, the update is completed automatically. Unplug the U FALASH DISK, press and hold the power button to turn on, the main interface of the radio is automatically entered. If the update fails, the radio screen will prompt an error code and failure message. Check whether the capacity of USB flash drive is enough or file name of FW-NEW.bin is correct, or you can replace another USB flash drive and copy FW-NEW.bin one more time to update the application again.

### Note:

The application FW-NEW.bin can only be stored in the USB flash drive used for firmware upgrade, and the file name of bin cannot be changed. The BootLoader file can be stored anywhere on the computer, but in order to find it quickly, it is recommended to store it in the U FALASH DISK together with the BootLoader file. Please do not store files other than the application program and BootLoader in the U FALASH DISK. Otherwise, the BootLoader may not recognize the application program and the firmware cannot be upgraded. The capacity of the U FALASH DISK needs to be less than or equal to 8G, due to the BootLoader cannot recognize the U FALASH DISK with capacity more than 8G.









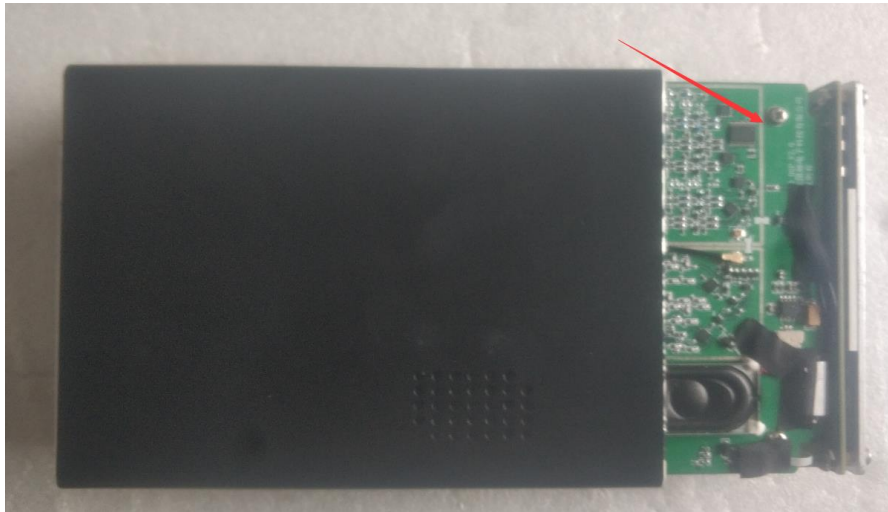
Complete the BootLoader and application upgrade.

**Note:**

1. BootLoader only needs to be downloaded once, and does not need to be downloaded every time the firmware is upgraded, unless other special instructions. To upgrade the program in the future, you only need to copy the new version of the application to the USB flash drive to upgrade.

2. After the update is completed, please don't insert the USB flash drive again, otherwise the application will be updated again.

**Step 9:** Insert the movement horizontally. Be careful not to insert diagonally.



**Step 10:** Install the four screws of the shell.

