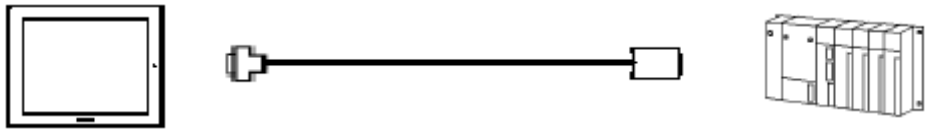
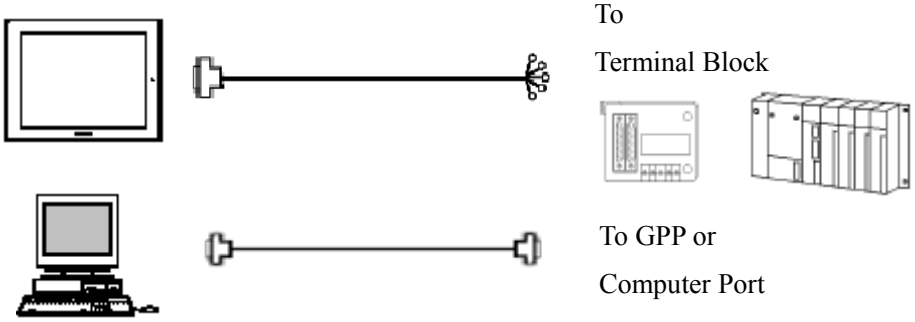
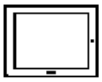
Mitsubishi <3> Mitsubishi Electric Corporation
A Series (AnA/AnU/AnUS/AnUSH) CPU Direct Connection

System Structure

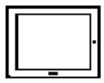
Connecting Directly	
Using 2-Port Adapter Ⅱ	
Using Internal 2-Port Feature	

GP

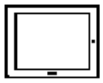
Machine 	Model	Remark
GP	GP70 Series GP77/77R Series GP2000 Series	Excepting for handy types. The internal 2-Port feature is supported by only GP77/77R Series and GP2000 Series.
GLC	GLC2000 Series	2-Port Adapter Ⅱ and the internal 2-Port feature are not supported.

PLC

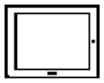
[Connecting Directly]

CPU 	Communication Method	Connection Cable 	GP 
A2A, A3A, A3U, A4U, A2U-S1, A2US, A2US-S1, A2USH-S1	RS-422	**Connection Method [1]**	
	RS-232C		

[Using 2-Port Adapter Ⅱ]

CPU 	Adapter 	Communication Method	Connection Cable 	GP 
A2A, A3A, A4U, A2U-S1, A2US, A2USH-S1	GP070-MD11	RS-422	**Connection Method [2]**	

[Using Internal 2-Port Feature]

CPU 	Communication Method	Connection Cable 	GP 
A2A, A3A, A2U-S1, A2US, A2USH-S1	RS-232C	**Connection Method [1]**	GP77/77R Series GP2000 Series
	RS-422		

Procedure to Connect PLC

Select PLC Type on GP-PRO/PBⅢ 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/PBⅢ 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.

Communication Setting Sample

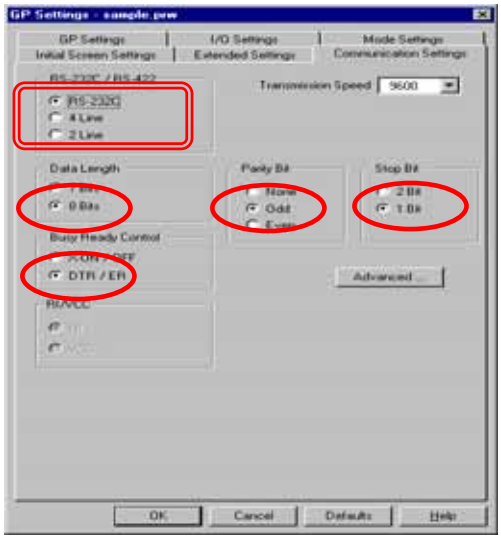
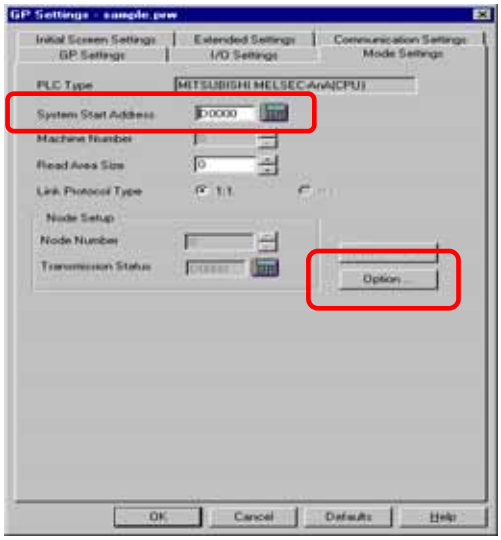
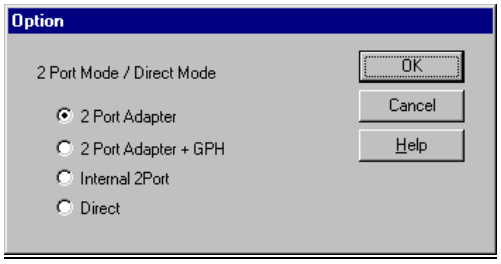
GP Setup		PLC Settings
Baud Rate	9600 bps (fixed)	---
Data Length	8 bit (fixed)	---
Stop Bit	1 bit (fixed)	---
Parity Bit	Odd (fixed)	---
Data Flow Control	ER Control	---
Communication Format *1 (RS-232C)	RS-232C	---
Communication Format (RS-422)	4-wire type	---
Unit No.	0 (fixed)	---

*1 For Communication Format, select RS-232C when using GP430-IP10-O, or select 4-wire type cable when using another cable.

Communication Settings [GP]

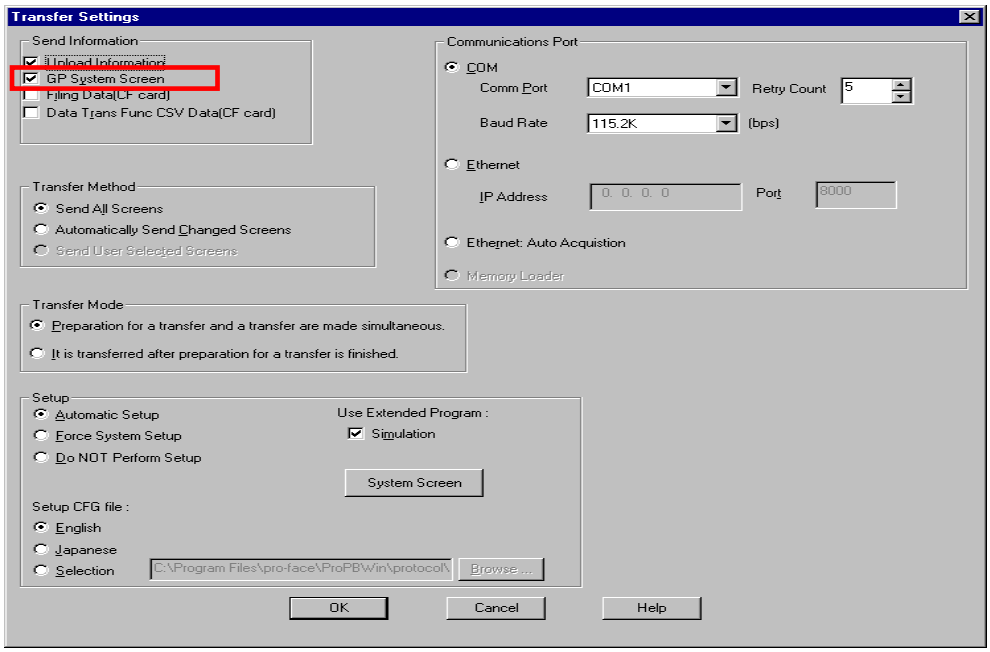
1 [GP-PRO/PBIII C-Package Setting]

Select [GP Setup] on Project Manager.

1) Communication Settings 	1) Communication Settings Transmission Speed : 9600bps Data Length : 8 Bits Stop Bit: 1 Bit Parity Bit: Odd Busy Ready Control : DTR / ER RS-232C/ RS-422 : Using GP430-IP10-O : RS-232C Using Other Cable: 4 Line * Select one in ☐ .
2) Mode Settings 	2) Mode Settings System Start Address: Arbitrary Address Select [Option…].
3) 2-Port Mode/Direct Mode Settings 	3) 2-Port Mode/Direct Mode Settings Using GP430-IP10-O or User-Created Cable: Direct Using 2-Port Adapter II : 2-Port Adapter Using Internal 2-Port Feature: Internal 2-Port

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

4) Transfer Settings



4) Transfer Settings GP System Settings: Checked

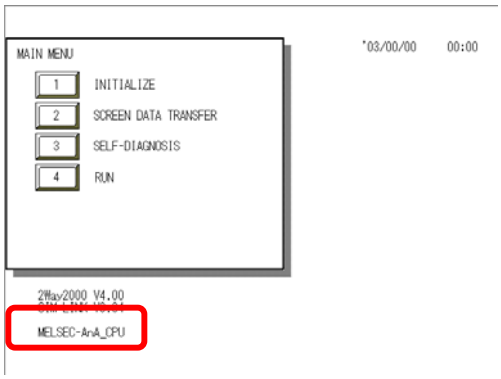
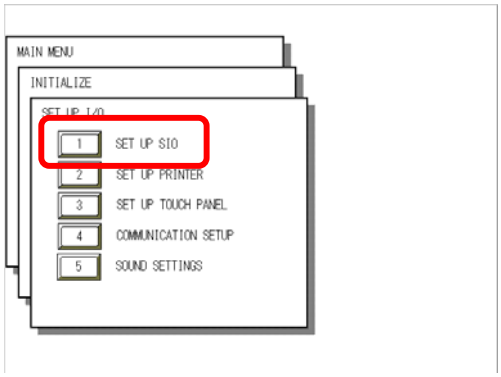
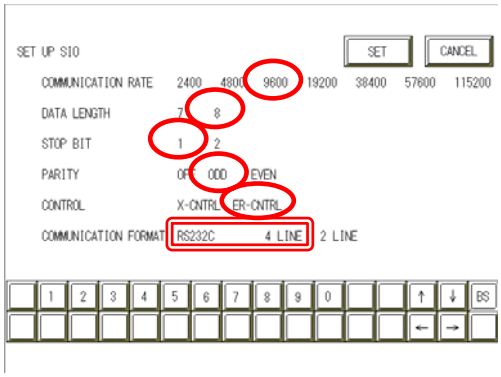
Transfer to GP after settings completed.

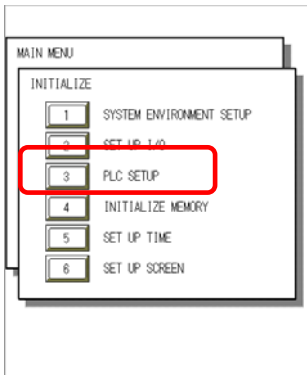
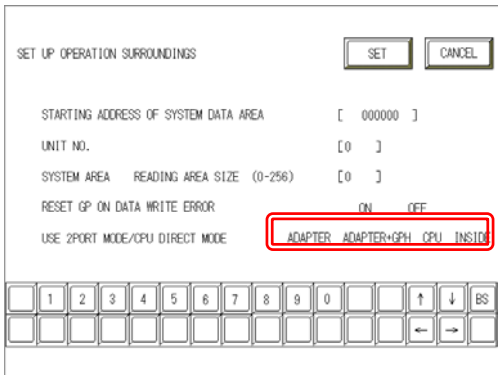
2 [GP Settings]

—Displaying Setting Screen—

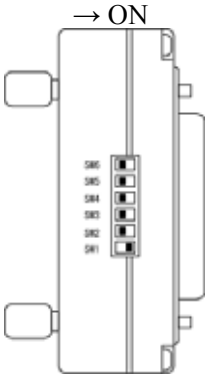
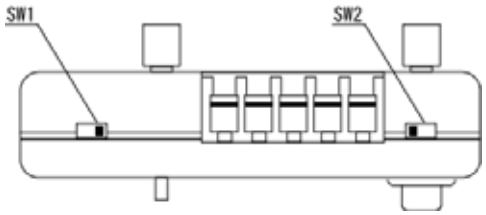
Touch the left top of the screen within 10 second after powering on.

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].

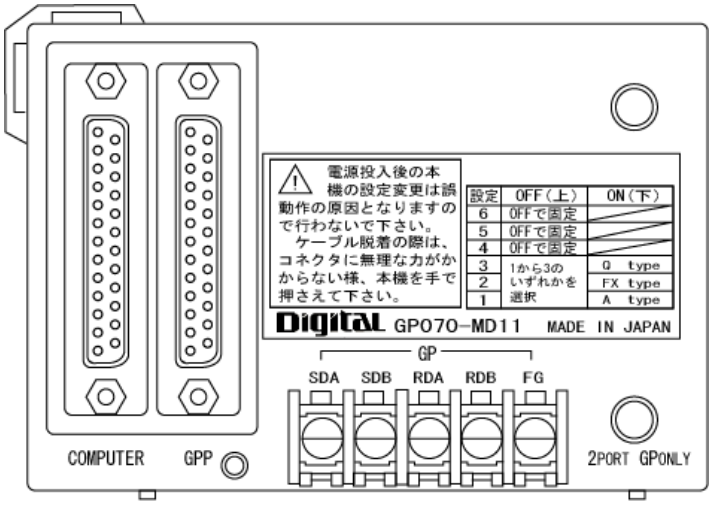
1) Checking GP Type 	1) Checking GP Type If you have selected Mitsubishi MELSEC-AnA (CPU), the following will be shown. "MELSEC-AnA_CPU"
2) Communication Settings 	2) Communication Settings [MAIN MENU] ↓ [INITIALIZE] ↓ [SET UP I/O] ↓ [SET UP SIO]
	Communication Rate: 9600bps Data Length: 8 Bits Stop Bit: 1 Bit Parity: Odd Control: ER Cntrl Communication Format Using GP430-IP10-O: RS-232C Using other cable: 4 Line * Select one in [ ] .

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 GP430-IP11-O Cable/User-Created Cable: CPU 2-Port Adapter Ⅱ: Adapter Internal 2-Port Adapter: Inside * Select one in [ ] .

3 [2-Port Adapter Ⅱ Settings]

1) PLC Type Settings	1) PLC Type Settings
→ ON  → To PLC	SW 6: OFF SW 5: OFF SW 4: OFF SW 3: OFF SW 2: OFF SW 1: ON
2) Device/PLC Settings	2) Device/PLC Settings
 ↓ To PLC	SW 1: Connecting Peripheral Device RS-422 Cable: Right (GPP) RS-232C Cable : Left (COMPUTER) SW 2: Setting to connect any peripheral devices GP Only (No Peripheral Device): Right (GP ONLY) GP and Peripheral Device: Left (2-Port)

<Reference> 2-Port Adapter Ⅱ

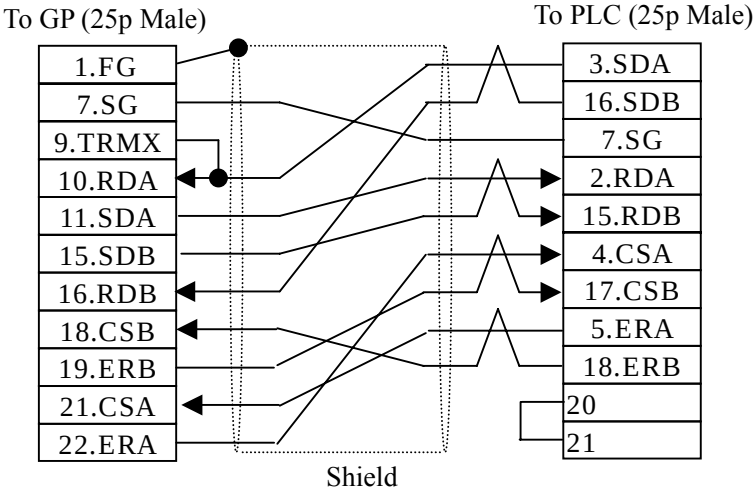


Communication Settings [PLC]

There are no items to set on the PLC.

Connection Method

[Connecting Directly / Connecting with Internal 2-Port Feature]

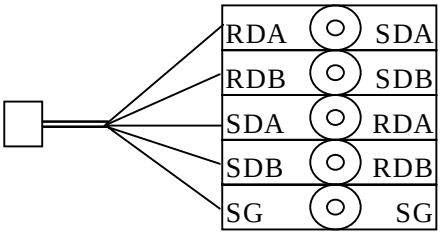
Type	Connection Method	Distance
Using GP430-IP10-O		5m
Creating Cable		Within 5m Supporting Models: GP2000 / GLC2000 Series

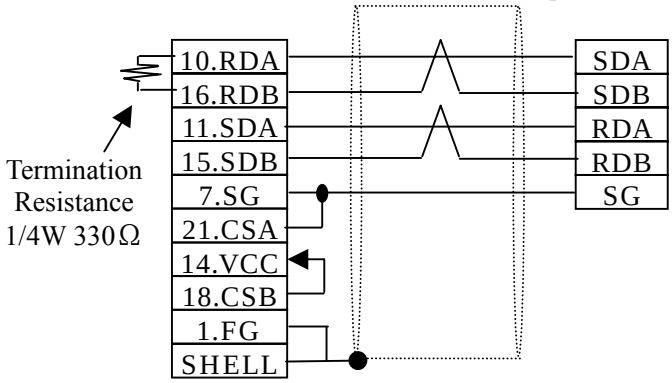
This wiring is available for only GP2000 Series / GLC2000 Series.

Recommended Products

Connecter/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.>
Cable	CO-MA-VV-SB5P × 28AWG <Hitachi Cable Ltd.>	
Setscrew	Metric Coarse Screw Tread : M2.6 × 0.45	

[Connecting via 2-Port Adapter Ⅱ]

<table>
<tr><th>Type</th><th>Connection Method</th><th>Distance</th></tr>
<tr><td>Using
GP070-MDCB11</td><td>Cable with 5 wires
Adapter with 5 contacts
 

Caution Cross the signal names of wires and ones of terminal block contacts.</td><td>5m</td></tr>
<tr><td>Creating Cable</td><td>To GP (25p Male) Adapter Terminal Block
 

Caution RS-422 Connecter Terminal Adapter (GP070-CN10-O) cannot be used on the GP.</td><td>Within 600m</td></tr>
</table>

Recommended Products

Connecter/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.>
Terminal on Adapter	Equivalent to V1.25-MS3 <J.S.T. Mfg. Co., Ltd.>	
Cable	CO-SPEV-SB (A) 3PX0.5SQ <Hitachi Cable Ltd.>	
Setscrew	Metric Coarse Screw Tread : M2.6 × 0.45	