Quantum[™] HD

Software Update Procedure

Read Thoroughly

Updating the Operating Software on a Quantum HD is easy and free. Use the following steps to download the update and upload it to your Quantum HD controller(s). Some enhancements may require additional hardware.

Use the URL below to be directed to the Quantum HD Controller page of the Frick Controls website.

http://www.frickcontrols.com/pages/quantum_hd/home

Once on the Quantum HD Controller page as seen below, the software upgrade procedure, software release notes and the current version upgrade file will be present.

Before you can upgrade to the latest version (10.20 or later) you first must already have version 10.13 or later installed in your Quantum HD. If you are at any version below 10.13, do not perform the upgrade. You may need to replace your flash card. Contact Frick Service for details.



Connect a USB Flash Drive (thumb drive) to your PC's USB port. The upgrade procedure and software release notes are PDF files. Simply right click and select "Save Link As" or "Save Target As" (depending on your PC's Browser) to save them to your PC. You will need the Software Upgrade Procedure available while performing the upgrade. Either print it our have the PDF file available on your mobile device.

The upgrade file is not viewable. You must save the update file to a USB Flash Drive. To save the upgrade file to a USB device, right click and select "Save Link As" or "Save Target As" (depending on your PC's Browser) to save them to your PC, as shown below.

Quantum H	D	
Resources		
	Upgrade Procedure (PDF) Release Notes (PDF) Copen link in new tab Open link in new window Open link in incognito window	
View Remotely Now! (best viewed in Mozil http://www.guantumh	Save link as Copy link address Inspect	Ctrl+Shift+I

Select *Save* and save the upgrade file to a Top Level root directory only on your USB device. Saving to a subfolder will not allow the Quantum HD to recognize the file when the USB device is plugged into the USB port of the Quantum HD's Q5 processor board.

Once the download is complete, you will see a confirmation message similar to the one below. Close the download window and properly remove the USB device from the computer.



Once you have downloaded the upgrade to a USB device, it can be used to update an infinite number of Quantum HD Controllers.

Updating the Quantum HD Operating Software

With the Quantum HD already powered up, insert the USB device with the upgrade file into one of the USB ports on the Q5 processor board shown below.



NOTE: Do not power up the Quantum HD controller with a USB drive device plugged in. Doing so could divert the booting process to the USB device. The result being that the boot would stop, displaying the following message.

Verifying DMI Pool Data
Disk I/O error Replace the disk, and then press any key

If you experience this message when booting, power down, then check to see if a USB device is plugged into the Q5 processor board as shown above. If so, remove it and re-apply power.

Saving Setpoints and Upgrading Operating Software

Before performing the Quantum HD software upgrade you first need to save the setpoints of the Quantum HD control being upgraded. The upgrade will reset all settings to the default values. After the upgrade is completed, you will restore the original setpoints from the saved file for that Quantum HD controller.

Save Setpoints –With the Quantum HD powered up and a USB device plugged into the Q5 processor board, the user must be logged into the *Service* level. Press the *Menu* button and select *Service* then select the *Software* at the top of the screen as shown below.

Normal					North RC-1		\bigcirc	
Control : Suction Pressure Setpoint : 0.0 PSIG - Actual : 21.6 PSIG			192,168.0.144 04/18/2012 16:49:39		Alarms	Menu		
Oil Pump	Maintenance	Communications	Diagnostics	Software				
Softw	are Service							
Locally	Saved Setpoi	nts			Save Setpoints			
					Setpoints Name			
					Save Location		Locally	0
							Sa	/e
					Restore Setpoints			
					In order to restore setpo Ail of the control softwa After this application cl	re will be shut down	n as well.	
					Restore Setpo		Upgrade Softwa	are

• In order to save a setpoint file it must first be named as shown below. To do this touch the *Setpoints Name* button to activate the keypad. Enter the desired name and press *enter*.

Save Setpoints	
Setpoints Name	10.01 Upda e
Save Location	Locally 💟
	Save

The setpoints can be saved either *Locally* (default) to the flashcard on the Q5 processor board or to a USB Flash Drive (Thumb Drive) that is inserted into one of the USB ports of the Q5 processor board. Select the Save Location button to choose the location to which the setpoints will be saved.

Save Setpoints			
Setpoints Save Loo		Locally	
Save Lu	ation	USB Thumb Drive	

- The same USB Flash Drive that is being used for the program upgrade can be used to save the setpoints of the controller prior to doing the software upgrade.
- It is recommended that all *Locally* saved setpoint files also be saved to a USB Flash Drive and stored in a safe, secure location.
- Once all of this is done, press the *Save* button to save the setpoints to the selected location.

Save Setpoints	
Setpoints Name	10.01 Update
Save Location	Locally 📀
	Save

• If the setpoints are saved *Locally* the file name, date and time will be listed on the left side of the screen as shown below. Again, it is **always** recommended to back-up any locally saved setpoints to a USB Flash Drive.

Oil Pump	Maintenance	Communications	Diagnostics	Software	
Software Service					
Locally Saved Setpoints					
	10.01 Update -				

 Once the setpoints are saved, the Quantum HD Software can be updated. Using the USB Flash Drive with the Software Upgrade file plugged into the USB port of the Q5 processor board, select the Upgrade Software button.

	Setpoints	
In ord	der to restore setpoints this appl	ication has to be exited.
All of	f the control software will be shu	t down as well.
After	this application closes the Rest	ore application will start.
	Restore Setpoints	Upgrade Software

• After the *Upgrade Software* button is pushed the screen will display *HD Loading* and then the Install page appears as shown below.



- To perform the install touch the *Full System Install* button. To abort the upgrade, touch the *Exit* button.
- During the upgrade the *Please Wait* message will appear and then *Operation Complete*. Touch the *OK* button, then the *Exit* button.



Once the *Exit* button is touched you will be prompted "*Are You Sure*". Touch the button for the appropriate response. When exiting, the *HD Loading* screen will appear briefly. After several seconds, the Quantum HD home screen will reload and you will be logged out of the Service level. It will be necessary to *Login* to the Service level to restore the saved setpoints and calibration data.

• Once logged in, go to Menu, select *Service* then select the *Software* tab as before. Once on the software page select *Restore Setpoints*.

estore Setpoints	
In order to restore setpoints this app	lication has to be exited.
All of the control software will be shu	it down as well.
After this application closes the Res	tore application will start.
Restore Setpoints	Upgrade Software

• Once restore setpoints is selected the available files that are on the flash card (locally saved) and/or on the USB device will be displayed as seen below. Use the keypad to select the associated number for the setpoints and calibration data file you wish to restore and touch **OK**. Depending on the software version, your screens may look slightly different.

These sets are on	the flash car
1. 10.01 Updat	e 🕨
These sets are on	
2. 10.01 Updat	eB
	number for the set you wish to res
	number for the set you wish to res

• You will be prompted to **Restore Calibration Data**. If you would select to not Restore Calibration Data, all analog calibration offsets will be cleared. This would require a Calibration to be performed for all analog devices after the upgrade is completed.

Restore Setpoints	Setpoint Maintenance
Restore calibration data also?	Restore Setpoints Restoring Setpoints Please Wait 50%
Exit	Exit

Once the setpoints are restored the below screen will appear. Press *Exit* to finish this process. Press *Yes* that you wish to exit.



The *HD Loading*... screen will appear briefly. In several seconds the Quantum HD home screen will reload. The Software Upgrade and Setpoints Restore is now complete. You can verify this by going to the *About* screen and viewing the *Software Version* posted there.

If you experience any issue with this process, contact Frick Service at 717-762-212. Digital screen shots (pics) can be very helpful in resolving issues with this process.