

Cooper™ App GoFa Software Install Guide

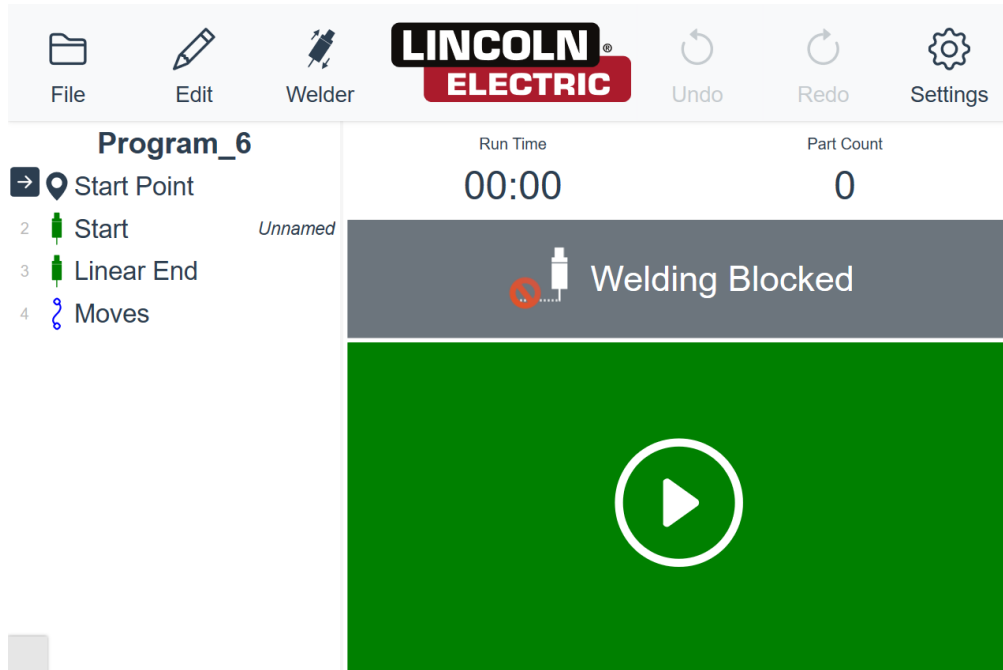


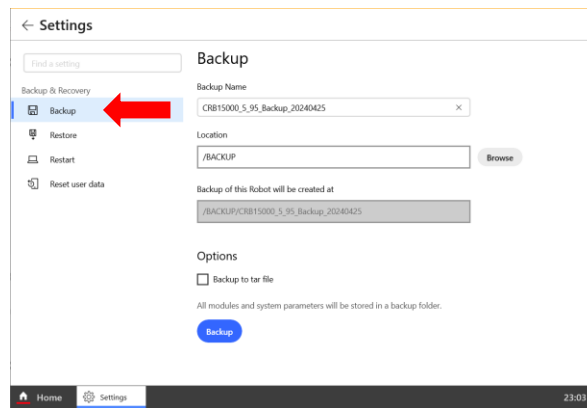
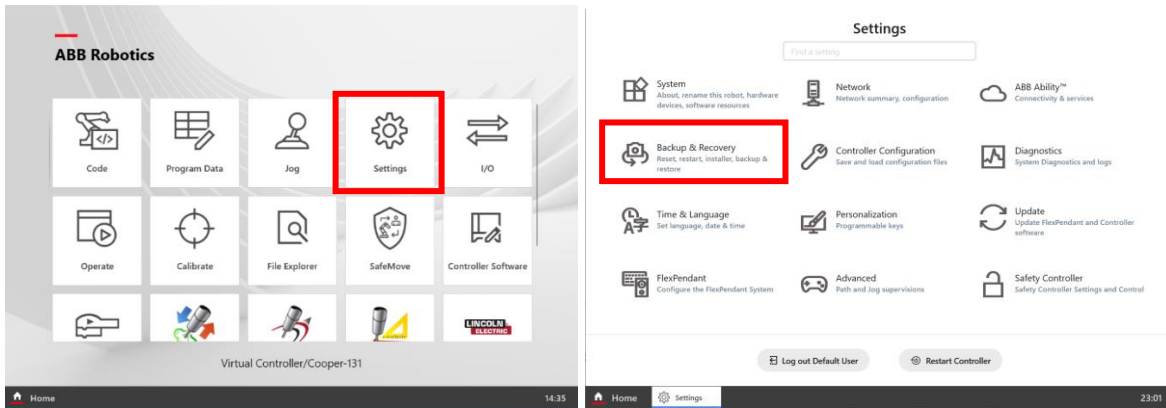
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Section 1: System Backup & Preparation

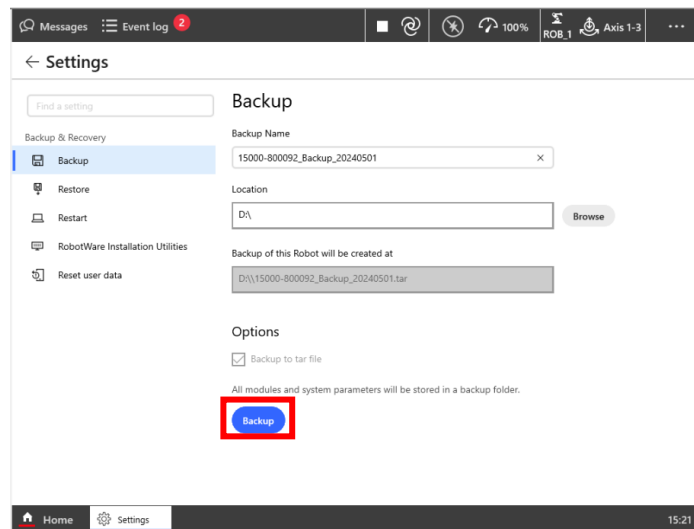
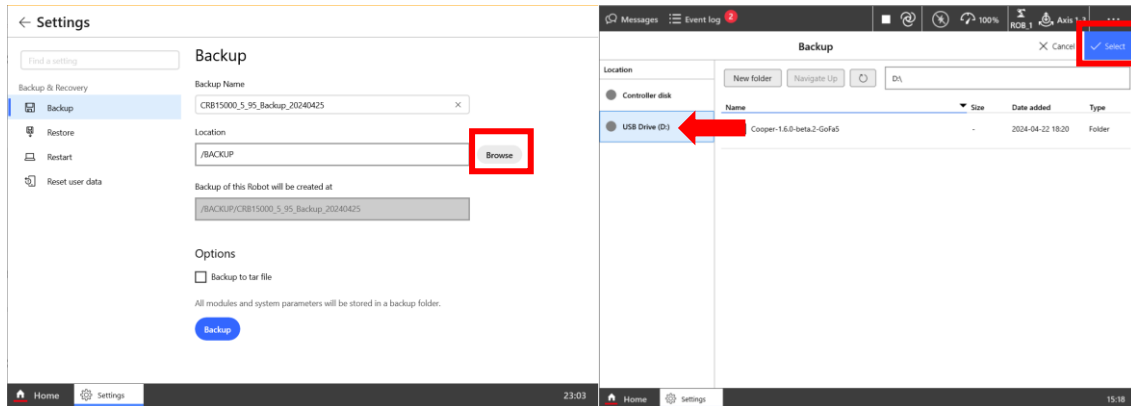
1.1: System Backup

Before performing a system backup save and close all programs. Close the Cooper App. From the Home tab, navigate to Settings / Backup & Recovery / Backup.



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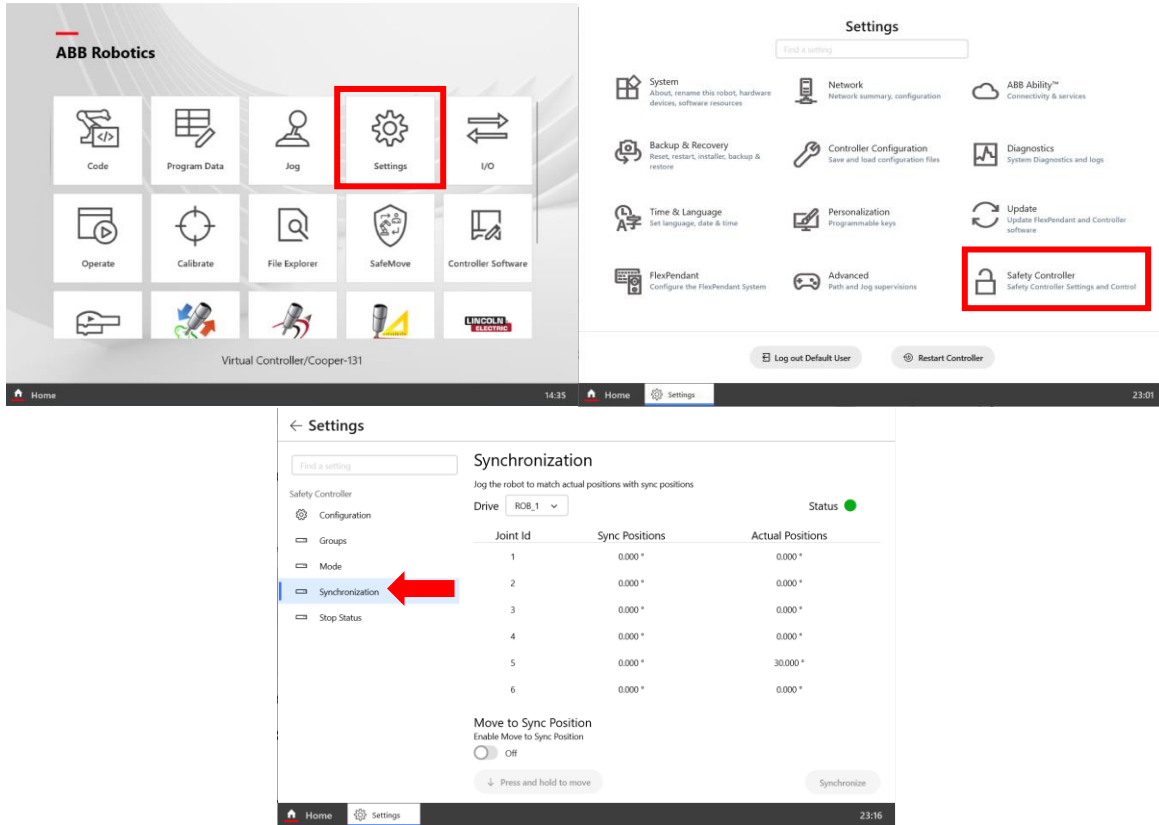
Click Browse to select the location to store the backup. Ensure a USB is inserted to the FlexPendant and specify USB (D:) and confirm by clicking Select. Click Backup. This will store a backup to the inserted USB.



A popup will be displayed that the backup has been successfully stored to the USB. Click OK to close.

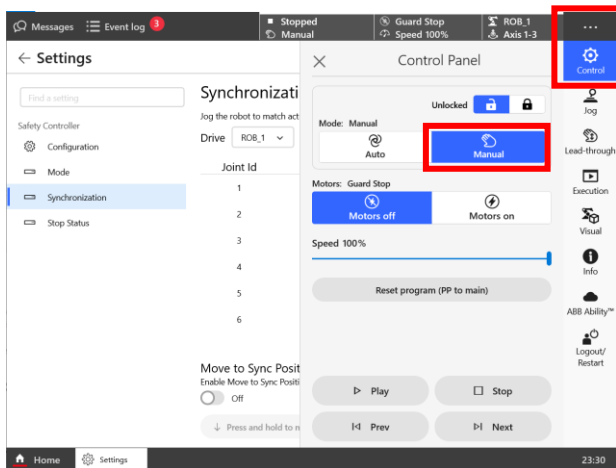
1.2: Synchronize Cobot

Move robot to synchronization position. Select Home / Settings / Safety Controller / Synchronization.

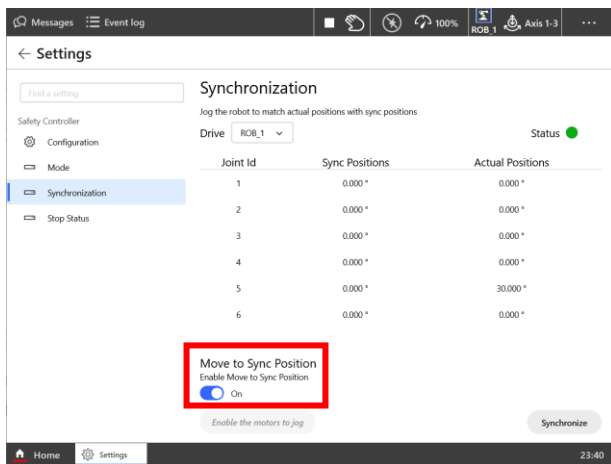


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Press the three dots in the upper right hand corner of the Flex Pendant and select Control. Set the Mode to Manual.

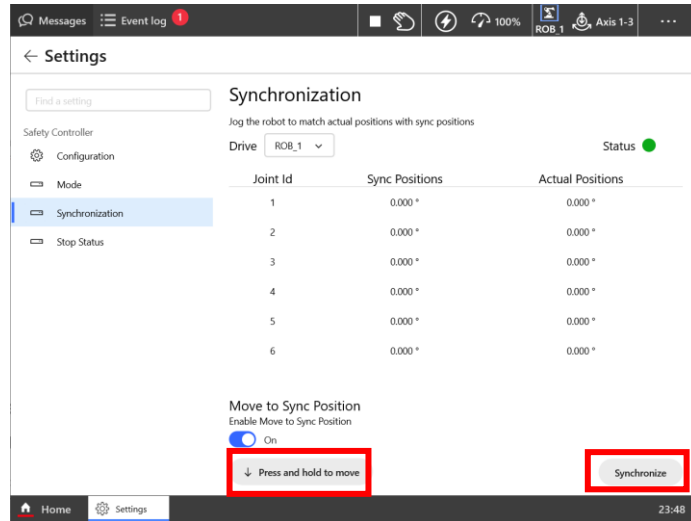


Toggle Enable Move to Sync Position to On.



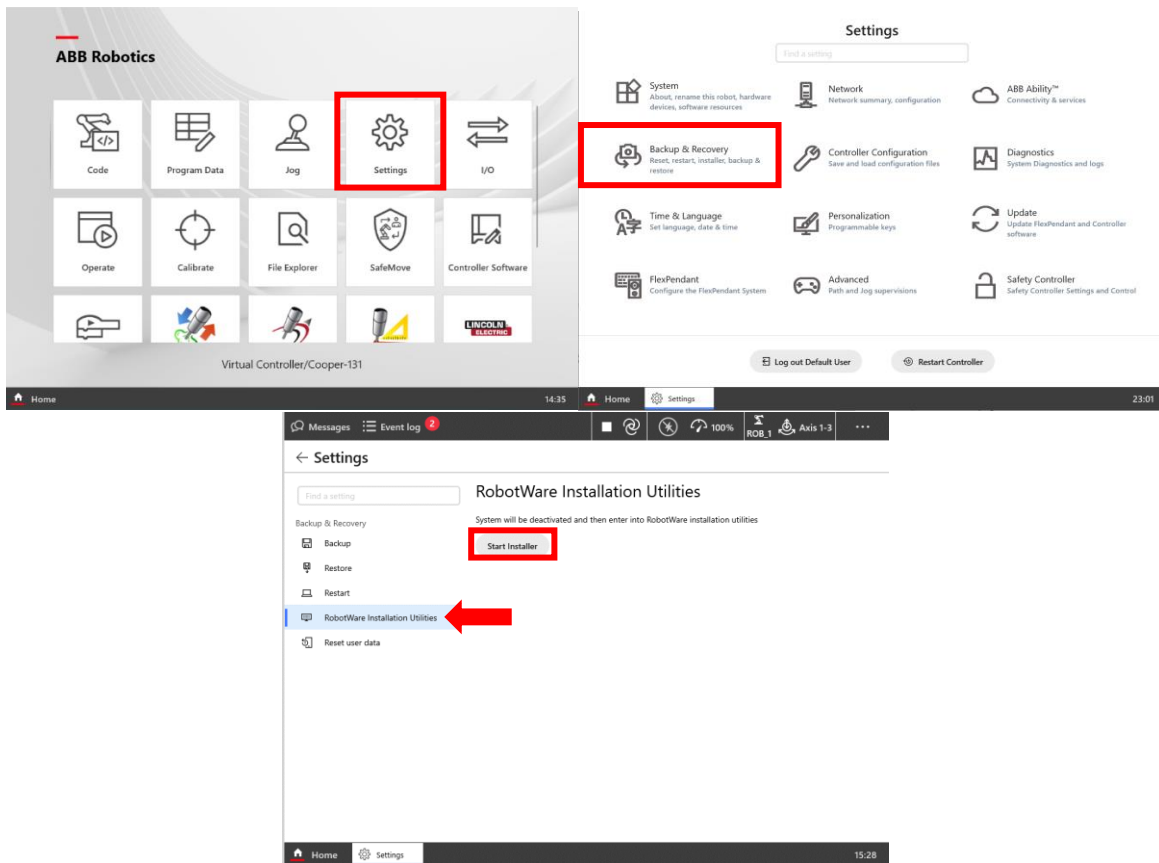
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On the Flex Pendant, physically depress the dead man switch located on the handle of the pendant. It will need to be partially depressed to enable the motors. While partially depressed, with the motors on, press and hold the 'Press and hold to move' button. Hold until all axis are at or as close as possible to 0.000 then press Synchronize.



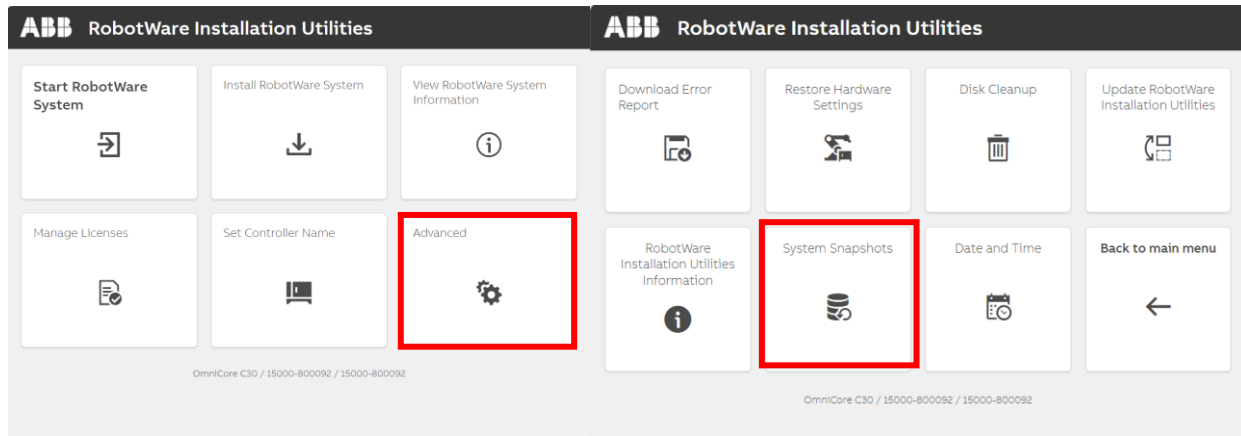
1.3: Take System Snapshot

Ensure all programs have been closed and Mode is still set to Manual. Navigate to Home / Settings / Backup & Recovery / Robot Ware Installation Utilities and click Start Installer.

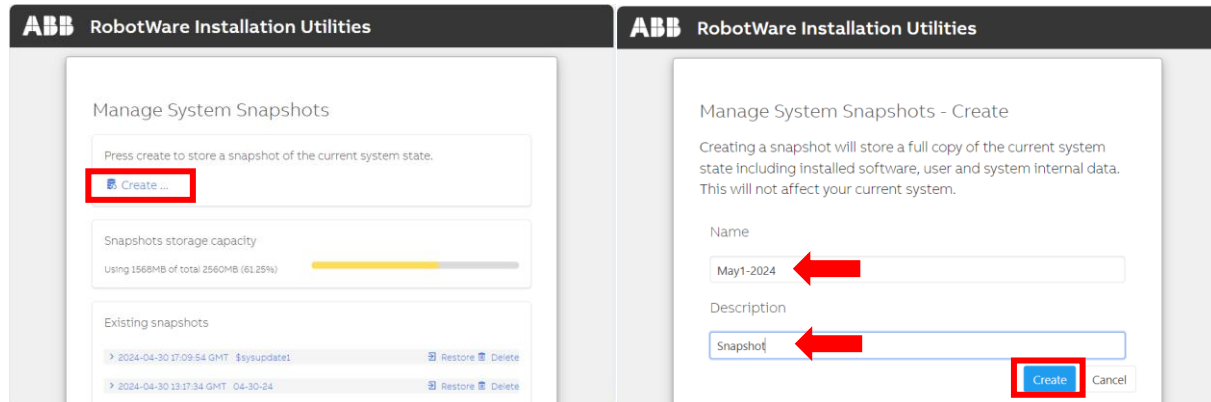


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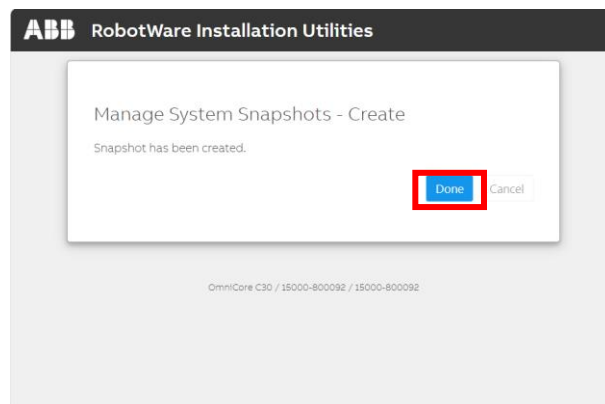
A popup will be presented notifying that the controller will be restarted and the current system deactivated. Click OK. The controller will restart and the RobotWare Installation Utilities menu will be displayed. Navigate to Advanced / System Snapshots.



To create a snapshot, click Create. Enter a name and description for the snapshot then click Create once again to save it.

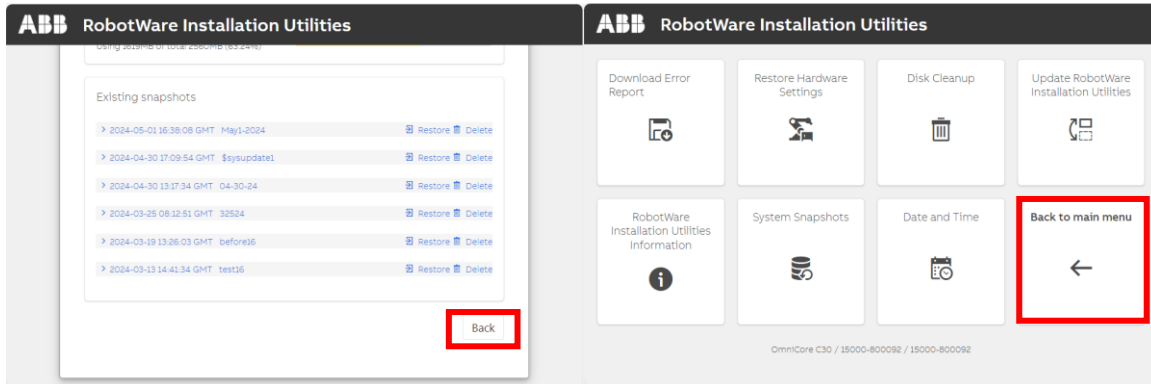


Once the snapshot has been saved successfully, click Done.



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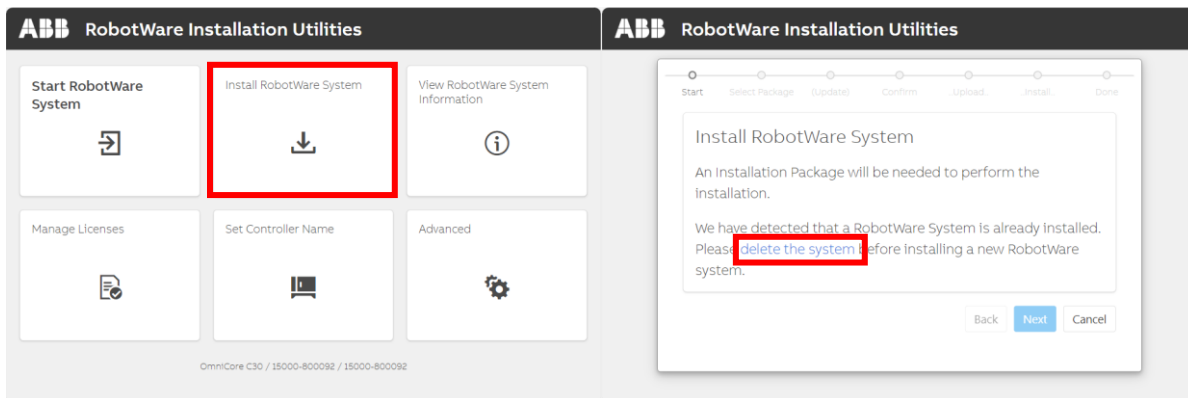
From the Manage System Snapshots menu, scroll down to select Back / Back to main menu to return to RobotWare Installation Utilities menu.



Section 2: Delete RobotWare System

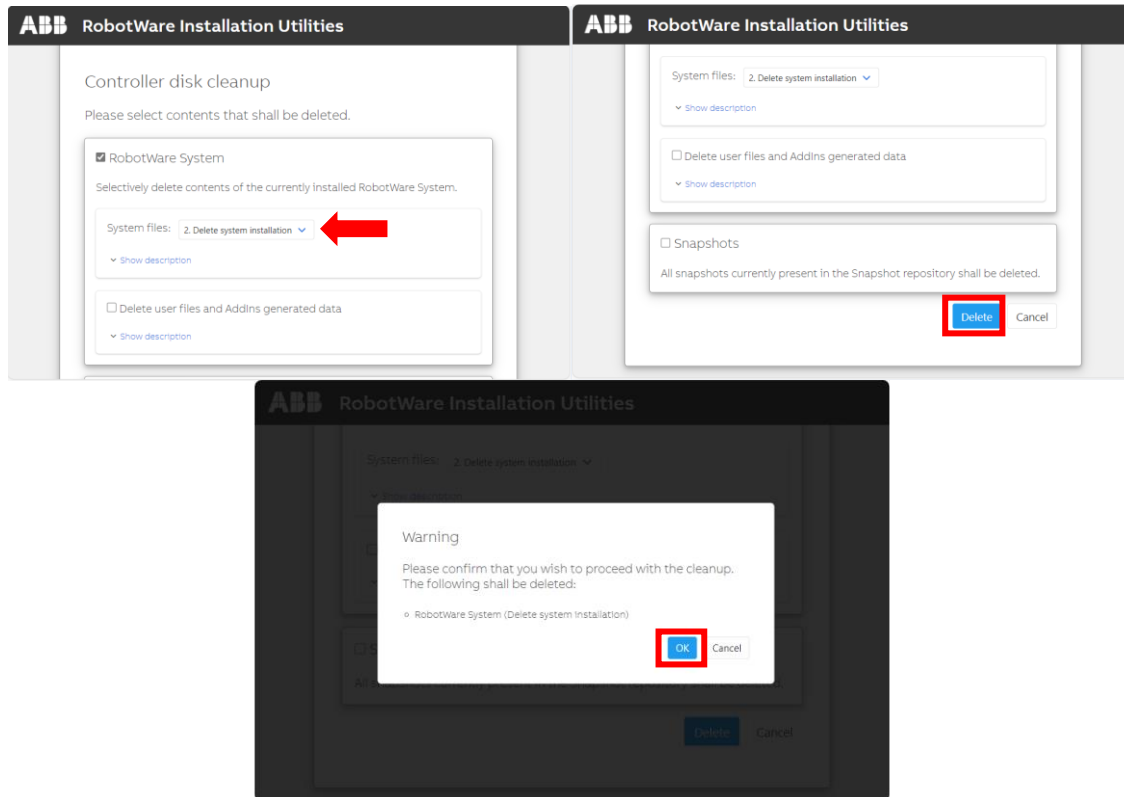
2.1: Delete Previous RobotWare System

From the main menu, select Install RobotWare System and select the linked text "delete the system".



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To delete the existing RobotWare System, under System Files specify option 2: Delete system installation. Leave all other options as default. Scroll down to press Delete and click OK to confirm.



Once the system has been cleaned up, click OK to continue.

Section 3: Install Licenses

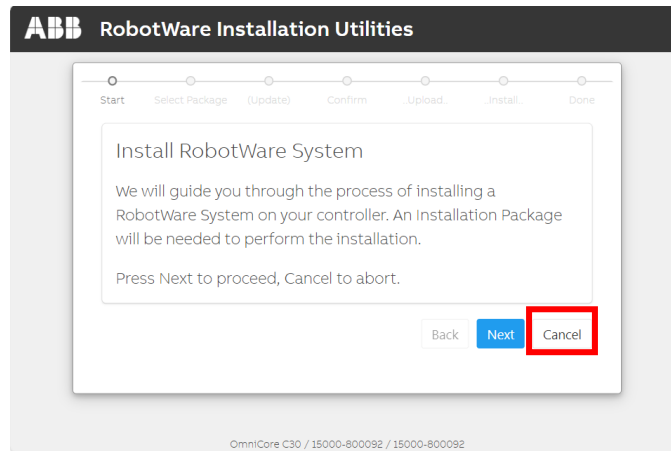
WARNING: DO NOT delete licenses on systems upgrading from Cooper App version 1.3 or newer. If system is running Cooper App 1.3 – 1.5.2., continue on to Section 4.

If unsure, what version of Cooper App you are upgrading from or if system is running with Cooper App 1.2 or older, send the backup saved in Section 1.1. to service_fortcollins@lincolnelectric.com to verify or request a new license. If a new license is required continue with the following steps, otherwise proceed to Section 4.

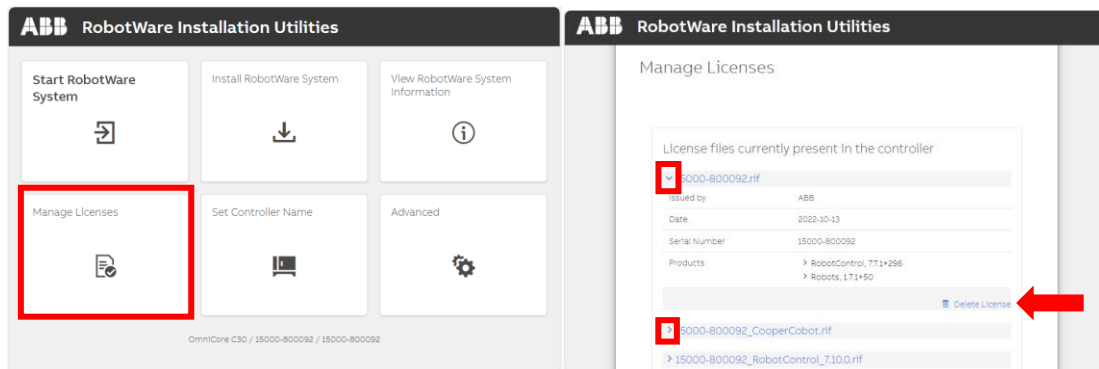
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3.1: Delete Existing Licenses

Once license files have been received, place them on a USB at the root level and insert the USB into the FlexPendant. Abort the install of the RobotWare System by clicking Cancel.



From the RobotWare Installation Utilities main menu, select Manage Licenses. The existing licenses will be listed. Select the arrow on the left side of each license to expand the information. In the bottom right, select Delete License. Expand and delete each of the four existing licenses.

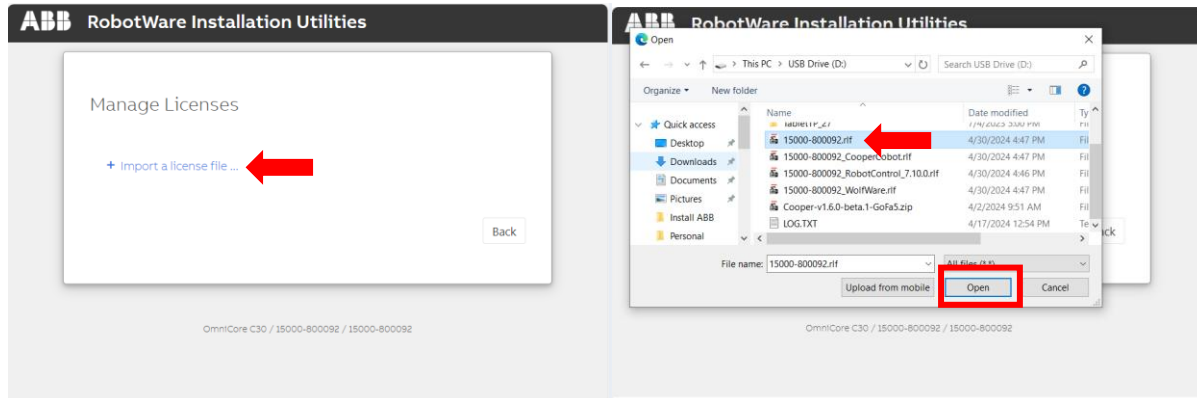


Once completed, there should be no licenses listed and the only option should be Import a license file.

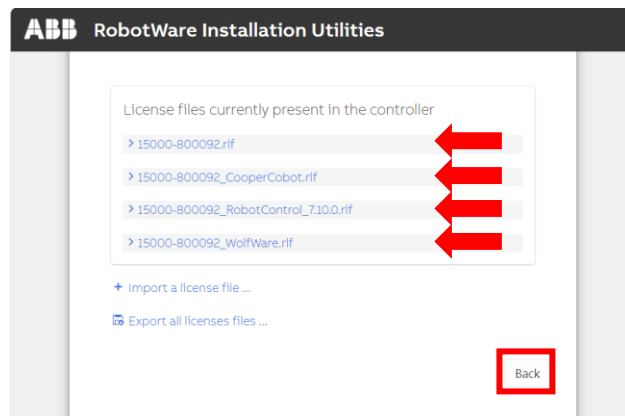
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3.2: Import New License Files

Select Import a license file. Navigate to (D:) and select one of the license files with the extension **.rif

 and Open it. Repeat this process for each of the four new licenses. Each of the licenses will begin with the serial number of the cobot. There will be one license named with just the serial number along with: CooperCobot, RobotControl, and WolfWare licenses.

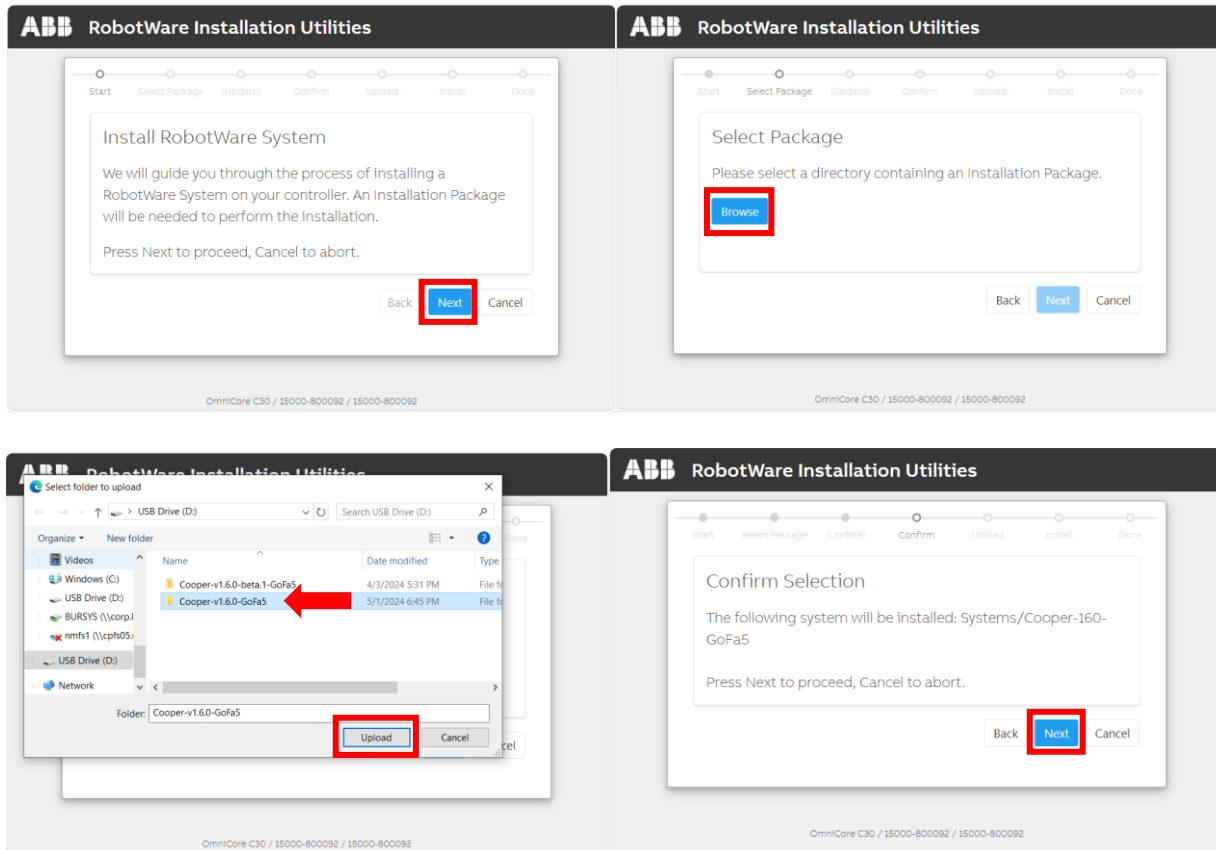
Once complete, all four license should now be listed. Select Back and from the main menu select Install RobotWare System.



Section 4: Install RobotWare System

4.1: Install RobotWare

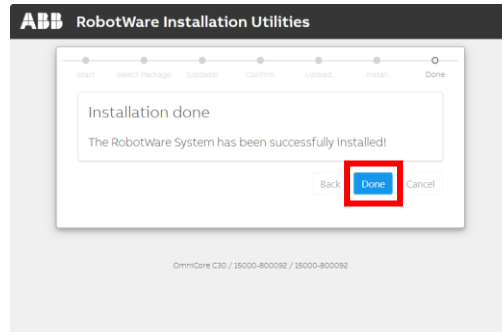
Download the Cooper App update from the website and extract folder to root level of USB. On the USB should be a folder titled: Cooper_vX.X.X-GoFaX. Insert USB to FlexPendant and press Next to install RobotWare System. Select Browse to find the folder and press Upload. You will be prompted to confirm the selection by clicking Next to begin the install.



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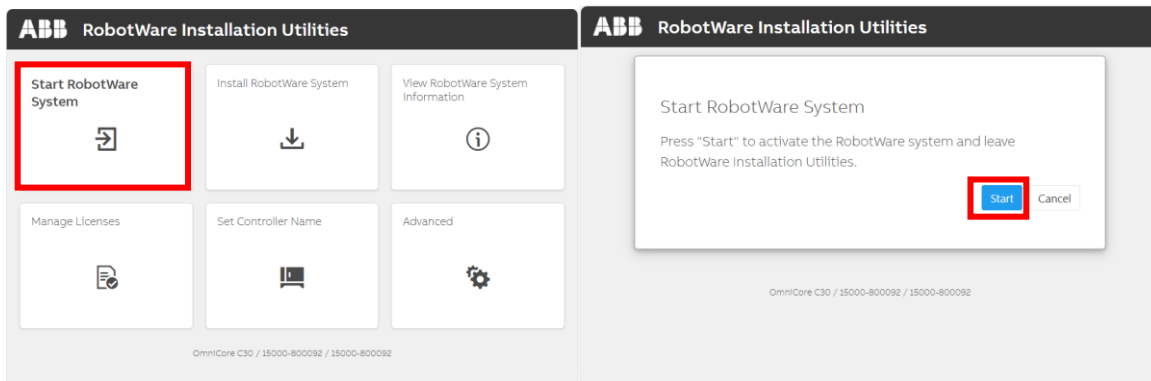
Note: If RobotWare Installation Utilities presents the message, "The controller contains no RobotWare System or current system is corrupted. Please install a new system before processing." Reattempt this step. If unsuccessful more than five times, contact support.

Once the installation has successfully completed, click Done.



4.2: Launch RobotWare System

From the main menu, select Start RobotWare System / Start. This will launch RobotWare and will restart the controller. This process will take several minutes.

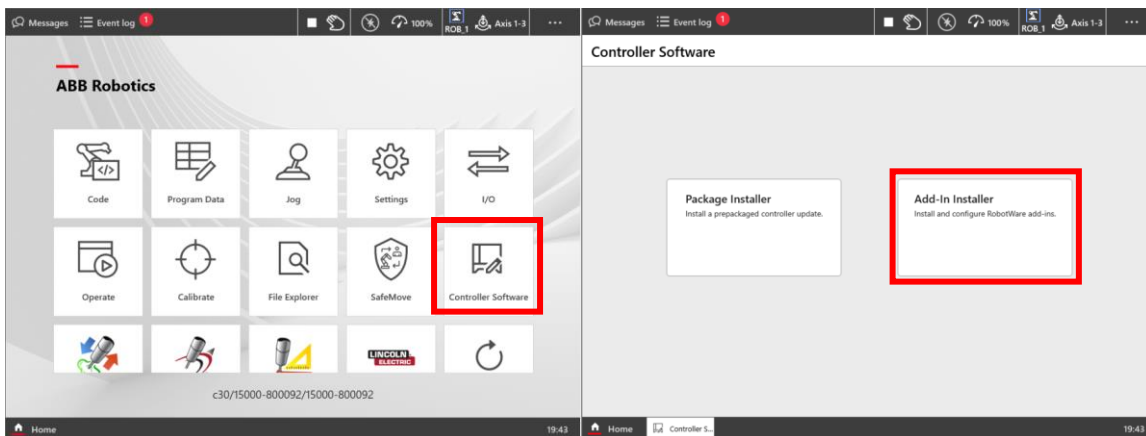


Note: If popup occurs for new FlexPendant version available, select Install.

Section 5: Cooper Option Configuration

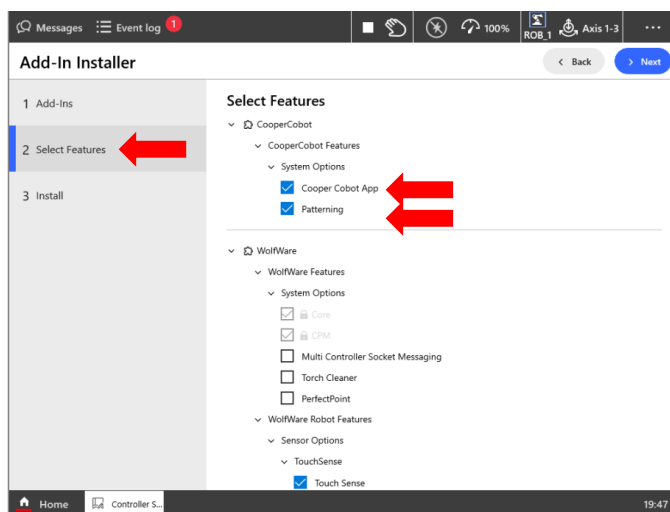
5.1: Select Cooper Options

Once the controller has restarted, specific Cooper App features will need to be selected. Navigate to Home / Controller Software / Add-in Installer.



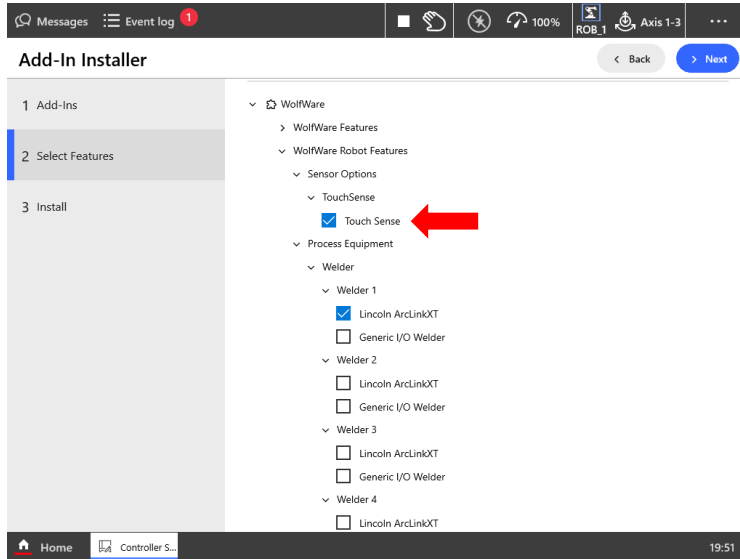
From the Select Features menu, ensure the following additional options are selected (do not uncheck any options that are already selected):

- CooperCobot / CooperCobotFeatures / System Options / Cooper Cobot App
- Patterning



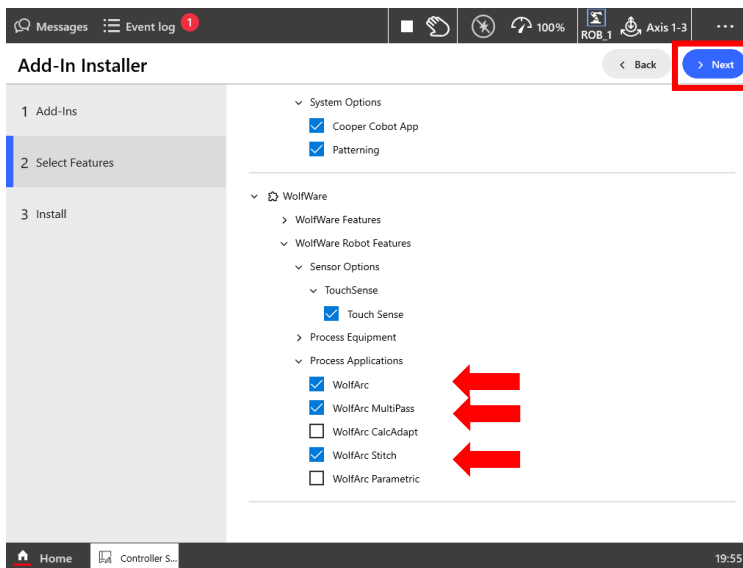
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WolfWare / WolfWare Robot Features / Sensor Options / Touch Sense / Touch Sense



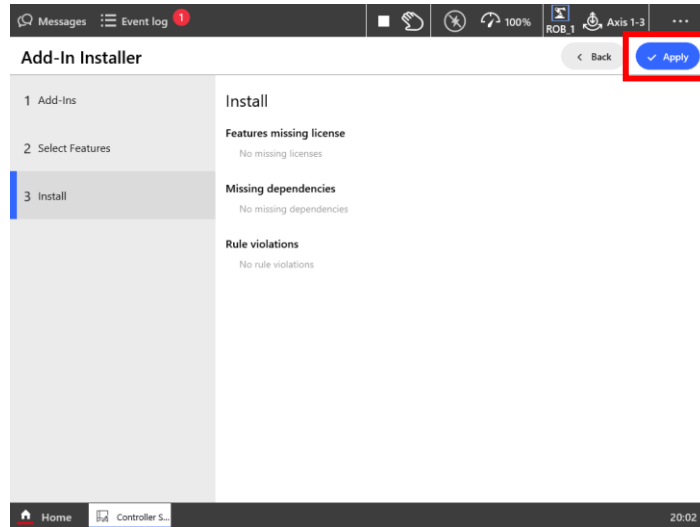
WolfWare / WolfWare Robot Features / Process Applications /
WolfArc
WolfArc Multipass
WolfArc Stitch

Then click Next.



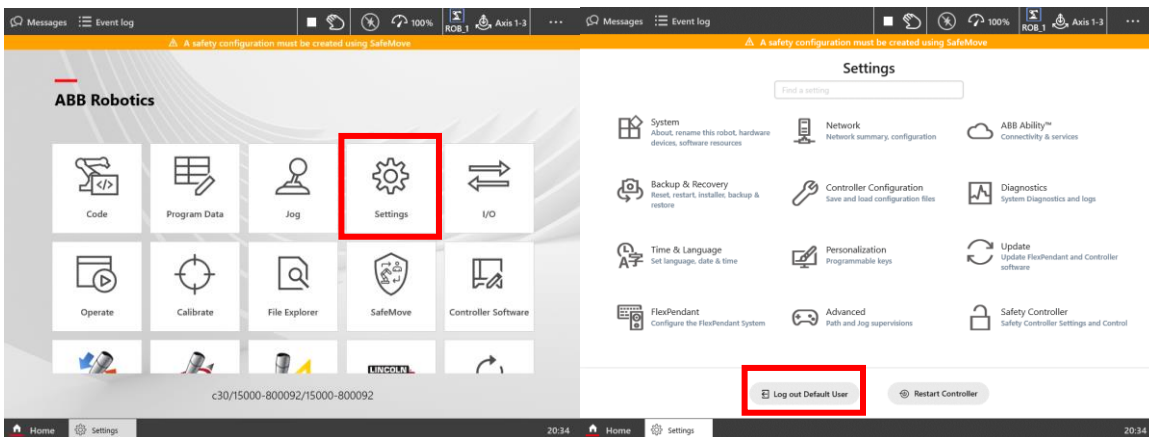
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If licenses are missing for any options that were selected, they will be displayed on the following screen. If you are missing any licenses related to the Cooper App, send backup taken in Section 1.1 to service and return to Section 3 to reinstall licenses. If no issues, click Apply to continue. Select Yes on the following popup to restart the controller and apply the changes.



5.2: Update Cooper App

Once controller has restarted, navigate to Settings / Logout as Default User.



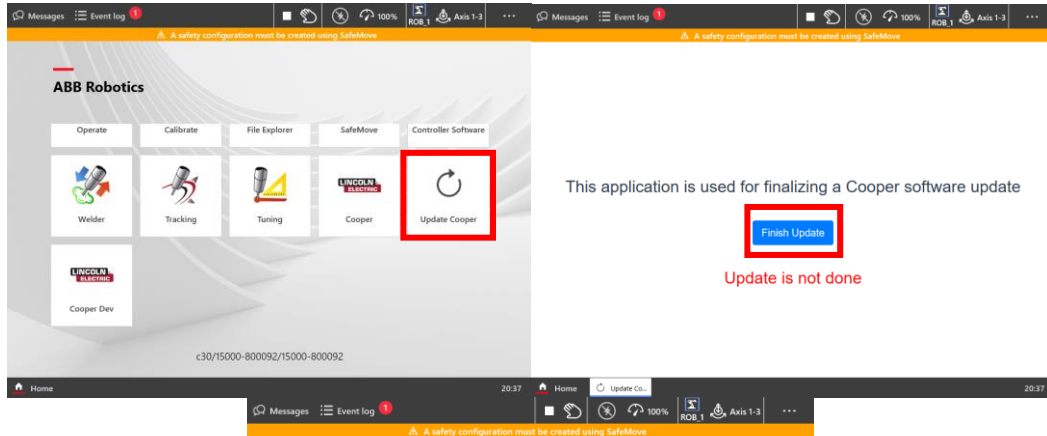
Log in with the credentials:

Username: Admin

Password: robotics

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Select the Home tab and select Update Cooper. Click Finish Update to apply the options selected in Section 5.1 to the app. Once complete, the screen will display the message 'Update is done!'



This application is used for finalizing a Cooper software update

Update is done!



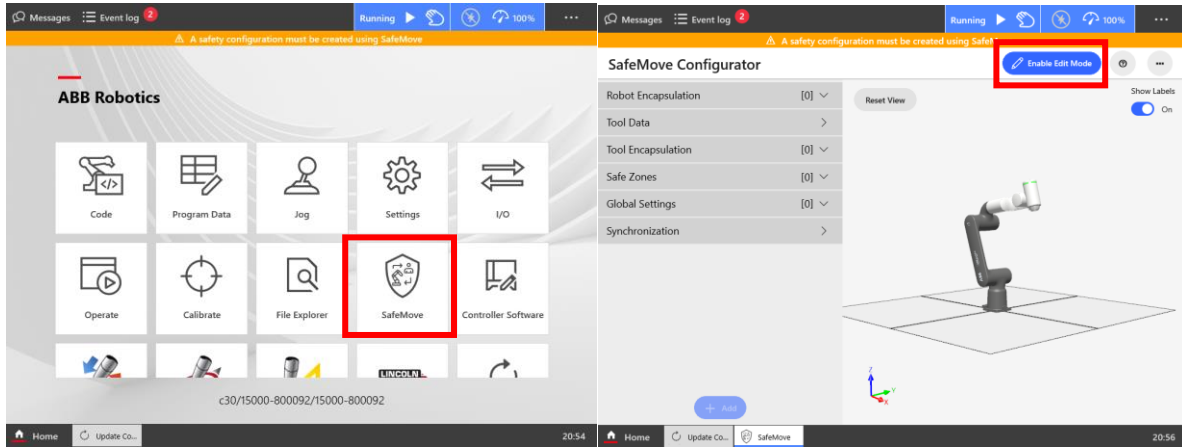
Section 6: Safety & FlexPendant Configuration

6.1: SafeMove Configuration

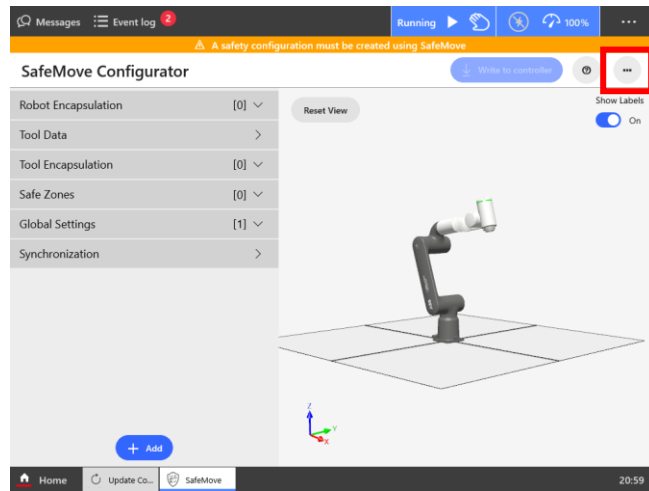
WARNING: Follow this update procedure exactly. Following the procedure eliminates the possibility of changing critical robot safety configurations. Knowingly changing any robot safety configuration places responsibility on the user for any detrimental or dangerous effects caused by the change.

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Navigate Home / SafeMove. Select Enable Edit Mode. From the popup, select the option “No, Start With Empty Configuration”.

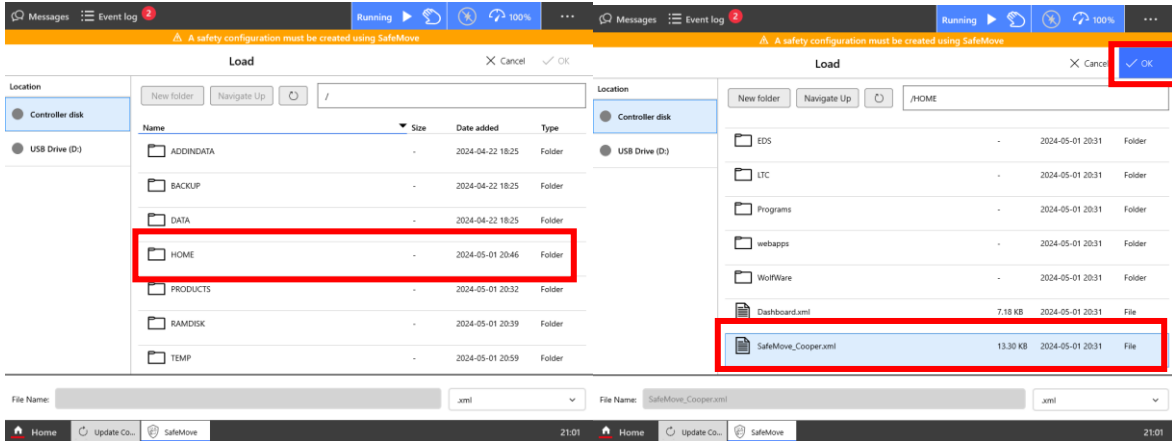


Select the three dots in the top right corner and from the dropdown list choose 'Load Configuration From File'.

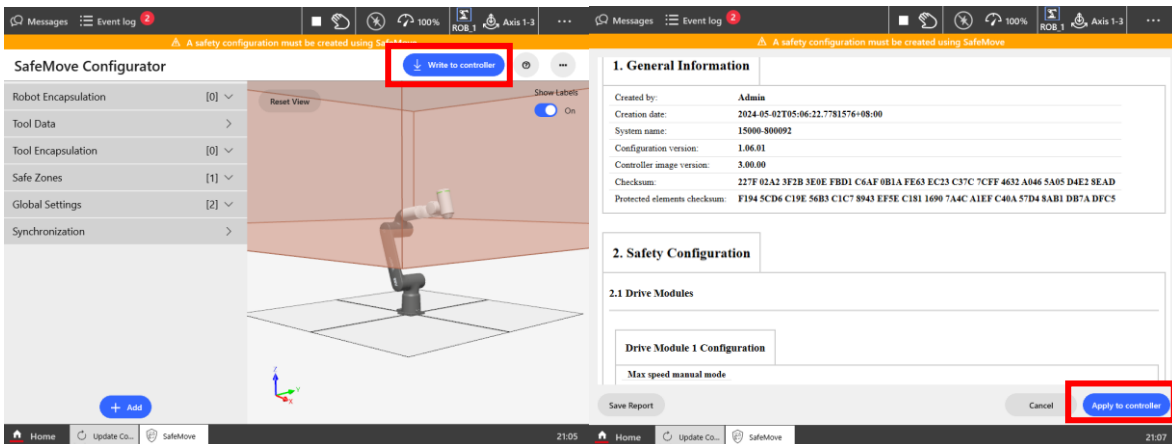


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Select HOME / SafeMove_Cooper.xml and click OK. When asked to proceed, click Yes.



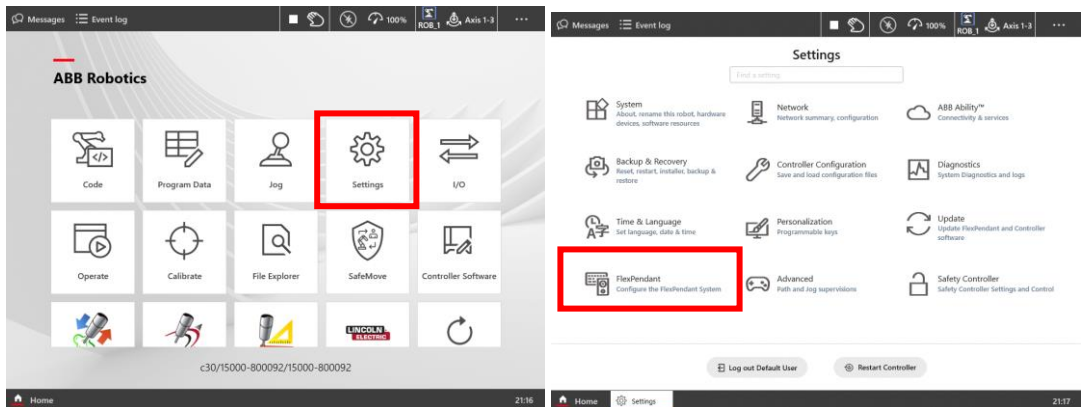
Select Write to Controller. The following screen will list all information related to the safety configuration. Select Apply to Controller. After being applied, you will be prompted to restart the controller. Select Restart Controller.



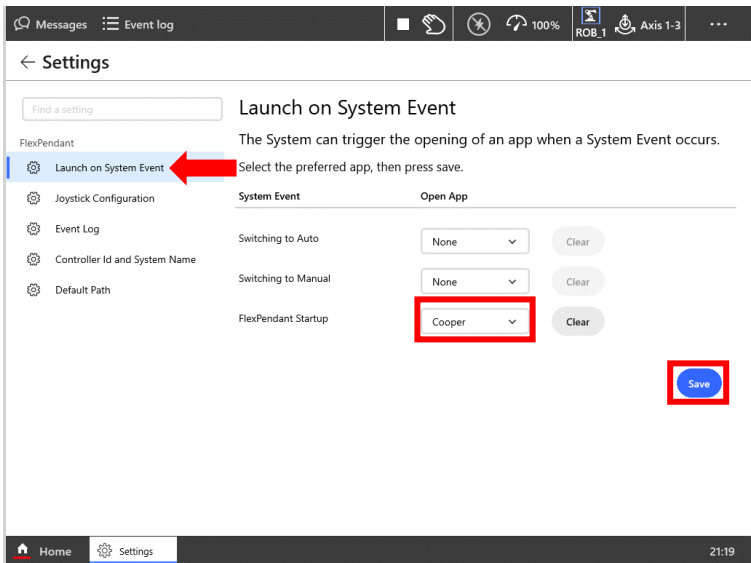
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6.2: FlexPendant Configuration

Navigate Home / Settings / FlexPendant.

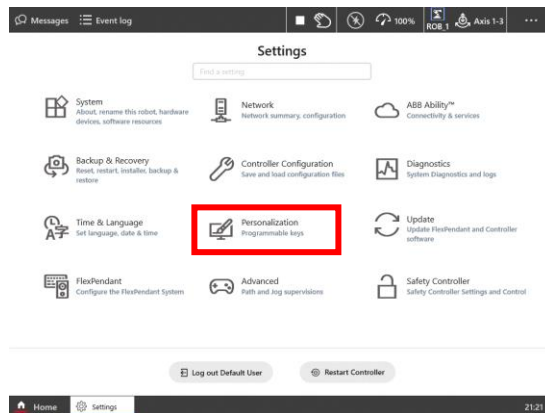


In Launch on System Event, set FlexPendant Startup to Cooper and click Save.



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Return to the Settings menu and select Personalization.



Click the arrow to expand Key 2. Set the information as follows and click Apply:

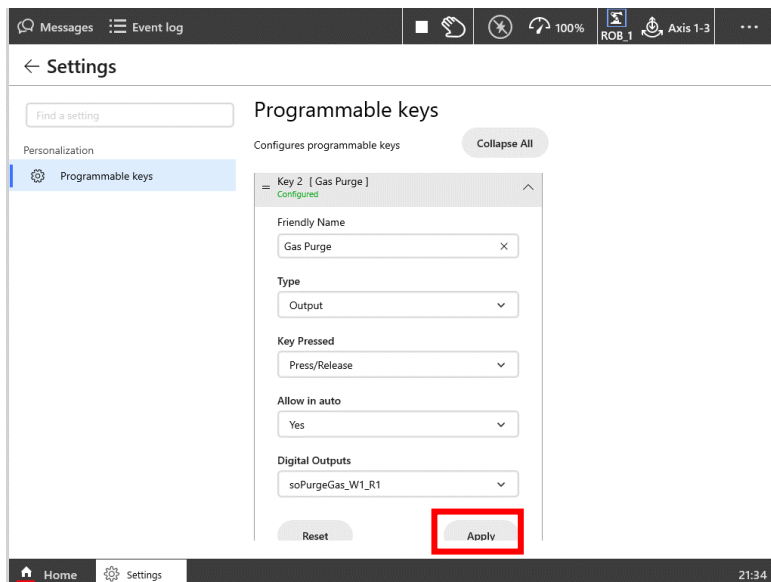
Friendly Name: Gas Purge

Type: Output

Key Pressed: Press/Release

Allow in Auto: Yes

Digital Outputs: soGasOn_W1_R1



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Click the arrow to expand Key 3. Set the information as follows and click Apply:

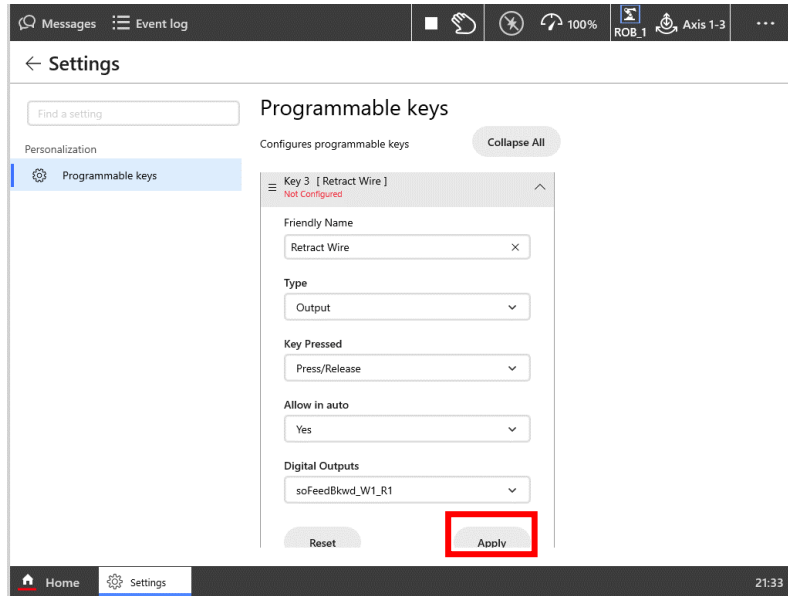
Friendly Name: Retract Wire

Type: Output

Key Pressed: Press/Release

Allow in Auto: Yes

Digital Outputs: soFeedBkwd_W1_R1



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Click the arrow to expand Key 4. Set the information as follows and click Apply:

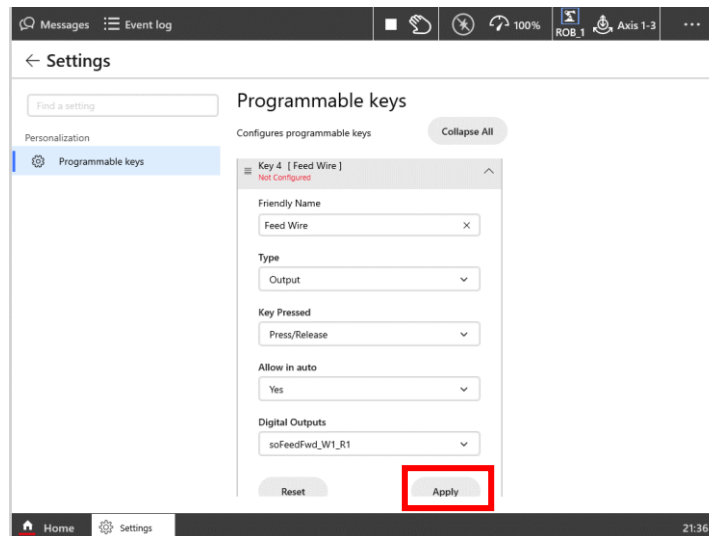
Friendly Name: Feed Wire

Type: Output

Key Pressed: Press/Release

Allow in Auto: Yes

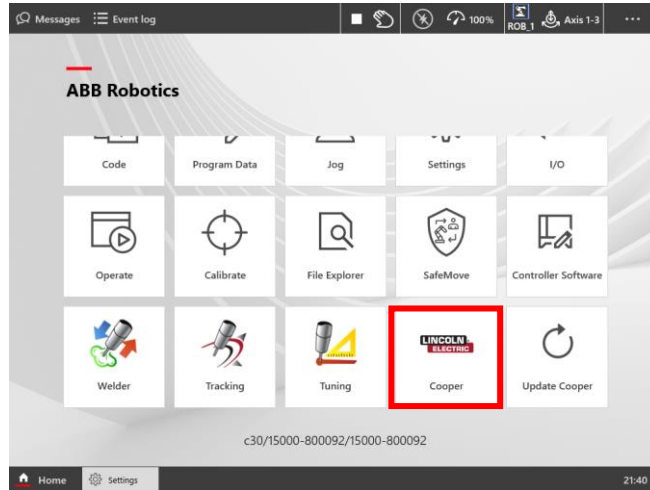
Digital Outputs: soFeedFwd_W1_R1



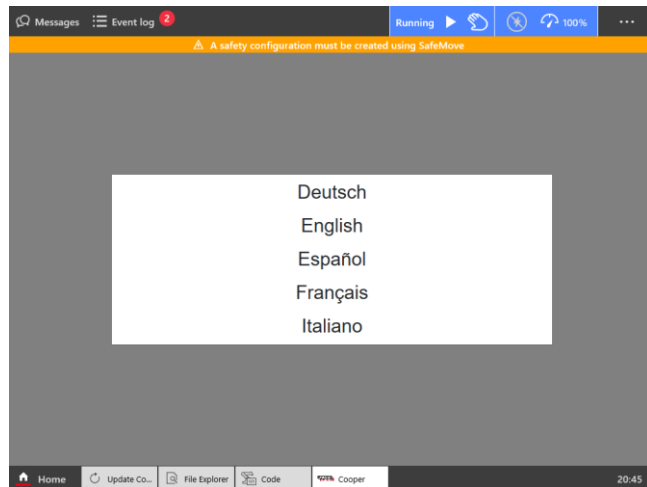
Section 7: Launch Cooper App

7.1: Setup Cooper App

Navigate Home / Cooper.

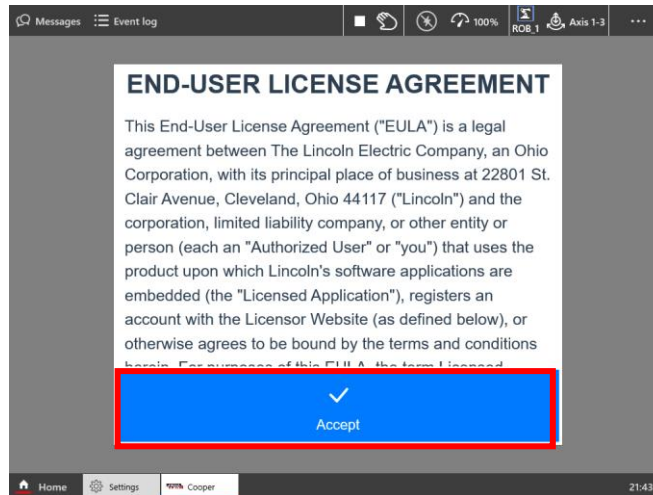


Select the language for the Cooper App.

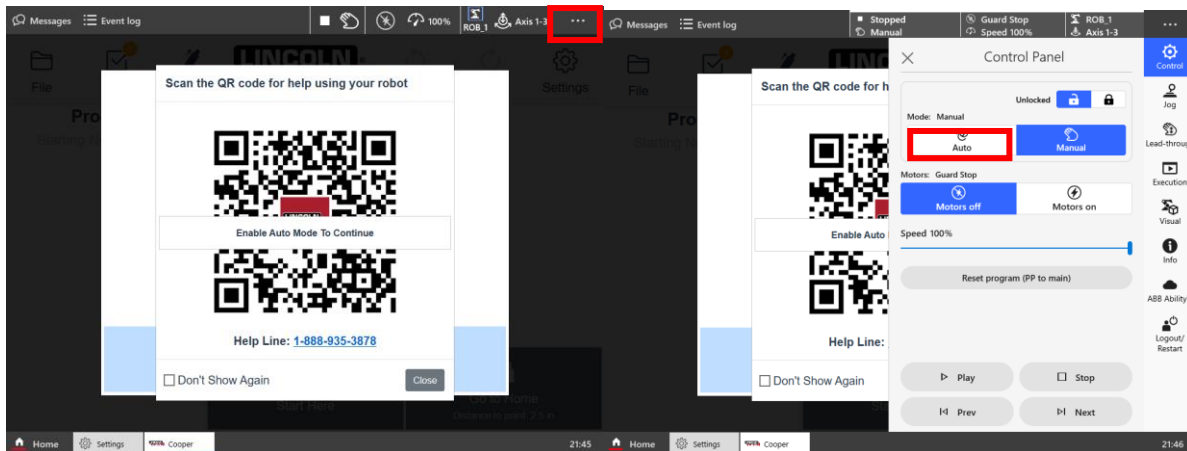


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Read the End User License Agreement and click Accept.

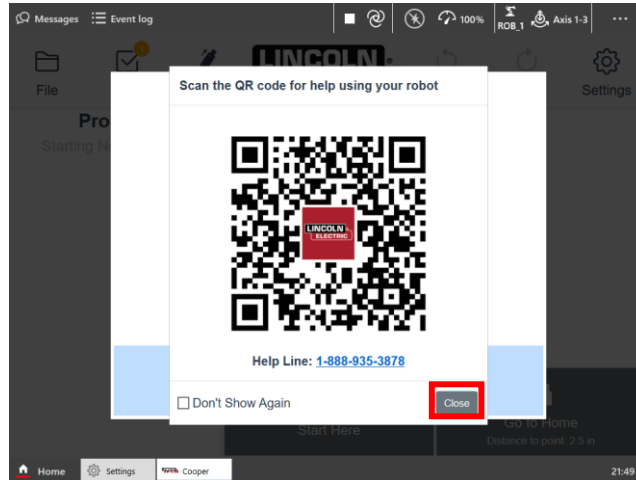


Re-enable Auto Mode by selecting the 3 dots in the top right and change Mode to Auto. Click Confirm and Acknowledge. Click the 3 dots again to close the right side menu.

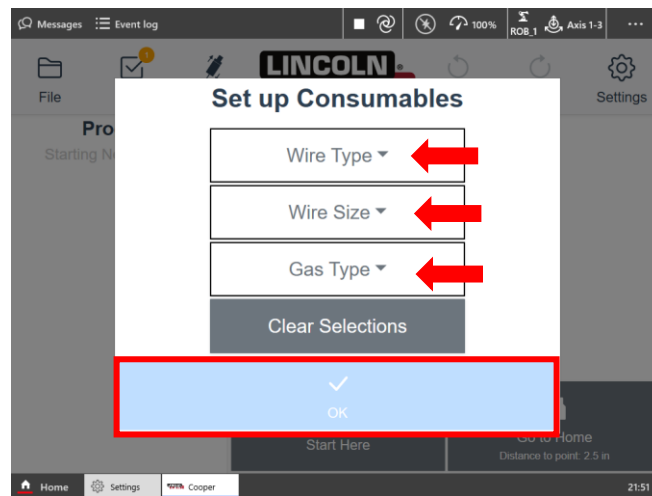


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Scanning the following QR code will redirect you to tutorials and resources for the Cooper App. Click Close to continue.



Reload weld-by-number sets by selecting consumables. Select the Wire Type, Wire Size, and Gas Type being used for the system. The corresponding weld-by-numbers weld parameters will automatically be loaded into the application. Once your selections have been made, click OK.



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You have successfully update the Cooper App!

