

Cryomech

# Firmware Update Instructions

For Version 1.xxx to Version 2.xxx changes only

**This whole process takes about 10 min and involves power cycling the panel several times.  
You will need a clean USB thumb drive to perform this operation.**

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1. Copy down all the files provided and place them on an empty USB thumb drive.

**Application.app**

**Applicatin.crc**

**update\_button.bat**

**update\_codesys.bat**

**UpdatePackage.zip**

2. Place the drive into the USB port on the panel.

**THE USB STICK MUST STAY IN THE USB PORT DURING THIS WHOLE PROCESS!**

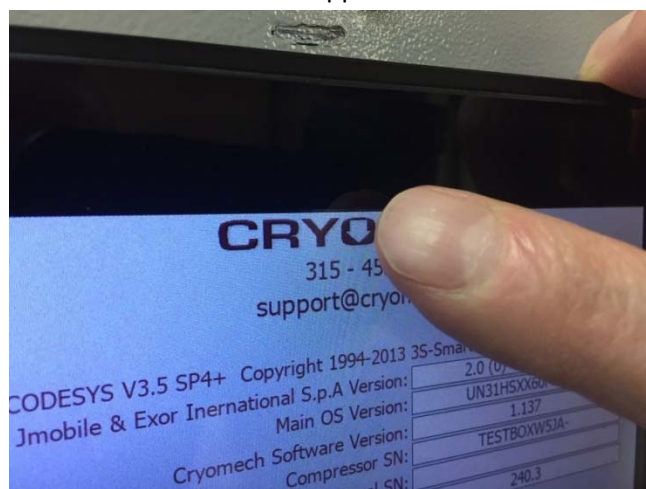
3. Navigate to the "About" screen. At this point note down all the version information.

**Tip: Cell phone camera really handy for this.**

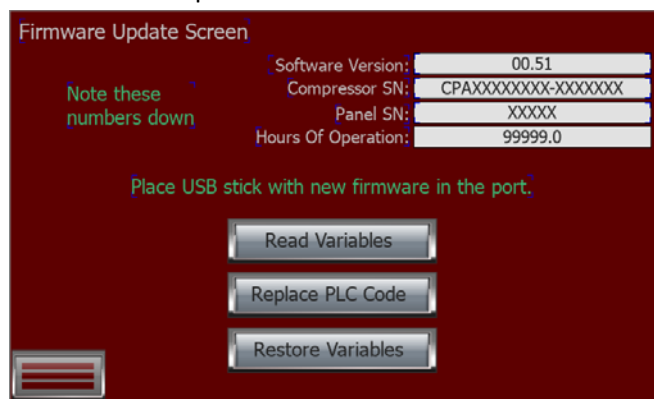
The important numbers are **Panel SN, Compressor SN & Hours of operation.**



4. Press and hold down on the 'O' in Cryomech logo until the Firmware update screen become visible. This will take about 6 seconds to happen.



The Firmware Update screen will look similar to this.

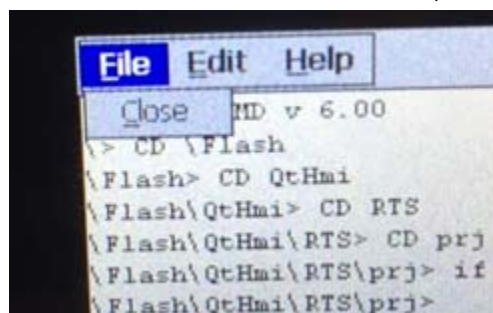


- At this point we wish to save important information to the USB stick. Press the **"Read Variables"** button. If you have an LED on your USB stick you should see it flash a little as it records data.

- Click on the **"Replace PLC Code"** button. This should result in a command window becoming visible and several commands being executed. When it reaches a point that it says "Press any key to continue....."

```
Pocket CMD v 6.00
> CD \Flash
\Flash> CD QtHmi
\Flash\QtHmi> CD RTS
\Flash\QtHmi\RTS> CD prj
\Flash\QtHmi\RTS\prj> if not exist Application.app goto COPY
\Flash\QtHmi\RTS\prj>
\Flash\QtHmi\RTS\prj> ECHO Removing Old Files
Removing Old Files
\Flash\QtHmi\RTS\prj> DEL /F /Q \Flash\QtHmi\RTS\prj\*.
\Flash\QtHmi\RTS\prj>
\Flash\QtHmi\RTS\prj> Echo Delay...
Delay...
\Flash\QtHmi\RTS\prj> REM | CHOICE /C:AB /T:A,%1 > NUL
Cannot execute CHOICE.exe.
\Flash\QtHmi\RTS\prj>
\Flash\QtHmi\RTS\prj> ECHO Inserting new files
Inserting new files
\Flash\QtHmi\RTS\prj> COPY \USEMemory\*.app \Flash\QtHmi\RTS\prj\Application.app
Copied 1 file(s).
\Flash\QtHmi\RTS\prj> COPY \USEMemory\*.crc \Flash\QtHmi\RTS\prj\Application.crc
Copied 1 file(s).
\Flash\QtHmi\RTS\prj>
\Flash\QtHmi\RTS\prj> GOTO END
\Flash\QtHmi\RTS\prj> PAUSE
Press any key to continue...
```

- Click on the word "File" in the menu, then click on "Close".



8. Press on an open red area of the screen and hold down until a small menu pops up. Slide up the menu until the word "update.." is highlighted. Or alternately click on the word "update..".

**There will be a pause that could last up to 20 seconds before you see anything happen.**

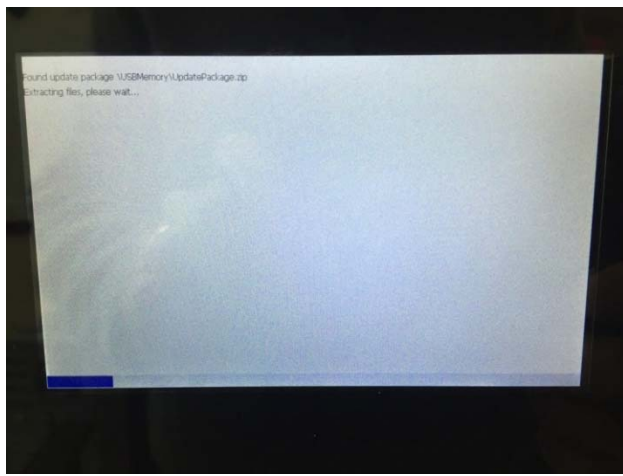


9. When it does respond the HMI Update Wizard screen will become visible.



10. Click "Next" and wait for the system to finish updating the HMI.

**Note:** There is a rather lengthy delay between clicking the Next button and actually seeing something happen. 6- 8 seconds. The screen will go mostly blank and you will see a progress bar slowly make its way across the bottom of the screen several times. This process will take several minutes.

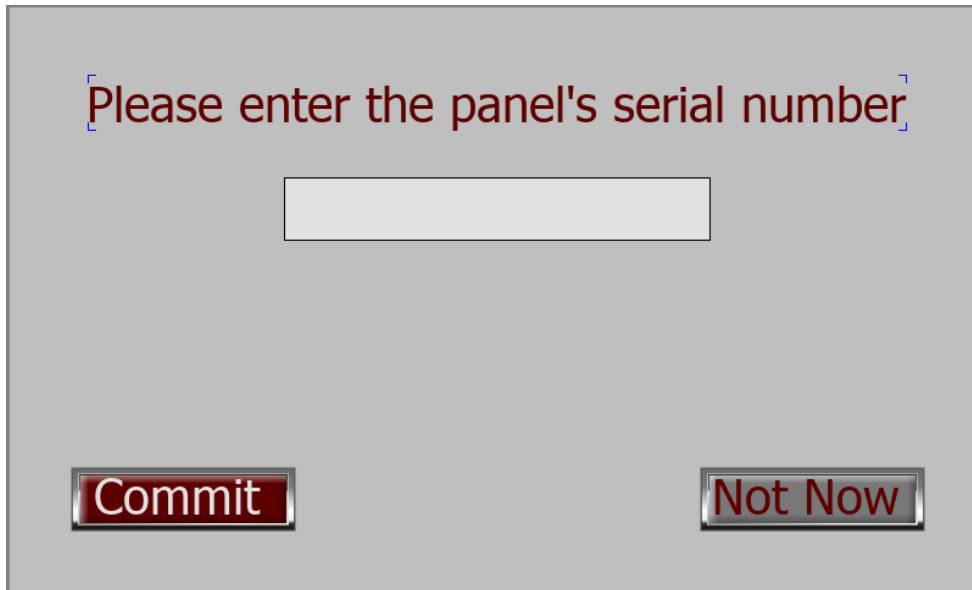


11. Once the HMI has finished updating and restarted, you will find the panel sitting on a diagnostic screen that looks like this.

15 Pin Connection In	15 Pin Connection Out	Outputs
ON Switch Open	Unit Good	Cold Head Idle
OFF Switch Open	High Temp	Power Contactor Open
INTERLOCK Switch Open	High Pressure	
SLVL Switch Open	Running	
		Local Buttons
		ON Button Released
		OFF Button Released
		<input type="checkbox"/> Testbox Mode
		Go Set The Serial Number



12. Just click on the button titled "Go Set The Serial Number" and it will take you to a screen that looks like this.



13. Click on the "Commit" button and the screen will return to the "Main" screen that looks like this.



14. Navigate back to the About screen and then press and hold down on the 'O' in Cryomech again. When the firmware update screen comes back up, Press the "**Import 1.xxx Variables**" button.  
( You should notice items such as the "Panel SN" and the "Compressor SN" getting updated.)
15. Remove the USB thumb drive at this time and power cycle the unit. When the device comes back up, it should be fully functional again. If you navigate back to the About screen again, all the revision and operating hours should be restored.