

Guidance on WS80 firmware upgrade

Section1: Brief Guidance

- ① Install the software "Dfuse_Demo_v3.X.X_setup.exe" on a Windows PC
- ② Download the firmware file "WS80_v1.X.X.dfu"
- ③ Prepare a USB to micro-USB Type A data cable (not included in the package)

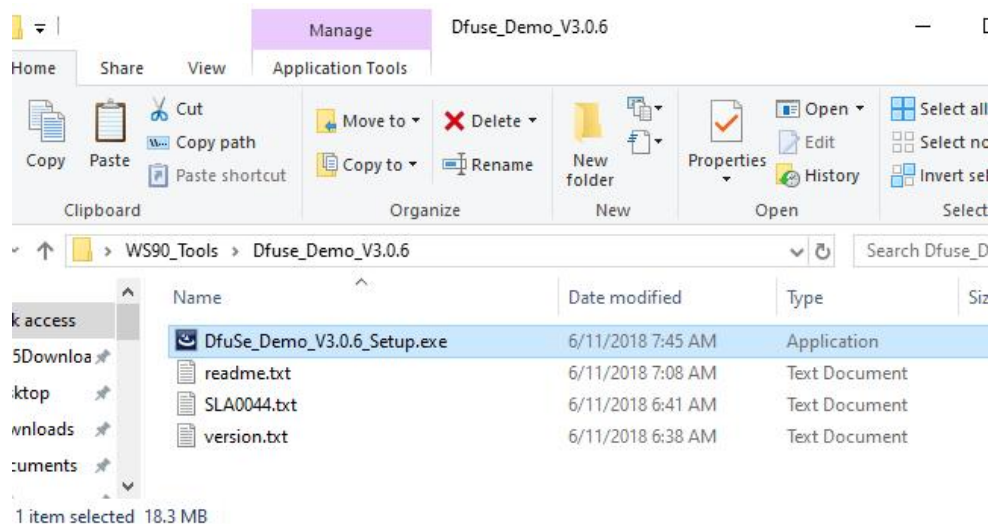


Please see below **Section2: Upgrade** for the details and specific instructions.

Section2: Upgrade

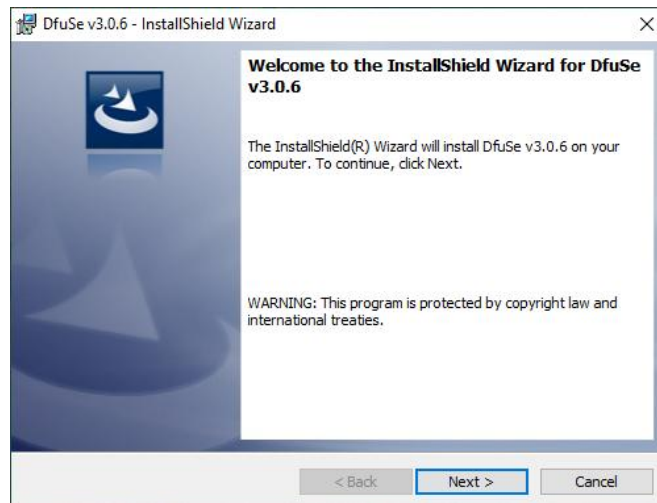
Step 1: Install DfuSe Demo Software

1. Double-click "DfuSe_Demo_V3.0.6_Setup.exe" to start the installation.

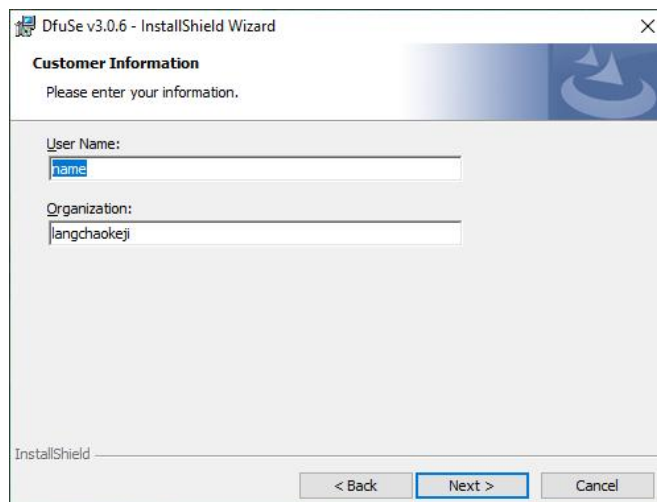


2. Follow the prompts:

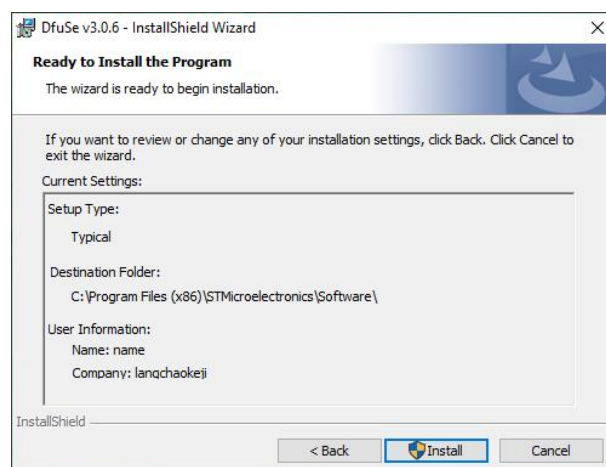
Click "Next"



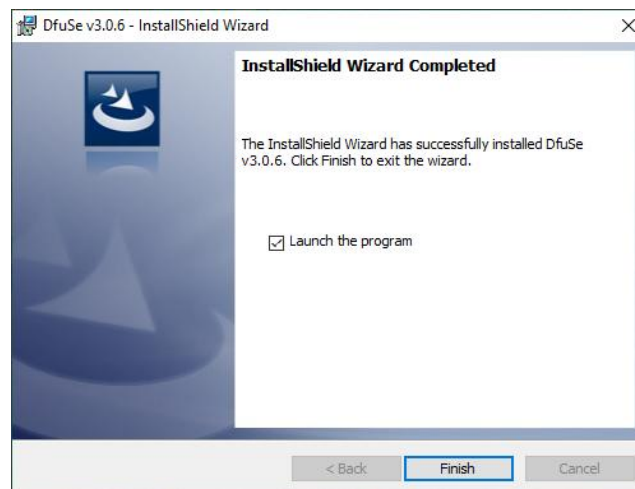
Click "Next"



Click "Install"



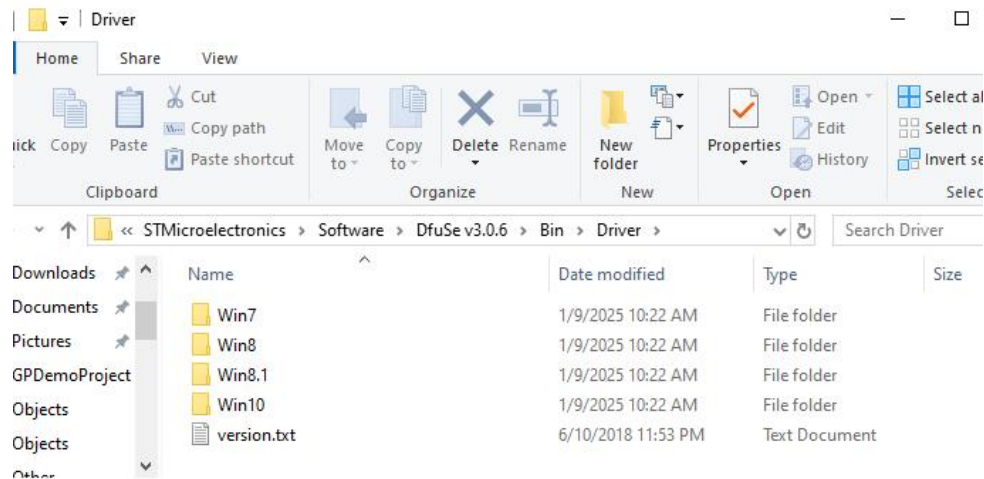
Click the "Finish. Installation completed.



3. Navigate to **C:\Program Files (x86)\STMicroelectronics\Software\DfuSe v3.0.6\Bin\Driver** and select the appropriate driver for your system.

- For 64-bit systems: Run dpinst_amd64.exe.
- For 32-bit systems: Run dpinst_x86.exe.

For example, if your computer system is Windows 10 or Windows 11 64-bit, install the driver found in the "Win10" folder, which is "dpinst_amd64.exe". If the system is Windows 10 or Windows 11 32-bit, install the driver found in the "Win10" folder, which is "dpinst_x86.exe". Similarly, for Windows 7, Windows 8, and Windows 8.1, install the driver found in the corresponding folders "Win7", "Win8", and "Win8.1".



Step 2: Connect WS80

1. Remove the white silicone sleeve from WS80.
2. Use a USB data cable to connect the WS80 and PC. (Note: Not every USB cable you use for charging is a data cable.)



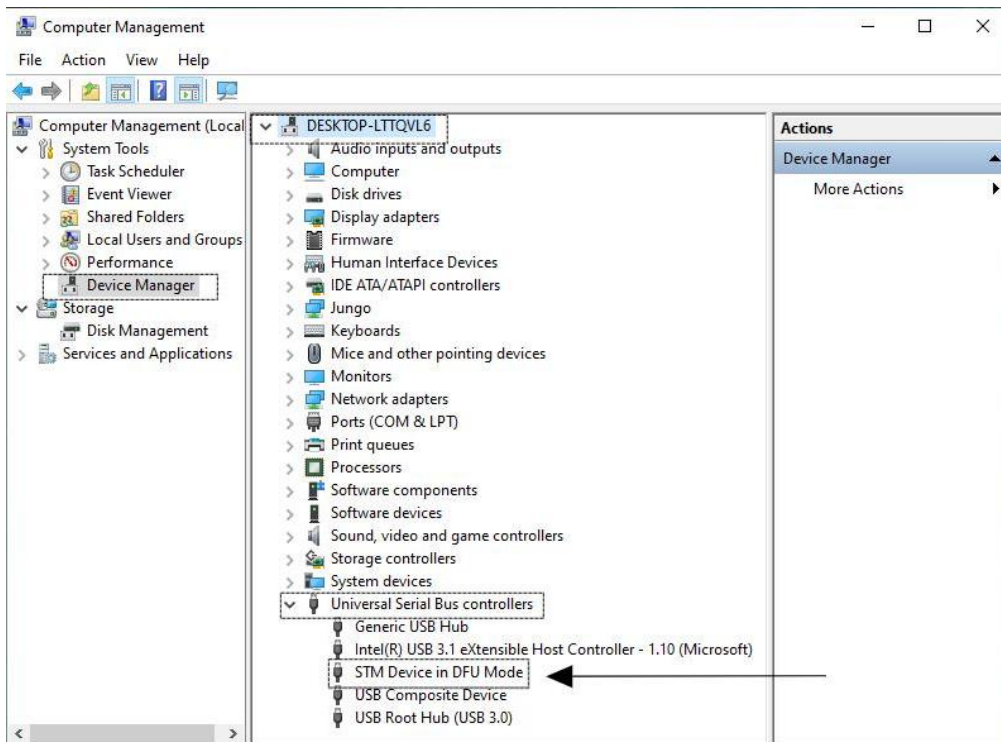
3. Remove the USB cable. Press the "**RESET**" button on the WS80 to enter reboot mode.



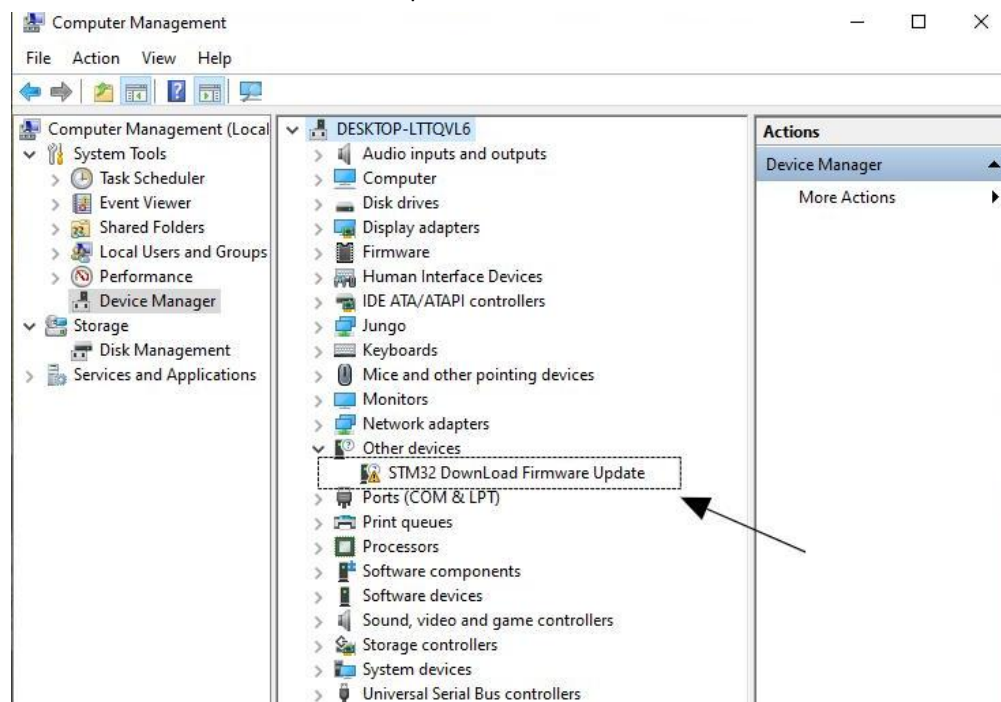
4. Verify the blue LED on the WS80 is flashing..

Step 3: Driver Installation Check

1. Open the Device Manager on your computer
 2. Confirm that "STM Device in DFU Mode" is listed.
- The "STM Device in DFU Mode" indicates that the driver is installed correctly.



- The "STM32 Download Firmware Update" indicates that the driver is not installed.



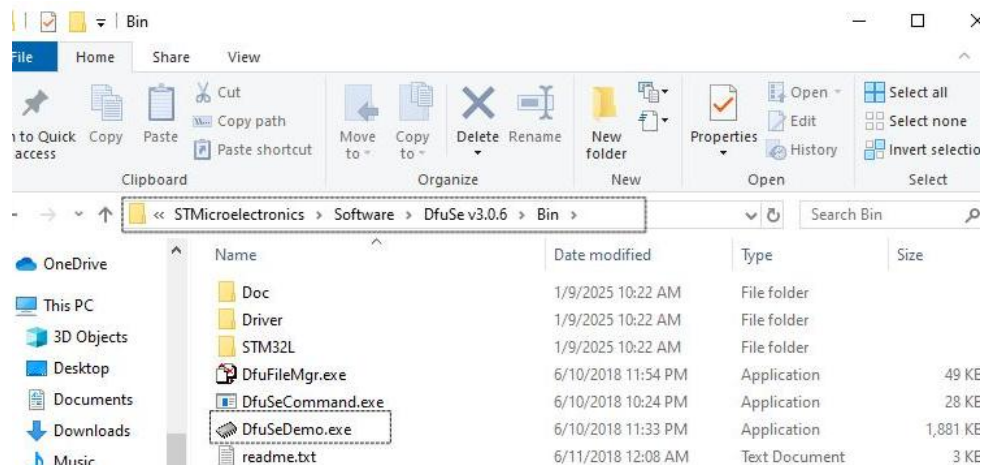
At this point, follow these steps:

- Reinstall the driver.

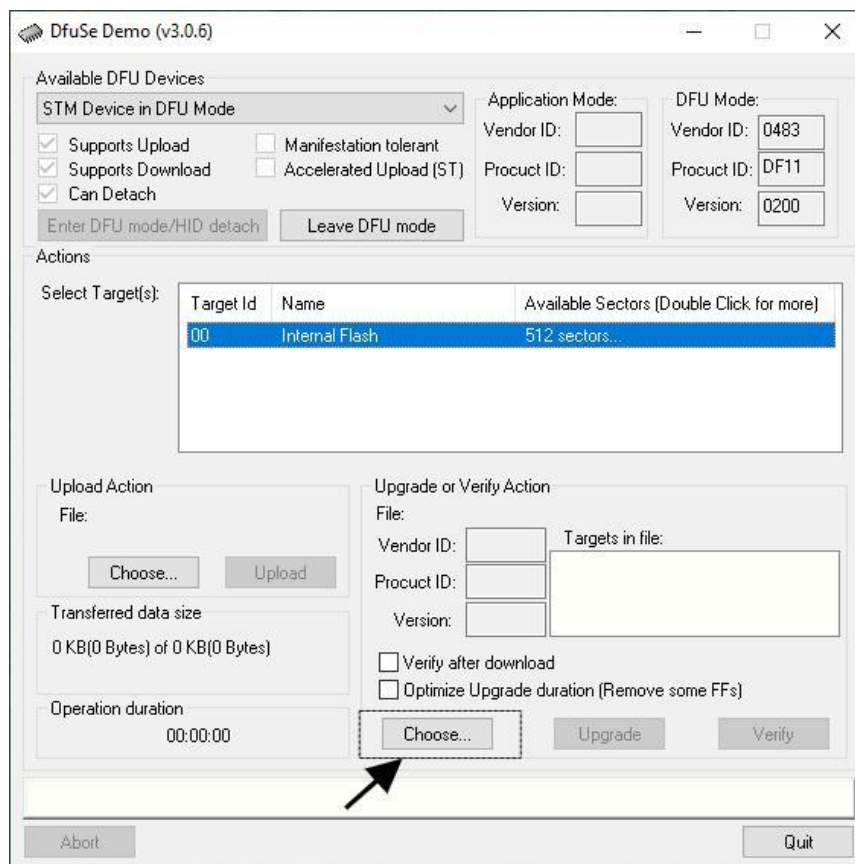
If the issue persists, contact support@ecowitt.com for further assistance.

Step 4: Perform Firmware Upgrade

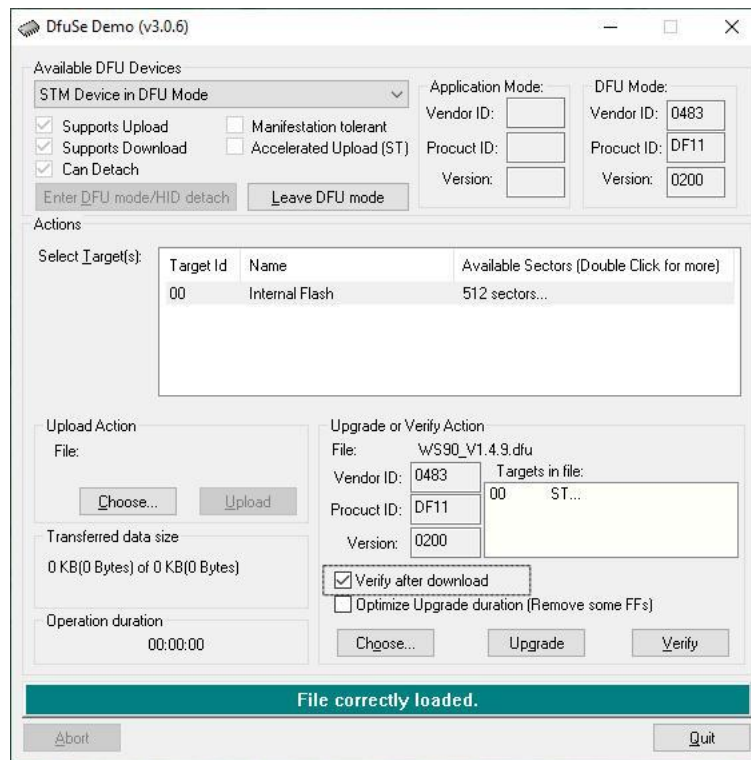
1. Open the software DfuSeDemo.exe.



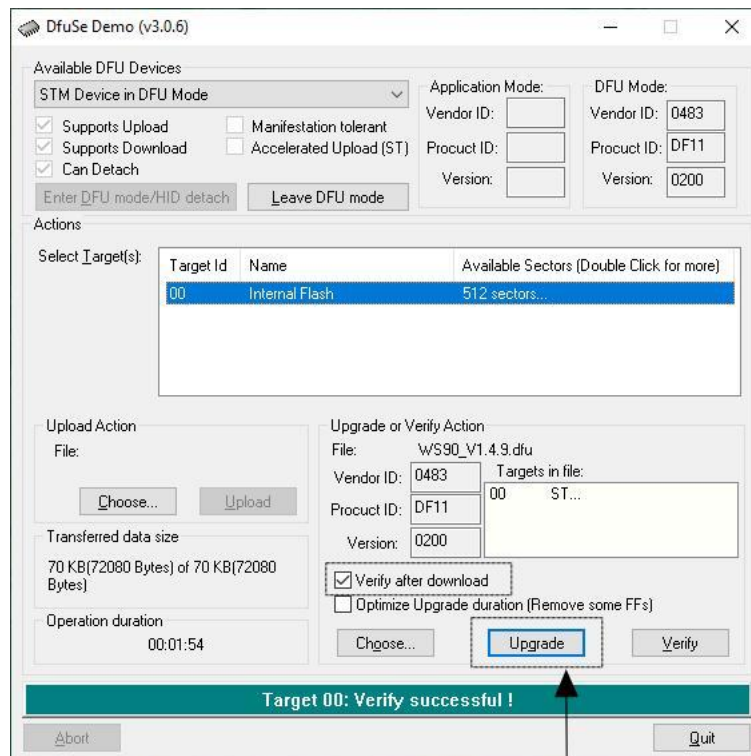
2. Click Choose....



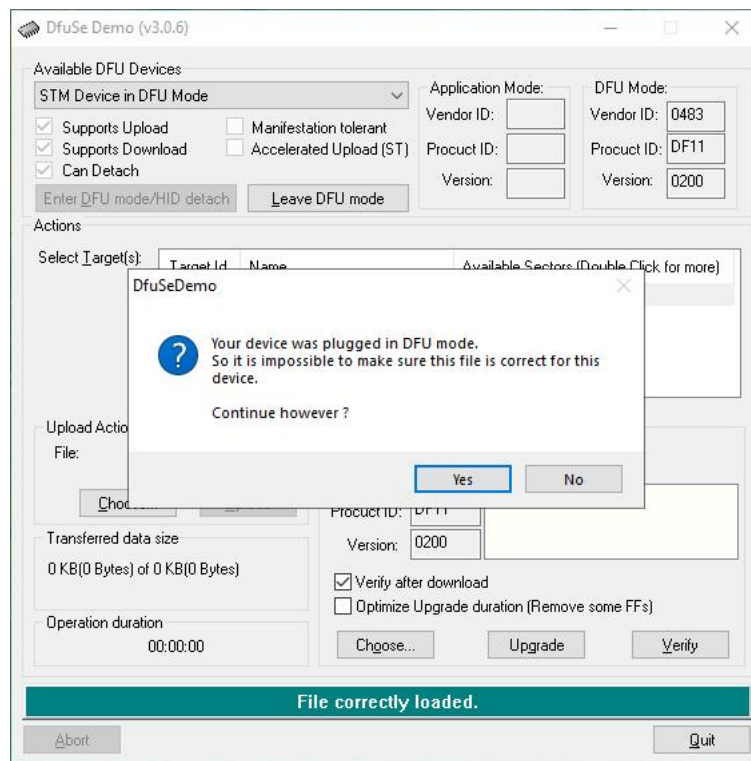
3. Locate and select the firmware file "WS80_V1.X.X_.dfu" file.
4. Enable "Verify after download".



5. Click "Upgrade".

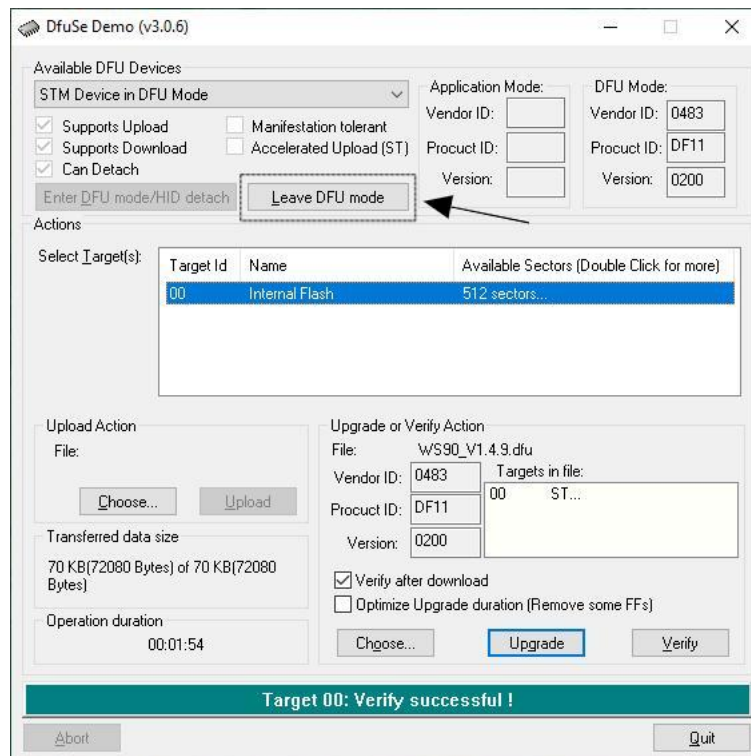


6. Confirm with "Yes".



7. After the upgrade is complete, the interface will show a completion message.

- 1) Click on "Leave DFU mode" to exit the DFU mode.
- 2) The program will automatically jump to the completed upgrade screen.
- 3) Press the "reset" button on the WS80 to enter reboot mode.
- 4) Ensure the LED flashes every 8 seconds to confirm a successful reboot.



Step 5: Final Steps

Ensure that the waterproof cover of the USB port is closed. And then install the white silicone sleeve.

Troubleshooting:

In principle, it doesn't matter if the USB outlet you use on your computer is USB2.0 or USB3.0; USB ports, generally, can be "moody" pieces and be a nightmare. Sometimes, you have to reboot your computer first to get it to work electrically properly. Sometimes, a simple restart/reboot is not enough (warm restart), but you need a complete shutdown and a subsequent restart (cold restart) to get "the electricity" straight. Sometimes, you must change the USB port or computer before the connection gets adequately established.

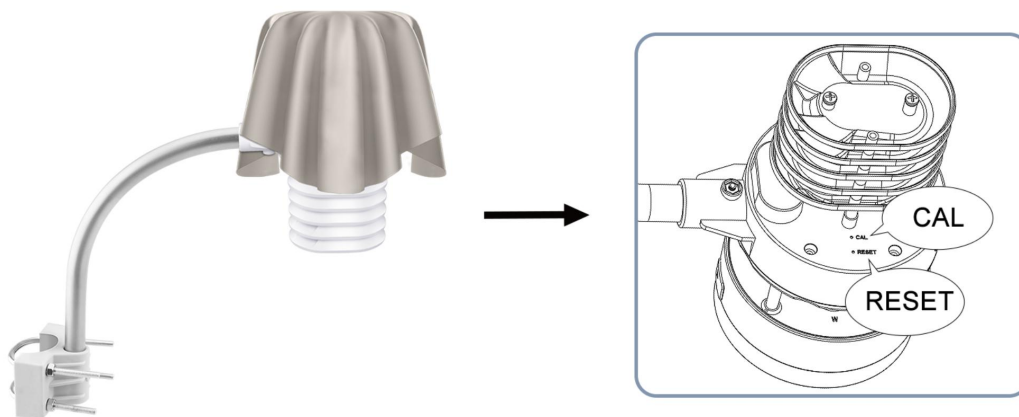
Section3: 0 Wind Speed Calibration.

Wind speed needs to be re-zeroed after update ! !

Use a fan to test if the wind speed responds at all angles !

1. Perform calibration in a windless room. Cover the top and wind speed sensor area of the WS80 with a soft cloth.

- Hold the CAL button for 3 seconds until the LED lights up for 5 seconds and starts flashing.
- Wait until the LED turns off, indicating that the wind speed calibration is complete and reset to zero.



2. To stop the LED from flashing, press the **CAL** button three times.

- To restart the LED light function, press the CAL button three times again.