

## Mitsubishi <11> Mitsubishi Electric Corporation

### Q Series (Q Mode) + Link Unit Connection

#### **Selecting PLC Type**

Start up GP-PRO /PBIII.

Select the following PLC Type when creating the project file.



#### **Communication Settings Sample**

GP Setup		Serial Communication Unit Settings *1	
Baud Rate	19200bps	Baud Rate	19200 bps
Data Length	7 bits	Data Bit	7 bits
Stop Bit	2 bits	Stop Bit	2 bits
Parity Bit	Even	Parity Check Parity setting even/odd	Yes Even
Data Flow Control	ER Control	---	
Communication Format (RS-232C)	RS-232C	Mode Setup (RS-232C)	4 (Format 4 Protocol Mode)
Communication Format (RS-422)	4-wire type	Mode Setup (RS-422)	4 (Format 4 Protocol Mode)
---		Sum Check	Yes
Unit No.	0	Station Number	0

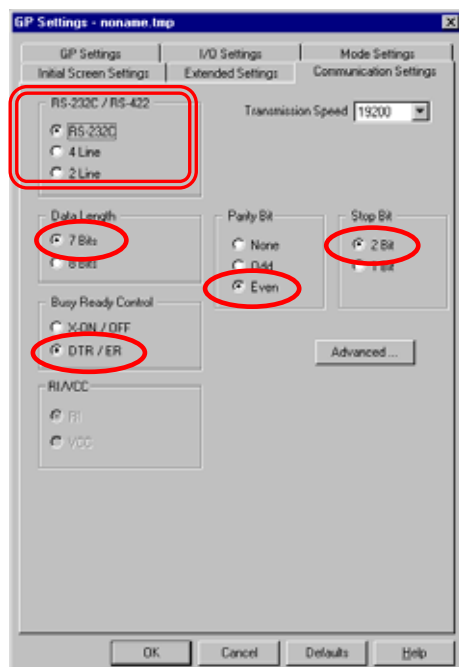
\*1 The setting is made by Mitsubishi's GPP function software.

## Communication Settings [GP]

1 [GP-PRO/PB C-Package Setting]

Select [GP Setup] on Project Manager.

### 1) Communication Settings

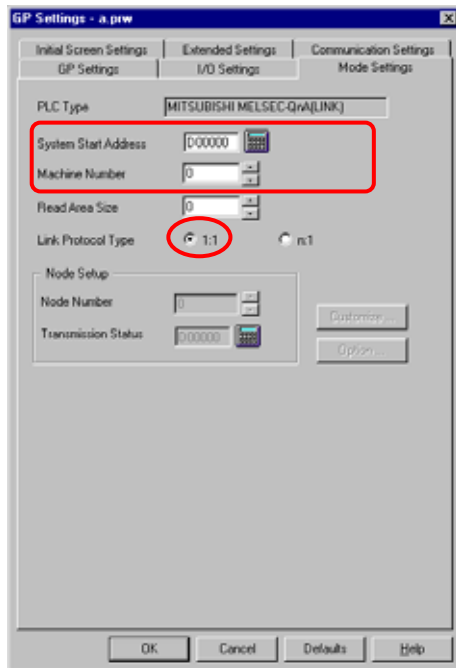


### 1) Communication Settings

Transmission Speed : 19200bps  
Data Length : 7 Bits  
Stop Bit : 2 Bit  
Parity Bit : Even  
Busy Ready Control : DTR / ER  
RS-232C/ RS-422  
RS-232C Connection : RS-232C  
RS-422 Connection : 4 Line

\* Select one in   
depending on the communication  
method.

## 2) Mode Settings



## 2) Mode Settings

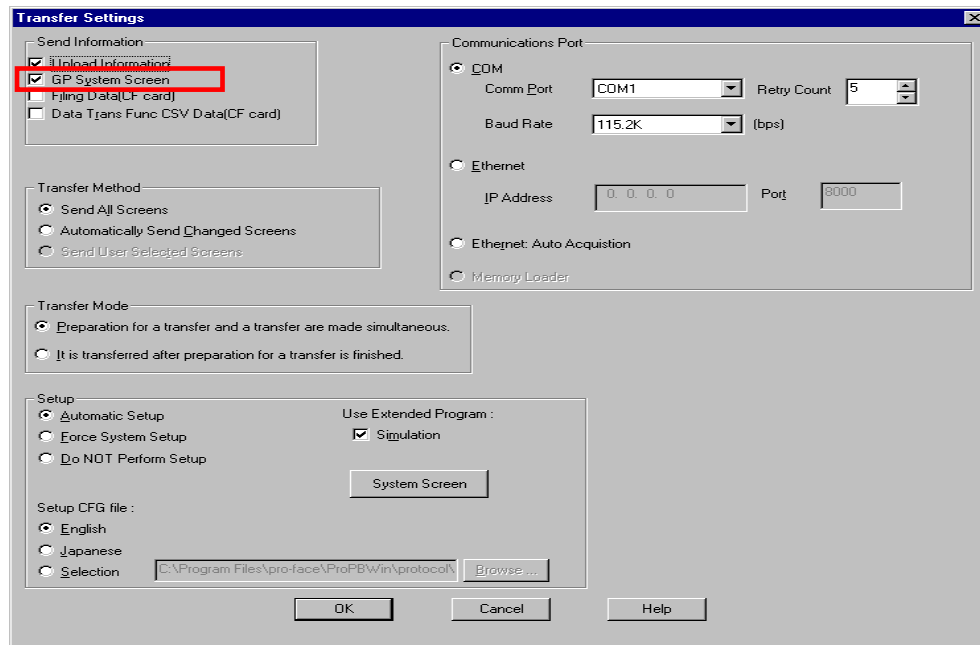
System Start Address:                      Arbitrary Address

Machine Number:                            0

Link Protocol Type:                        1: 1

Select [Transfer] --> [Setup] --> [Transfer Settings].

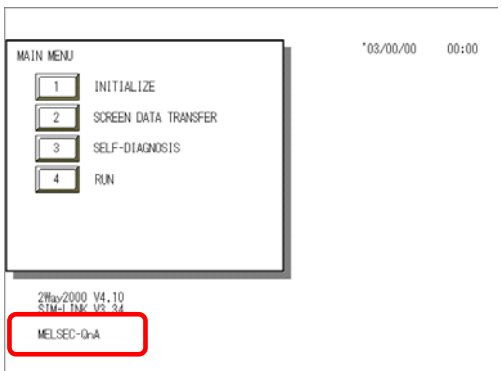
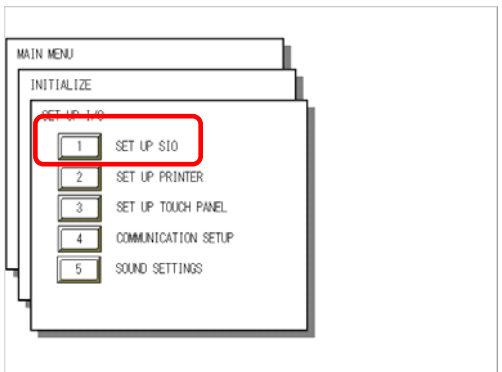
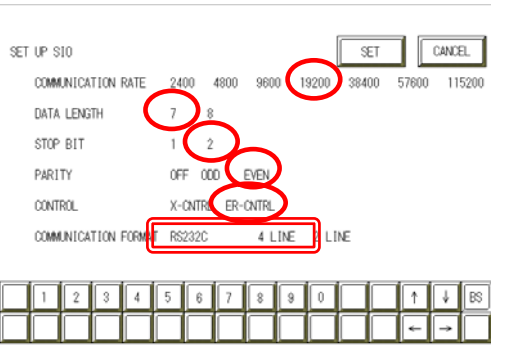
### 3) Transfer Settings

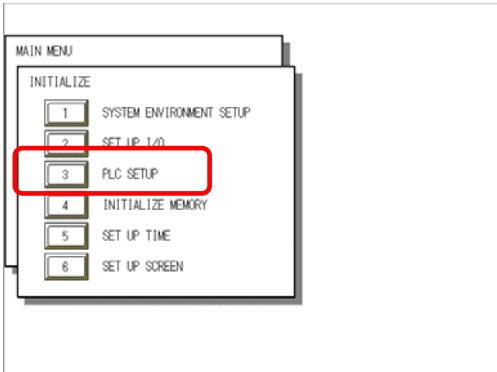

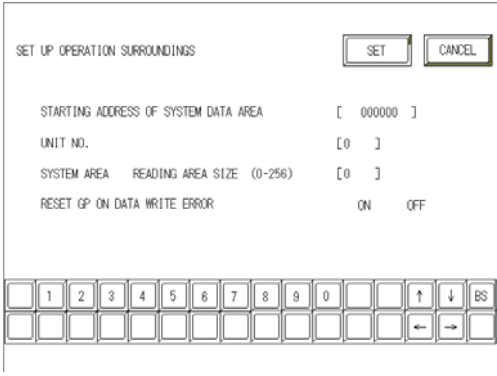


3) Transfer Settings      GP System Settings:    Checked

Transfer to GP after settings completed.

## 2 [GP Settings]

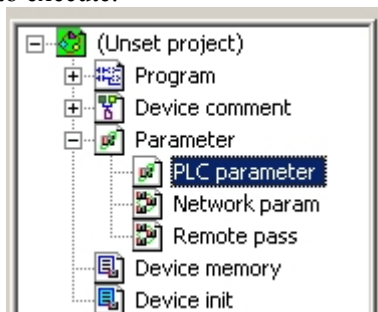
<p><u>1) Checking GP Type</u></p> 	<p><u>1) Checking GP Type</u></p> <p>If you have selected Mitsubishi MELSEC-QnA (Link), the following will be shown.</p> <p>”MELSEC-QnA”</p>
<p><u>2) Communication Settings</u></p> 	<p><u>2) Communication Settings</u></p> <p>[MAIN MENU] ↓ [INITIALIZE] ↓ [SET UP I/O] ↓ [SET UP SIO]</p>
	<p>Communication Rate: 19200bps Data Length: 7 Bits Stop Bit: 2 Bits Parity: Even Control: ER Cntrl Communication Format RS-232C Connection: RS-232C RS-422 Connection: 4 Line</p> <p>* Select one in <input type="text"/> depending on the communication method.</p>

<p>3) Setting up Operation Surroundings</p> 	<p>3) Setting up Operation Surroundings</p> <p>[MAIN MENU] ↓ [INITIALIZE] ↓ [PLC SETUP] ↓ [PLC SETUP]</p>
	<p>SET UP OPERATION SURROUNDINGS MENU: 1: 1</p>
	<p>Starting Address of System Data Area: Arbitrary Address Unit No . : 0</p>

## Communication Settings [PLC]

### 1 [RS-232C / RS-422 Connection]

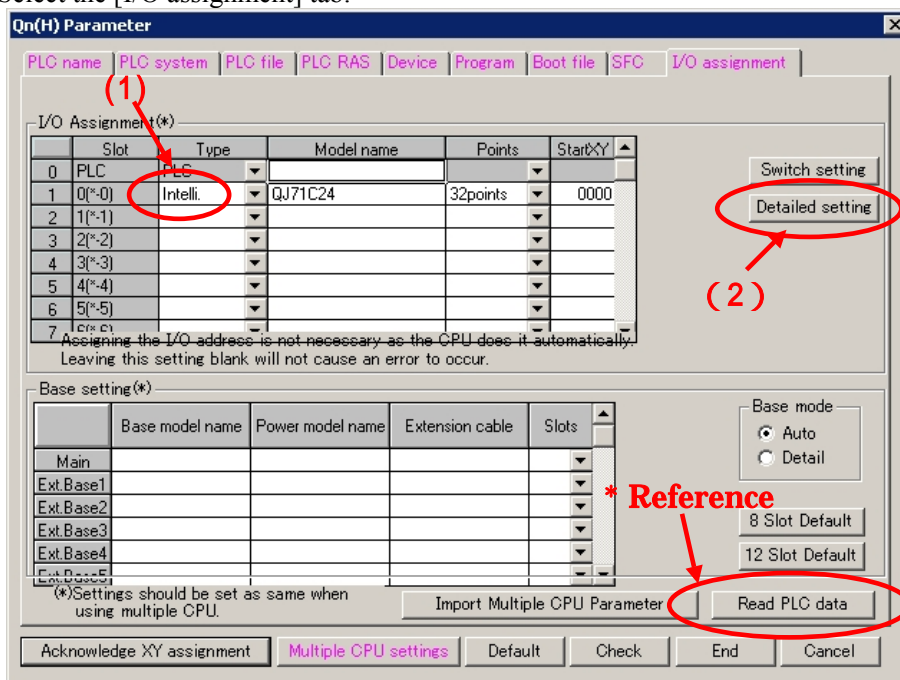
Start up the ladder tool “GX Developer”. Double-click [PC Parameter] under [Parameter] to execute.



A dialog box below opens.



Select the [I/O assignment] tab.

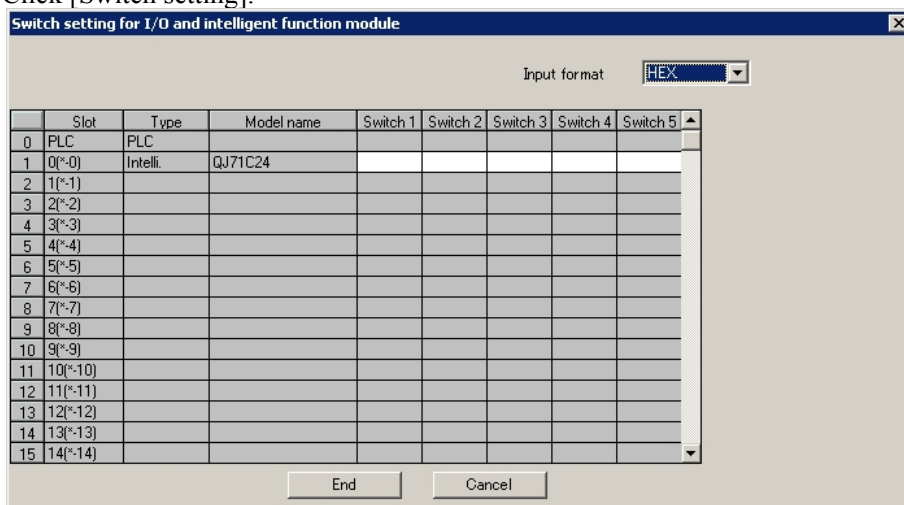


(1) Click [Type] to select [Intelli.]

\* By clicking the [Read PLC data] button, the type(s) and points of the unit(s) inserted currently into the base unit can be read automatically.

(The PC needs to be connected to the CPU via ladder cable.)

(2) Click [Switch setting].



A dialog box above opens.  
Set [Switch setting] as below.

( Settings Switch1 and Switch2 are for the RS-232C interface on CH1.  
Settings Switch3 and Switch4 are for the RS-422/485interface on CH2.  
Settings Switch5 are for the machine number on both CH1 and CH2. )

In this sample here, a sample setting only for CH1 is introduced, but set CH2 in a same way as CH1.

Slot	Type	Model name	Switch 1	Switch 2	Switch 3	Switch 4	Switch 5
0	PLC	PLC					
1	0(*-0)	Intelli.	QJ71C24	07FC	0004		
2	1(*-1)						0000



Please see the setting description as below.

Switch No.	Set Value	Setting Description		
Switch 1	07FC	07 --> Transmission Speed 19,200bps		
		Bit	Settings	Item / Content
		Bit0	OFF	Operation Setting / Independent
		Bit1	OFF	Data Bit / 7 bits
		Bit2	ON	Parity Bit / Yes
		Bit3	ON	Even/Odd Parity / Even
		Bit4	ON	Stop Bit / 2 bits
		Bit5	ON	Sum Check Code / Yes
		Bit6	ON	Write during RUN / Enabled
	Bit7	ON	Change Setting / Enabled	
Switch 2	0004	Communication Protocol Setting --> MC Protocol Type 4		
Switch 3		Same as Switch 1		
Switch 4		Same as Switch 2		
Switch 5	0000	Machine Number : 0		
Note: When communicating CH1 and CH2 at the same time, set 115200 bps for the total of the transmission speed of both interfaces.				

After completing the above settings, click [End].

The [Switch Setting] dialog box returns to the [Parameter Setting] dialog box. Click [End] again.

- 3) Select [Offline]-->[Write to PLC] to open the [Write to PLC] dialog box.  
Check [PC/Network] under [Parameter]. Click [Execute] to start downloading the parameter file to the PLC.

After downloading completed, power off and on the PLC to restart up.