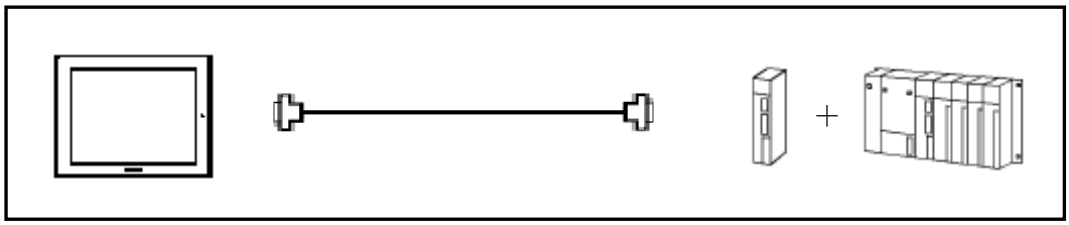
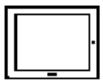
Mitsubishi <5> Mitsubishi Electric Corporation
A Series (AnS/AnSH/A0J2) + Link Unit (Medium) Connection

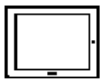
System Structure



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 
AOJ2 AOJ2H	AOJ2-C214-S1	RS-422	**Connection Method [2]**	
A1S	A1SJ71C24-R2 A1SJ71UC24-R2	RS-232C	**Connection Method [1]**	
	A1SJ71C24-R4	RS-422	**Connection Method [2]**	
A1SJ, A2SH, A1SH	A1SJ71UC24-R4			
	A1SJ71UC24-R2	RS-232C	**Connection Method [1]**	
A2CCPU24	Link Unit on CPU Unit	RS-232C		

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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**

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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
Unit No.	0	Station Number	0

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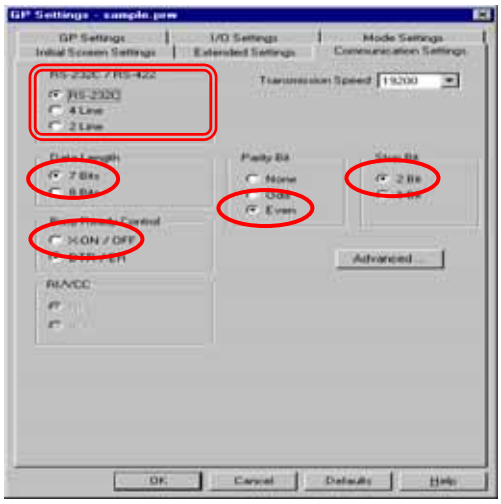
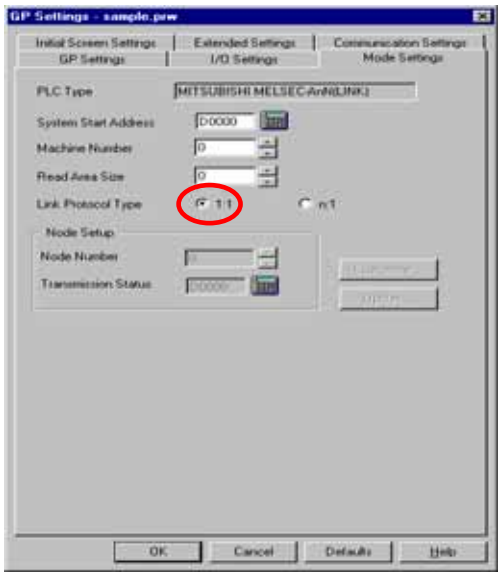
Communication Settings [GP]

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

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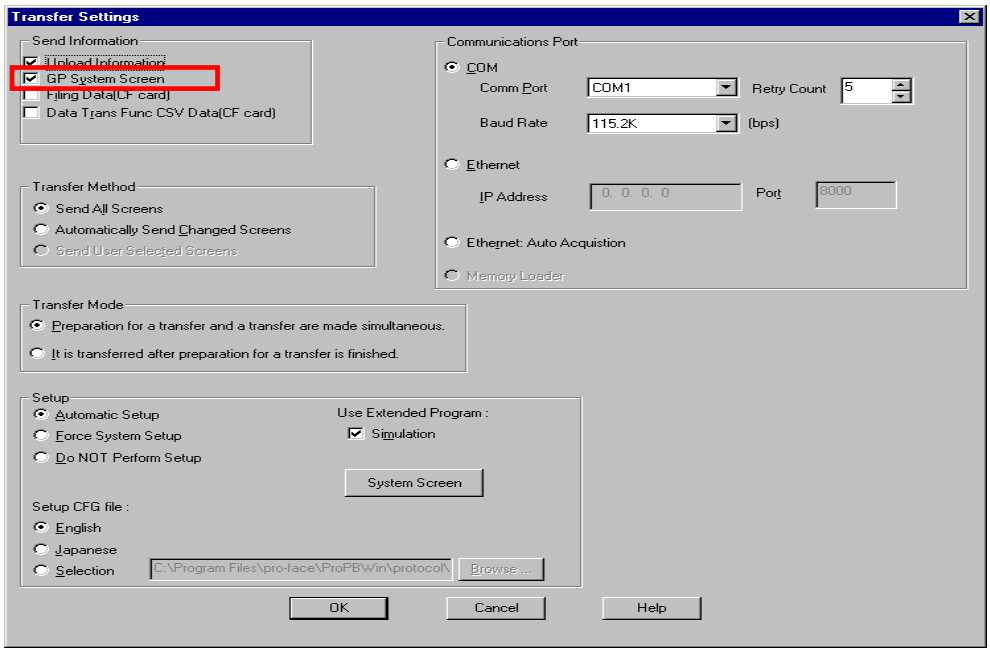
Select [Transfer] --> [Setup] --> [Transfer Settings].

3) Transfer Settings



3) Transfer Settings GP System Settings: Checked

Transfer to GP after settings completed.

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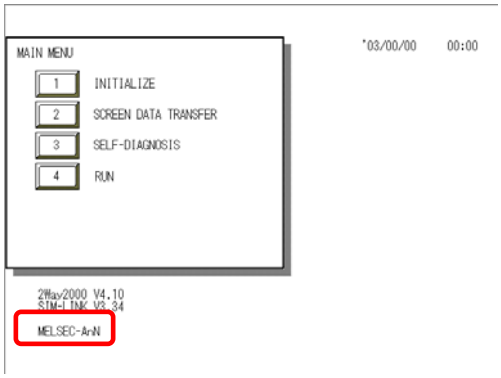
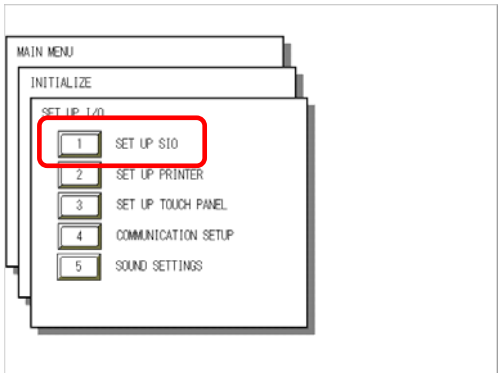
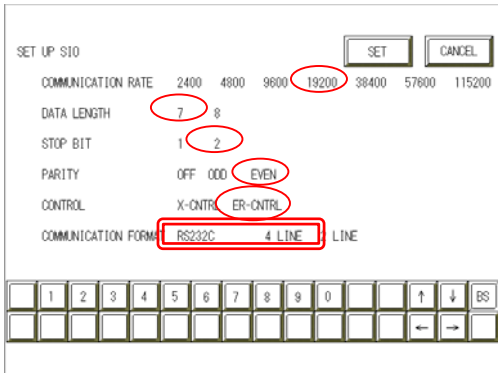
2 [GP Settings]

1) Checking GP Type 	1) Checking GP Type If you have selected Mitsubishi MELSEC-AnN (LINK), the following will be shown. "MELSEC-AnN"
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 [ ] .

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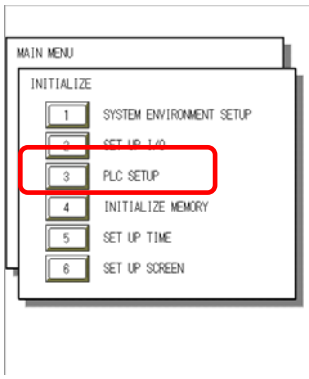
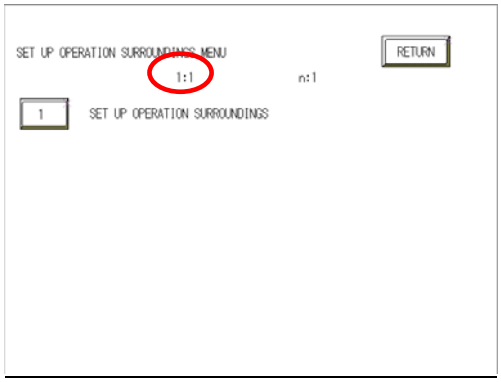
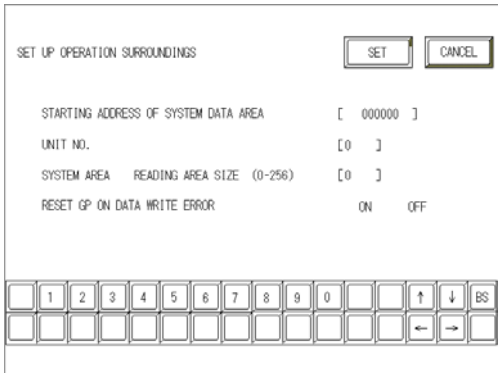
3) Setting up Operation Surroundings 	3) Setting up Operation Surroundings [MAIN MENU] ↓ [INITIALIZE] ↓ [PLC SETUP] ↓ [PLC SETUP]
	SET UP OPERATION SURROUNDINGS MENU: 1:1
	Starting Address of System Data Area: Arbitrary Address Unit No.: 0

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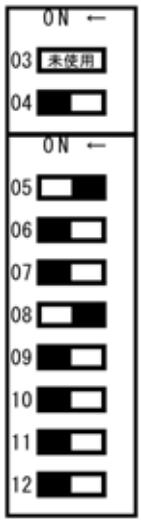
Communication Settings [PLC]

1. RS-232C Connection

1-1 [Connecting via Computer Link Unit A1SJ71C24-R2 / A1SJ71UC24-R2]

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

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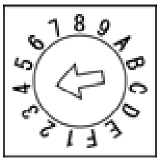
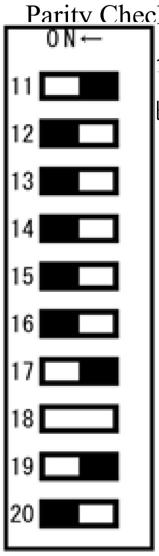
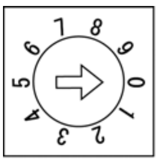
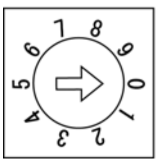
1-2 [Connecting via Computer Link Unit A2CCPU24 on CPU Unit]

1) Mode Setup MODE	1) Mode Setup  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 ng Even/Odd :Even ble in RUN Mode: Possible :Yes 
3) Node Settings STATION NO.	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU3) Node Settings Station Number: 0  ×10  ×1

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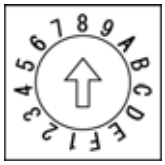
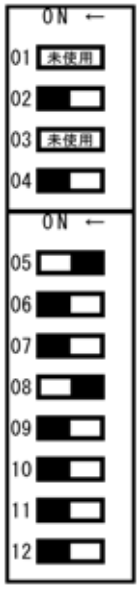
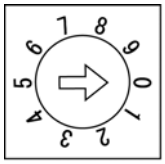
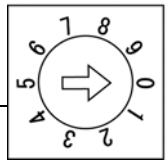
2. RS-422 Connection

2-1 [Connecting via Computer Link Unit A1SJ71C24-R4 / A1SJ71UC24-R4]

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.  ×10  ×1	3) Node Settings Station Number: 0

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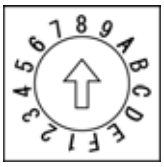
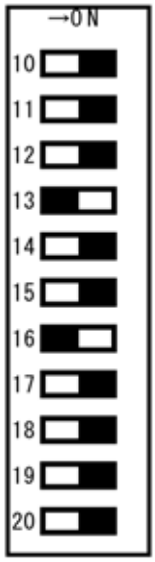
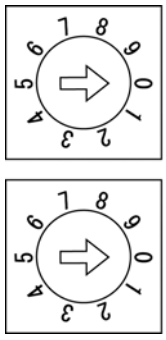
2-2 [Connecting via Computer Link Unit AOJ2-C214-S1]

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

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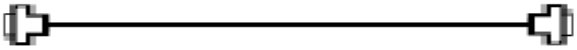
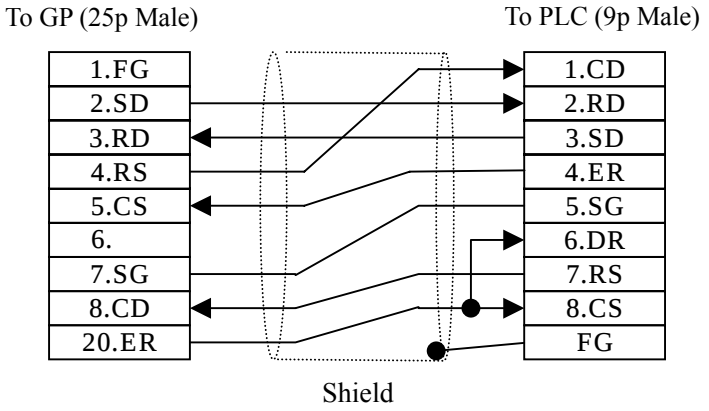
Connection Method

1. RS-232C Connection

Type	Connection Method	Distance
Using GP000-IS02-MS		3m
Creating Cable		Within 15m

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

NOTE

The optional cable, GP000-IS02-MS is 3m 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	

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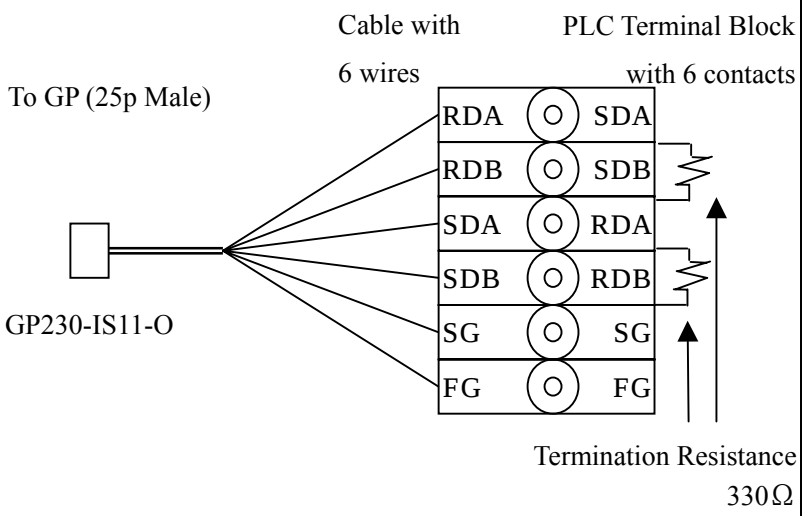
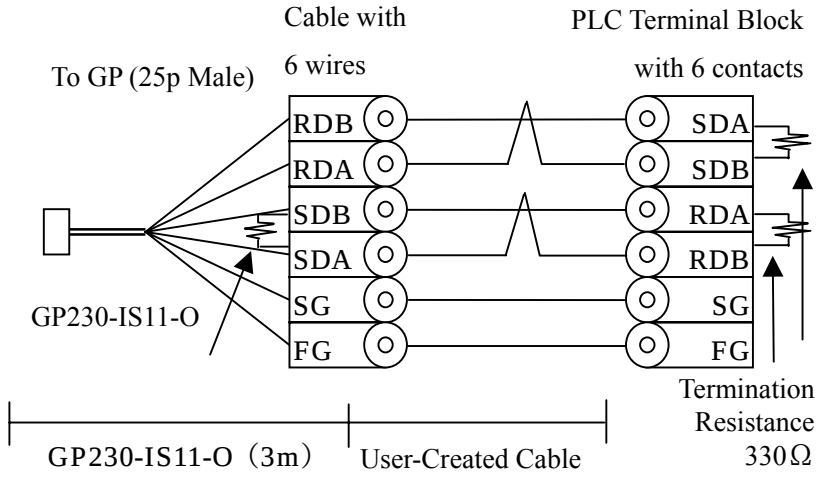
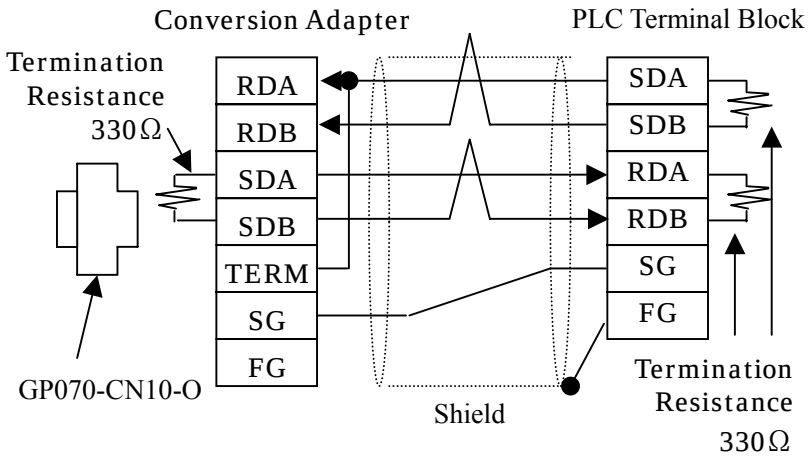
2. RS-422 Connection

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

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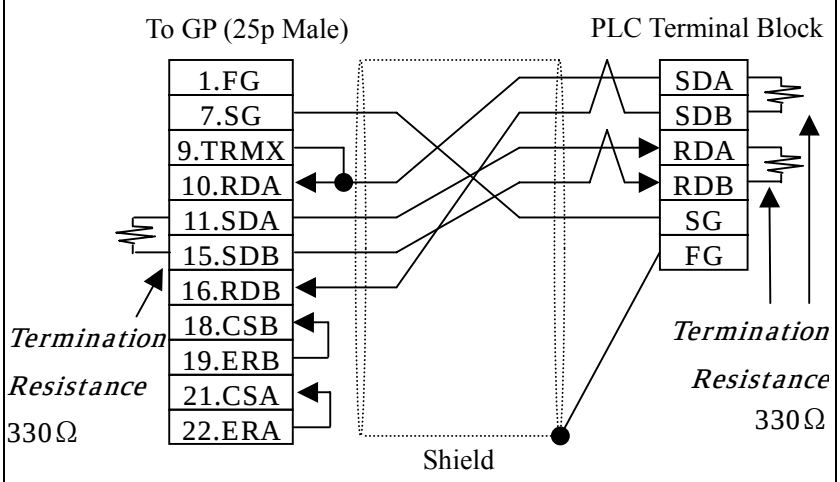
Creating Cable



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

*** 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	

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