

Falcon[®]-NEO

Software Update/Reinstall Instructions



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1.0 Introduction

The latest Falcon-NEO software, manual, and readme file (which contains the software release notes) can always be found on the Falcon-NEO support page at <https://www.logicube.com/knowledge/forensic-falcon-neo>.

The Falcon-NEO software release may contain both a software and firmware update. This document details how to update/reinstall the software and firmware.

2.0 Requirements

To perform the software update/reinstall, one of the following is required:

- The Falcon-NEO connected to a network with Internet access (for updating "FROM NETWORK"), or
- The Falcon-NEO with your own USB flash drive. The USB flash drive must be formatted FAT32 or NTFS (for updating "FROM USB DRIVE").



A System Restore is required for all Falcon-NEO units that currently have a software version below v3.0 if the optional *Cloud Storage Acquisition* and/or *Mobile Device Capture* subscriptions will be purchased. If no subscription will be purchased, the System Restore is not required.

3.0 System Restore

If the current software on the Falcon-NEO is v2.3 or lower, a system restore may be required depending on the following:

If one or more of the optional subscriptions will be purchased, a System Restore is required if the currently installed software version is below v3.0 in order for the options to work properly. The available optional subscriptions are:

- Cloud Storage Acquisition
- Mobile Device Capture

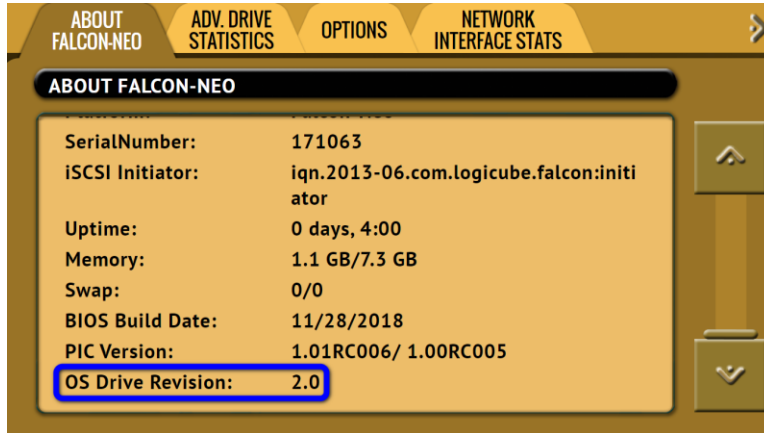


For details on these options, please contact Logicube sales at sales@logicube.com.

If no optional subscriptions will be purchased, there is no need to perform a System Restore. The Falcon-NEO's other features and functions will work, including all the new features in the software release (except for the Cloud Storage Acquisition and Mobile Device capture).

For the subscription options to work, the Falcon-NEO must have an OS Drive Revision of 2.0. To check the current OS Drive Revision of your Falcon-NEO, go to the **Statistics** screen. In the **About Falcon-NEO** tab, scroll down to the bottom of the page.

- **If the OS Drive Revision shows 2.0** – There is no need to perform the System Restore. Proceed to [Section 4.0 – Updating/Reinstalling the software](#).
- **If the OS Drive Revision shows 1.0** – A System Restore is required if the Cloud Storage Acquisition or Mobile Device Capture subscription options will be purchased. Follow the rest of the instructions in this section.
- **If there is no OS Drive Revision** – A System Restore is required if the Cloud Storage Acquisition or Mobile Device Capture subscription options will be purchased. Follow the rest of the instructions in this section.



3.1 Requirements

- Your own 4 GB or larger capacity USB flash drive
- A computer with a Windows Operating System
- A wired USB keyboard

3.2 Creating the Restore USB flash drive

Here are the steps to prepare the flash drive with the software necessary to be bootable:



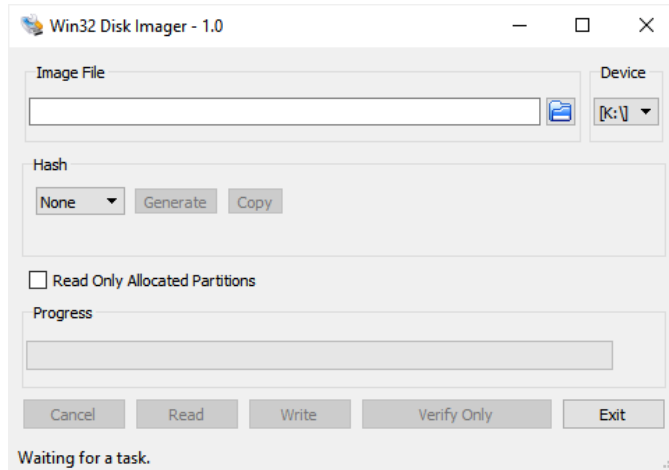
It is recommended to use Chrome or Firefox to download the files. Internet Explorer and Edge may not download *.img files properly.

1. Go to <http://updates.logicube.com/falcon-neo-restore/>. Look for the following two files:
 - The Falcon-NEO image file (a file with a *.img extension)
 - win32diskimager-v1.0.0-binary.zip – An open-source tool used for writing images to USB flash drives or SD/CF cards
2. Download both files. If the image file will not download, right-click on the link and use the 'Save Target As...' or 'Save Link As' option and make sure it is saved with the *.img file extension.
3. Extract all the files in the win32diskimager-v1.0.0-binary.zip file to a folder or directory of your choosing.
4. Connect a USB flash drive that is at least 2 GB in capacity to the computer where the software was downloaded. It is recommended that all other USB drives are unplugged.

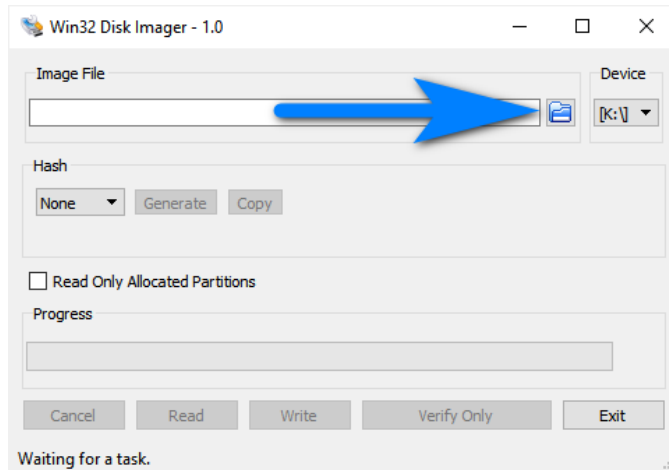


The contents of the USB flash drive will be overwritten. If there is data on the USB flash drive that should not be deleted, back up the contents of the USB flash drive or use another USB flash drive for this procedure.

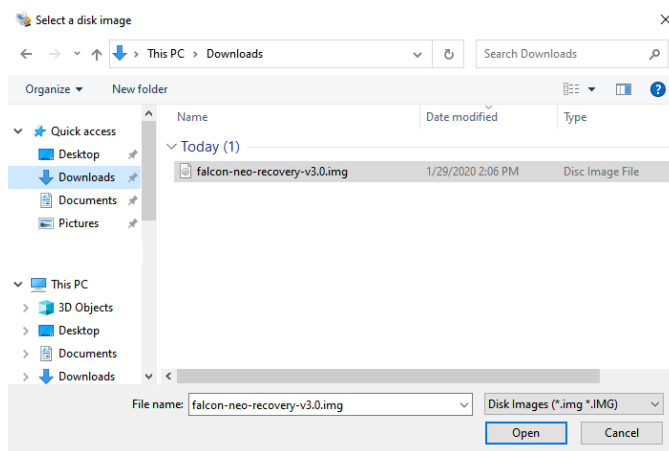
- In the win32diskimager-v1.0.0-binary folder where the software was extracted, run the file **Win32DiskImager.exe**. The Win32 Disk Imager window will appear.



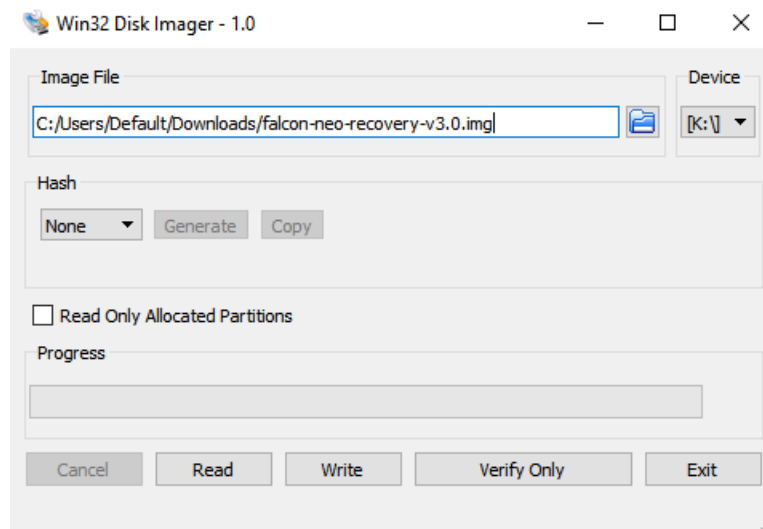
- Click the folder icon to select a disk image.



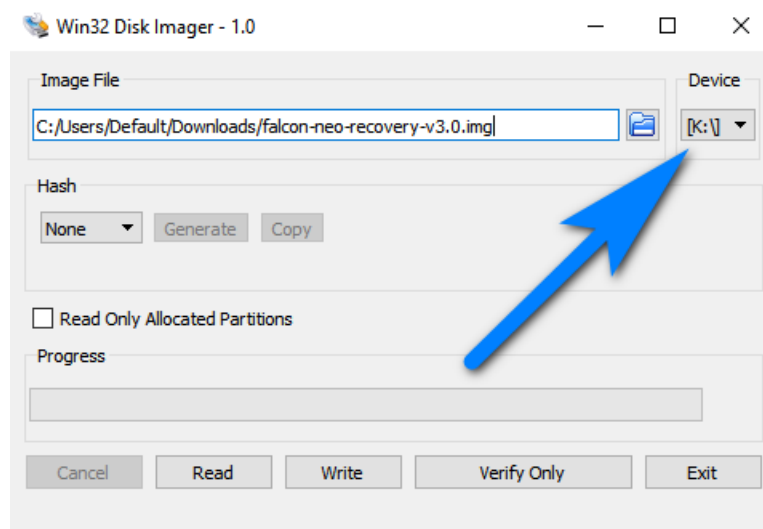
- In the folder where the files were downloaded (in step 2), select the restore file and click the **Open** icon. Note the screenshot below shows a different file name.



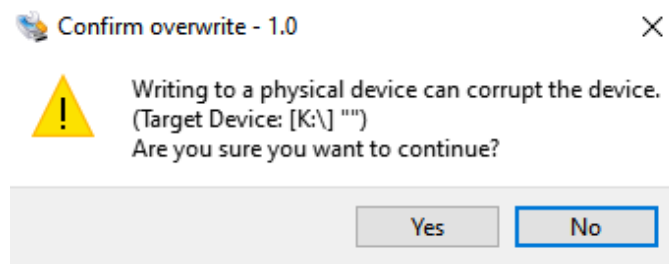
8. The Image file should now be seen in the Win32 Disk Imager screen under 'Image File'.



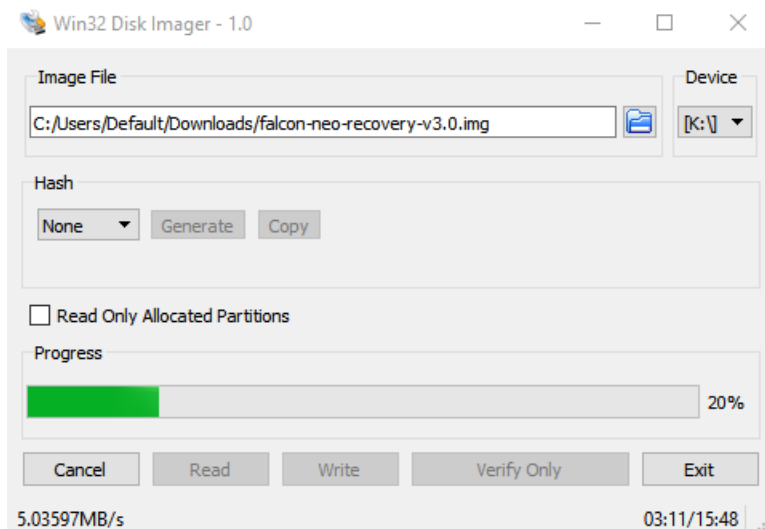
9. Under 'Device', select the drive letter for the USB flash drive that was connected during step 3 then click the **Write** icon.



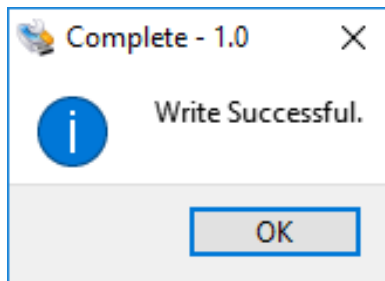
10. A confirmation screen will appear. Make sure that the "Target Device" is set to the correct drive letter. If it is the correct drive letter, click **Yes** to continue. If it is showing the wrong drive letter, click **No**. This will take you back to the previous screen where you can select the correct drive letter (back to step 9).



11. The USB flash drive is now being prepared and the progress bar should be advancing.



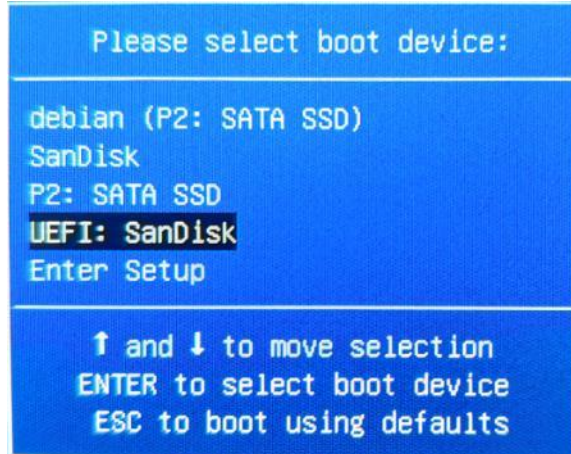
12. When it is finished, a prompt should appear stating the write was successful. Click the **OK** icon to continue. Close the Win32 Disk Imager window. The USB flash drive is now ready to be used.



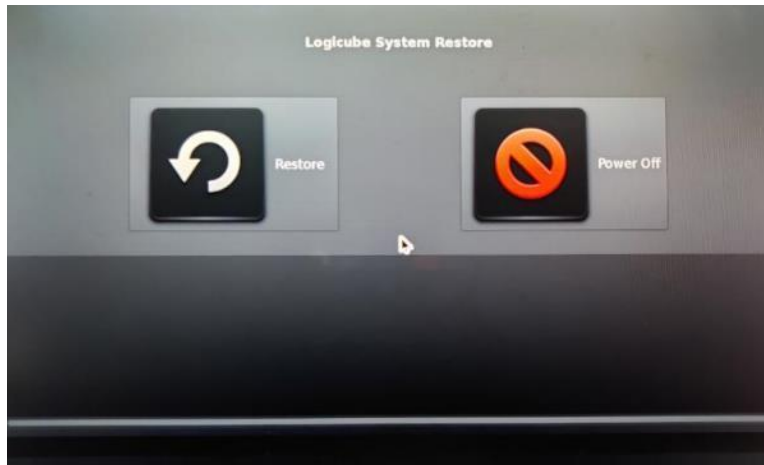
13. Disconnect the USB flash drive from the computer.

3.3 Using the Restore USB Flash Drive

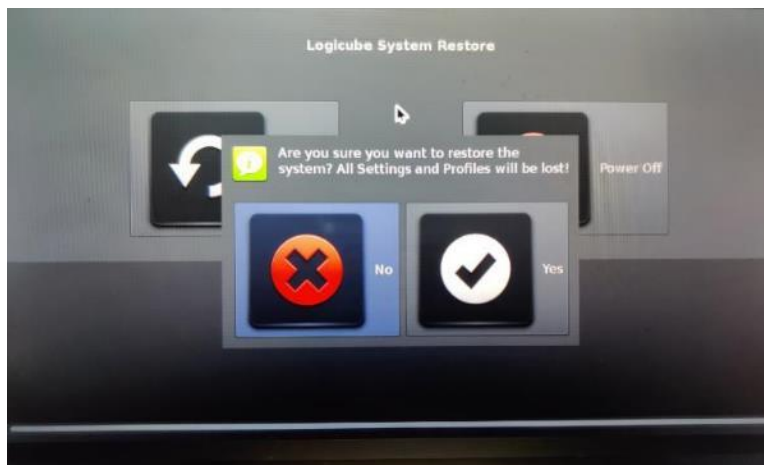
1. Turn the Falcon-NEO OFF and disconnect all drives (and any drive adapters) connected to all source and destination ports.
2. Insert the restore USB flash drive to one of the front USB ports.
3. Connect a USB keyboard to the other front USB port.
4. Turn the Falcon-NEO on. The Falcon-NEO will display a logo, then beep.
5. Immediately after the beep, press and release the **F7** key. A boot menu should appear.
6. Using the arrow keys on the keyboard, select the USB flash drive with UEFI in the front of the name of the USB flash drive. **Do not** select **"UEFI OS:"** if it is available.



7. The System Restore will load. When the System Restore fully loads, the following screen will appear. Tap **Restore**.

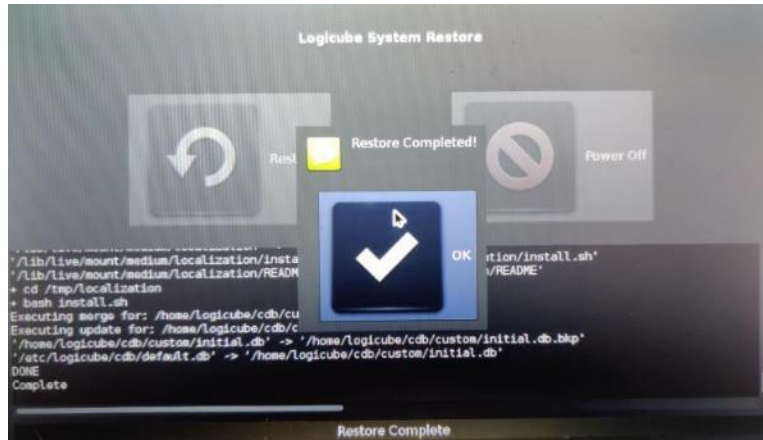


8. A confirmation screen will appear. Tap **Yes** to continue with the System Restore.



9. The system restore will begin. The entire process may take up to 10 (ten) minutes to complete.

10. When finished, the following screen will appear. Tap **OK**.



11. The main System Restore screen will appear. Tap **Power Off**.



12. A confirmation screen will appear. Tap **Yes**. The Falcon-NEO should power off. You can now disconnect the Restore USB flash drive and USB keyboard.



13. Proceed to [Section 4.0](#).

4.0 Updating/Reinstalling the Software

There are two methods available to update/reinstall the Falcon-NEO software:

- A. **FROM NETWORK** – Over the Internet through a network connection.
- B. **FROM USB DRIVE** – Through a software file download onto a USB flash drive.

4.1 From Network (Over the Internet)

The Falcon-NEO software can be updated/reinstalled by connecting the Falcon-NEO to a network with Internet access.



It is recommended to disconnect all drives and drive adapters from the Falcon-NEO before the update/reinstall process.

1. Connect the Falcon-NEO to a network with Internet access and turn the Falcon-NEO on.
2. From the main menu on the Falcon-NEO, locate and tap the **Software Updates** icon on the left side.
3. Select **From Network**. The Falcon-NEO will check for software on Logicube's server. After a few seconds, one of the following messages will appear:
 - **NEWER VERSION AVAILABLE** – This message will appear if there is a newer software version found. Tap the **OK** icon to continue.
 - **UP TO DATE** – This message will appear if the software version found is the same as the version currently installed. Tap the **OK** icon to continue.
 - **HTTP://UPDATES.LOGICUBE.CCNEO/ FAILED: 500 CAN'T CONNECT TO UPDATES.LOGICUBE.COM:80** – This message will appear if the Falcon-NEO cannot connect to the update site. When this message appears, double-check that you have an Internet connection to the Falcon-NEO. For example, try a different network cable or network drop. If the message persists, try the following:
 - i. Go to the **About** tab in the **Statistics** screen and check the **N/W Interfaces** to make sure the Falcon-NEO is connected to a network and has a valid **IPAddress**, or
 - ii. Make sure the network the Falcon-NEO is connected to has Internet access, or
 - iii. Try using the "From USB DRIVE" option (see [Section 4.2](#)).
4. Tap the **Update** icon to begin the update/reinstall. The Falcon-NEO should begin the update/reinstall process. Do not interrupt this process. It may take several minutes. Once completed, a screen will appear stating the update is complete and will prompt you to turn the unit off then back on.
5. Turn the Falcon-NEO off. Wait at least 5 seconds then turn the Falcon-NEO back on.

6. Verify the software version by going to the Software Updates screen then go to [Section 5.0 Firmware Update](#) to check if there is a firmware update available.

4.2 From USB Drive (Through a software file download)

Aside from the network option, the latest software can also be downloaded from Logicube's website and be placed onto a USB flash drive to perform the software update/reinstall. It is recommended to use an empty USB flash drive.

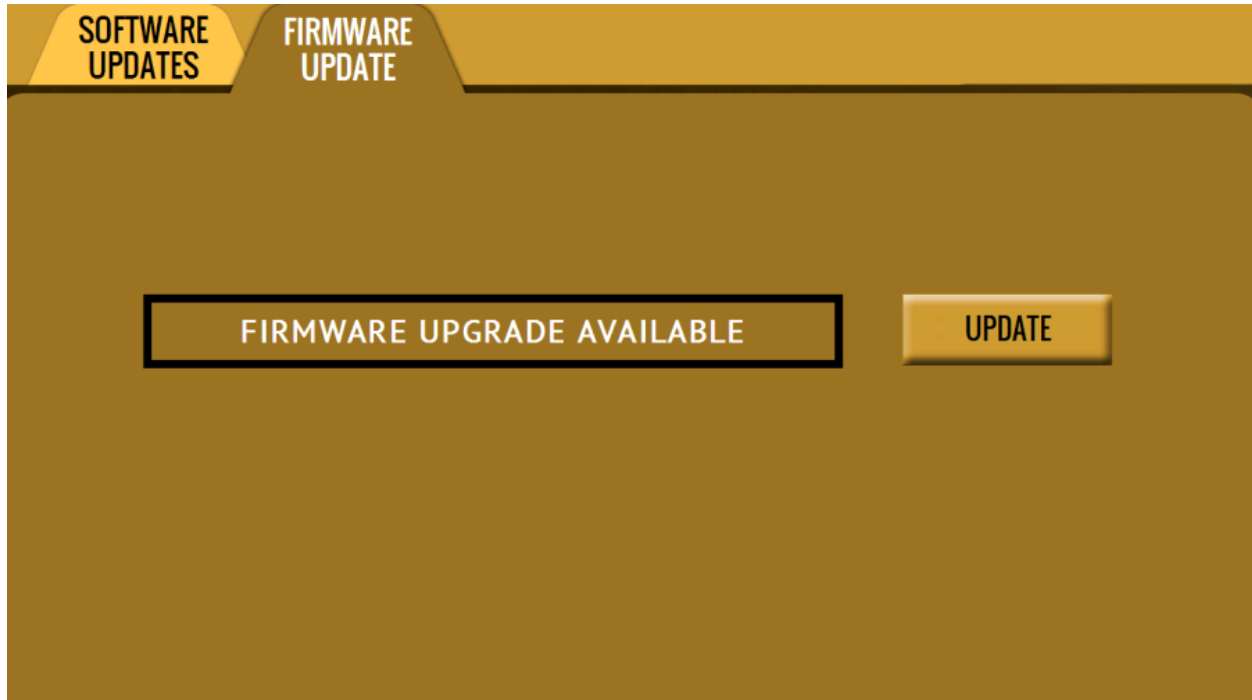


It is recommended to disconnect all drives and drive adapters from the Falcon-NEO before the update/reinstall process.

1. Using a computer, download the latest software from the Falcon-NEO product support page at <https://www.logicube.com/knowledge/forensic-falcon-neo>.
2. Extract the contents of the downloaded zip file to the root of the USB flash drive.
3. Turn the Falcon-NEO on. When the main software screen appears, connect the USB flash drive (that has the extracted software from step 2) to the USB_S1 port (the USB port on the left side).
4. From the main menu on the Falcon-NEO, locate and tap the **Software Updates** icon on the left side.
5. Select **From USB Drive**. The Falcon-NEO will check for the version of the software on the USB drive. After a few seconds, one of the following messages should appear:
 - **SOFTWARE FOUND** – A software version is found on the USB flash drive. Tap the **OK** icon to continue.
 - **UPDATES NOT FOUND!** – The Falcon-NEO did not find any software on the USB flash drive or could not detect the USB flash drive. If this message is seen, try the following:
 - i. Make sure the correct software was downloaded and the files were extracted to the root of the USB flash drive, or
 - ii. Format and use a different USB flash drive, or
 - iii. Try using the "From Network" option (see [Section 4.1](#))
6. Tap the **Update** icon to begin the update/reinstall. The Falcon-NEO should begin the update/reinstall process. Do not interrupt this process. It may take several minutes. Once completed, a screen will appear stating the update is complete and will prompt you to turn the unit off then back on.
7. Turn the Falcon-NEO off. Wait at least 5 seconds then turn the Falcon-NEO back on.
8. Verify the software version by going to the Software Updates screen then go to section [5.0 Firmware Update](#) to check if there is a firmware update available.

5.0 Firmware Update

Falcon-NEO software releases may contain a firmware update. This section provides instructions on how to check if a firmware update is required, and how to perform the firmware update.



1. After the software is updated/reinstalled on the Falcon-NEO, locate and tap the **Software Updates** icon on the left side.
2. Tap the "Firmware Update" tab. One of the following screens will appear:
 - **FIRMWARE UPGRADE AVAILABLE** – Tap the **Update** icon. A message will appear: "FIRMWARE UPDATE COULD TAKE UP TO A FEW MINUTES TO COMPLETE; PLEASE DO NOT INTERRUPT POWER DURING THIS TIME. ON COMPLETION THE UNIT WILL AUTO-RESTART AND CONFIRM THE UPDATE." Tap the **OK** icon to start the firmware update process.



When the **OK** icon is tapped, the screen may appear to do nothing. Do not keep tapping the **OK** icon. The firmware update typically takes no more than 60-120 seconds. When the firmware update finishes, the Falcon-NEO will reboot automatically.

- **FIRMWARE UPGRADE NOT AVAILABLE** – This message will appear if the device does not require a firmware update. No further action is necessary if this message appears.

6.0 Troubleshooting

There may be times when the software update fails. When this happens, typically the Falcon-NEO will not boot up to the normal GUI. Instead, a login screen will appear like the one below:

```
Debian GNU/Linux 9 falcon-181000 tty1

falcon-171000 login:
```

A built-in system rescue is available to attempt to re-install the software and bring the Falcon-NEO back to working order.

System Rescue Instructions

When the login screen (like the one above) appears after attempting to update the Falcon-NEO software, follow these steps to run the System Rescue:

1. Connect a wired USB keyboard to one of the front USB ports on the Falcon-NEO.
2. Login with the following credentials:

Username: logicube

Password: logicube

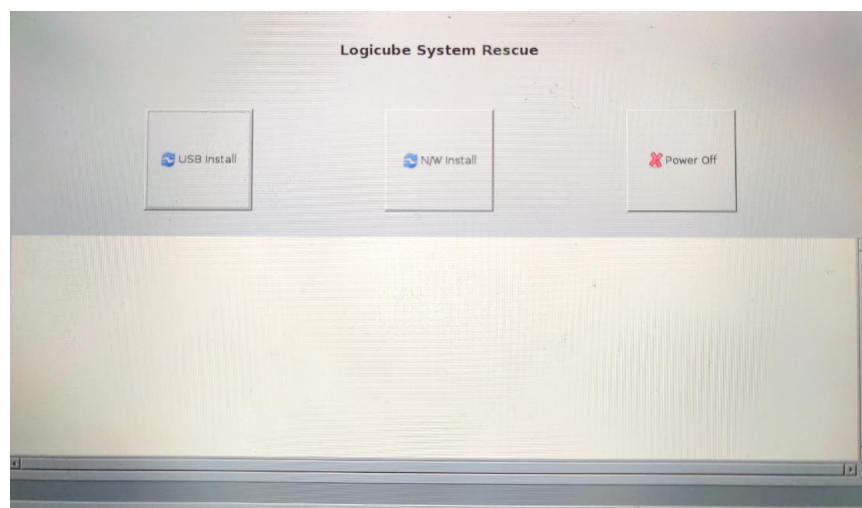


The logicube account's password can be changed. If this was changed, please use the new password.

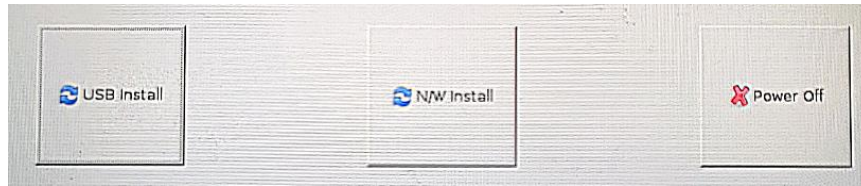
3. Type the following command then press the Enter key:

sudo run-system-rescue

4. The System Rescue should load and the following screen will appear:



5. If the software is on a USB drive, make sure the USB drive is connected to the USB_S1 port then tap **USB Install**. If a software update through the network will be used, make sure the Falcon-NEO is connected to a network with Internet access then tap **N/W Install**.



6. The Falcon-NEO should start re-installing the software. Towards the bottom of the screen, it should show "Installing from USB" or "Installing from Network".
7. The installation process will take several minutes. When finished, the bottom of the screen should show "Installation complete!"
8. Tap the **Power Off** button to turn the unit off. Disconnect the USB keyboard.
9. Turn the Falcon-NEO back on. The unit should boot up normally. If it does, go to [Section 5.0](#) to check for a firmware update

Technical Support Information

For further assistance please contact
Logicube Technical Support
By phone: **(+1) 818.700.8488, option 3, 8 a.m. – 5 p.m. PT, M-F**
(excluding US legal holidays)
or by email: techsupport@logicube.com