

Upgrade Instructions

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Biomedical

INCUII Firmware version 1.07C

Caution: This FW version should ONLY be installed on units with S/N less than 3600000.

This firmware includes:

- Bug fix to address truncated data files >~4 hours

1. Install firmware update utility from Fluke Biomedical

1.1. Download the INCUII Firmware v1.07C package from Fluke Biomedical.

1.2. Download and install the latest Ansur Executive 3.0 software from

<http://www.flukebiomedical.com/Biomedical/user/Support/software/Ansur-Software.htm>

See Appendix A for assistance completing the Ansur install process. If Ansur 3.0 is already installed then skip to step 1.3 below.

1.3. Open Windows Explorer and navigate to the following folder:

64-bit machines:

[C:\Program Files \(x86\)\Fluke\AnsurMLC](C:\Program Files (x86)\Fluke\AnsurMLC)

32-bit machines:

<C:\Program Files\Fluke\AnsurMLC>

1.4. Rename the existing file **ansurfwu.dll** in the AnsurMLC folder to **ansurfwuold.dll**.

1.5. Copy the new file **ansurfwu.dll** from Fluke Biomedical into the AnsurMLC folder.

1.6. Go to Start > All Programs > Accessories.

1.7. Right-click on the Command Prompt and select “Run as administrator”.

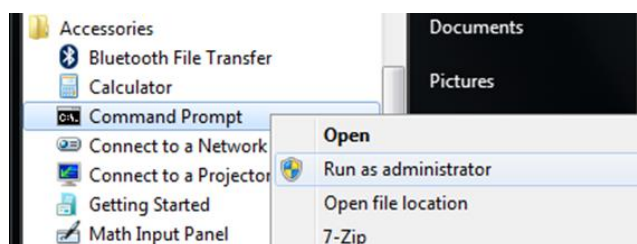


Figure 1 - Command Prompt selection

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- 1.8. Copy the appropriate regsvr32 line and paste into the Command Prompt window, then press enter (right-click inside the Command Prompt window to access the 'Paste' option):

64-bit machines:

[regsvr32 "C:\Program Files \(x86\)\Fluke\AnsurMLC\ansurFWU.dll"](#)

32-bit machines:

[regsvr32 "C:\Program Files\Fluke\AnsurMLC\ansurFWU.dll"](#)

Figure 2 below shows a successful registration of the DLL:

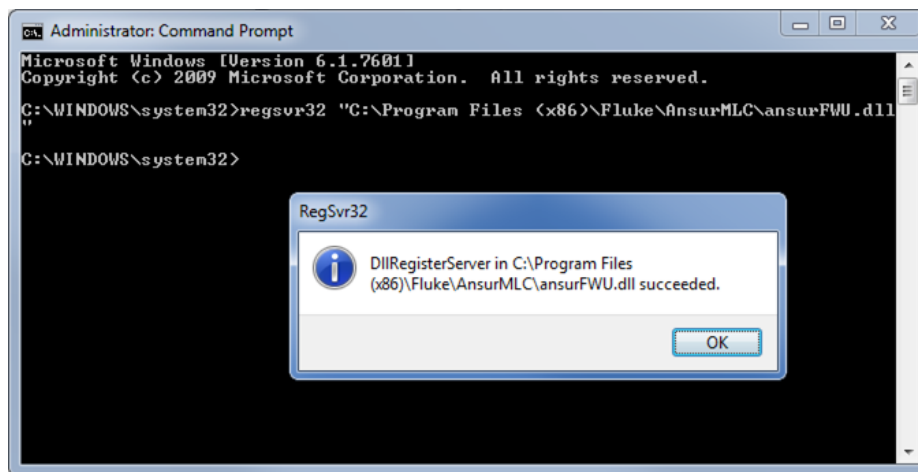


Figure 2 - DLL Registration

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**Important: If INCU II FW is V1.05 or newer, skip Section 3.
Uploading new bootloader is only needed to upgrade from FW V1.02.**

2. Upload Bootloader to INCU II

- 2.1. Connect INCU to AC adapter.
- 2.2. Power on the INCU II (leave at main menu) and connect to PC via USB.
- 2.3. Determine the COM port associated with INCU II via Windows Device Manager:
 - 2.3.1. Open Windows Device Manager
 - Click Start Menu.
 - Type in 'Device Manager' in the run box.
 - Select to open Device Manager from list of displayed options.
 - 2.3.2. Inside the Device Manager application, expand the section labeled 'Ports (COM & LPT)'.
 - 2.3.3. Locate the sub-item labeled 'USB Serial Port' and note the text immediately to the right (e.g. COM1, COM2, etc.) as shown in Figure 3.

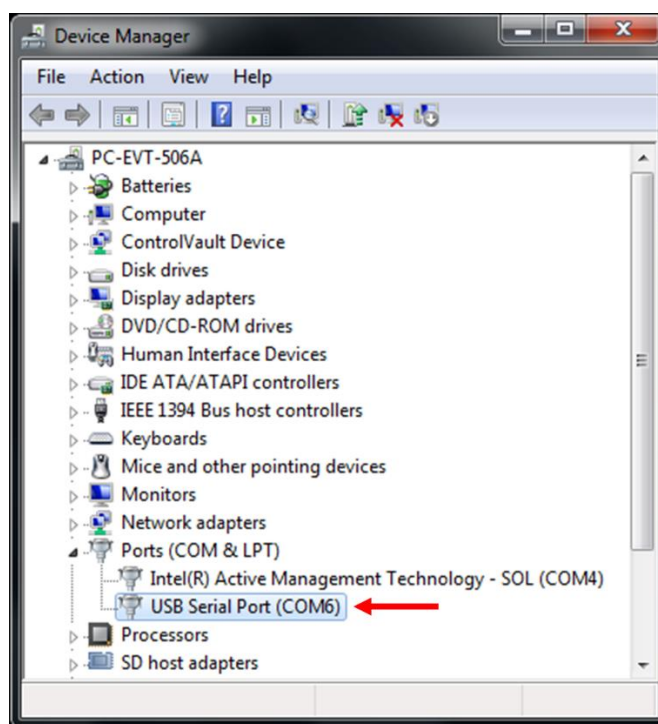


Figure 3 - Device Manager

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- 2.4. Click the Start button and navigate to the Fluke program group. Open the 'Update Firmware' program as shown in Figure 4 below:

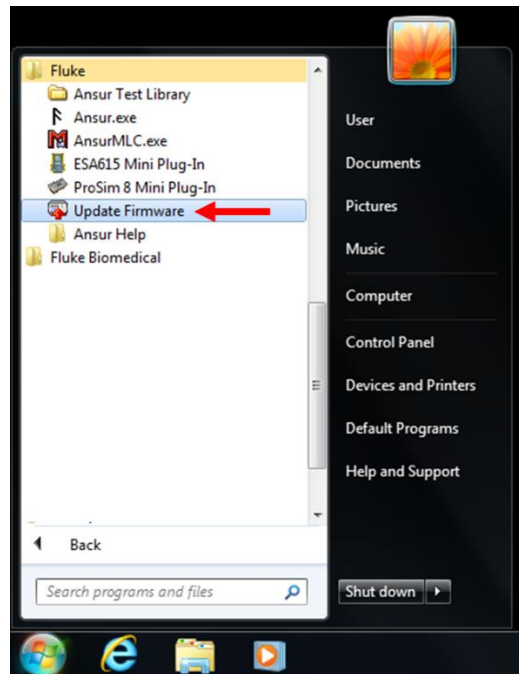


Figure 4 - Update Firmware application on Start Menu

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- 2.5. Scroll to and select '**INCUII**' from the list of devices as shown in Figure 5. Select the COM port associated with INCUII (as noted from Device Manager) in the COM port dropdown menu. Click the 'Next >' button.

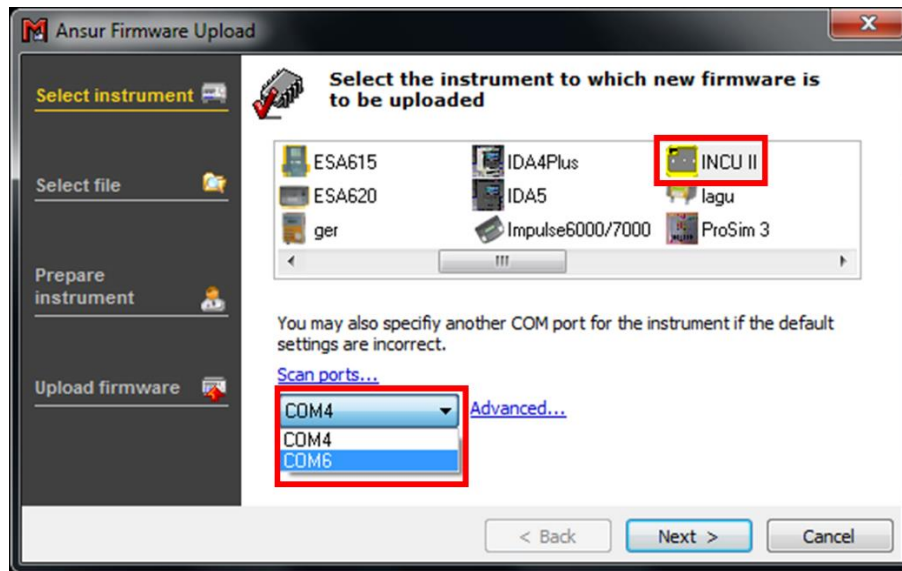


Figure 5 - Instrument selection and configuration

- 2.6. Click the (...) button. Browse to and select the **bootloader** .bin received from Fluke Biomedical as shown in Figure 6. Click the 'Next >' button.

Warning: The download package contains both 'bootloader' and 'firmware' .bin files. Select the file labeled "INCUII_Bootloader_v1.05.bin" (this is the bootloader for FW versions 1.05 and newer) as shown below.

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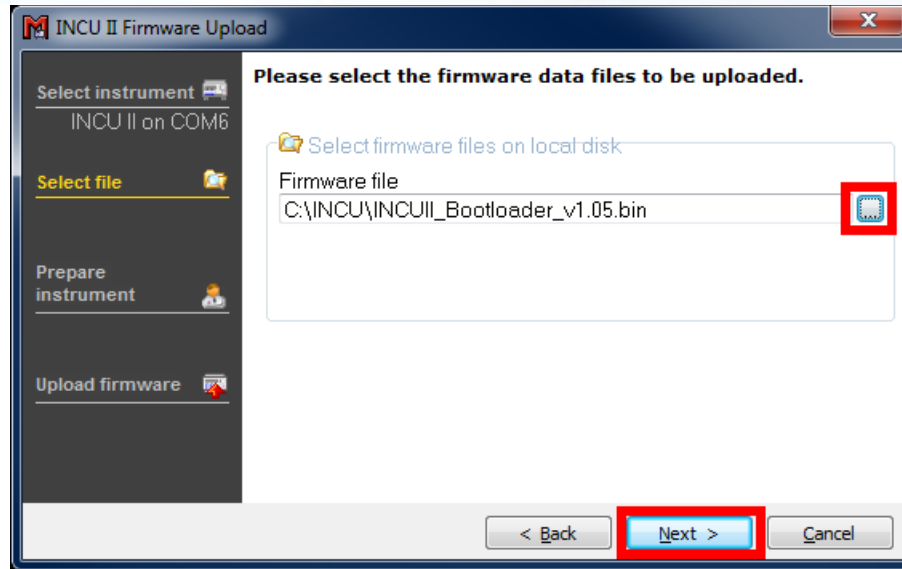


Figure 6 - Bootloader file selection

- 2.7. Click the 'Upload >' button to begin the bootloader upload. The update process will complete in approximately 1 minute.

INCUII screen will turn blank during the upload process.

Warning: Do not disconnect USB, power off the INCUII, or close the application program while the update is in progress or INCUII may become unbootable.

User interface will indicate success as shown in Figure 7. INCUII screen will remain black after completion.

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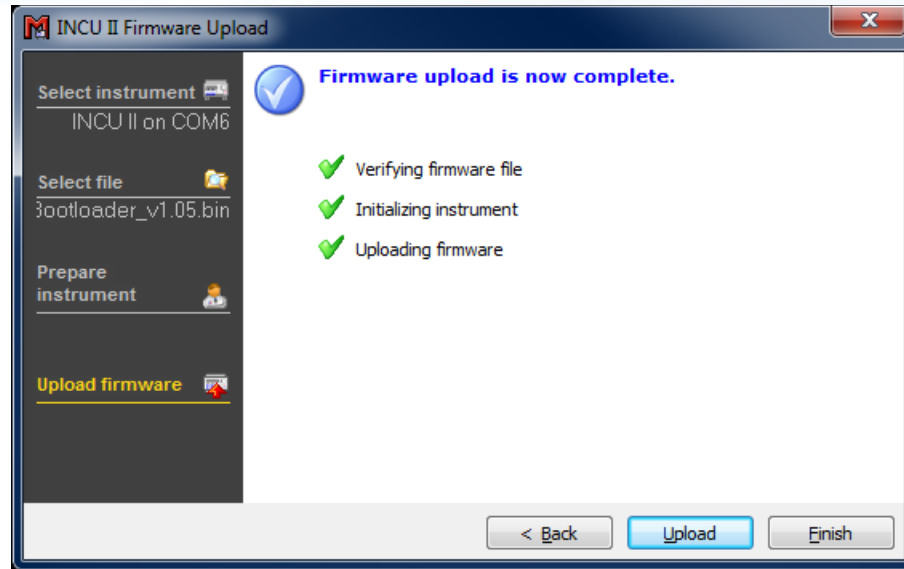


Figure 7 - Bootloader upload complete

In the case of an error as shown in Figure 8, check PC USB connection and COM port selection and press the 'Upload' button to retry. If an error occurred during the 'Uploading firmware' step then press the 'Upload' button to retry.

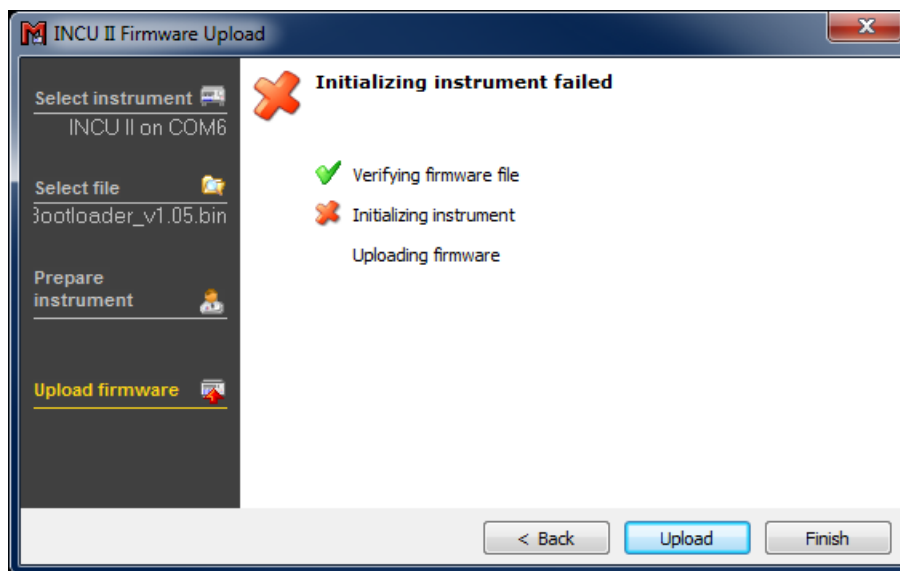


Figure 8 - INCU II PC connection error recovery

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3. Upload Firmware to INCU II

- 3.1. If necessary, click the '< Back' button two times to return to the file selection screen as shown in Figure 9.

If the Firmware Upload utility was previously closed, follow steps 2.4 – 2.5 above, followed by the 'Next >' button to return to the file selection screen.

- 3.2. Select the INCUII_v1.07C **firmware** .bin file received from Fluke Biomedical and press the 'Next >' button as shown in Figure 9 below.

Warning: The download package contains both 'bootloader' and 'firmware' .bin files. Select the file labeled as "INCUII_v1.07C.bin" as shown below.

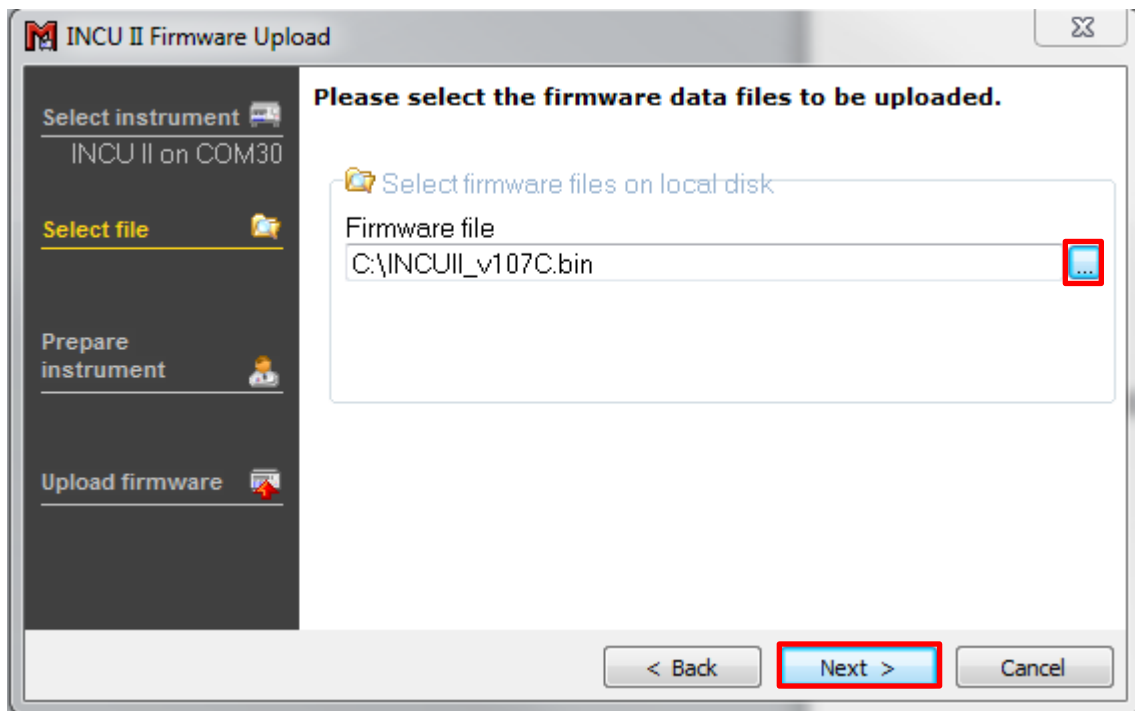


Figure 9 - Firmware file selection

- 3.3. If the power button is not illuminated Green on INCU, press the power button to turn on the Analyzer. Verify INCU II is on the main menu.

Note: If the bootloader was just updated from Step 2, the INCU II power button will remain illuminated green and the display will remain black.

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- 3.4. Click the 'Upload >' button to begin the firmware upload. The update process will complete in approximately 35 minutes.

Warning: Do not disconnect USB, power off the INCU II, or close the application program while the update is in progress or INCU may become unbootable.

User interface will indicate successful completion as shown in Figure 10 below.

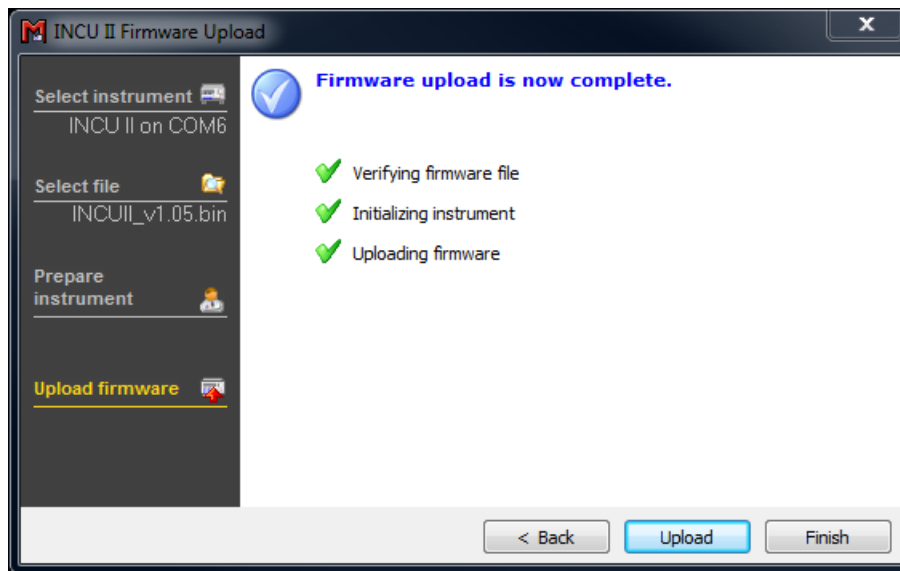


Figure 10 - Firmware upload complete

At this time the Analyzer is ready for use.

In case of an error on the 'Initializing Instrument' or 'Uploading firmware' steps, check USB connection to PC, ensure power button is illuminated Green, and then press the 'Upload' button to re-attempt firmware upload.

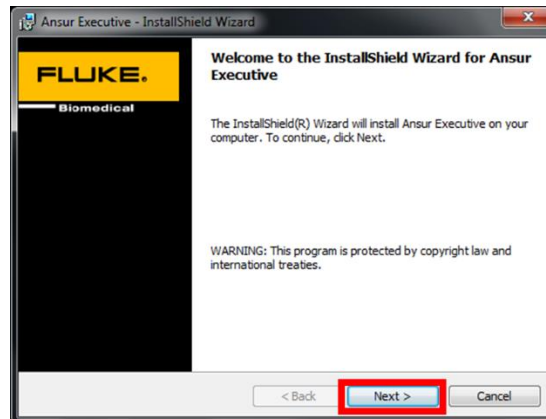
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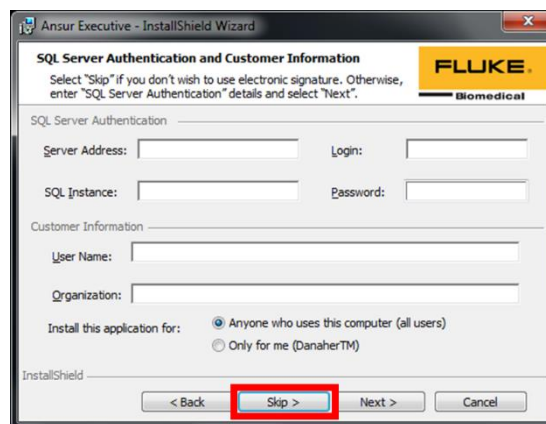
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Appendix A – Ansur Executive Installation

1. Run the setup program **Ansur Executive v3.0.0.exe** located inside the Ansur Zip file.
2. Click the 'Next >' button to progress through the introduction and license agreement screens as shown:



3. Click 'Skip >' on the SQL Server Authentication and Customer Information page and click 'Install' on the screen following:

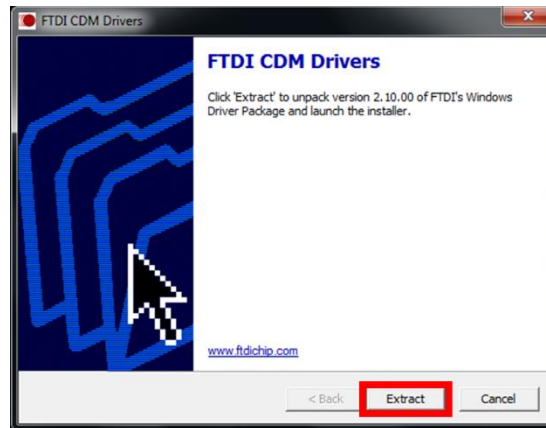


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- Click 'Extract' when prompted in the FTDI CDM Drivers screen as shown:



- Click 'Next >' and 'Finish' buttons when prompted in the two Device Driver Installation Wizard screens as shown:

