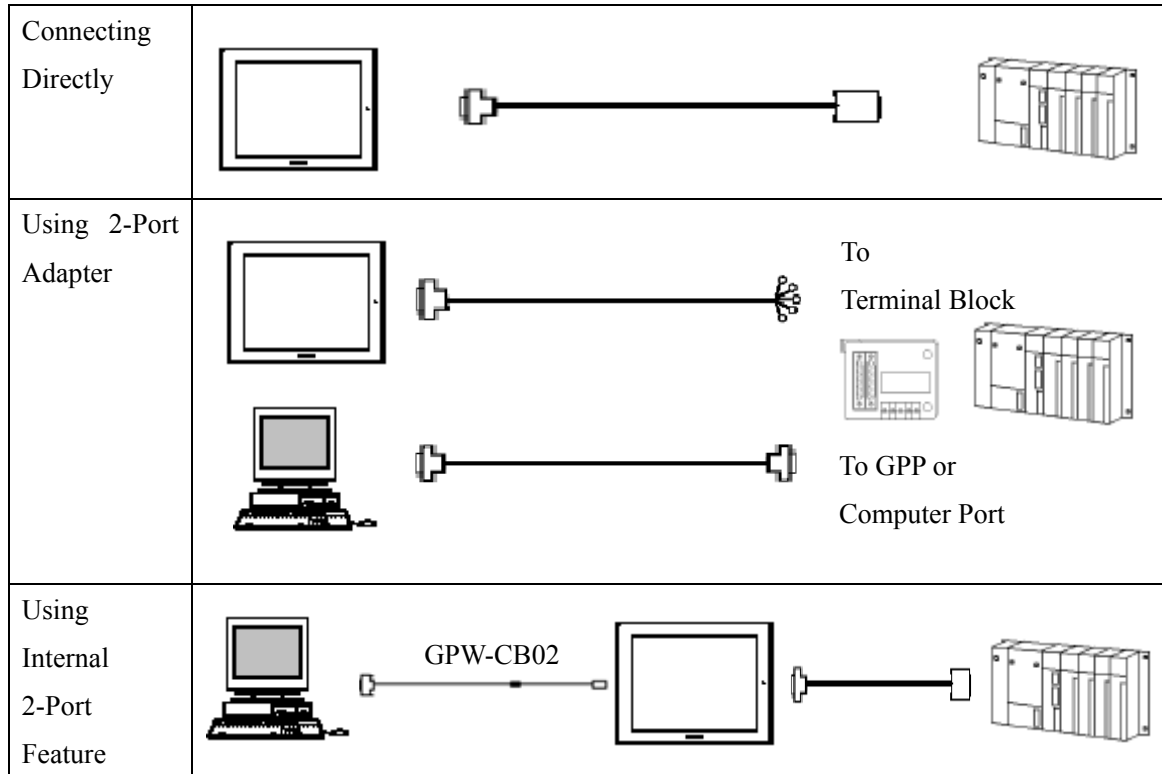



Mitsubishi <6> Mitsubishi Electric Corporation

A Series (AnN/AnS) CPU Direct Connection

System Structure






GP




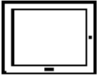
Machine 	Model	Remark
GP	GP70 Series GP77/77R Series GP2000 Series	Excepting for handy types. The internal 2-Port feature is supported by only GP77/77R Series and GP2000 Series.
GLC	GLC2000 Series	2-Port Adapter and the internal 2-Port feature are not supported.

PLC



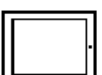
[Connecting Directly]

CPU 	Communication Method	Connection Cable 	GP 
A1N, A2N, A3N, A3H	RS-422	Connection Method [1]	
A1FX	RS-232C	Connection Method [2]	

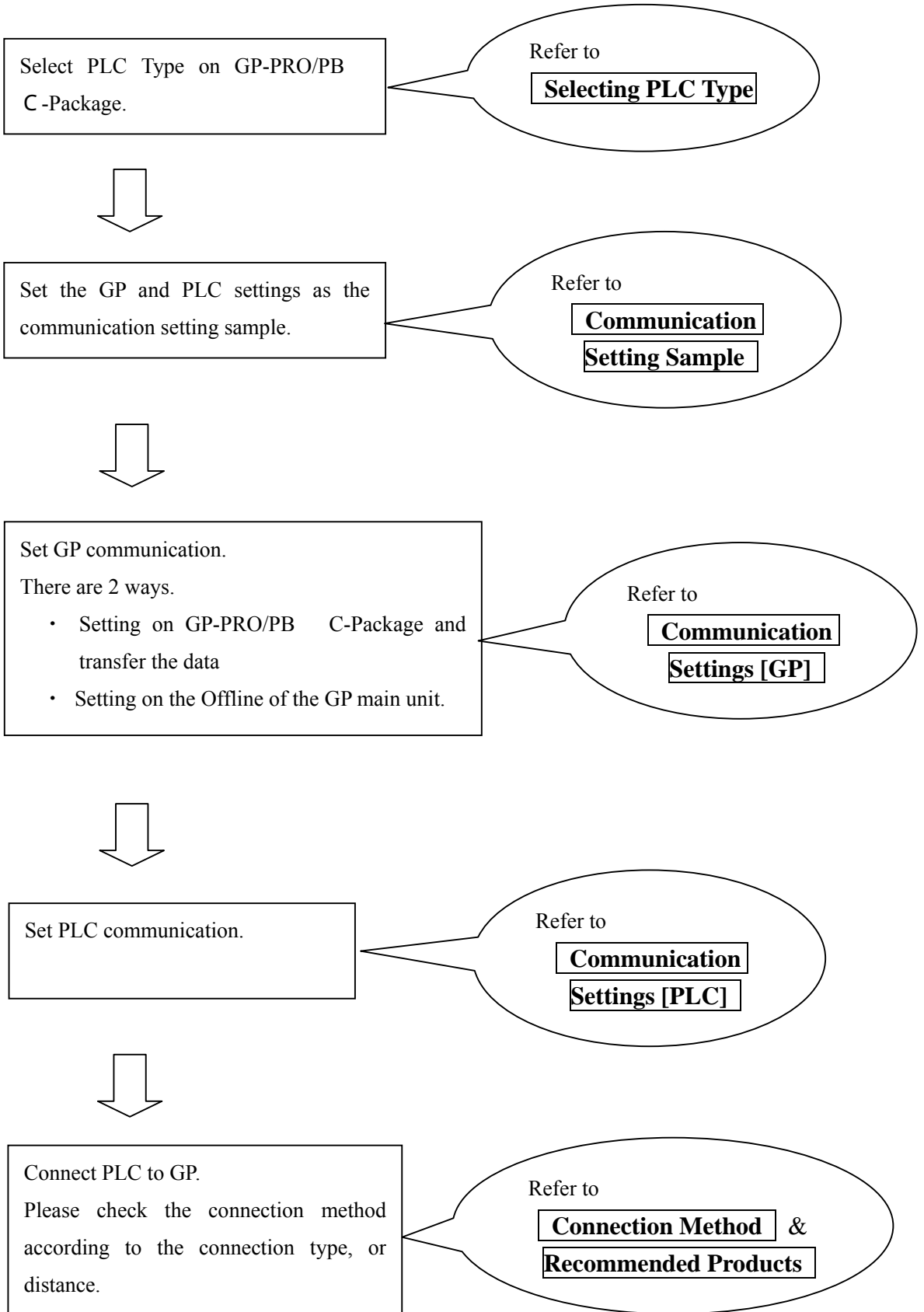
[Using 2-Port Adapter]

CPU 	Adapter 	Communication Method	Connection Cable 	GP 
A1S, A2N, A3H, A3N	GP070-MD11	RS-422	Connection Method [3]	
A1FX				

[Using Internal 2-Port Feature]

CPU 	Communication Method	Connection Cable 	GP 
A1S, A2N, A3H, A3N	RS-232C	Connection Method [1]	GP77/77R Series GP2000 Series
	RS-422		

Procedure to Connect PLC



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)	---

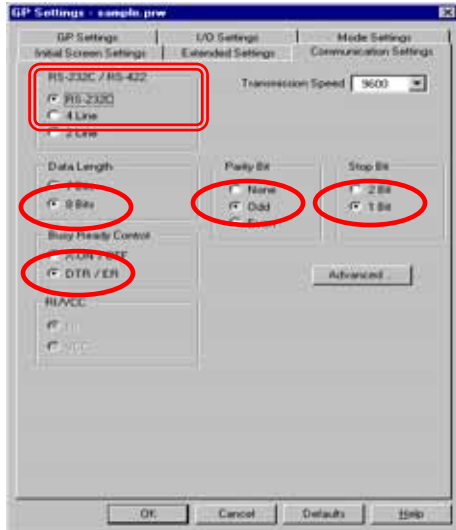
*1 For Communication Format, select RS-232C when using GP430-IP10-O, or select 4-wire type cable when using another cable.

Communication Settings [GP]

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

Select [GP Setup] on Project Manager.

1) Communication Settings

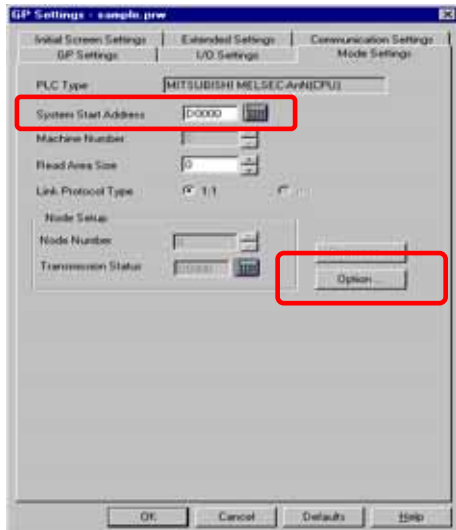


1) Communication Settings

Transmission Speed : 9600bps
 Data Length : 8 Bits
 Stop Bit: 1 Bit
 Parity Bit: Odd
 Busy Ready Control : DTR / ER
 RS-232C/ RS-422 :
 GP430-IP10-O : RS-232C
 Other Cable: 4 Line

* Select one in .

2) Mode Settings

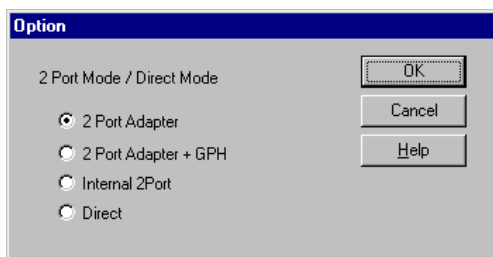


2) Mode Settings

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 : 2-Port Adapter
 Using Internal 2-Port Feature:
 Internal 2-Port

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

4) Transfer Settings

The screenshot shows the 'Transfer Settings' dialog box with the following configurations:

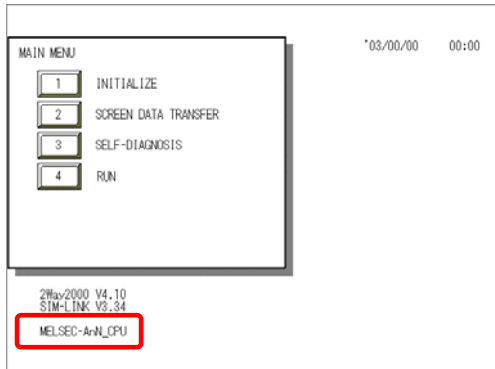
- Send Information:**
 - Download Information
 - GP System Screen (highlighted with a red box)
 - Filing Data(CF card)
 - Data Trans Func CSV Data(CF card)
- Transfer Method:**
 - Send All Screens
 - Automatically Send Changed Screens
 - Send User Selected Screens
- Transfer Mode:**
 - Preparation for 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
- Setup CFG file:**
 - English
 - Japanese
 - Selection
- Communications Port:**
 - COM
 - Comm Port: COM1
 - Baud Rate: 115.2K (bps)
 - Retry Count: 5
 - Ethernet
 - IP Address: 0. 0. 0. 0
 - Port: 8000
 - Ethernet: Auto Acquisition
 - Memory Loader

4) Transfer Settings GP System Settings: Checked

Transfer to GP after settings completed.

2 [GP Settings]

1) Checking GP Type

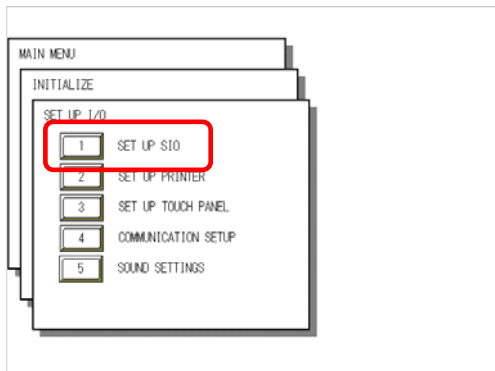


1) Checking GP Type

If you have selected Mitsubishi MELSEC-AnN (CPU), the following will be shown.

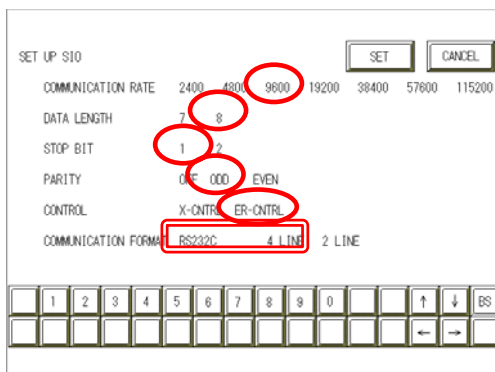
“MELSEC-AnN_CPU”

2) Communication Settings



2) Communication Settings

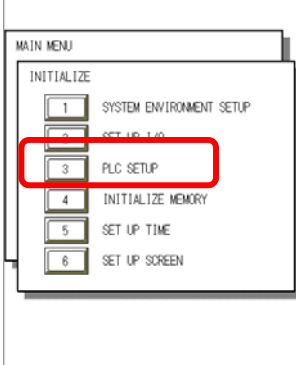
[MAIN MENU]
↓
[INITIALIZE]
↓
[SET UP I/O]
↓
[SET UP SIO]



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

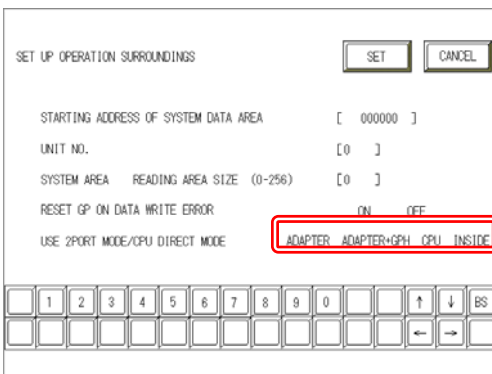
* Select one in .

3) Setting up Operation Surroundings



3) Setting up Operation Surroundings

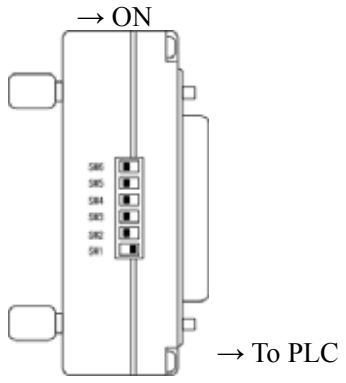
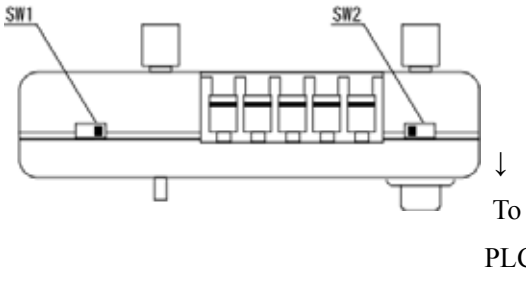
[MAIN MENU]
↓
[INITIALIZE]
↓
[PLC SETUP]
↓
[PLC SETUP]



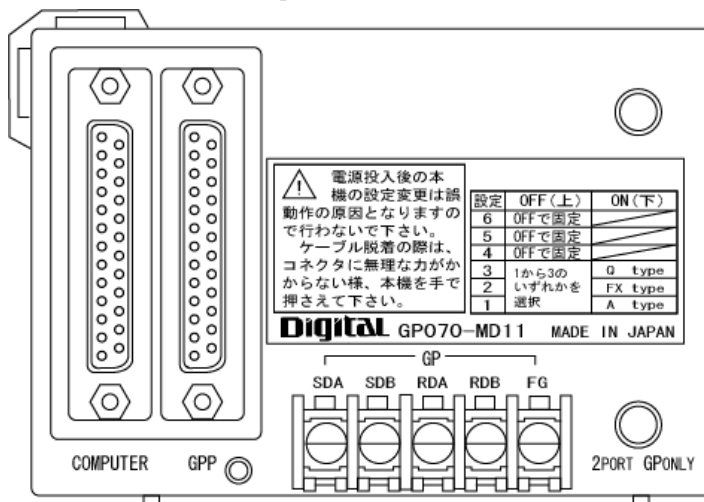
Starting Address of System Data Area:
Arbitrary Address
Unit No.: 0
Use 2-Port Mode/CPU Direct Mode
GP430-IP11-O Cable/User-Created Cable:
CPU
2-Port Adapter : Adapter
Internal 2-Port Adapter: Inside

* Select one in .

3 [2-Port Adapter Settings]

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

<Reference> 2-Port Adapter


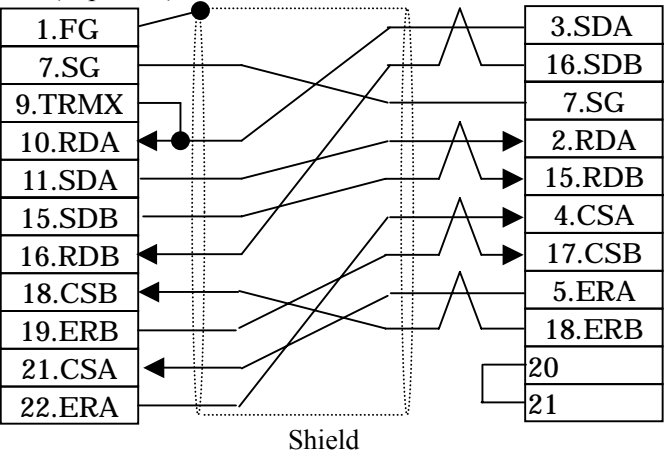


Communication Settings [PLC]

There are no items to set on the PLC.

Connection Method

[Connecting to A1N / A2N / A3N / A3H]

Type	Connection Method	Distance																						
Using GP430-IP10-O		5m																						
Creating Cable	<p>To GP (25p Male)</p> <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>1.FG</td></tr> <tr><td>7.SG</td></tr> <tr><td>9.TRMX</td></tr> <tr><td>10.RDA</td></tr> <tr><td>11.SDA</td></tr> <tr><td>15.SDB</td></tr> <tr><td>16.RDB</td></tr> <tr><td>18.CSB</td></tr> <tr><td>19.ERB</td></tr> <tr><td>21.CSA</td></tr> <tr><td>22.ERA</td></tr> </table> <p>To PLC (25p Male)</p> <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>3.SDA</td></tr> <tr><td>16.SDB</td></tr> <tr><td>7.SG</td></tr> <tr><td>2.RDA</td></tr> <tr><td>15.RDB</td></tr> <tr><td>4.CSA</td></tr> <tr><td>17.CSB</td></tr> <tr><td>5.ERA</td></tr> <tr><td>18.ERB</td></tr> <tr><td>20</td></tr> <tr><td>21</td></tr> </table> <p style="text-align: center;">Shield</p> 	1.FG	7.SG	9.TRMX	10.RDA	11.SDA	15.SDB	16.RDB	18.CSB	19.ERB	21.CSA	22.ERA	3.SDA	16.SDB	7.SG	2.RDA	15.RDB	4.CSA	17.CSB	5.ERA	18.ERB	20	21	<p>Within 5m</p> <p>Supporting Models: GP2000 / GLC2000 Series</p>
1.FG																								
7.SG																								
9.TRMX																								
10.RDA																								
11.SDA																								
15.SDB																								
16.RDB																								
18.CSB																								
19.ERB																								
21.CSA																								
22.ERA																								
3.SDA																								
16.SDB																								
7.SG																								
2.RDA																								
15.RDB																								
4.CSA																								
17.CSB																								
5.ERA																								
18.ERB																								
20																								
21																								




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

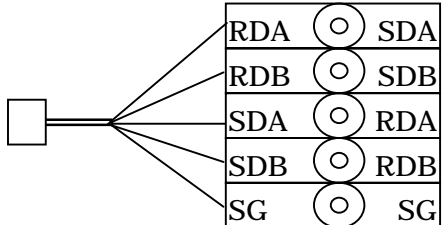
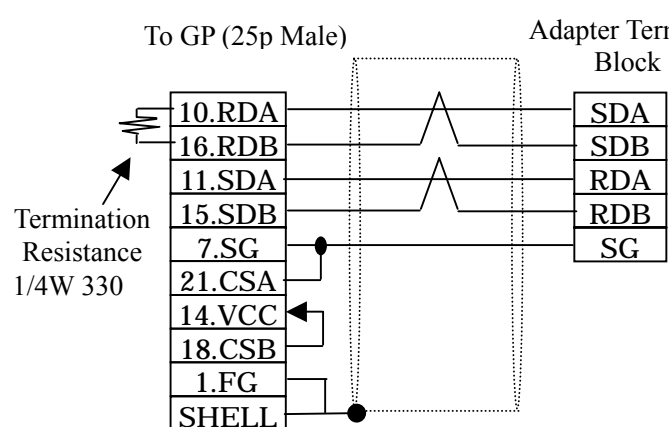
Recommended Products

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

[Connecting to A1FX]

Type	Connection Method	Distance
Using GP430-IP11-O		5m

[Connecting via 2-Port Adapter]

Type	Connection Method	Distance
Using GP070-MDCB11	<p>Cable with 5 wires Adapter with 5 contacts</p>  <p>Caution Cross the signal names of wires and ones of terminal block contacts.</p>	5m
Creating Cable	<p>To GP (25p Male) Adapter Terminal Block</p>  <p>Termination Resistance 1/4W 330</p> <p>Caution RS-422 Connector Terminal Adapter (GP070-CN10-O) cannot be used on the GP.</p>	Within 600m



Connecting to A1FX via 2-Port Adapter



*1: You need a straight cable to adjust height of the connector on the CPU and align it with that of the CPU cover.

Recommended Products

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.>
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	