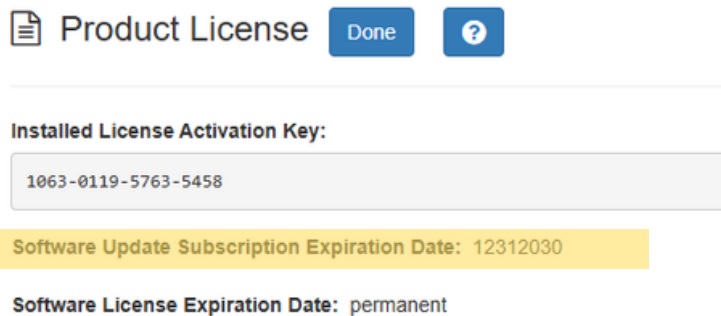


Nyquist E7000 System Controller Software Upgrade via USB Flash Drive

This document describes the process for upgrading the Nyquist System Controller software using a USB Flash Drive. The USB Flash Drive contains the software image for the Nyquist System Controller.

Prerequisites:

Warning: This upgrade requires an active Software Update Subscription (SUS) for the Nyquist license. If your SUS has expired, the upgrade will not work. Please contact your Bogen Regional Sales Manager (RSM) to discuss renewal options before proceeding.



Create the USB Flash Drive

1. SanDisk Extreme USB 3.1 Thumb drive (or equivalent) minimum size 64 GB.
2. Nyquist System image (can be downloaded from Bogen website, [HERE](#)). Do NOT “unzip” the compressed file.
3. The Windows account you are using must either have administrative privileges or be granted permission to format and write to USB thumb drives connected to the system.
4. [balenaEtcher Disk Imager](#) program installed on the Windows PC.

Computer hardware and software to update the Nyquist System Controller

1. USB Flash Drive that contains the Nyquist System Controller Software image.
2. Keyboard and HDMI monitor attached to Nyquist System Controller.
3. Windows PC with Ethernet connection to Nyquist System Controller.
4. Nyquist License Activation Key.
5. Internet access for Nyquist System Controller.

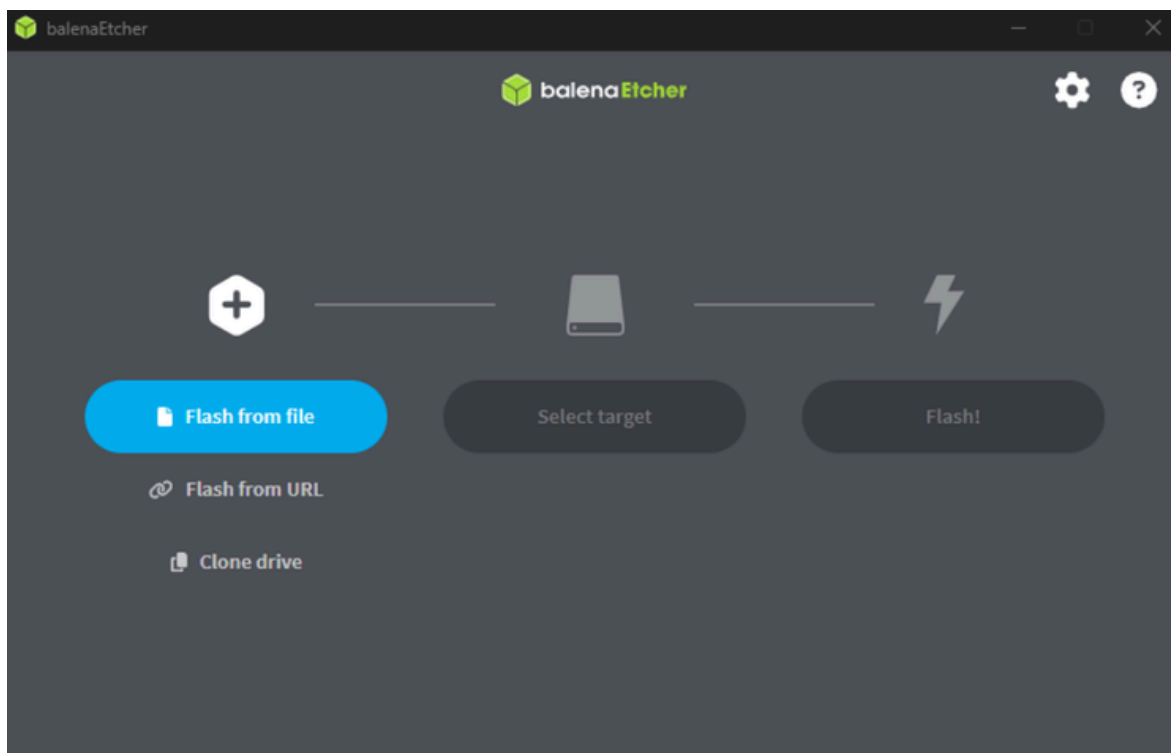
Creating USB Thumb Drive with Nyquist System Image

Important Warnings

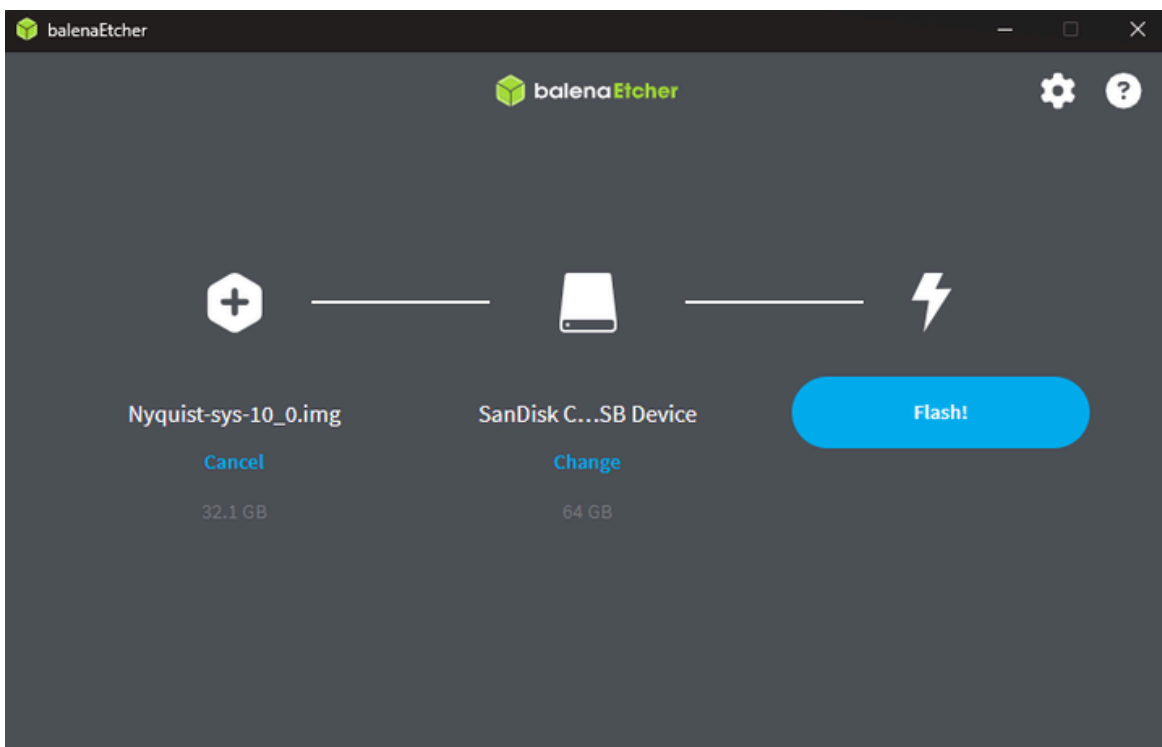
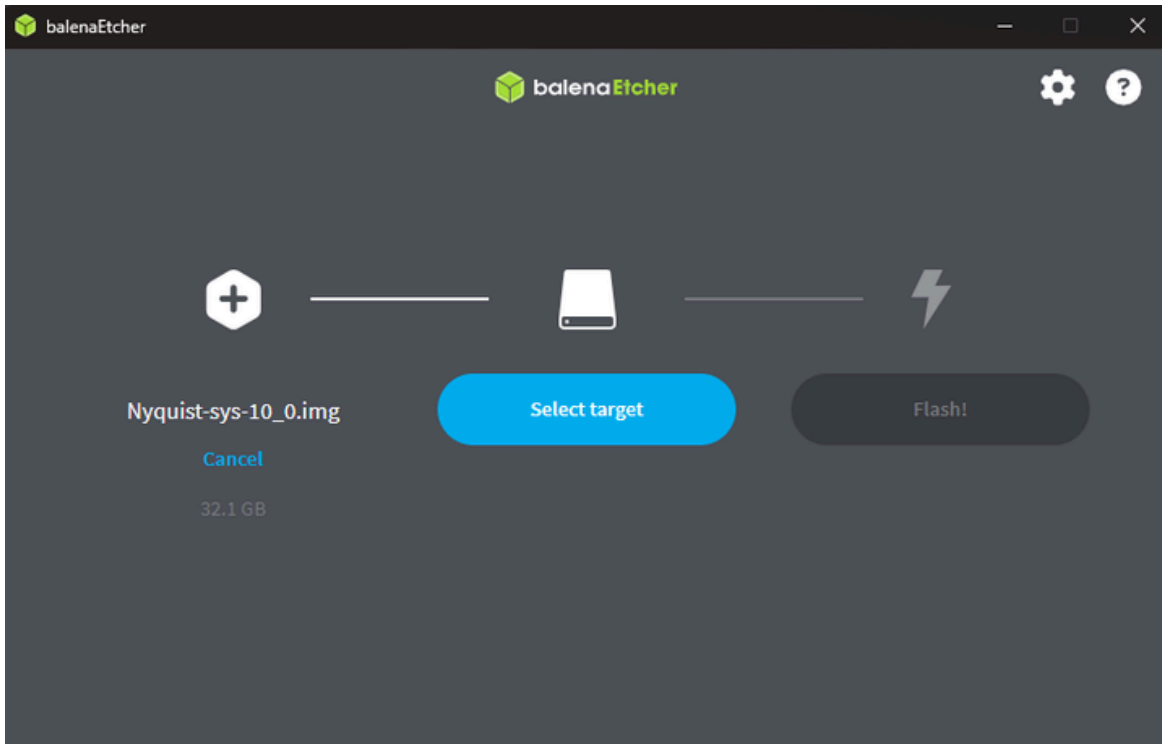
Data Loss: Writing an image permanently erases all data on the target device.

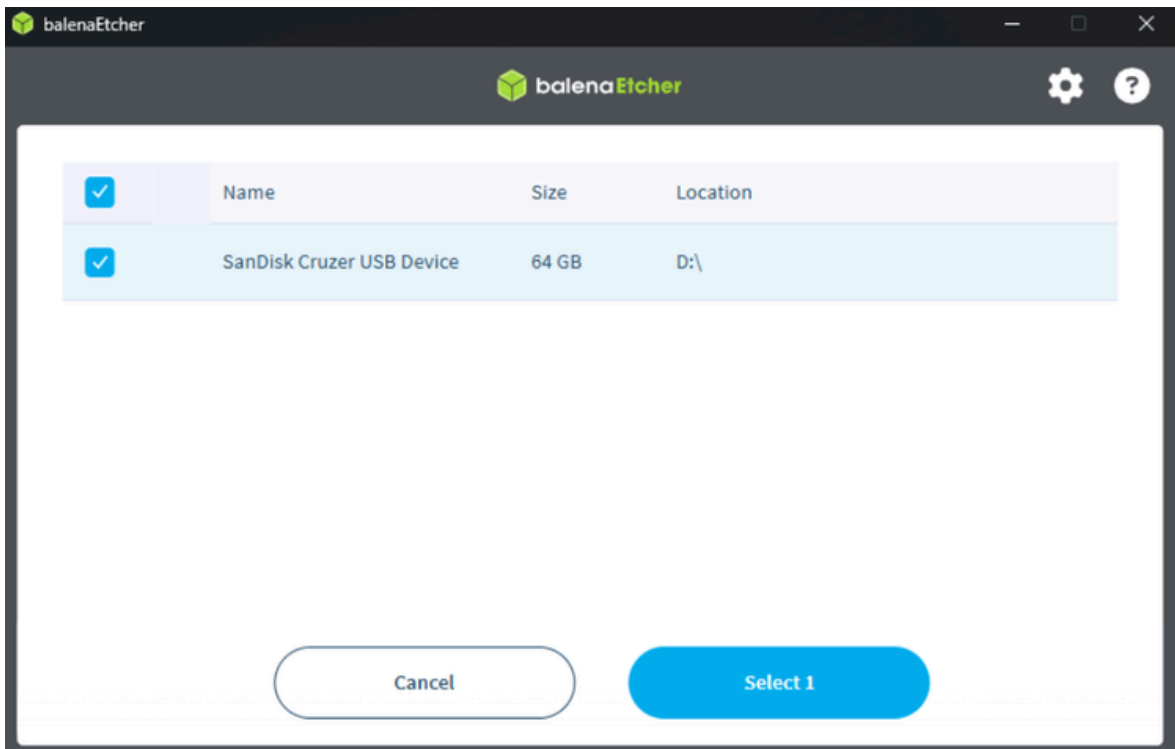
Target Device: Always double-check the drive letter in the "Device" box to avoid wiping the wrong drive (like your main hard drive).

- a. Insert Device: Plug 64 GB USB thumb drive into your PC.
- b. Launch Tool: Open BalenaEtcher, right-click the shortcut, and select Run As Administrator.
- c. Select the "ZIPPED" Image File: Click the blue Flash from file button, navigate to the Nyquist system .img file, and select it.



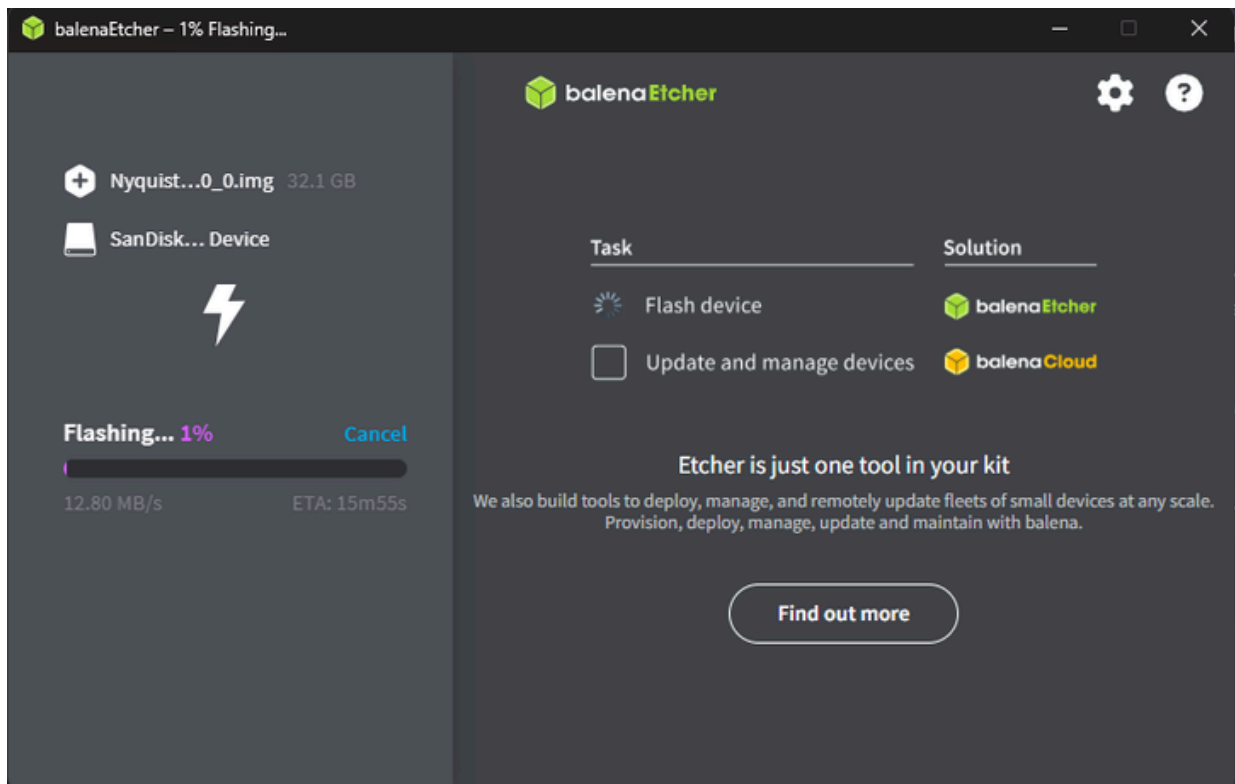
- d. Select Device: Click the blue 'Select target' button or the blue 'Change' button (depending on whether or not balenaEtcher automatically selected a device) then carefully choose the correct USB drive (e.g., E: or F:), ensuring it's the correct drive letter (If there is only 1 thumb drive it will be the only option).

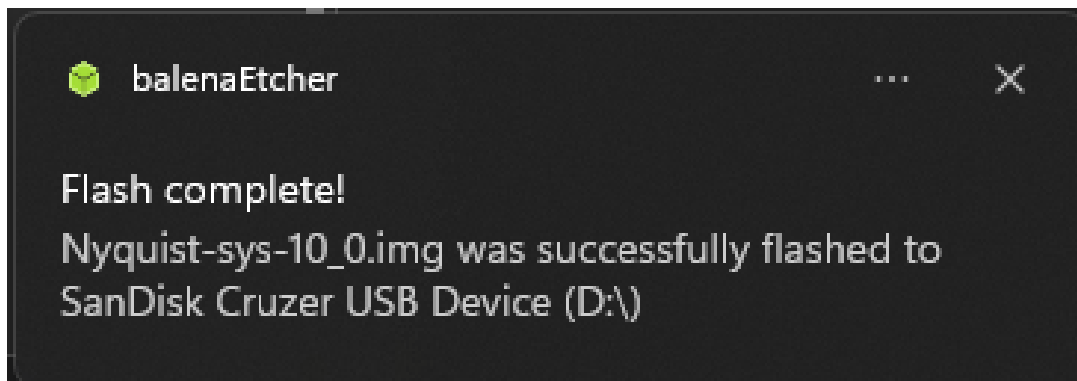
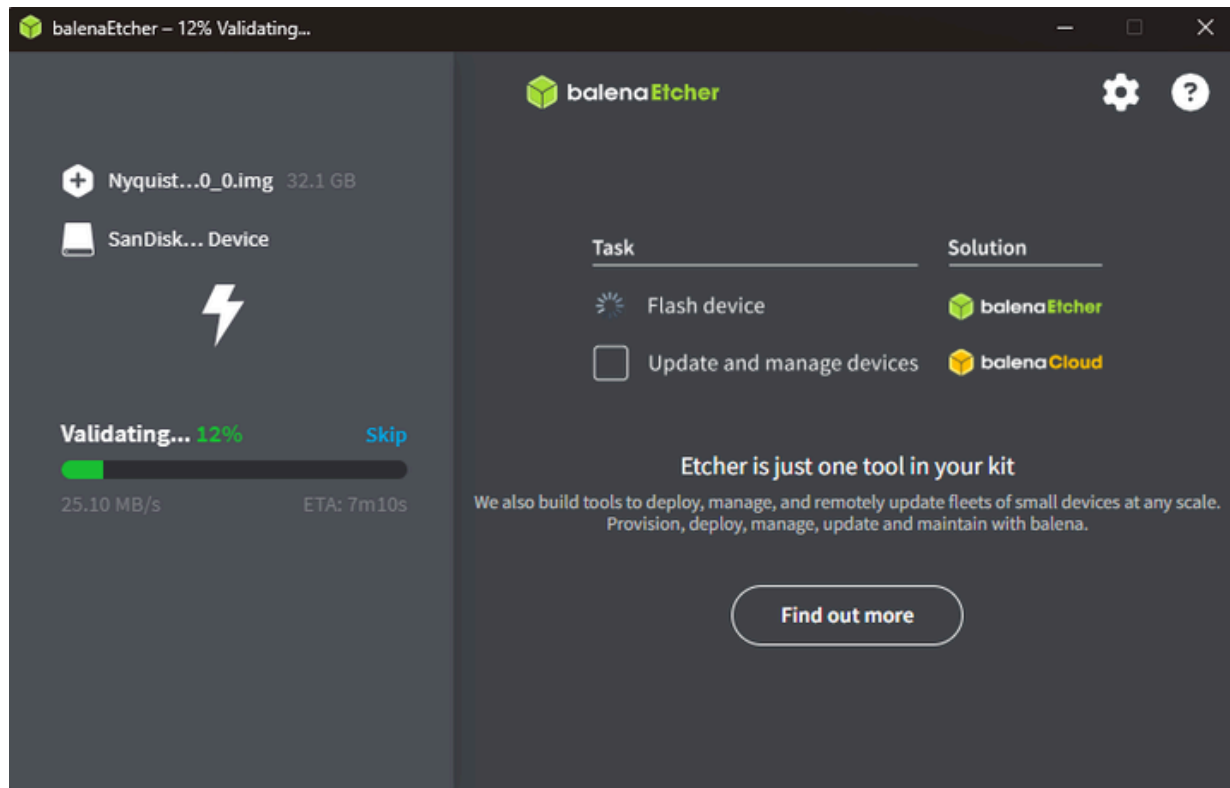




e. Write: Click the Flash! button.

f. Wait: The process takes time. After the flashing is completed, the software will automatically proceed to validating the newly flashed USB. When finished, a popup will appear in the notification tray indicating that the flash completed.





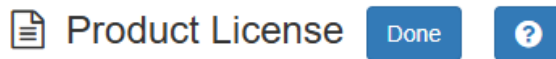
Now the USB flash drive is ready to use and can be ejected; eject the device from the system tray and unplug it from the PC.

Note: After creating the USB flash drive, you may see a File Explorer message such as, "You need to format the disk in drive X: before you can use it." This is expected on some versions of Microsoft Windows and not a problem. Click Cancel, then safely eject the USB drive from the system tray and unplug it from your PC.

Updating the Nyquist System Controller using the USB Flash Drive

1. Use the Nyquist web-interface, Product License page to check the "Software Update Subscription Expiration Date" to make sure that your SUS is not expired. If your SUS is expired, do not proceed with the remaining instructions until you have updated your SUS and verified that SUS is not expired. Your Product License Key needs to include unexpired SUS before product activation will succeed.

Note: If SUS has expired, please contact your Bogen RSM to discuss options for updating SUS. This upgrade WILL NOT WORK for a System that has expired SUS.



Installed License Activation Key:

1063-0119-5763-5458

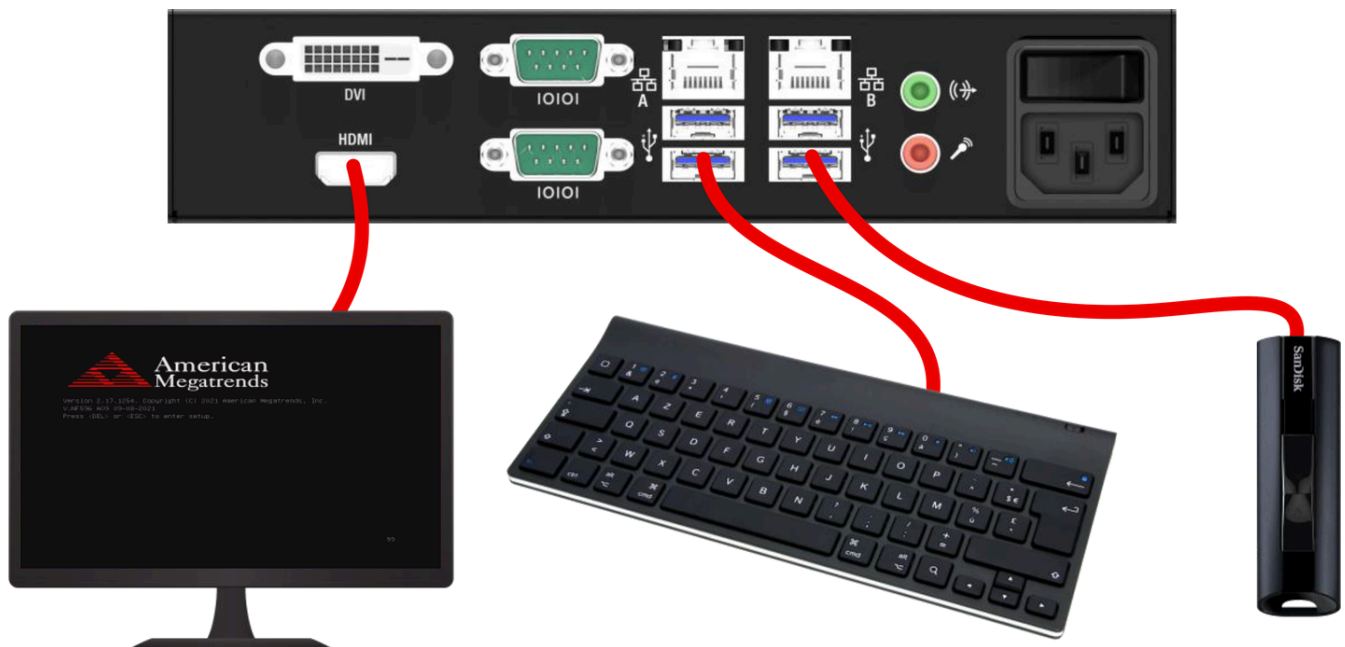
Software Update Subscription Expiration Date: 12312030

Software License Expiration Date: permanent

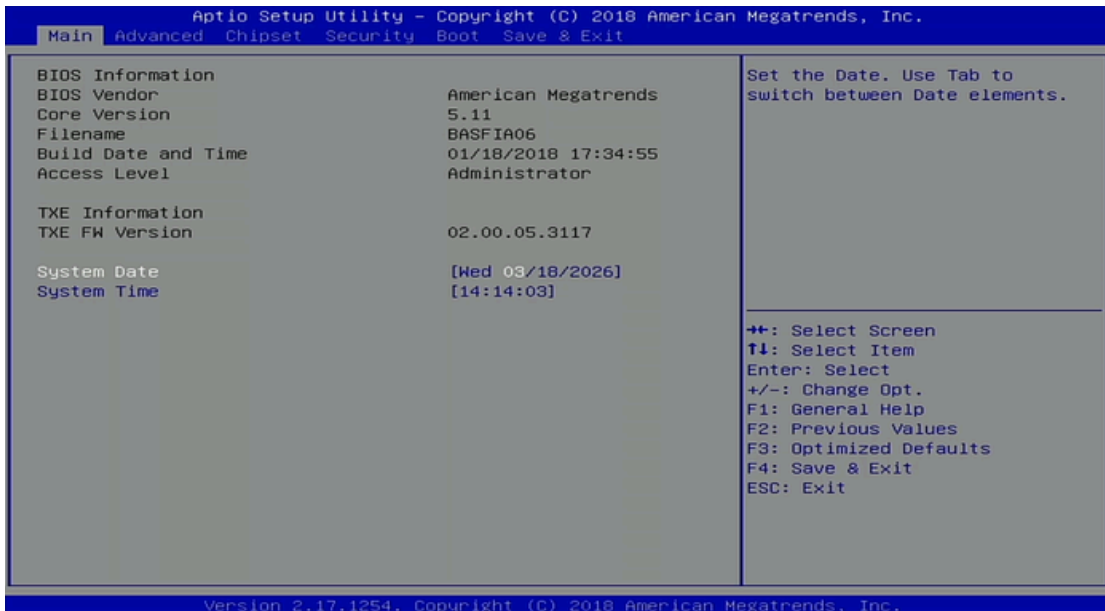
2. For E7000, write down the Product License Activation Key for later use.
3. Write down the System Controller's Serial Number (found on the bottom of the System Controller).



4. Go to <https://<IP Address>/setup/network> to record Port A and B IP/Subnet/Gateway. Note: This will not be restored from the backup.
 5. Go to System Parameters to generate an Export Report.
 6. Create a backup of the System Controller. Export the backup to your computer.
 7. Use the Nyquist web-interface, Product License page to release the Product License Activation Key. Click the 'Release License' button and look for a success message. If you are unable to release the Key, contact Bogen Technical Support for assistance.
- WARNING: Failure to release License Activation Key may prevent reactivation and require assistance from Bogen Technical Support to resolve.**
8. Turn off the System Controller by moving the power switch to the OFF position.
 9. Attach a keyboard and HDMI monitor to the System Controller.
 10. Insert the Nyquist Software Update USB Flash Drive into an available USB port on the System Controller.



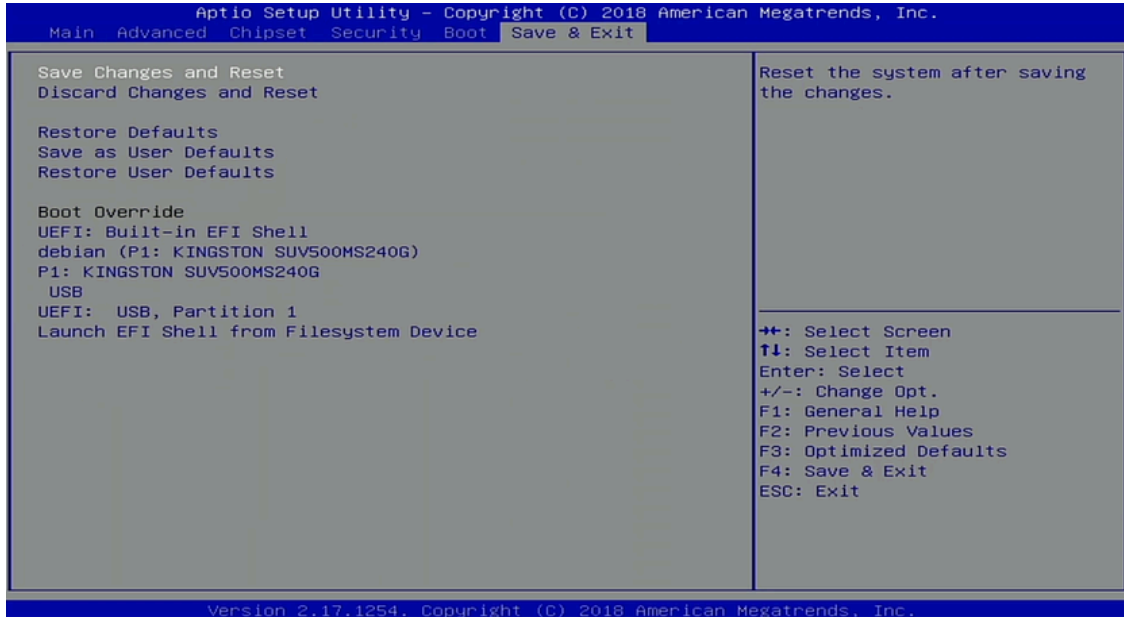
11. Turn on the System Controller power and enter the BIOS by repeatedly pressing the Delete key.



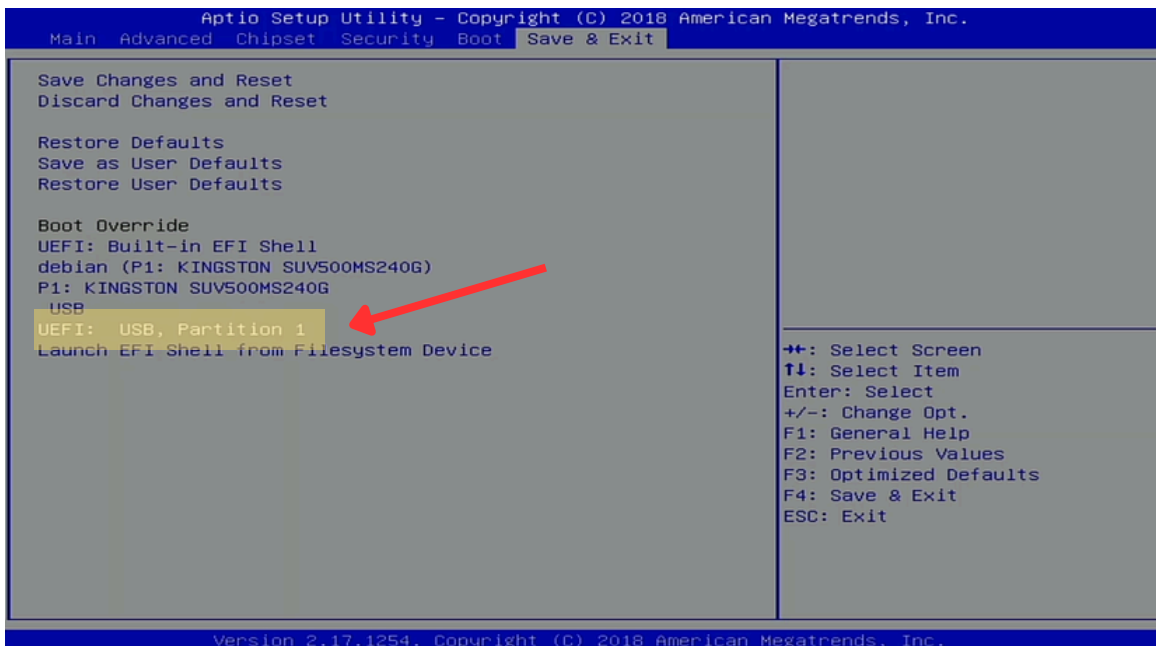
NOTE: If the BIOS screen does not appear, power off the System Controller and try again.

12. Instruct the BIOS to boot from the USB Flash Drive by using the one-time boot menu (Save & Exit tab) to boot from USB without changing permanent boot order.

a. Use the right arrow to select the “Save & Exit” tab.



b. Select the “UEFI: [USB drive name], Partition 1” entry to boot off the USB flash drive, and press enter. Some example USB drive names are “SanDisk Extreme Pro 0”, “Samsung Flash Drive 1100”, or simply “USB” pictured below.



13. The System Controller will boot from the USB Flash Drive and will automatically re-image the System Controller with the Nyquist Release contained on the USB Flash Drive.

NOTE: During re-image process, Debian Login screen will be displayed. This is normal.

14. When the imaging process is finished, the System Controller will automatically turn off. To finish powering the System Controller down move the power switch to the OFF position.

15. After the System Controller turns off, remove the USB Flash Drive.

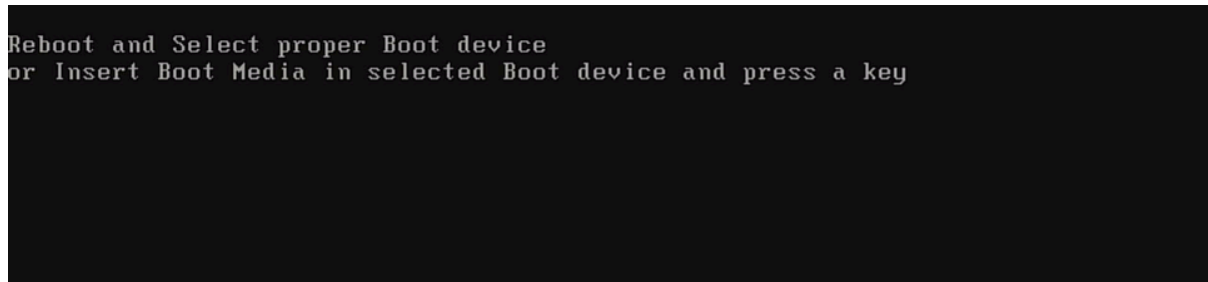
WARNING: Do not access the Nyquist network setup wizard or attempt system activation while a USB flash drive is connected. Making system changes with the USB flash drive plugged in may corrupt the drive and cause unexpected behavior if it is later used on another System Controller.

16. Turn back on the System Controller. The Debian Login screen will again be displayed from the HDMI output, you will not see a Bogen GUI or Login screen.

NOTE: If the System Controller fails to boot, you might see a message similar to the following:

Reboot and Select proper Boot device or Insert Boot Media in selected Boot device and press a key.

You need to power-cycle the controller, press the 'Delete' key to enter the BIOS, use the arrow keys to move to the "Boot" tab, change the Boot order via the Boot tab; select the item that contains the text "Debian", then use the right-arrow on your keyboard to move to the 'Save & Exit' tab to save and exit. This will force the BIOS to boot Debian from the System Controller's SSD.



```
Reboot and Select proper Boot device  
or Insert Boot Media in selected Boot device and press a key
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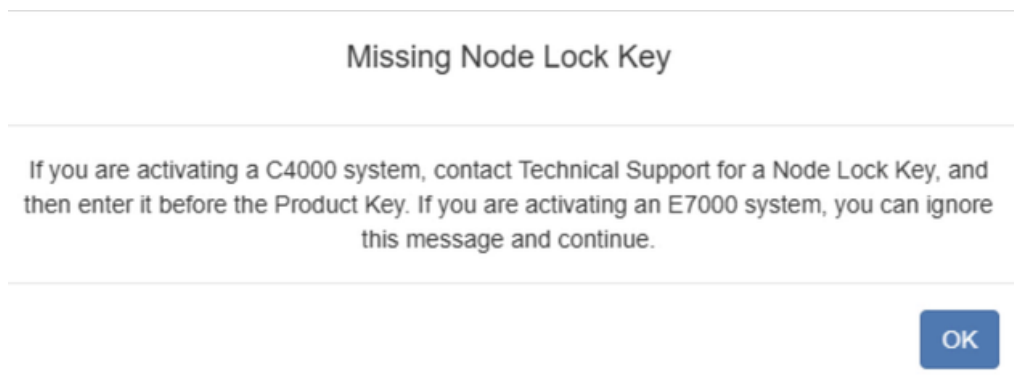
17. Access the product activation page via IP address: 192.168.1.10 See the document entitled: Nyquist System Controller Setup Guide.

18. In Network Wizard re-enter Port A and B - IP/Subnet/Gateway.

19. Go through the activation process.

20. The system will request the serial number, enter the serial number.

21. Click “OK” on the Missing Node Lock Key warning popup.



22. Enter the License Activation Key.

23. After going through the setup wizards, login.

24. Import and restore your system backup. Select “No, do not restore License Activation Key, the LAK has already been activated.” when prompted.

25. The System Controller should now be running the new release imaged from the USB Flash Drive and should be operational.