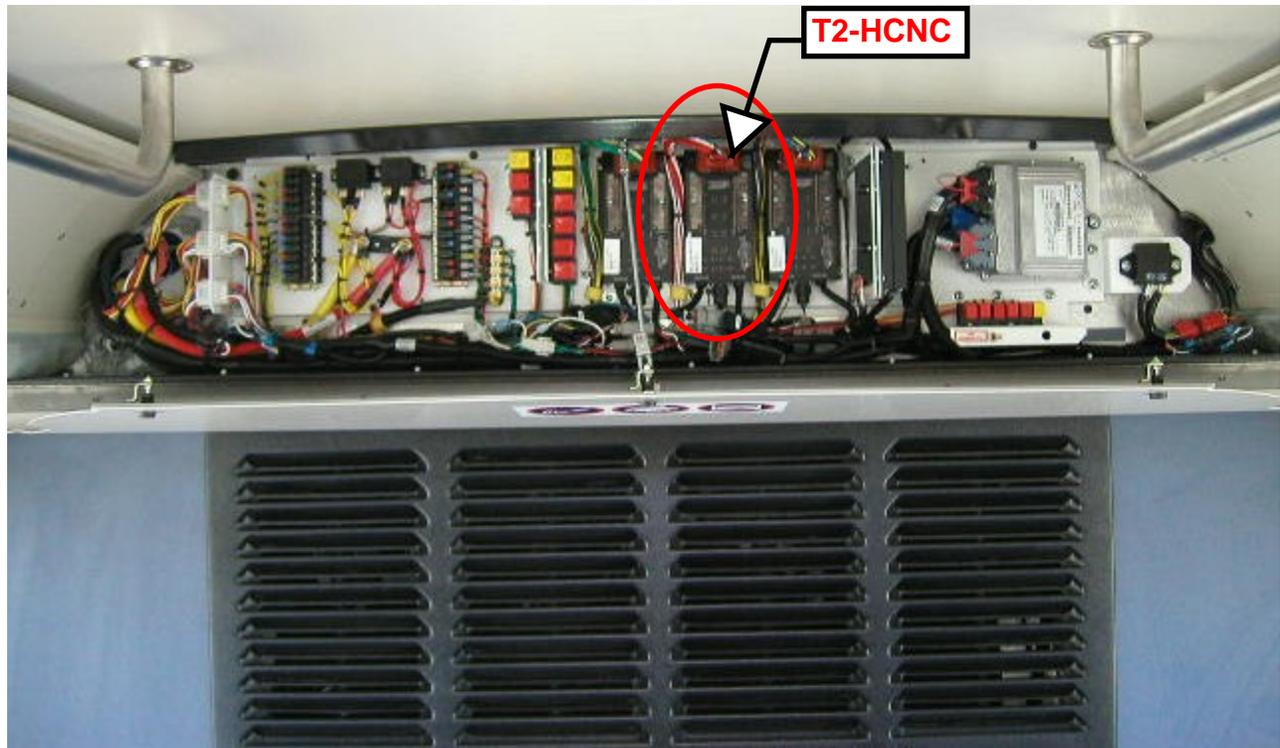


Gillig FMVSS Campaign Dinex module download instructions July 09, 2018.

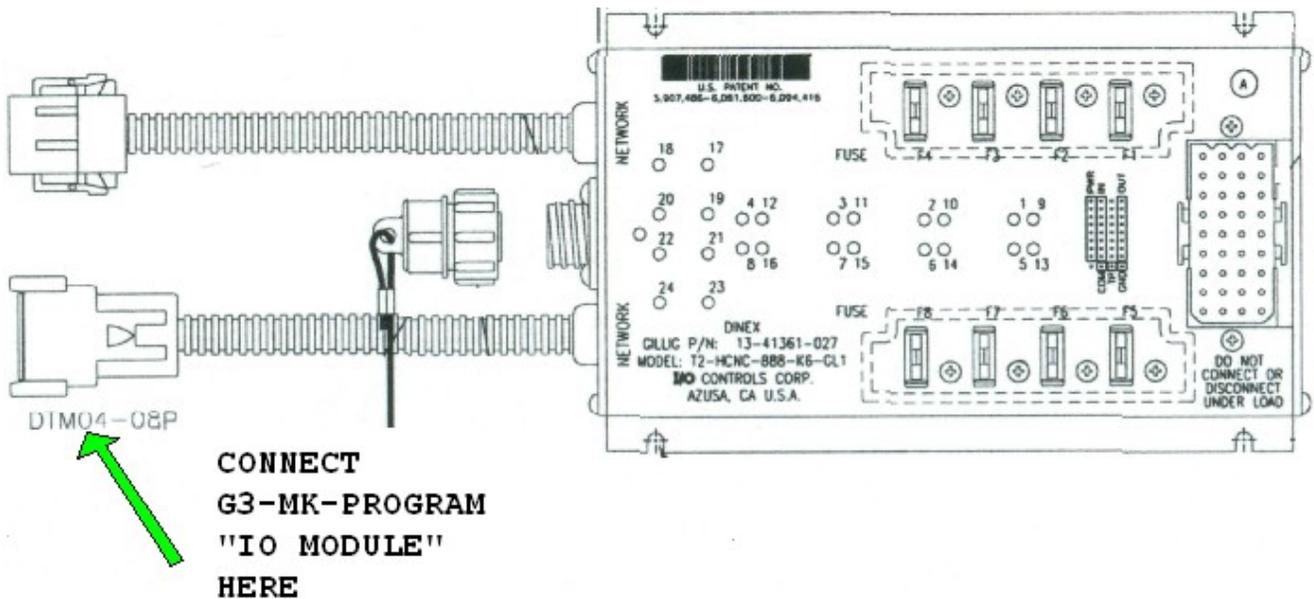
- A. Locate the master module “T2-HCNC” in the D-Zone, at the rear of the bus above the air conditioning inlet. Use a key tool to open the D-Zone compartment. T2 Modules are black. Locate the D2 module, it is usually in the middle between D1 and D3.



B. Disconnect the ring loop connectors. Connect the G3-MK-CHARGER "IO MODULE" cable to the T2-HCNC NETWORK. Connect the G3-MK-CHARGER "POWER" cable to the ring loop.

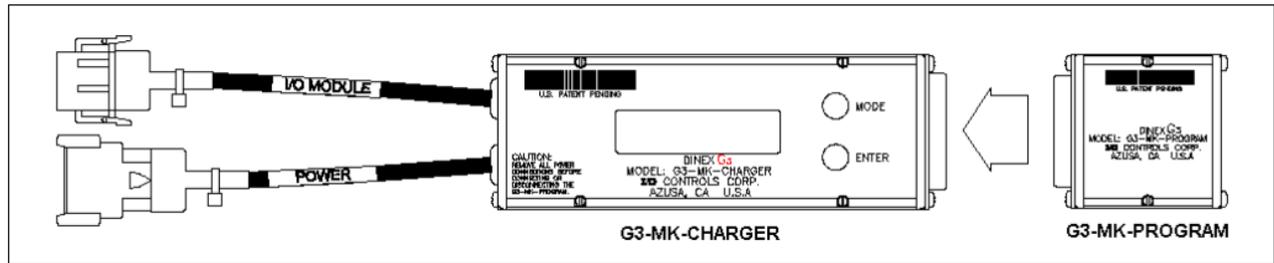


C. T2-HCNC-888 detail.



D. Connect the G3-MK-PROGRAM that has the “NEW” ladder logic.

G3-MK-CHARGER with G3-MK-PROGRAM



E. Wake up the bus by turning the master switch ON. The G3-MK-CHARGER display should read, “PUSH MODE BUTTON TO DISPLAY MODES”.



F. Checksum test of the “OLD” Ladder Logic from T2-HCNC-888 using G3-MK-CHARGER

1. Already have selected a G3-MK-PROGRAM module with the correct “NEW Ladder Logic” Bus lot # or contract # and revision level.
2. Push "Mode" button four times to select "MODULE MESSAGE ENTER TO SELECT" on the G3-MK-CHARGER.

PUSH MODE BUTTON
TO DISPLAY MODES

DOWNLOAD (REV#A)
ENTER TO SELECT

UPLOAD (FROM PC)
ENTER TO SELECT

VERIFY (REV#A)
ENTER TO SELECT

MODULE MESSAGE
ENTER TO SELECT

3. Press "Enter" on the G3-MK-CHARGER, display should read "REV x mm/dd/yyyy CHASSIS # xxxxxx".



CHASSIS # ON
G3-MK-CHARGER SHOULD
MATCH WITH THE LABEL
ON THE T2-HCNC, IN
THIS CASE "S/N 188001"



4. Press "Enter" again and display should read "CHECK SUM = xxxx ENTER TO RETURN".



CHECK SUM = E583
ENTER TO RETURN

5. Compare the checksum on the display with the checksum in the documentation provided by Gillig.
6. If the checksum matches with documentation provided by Gillig, then proceed to section G next page.
7. If the checksum does not match then STOP. DO NOT PROCEED. Disconnect the G3-MK-CHARGER from the T2-HCNC.

- G. If the checksum matches then this indicates that the Vehicle program matches with the existing documentation. **Download the new program from G3-MK-CHARGER to T2-HCNC-168**
8. Push "ENTER" button, then press "Mode" button to select "DOWNLOAD (REV# "PROGRAM REVISION").." on the G3-MK-CHARGER.



A photograph of a green LCD display on a black background. The text on the screen is "DOWNLOAD (REV#C)" on the top line and "ENTER TO SELECT" on the bottom line.

9. Press "Enter" on the G3-MK-CHARGER, display should read "T2 PROGRAM OK CKSUM = xxxx REV#x".



A photograph of a green LCD display on a black background. The text on the screen is "T2 PROGRAM OK" on the top line and "CKSUM=E3CA REV#G" on the bottom line.

10. Press "Enter" again and display should read "DOWNLOADING ... xx% COMPLETED".



A photograph of a green LCD display on a black background. The text on the screen is "DOWNLOADING ..." on the top line and "34 % COMPLETED" on the bottom line.

11. Wait until program download is complete, display should read "DOWNLOAD OK!..".

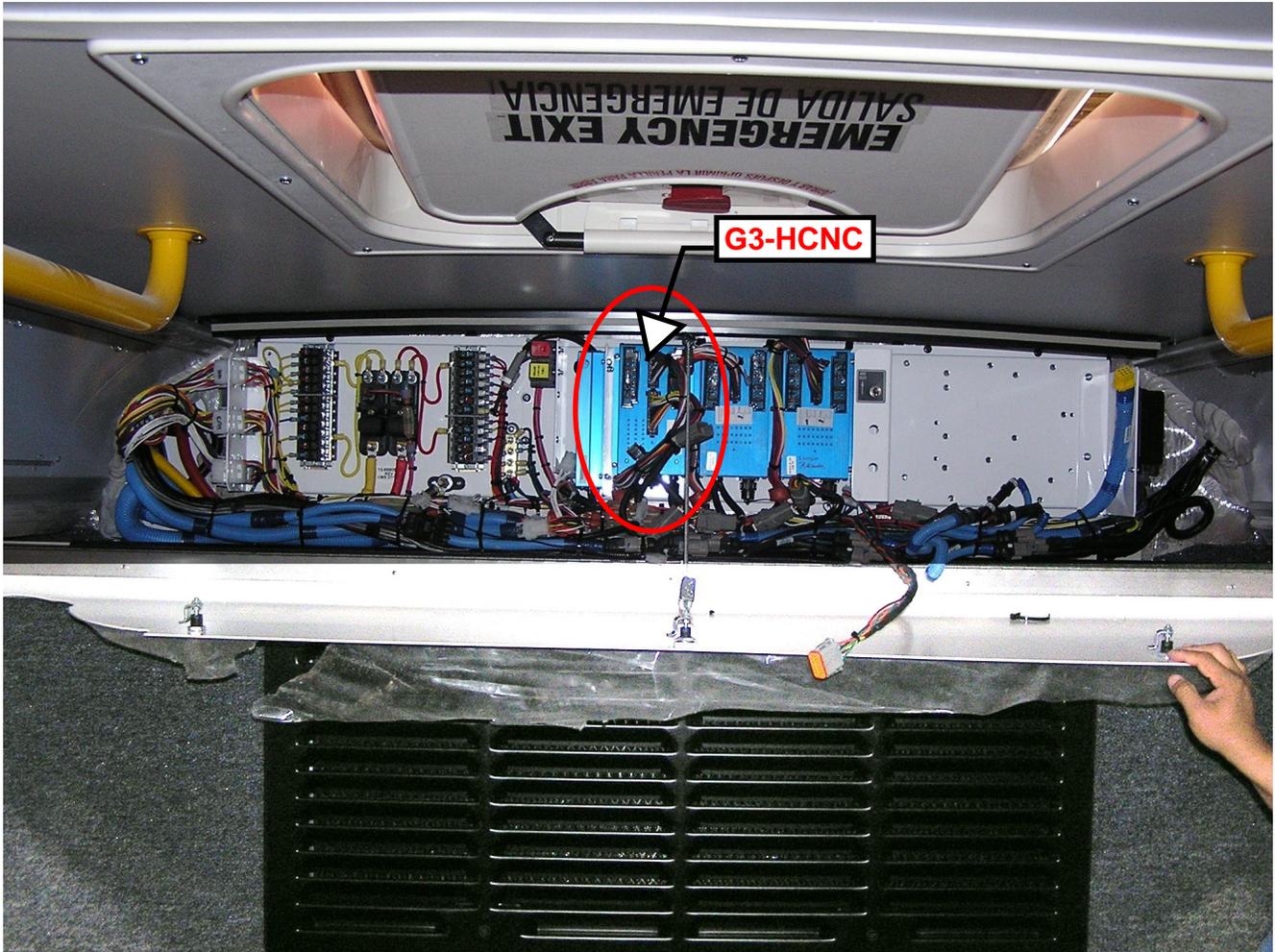


A photograph of a green LCD display on a black background. The text on the screen is "DOWNLOAD OK!" on the top line and "CKSUM=BA38 REV#C" on the bottom line.

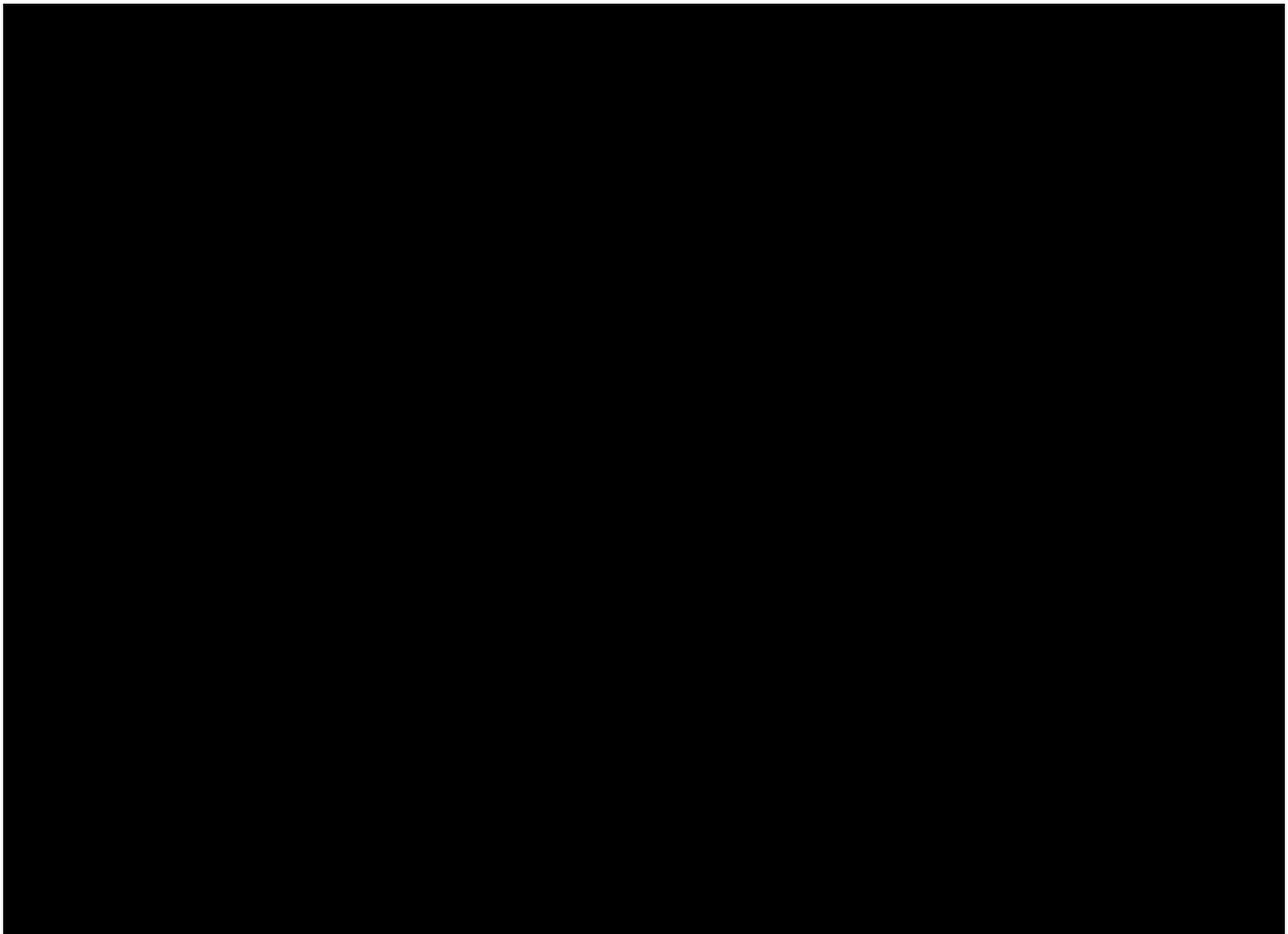
12. Check for any error message on the G3-MK-CHARGER. If error occurs, recycle power and repeat step 8 through 11. It is important to disconnect the power completely.
13. If no error then press "Enter" a few times until the display reads "VERIFY (REV#)".
14. Press "Enter" twice and display should read "VERIFYING ... xx% COMPLETED".
15. Wait until program verify is complete, display should read "VERIFY OK!..".
16. If no error then disconnect power from the G3-HCNC. It is important to disconnect the power completely. Note the revision level x and checksum xxxx. Compare with same information written on G3-MK-PROGRAM label.
17. Disconnect the G3-MK-CHARGER from the T2-HCNC.
18. Procedure complete.

Gillig FMVSS Campaign Dinex module download instructions July 06, 2018.

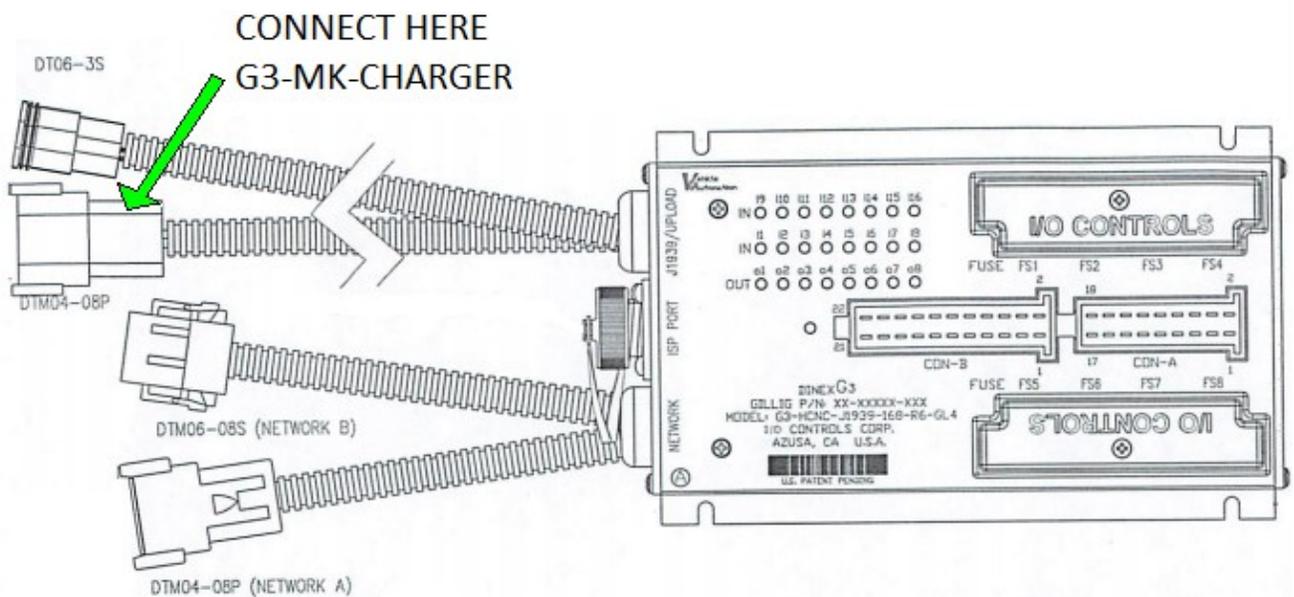
- A. Locate the master module “G3-HCNC” in the D-Zone, at the rear of the bus above the air conditioning inlet. Use a key tool to open the D-Zone compartment.



B. Locate the UPLINK connector.

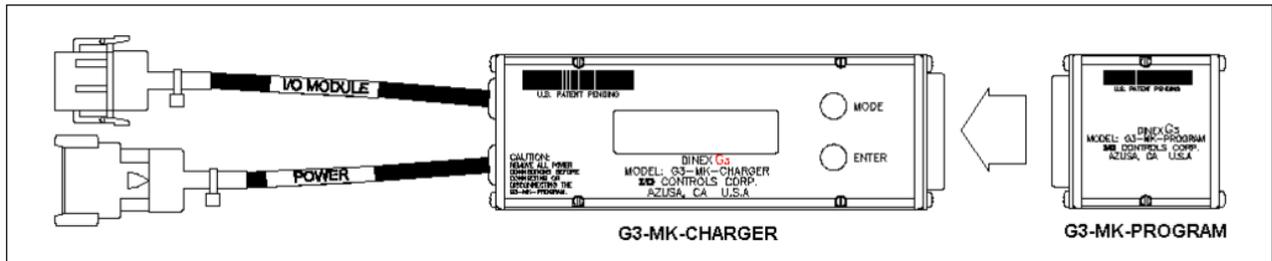


C. G3-HCNC-168 detail.



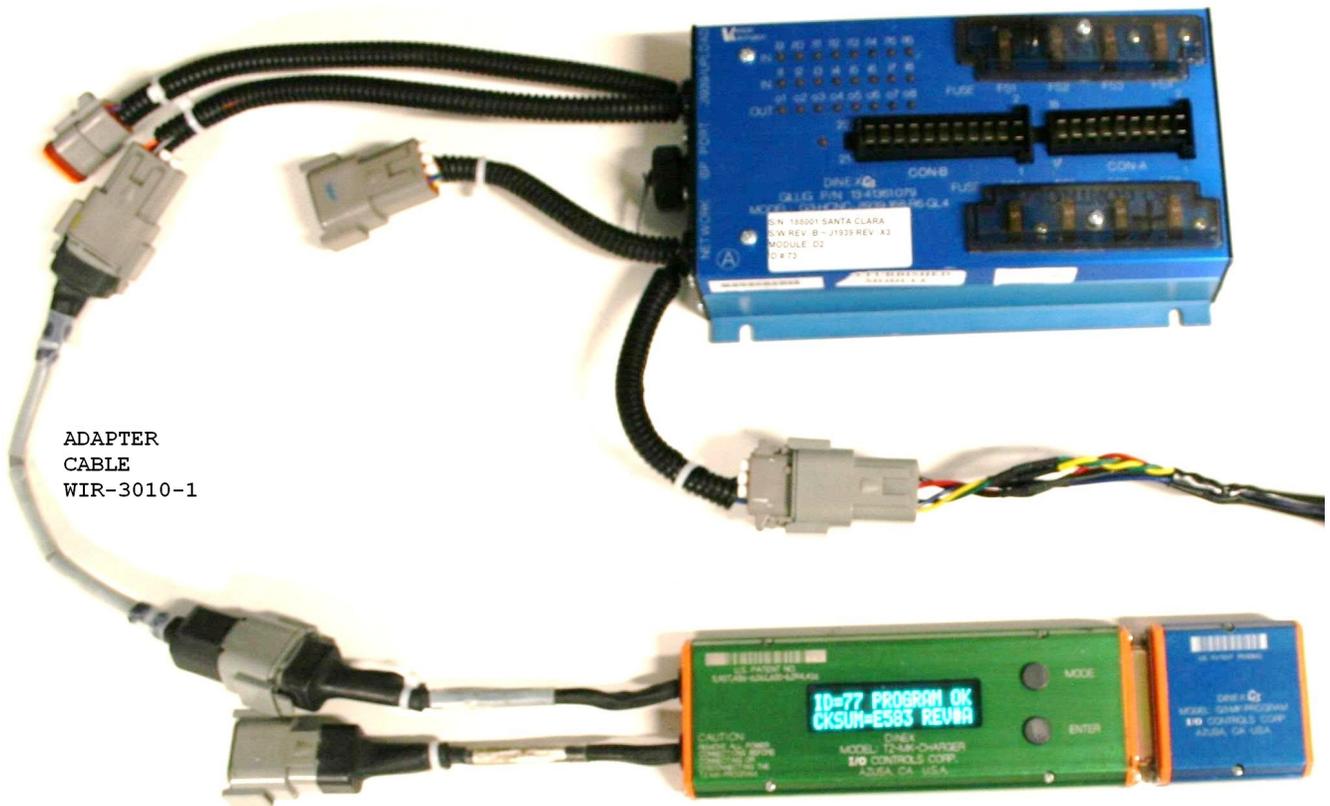
D. Connect the G3-MK-PROGRAM that has the “NEW” ladder logic. Connect the G3-MK-CHARGER “IO MODULES” connector to the WIR-3010-1. Connect the WIR-3010-1 to the G3-HCNC “UPLOAD” connector. ****IMPORTANT**** NOTE: If the bus had an optional item connected to the “UPLOAD” port, please remember to re-connect the optional item before closing the D-Zone compartment door.

G3-MK-CHARGER with G3-MK-PROGRAM



E. Wake up the bus by turning the master switch ON. The G3-MK-CHARGER display should read, “ID=77 PROGRAM OK” the checksum “CKSUM XXXX” and revision “REV#X” should match with label on the G3-MK-PROGRAM, or the provided documentation.





ADAPTER
CABLE
WIR-3010-1

F. Checksum test of the “OLD” Ladder Logic from G3-HCNC-168 using G3-MK-CHARGER

1. Already have selected a G3-MK-PROGRAM module with the correct “NEW Ladder Logic” Bus lot # or contract # and revision level.
2. Master switch must be off, all J1939 communications must be silent.
3. Push "Mode" button four times to select "MODULE MESSAGE ENTER TO SELECT" on the G3-MK-CHARGER.

PUSH MODE BUTTON
TO DISPLAY MODES

DOWNLOAD (REV#A)
ENTER TO SELECT

UPLOAD (FROM PC)
ENTER TO SELECT

VERIFY (REV#A)
ENTER TO SELECT

MODULE MESSAGE
ENTER TO SELECT

4. Press "Enter" on the G3-MK-CHARGER, display should read "REV x mm/dd/yyyy CHASSIS # xxxxxx".



CHASSIS # ON
G3-MK-CHARGER SHOULD
MATCH WITH THE LABEL
ON THE G3-HCNC, IN
THIS CASE "S/N 188001"



5. Press "Enter" again and display should read "CHECK SUM = xxxx ENTER TO RETURN".



6. Compare the checksum on the display with the checksum in the documentation provided by Gillig.
7. If the checksum matches with documentation provided by Gillig, then proceed to section G next page.
8. If the checksum does not match then STOP. DO NOT PROCEED. Disconnect the G3-MK-CHARGER from the G3-HCNC.

- G. If the checksum matches then this indicates that the Vehicle program matches with the existing documentation. **Download the new program from G3-MK-CHARGER to G3-HCNC-168.**
9. Push "ENTER" button, then press "Mode" button to select "DOWNLOAD (REV# "PROGRAM REVISION").." on the G3-MK-CHARGER.



A photograph of a green LCD display on a black background. The text on the screen is arranged in two lines: "DOWNLOAD (REV#C)" on the top line and "ENTER TO SELECT" on the bottom line.

10. Press "Enter" on the G3-MK-CHARGER, display should read "ID = 77 PROGRAM OK CKSUM = xxxx REV#x".



A photograph of a green LCD display on a black background. The text on the screen is arranged in two lines: "ID=77 PROGRAM OK" on the top line and "CKSUM=BA38 REV#C" on the bottom line.

11. Press "Enter" again and display should read "DOWNLOADING ... xx% COMPLETED".



A photograph of a green LCD display on a black background. The text on the screen is arranged in two lines: "DOWNLOADING ..." on the top line and "34 % COMPLETED" on the bottom line.

12. Wait until program download is complete, display should read "DOWNLOAD OK!..".

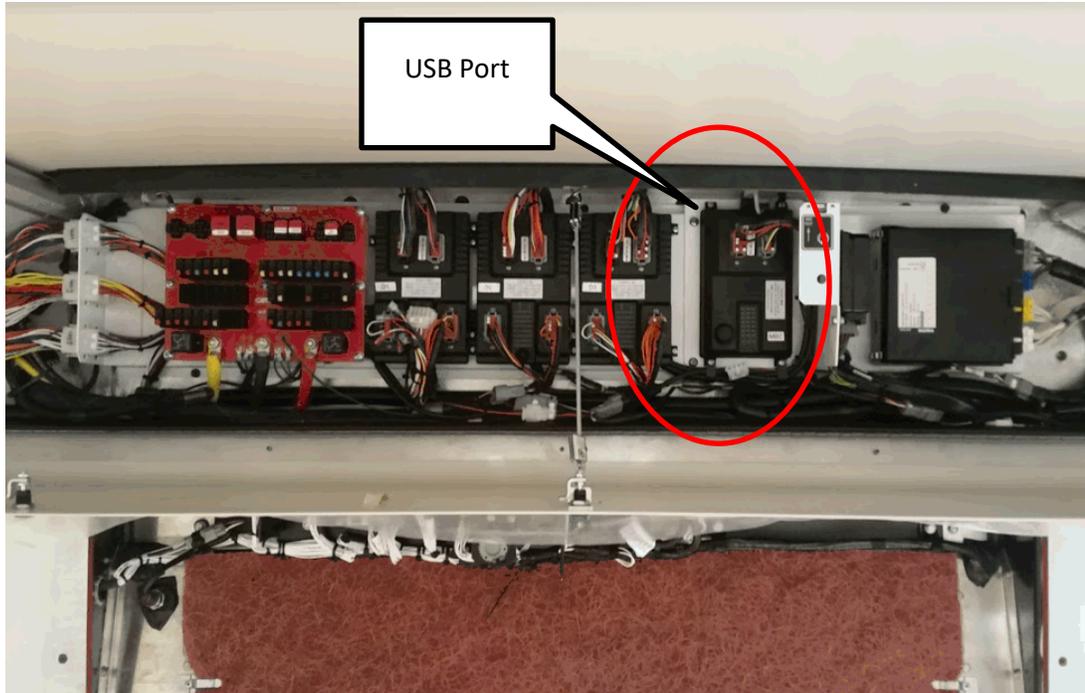


A photograph of a green LCD display on a black background. The text on the screen is arranged in two lines: "DOWNLOAD OK!" on the top line and "CKSUM=BA38 REV#C" on the bottom line.

13. Check for any error message on the G3-MK-CHARGER. If error occurs, recycle power and repeat step 9 through 12. It is important to disconnect the power completely.
14. If no error then press "Enter" a few times until the display reads "VERIFY (REV#)".
15. Press "Enter" twice and display should read "VERIFYING ... xx% COMPLETED".
16. Wait until program verify is complete, display should read "VERIFY OK!..".
17. If no error then disconnect power from the G3-HCNC. It is important to disconnect the power completely. Note the revision level x and checksum xxxx. Compare with same information written on G3-MK-PROGRAM label.
18. Disconnect the G3-MK-CHARGER from the G3-HCNC.
19. OPTIONAL if there was an optional item connected to the "UPLOAD" port, please remember to re-connect the optional item before closing the D-Zone compartment door.
20. Procedure complete.

Download Program for G4 System

1. Find the G4 MBC module in the following location

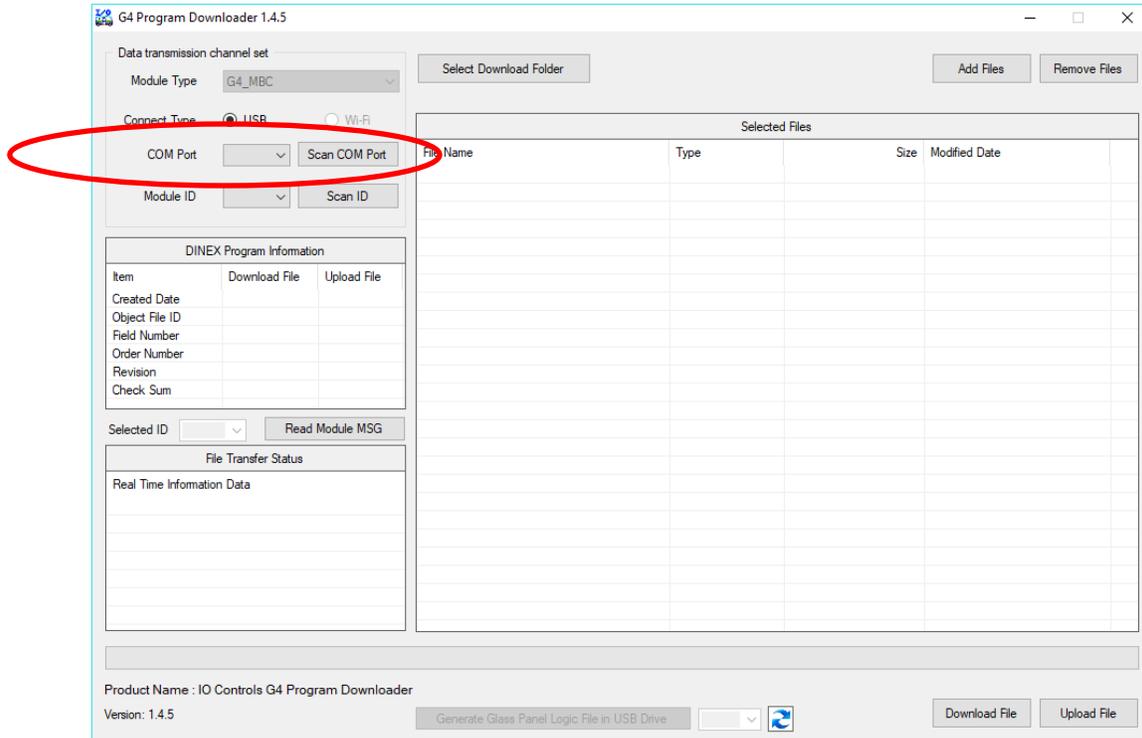


2. Connect MBC to a computer with an USB Type-A to Type-A cable

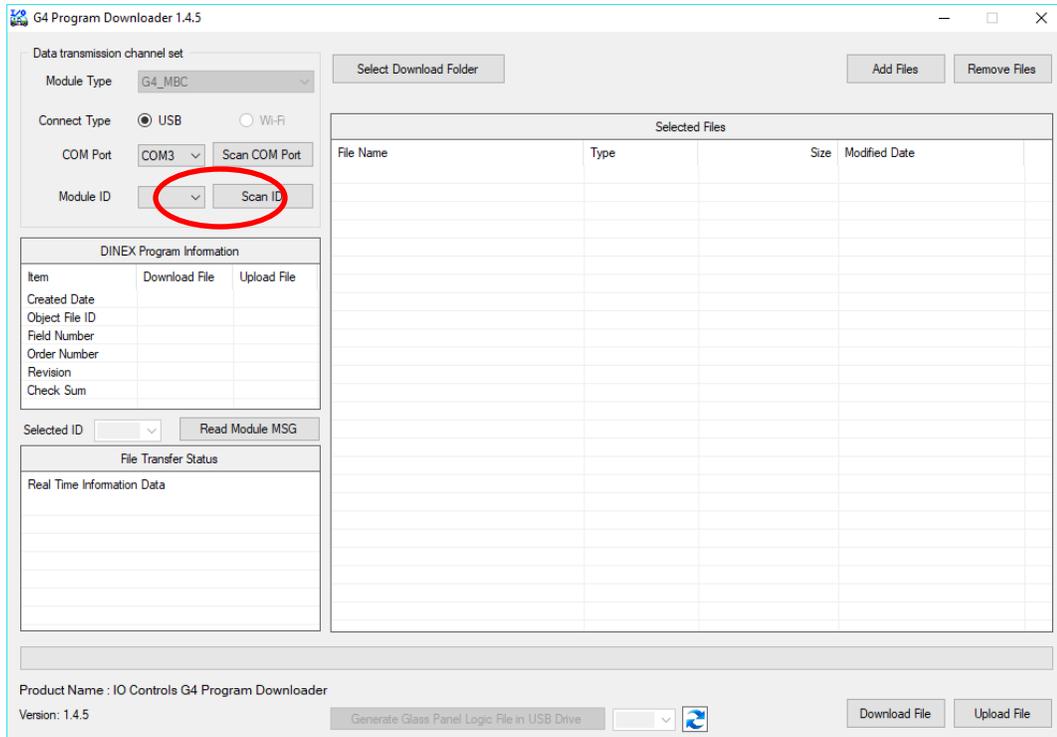


3. Execute the "G4 Program Downloader V1.x" on the computer.

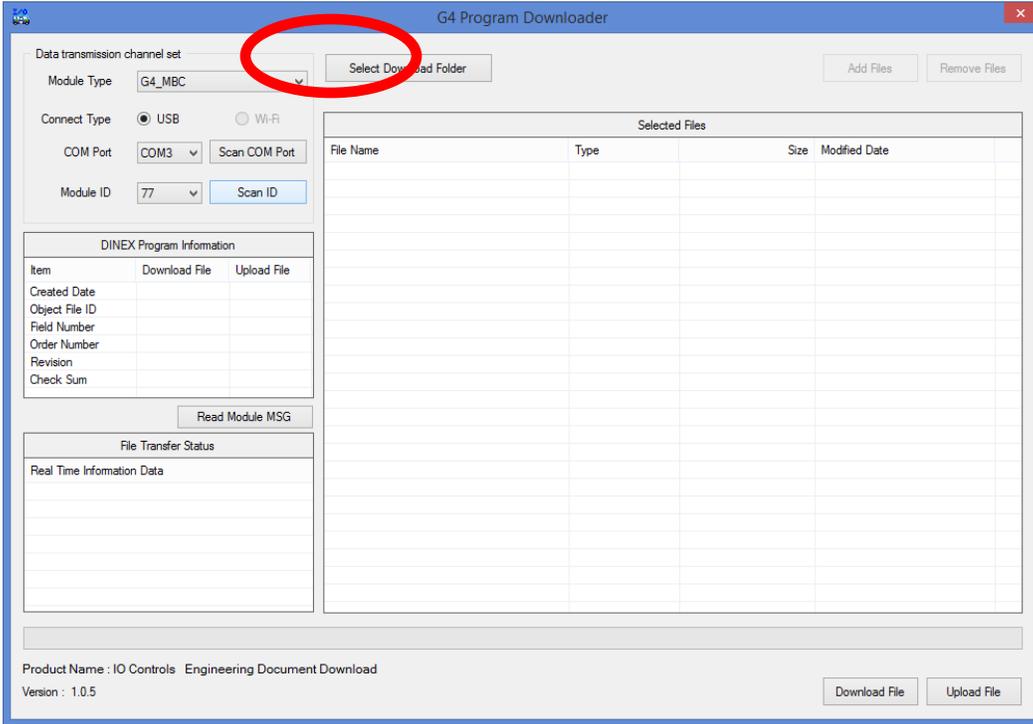
4. If the COM port is found, use the default COM port number, if not, click the [Scan COM Port]



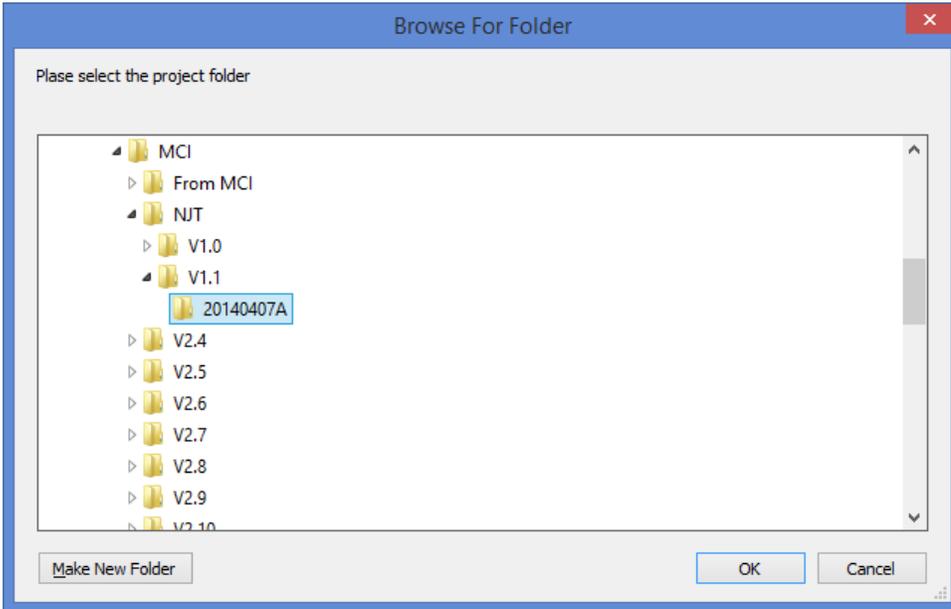
5. Click [Scan ID], the system will get the module information from the MBC. The Module ID should be "77".



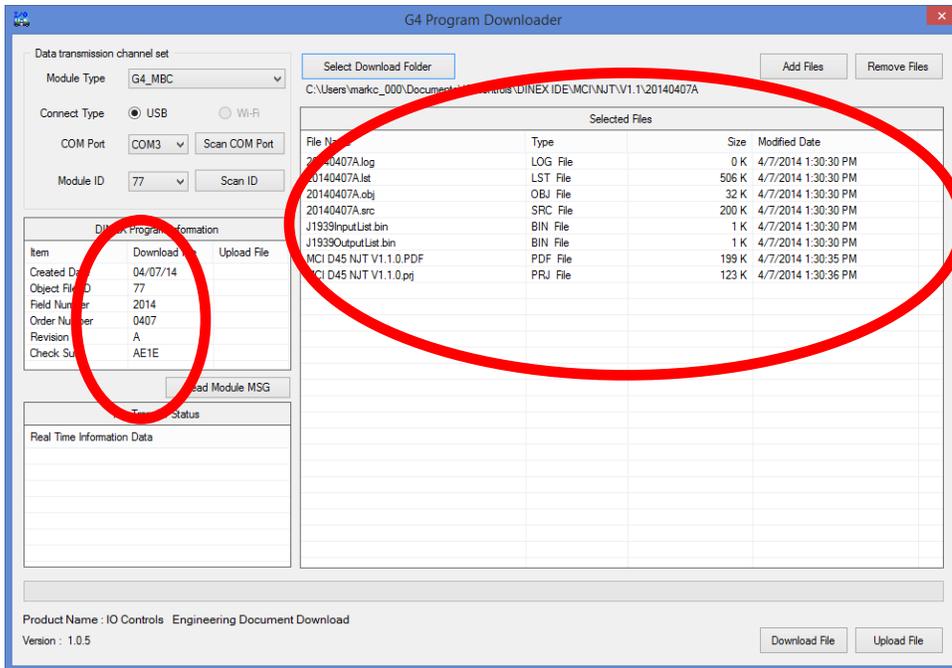
6. Click "Select download folder" Button



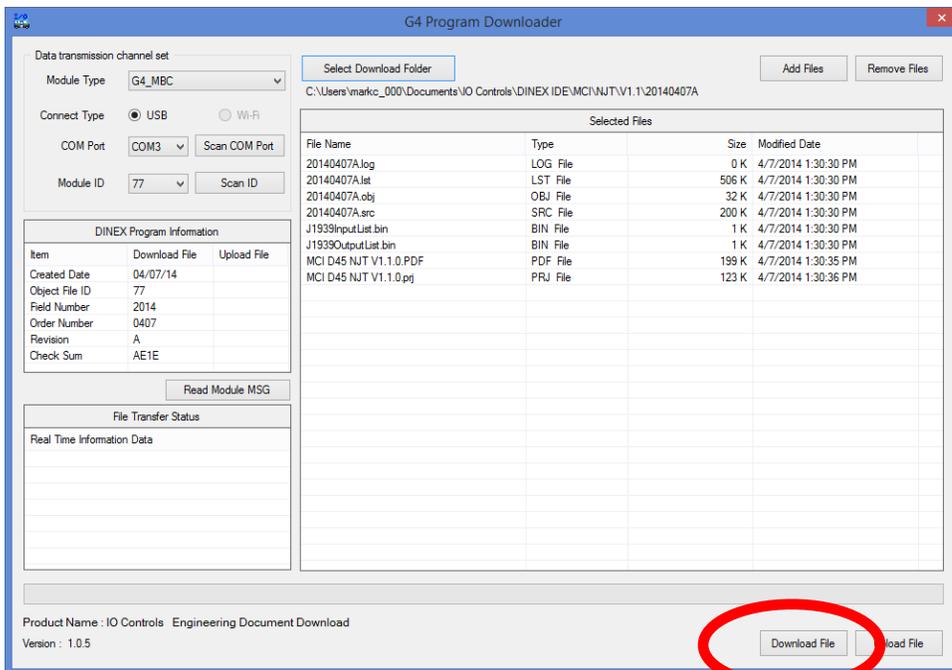
7. Select the folder with program. The folder name in the attachment is "20140407A"



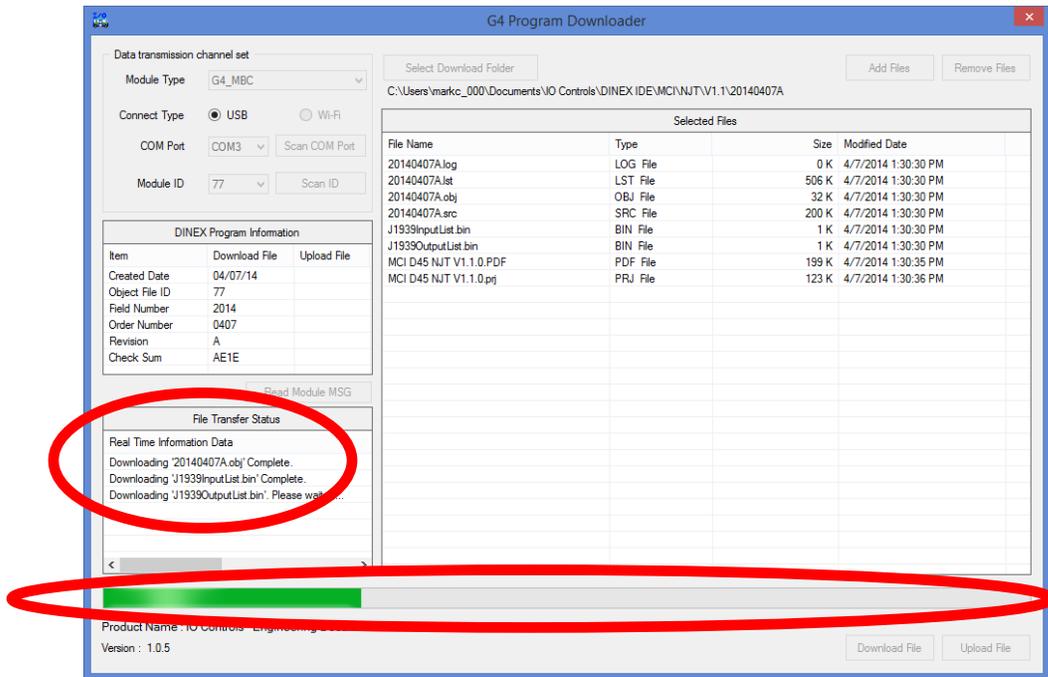
8. After you select the folder, the system will show all the files in the folder



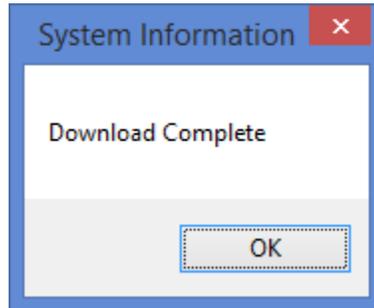
9. Click "Download File"



10. System shows the download status.



11. Download Complete: Download process may take a few minutes. When download is completed , system shows the follow message.



12. Recycle the power of MBC.

13. Download program Finish and program should be running.

Dinex G4 Program Downloader v1.4.5

User Manual

Connecting and Running the G4 Program Downloader Page 2

Downloading to a G4-MBC Page 4

Installing the G4 Program Downloader v1.4.5 Page 5

Installing the G4-MBC-HUB-xx Driver Page 11

Connecting and Running the G4 Program Downloader

The procedure is the same for all models of the G4-MBC module

- 1) Turn the SLEEP FUNC. switch on the G4-MBC module to the DISABLE position. This will make sure the module is awake and will not enter Sleep Mode while the download is occurring.
- 2) Connect the USB cable to the PC.
- 3) If the G4-MBC module is on the vehicle make sure the G4-MBC module is powered. If the module is powered up continue to step 5.
- 4) If the G4-MBC module is not on the vehicle the **WIR-4007-2** and AC Adapter will need to be used to power the G4-MBC module.
 - a) Connect the **G4-MBC** connector on the WIR-4007-2 to the G4-MBC module
 - b) Plug in the AC Adapter to an outlet.
 - c) Connect the **POWER** connector on the WIR-4007-2 to the connector on the AC Adapter.
 - d) The G4-MBC module should now be powered up.
- 5) Remove the cover for the USB port to the G4-MBC.
- 6) Connect the USB cable to the USB port on the G4-MBC. Note that the bus may have a USB extension port connected the G4-MBC in a convenient location. The computer will indicate that a device has been connected to the PC.
- 7) Start the G4 Program Downloader on the PC.

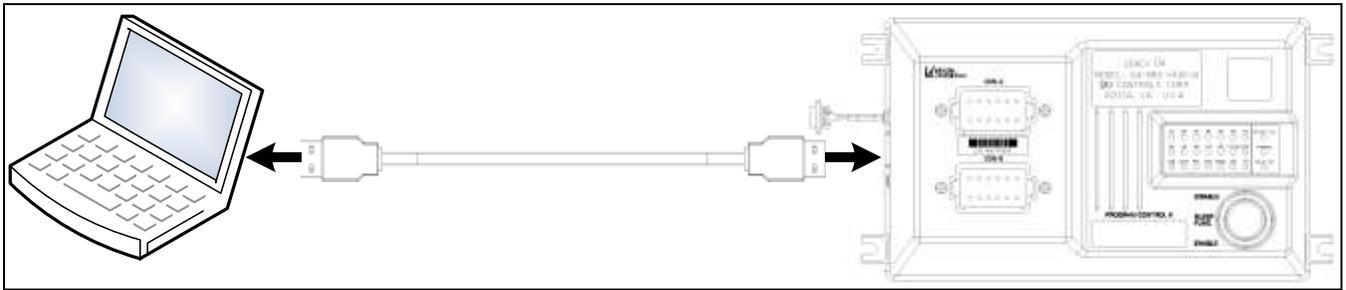


Diagram 1 (On Vehicle)

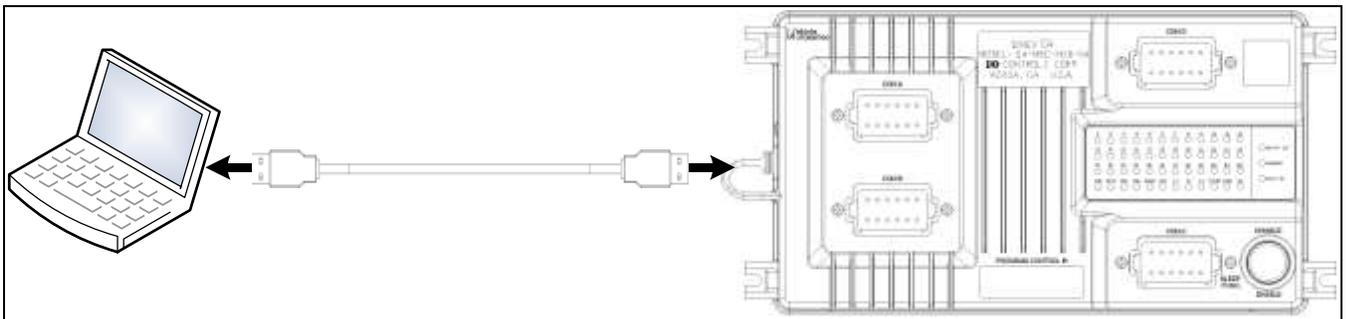


Diagram 2 (On Vehicle)

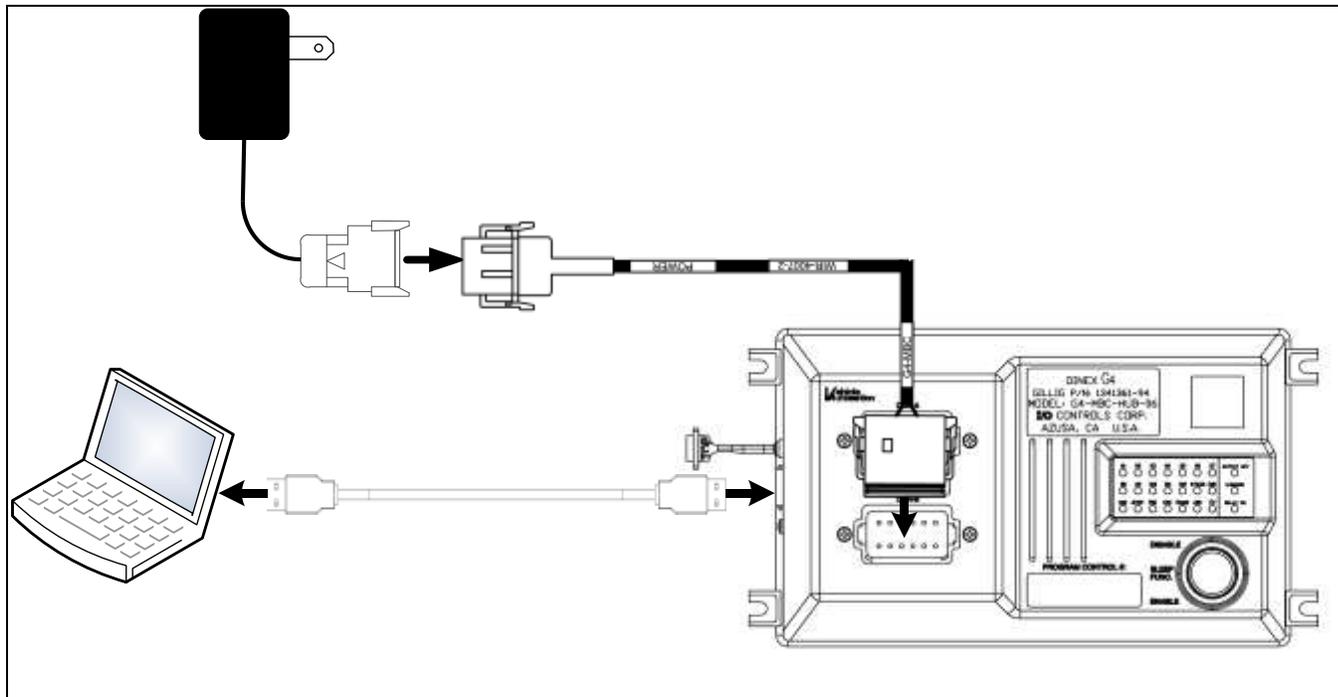


Diagram 3 (Off Vehicle using WIR-4007-2 and AC Adapter)

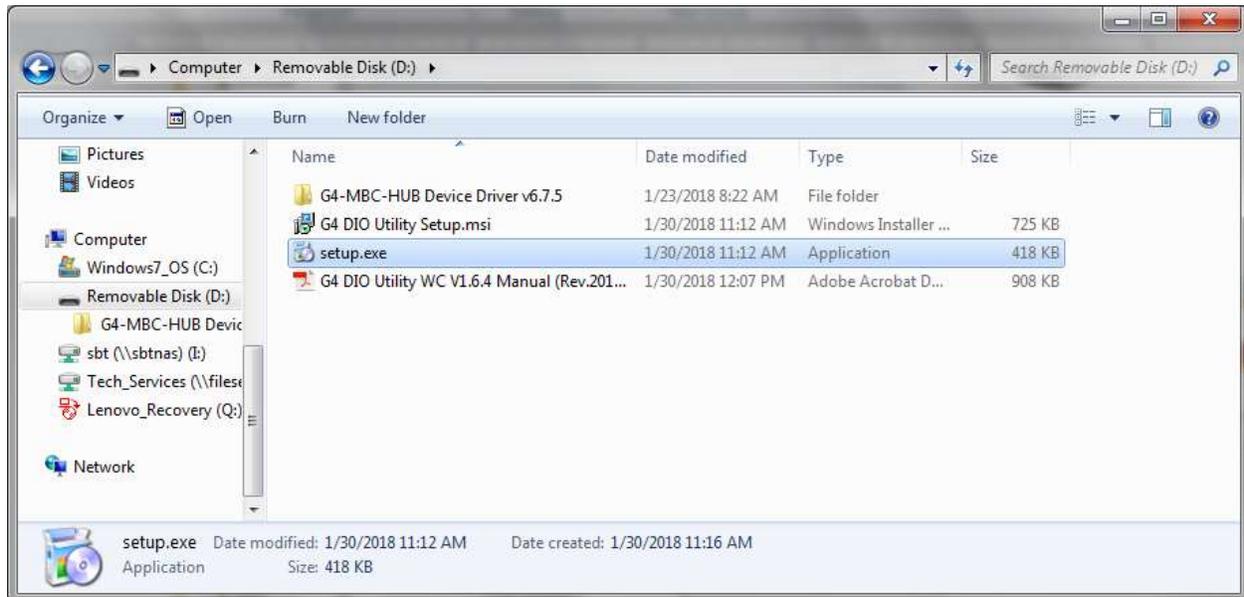
Programming G4-MBC using the G4 Program Downloader

The procedure is the same for all models of the G4-MBC module

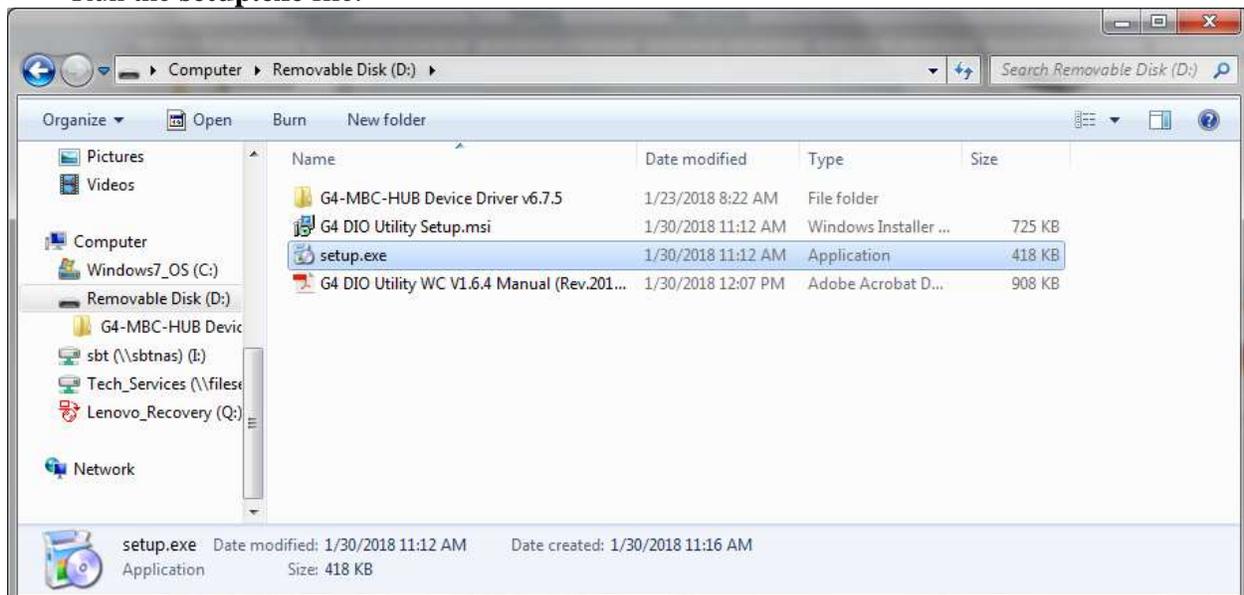
- 1) Start the G4 Program Downloader on the PC.
- 2) Click the SCAN ID button. The program should return 77 in the Module ID box, within 30 seconds.
- 3) If the program does NOT return 77 in the Module ID box there may be multiple COM ports on your PC. Select a different COM port and click SCAN ID again.
- 4) Click the Select Download Folder button.
- 5) A pop-up window will appear. Select the folder containing all the files you want to download to the module click OK. If there is a sub-folder contained in the folder selected it will not appear in the Selected Files section but it will be downloaded to the module.
- 6) Optional** To add an additional file to the files selected in the previous step click the Add Files button, if not skip to step 8.
- 7) A pop-up window will appear. Select the file to be added to the Selected Files list to be downloaded to the module and click Open.
- 8) Make sure that in the Selected ID box 77 appears. If a different number appears change the Selected ID to 77.
- 9) Click the Download button.
- 10) If the program returns an error message
- 11) The program will begin downloading the files from the PC to the G4-MBC-HUB, for about 2 minutes and 10 seconds.
- 12) While the program is downloading to the module the Status bar will begin turning green to indicate the status of the download. Also while downloading to the module the ladder logic program will stop running on the module and all outputs will remain in the state they were in when the download was started, when the download is complete the program will start running again.
- 13) When the download is successful a pop-up window will appear with the message: **Download Complete**. If the download is not successful a pop-up window will appear with the message: **Downloading Fail**.
- 14) If the download is successful disconnect the USB cable from the G4-MBC-HUB or the USB extension cable.
- 15) ******IMPORTANT****** Cycle power to the G4-MBC-HUB with the engine off by turning the battery disconnect switch to the off position then returning it to the on position. If this is not done the new program will not operate properly.

Installing the Dinex Program Downloader Software

- Depending on the setup of the PC you may need to be logged in as the Administrator to install the program.
- Open the USB drive in windows explorer. Find the directory DINEX G4 Program Downloader v1.4.5 Setup.



- Run the **setup.exe** file.



- Follow the Instructions on the screen. Depending on the setup of the PC you may need to be logged in as the Administrator to install the program.
- Depending on the computer operating system, an extra window may pop up. Click “More Info”

Windows protected your PC

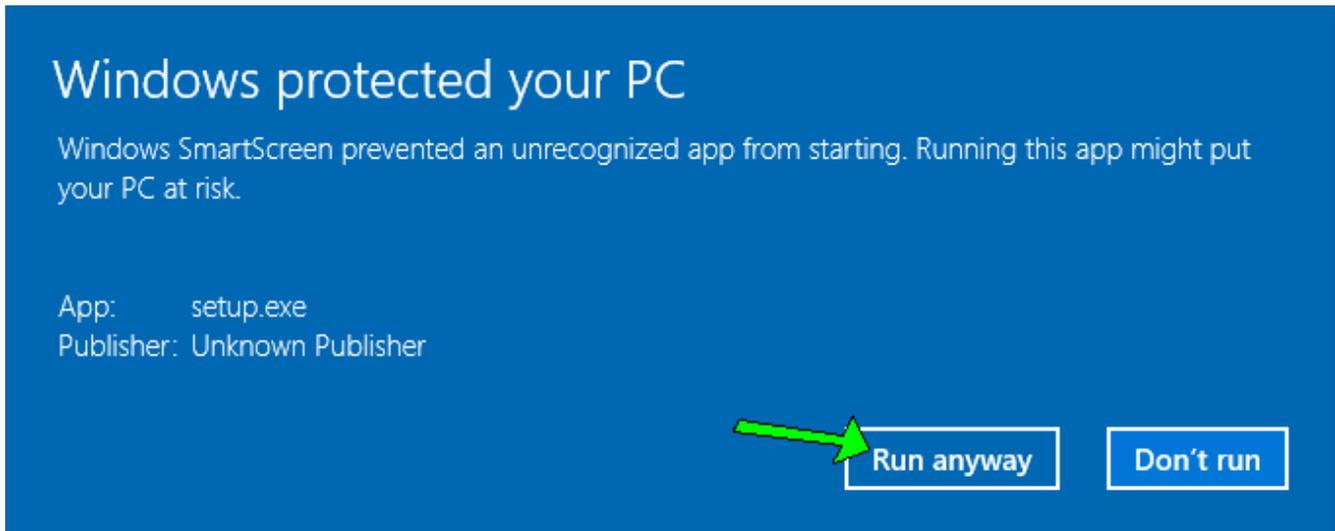
Windows SmartScreen prevented an unrecognized app from starting. Running this app might put your PC at risk.

[More info](#)

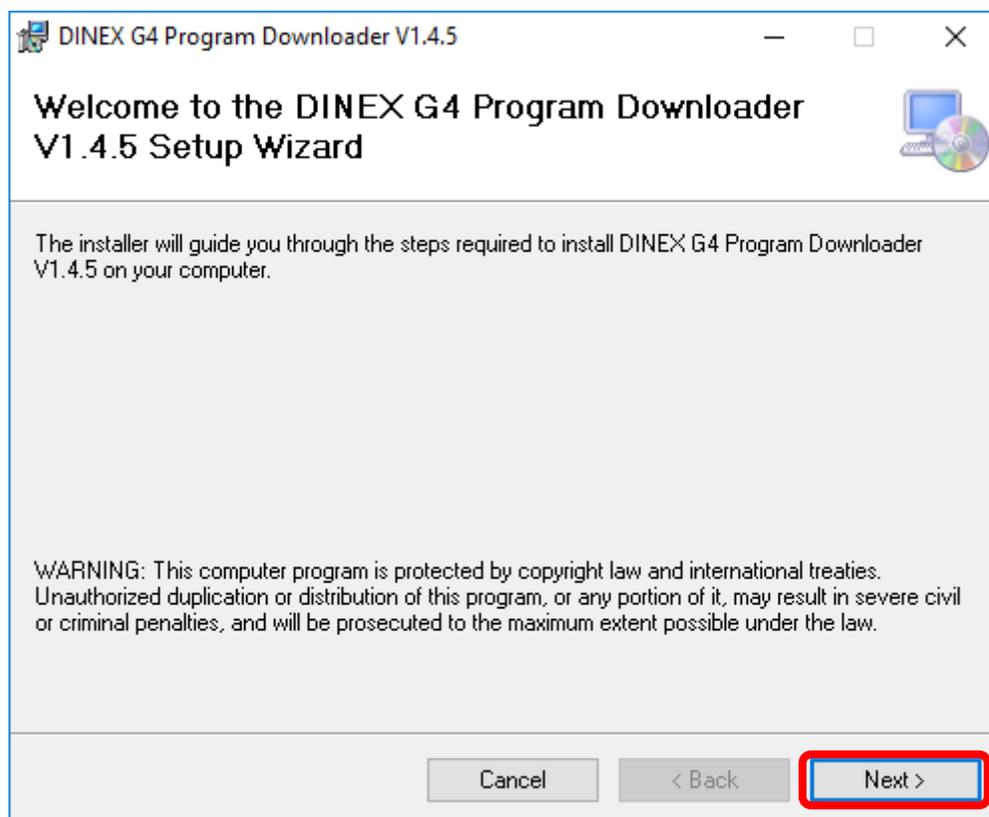


Don't run

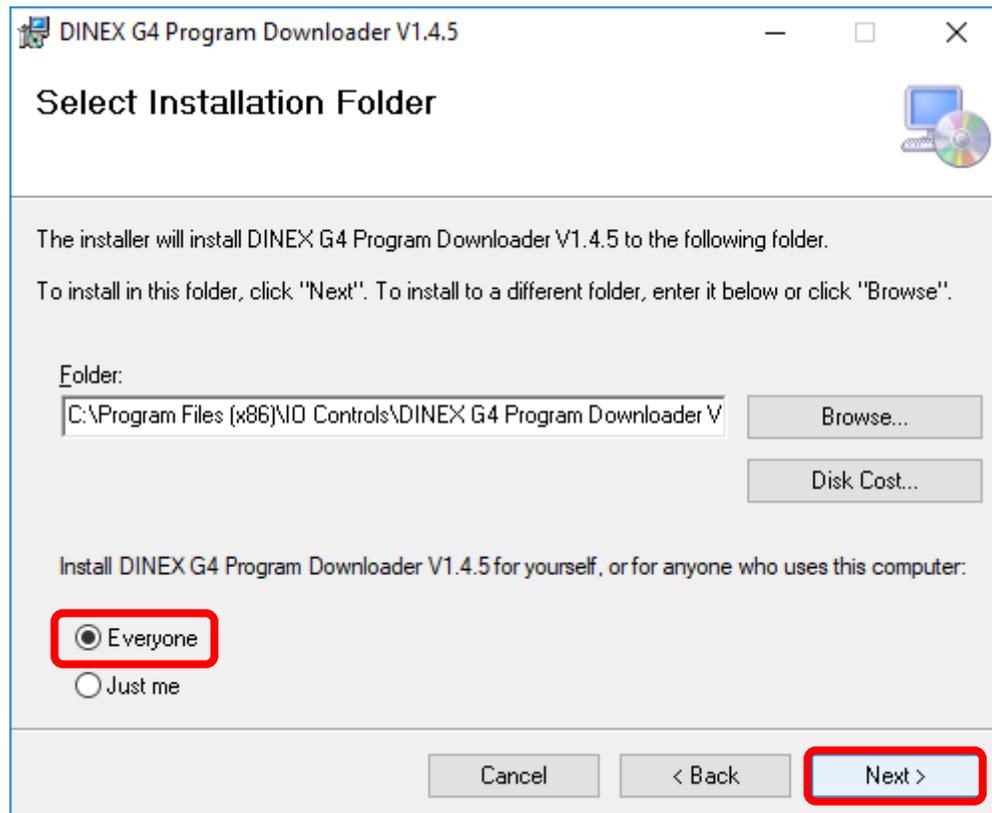
- Click “Run Anyway”



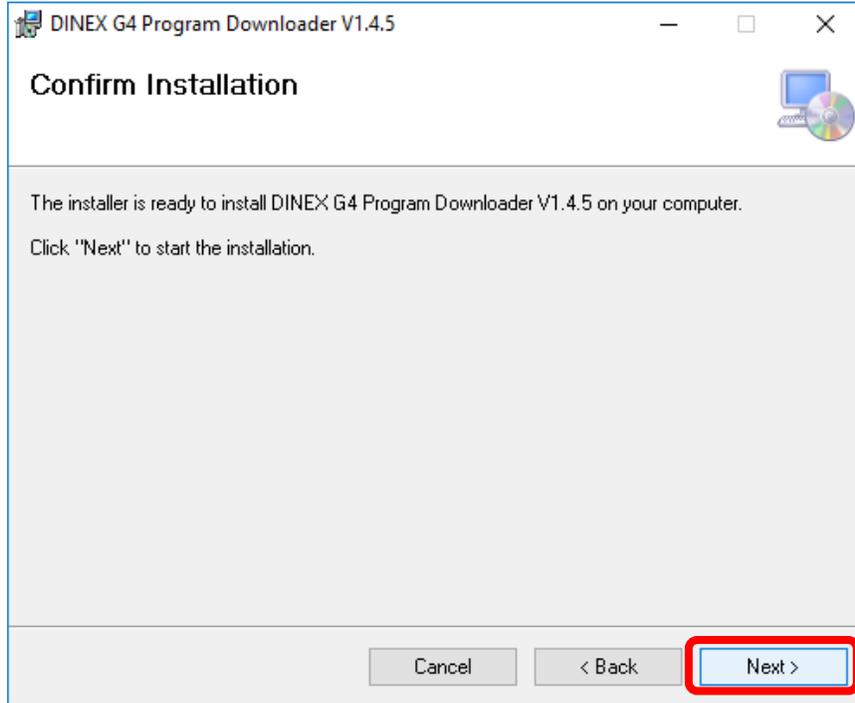
- On the Welcome screen, click **Next**.



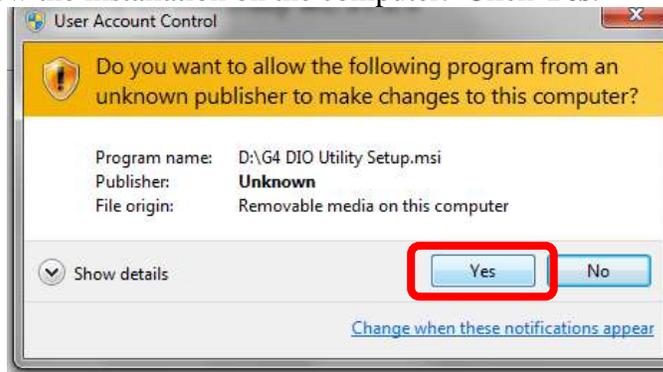
- On the Setup screen, click on the **Everyone**, then click **Next**.



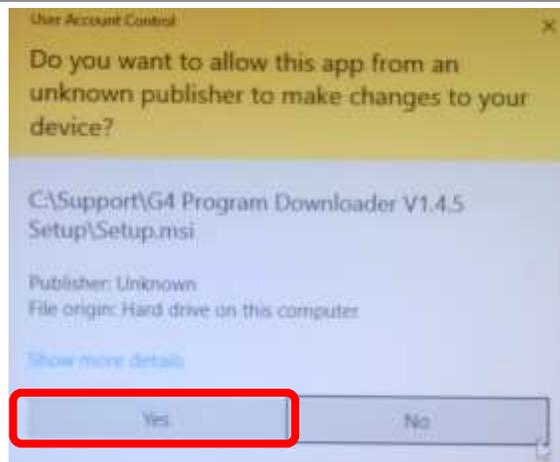
- On the Confirm Installation screen, click **Next**.



- Depending on the setting the computer a User Account Control window may appear asking if you want to allow the installation on the computer. Click **Yes**.

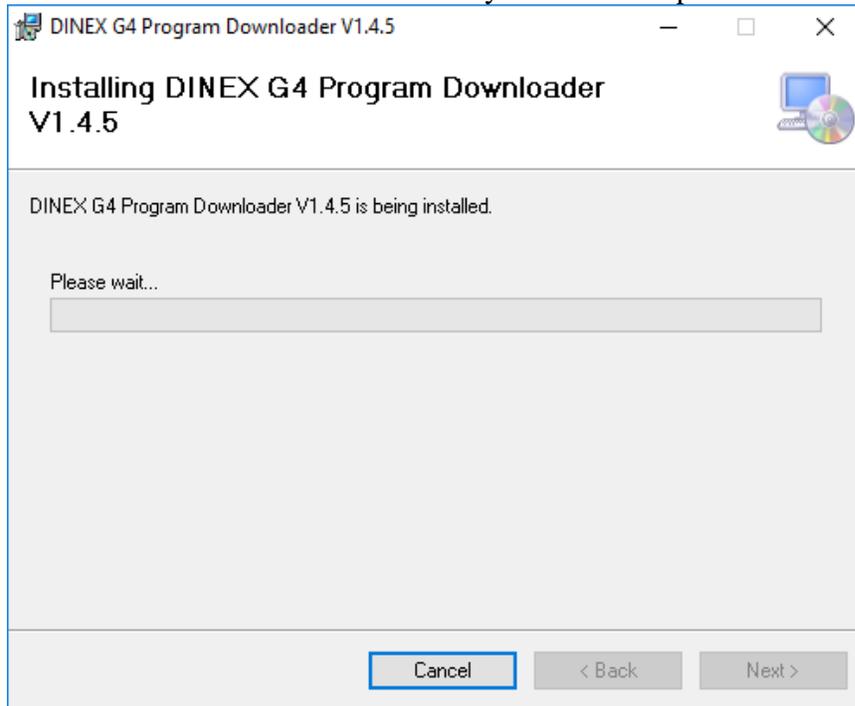


Windows 7

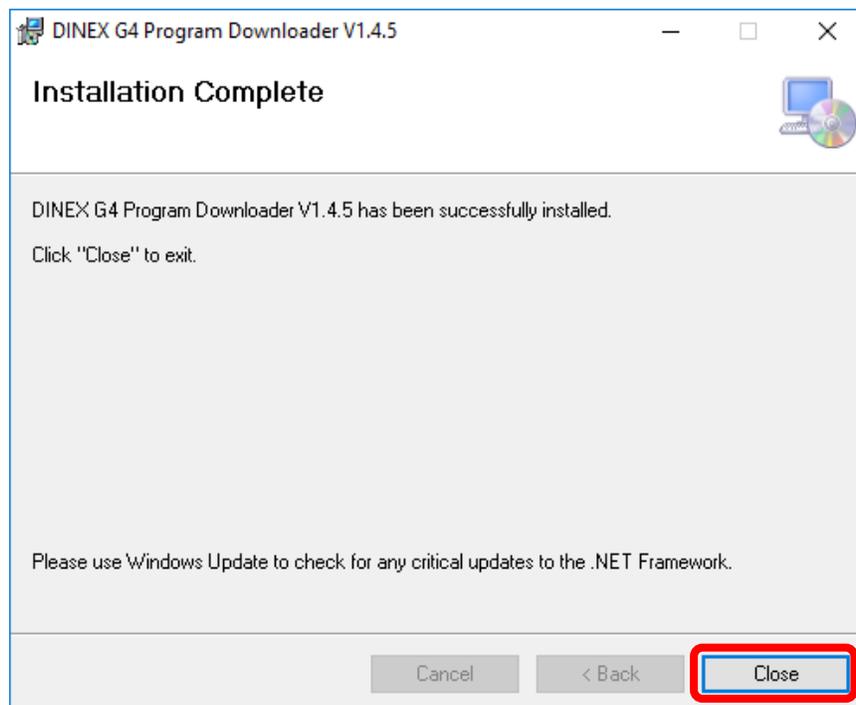


Window 10

- The installation process will begin. A window displaying the progress of the installation will be displayed. The amount of time this window will vary between computers.



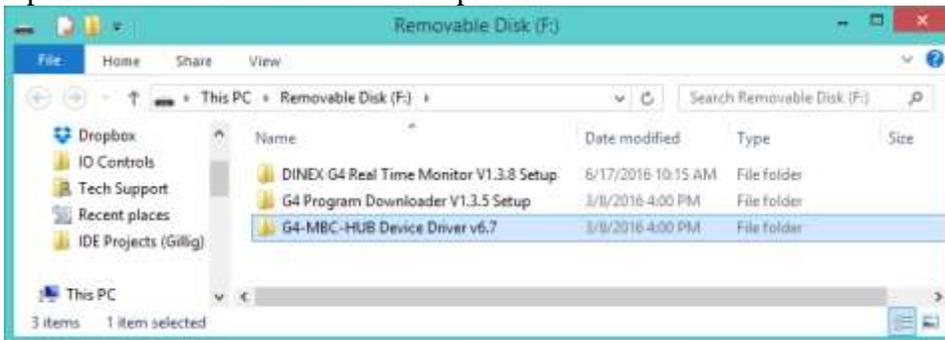
- When the files have finished installing the Installation Complete window will appear. Click the **Close**.



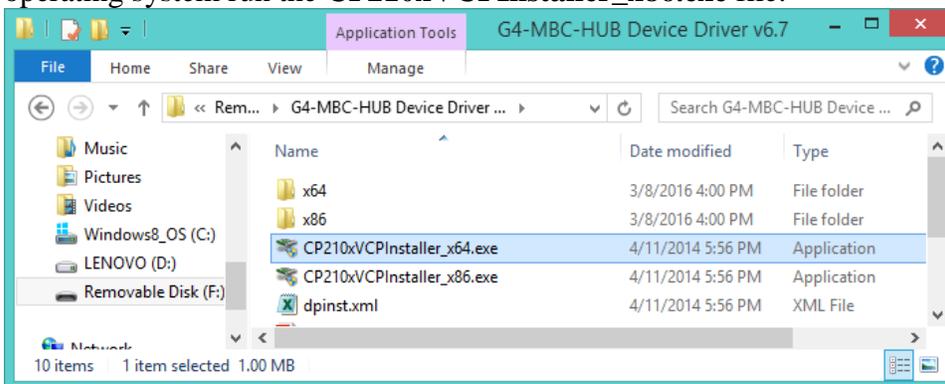
- If this is the first time installing Dinex G4 software, then please proceed to installing the G4-MBC-HUB device driver.

Installing the G4-MBC-HUB-xx Driver

- The driver is the same for all variations of the G4-MBC-HUB-xx.
- Depending on the setup of the PC you may need to be logged in as the Administrator to install the G4-MBC-HUB-xx device driver.
- Important do NOT connect to a G4-MBC-HUB-xx until after completing the driver installation.
- Connect the USB drive to an available USB port. The USB drive contains the Dinex G4 G4 DIO Utility WC software license in addition to the installation files. The USB drive will need to remain connected to the PC to properly run the Dinex G4 DIO Utility WC software.
- Open the USB drive in windows explorer.



- Open the G4-MBC-HUB Device Driver v6.7.5 folder. If installing the driver on a 64-bit operating system run the **CP210xVCPIInstaller_x64.exe** file. If installing the driver in a 32-bit operating system run the **CP210xVCPIInstaller_x86.exe** file.

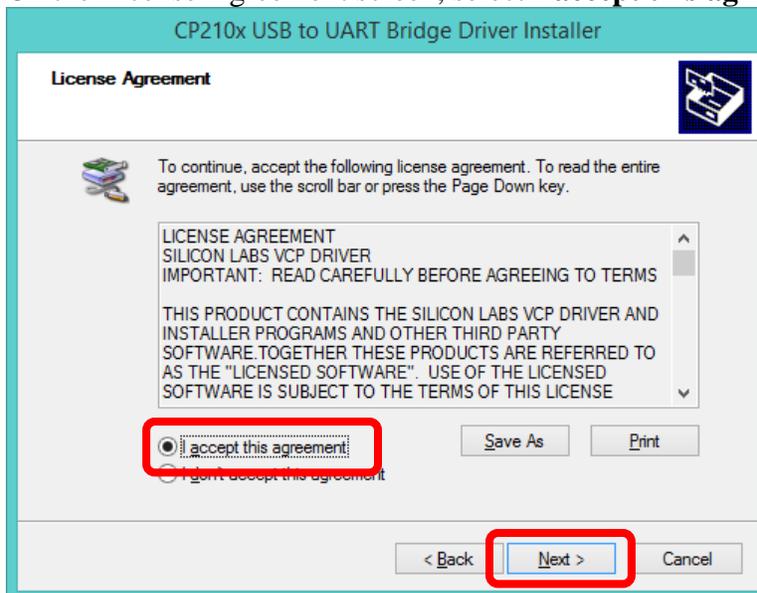


- Depending on the setup of the PC you may need to be logged in as the Administrator to run the installation file for the G4-MBC-HUB-xx device driver.
- Depending on the setting the computer a User Account Control window may appear asking if you want to allow the installation on the computer. Click **Yes**.

- Follow the instructions on the screen. On the Welcome screen, click **Next**.

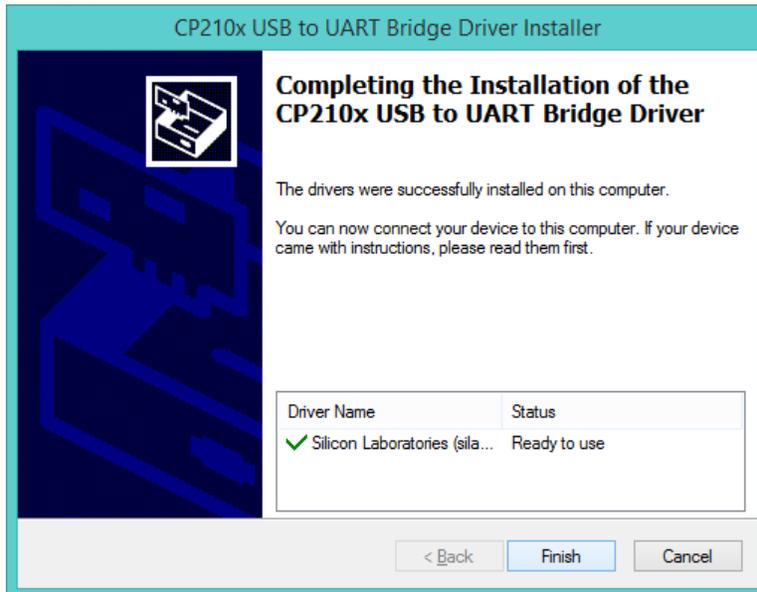


- On the License Agreement screen, select **I accept this agreement** then click **Next**.



- A new window will appear showing the files being installed, wait until this process is completed.

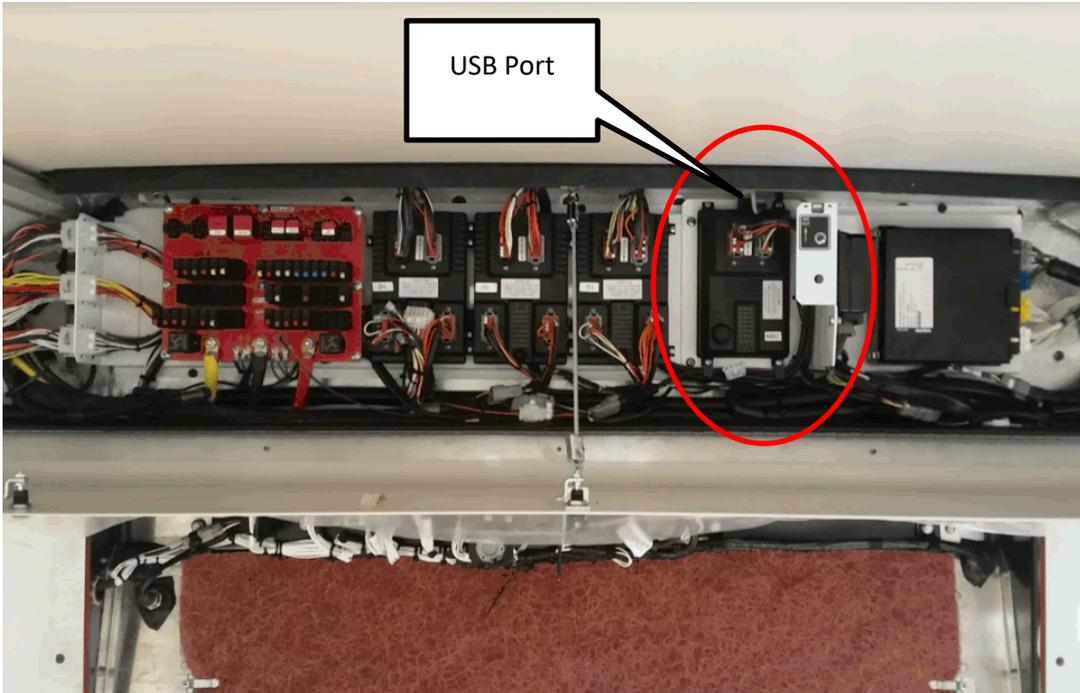
- When the G4-MBC-HUB-xx device driver finishes installing the Finish screen will appear click **Finish**.



- The G4-MBC-HUB-xx device driver has successfully been installed. It is now okay to connect to the G4-MBC-HUB-xx.

Verify Program Checksum for G4 System

1. Find the G4 MBC module in the following location

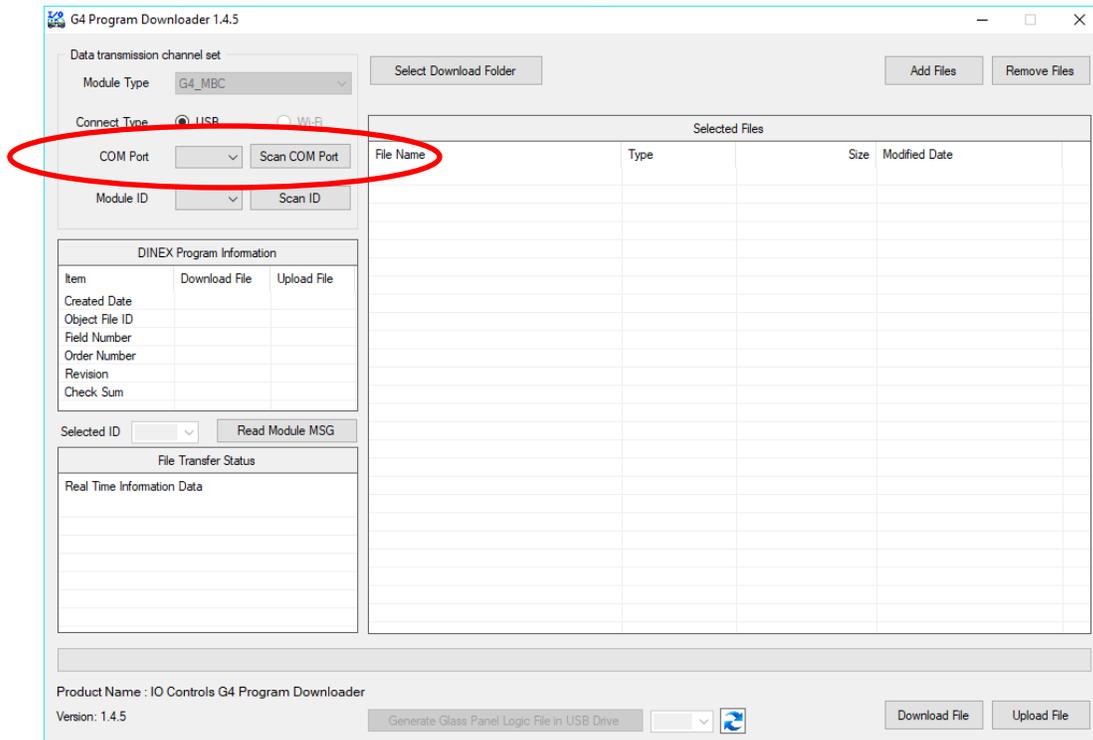


2. Connect MBC to a computer with an USB Type-A to Type-A cable

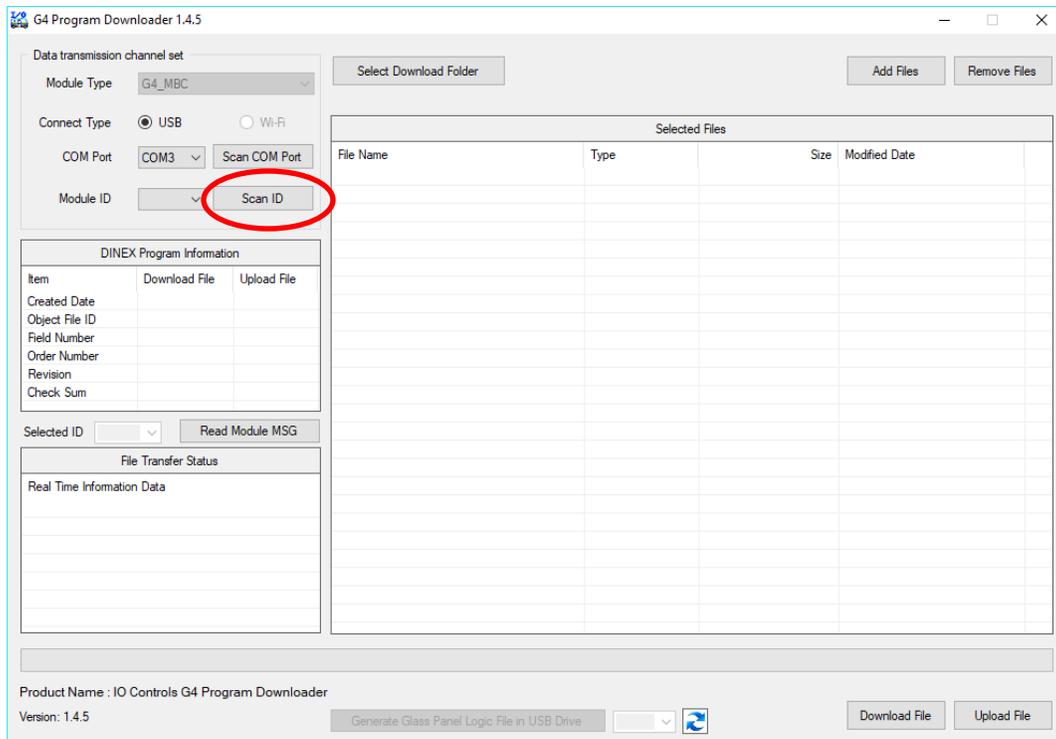


3. Execute the "G4 Program Downloader V1.x" on the computer.

4. If the COM port is found, use the default COM port number, if not, click the [Scan COM Port]



5. Click [Scan ID], the system will get the module information from the MBC. The Module ID should be "77".



6. The checksum is in the middle of the left panel

The screenshot shows the 'G4 Program Downloader 1.4.5' application window. The interface is divided into several sections:

- Data transmission channel set:** Includes dropdowns for 'Module Type' (G4_MBC), 'COM Port' (COM3), and 'Module ID' (77). It also has radio buttons for 'Connect Type' (USB selected, Wi-Fi unselected) and buttons for 'Scan COM Port' and 'Scan ID'.
- Select Download Folder:** A button located at the top right of the left panel.
- DINEX Program Information:** A table with columns 'Item', 'Download File', and 'Upload File'. The 'Check Sum' row is circled in red, showing a value of '2E9E'. Other rows include 'Created Date' (07/06/18), 'Object File ID' (77), 'Field Number' (0009), and 'Order Number' (3466).
- Selected Files:** A large table with columns 'File Name', 'Type', 'Size', and 'Modified Date', currently empty.
- File Transfer Status:** A section at the bottom of the left panel showing 'Real Time Information Data' and the message 'Module MSG read complete.'.
- Footer:** Displays 'Product Name : IO Controls G4 Program Downloader', 'Version: 1.4.5', and buttons for 'Download File' and 'Upload File'.