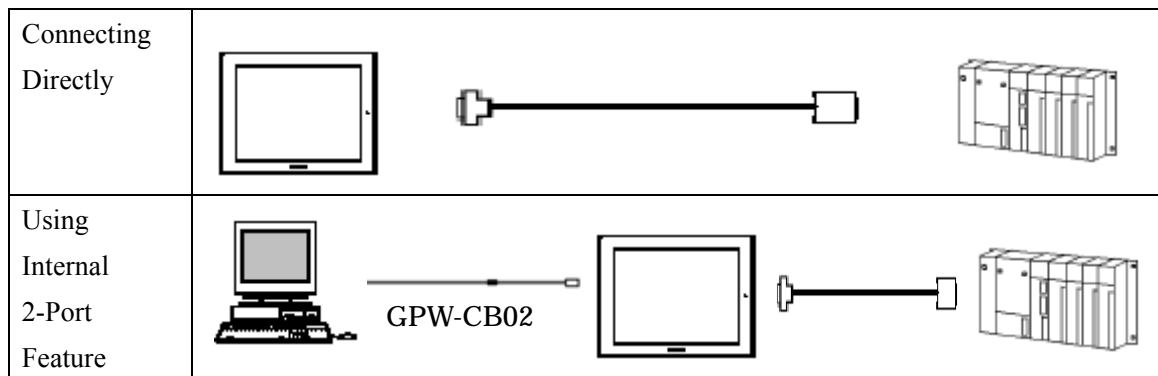



Mitsubishi <12> Mitsubishi Electric Corporation
Q Series (A Mode) CPU Direct Connection

System Structure






2-Port Adapter cannot be used.

GP

Machine 	Model	Remark
GP	GP70 Series GP77/77R Series GP2000 Series	Excepting for handy types. The internal 2-Port feature is supported by only GP77/77R Series and GP2000 Series.
GLC	GLC2000 Series	2-Port Adapter and the internal 2-Port feature are not supported.

PLC

CPU 	Communication Method	Connection Cable 	GP 
Q02-A Q02H-A Q06H-A	RS-232C	Connection Method	

Procedure to Connect PLC

Select PLC Type on GP-PRO/PB C-Package.

Refer to

Selecting PLC Type



Set the GP and PLC settings as the communication setting sample.

Refer to

**Communication
Setting Sample**



Set GP communication.
There are 2 ways.

- Setting on GP-PRO/PB C-Package and transfer the data
- Setting on the Offline of the GP main unit.

Refer to

**Communication
Settings [GP]**



Set PLC communication.

Refer to

**Communication
Settings [PLC]**



Connect PLC to GP.
Please check the connection method according to the connection type, or distance.

Refer to

**Connection Method
& Recommended
Products**

Selecting PLC Type

Start up GP-PRO /PBIII.

Select the following PLC Type when creating the project file.



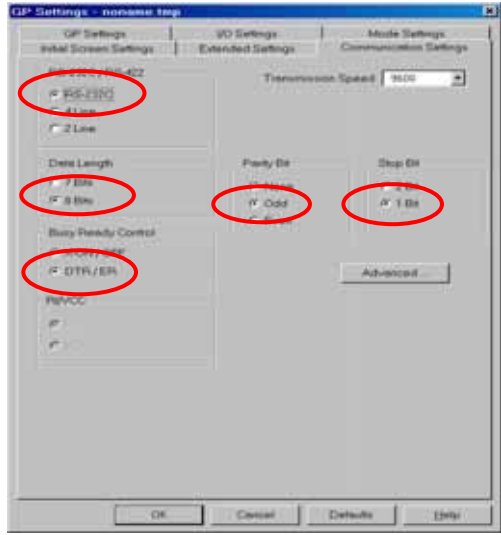
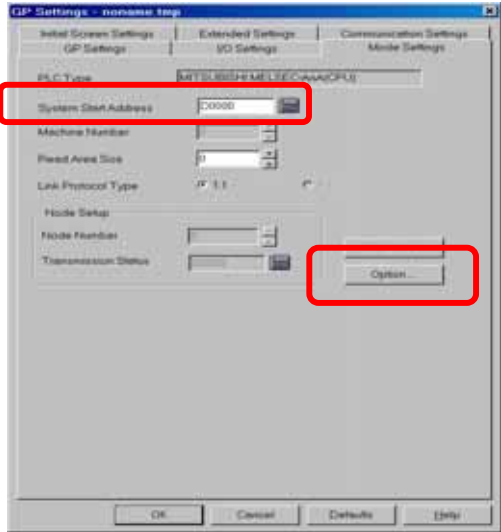
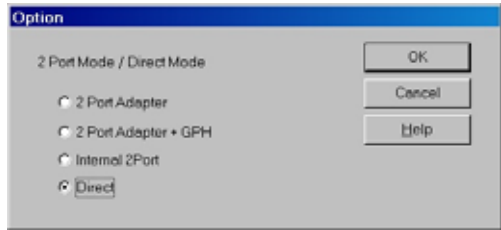

Mitsubishi MELSEC-AnA (CPU)

Communication Setting Sample

GP Setup		PLC Settings
Baud Rate	9600bps (fixed)	——
Data Length	8bit (fixed)	——
Stop Bit	1bit (fixed)	——
Parity Bit	Odd (fixed)	——
Data Flow Control	ER Control	——
Communication Format	RS-232C	——
Unit No.	0 (fixed)	——

Communication Settings [GP]

- [GP-PRO/PB C-Package Setting]
 Select [GP Setup] on Project Manager.

<p>1) <u>Communication Settings</u></p> 	<p>1) <u>Communication Settings</u></p> <p>Transmission Speed : 9600bps Data Length : 8 Bits Stop Bit: 1 Bit Parity Bit: Odd Busy Ready Control: DTR / ER RS-232C/ RS-422 : RS-232C</p>
<p>2) <u>Mode Settings</u></p> 	<p>2) <u>Mode Settings</u></p> <p>System Start Address: Arbitrary Address</p> <p>Select [Option...].</p>
<p>3) <u>2-Port Mode/Direct Mode Settings</u></p> 	<p>3) <u>2-Port Mode/Direct Mode Settings</u></p> <p>Connecting CPU Directly: Direct Using Internal 2-Port Adapter: 2-Port Adapter</p> <p> Caution 2-Port Adapter cannot be used.</p>

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

4) Transfer Settings

Transfer Settings

Send Information

- Upload Information
- GP System Screen
- Filing Data(CF card)
- Data Trans Func CSV Data(CF card)

Transfer Method

- Send All Screens
- Automatically Send Changed Screens
- Send User Selected Screens

Transfer Mode

- Preparation for a transfer and a transfer are made simultaneous.
- It is transferred after preparation for a transfer is finished.

Setup

- Automatic Setup
- Force System Setup
- Do NOT Perform Setup

Use Extended Program :

- Simulation

System Screen

Setup CFG file :

- English
- Japanese
- Selection

C:\Program Files\pro-face\ProPBWin\protocol\ Browse...

OK Cancel Help

4) Transfer Settings GP System Settings: Checked

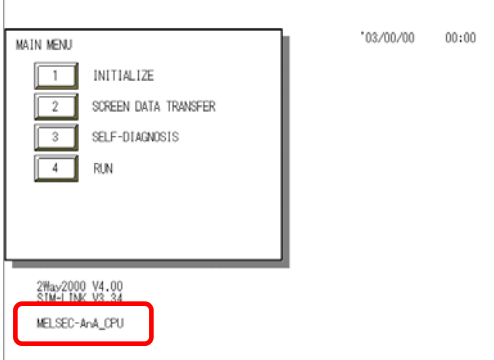
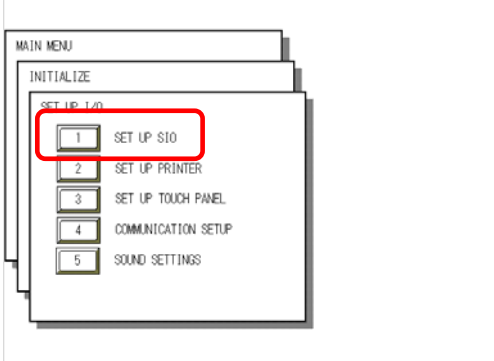
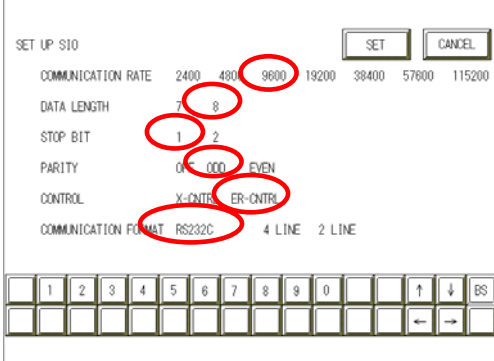
Transfer to GP after settings completed.

2 [GP Settings]

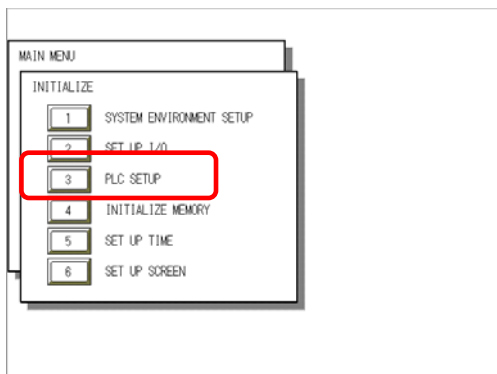
-Displaying Setting Screen-

Touch the left top of the screen within 10 second after powering on.

Or touch the right top and the right bottom of the screen at the same time. Keep 2 points touched and touch the left bottom. The menu bar will display on the bottom of the screen. Then touch [Offline].

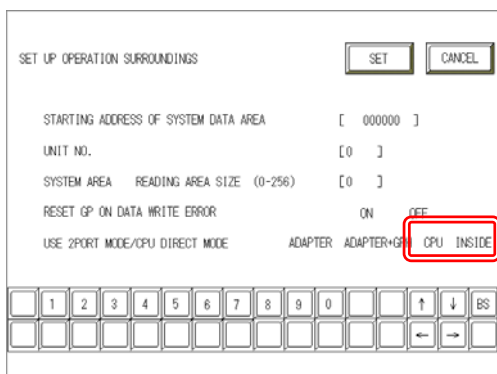
<p><u>1) Checking GP Type</u></p> 	<p><u>1) Checking GP Type</u></p> <p>If you have selected Mitsubishi MELSEC-AnA (CPU), the following will be shown.</p> <p>”MELSEC-AnA_CPU”</p>
<p><u>2) Communication Settings</u></p> 	<p><u>2) Communication Settings</u></p> <p>[MAIN MENU] ↓ [INITIALIZE] ↓ [SET UP I/O] ↓ [SET UP SIO]</p>
	<p>Communication Rate: 9600bps Data Length: 8 Bits Stop Bit: 1Bit Parity: Odd Control: ER Cntrl Communication Format:RS-232C</p>

3) Setting up Operation Surroundings



3) Setting up Operation Surroundings

[MAIN MENU]
 ↓
 [INITIALIZE]
 ↓
 [PLC SETUP]
 ↓
 [PLC SETUP]



Starting Address of System Data Area:
 Arbitrary Address
 Unit No.: 0
 Use 2-Port Mode/CPU Direct Mode
 Connecting CPU Directly: CPU
 Using Internal 2-Port Adapter:
 Inside

 2-Port Adapter cannot be used.
Caution

* Select one in

Communication Settings [PLC]

There are no items to set on the PLC.

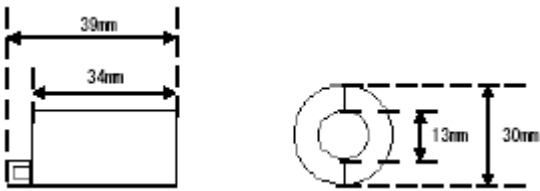
Connection Method

Type	Connection Method	Distance
Using QC30R2 by Mitsubishi Electric Corporation *9-25pin Conversion Adapter is required.	<p>GP Unit 25 pin Male PLC Mini DIN 9 pin</p> <p>Conversion Adapter QC30R2 by Mitsubishi Ferrite Core Ferrite Core Holder</p>	3m
Using DQCABR2 by Diatrend	<p>GP Unit 25 pin Male PLC Mini DIN 9 pin</p> <p>Ferrite Core Ferrite Core Holder</p>	Range between 1.5 and 15m

NOTE

- Attaching a Ferrite Core will reduce the amount of noise in your cable.
- Attach two Ferrite Cores to your cable, one at each end. Also, as shown in the drawing below, loop the cable once around the Ferrite Core.
- When using a data communication cable that is 3m (approx. 10 ft.) or longer, please use a cable made by Diatrend Corporation.

Recommended Products

Ferrite Core	E04SR301334 <Seiwa Electronics Corporation>
	
9-25 Conversion Adapter	ZA-403 <Roas Co.>

[Creating a 9-25 pin Conversion Adapter]

Connector/Cover for GP	D-sub 25 pin Plug	XM2A-2501 <OMRON Co.>
	Cover for D-sub 25 pin	XM2S-2511 <OMRON Co.>
	Jack Screw	XM2Z-0071 <OMRON Co.>
Setscrew	Metric Coarse Screw Tread : M2.6 × 0.45	
Diagram	<p>D-sub 25 pin Male D-sub 9 pin Male</p> <p>Lock-screw (mm) Lock nut (inch)</p> 