

Mitsubishi QJ71E71 (Ethernet)

Supported Series ; Mitsubishi Q type, MELSEC-Q series PLC (Q00J, Q00, Q01, Q02, Q02H, Q06H, Q12H, Q25H, Q12PH, Q25PH) QJ71E71-100 Ethernet module.

Website: <http://www.mitsubishi-automation.com>

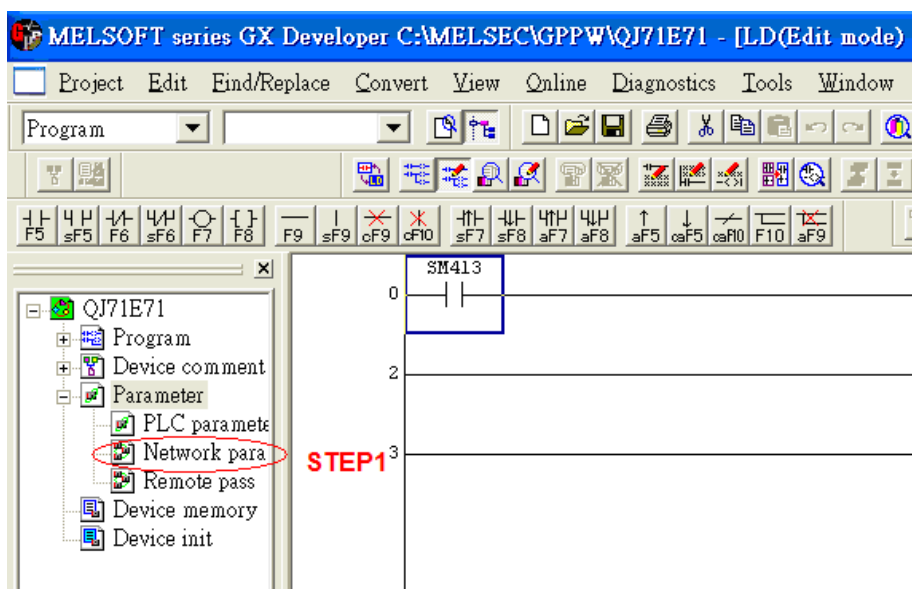
HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Mitsubishi QJ71E71 (Ethernet)		
PLC I/F	Ethernet		
Port no.	5002		
PLC sta. no.	2	1~99	
Network	1	1~999	

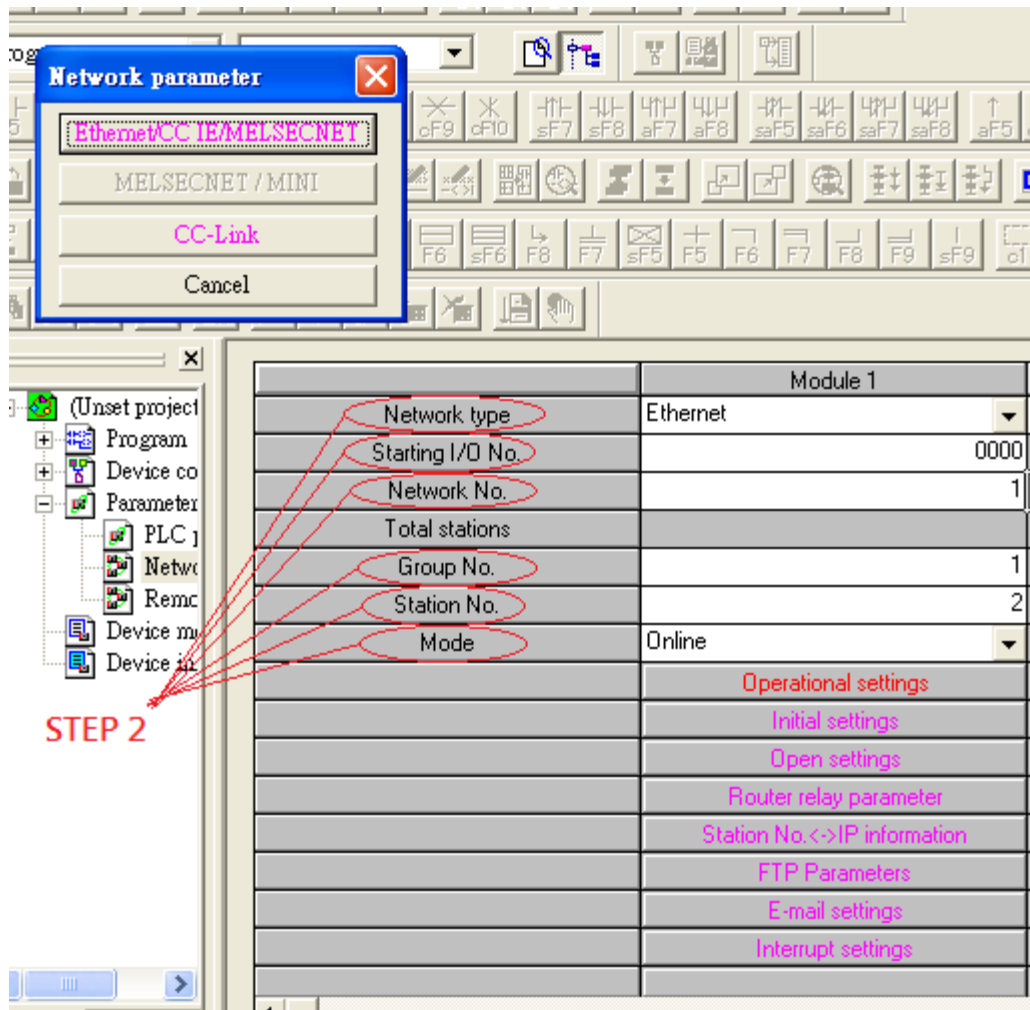
PLC Setting:

QJ71E71-100 Ethernet module settings:

1. Use USB or RS232 of Q-CPU for setting PLC parameters.

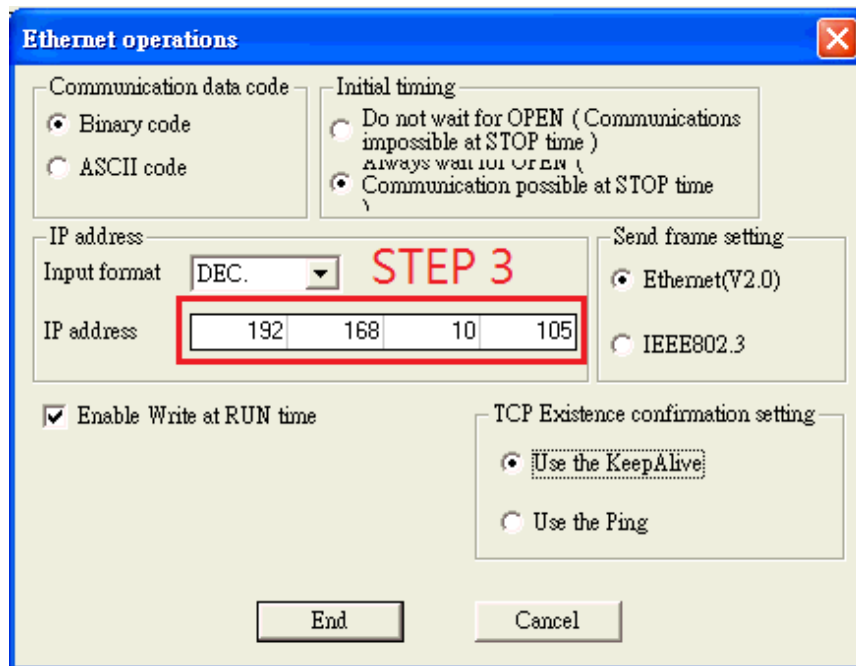


2. Click [Operational settings] to set IP information.



Module 1	
Network type	Ethernet
Starting I/O No.	0000
Network No.	1
Total stations	
Group No.	1
Station No.	2
Mode	Online
	Operational settings
	Initial settings
	Open settings
	Router relay parameter
	Station No. <-> IP information
	FTP Parameters
	E-mail settings
	Interrupt settings

3. Select Ethernet (2.0) for communicating with HMI.



Ethernet operations

Communication data code
 Binary code
 ASCII code

Initial timing
 Do not wait for OPEN (Communications impossible at STOP time)
Always wait for OPEN
 Communication possible at STOP time

IP address
 Input format: DEC.
 IP address: 192 168 10 105 **STEP 3**

Send frame setting
 Ethernet(V2.0)
 IEEE802.3

Enable Write at RUN time

TCP Existence confirmation setting
 Use the KeepAlive
 Use the Ping

End Cancel

4. Click [Open settings] to set the system.

	Module 1
Network type	Ethernet
Starting I/O No.	0000
Network No.	1
Total stations	
Group No.	1
Station No.	2
Mode	Online
	Operational settings
	Initial settings
STEP 4	Open settings
	Router relay parameter
	Station No.<->IP information
	FTP Parameters
	E-mail settings
	Interrupt settings

[TCP Port Settings]

Open System: Unpassive

	Protocol	Open System	Fixed Buffer	Fixed Buffer Communication	Pairing Open	Existence Confirmation	Host Station Port No.	Destination IP Address	Destination Port No.
1	TCP	Unpassive	Send	Procedure Exist	Disable	No Confirm	5002		
2	TCP	Unpassive	Send	Procedure Exist	Disable	No Confirm	5003		
3	TCP	Unpassive	Send	Procedure Exist	Disable	No Confirm	5004		

[UDP Port Settings]

EasyBuilder Pro Version: 6.03.02.493 Build 2020.04.30

Version: 6.04.01.373 Build 2020.04.30 (excluding):

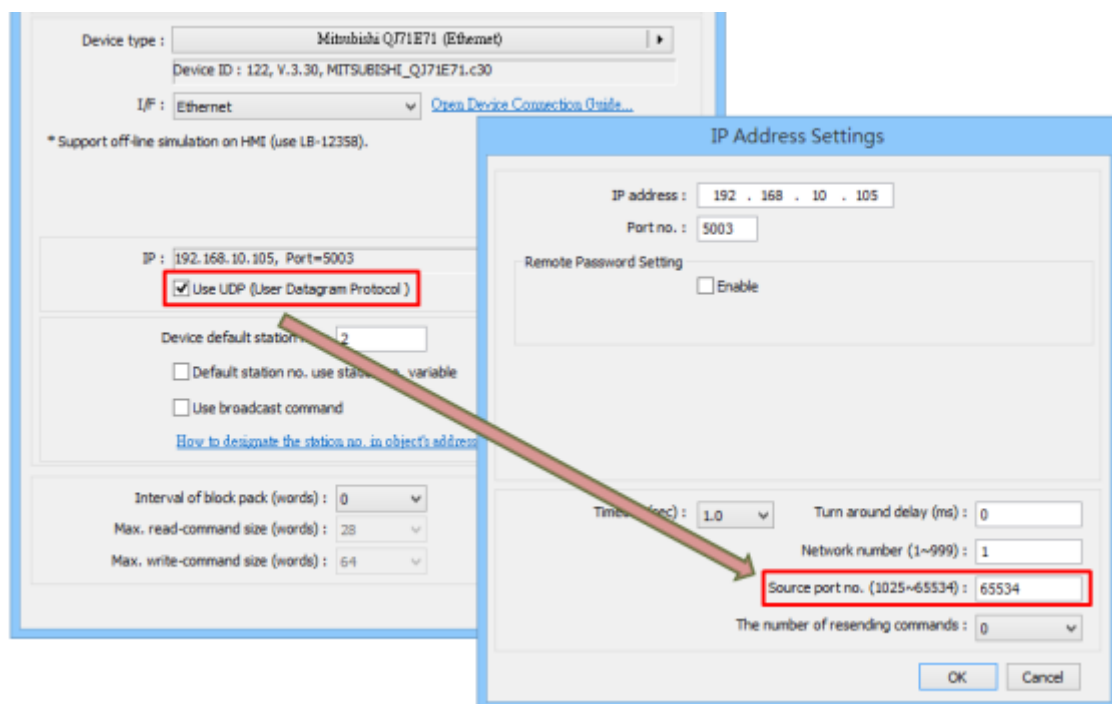
Only communication ports 5000 and 5001 can be used (no configuration required)

EasyBuilder Pro Version: 6.03.02.493 Build 2020.04.30

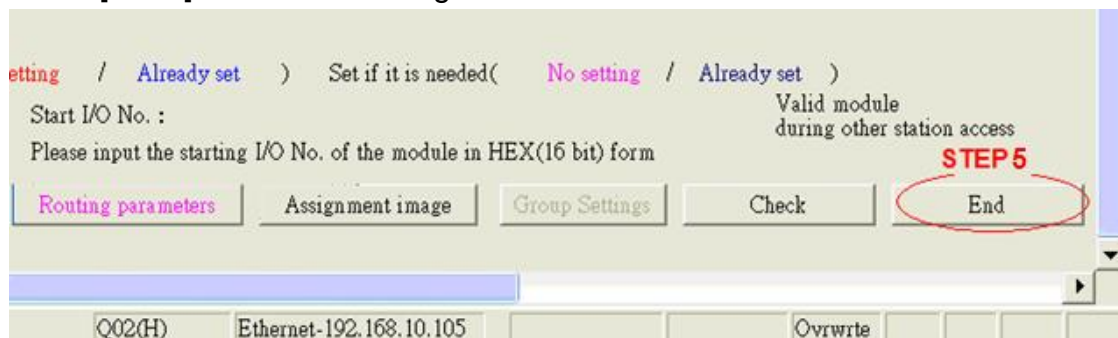
Version: 6.04.01.373 Build 2020.04.30 (inclusive) and later versions:

Support all UDP Port settings in the picture below

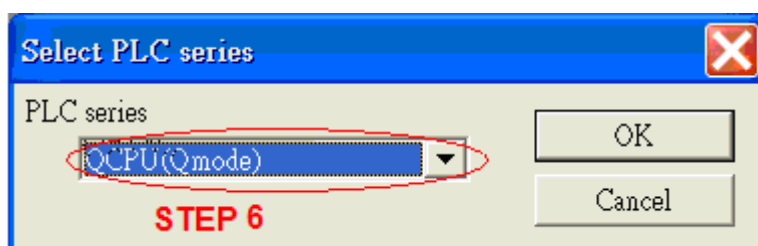
	Protocol	Open System	Fixed Buffer	Fixed Buffer Communication	Pairing Open	Existence Confirmation	Host Station Port No.	Destination IP Address	Destination Port No.
1	UDP		Send	Procedure Exist	Disable	No Confirm	5002	192.168.1.100	1234
2	UDP		Send	Procedure Exist	Disable	No Confirm	5003	192.168.1.100	65534
3	UDP		Send	Procedure Exist	Disable	No Confirm	5004	192.168.1.100	6000



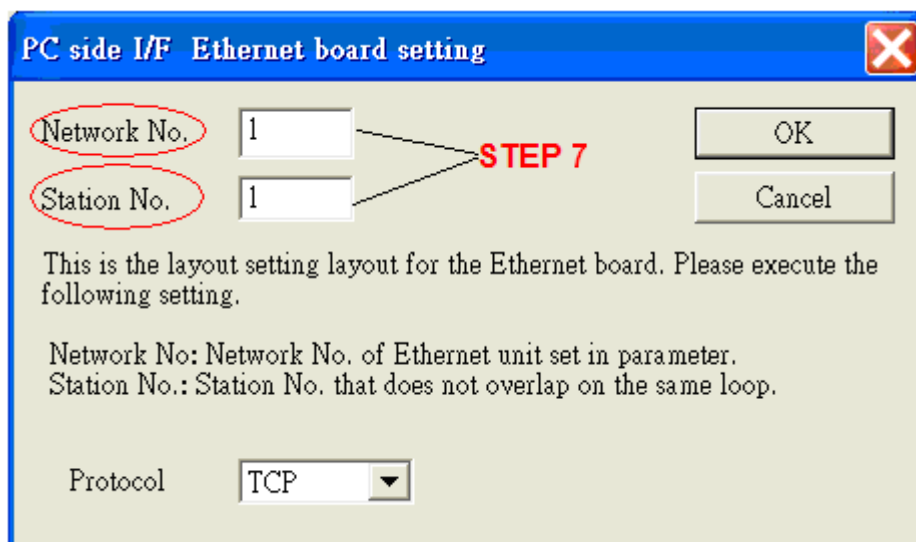
- Press [END] to finish settings.



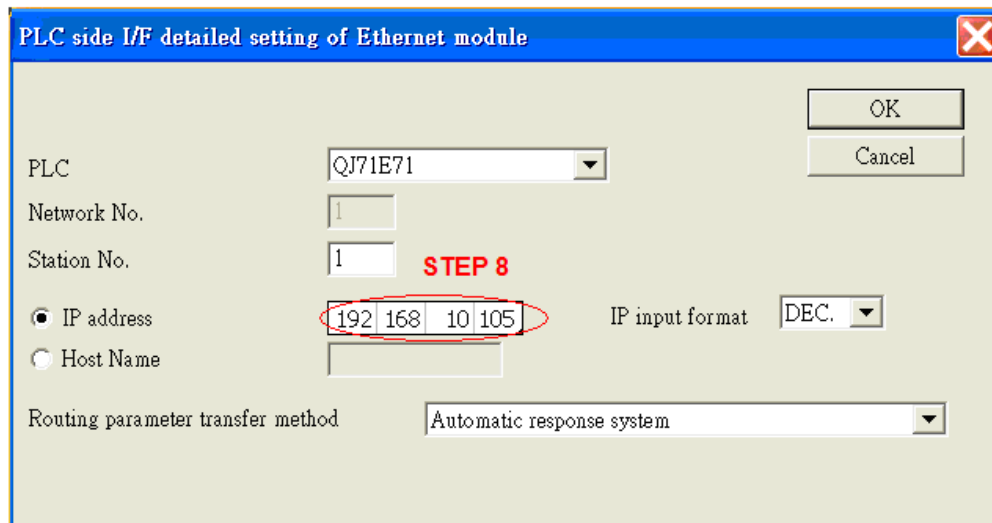
- Restart PLC software and select [READ FROM PLC], select [QCPU(Qmode)] and press [OK].



- In [PC side I/F Ethernet board setting] set Network No. and Station No. (Station No.1 is PC Station No. not Ethernet module Station No., ranged from 2~64, the Network No. can not be the same as that of PC)



8. Select “Ethernet module” in PLC Side I/F to set QJ71E71 IP address.(IP address = Network Parameter IP address)



PLC side I/F detailed setting of Ethernet module

PLC: QJ71E71

Network No.: 1

Station No.: 1 **STEP 8**

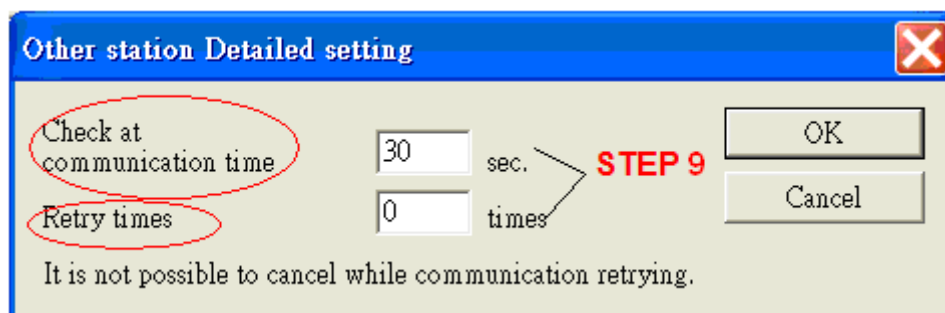
IP address: 192.168.10.105 IP input format: DEC.

Host Name:

Routing parameter transfer method: Automatic response system

OK Cancel

9. For “Other station”, click [Other station(Single network)] for setting [Check at communication time] and [Retry times].



Other station Detailed setting

Check at communication time: 30 sec. **STEP 9**

Retry times: 0 times

It is not possible to cancel while communication retrying.

OK Cancel

10. After finishing the settings above, click [Connection test] for testing the communication and sending the PLC program.

Device Address:

Bit/Word	Device type	Format	Range	Memo
B	SM	N.DDDD	0 ~ 4.2047	
B	X	N.HHHH	0 ~ 4.1fff	Input Relay
B	Y	N.HHHH	0 ~ 4.1fff	Output Relay
B	M	N.DDDDD	0 ~ 4.61439	Internal Relay
B	L	N.DDDDD	0 ~ 4.32767	Latch Relay
B	F	N.DDDDD	0 ~ 4.32767	Annunciator
B	V	N.DDDDD	0 ~ 4.32767	Edge Relay
B	B	N.HHHH	0 ~ 4.1fff	Link Relay
B	TS	N.DDDD	0 ~ 4.2047	Timer Contact

Bit/Word	Device type	Format	Range	Memo
B	TC	N.DDDD	0 ~ 4.2047	Timer Coil
B	SS	N.DDDDD	0 ~ 4.25471	Retentive Timer
B	SC	N.DDDDD	0 ~ 4.25471	Retentive Timer Coil
B	CS	N.DDDDD	0 ~ 4.25471	Counter Contact
B	CC	N.DDDDD	0 ~ 4.25471	Counter Coil
B	SB	N.HHH	0 ~ 4.7ff	Special Link Relay
B	S	N.DDDD	0 ~ 4.8191	Step Relay
B	DX	N.HHHH	0 ~ 4.1fff	Direct Input
B	DY	N.HHHH	0 ~ 4.1fff	Direct Output
B	D_Bit	N.DDDDDDDh	0 ~ 4.4212735f	
B	ZR_Bit	N.HHHHHh	0 ~ 4.fe7fff	
B	ZR_Dec_Bit	N.DDDDDDDh	0 ~ 4.1042431f	
W	SD	N.DDDD	0 ~ 4.2047	
W	D	N.DDDDDDD	0 ~ 4.4212735	Data Register
W	W	N.HHHH	0 ~ 4.1fff	Link Register
W	TN	N.DDDD	0 ~ 4.2047	Timer Current Value
W	SN	N.DDDD	0 ~ 4.2047	Retentive Timer Current
W	CN	N.DDDD	0 ~ 4.1023	Counter Current
W	SW	N.HHH	0 ~ 4.7ff	Special Link Register
W	Z	N.DD	0 ~ 4.15	Index Register
W	R	N.FFFDDDDD	0 ~ 4.3132767	File Register (FF:File No. 0~31) (DDDDD:0~32767)
W	ZR	N.HHHHH	0 ~ 4.fe7ff	File Register
W	ZR_decimal_addr	N.DDDDDDD	0 ~ 4.1042341	

Note: N=CPU Slot no. (0~4)

Wiring Diagram:

Ethernet cable:

