CONTROLS & DRIVES LTD

The Industrial Automation Specialists

Technical Tip

GOT2000 Ethernet Multidrop
Using FX and Q series PLCs

Controls & Drives Ltd

Part of the BPX Group

GOT2000 Multidrop with FX and Q

Contents

Intro

A setup guide on GOT2000 networked with Multiple PLC through Ethernet.

Equipment used:

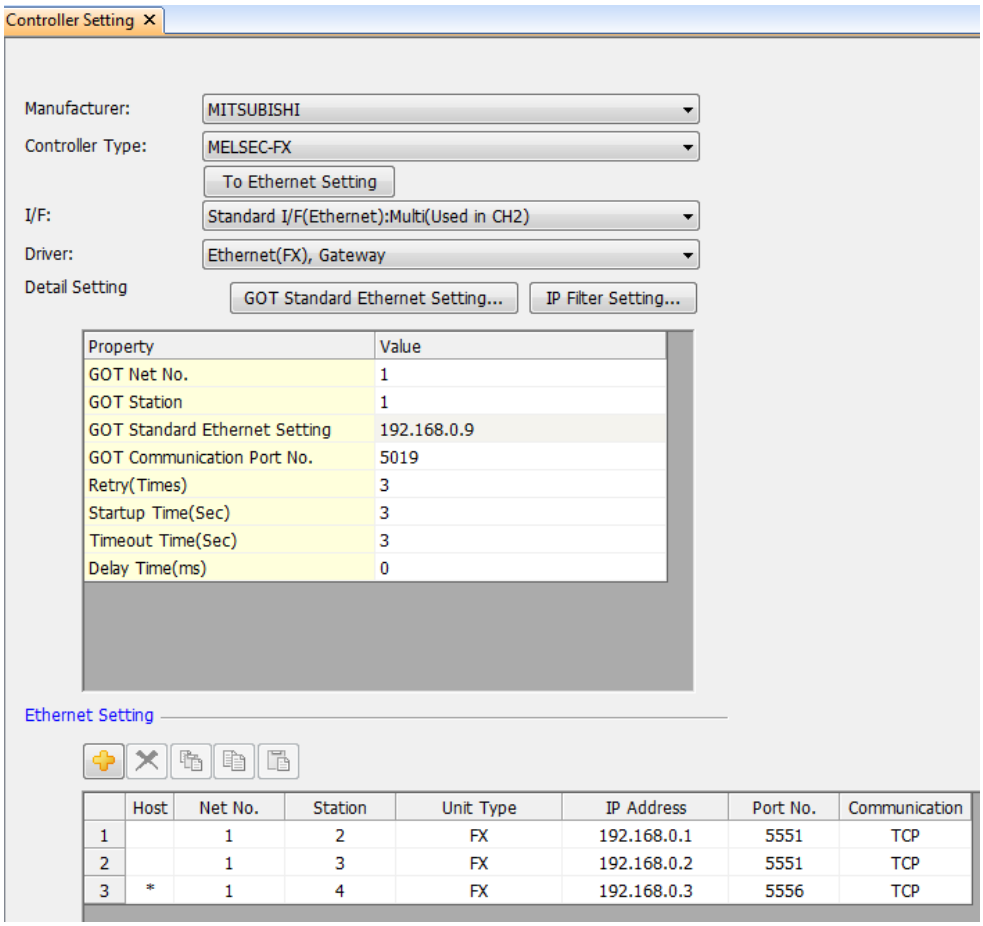
FX3G – with FX3U-ENET
FX3G – with FX3U-ENET-ADP
FX3U – with FX3U-ENET
Q02 – with QJ71E71-100
GT2508-VTBA
Standard Ethernet switch

HMI settings on GT25 – GT Designer 3

1) Create a new project in GT designer 3 and select correct HMI type.

2) In controller settings the following settings were used:

CH1:



It is possible to setup all FX3 PLCs on one channel. You can see above GOT is station 1 and the PLCs are Stations 2, 3, and 4.

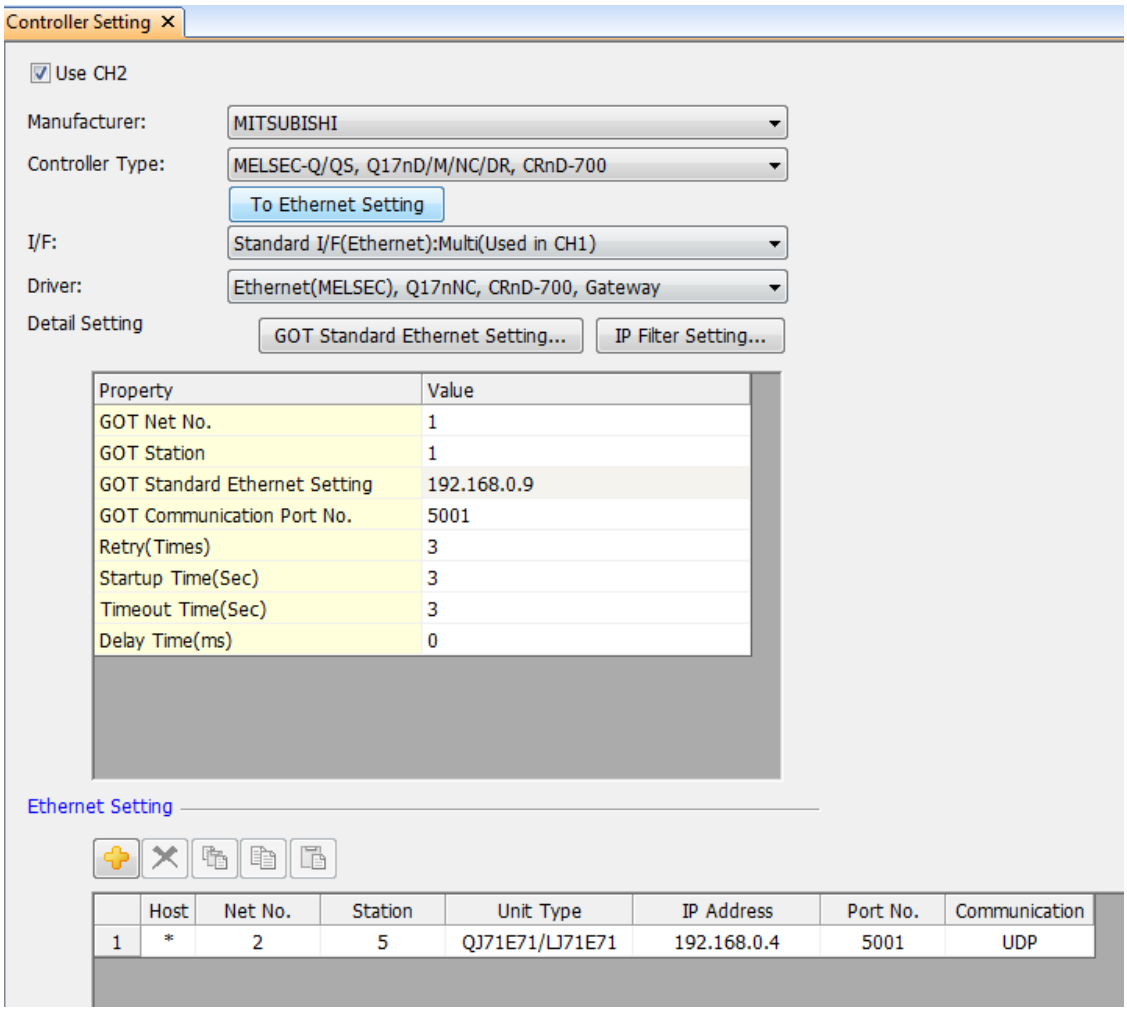
The FX3U-ENETs is port 5551, and the FX3U-ENET-ADP is port 5556 (the port number is determined by the type of equipment used and it is not changeable in FX).

Please note: it is not possible to setup Q series PLC and FX3 on the same channel.

Now select CH2:

Check ‘use CH2’ tick box

These are the settings that were used for Q series. You are able to use a Q series PLC as long as you use a different channel.



On this channel you have to make sure your network number is 2.

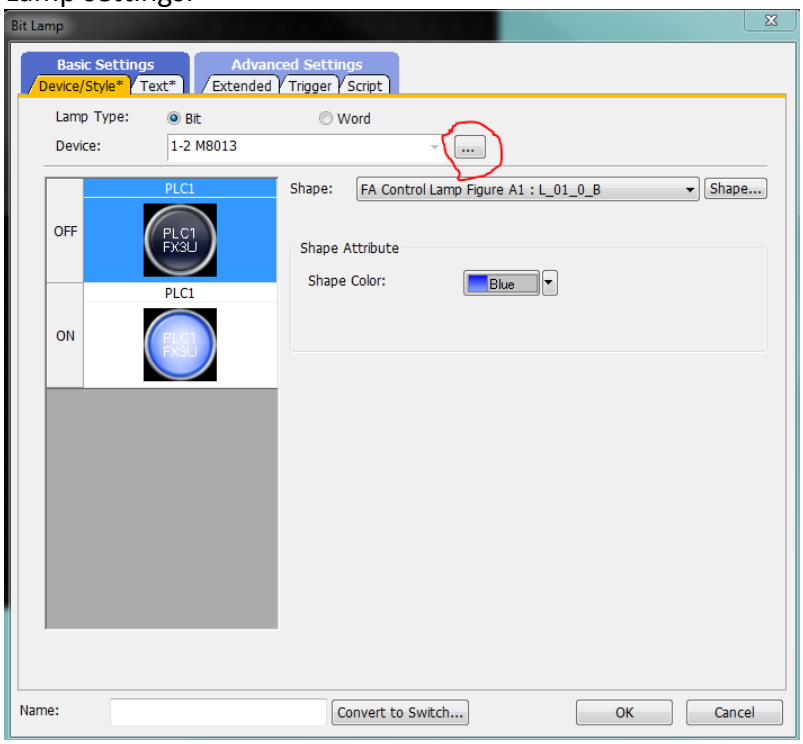
Station number 5 was used as an optional number, however the station number needs to be different to the HMI.

Please note: You need will need use a different IP address to the FX PLCs, and also make sure the correct Unit type has been selected.

3) HMI Screen:

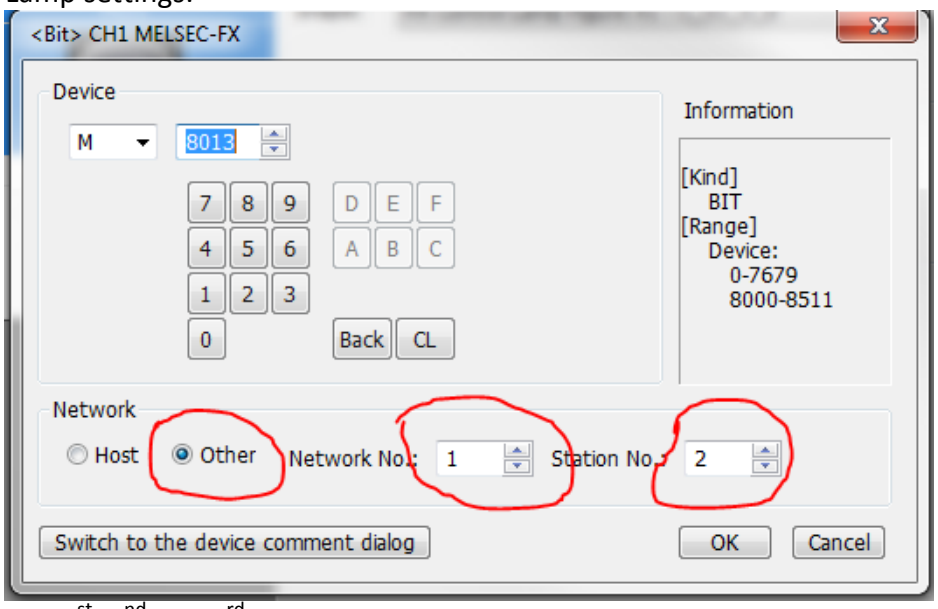
For the screen, 4 lamps were used with a 1 second PLC pulse contact.
FX – M8013
Q – SM412

Lamp settings:



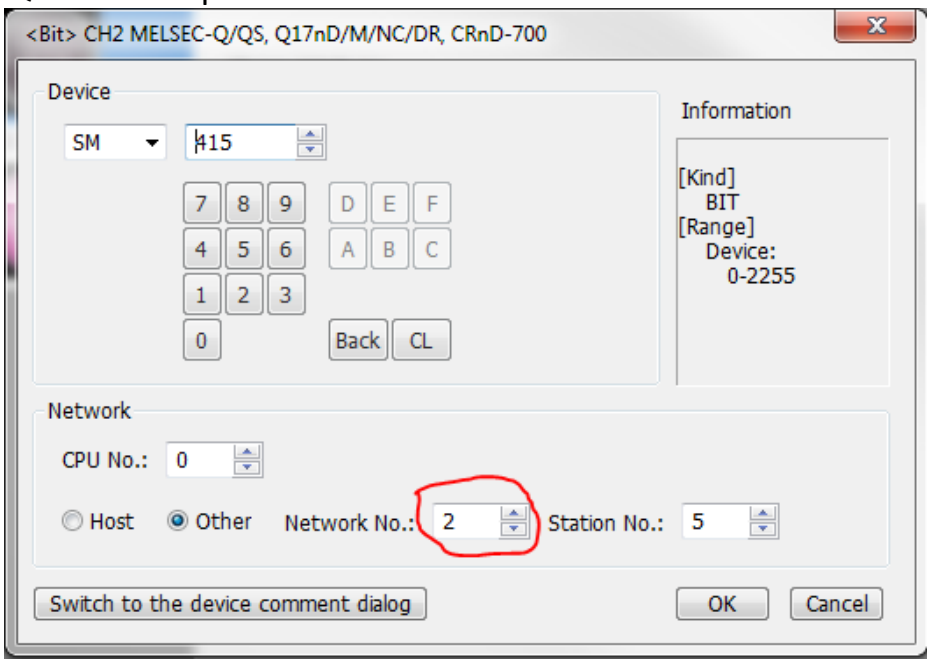
The lamp will require addressing, As above click on the button with '3 dots'.

Lamp settings:



The 1st, 2nd and 3rd lamp was FX therefore Network 1 was selected, station number will differ accordingly.

Q series setup:



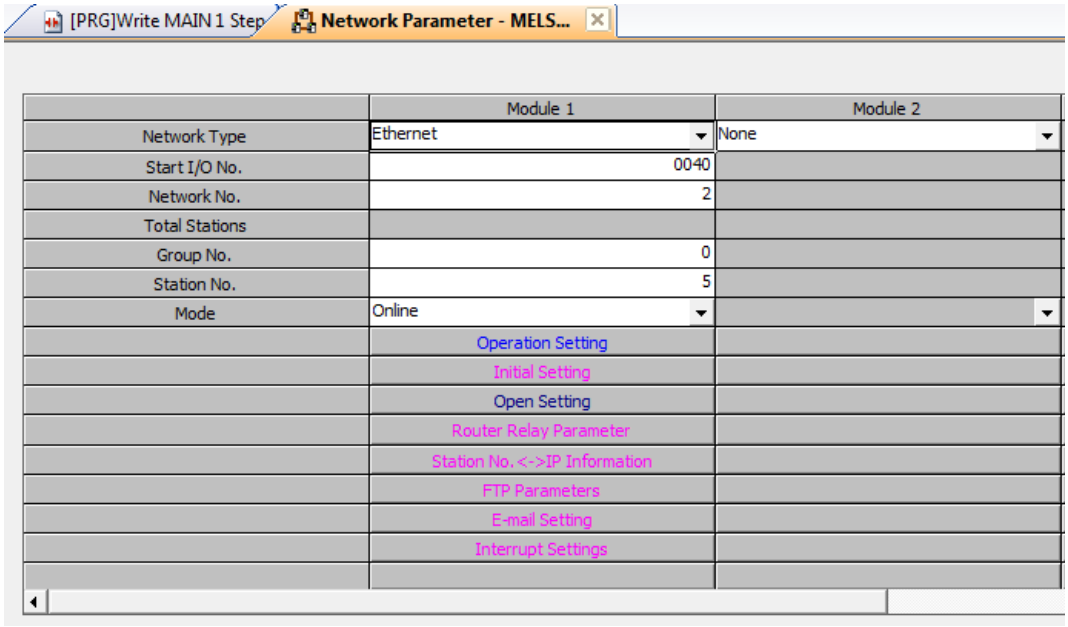
You can see here Network 2 is selected and Station 5 is selected.

4: The HMI is now ready and can downloaded to GOT screen

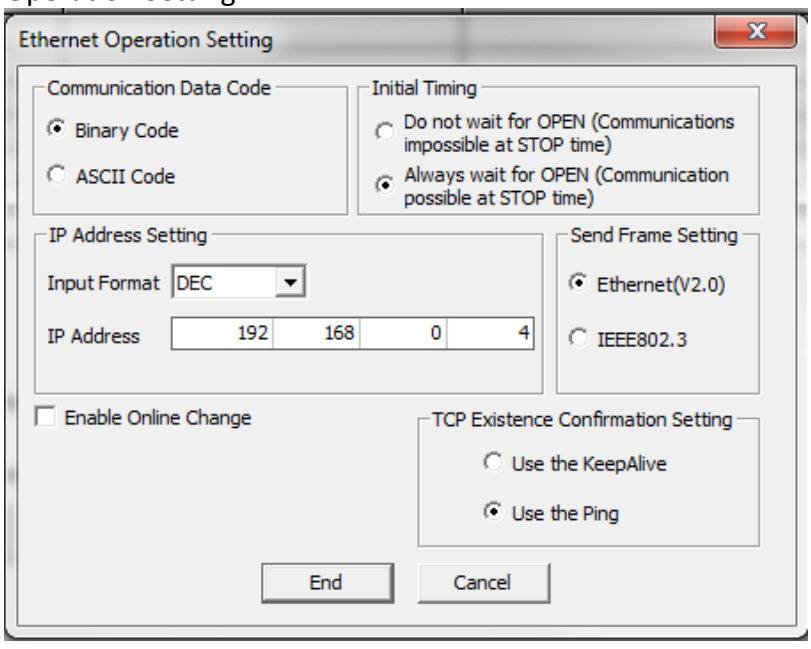
Setting up PLCs

1) Q02 series

Ethernet settings will need to be setup in Network parameters as a QJ71E71-100 was used:



Operation Setting:



Please note: the IP address needs to be the same as the GOT screen for Q series controller in channel 2.

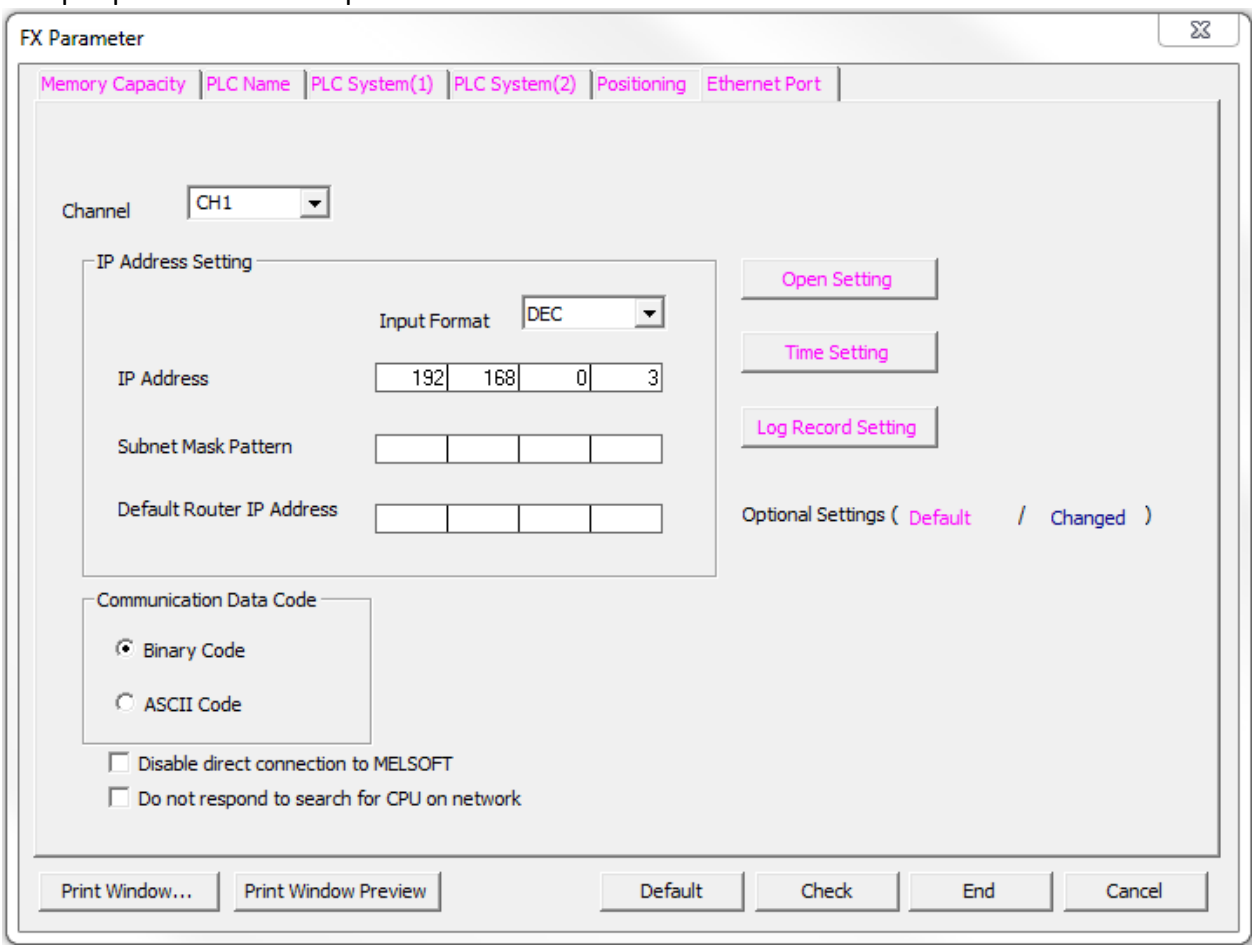
Open settings:

	Protocol	Open System	Fixed Buffer
1	TCP	MELSOFT Connection	
2			
3			
4			
5			
6			

These settings can now be downloaded to The Q series PLC.

2: FX3U-ENET-ADP modules:

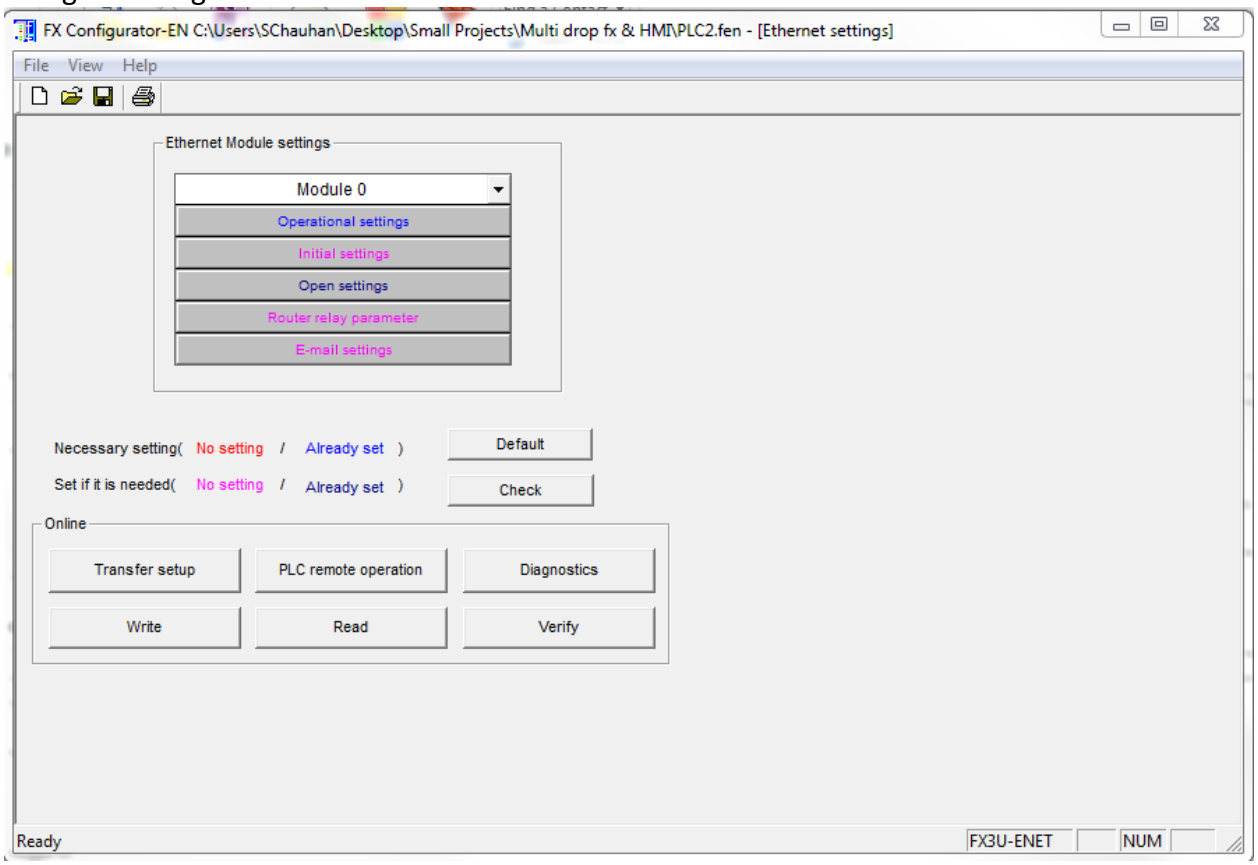
Setup is performed in PLC parameters:



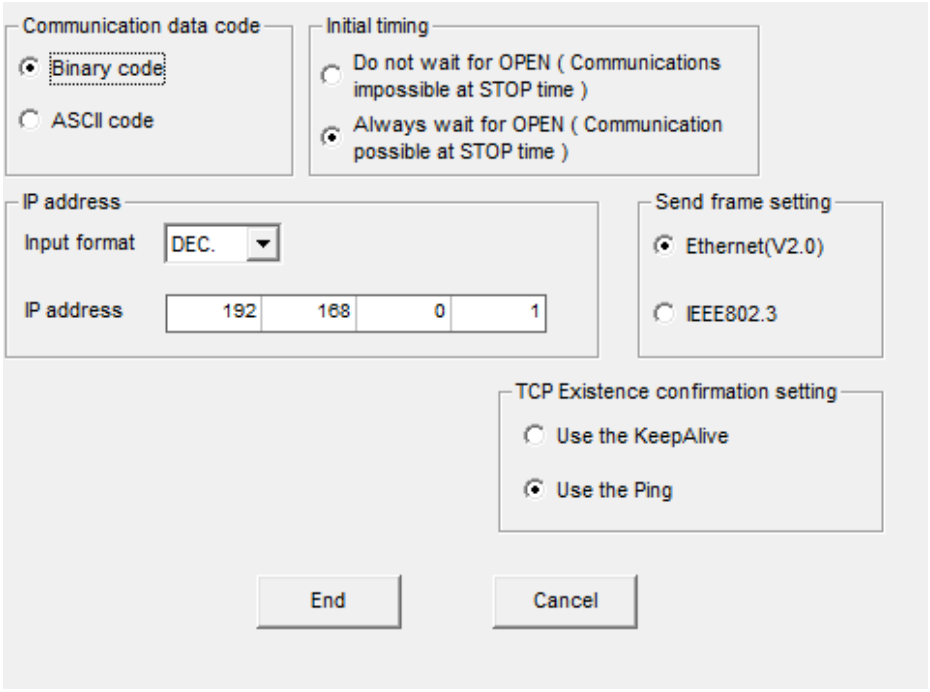
These settings can now be downloaded to The FX3 PLC.

2) FX3U-ENET modules:

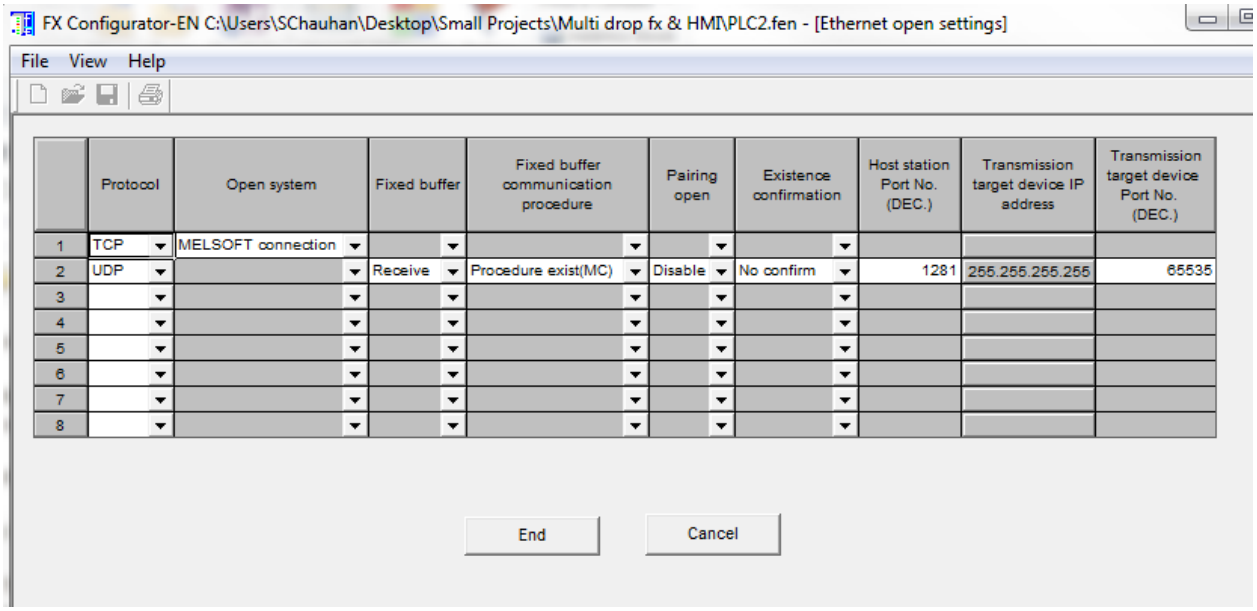
Using FX Configurator-EN tool:



Operation settings:



Open settings:



This can now be downloaded to the PLC.

Please note: These settings were also used for the 2nd FX3U-ENET module.

Troubleshooting Tips:

1) Make sure all parameter settings are downloaded to the correct PLCs and Power has been recycled.
2) If any of the lamps are not flashing you may have a break in the connection cable, swap cables to retry.