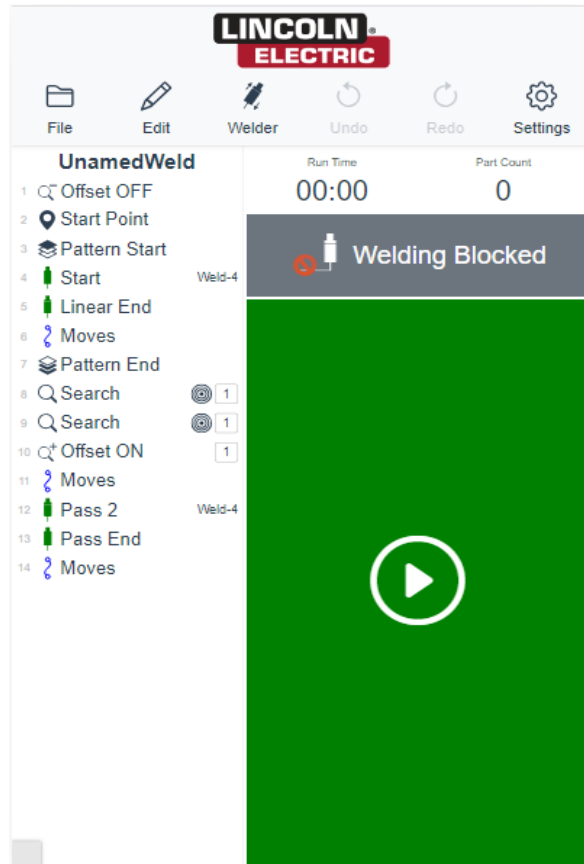


# Cooper™ App CRX Software Update Guide



## TABLE OF CONTENTS

|  |           |
|--|-----------|
| <b>TABLE OF CONTENTS</b> .....                                 | <b>2</b>  |
| <b>Section 1: Prerequisites</b> .....                          | <b>3</b>  |
| <b>Section 2: Uninstalling Previous App Version</b> .....      | <b>3</b>  |
| 2.1: Cooper App Background Logic STOP .....                    | 3         |
| 2.2: Cooper App Plug-In Uninstall.....                         | 4         |
| 2.3: FANUC App – Cache Clear .....                             | 5         |
| <b>Section 3: IO Setup</b> .....                               | <b>6</b>  |
| 3.1: Configure Virtual IO .....                                | 6         |
| <b>Section 4: Cooper App Install &amp; Configuration</b> ..... | <b>9</b>  |
| 4.1: Cooper App Plug-In Install .....                          | 9         |
| 4.2: Cooper App Setup & Preferences.....                       | 11        |
| 4.3: Cooper App Background Logic RUN .....                     | 13        |
| <b>Section 5: Launch Cooper App</b> .....                      | <b>15</b> |
| 5.1: Open Cooper App .....                                     | 15        |

# Section 1: Prerequisites

Ensure that the following prerequisites have been met before continuing with the update procedure.

1. The robot must have previously been set up with standard IO configuration to support the welder and payload data for the torch.
2. The robot must be loaded with FANUC software release V9.40/P57 and Tablet TP Android App Software – V1.31
3. The robot must have options R796 (Ascii Program Loader) and R632 (KAREL) authorized and installed. R877 (Thick Plate Weld Pkg) is required if Thru-Arc Seam Tracking or Multi-pass welding will be licensed.

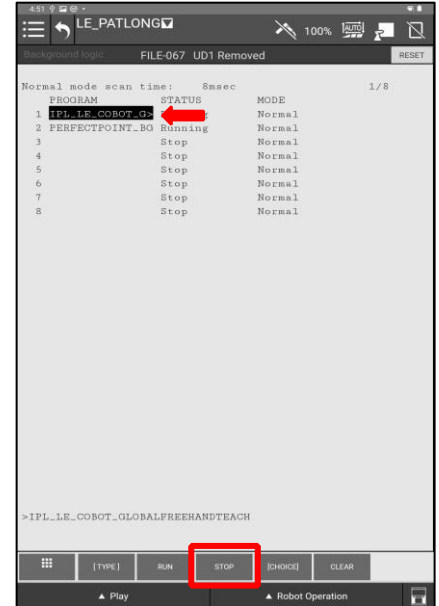
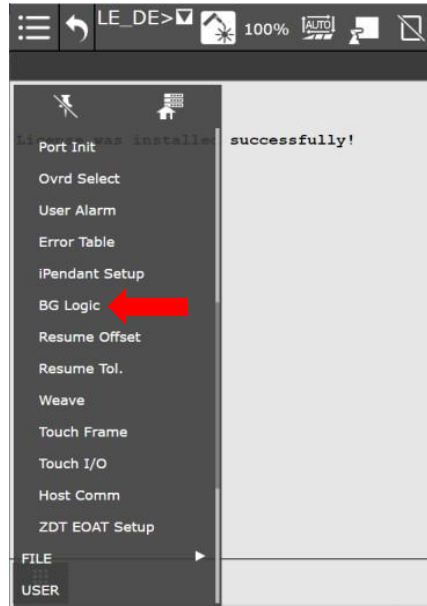
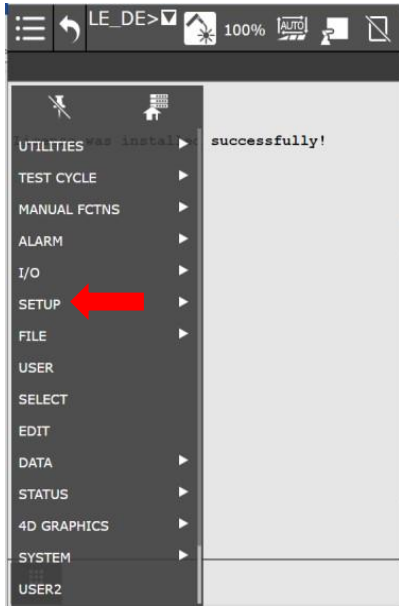
# Section 2: Uninstalling Previous App Version

## 2.1: Cooper App Background Logic STOP

First step in the software update process is to STOP the Cooper App Background Logic to allow for an all-inclusive uninstallation of the older version of the Cooper App.

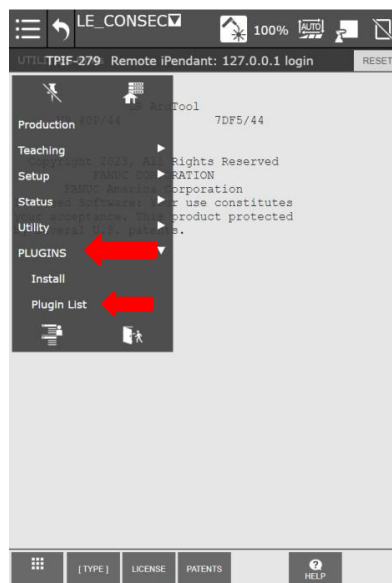
From the extended version of the FANUC left side dropdown, navigate to SETUP / BG Logic. From the BG Logic Screen, select each program with the prefix IPL\_LE\_COBOT to highlight it, and then press the STOP button. There should be NO programs with the prefix IPL\_LE\_COBOT running.

# Cooper App Plugin Update Manual



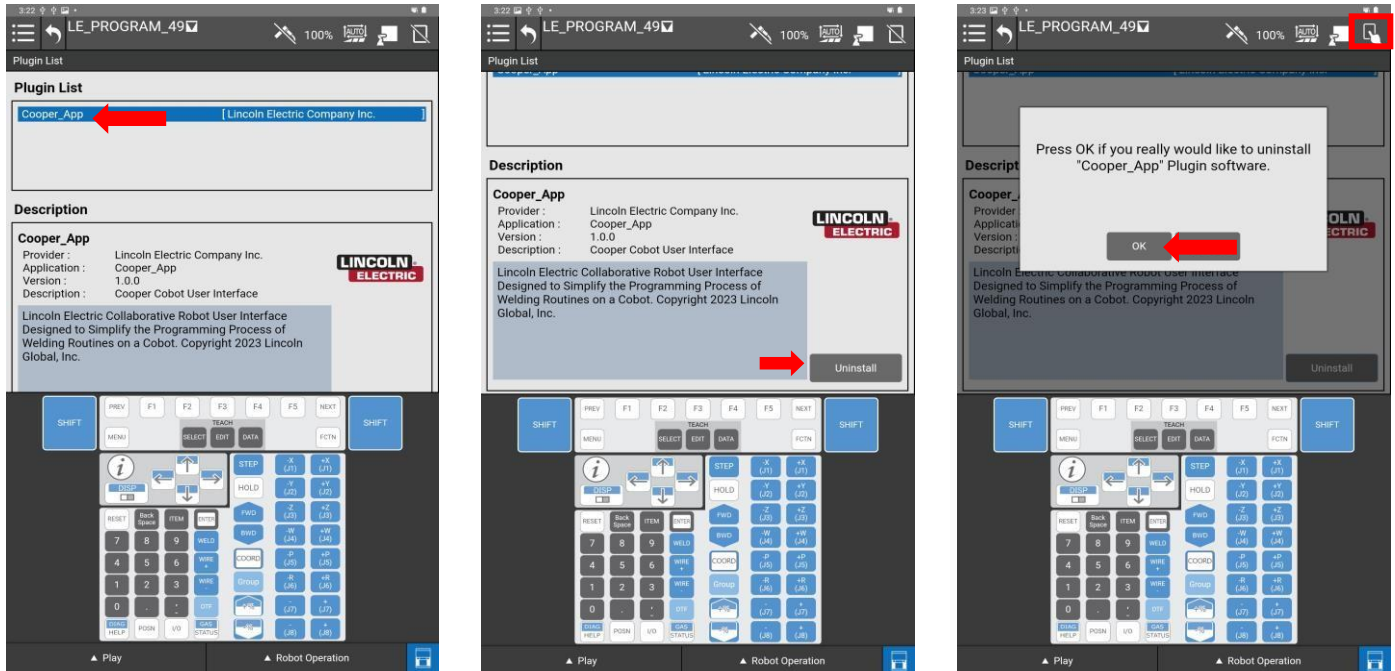
## 2.2: Cooper App Plug-In Uninstall

From the FANUC reduced version of the dropdown navigate to PLUGINS / Plugin List.



## Cooper App Plugin Update Manual

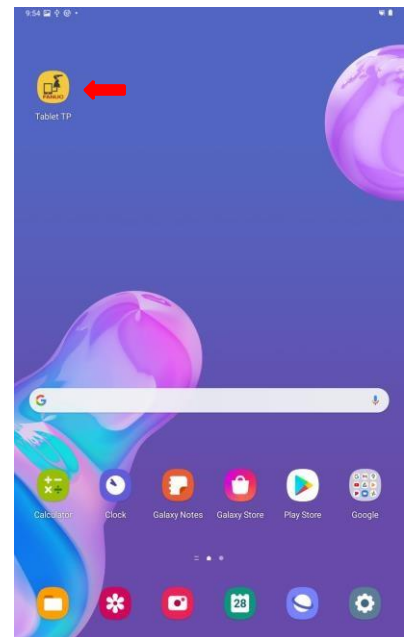
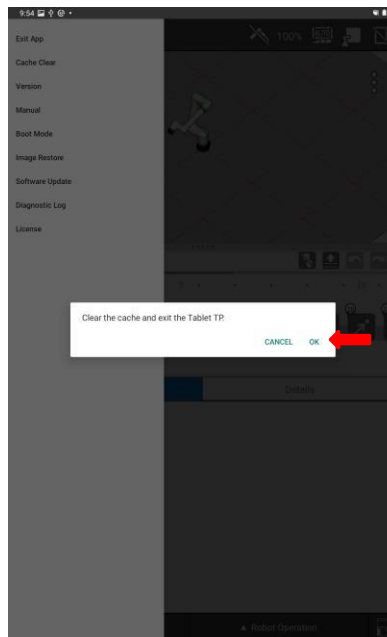
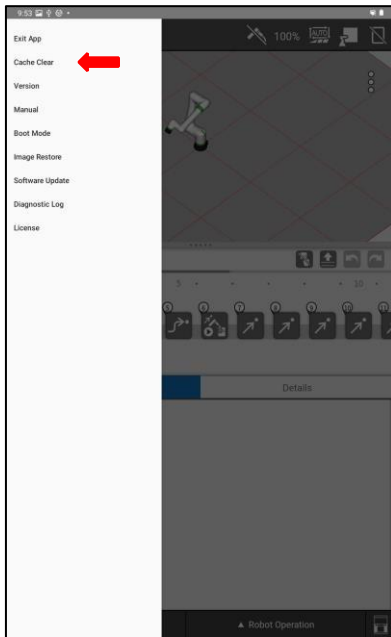
From the FANUC Plugin List ensure that Cooper\_App is highlighted. Scroll down on the page until the Uninstall button is shown. Click on “Uninstall” and then OK on the pop-up to confirm the uninstallation of the Cooper App. Note, the teach pendant will need to be enabled. Cycle power on the controller one the app has successfully been uninstalled by manually switching the controller off then turning it back on.



## 2.3: FANUC App – Cache Clear

From within the FANUC Timeline application swipe the screen from the left to the right to expose the Clear Cache option. Press the Cache Clear button and then OK. Once the cache is cleared, the FANUC Timeline application will close and you will be required to restart the FANUC Application.

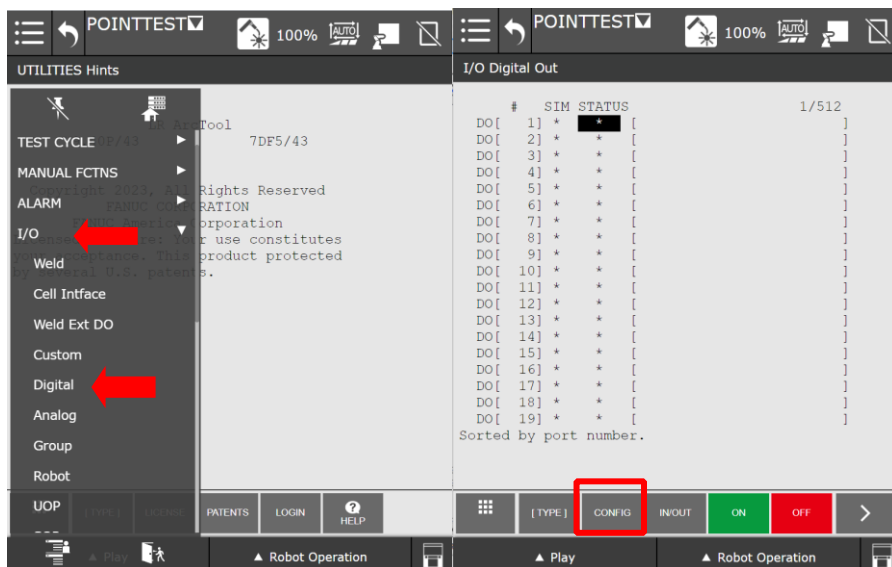
# Cooper App Plugin Update Manual



## Section 3: IO Setup

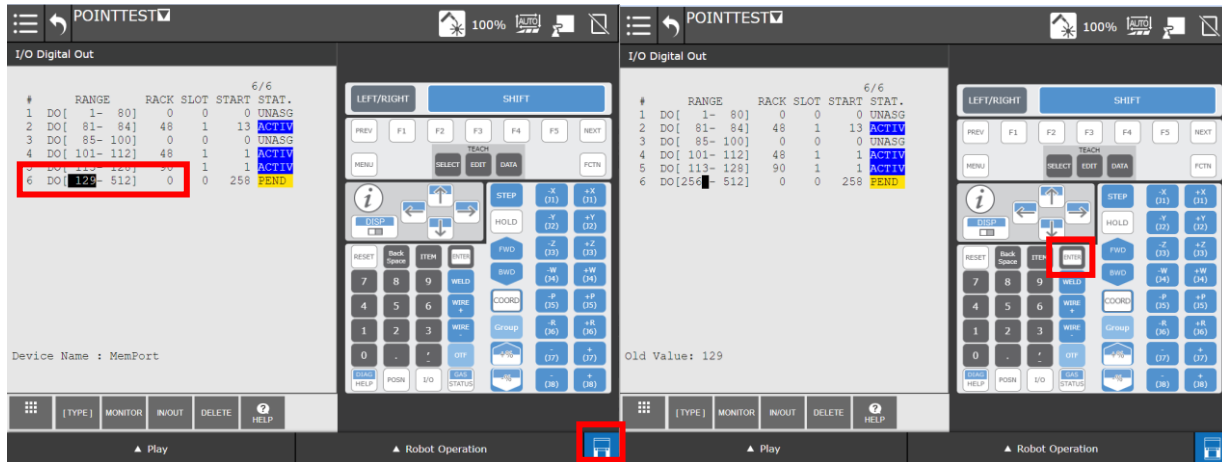
### 3.1: Configure Virtual IO

From the expanded version of the FANUC dropdown menu, navigate to IO / Digital. Select CONFIG.

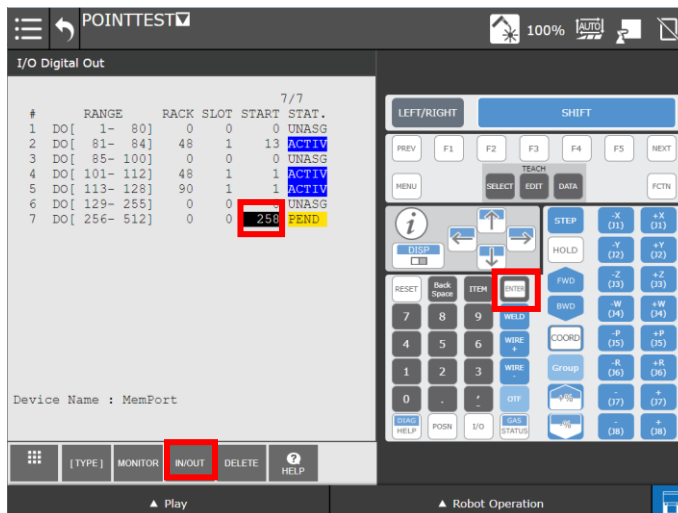


## Cooper App Plugin Update Manual

Select the last range of DO's and if not already, set the range from 256 – 512. To set the range, select the first number of the last range. Open the legacy TP and verify you are still on the same screen. If needed navigate back to CONFIG. Using the number keys enter the value to be 256 and press ENTER. The last range should now read [256 – 512].

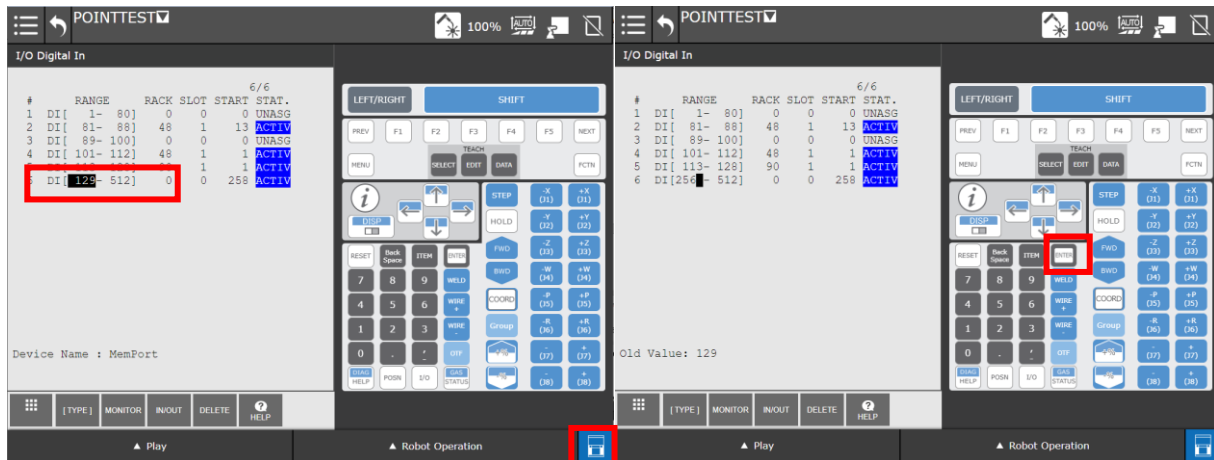


Select the 'START' value. Using the number keys on the legacy TP set the value to 258 and press ENTER. Select IN/OUT to switch over to the DI's.

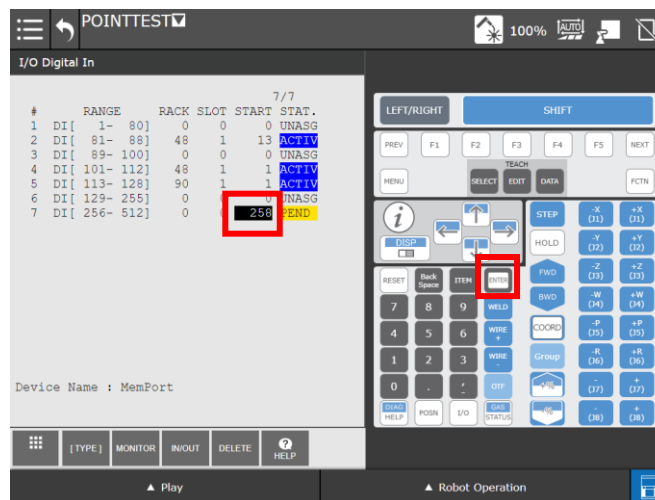


## Cooper App Plugin Update Manual

Select the last range of DI's and if not already, set the range from 256 – 512. To set the range, select the first number of the last range. Open the legacy TP and verify you are still on the same screen. If needed navigate back to CONFIG. Using the number keys enter the value to be 256 and press ENTER. The last range should now read [256 – 512].



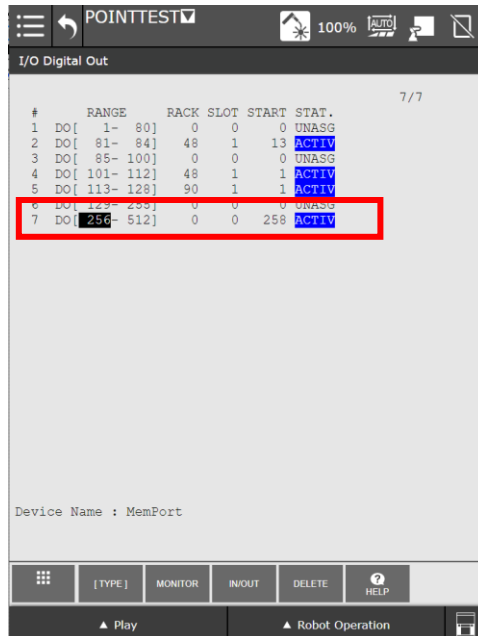
Select the 'START'. Using the number keys on the legacy TP set the value to 258 and press ENTER. Cycle power on the controller to apply the changes.





## Cooper App Plugin Update Manual

Once the controller has restarted, navigate back to IO / Digital. Select CONFIG and verify that the changes have been applied. The STAT. of DO & DI [256 – 512] should now be set to ACTIVE.

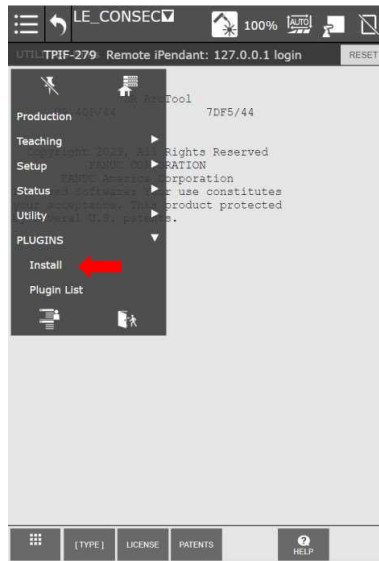


## Section 4: Cooper App Install & Configuration

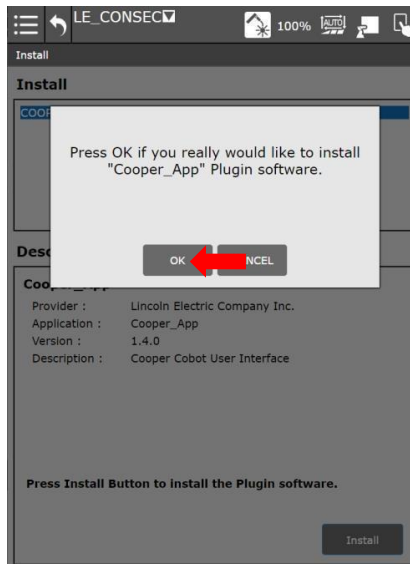
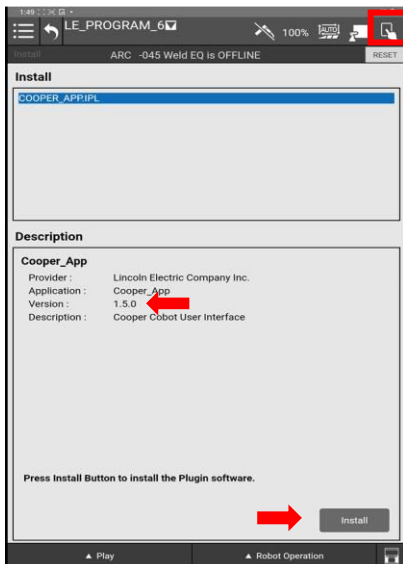
### 4.1: Cooper App Plug-In Install

Insert a USB drive with the file Cooper\_App.ipl in it. The Cooper\_App.ipl should be at the root level and not located within a folder. It should be named exactly 'Cooper\_App.ipl'. If multiple copies of the app have been downloaded i.e. Cooper\_App(1).ipl, please rename the file and ensure there are NO spaces in the name. From the FANUC reduced version of the dropdown, navigate to PLUGINS / Install.

# Cooper App Plugin Update Manual



Verify that the version of the software to be installed is correct by referencing the Description -> Version. Once confirmed press Install -> OK buttons and wait for the install to complete. Note, the teach pendant will need to be enabled. The installation process will take a few minutes (5 – 10). The message "Plugin software successfully installed!" will be shown if successful. Cycle power on the controller by manually switching the controller off then turning it back on.

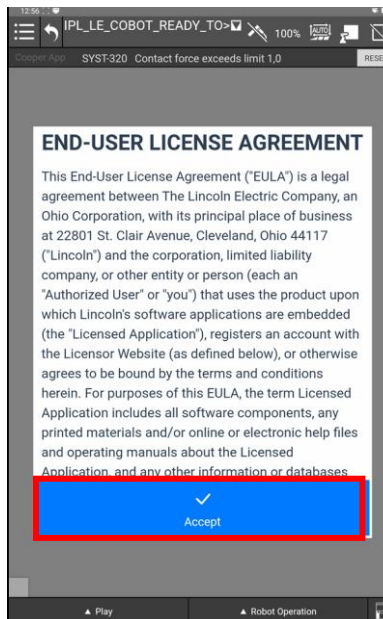


### 4.2: Cooper App Setup & Preferences

Following power cycle, the Cooper App will automatically be launched on restart. First, select the language you would like the app to be displayed in.

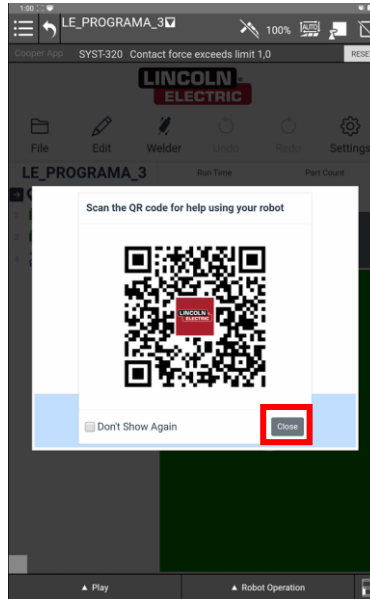


Once select, you will be presented with the End-User License Agreement. Please read the terms outlined and click Accept.

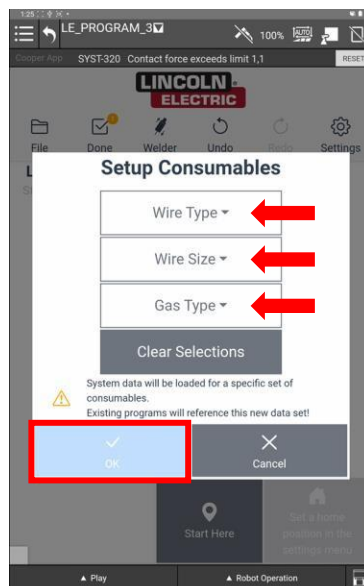


## Cooper App Plugin Update Manual

Once accepted, you will be presented with a QR code that when scanned will redirect you to tutorial videos, manuals, and other resources for your Cooper Cobot system. Click Close to continue.

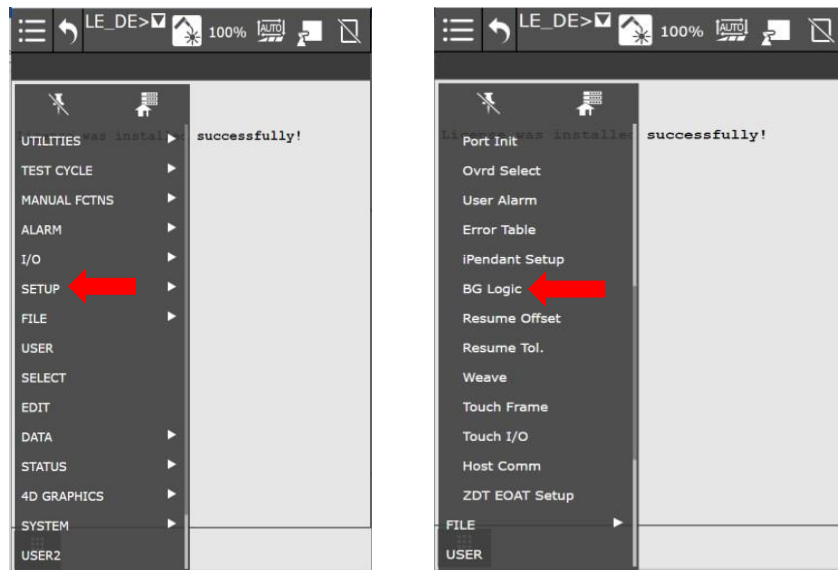


Finally, you will be prompted to reselect your consumables. Select the appropriate Wire Type, Wire Size, and Gas Type present on your system. If your exact combination is not available, please select the closest alternative combination. Once, consumables have been selected, press OK to load in the weld-by-number weld database. This process will take approximately 5-10 minutes to complete.



## 4.3: Cooper App Background Logic RUN

From the expanded version of the FANUC dropdown menu, navigate to SETUP / BG Logic.



From the BG Logic Screen select each program with the prefix IPL\_LE\_COBOT to highlight it then press the RUN button to restart the program. Verify that each of the following BG Logic programs are all running: IPL\_LE\_COBOT\_FREEHANDTEACH, IPL\_LE\_COBOT\_SEARCHEXTERR, and if system has a wire break torch IPL\_LE\_COBOT\_WIREBREAKWITHFEED or IPL\_LE\_COBOT\_WIREBREAK. **All programs with the prefix IPL\_LE\_COBOT that have STATUS set to Running.**

# Cooper App Plugin Update Manual

Background logic

| PROGRAM          | STATUS | MODE   |
|------------------|--------|--------|
| 1 IPL_LE_COBOT_G | Stop   | Normal |
| 2                | Stop   | Normal |
| 3                | Stop   | Normal |
| 4                | Stop   | Normal |
| 5                | Stop   | Normal |
| 6                | Stop   | Normal |
| 7                | Stop   | Normal |
| 8                | Stop   | Normal |

>IPL\_LE\_COBOT\_GLOBALFREEHANDTEACH

[TYPE] **RUN** STOP [CHOICE] CLEAR

Background logic

| PROGRAM          | STATUS  | MODE   |
|------------------|---------|--------|
| 1 IPL_LE_COBOT_G | Running | Normal |
| 2                | Stop    | Normal |
| 3                | Stop    | Normal |
| 4                | Stop    | Normal |
| 5                | Stop    | Normal |
| 6                | Stop    | Normal |
| 7                | Stop    | Normal |
| 8                | Stop    | Normal |

>IPL\_LE\_COBOT\_GLOBALFREEHANDTEACH

[TYPE] RUN STOP [CHOICE] CLEAR

## Section 5: Launch Cooper App

### 5.1: Open Cooper App

From the FANUC reduced version of the dropdown navigate to PLUGINS and click on the Cooper\_App plugin to start the application. This will initiate the start-up process and present you with the Cooper App.

