

Create communication with WECON PLC



WECON Technology Co., Ltd.

Website: <http://www.we-con.com.cn/en>

Technical Support: liux@we-con.com.cn

Skype: "fewkkj" or "Jason.chen842"

Phone: 86-591-87868869

QQ Tech Group: 465230233

Technical forum: <http://wecon.freeforums.net/>

HMI

1. PIStudio Software Downloading

Please visit below link to get the latest version LeviStudioU for HMI programming:

<https://drive.google.com/open?id=0B0j9uum1UPXbfjZDdD1mSjhsTnQyQzhqb09oTmZaVDJCM1ZCc3YydFlTCzJlTC1WQnFQb0k>

Or

<https://mega.nz/#F!uFVzmBAZ!U5R9dGfNgbUxrWfrgcRJgA>

2. build a new HMI project connect with PLC

See the video in below link, it will guide you how to get started with a new project

<https://drive.google.com/open?id=0B0j9uum1UPXbMENtRlF2VzdQdHc>

for more videos, please visit Youtube

<http://www.youtube.com/user/Wecon2004/videos>

For more demo:please visit our forum

<http://wecon.freeforums.net/>

3. General

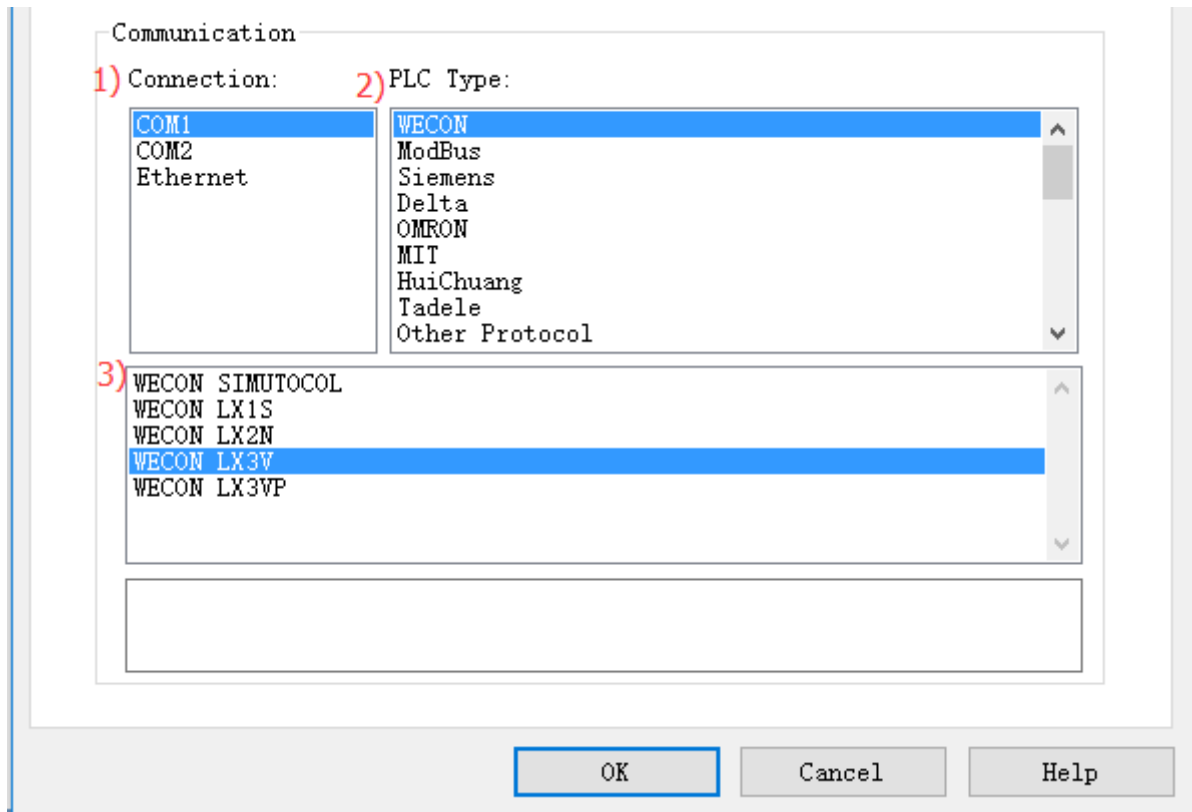
HMI could communicate with PLC, WECON HMI could support many PLC protocol, it is easy to operate and set communication parameters. This demo shows how to make a communication with PLC device, use WECON LX3V Series PLC as an example.

4. Protocol settings

The communication between two devices requires a protocol. The following contents show the step of protocol settings.

Please select the protocol, when creating a new project.

- 1) Select the COM port for communication;
- 2) PLC type: It means PLC brand, like WECON;
- 3) PLC model: It shows the model of PLC, such as LX3V;

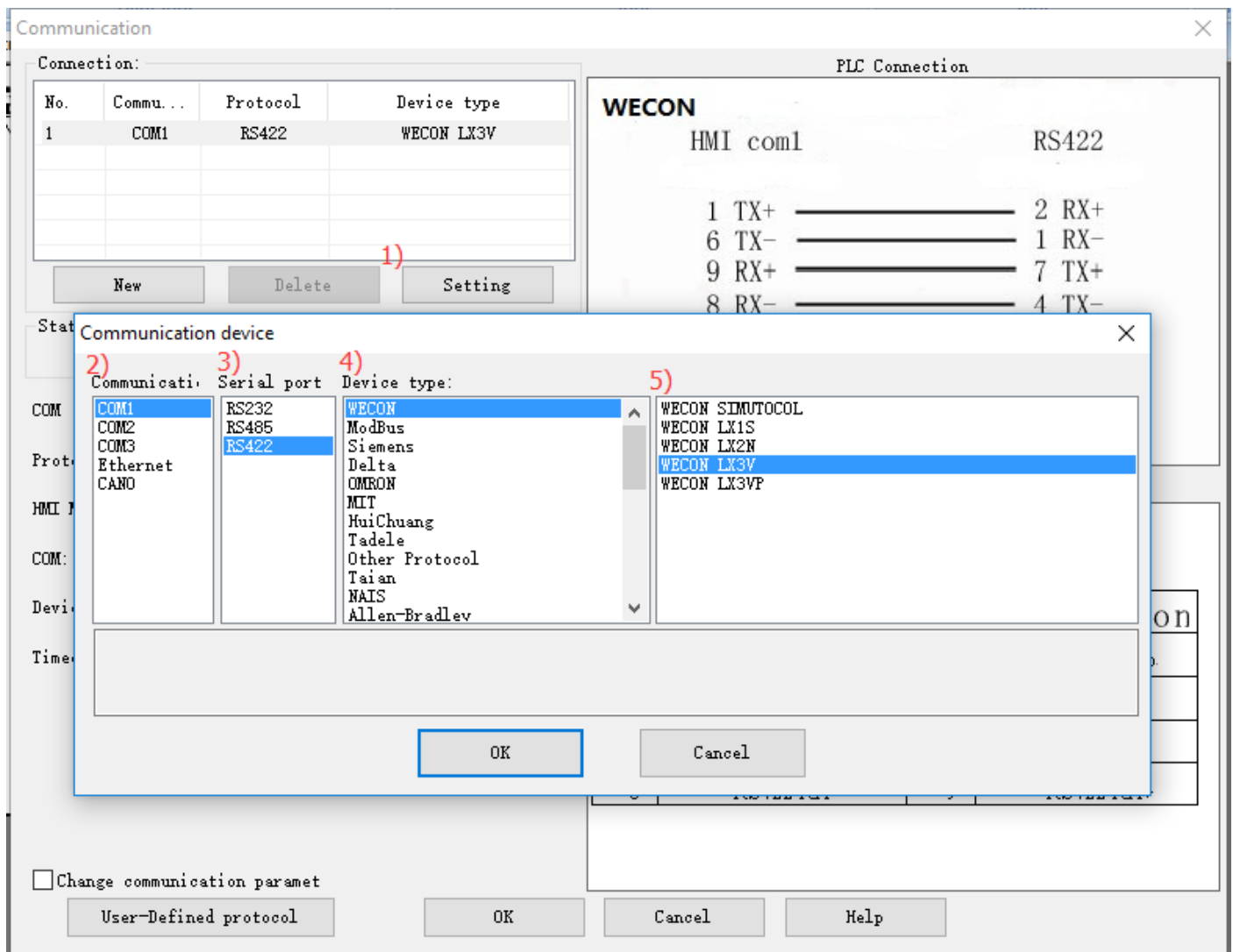


If you wanted to change the protocol for existing project, please click [Program] -> [Communication] to open the [Communication] windows as following figure shows.



Please do the following steps to change the protocol for project

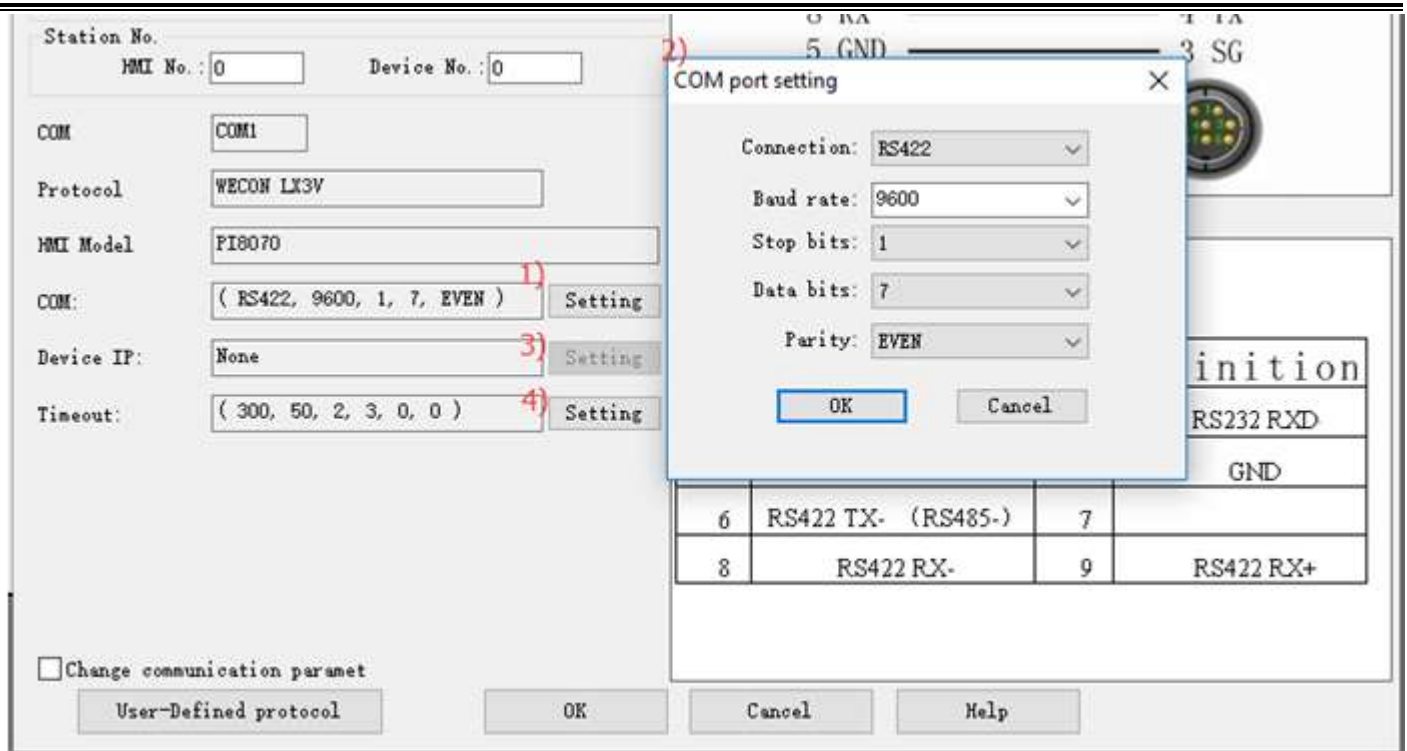
- 1) Click [Setting] to open the [Communication device] window;
- 2) Select communication port, such as COM1;
- 3) Select Serial port for communication, such as RS422;
- 4) Select device type (device brand), such as WECON;
- 5) Select the protocol for communication, such as WECON LX3V;



5. Parameter settings

The parameters settings are in [Communication] window, as following figure shows.

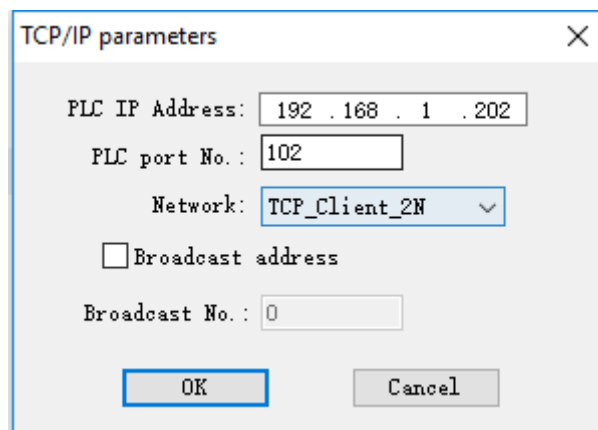
- 1) Click [Setting] to open the [COM port setting] window;
- 2) Set the parameters such as [connection], [Baud rate] and so on;



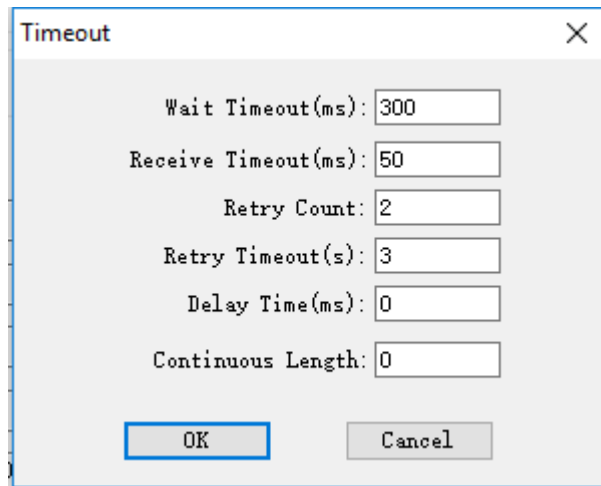
- 3) Click [Setting] to open the [TCP/IP] parameters for Ethernet communication, the [Setting] only available when using Ethernet protocol, users can set the PLC IP address and PLC port No for communication.

Note:

The default Network is same as PLC default Network, if users want to change the network type, please make sure it is the same as PLC's

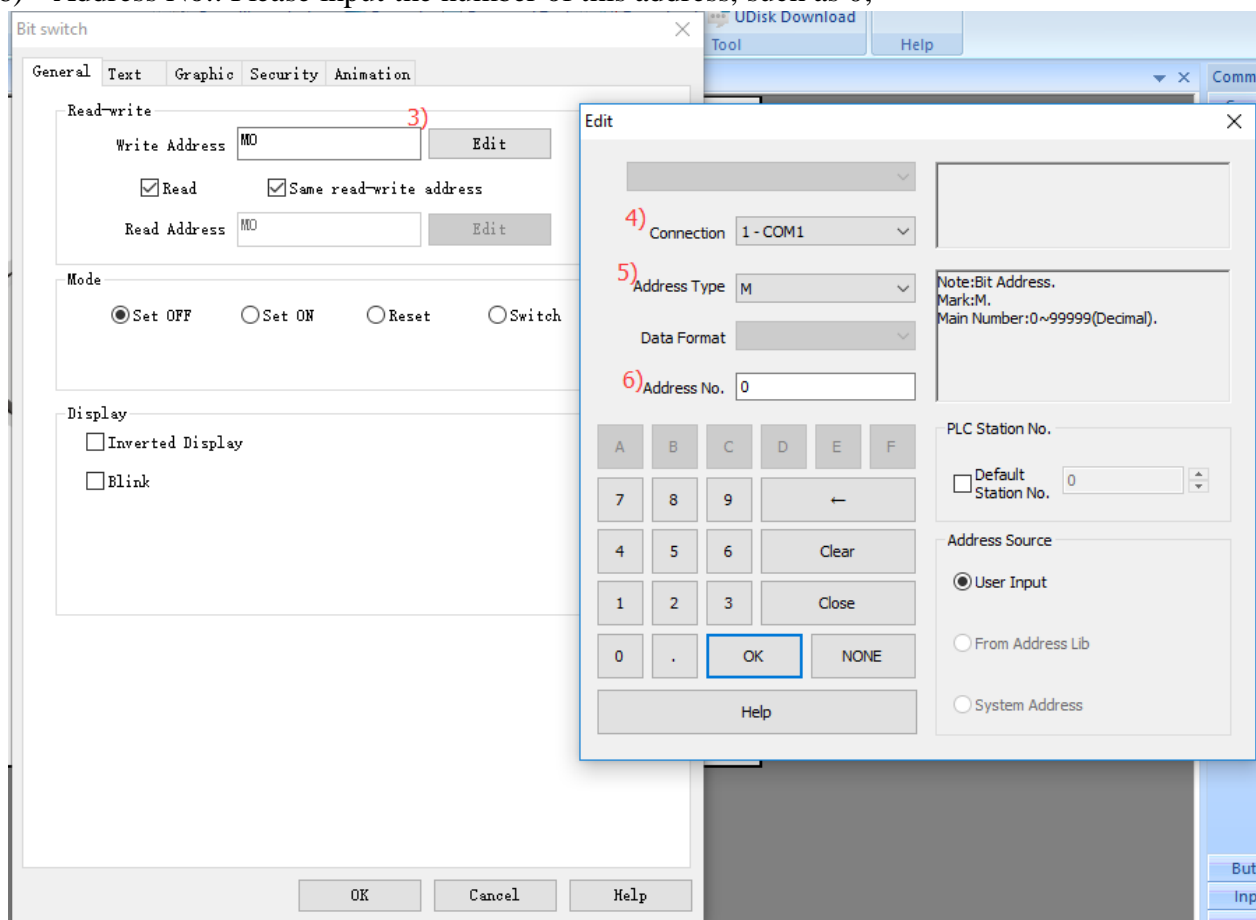


- 4) Click [Setting] to open [Timeout] setting window, users can set the parameters according requirements, or just use the default value.



6. Set PLC address in HMI screen

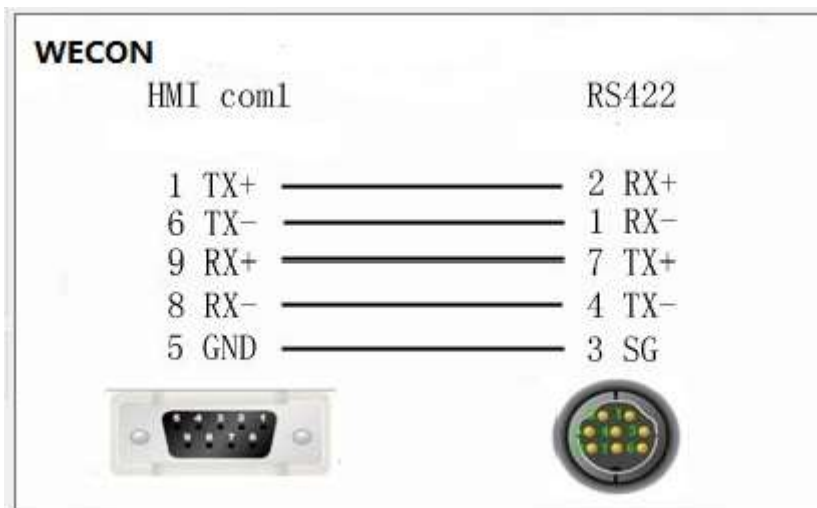
- 1) Place the objects to HMI screen;
- 2) Double-click the object to open the setting window;
- 3) Click “Edit” to open the address setting windows;
- 4) Connection: select the serial port in HMI;
- 5) Address type: All the PLC address types will be display in this list, such as M;
- 6) Address No.: Please input the number of this address, such as 0;



7. Communication cable

In order to ensure the stability of communication, please use the twisted-pair communication cable with good grounding.

The following figure shows the pin out definition.



PLC

1. PLC Software Downloading

Please visit below link to get the latest version PLC Editor for HMI programming

<https://drive.google.com/folderview?id=0B0j9uuum1UPXbfk9JTklxcVdVRFF3NzNrNDc0LTdGNUg5U1hnMkFndXdZTk42U0FJWm1iRFk&usp=sharing>

Or

https://mega.nz/#F!LENmiLJZ!rHMcG_UhqbUhetob1QQPyg

2.Start a new PLC project

1) Start a new PLC project

Start a new PLC project by clicking “New” on the left top corner of screen, select the PLC mode from the drop-down list.



Figure 1

2) Change the PLC mode



Figure 2

3) Set the password for project

It would require password when you open the PLC project.



Figure 3

4) Add a new instruction

Double click on the ladder, select the ladder symbol (instruction) from the drop-down list, then enter the address for this symbol.

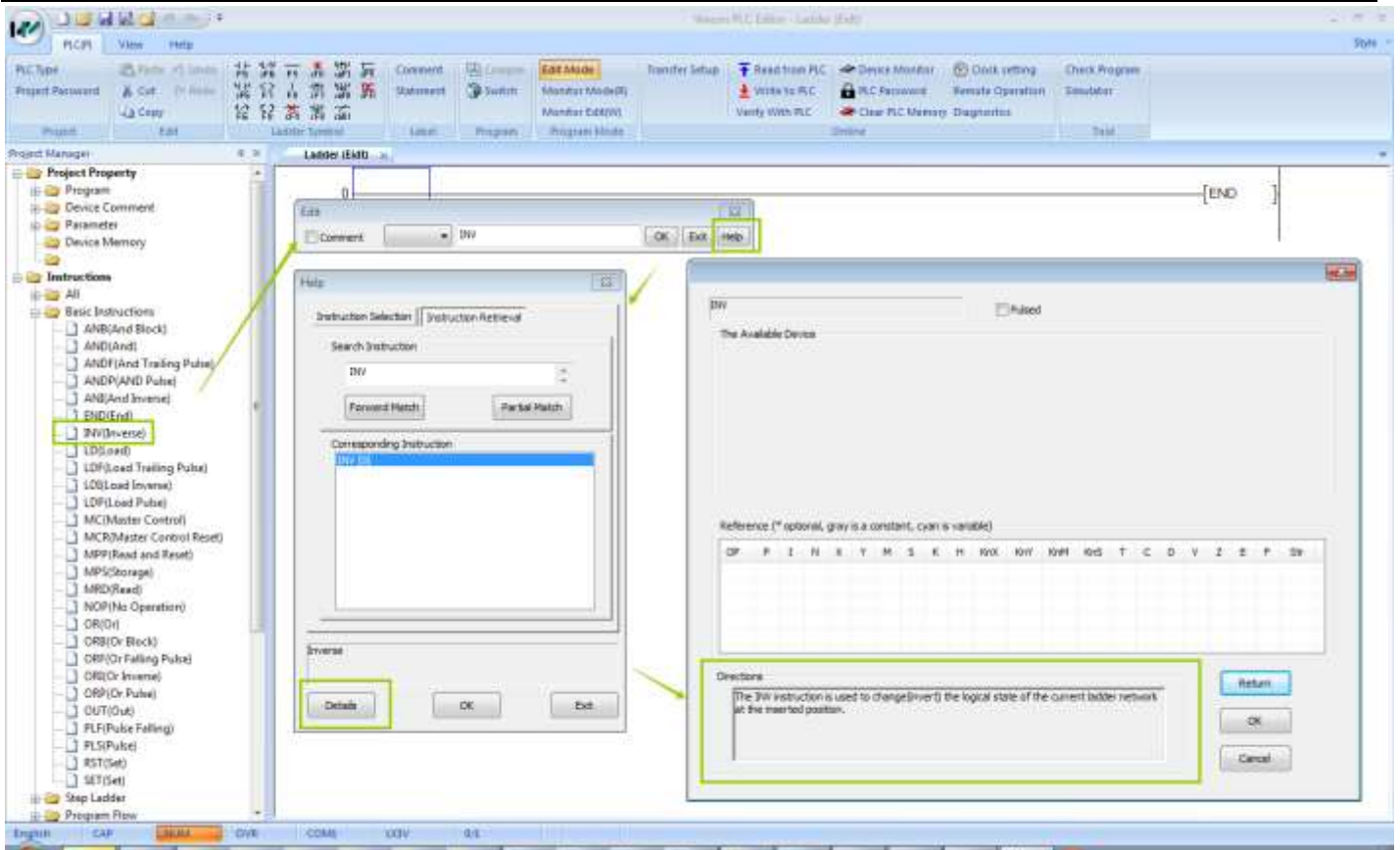


Figure 4

Also you could select the ladder symbol from the menu bar directly.



Figure 5



5) Add comment to PLC program



Figure 6

6) Add the statement to PLC program

Add the statement by single click on “Statement”, when finished, single click on “Statement” again to go back to Ladder edit.



Figure 7

7) Compile

You need to compile the PLC program before downloading or running Off-line Simulator. The background color will be changed from gray to white, when no error found.

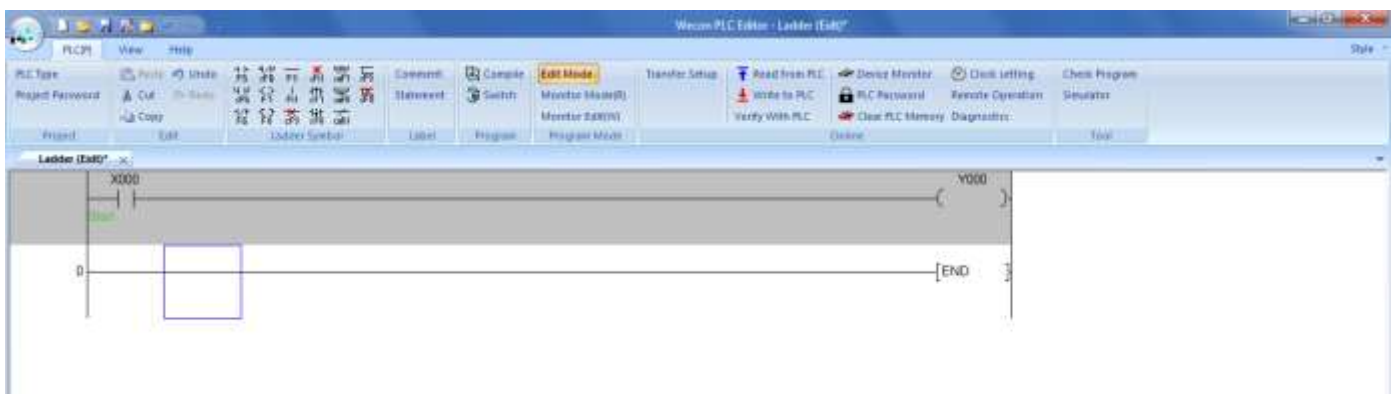


Figure 8

8) Download setting

Click on “Transfer Setup” to select the serial port to download.

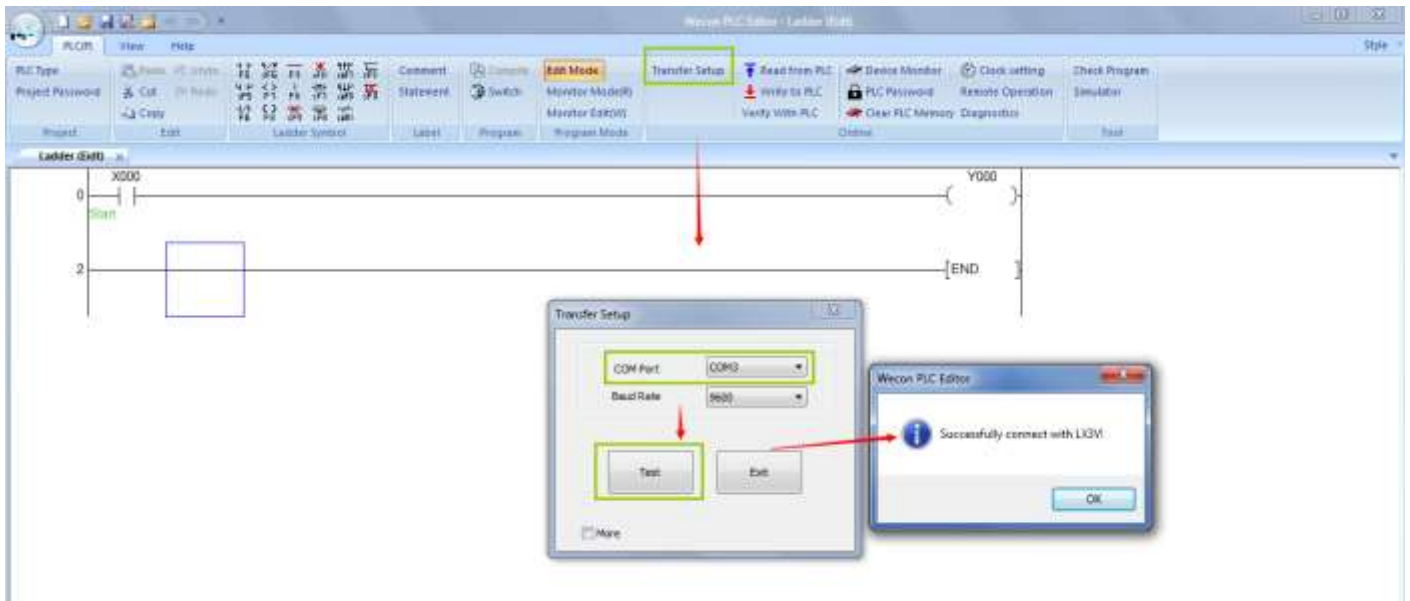


Figure 9

9) Download PLC program to PLC

Quick select the parameters and main program of PLC program, then download to PLC, “Yes”-”Yes”-”OK”

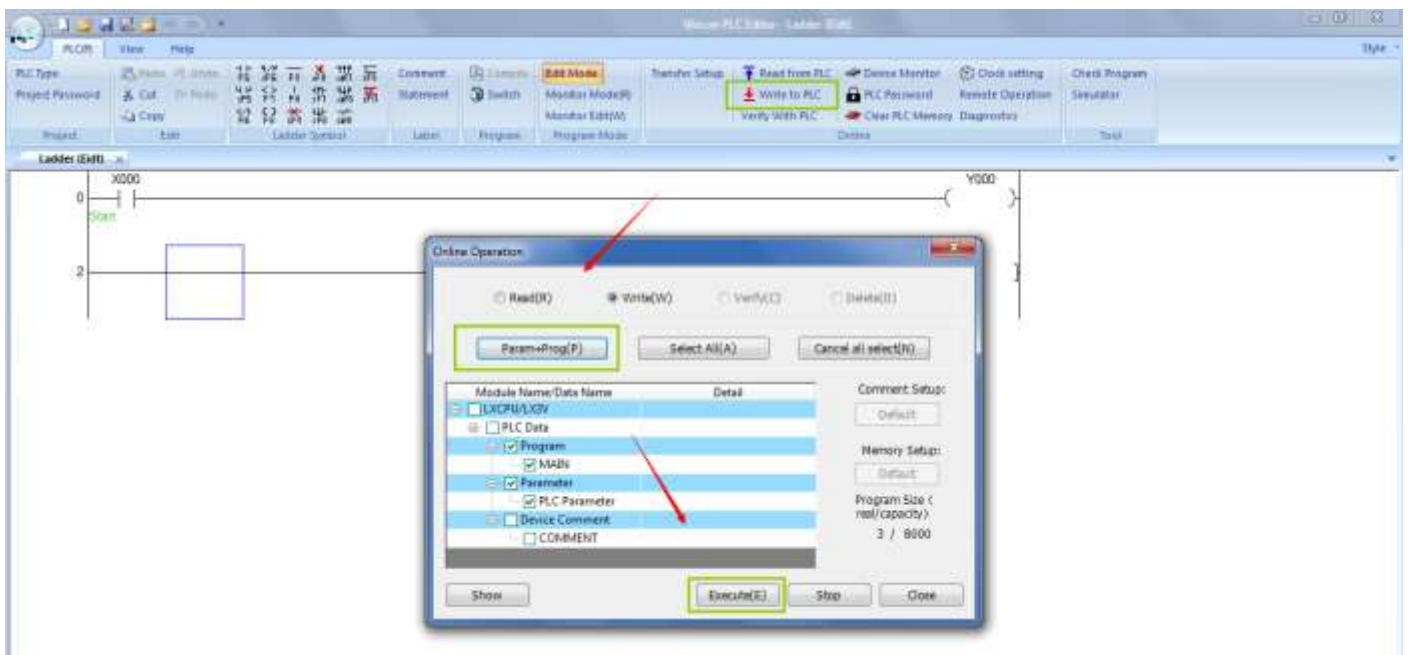


Figure 10

10) Upload PLC program from PLC

Read the PLC program from PLC to computer.

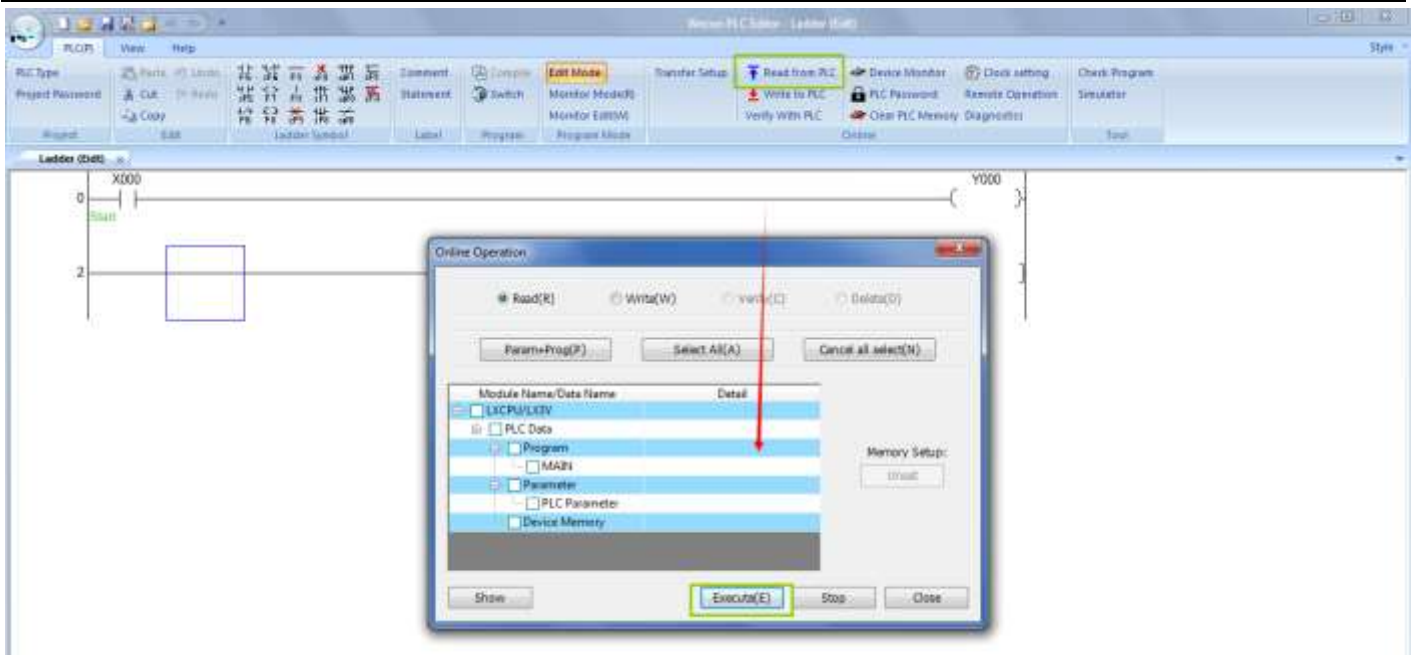


Figure 11

11) Device monitor

Monitor the value of certain address in PLC, double click on “Current value” to change the value in this address.

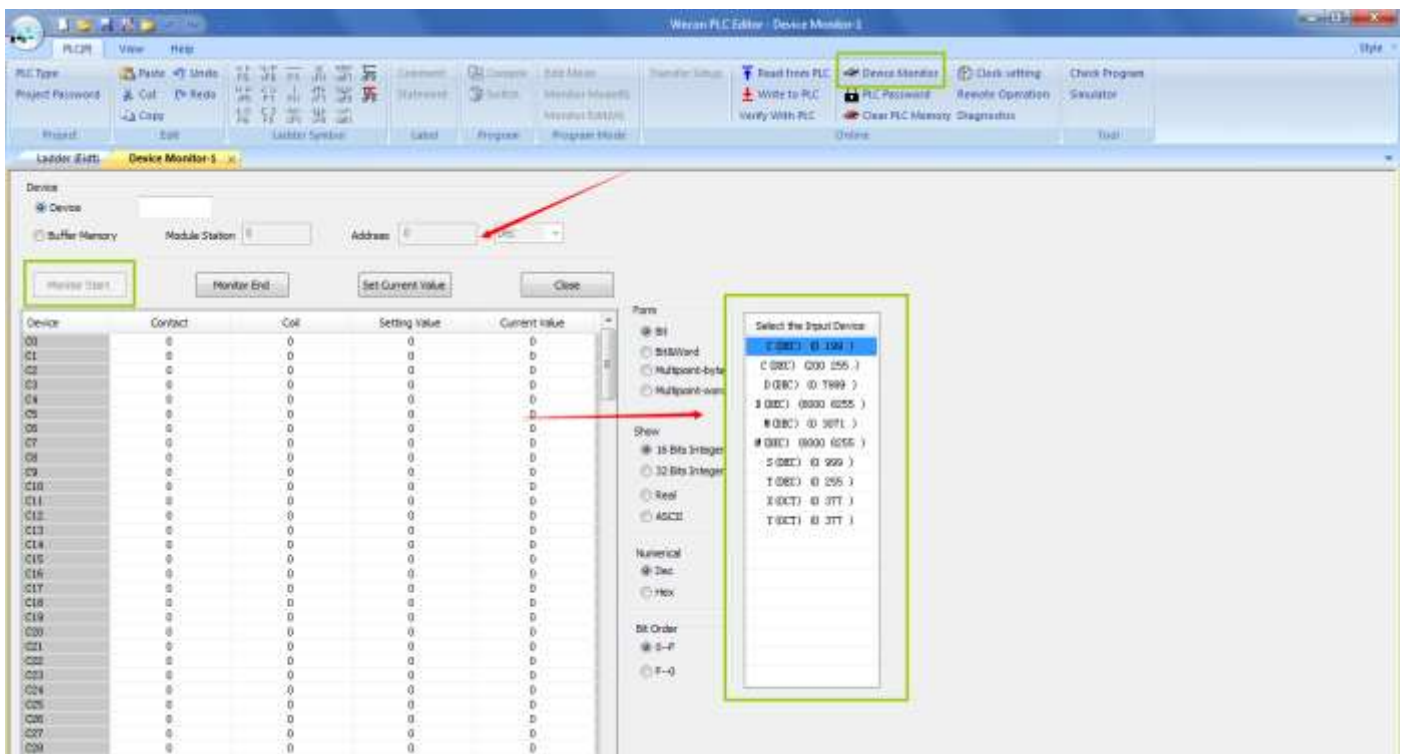


Figure 12

12) Off line simulator

Check the states of PLC program by running off line simulator.

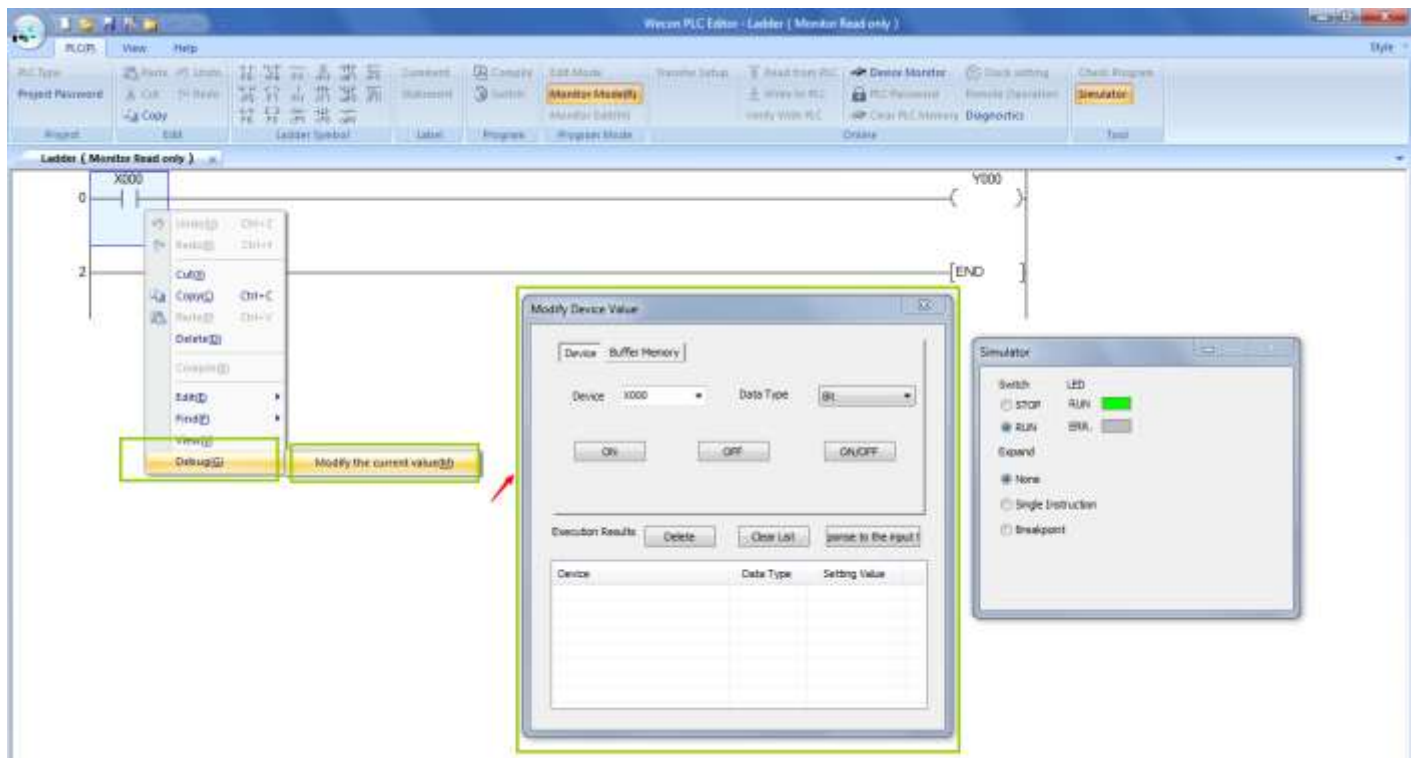


Figure 13

13) Online monitor

Monitor the each address in PLC by online monitor, also allow you changing the state or value in PLC.

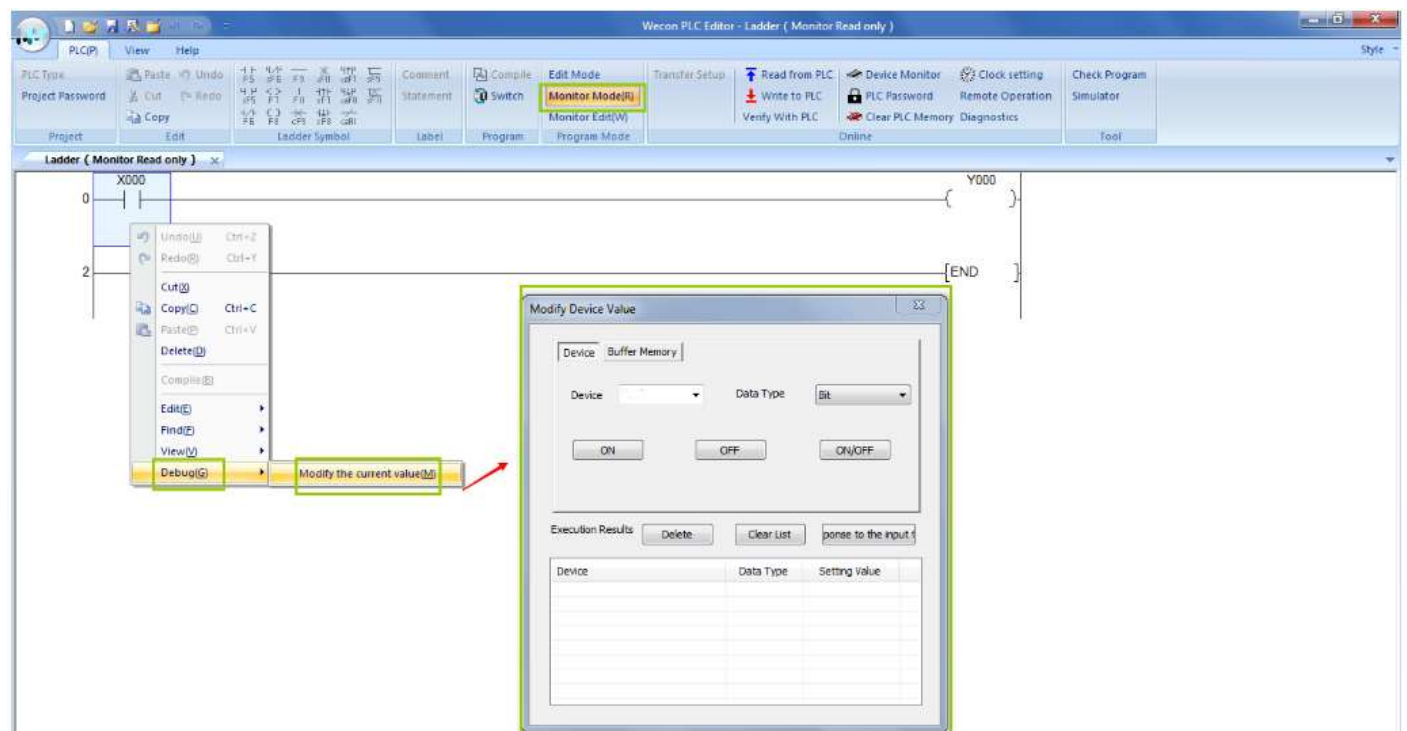


Figure 14

14) Monitor edit

In this mode, allow user to edit the PLC program during PLC is running.



Figure 15

Version: V2.0.0

Date: Dec 2016