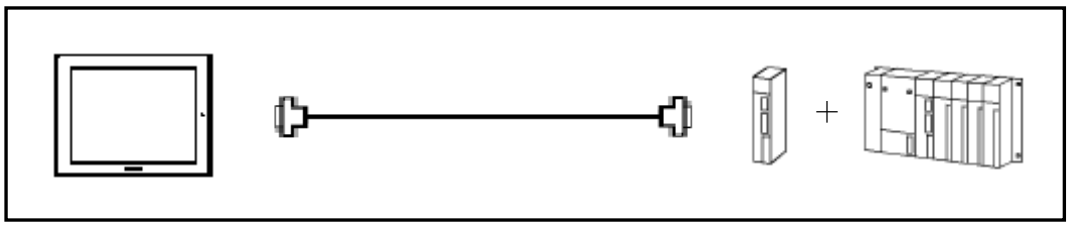
Mitsubishi <1> Mitsubishi Electric Corporation

A Series (AnU/AnA) + Link Unit (Large) Connection

System Structure



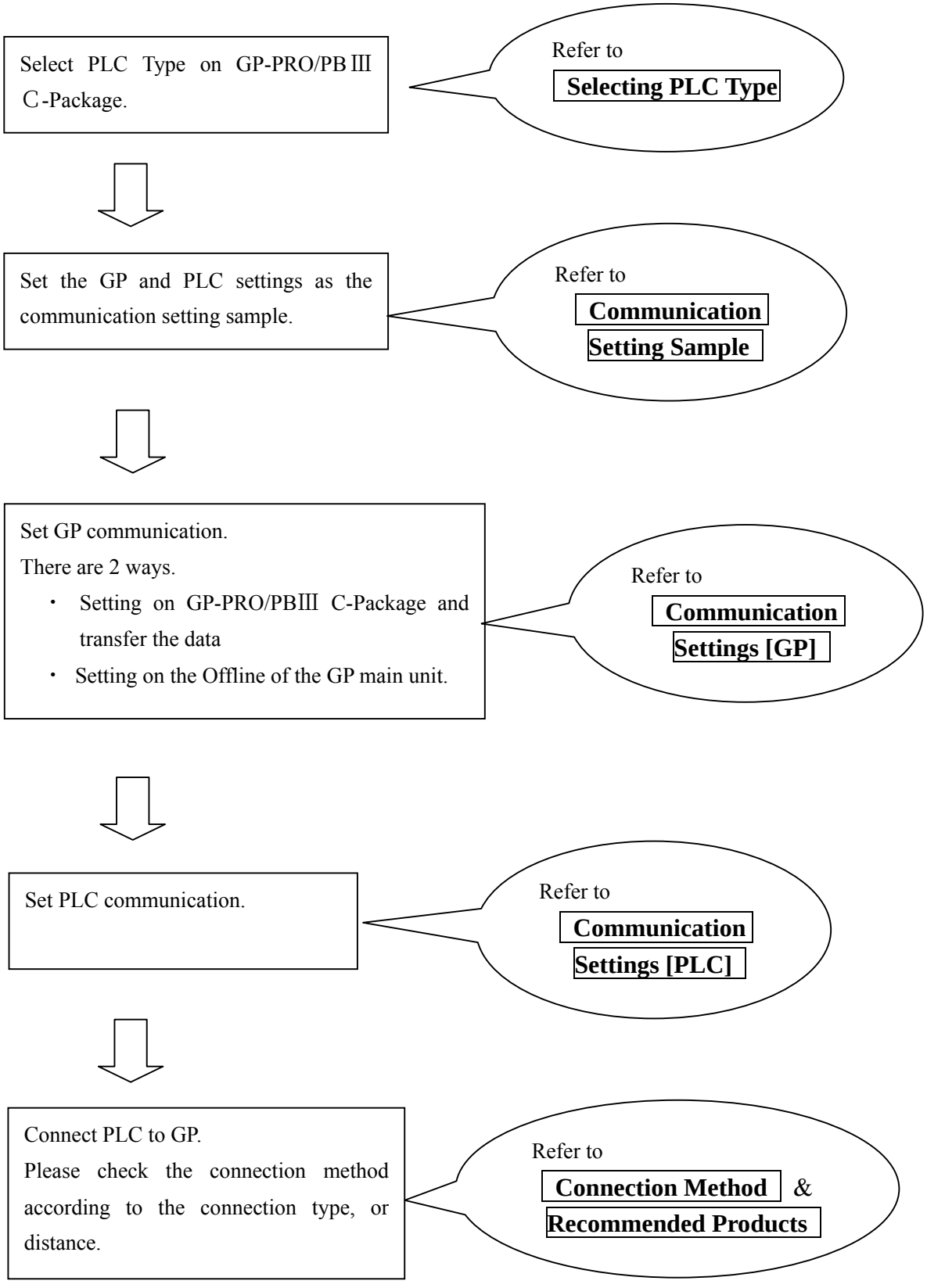
GP

Machine	Model	Remark
GP	GP70 Series GP77/77R Series GP2000 Series	Excepting for handy types.
GLC	GLC2000 Series	

PLC

CPU	Computer Link Unit	Communication Method	Connection Cable	GP
A2A, A3A, A2U, A3U, A4U	AJ71C24-S6 AJ71C24-S8 AJ71UC24	RS-232C	**Connection Method [1]**	
		RS-422	**Connection Method [2]**	

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

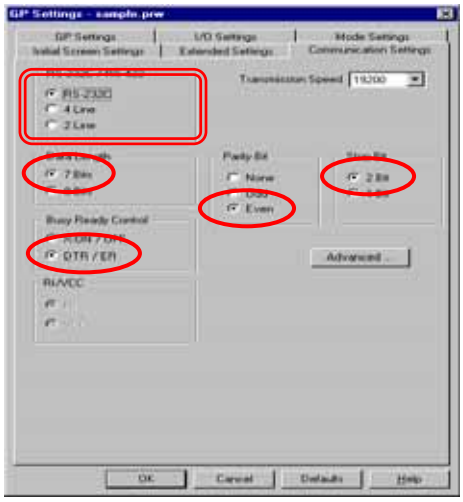
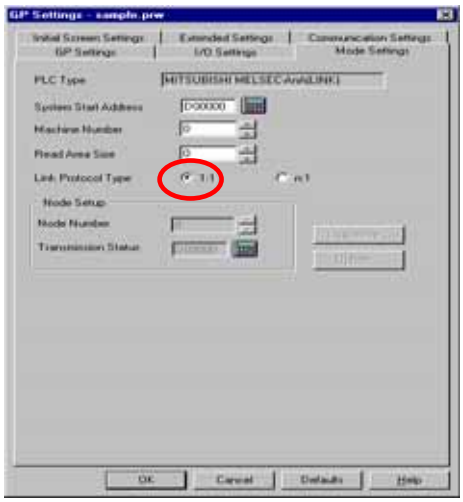
GP Setup		Computer Link Unit Setitings	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	7 bits	Data Bit	7 bits
Stop Bit	2 bits	Stop Bit	2 bits
Parity Bit	Even	Parity Check Parity setting even/odd	Yes Even
Data Flow Control	ER Control	---	
Communication Format (RS-232C)	RS-232C	Channel Setup Mode Setup (RS-232C)	RS-232C 4 (Format 4 protocol)
Communication Format (RS-422)	4-wire type	Channel Setup Mode Setup (RS-422)	RS-422 8 (Format 4 protocol)
---		Write possible in RUN mode.	Possible
---		Sum Check	Yes
---		Enable Sender Termination Resistor *1	Yes
---		Enable Receiver Termination Resistor *1	Yes
Unit No.	0	Station Number	0

* 1: AJ71UC24 does not have this setting.

Communication Settings [GP]

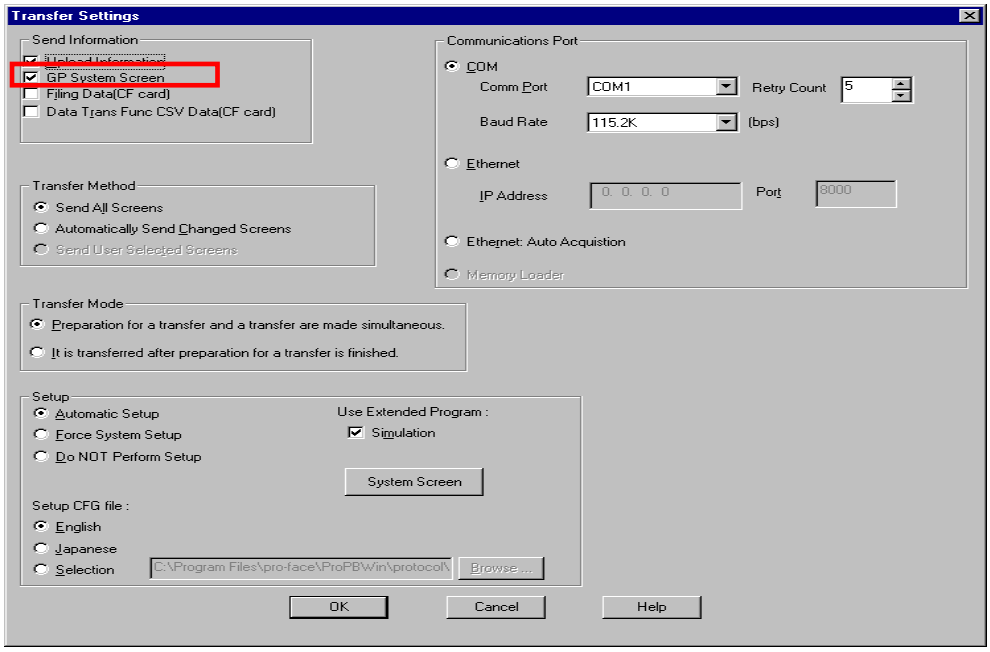
1 [GP-PRO/PBIII C-Package Setting]

Select [GP Setup] on Project Manager.

1) Communication Settings 	1) Communication Settings Transmission Speed : 19200bps Data Length : 7 Bits Stop Bit: 2 Bits 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 No.: 0 Link Protocol Type: 1:1

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

3) Transfer Settings



3) Transfer Settings GP System Settings: Checked

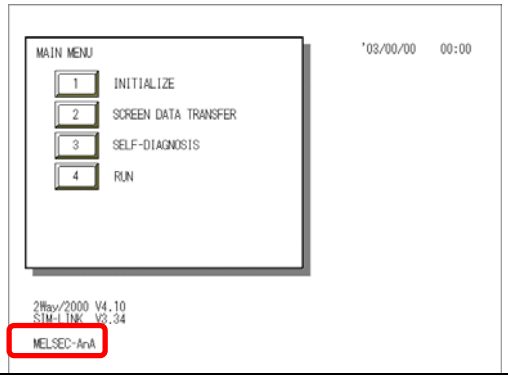
Transfer to GP after settings completed.

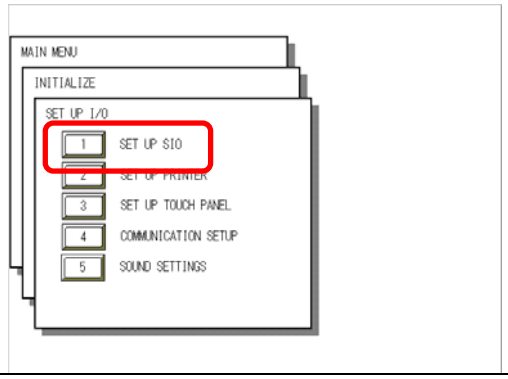
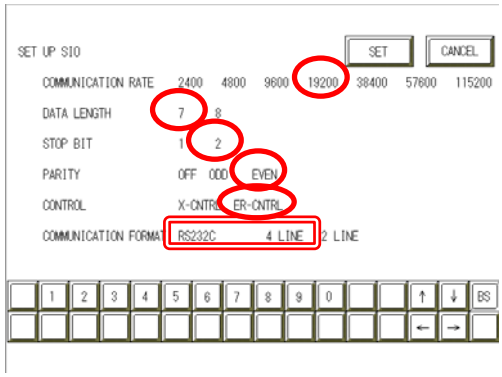
2 [GP Settings]

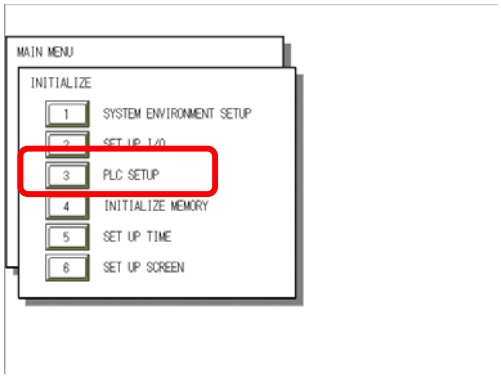
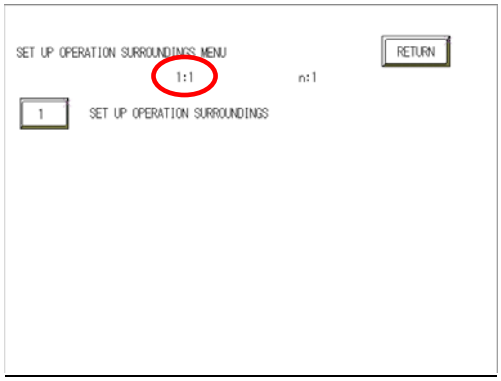
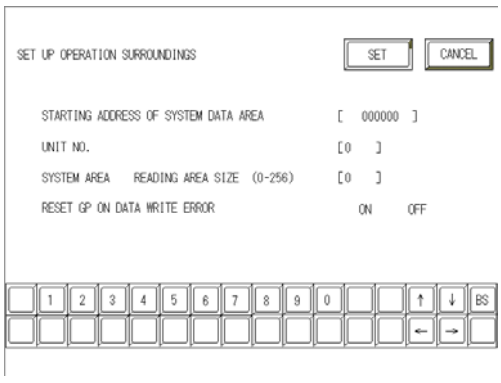
－Displaying Setting Screen－

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 (LINK), the following will be shown. "MELSEC-AnA"

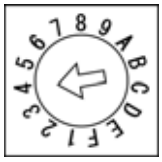
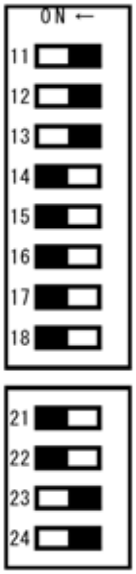
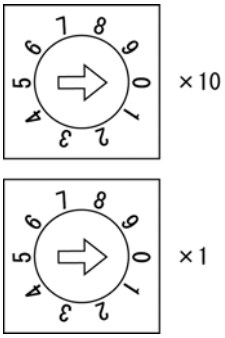
2) Communication Settings	2) Communication Settings
	[MAIN MENU] ↓ [INITIALIZE] ↓ [SET UP I/O] ↓ [SET UP SIO]
	Communication Rate: 19200bps Data Length: 7 Bits Stop Bit: 2 Bits Parity: Even Control: ER Cntrl Communication Format RS-232C Connection: RS-232C RS-422 Connection: 4 Line * Select one in [ ] .

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

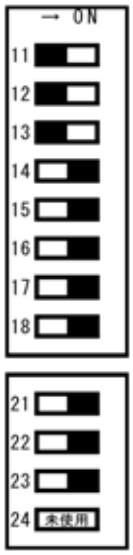
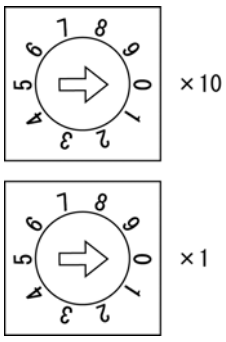
Communication Settings [PLC]

1. RS-232C Connection

1-1 [Connecting via Computer Link Unit AJ71C24-S6 / AJ71C24-S8]

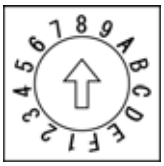
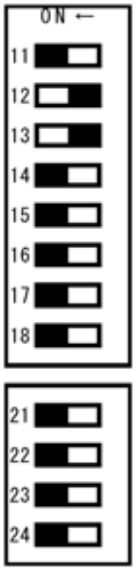
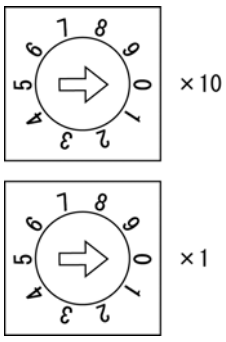
1) Mode Setup MODE 	1) Mode Setup 4 (Format 4 Protocol)
2) Communication Settings **Set switches to the black.** 	2) Communication Settings Baud Rate :19200bps Data Bit :7 Bits Stop Bit :2 Bits Parity Check :Yes Parity Setting Even/Odd :Even Write Possible in RUN Mode: Possible Sum Check :Yes Enable Sender Termination Resistor: Yes Enable Receiver Termination Resistor: Yes
3) Node Settings STATION NO 	3) Node Settings Station Number: 0

1-2 [Connecting via Computer Link Unit AJ71UC24]

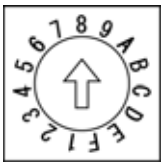
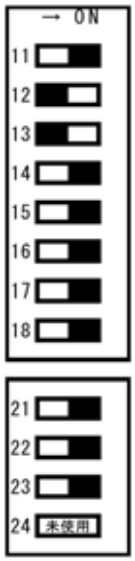
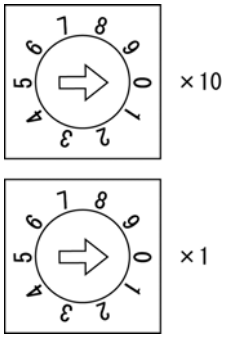
1) Mode Setup MODE 	1) Mode Setup 4 (Format 4 Protocol)
2) Communication Settings **Set switches to the black.** 	2) Communication Settings Baud Rate :19200bps Data Bit :7 Bits Stop Bit :2 Bits Parity Check :Yes Parity Setting Even/Odd :Even Write Possible in RUN Mode: Possible Sum Check :Yes
3) Node Settings STATION NO 	3) Node Settings Station Number: 0

2. RS-422 Connection

2-1 [Connecting via Computer Link Unit AJ71C24-S6 / AJ71C24-S8]

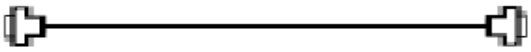
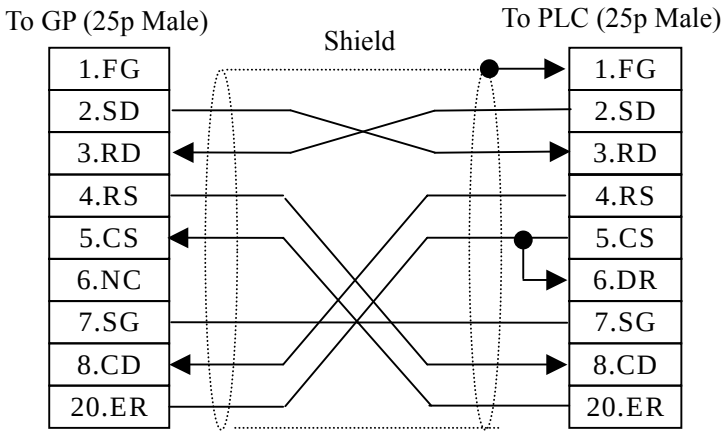
1) Mode Setup MODE 	1) Mode Setup 8 (Format 4 Protocol)
2) Communication Settings **Set switches to the black.** 	2) Communication Settings Baud Rate :19200bps Data Bit :7 Bits Stop Bit :2 Bits Parity Check :Yes Parity Setting Even/Odd :Even Write Possible in RUN Mode: Possible Sum Check :Yes Enable Sender Termination Resistor: Yes Enable Receiver Termination Resistor: Yes
3) Node Settings STATION NO 	3) Node Settings Station Number: 0

2-2 [Connecting via Computer Link Unit AJ71UC24]

1) Mode Setup MODE 	1) Mode Setup 8 (Format 4 Protocol)
2) Communication Settings **Set switches to the black.** 	2) Communication Settings Baud Rate :19200bps Data Bit :7 Bits Stop Bit :2 Bits Parity Check :Yes Parity Setting Even/Odd :Even Write Possible in RUN Mode: Possible Sum Check :Yes
3) Node Settings STATION NO 	3) Node Settings Station Number: 0

Connection Method

1. RS-232C Connection

Type	Connection Method	Distance
Using GP410-IS00-O		5m
Creating Cable		Within 15m

*** If a communication cable is used, it must be connected to the SG.**

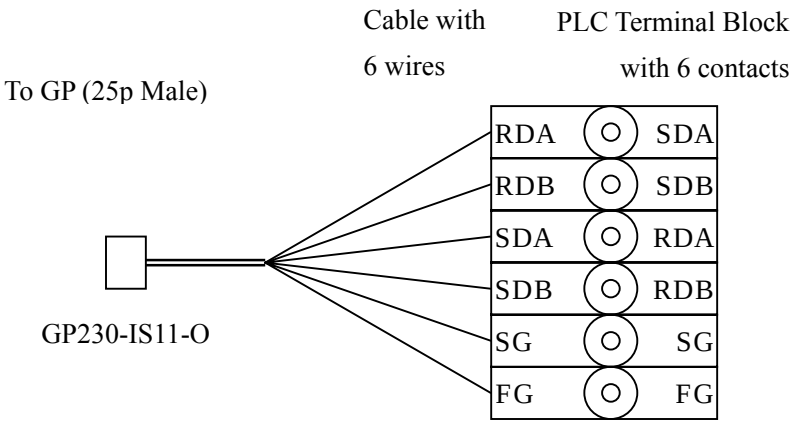
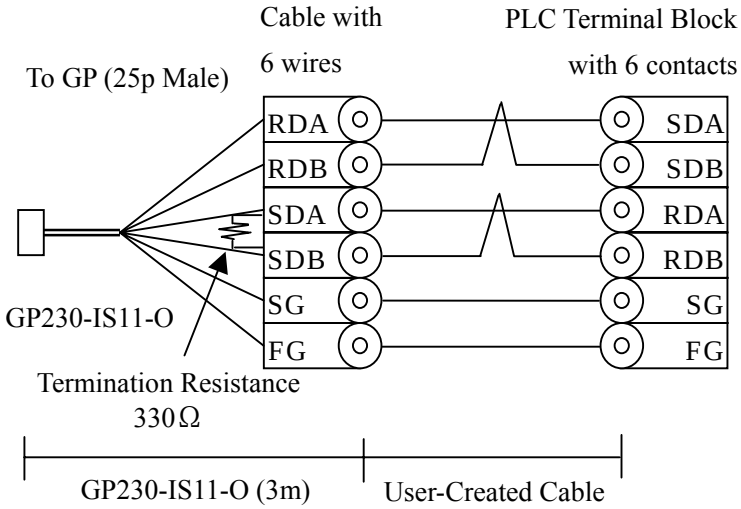
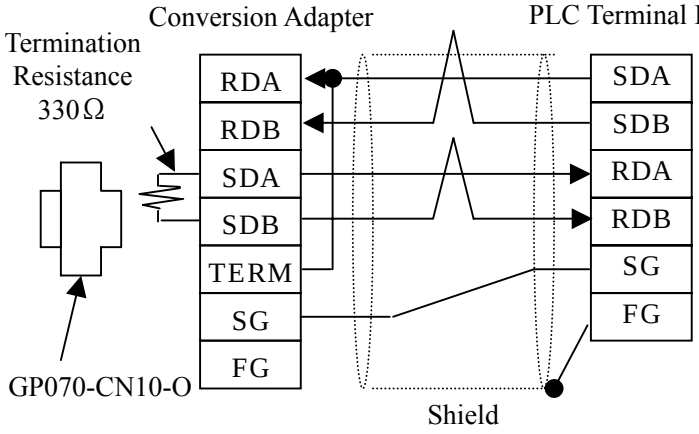
NOTE

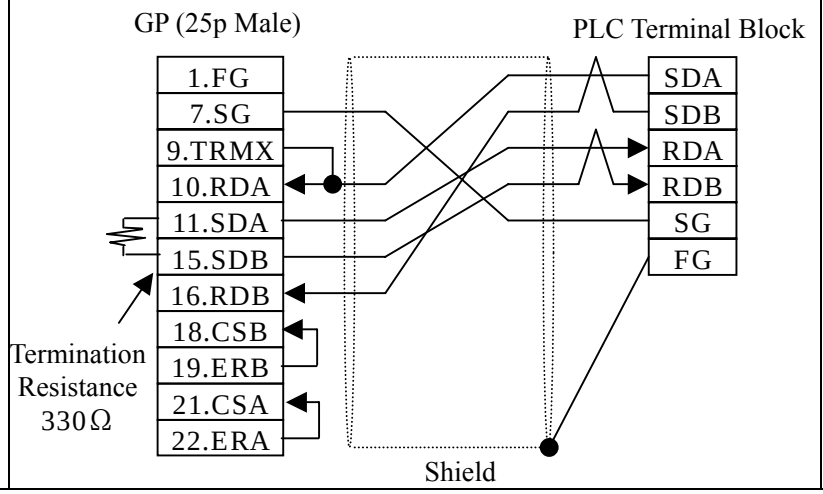
The optional cable, GP410-IS00-O is 5m long. If you need a longer cable or shorter, please use a User-Created cable to connect.

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	

2. RS-422 Connection

Type	Connection Method	Distance
Using GP230-IS11-O		5m
Extending GP230-IS11-O		5 - 500 m
Using GP070-CN10-O		Within 500m

Creating Cable		Within 500m

*** If a communication cable is used, it must be connected to the SG.**

*** Turn on the termination resistance switch on the PLC. (Excepting for AJ71UC24)**

*** Termination resistance when using AJ71UC24**

PLC / between SDA and SDB, between RDA and RDB : 330Ω
(with wattage specified on PLC)

GP Unit / as required (Refer to Cable Diagrams) : 330Ω
(with wattage specified on PLC)

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	SPEV(SB)-MPC-0.2*3P <Mitsubishi Cable Ind.>	
Setscrew	Metric Coarse Screw Tread : M2.6 × 0.45	