

Software/Firmware Update Procedure (Via Direct Connection to Computer)

Product(s): FreeZone® Freeze Dryers, Stoppering Tray Dryer, Triad, Bulk Tray Dryer, Small Tray Dryer, Heated Product Shelves (models with touch screen display).

Update Description: Lyo-Works 2.0

Before Updating the Software/Firmware

Check to see what version of “Application Software” is currently installed on your Freeze Dryer or Triad.

- On the Freeze Dryer (or Triad) touch screen, go to **[HELP > ABOUT]**
 - i. Note: For “Application Software: 10671F” the revision letter is “F”
- If the revision letter is **“A” to “E”**, **YOU CAN UPDATE THE APP SOFTWARE VIA DIRECT CONNECTION TO A COMPUTER.**
Continue to page 2.
- If the revision letter is **“F” or higher**, **YOU WILL NOT BE ABLE TO UPDATE THE APP SOFTWARE VIA DIRECT CONNECTION TO A COMPUTER. See Instructions #1066700**

OS Software: 10670-B

Application Software:10671F

IOB Software: 10644J, 10656J

Catalog Number: 710401030

Labconco (Product Service): 1 (800) 821-5525

The following libraries were used under the Apache 2.0 License in this project: Android Open Source Project, RXLint, Dagger 2, Lib Super User, Crashlytics, Zip 4j, Timber, RX Kotlin, Joda Time, Debug DB, RX Binding, RX

Update Application Software: Freeze Dryers with Application Software at revision “A” to “E”.

1. All settings, programs and data log files will be migrated to the new software.
2. If you have large data log files, this can add a considerable amount of time to the software update process. The software update time can be significantly reduced if you COPY the data log files from the Freeze Dryer to a USB drive and then DELETE the data log files from the Freeze Dryer.

To COPY data log files to a USB flash drive:

- a. Insert USB flash drive into USB port on left side of Freeze Dryer
- b. Go to the **[DATA LOGGING]** screen
- c. Touch the desired file name to select an individual data log file
- d. Touch the **[COPY]** button

To DELETE data log files from the Freeze Dryer:

- e. Go to the **[DATA LOGGING]** screen
- f. Touch the desired file name to select an individual data log file
- g. Touch the **[DELETE]** button
- h. Confirm **[DELETE]**

3. Go to labconco.com/resources/software-apps and download the latest Lyo-Works software upgrade file(s) to your computer.

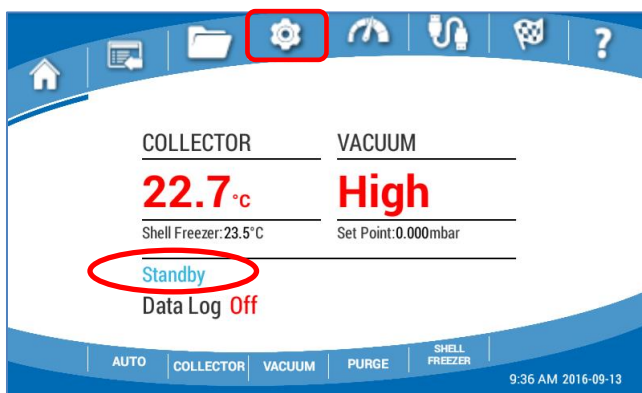
<i>For all FREEZE DRYER models download the two files below:</i>			
Step	File Name	Where Used	Upload to Freeze Dryer via
i.	FDAPP_v 0R _09_25_2024.LLC	Lyo-Works OS Software (Freeze Dryers)	Ethernet Port
ii.	FD_BND_XX_v R .LCC	Lyo-Works Bundle File (All Systems)	USB port

<i>For all TRIAD models download the two files below:</i>			
Step	File Name	Where Used	Upload to Freeze Dryer via
i.	FDAPP_v1R_09_25_2024.LLC	Lyo-Works OS Software (Triad)	Ethernet Port
ii.	FD_BND_XX_vR.LCC	Lyo-Works Bundle File (All Systems)	USB port

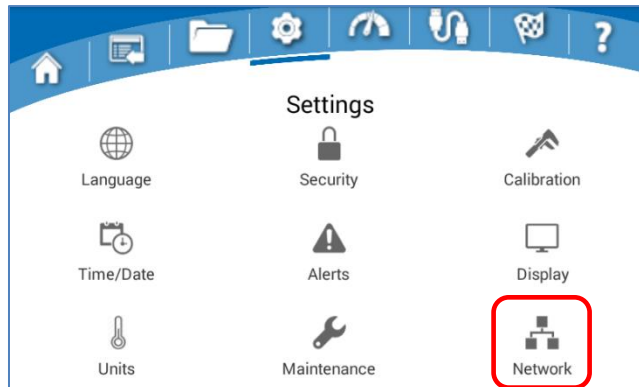
Example for upgrading a FREEZE DRYER:

- i. FDAPP_v0R_09_25_2024.LLC → FDAPP 1st (via Ethernet port)
- ii. FD_BND_XX_vR.LCC → FD_BND 2nd (via USB port)

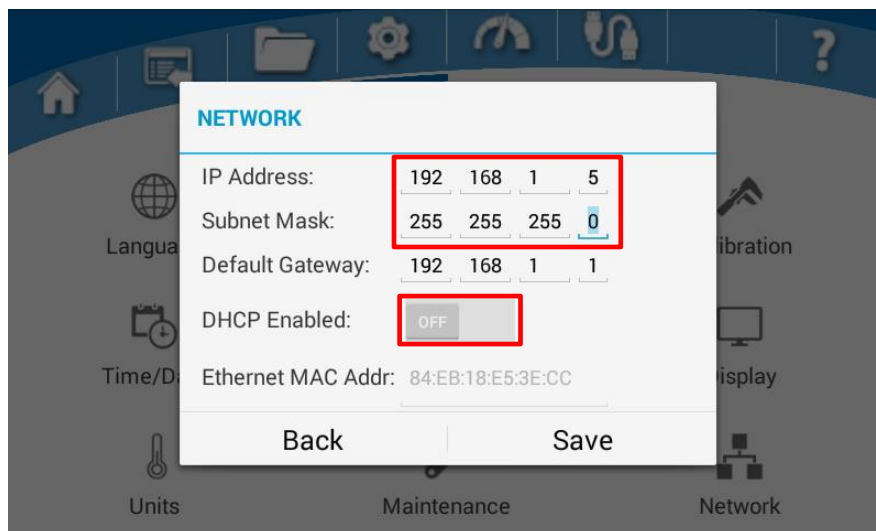
4. Use an Ethernet cable to connect the Freeze Dryer directly to your computer.
5. Make sure your computer is set to a static IP address (**See instruction on page 7 for “How to set a static IP address in Windows”**)
6. Make sure the Freeze Dryer is in “Standby” mode, where all functions are turned off.
7. Assign the matching static IP address (set on your computer in step 5) to the Freeze Dryer.
 - a. Touch the **[SETTINGS]** icon on the menu bar at the top of the display.



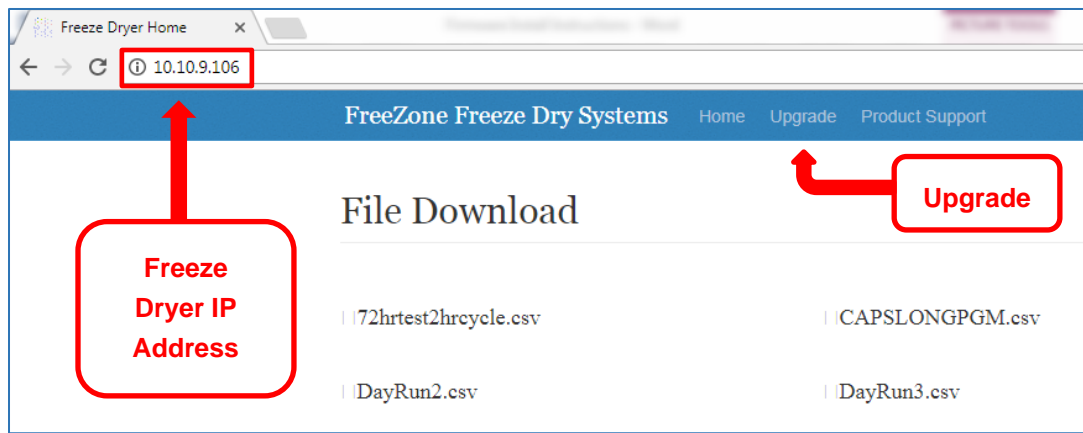
- b. Touch the **[NETWORK]** icon on the Settings screen.



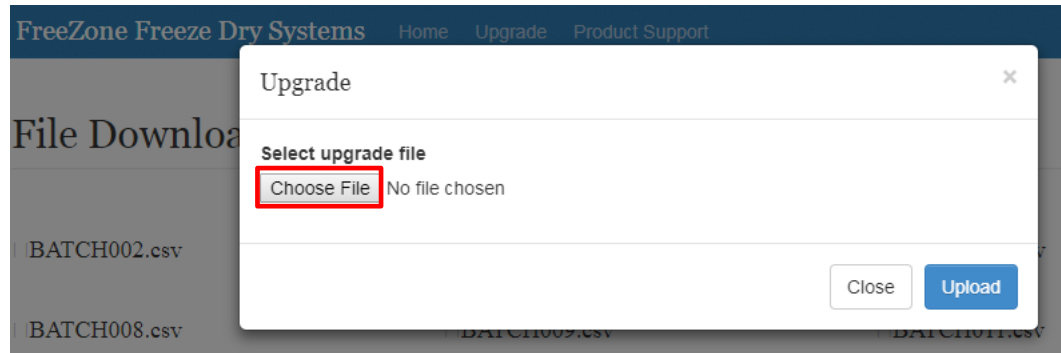
- c. Make sure the “**DHCP Enabled**” button is turned **OFF**
- d. Use keypad to type in numbers shown below for **IP Address & Subnet Mask**



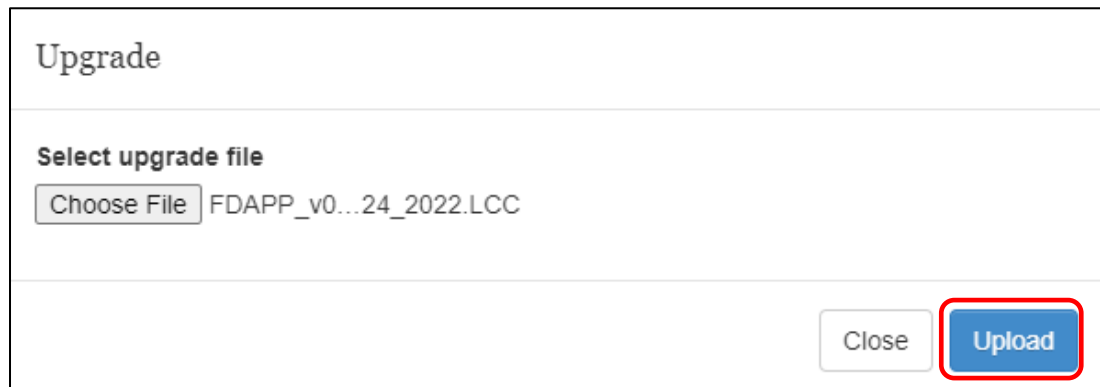
8. Open an internet browser of your choice and type the **Freeze Dryer IP address with periods (dots) between each number (example = 192.168.1.5)** in the address bar and press **Enter**. A web page similar to the image below should open.



9. Select **Upgrade** from blue menu bar at the top of the page. "Upgrade" window will open.
10. Select **Choose File** (may say **Browse** for some web browsers) to open a 'Windows Explorer' window. Navigate to the file location (on your computer) where the software files were stored in Step 1.




11. Select the **FDAPP_v0R_09_25_2024.LLC** file then Select **Open**.
 - For Triad models select **FDAPP_v1R_09_25_2024.LLC**
12. Select the **Upload** button.



13. Your Application Software has now been updated. Please see **Instructions #1066700** for updating the IOB & Accessory Software.

Verifying Completion of Software/Firmware

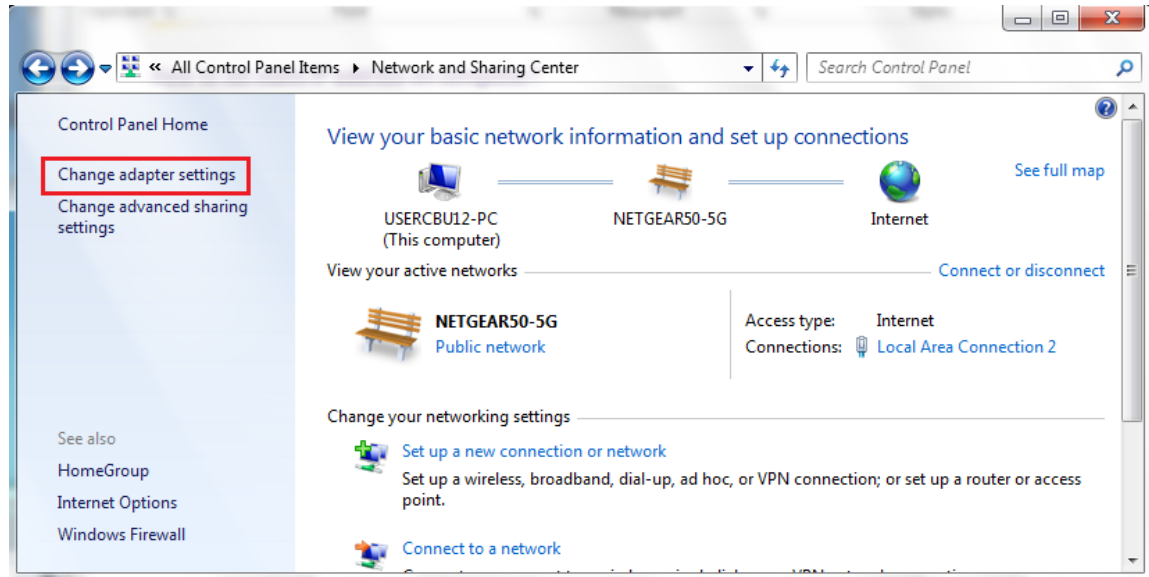
1. Touch the **[HELP]** icon  on the menu bar at the top of the display.
2. Touch the **[ABOUT]** button and verify the version letter at the end of each **Software Part #** matches the version letter shown in the table below.

Description on ABOUT Screen	Software Part #	Device Type
Application Software	10671 R	Freeze Dryer / Triad
IOB Software	10644 P	Freeze Dryer / Triad
Accessory Software	10644 N	Stoppering Tray Dryer
Accessory Software	10656 L	Bulk Tray Dryer, Small Tray Dryer, Heated Product Shelves

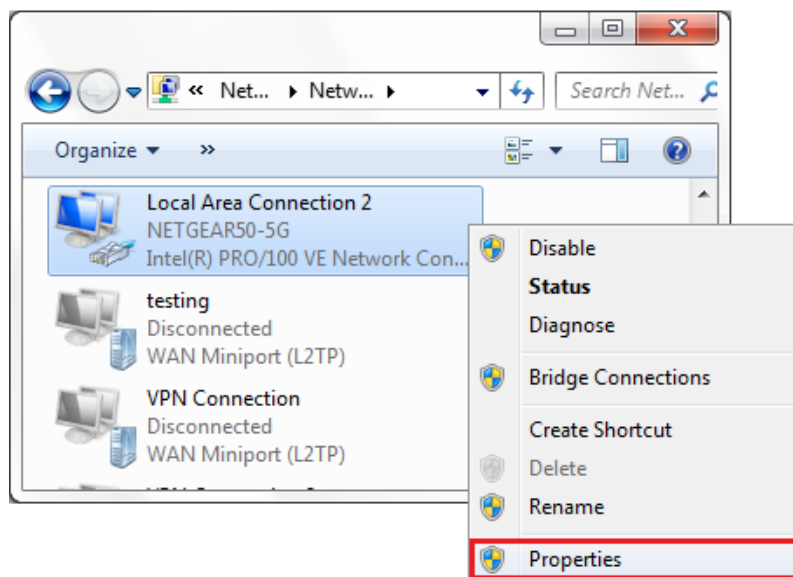
3. After completing all software updates unplug the power cord to the Freeze Dryer (or Triad) and any attached accessory (i.e. Stoppering Tray Dryer, Bulk Tray Dryer, Small Tray Dryer or Heated Product Shelves) and then reconnect the power cord(s) to ensure a proper restart of the Operating System.

How to set a static IP address in Windows

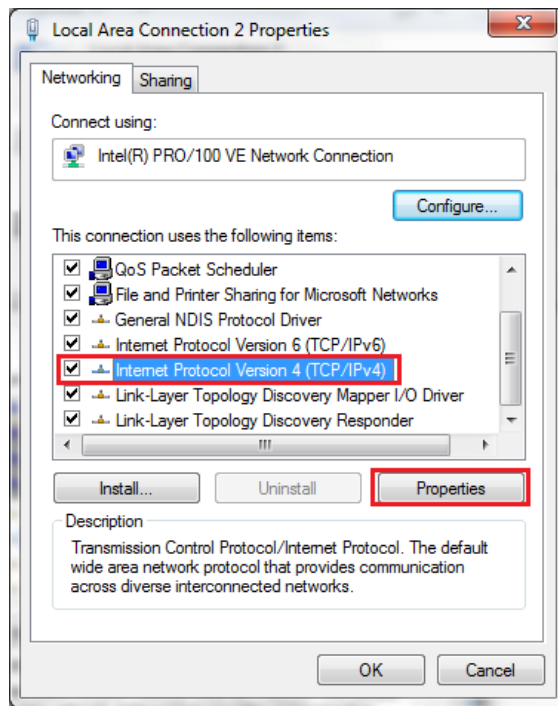
1. Select **Start Menu > Control Panel > Network and Sharing Center** (for Windows 8 and higher, search for and open Control Panel > Network and Internet).
2. Select **Change adapter settings**



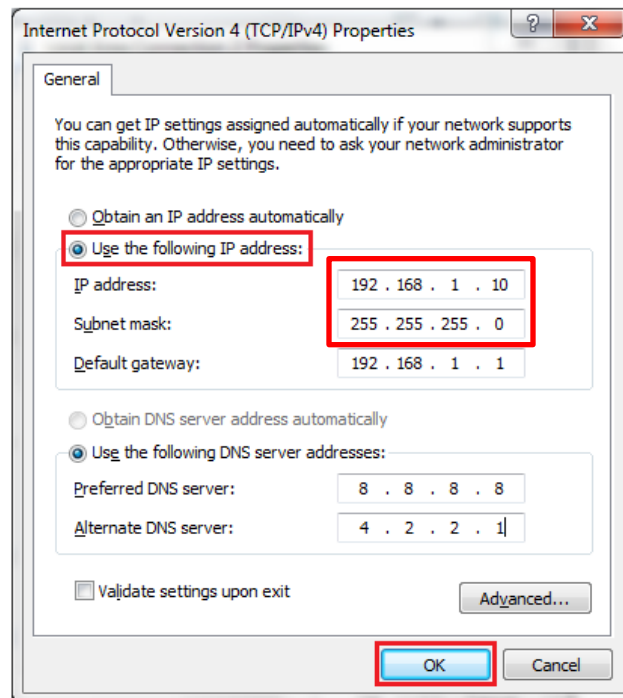
3. Right-Click on **Local Area Connection** and select **Properties**.



4. Select **Internet Protocol Version 4 (TCP/IPv4)** and Select **Properties**.



5. Select **“Use the following IP address”** and enter the numbers shown below for **IP address & Subnet Mask**. Select **OK** and close the **Local Area Connection** properties window.



6. After you have finished uploading software to the Freeze Dryer you will probably want to follow the steps to get back to the screen shown above (step 5) and Select **“Obtain an IP address automatically”** to reset your computer back to the standard settings. To set a static IP on a MAC OS computer, search **Configuring TCP/IP and Proxy Setting on Mac OSX**