

UPGRADING FIRMWARE MKIII CONTROLLER V1.0

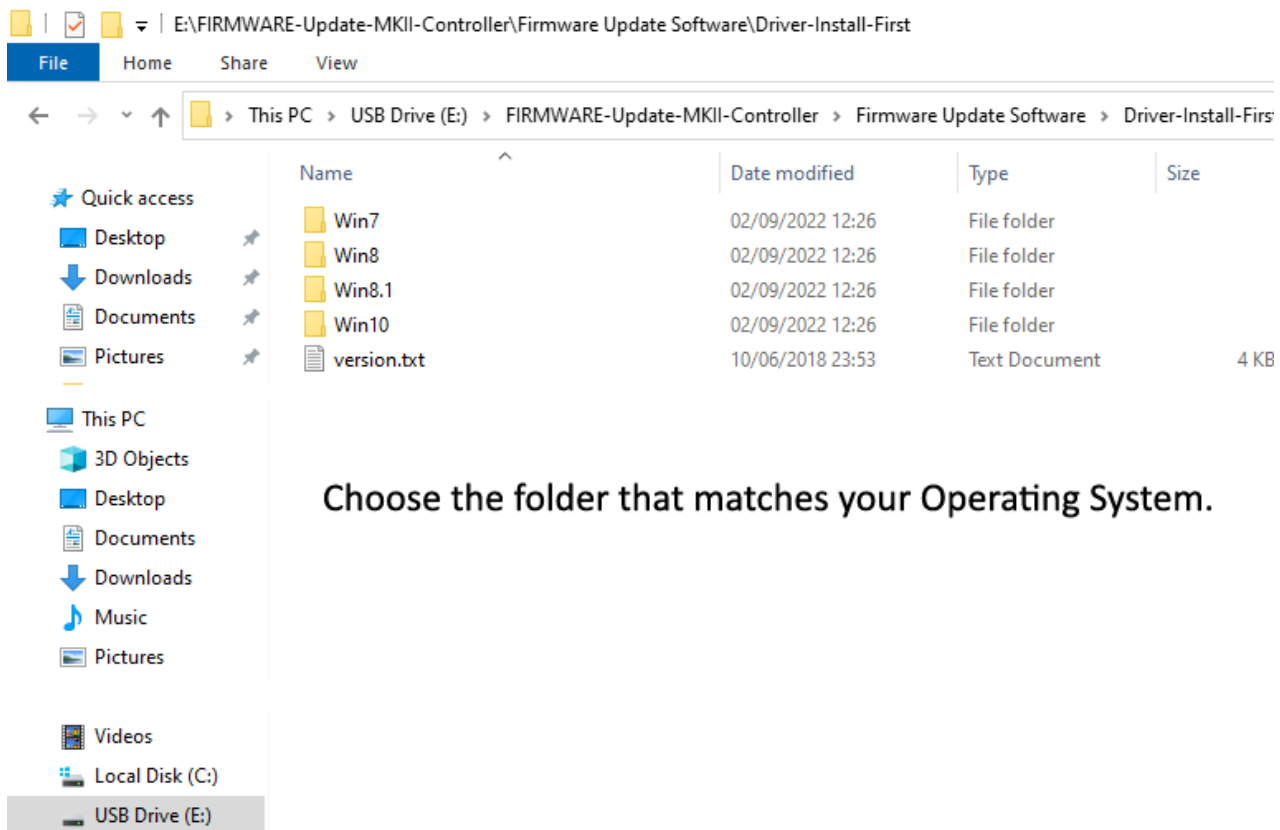
Install The Driver

If you have previously installed the drivers and Dfuse application you can skip down to the Programming section of this document.

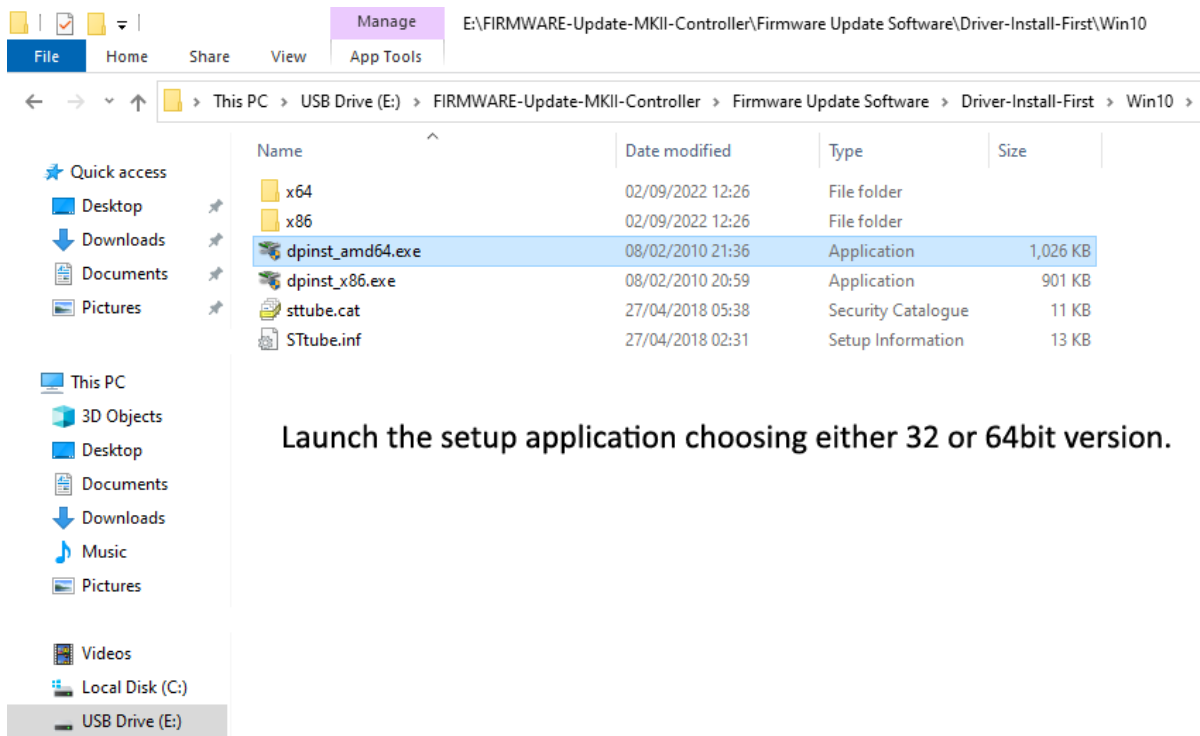
Before starting make sure the USB lead is disconnected from the Computer to Coil Winder controller.

In this document we are showing the controller box on the desk rather than attached to a machine. You do not have to remove the controller box from your machine to do this and can do it with the controller box still attached to your machine.



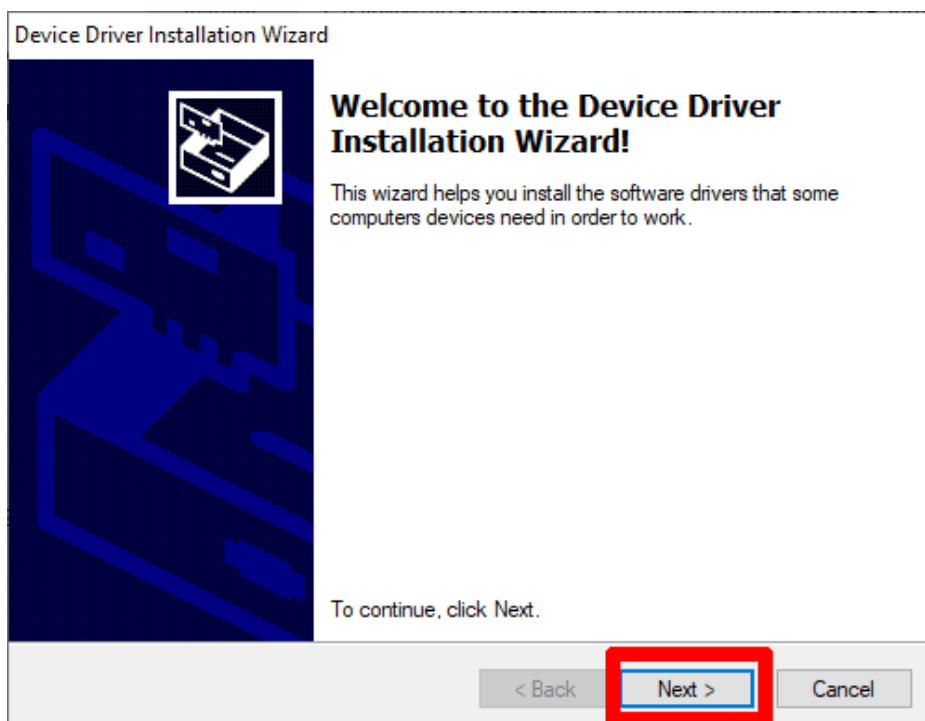


First thing to do is install the USB drivers for the DFU application that will allow you to upgrade the firmware on the ARM Controller MKIII. Insert the USB Memory Stick and navigate to the folder **<Drive:>\FIRMWARE-Update-MKII-Controller\Firmware Update Software\Driver-Install-First**. Go into the folder that matches your Operating System.

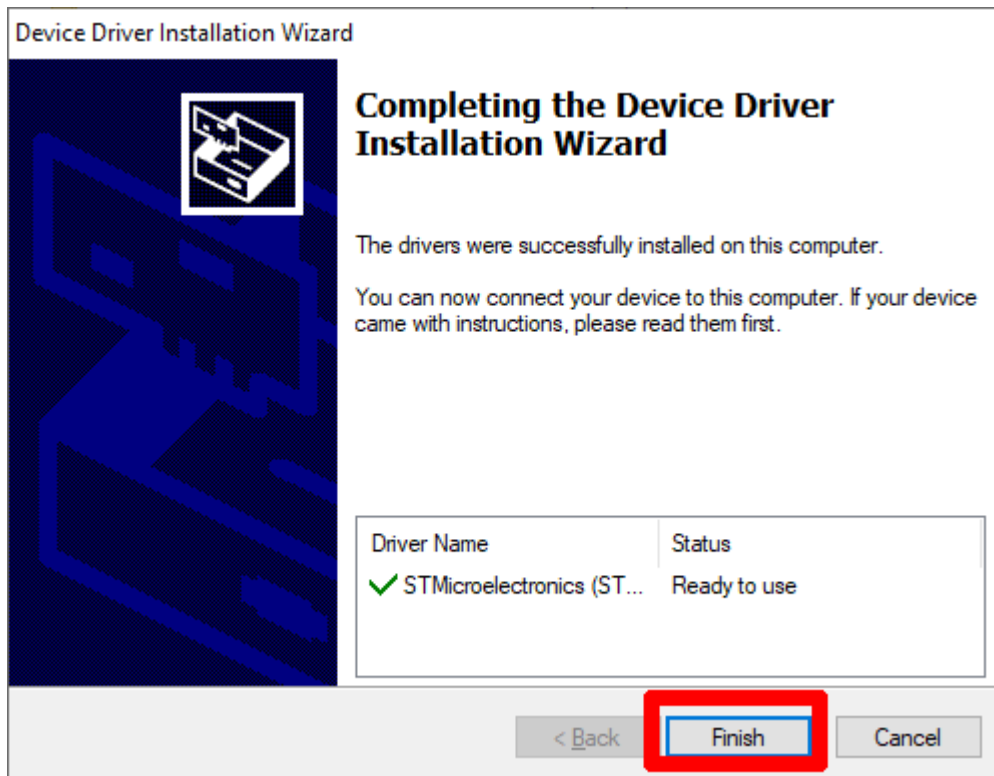


Launch the setup application choosing either 32 or 64bit version.

First Now launch the **dpinst_** file that matches your machines specification of 64bit or 32bit. It should warn you if you choose the wrong one.

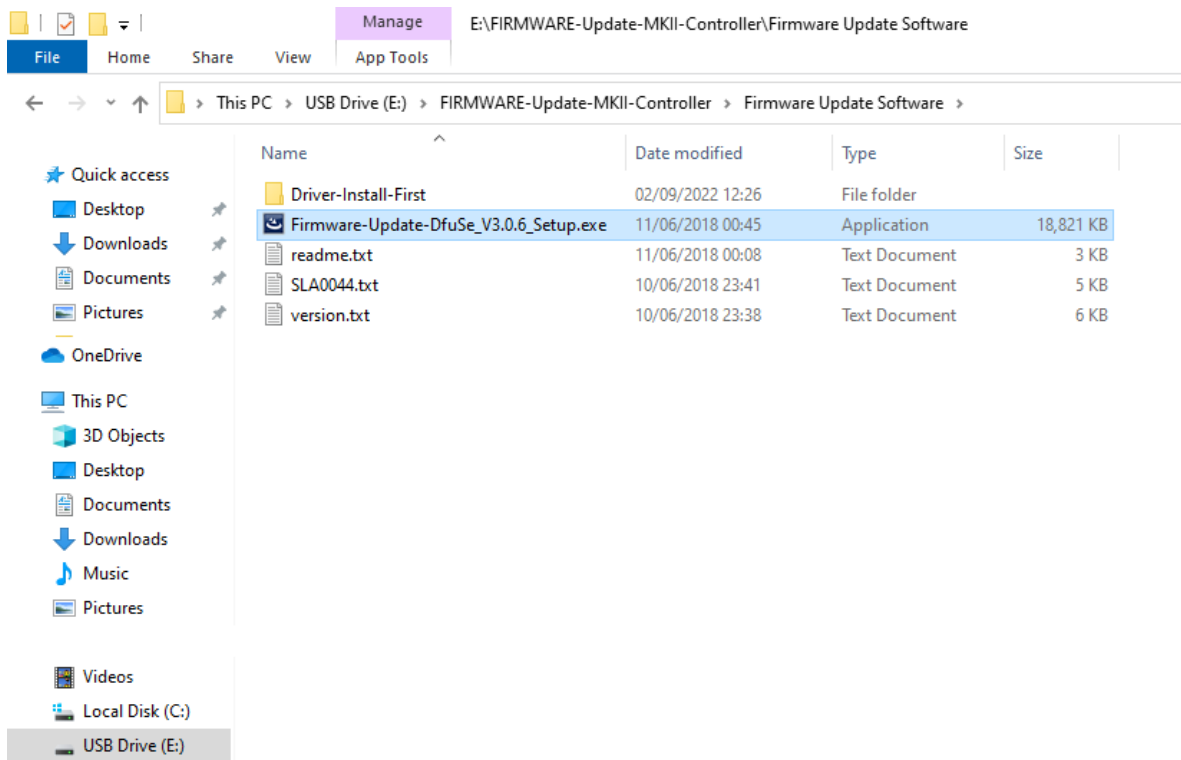


Click the Next Button



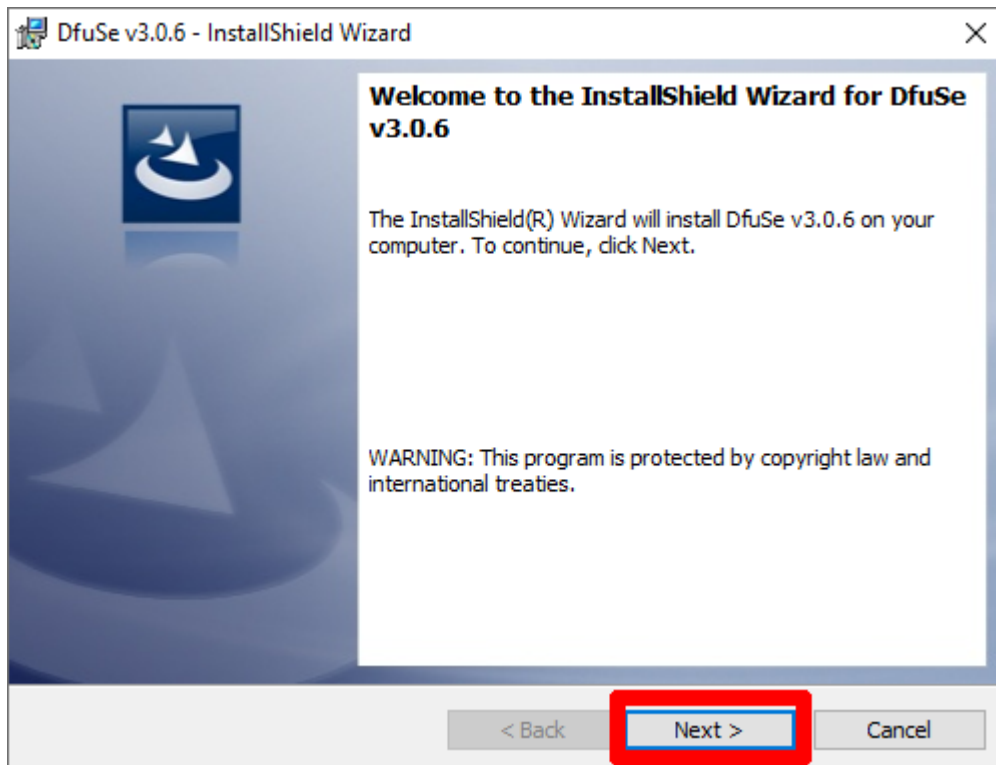
Click the Finish button.
The USB drivers are now installed.

Install DFU Application

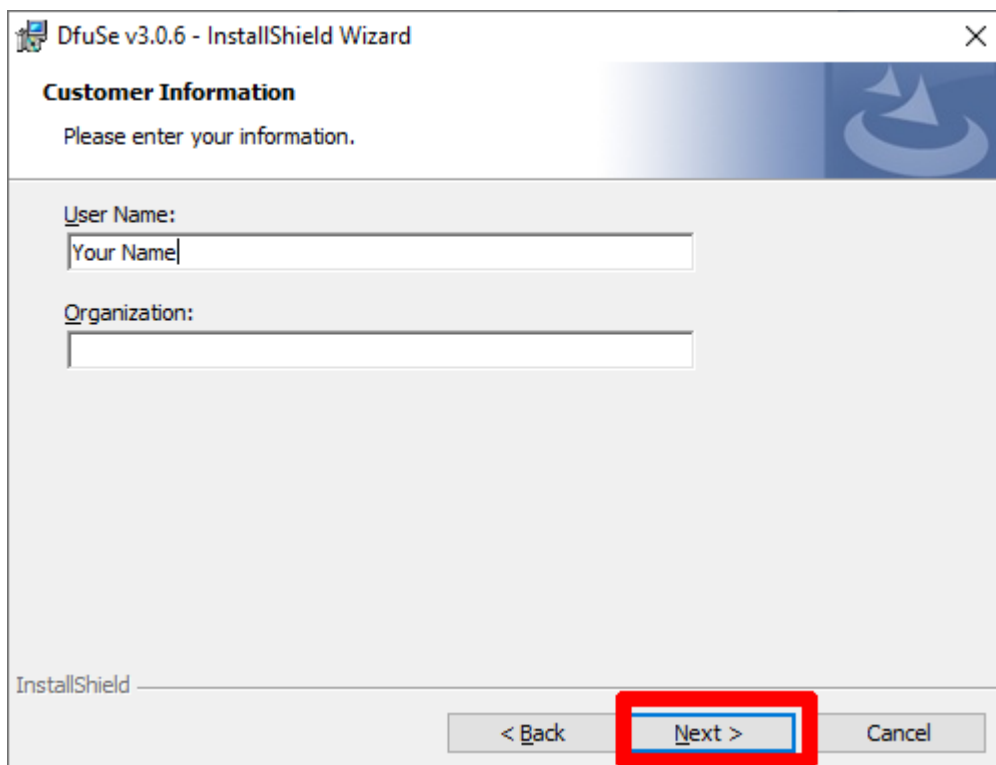


With the USB Memory Stick still inserted navigate to the folder
<Drive:>\FIRMWARE-Update-MKII-Controller\Firmware Update Software\

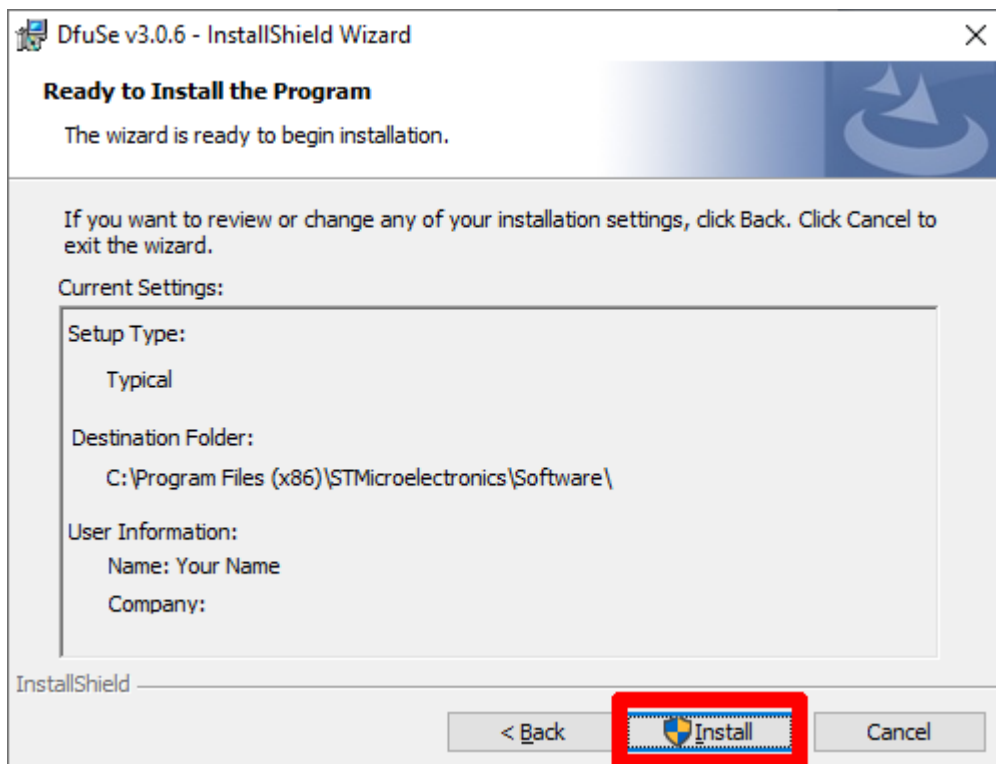
Launch the file **Firmware-Update-DfuSe_V3.0.6_Setup.exe**



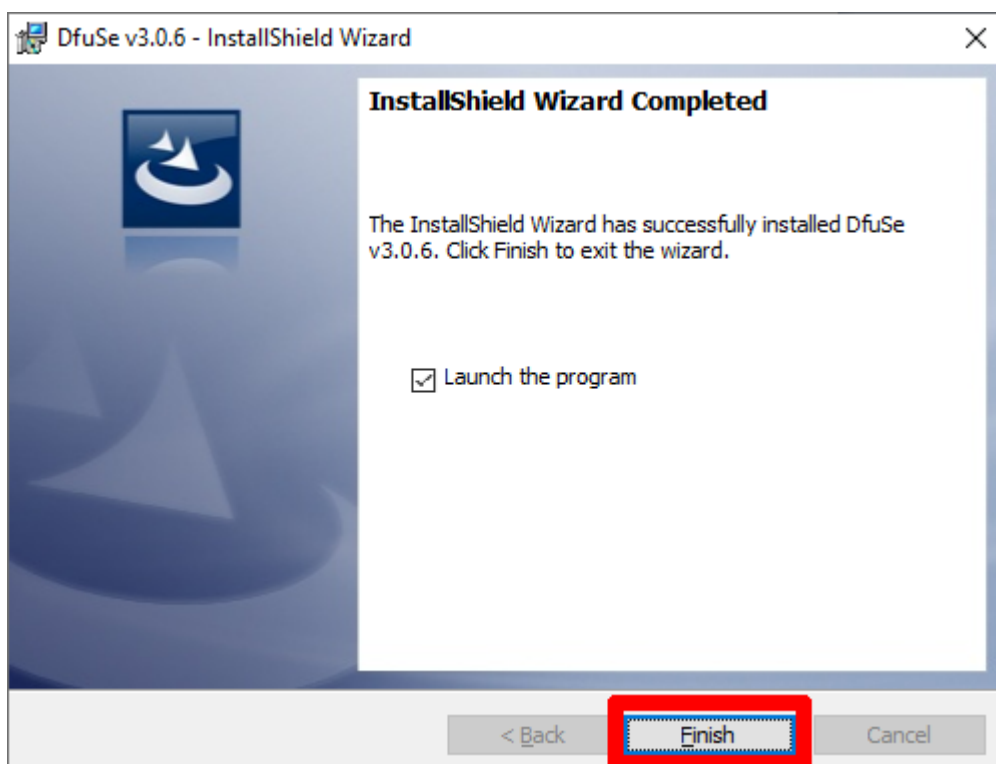
Click the Next button.



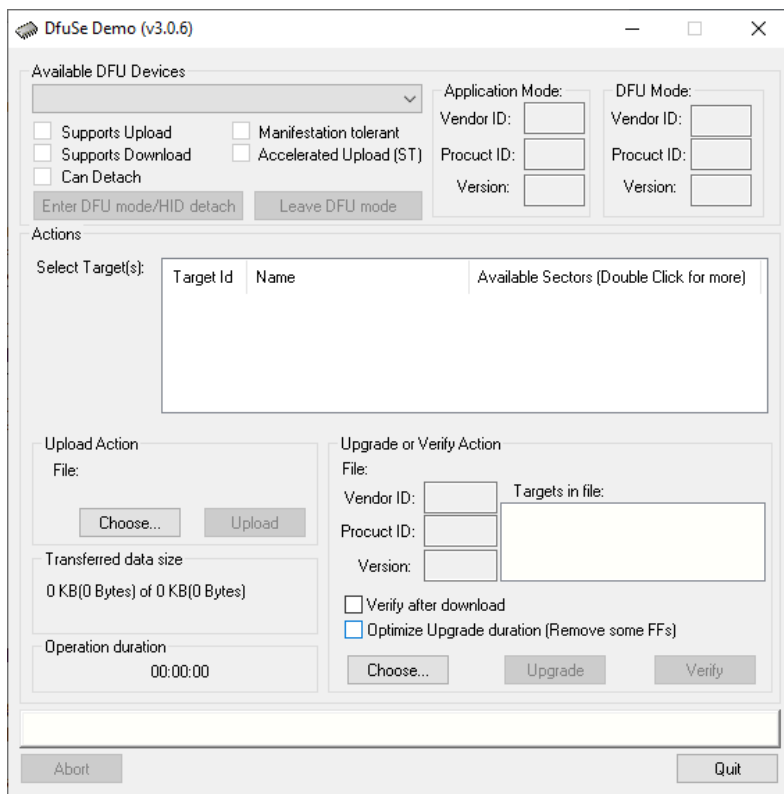
First Enter Your Name and Click the Next button.



Click the Install button.



Click the Finish button.
The Application should now launch.

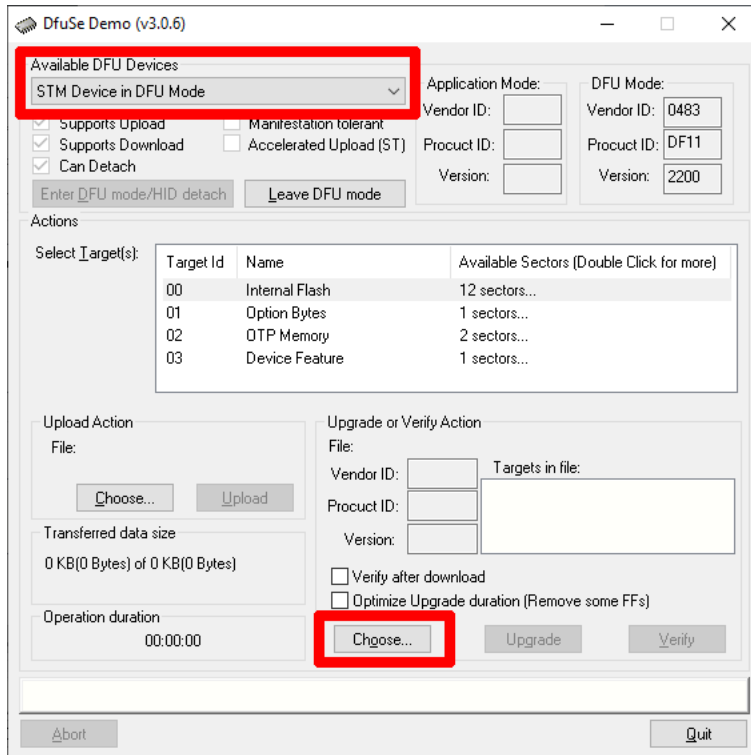


As you can see at the top Available DFU Devices is blank.

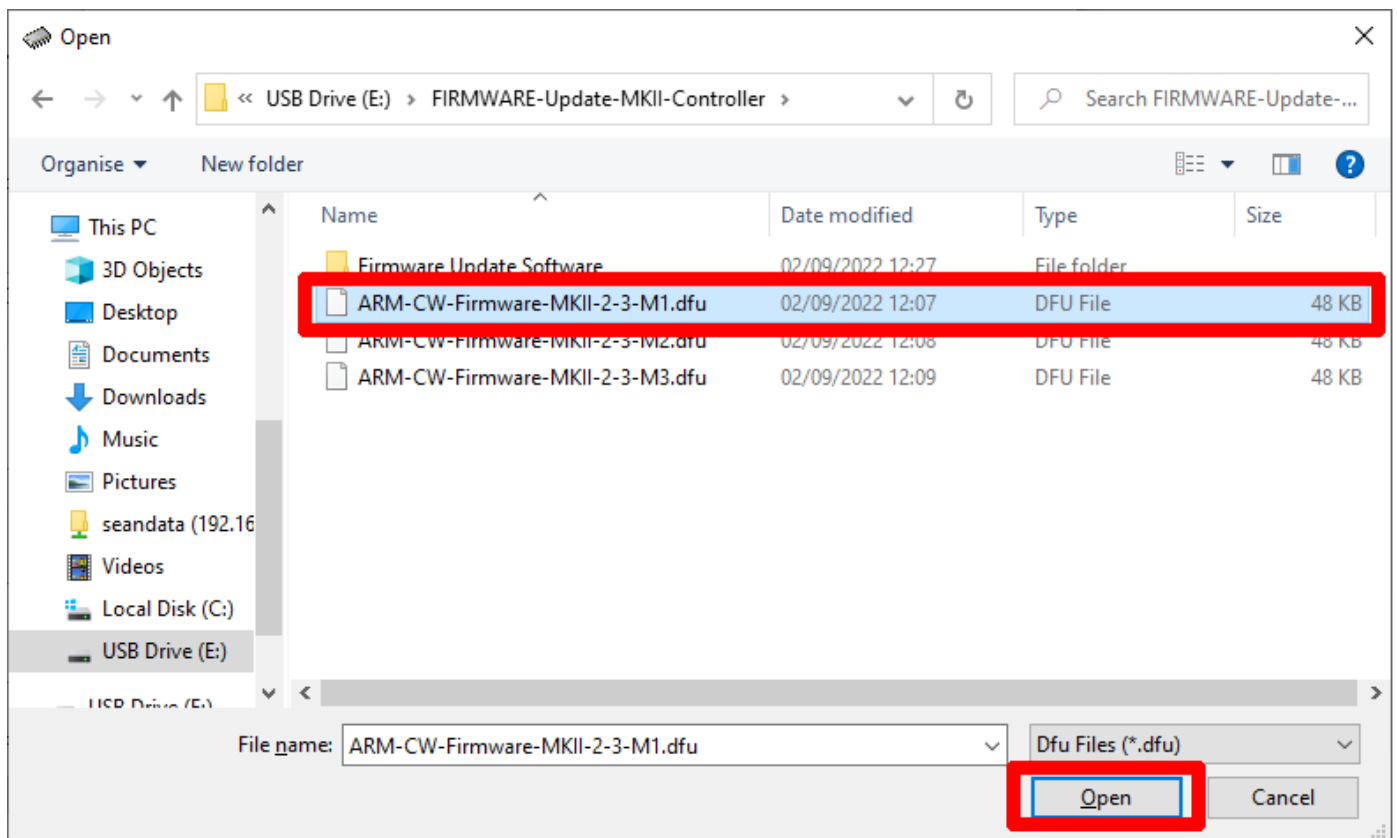
Programming the Firmware.



Set the switch on the controller to Firmware.
Then plug in the USB lead.
STM Device in DFU Mode should now appear as shown in picture below.



Click on the Choose button to load the firmware file.



Navigate to the folder **<Drive:>\FIRMWARE-Update-MKII-Controller**
Choose the firmware file you wish to load and click Open.

The reason there are 3 different firmware files is for when you want to run more than one machine on the same computer.

This is covered in other documentation, but generally if you are using one machine on your computer then choose the file with **M1** on the end.

DfuSe Demo (v3.0.6)

Available DFU Devices

STM Device in DFU Mode

☒ Supports Upload ☐ Manifestation tolerant
☒ Supports Download ☐ Accelerated Upload (ST)
☒ Can Detach

Enter DFU mode/HID detach

Application Mode:

Vendor ID:
Product ID:
Version:

DFU Mode:

Vendor ID:
Product ID:
Version:

Actions

Select Target(s):

Target Id	Name	Available Sectors (Double Click for more)
00	Internal Flash	12 sectors...
01	Option Bytes	1 sectors...
02	OTP Memory	2 sectors...
03	Device Feature	1 sectors...

Upload Action

File:

Transferred data size

0 KB(0 Bytes) of 0 KB(0 Bytes)

Operation duration

00:00:00

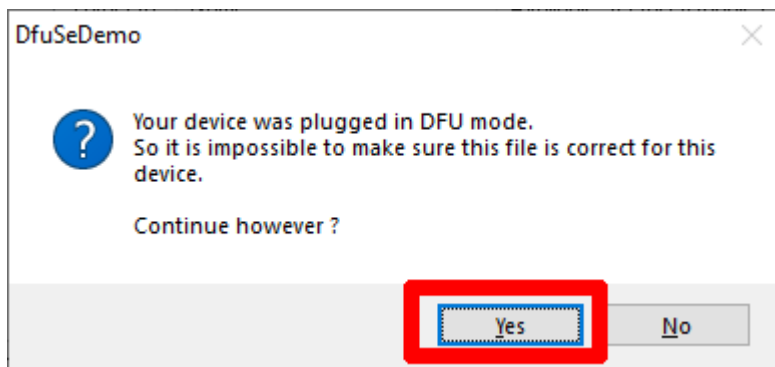
Upgrade or Verify Action

File: ARM-CW-Firmware-MKII-2-3-M1.dfu
Vendor ID: Targets in file:
Product ID: 00 ST...
Version:

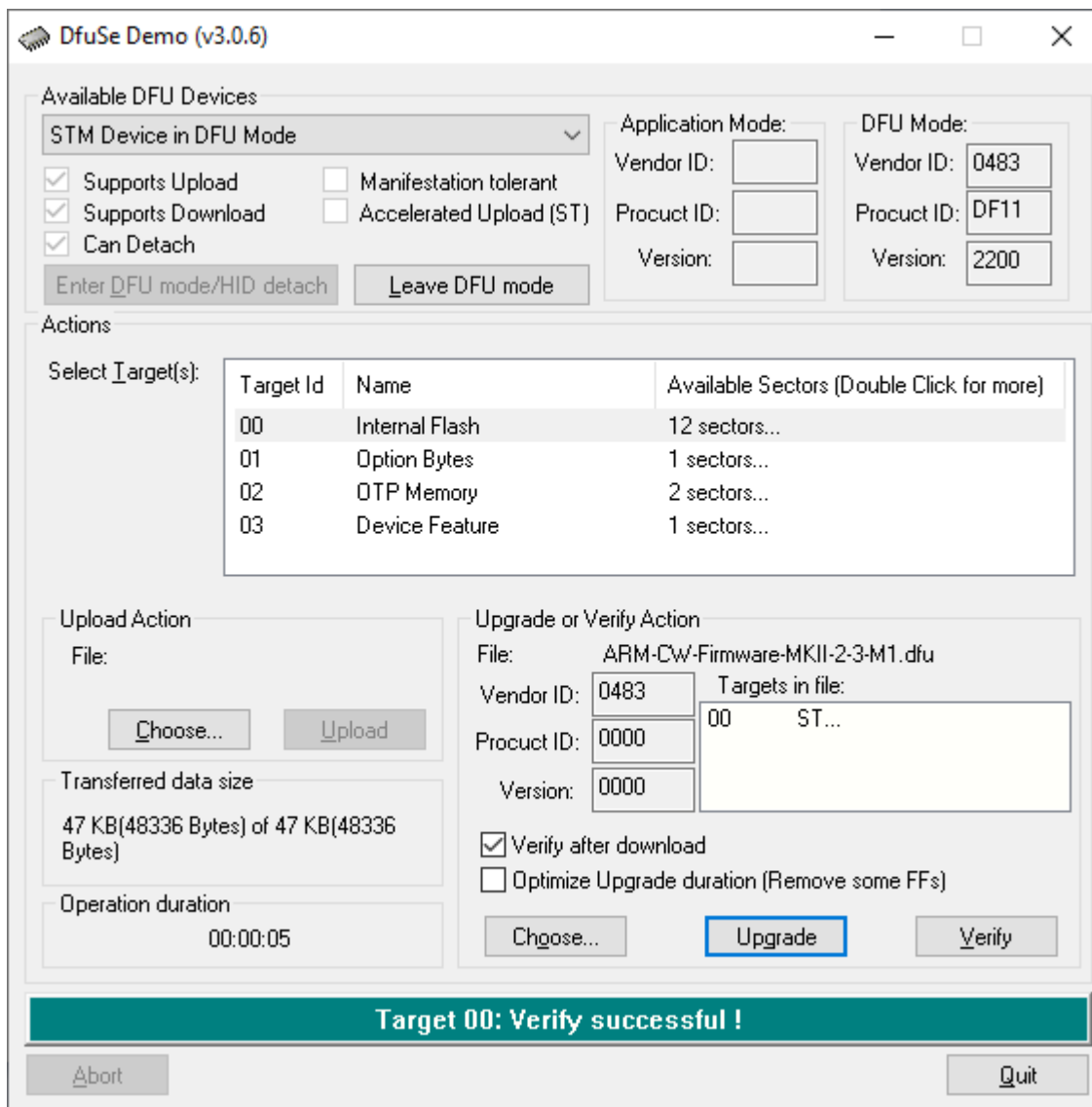
☒ Verify after download
☐ Optimize Upgrade duration (Remove some FFs)

File correctly loaded.

Click on the Upgrade button.



First Click Yes to the next warning

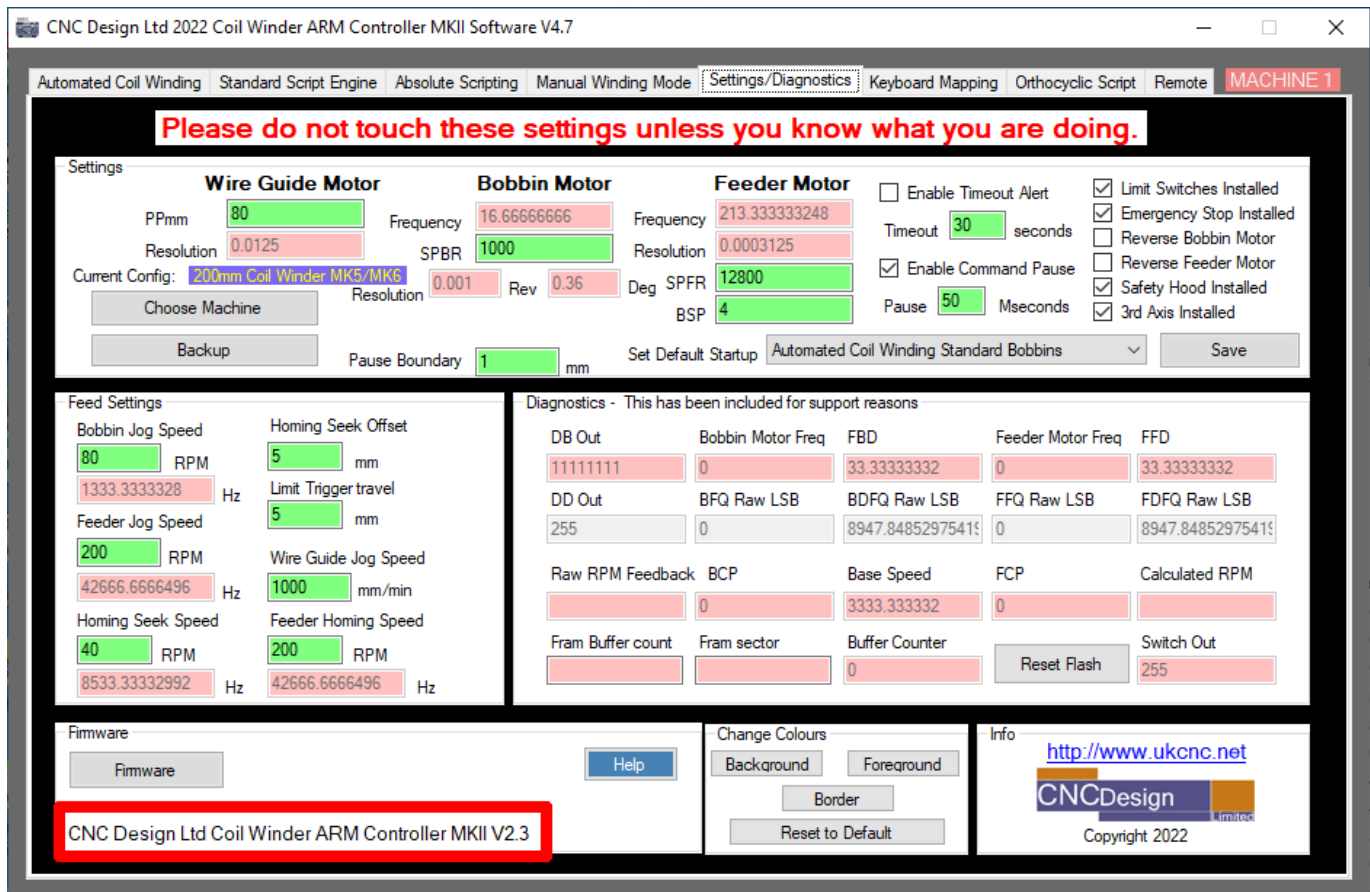


The Firmware upgrade is now complete!



Slide small switch to the left to place in Running Mode.

Now disconnect the USB lead from the controller.
Slide the little switch from Firmware to Running.
Then re-plug the USB lead back into the controller.



When launching the CNC Coil Winder ARM Software, it should now show the Firmware version that you have just programmed under the Settings/Diagnostics tab.