

How to transfer a HMI and PLC program from a USB Flash Drive

This application note includes three parts:

Part 1) Steps on how to save the HMI program in .zmv file format and the PLC program in .zld file format in USB Flash drive

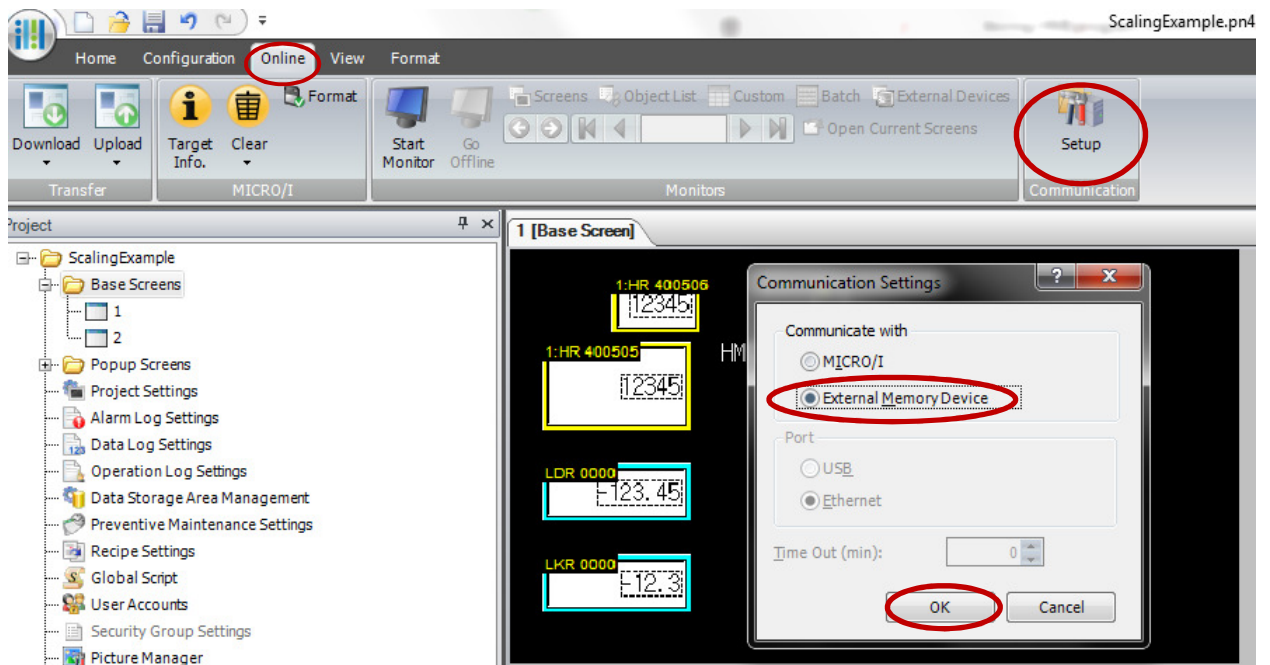
Part 2) Steps on how to configure the settings in USB Auto-Run Software Tool for the HMI and the PLC buttons

Part 3) The last part of this document shows exactly how to go about programming the HMI and PLC from the USB drive, with screen captures of what you see as you go through the process.

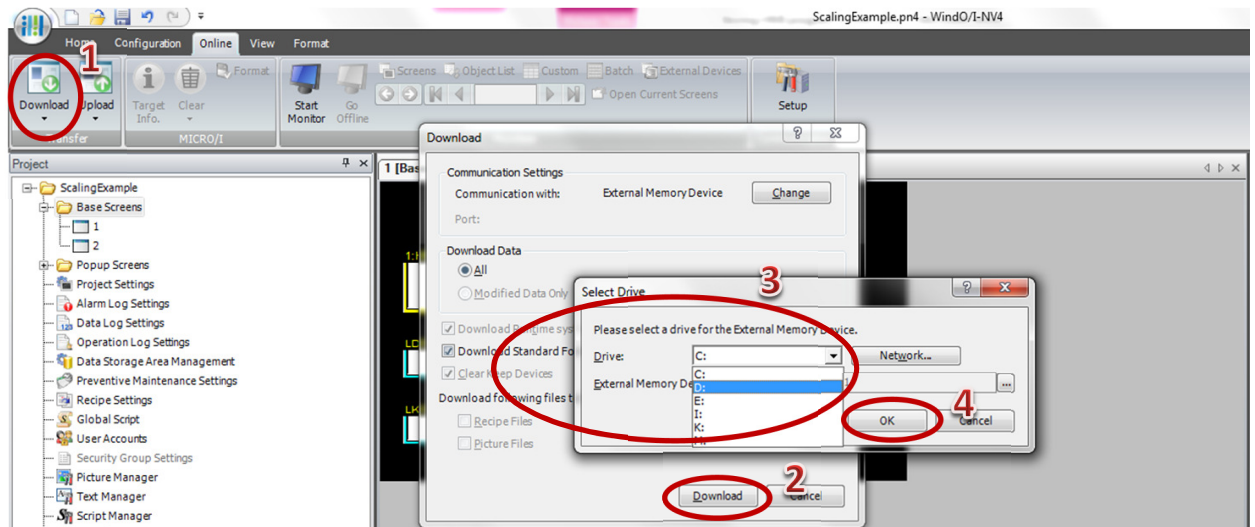
In this example, the HMI IP address is **192.168.1.6** and the PLC IP address is **192.168.1.5**.

Below are the steps on how to save the HMI program in .zmv file format in USB Flash Drive

- 1) Launch WindOI-NV4 software
- 2) Open your project file
- 3) Insert either USB flash drive or SD card into your PC
- 4) Click Online → Setup → External Memory Device → OK to close the dialog box.



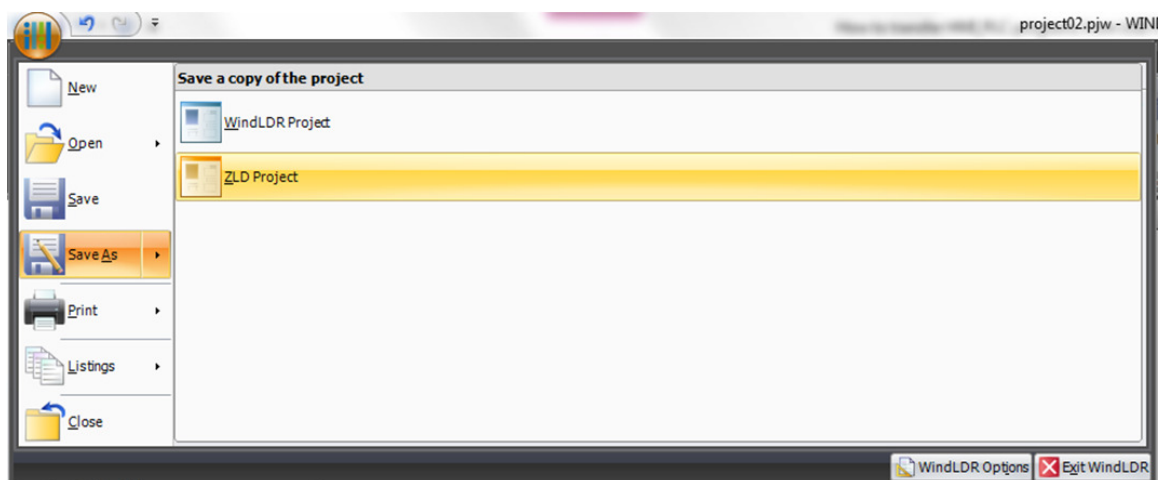
- 5) On “Online” tab, click “Download” and follow the configurations below. Select “Drive” for your USB flash on your computer.



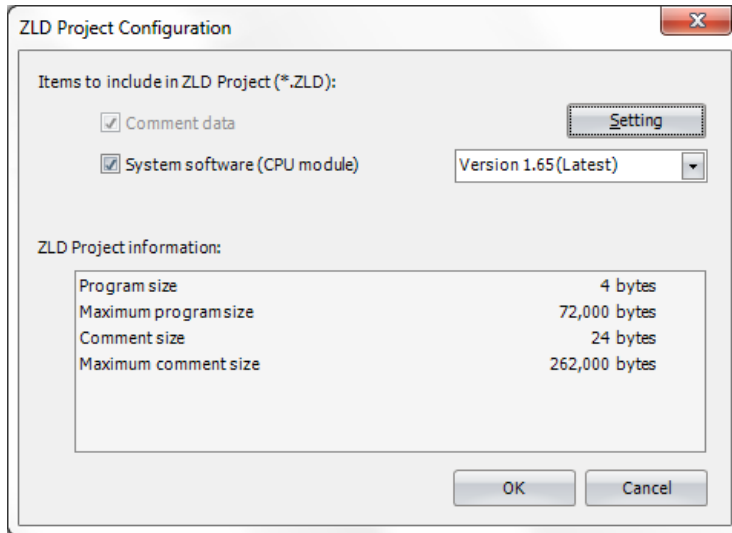
Note: This will save the project file onto your USB flash drive in a .zlv file extension. The file name is the same as the opened project file except the file extension is different.

Below are the steps on how to save the PLC program in .zld file format in USB flash drive.

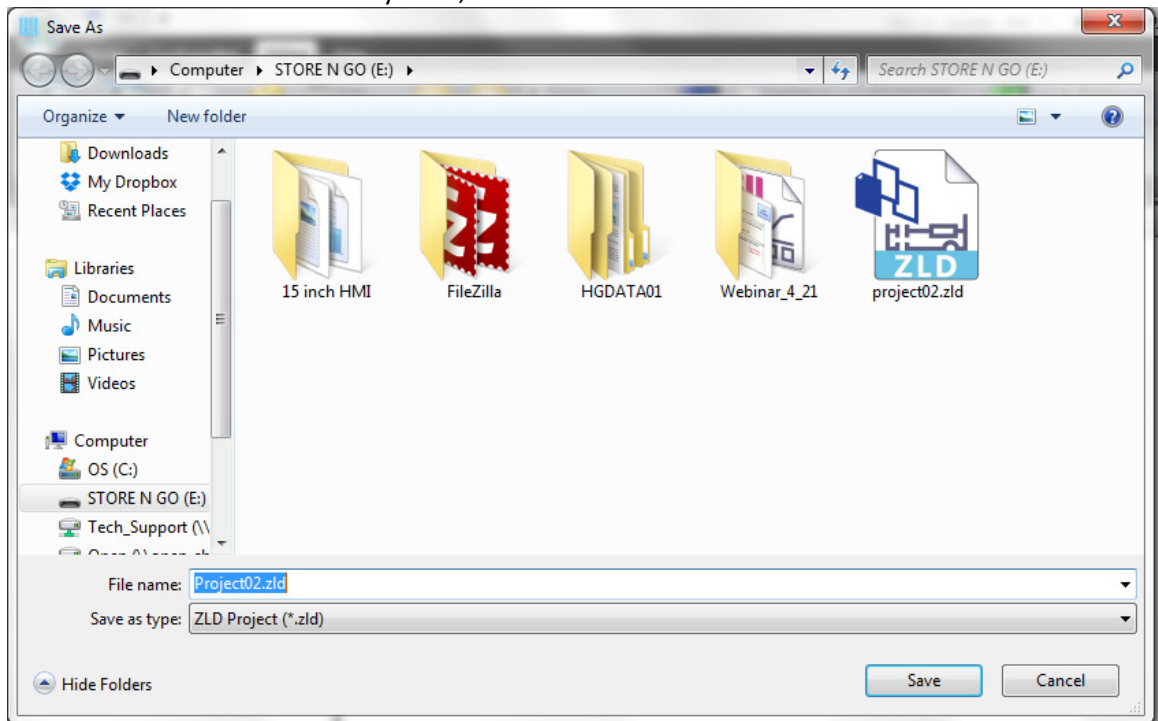
1. Insert USB Flash drive into an available USB Slot on the PC
2. Launch WindLDR Software.
3. Go to Application Button on the top left and select SAVE AS → ZLD Project



ZLD Project Configuration dialog box will pop-up. Click OK



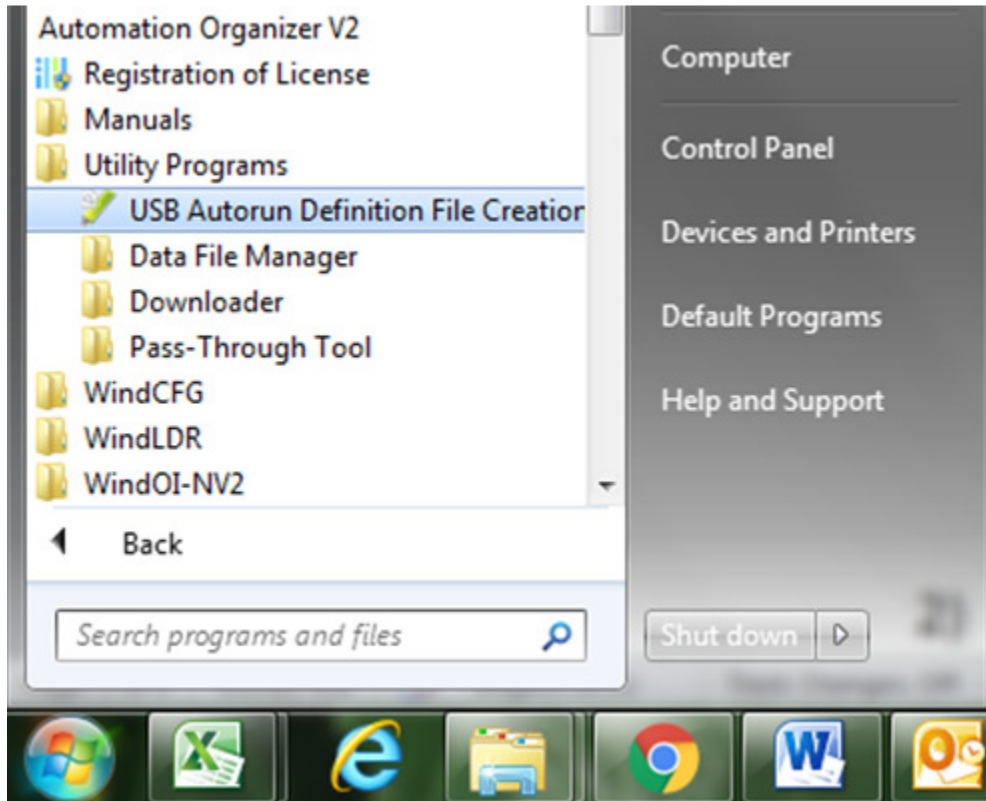
4. Select the drive for the USB Memory flash, enter a File Name and Click SAVE



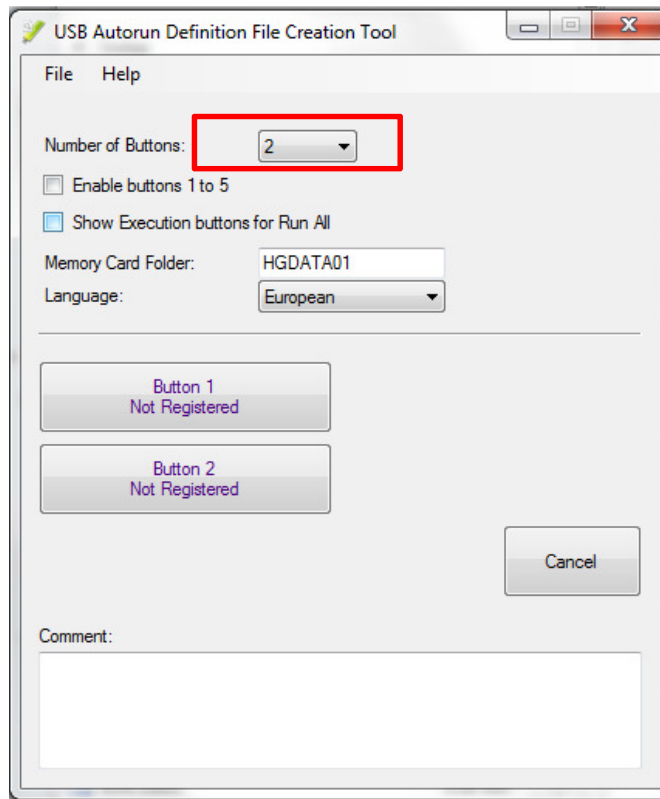
This will save the PLC project file onto a USB flash drive in .zld file format.

This part of the Application Note explains how to configure the settings in USB Auto-Run Software tool for the HMI and the PLC programs

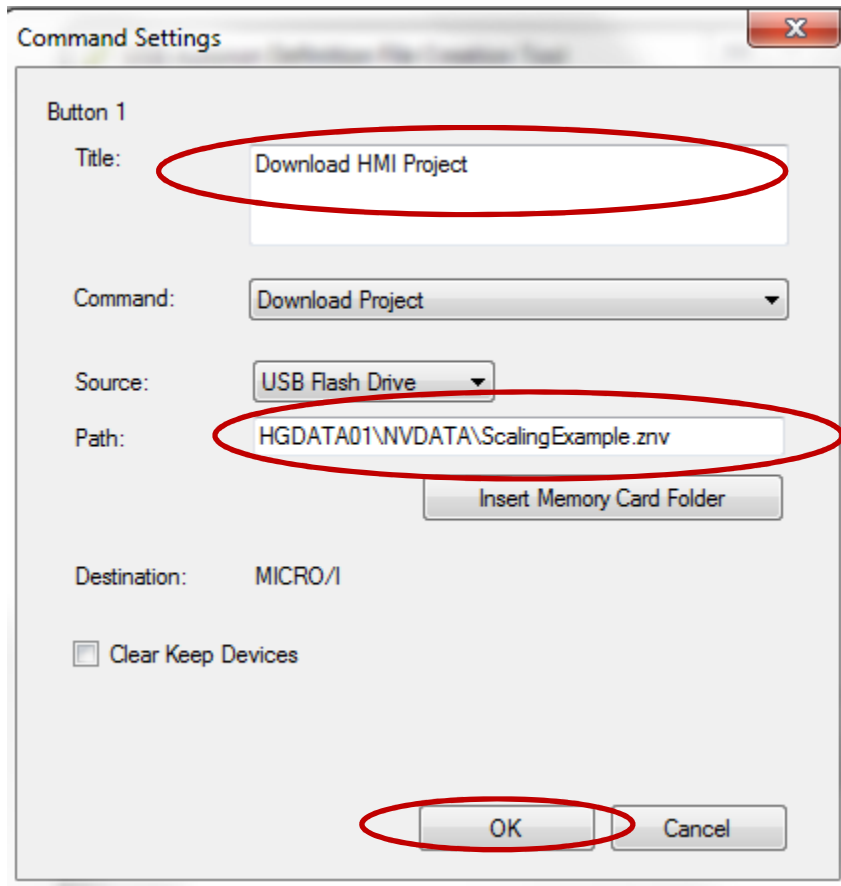
- 1) Launch USB Autorun tool in Automation Organizer V2, under Utility Programs.



2) Configure the following. "Number of Buttons" is 2. Click on "Button 1 Not Registered"



- 3) In Command Settings, enter Title and Path below.

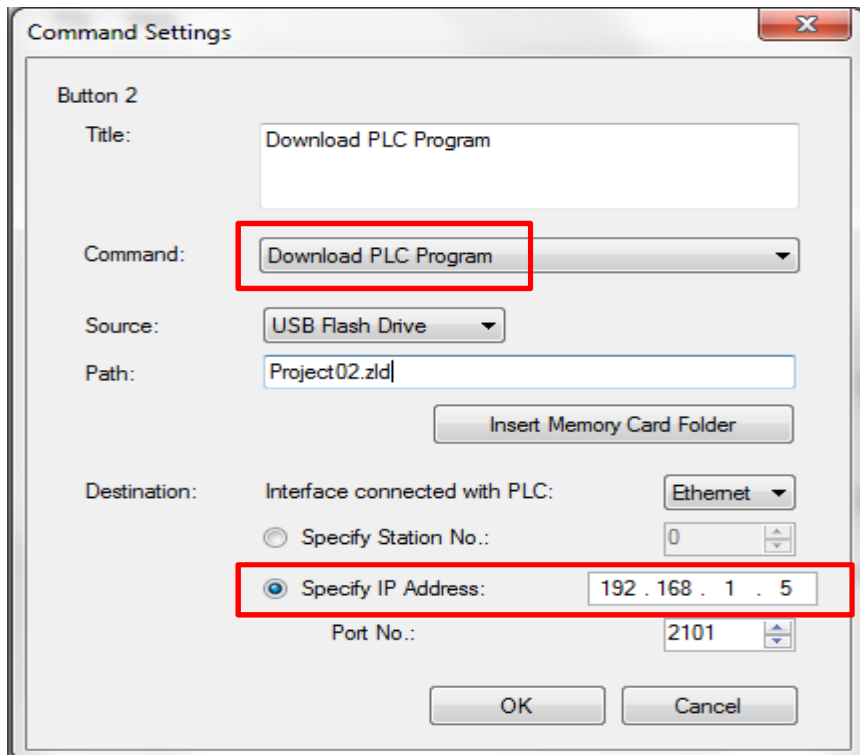


Note: In the above screen shot the project was create with filename “ScalingExample”. It’s important you put in the correct name of the project you are working with. You can check this by going to E:\HGDATA01\NVDATA

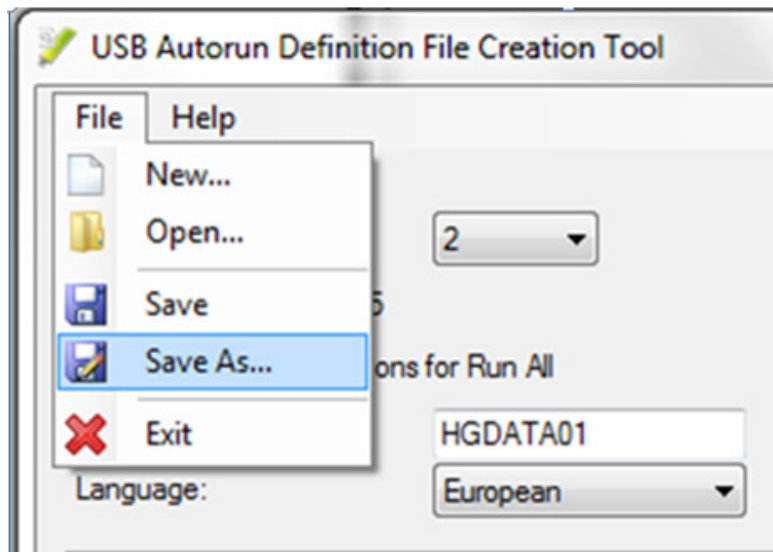
- 4) Click OK to close the dialog box.

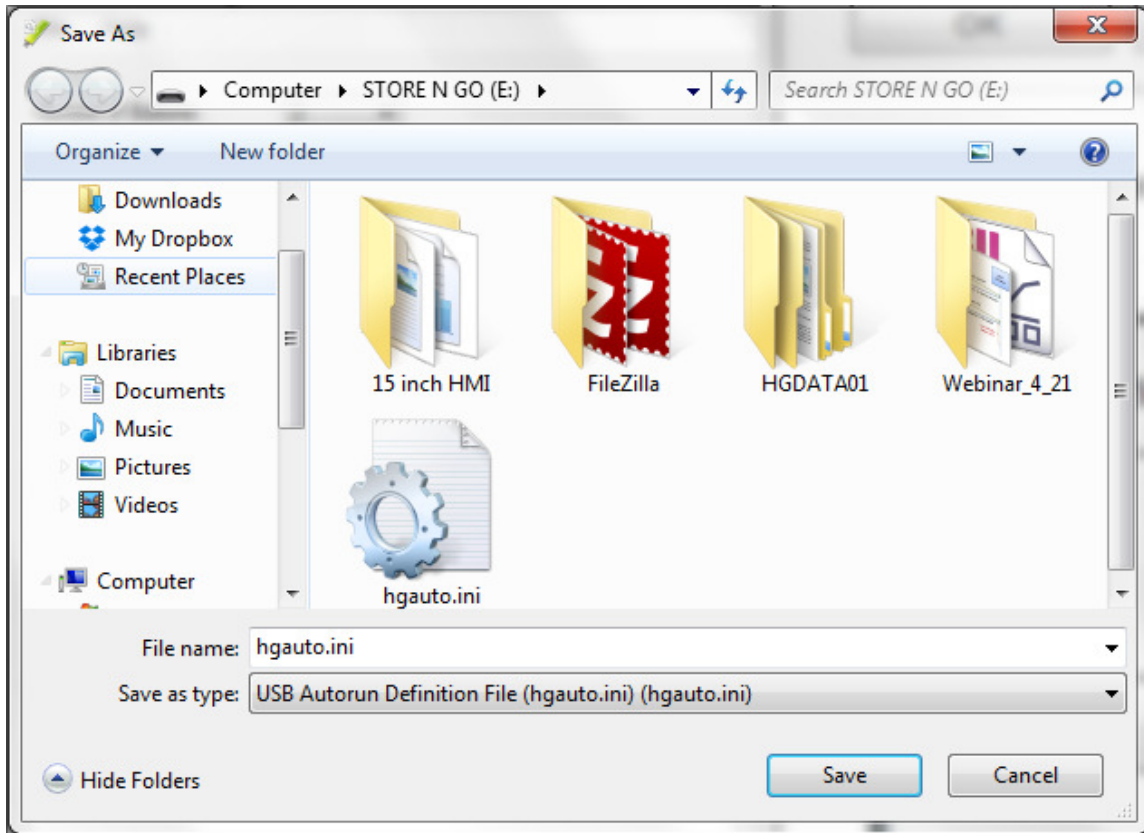
Next, Click on “Button 2 Not Registered” to repeat the step 2 for the PLC program.

- 5) In Command Settings, enter Title, Select “Download PLC Program” in Command, enter Path, Select “Ethernet” and enter PLC IP address. Click OK to close the dialog box.



- 6) Click "File" and select "Save As". Select E:\ drive and click Save. It will save the file with the name hgauto.ini

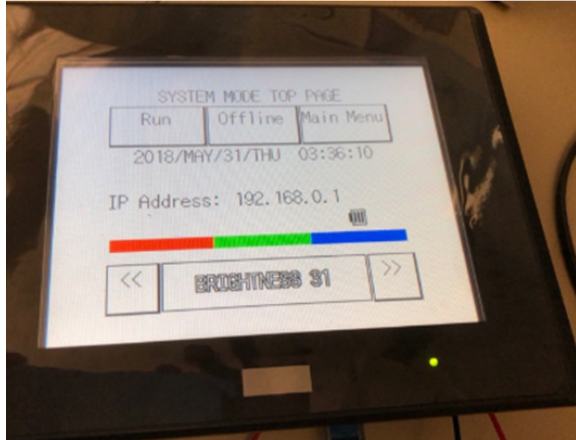




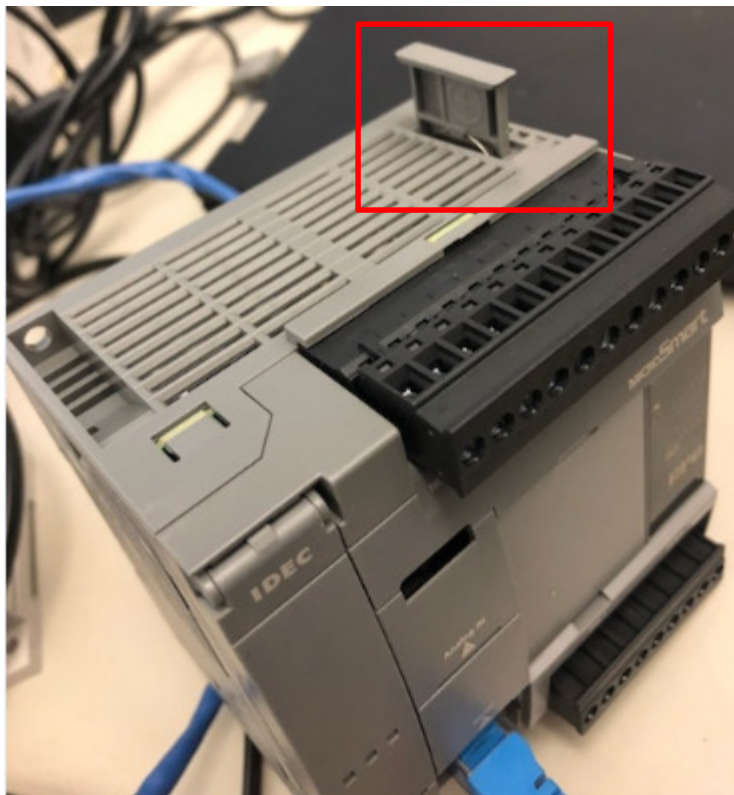
Please double check to see if you have all the necessary files in the USB flash drive. You should have .ZNV file, .ZLD file, and hgauto.ini file. The .ZNV file usually can be found in HGDATA01 → NVDATA folder.

Lastly, this document shows exactly how to go about programming the brand new HMI and PLC from the USB drive, with screen captures of what you see as you go through the process.

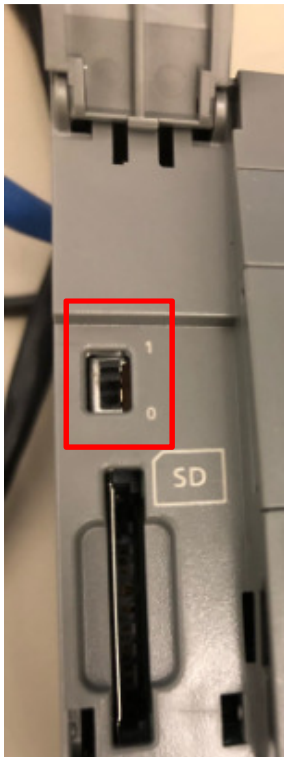
When you power up the brand new HMI, the System Mode Top Page will be displayed as below.



If the brand new PLC is used, please make sure the battery is inserted into the PLC.



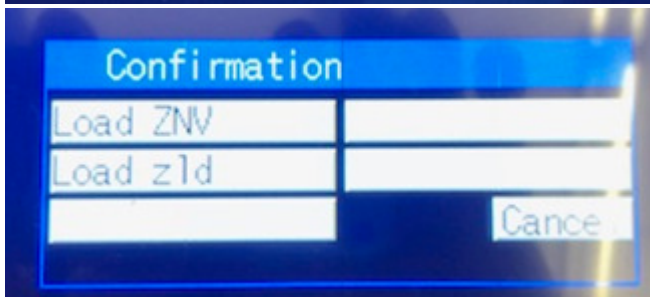
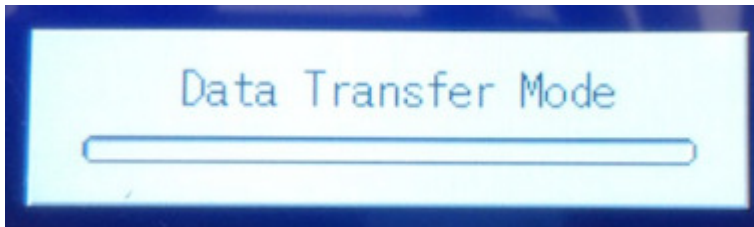
And also, turn the digit switch to a position 1 as below.



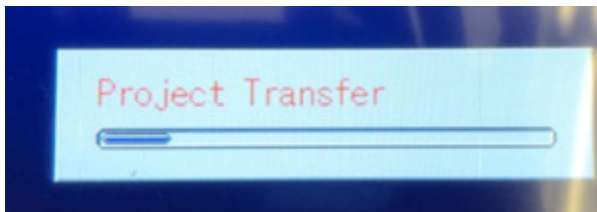
- 1) Unplug USB memory stick from your computer and plug it into the HMI onto USB2 slot.



- 2) A window will pop up with a Data Transfer Mode follow by another window Confirmation that has "Download Project" buttons on it.



- 3) Download the HMI program first by pressing "Load ZNV" button. When ZNV button is pressed, the HMI project in the USB memory stick will be started transferring into the HMI.



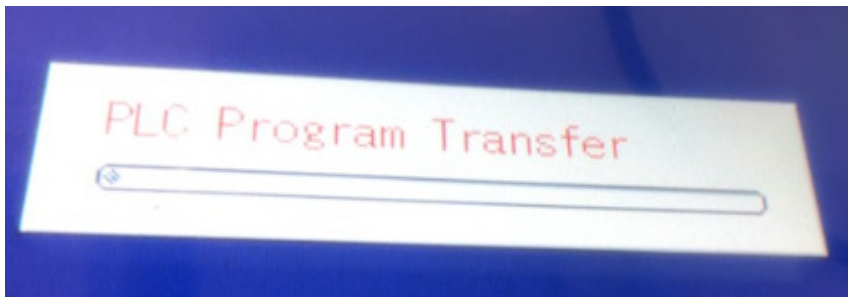
- 4) When the transfer is completed, the screenshot below will pop up. Press ACK to close the dialog box.



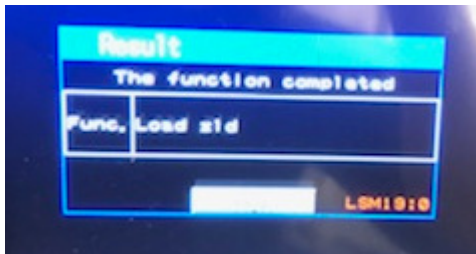
- 5) Next, press “Load Zld” to download the PLC program from the USB stick to the PLC via HMI.



- 6) The “PLC Program Transfer” message will be displayed.



- 7) When it's complete, below message will be displayed as “The function completed”. Press ACK.



If there is no communication error on the HMI, the PLC and the HMI should be talking to each other.

This is the end of the application note.