Pro-face

Digital Human Machine Interface

Device/PLC Connection Manuals

About the Device/PLC Connection Manuals

Prior to reading these manuals and setting up your device, be sure to read the "Important: Prior to reading the Device/PLC Connection manual" information. Also, be sure to download the "Preface for Trademark Rights, List of Units Supported, How to Read Manuals and Documentation Conventions" PDF file. Furthermore, be sure to keep all manual-related data in a safe, easy-to-find location.

2.24 Schneider PLC

With Schneider Uni-Telway, Modbus RTU 1:n Protocol units, when the same project file is used on multiple GP/GLC units, the system may malfunction. When using multiple GP/GLC units, create and maintain only one unique project file for each GP/GLC unit.

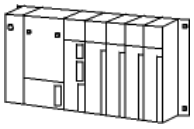
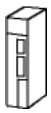
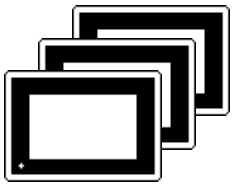
2.24.1 System Structure

The following describes the system structure for connecting the GP to the Schneider PLC.

Reference *The Cable Diagrams mentioned in the following tables are listed in the section titled "**2.24.2 Cable Diagrams**".*

Note: **GP/GLC series that can be connected to PLC made by Schneider are GP377 series, GP77R series, GP2000 series, GLC300 series and GLC2000 series.**

■ Nano Series (Uni-Telway)

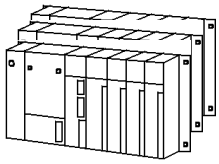
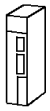
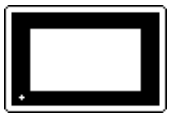
CPU	Link I/F	Cable Diagram	Cables	GP
				
TSX 07 3L □□28 TSX 07 30 10□□ TSX 07 31 16□□ TSX 07 31 24□□ TSX 07 32 □□28 TSX 07 33 □□28	PROGRAMMING PORT on CPU	RS-422(2-wire) <Cable Diagram 1>		GP/GLC/ST Series, Factory Gateway
		RS-232C <Cable Diagram 2>	RS-232C Schneider cable TSXPCX1031 (2.5m) *1	
	(Accessory box) AUX or TER Port on TSX PACC01	RS-422(2-wire) <Cable Diagram 1>		
	Acessory box TSX SCA62	RS-422(2-wire) <Cable Diagram 5>		

**1 Be sure to use a commercial 9-Pin<->25-Pin Conversion Adapter when using Schneider's TSXPCX1031 cable.*

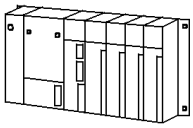
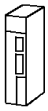
Note: **CPU model number data indicated by o varies depending on the specifications. For details,**

Reference *PLC Manual*

■ Nano Series (Modbus RTU)

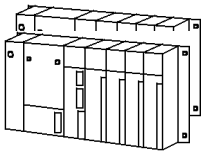
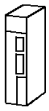
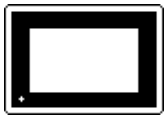
CPU	Link I/F	Cable Diagram	Cables	GP/GLC
				
TSX 07 30 10□□ TSX 07 31 16□□ TSX 07 31 24□□	Extension PORT on CPU	RS-422 (2-wire type) <Cable Diagram 6>		GP/GLC/ST Series, Factory Gateway

■ Micro Series (Uni-Telway)

CPU	Link I/F	Cable Diagram	Cables	GP/GLC
				
TSX 37 05 028DR1 TSX 37 08 056DR1 TSX 37 10 128DT1 TSX 37 10 128DR1 TSX 37 10 128DTK1 TSX 37 10 164DTK1 TSX 37 10 028AR1 TSX 37 10 028DR1 TSX 37 21 101 TSX 37 22 101 TSX 37 21 001 TSX 37 22 001	TER port on CPU	RS-422(2-wire) <Cable Diagram 1>		GP/GLC/ST Series, Factory Gateway
		RS-232C <Cable Diagram 2>	RS-232C Schneider cable TSXPCX1031 (2.5m) *1	
	AUX port on CPU	RS-422(2-wire) <Cable Diagram 1>		
	Accessory box AUX or TER Port on TSX PACC01 *2	RS-422(2-wire) <Cable Diagram 1>		
	Acessory box TSX SCA62	RS-422(2-wire) <Cable Diagram 5>		
TSX 37 21 101 TSX 37 22 101 TSX 37 21 001 TSX 37 22 101	RS485 PCMCIA Card TSX SCP114	RS-422(2-wire) <Cable Diagram 3>	Schneider cable TSXSCPCU40 30 (3m)	

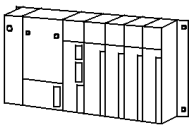
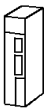
**1 Be sure to use a commercial 9-Pin<->25-Pin Conversion Adapter when using Schneider's TSXPCX1031 cable.*

■ Micro Series (Modbus RTU)

CPU	Link I/F	Cable Diagram	Cables	GP/GLC
				
TSX 37 05 028DR1 TSX 37 08 056DR1 TSX 37 10 128DT1 TSX 37 10 128DR1 TSX 37 10 128DTK1 TSX 37 10 164DTK1 TSX 37 10 028AR1 TSX 37 10 028DR1 TSX 37 21 101 TSX 37 22 101 TSX 37 21 001 TSX 37 22 101	TER PORT on CPU	RS-422 (2-wire type) <Cable Diagram 7>		GP/GLC/ST Series, Factory Gateway
		RS-232C <Cable Diagram 8>	Schneider's TSXPCX1031 Cable (2.5m) *1	
	AUX PORT on CPU	RS-422 (2-wire type) <Cable Diagram 7>		
	AUX or TER Port on Accessory Box TSX PACCO1	RS-422 (2-wire type) <Cable Diagram 7>		
	TSX SCA62 on Accessory Box	RS-422 (2-wire type) <Cable Diagram 10>		
TSX 37 21 101 TSX 37 22 101 TSX 37 21 001 TSX 37 22 101	PCMCIA Card TSX SCP114 for RS485	RS-422 (2-wire type) <Cable Diagram 9>		

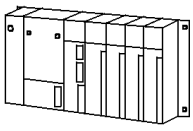
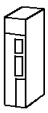
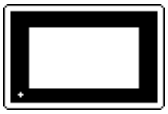
**1 Be sure to use a commercial 9-Pin<->25-Pin Conversion Adapter when using Schneider's TSXPCX1031 cable.*

■ Premium Series (Uni-Telway)

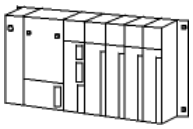
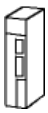
CPU	Link I/F	Cable Diagram	Cable	GP/GLC
				
TSX P57 103M TSX P57 153M TSX P57 203M TSX P57 253M TSX P57 303M TSX P57 353M TSX P57 453M	TER port on CPU	RS-422(2-wire) <Cable Diagram 1>		GP/GLC/ST Series, Factory Gateway
		RS-232C <Cable Diagram 2>	RS-232C Schneider cable TSXPCX1031 (2.5m) *1	
	AUX port on CPU	RS-422(2-wire) <Cable Diagram 1>		
	Accessory box AUX or TER Port on	RS-422(2-wire) <Cable Diagram 1>		
	Acessory Box TSX SCA62	RS-422(2-wire) <Cable Diagram 5>		
	RS485 PCMCIA Card TSX SCP114	RS-422(2-wire) <Cable Diagram 3>	Schneider cable TSXSCPCU4030 (3m)	
	RS485 Communication Module TSX SCY 21601	RS-422(2-wire) <Cable Diagram 4>		

**1 Be sure to use a commercial 9-Pin<->25-Pin Conversion Adapter when using Schneider's TSXPCX1031 cable.*

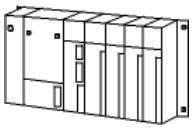
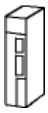
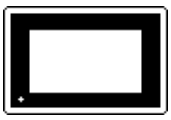
■ Premium Series (Modbus RTU)

CPU	Link I/F	Cable Diagram	Cables	GP/GLC
				
TSX P57 103M TSX P57 153M TSX P57 203M TSX P57 253M TSX P57 303M TSX P57 353M TSX P57 453M	PCMCIA Card TSX SCP114 for RS485	RS-422 (2-wire type) <Cable Diagram 9>		GP/GLC/ST Series, Factory Gateway

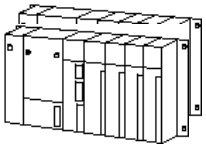
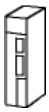
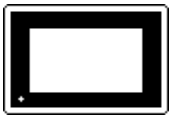
■ Momentum Series (Modbus RTU)

CPU	Link I/F	Cable Diagram	Cables	GP/GLC
				
171 CCS 700 00 171 CCS 700 10 171 CCS 760 00 171 CCC 760 10	Serial Port on Processor	RS-232C <Cable Diagram 11>		GP/GLC/ST Series, Factory Gateway
171 CCS 780 00 171 CCC 780 10 171 CCC 980 20/30	Serial Port on Processor	RS-232C <Cable Diagram 11>		
		RS-422 (2-wire type) <Cable Diagram 12>		

■ Quantum Series (Modbus RTU)

CPU	Link I/F	Cable Diagram	Cables	GP/GLC
				
140 CPU 113 02 140 CPU 113 03 140 CPU 434 12A 140 CPU 534 14A	Modbus Port on CPU	RS-232C <Cable Diagram 13>		GP/GLC/ST Series, Factory Gateway

■ Twido Series (Modbus RTU)

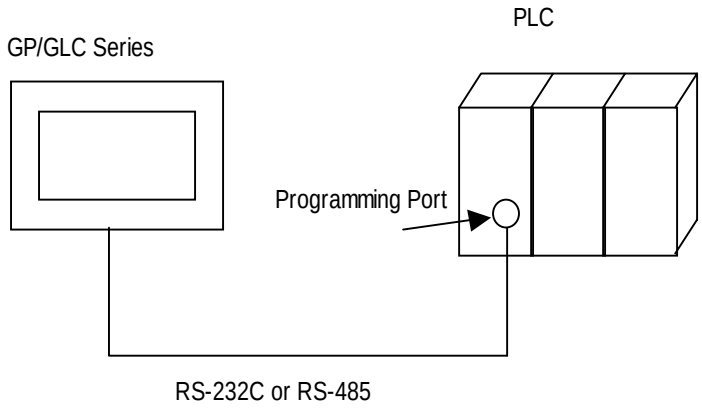
CPU	Link I/F	Cable Diagram	Cables	GP/GLC
				
TWD LCAA 10DRF TWD LCAA 16DRF TWD LCAA 24DRF TWD LMDA 20DTK TWD LMDA 20DUK TWD LMDA 20DRT TWD LMDA 40DTK TWD LMDA 40DUK	Programming PORT on CPU	RS-422 (2-wire type) <Cable Diagram 15>		GP/GLC/ST Series, Factory Gateway
		RS-232C <Cable Diagram 8>	Schneider's TSXPCX1031 Cable (2.5m) *1	
	TWD NAC232D	RS-232C <Cable Diagram 14>		
	TWD NAC485D	RS-422 (2-wire type) <Cable Diagram 15>		
	TWD NAC485T	RS-422 (2-wire type) <Cable Diagram 6>		

**1 Be sure to use a commercial 9-Pin<->25-Pin Conversion Adapter when using Schneider's TSXPCX1031 cable.*

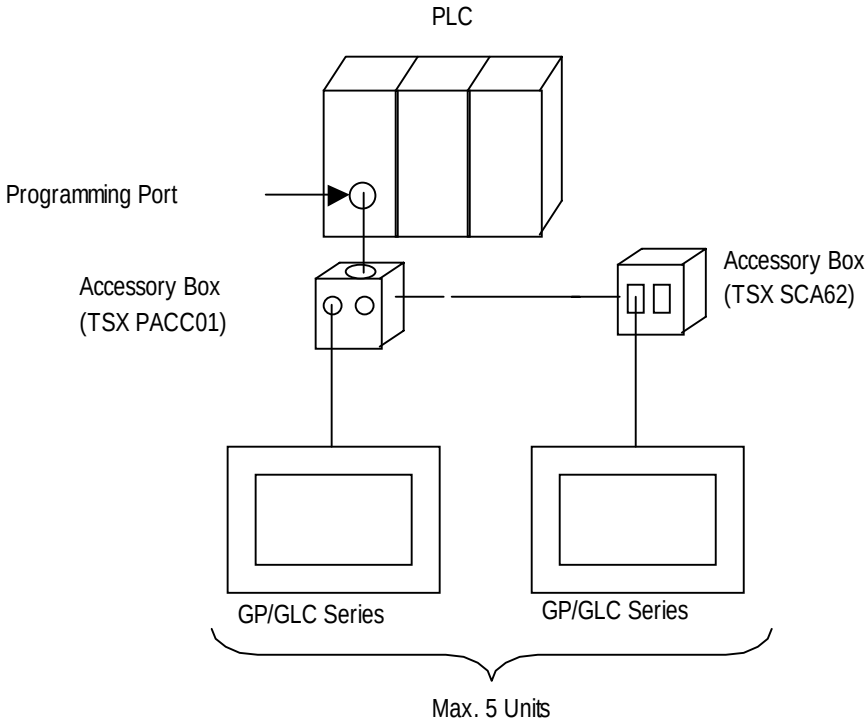
■ Connection Structure (UniTelWay)

■ Nano Series

- 1:1 Connection

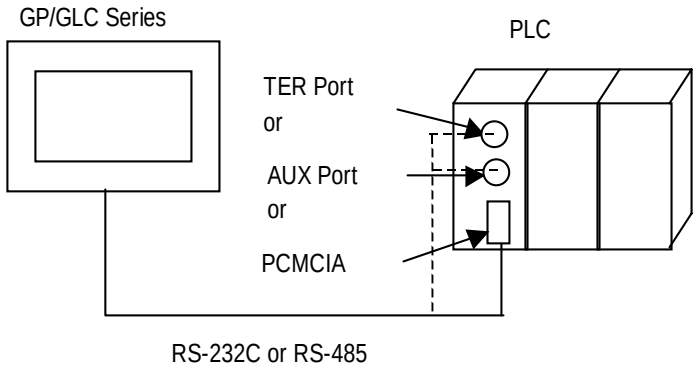


- n:1 Connection (RS-485)



■ Micro Series

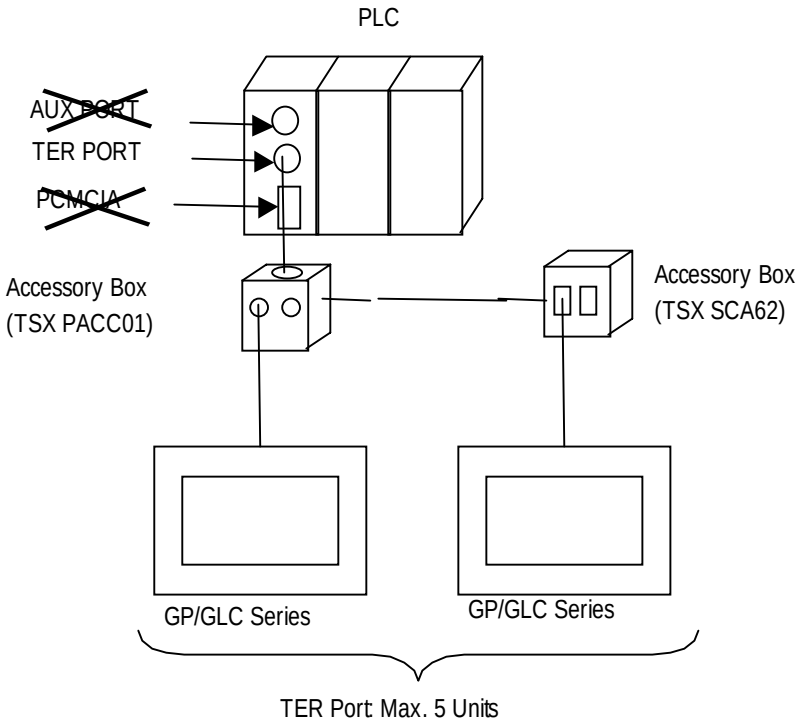
- 1:1 Connection



* *The GP/GLC unit can be connected to the PLC unit's TER Port, AUX Port or PCMCIA slot. Multiple GP/GLC units can be connected simultaneously to the PLC unit via these slots.*

- n:1 Connection (RS-485)

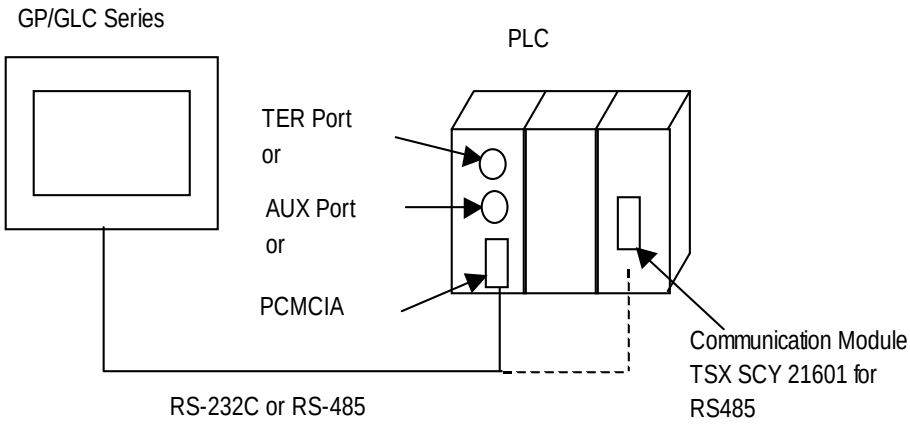
An accessory box is necessary when using an n:1 connection. A connection example is shown below.



* *When connecting the GP unit to the PLC unit via the accessory box, be sure to connect the accessory box to the PLC unit's TER Port.*

■ Premium Series

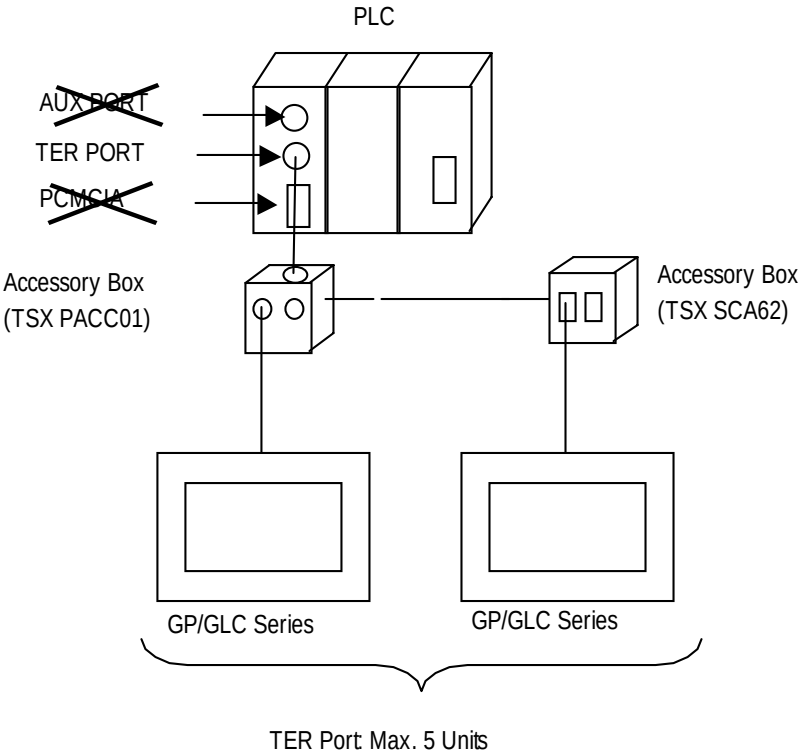
- 1:1 Connection



* *The GP/GLC unit can be connected to the PLC unit's TER Port, AUX Port, PCMCIA or Communication Module slots.*

- n:1 Connection (RS-485)

An accessory box is necessary when using an n:1 connection. A connection example is shown below.

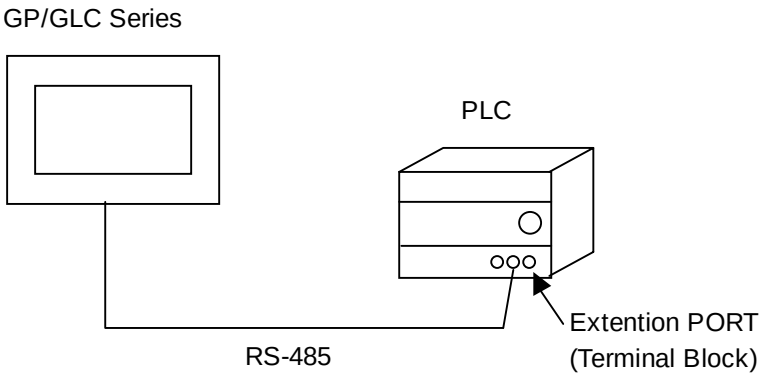


* *When connecting the GP unit to the PLC unit via the accessory box, be sure to connect the accessory box to the PLC unit's TER Port.*

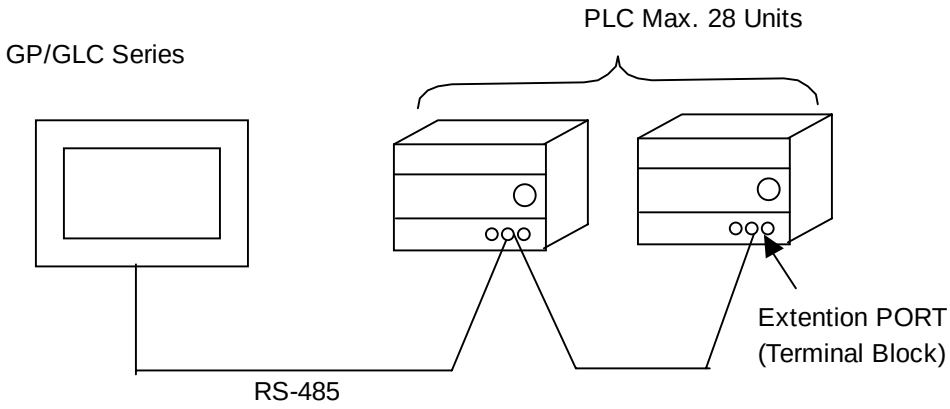
■ Connection Structure (Modbus RTU)

■ Nano Series

- 1:1 Connection

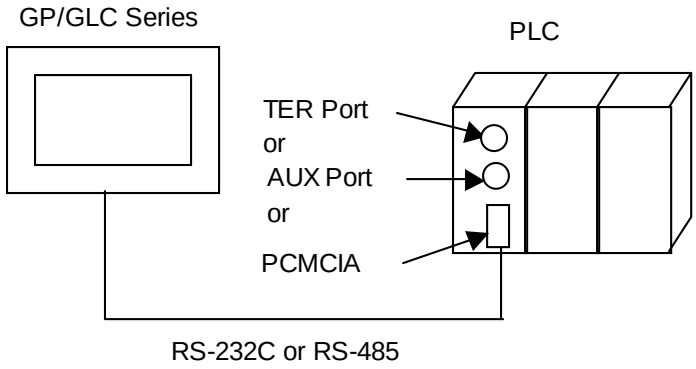


- 1:n Connection



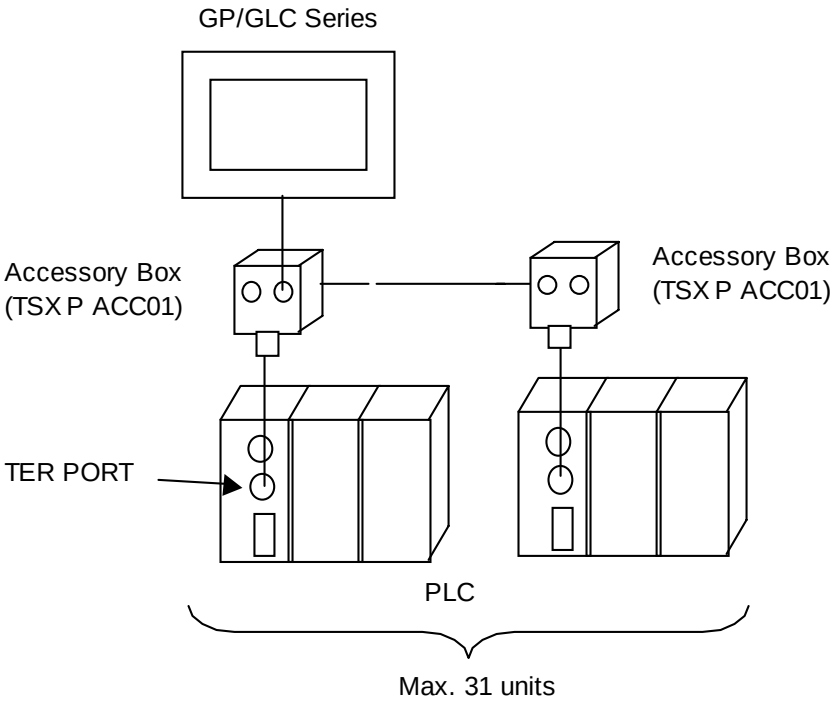
■ Micro Series

- 1:1 Connection



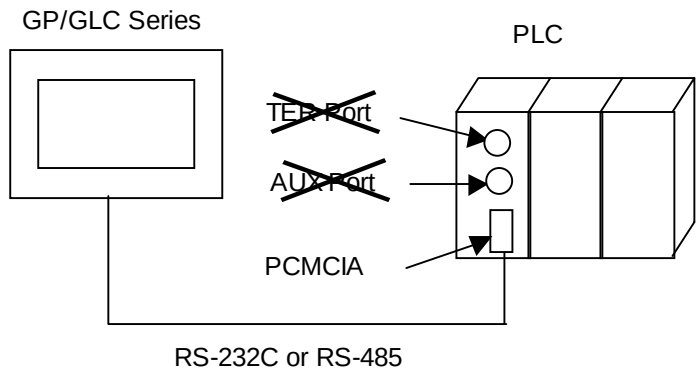
* *The GP/GLC unit can be connected to the PLC unit's TER Port, AUX Port or PCMCIA slots. Multiple GP/GLC units can also be connected to a single PLC unit via these ports.*

- 1:n Connection



* *Connect the Accessory Box to the PLC unit's TER Port.*

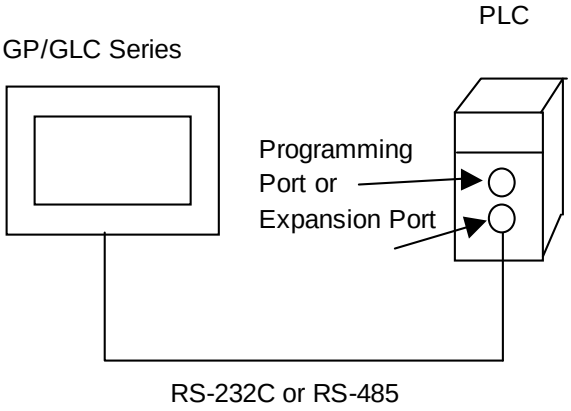
■ Premium Series



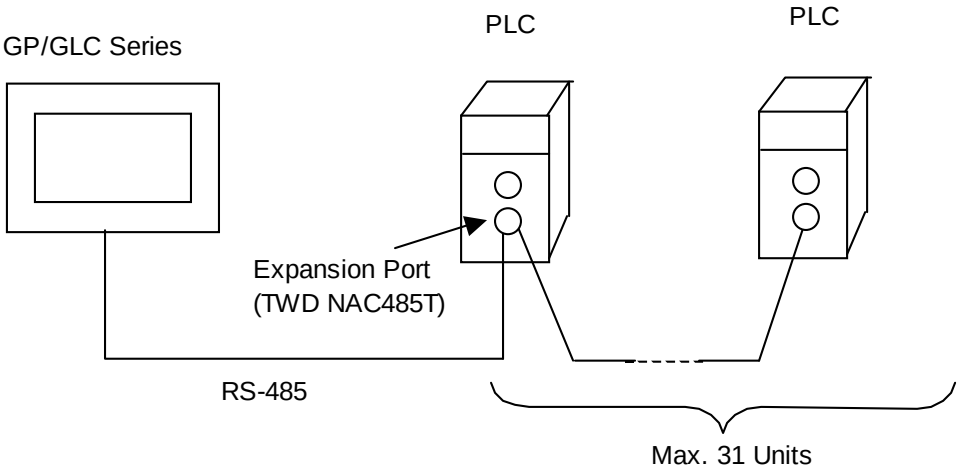
* *The GP/GLC unit can only be connected to the PLC unit's PCMCIA slot.*

■ Twido Series

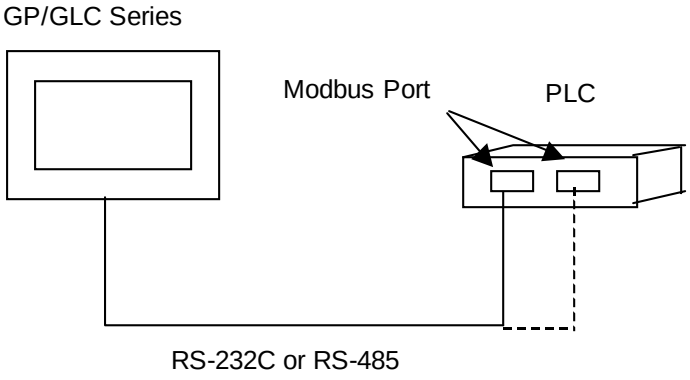
- 1:1 Connection



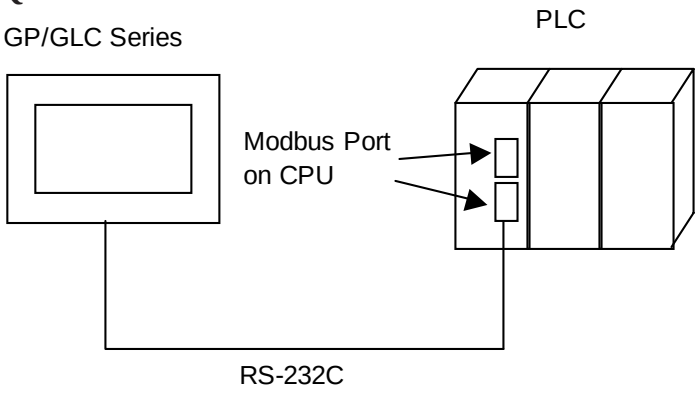
- 1:n Connection



■ Momentum Series



■ Quantum Series



2.24.2 Cable Diagrams

■ Uni-Telway Cable Diagrams

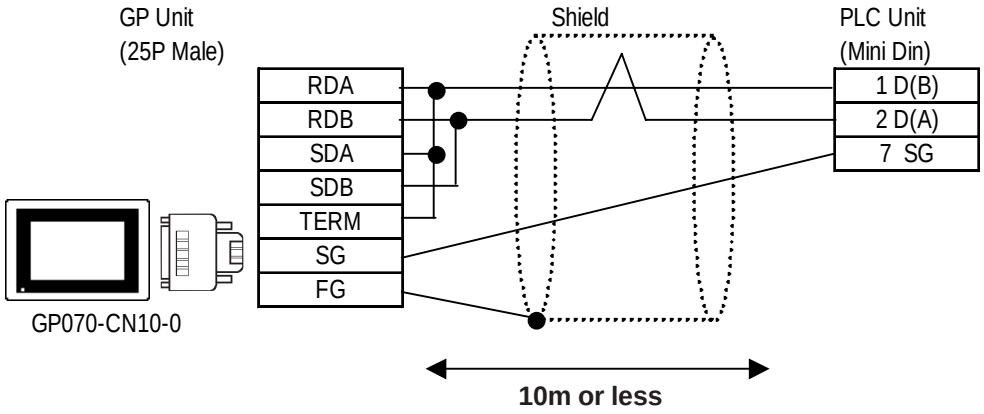
The cable diagrams illustrated below and the cable diagrams recommended by Schneider Corporation may differ; In any case, using these cables for your PLC operations will not cause any problems.

Cable Diagram 1 RS-422

• When using Digital's RS-422 connector terminal adapter GP070-CN10-O

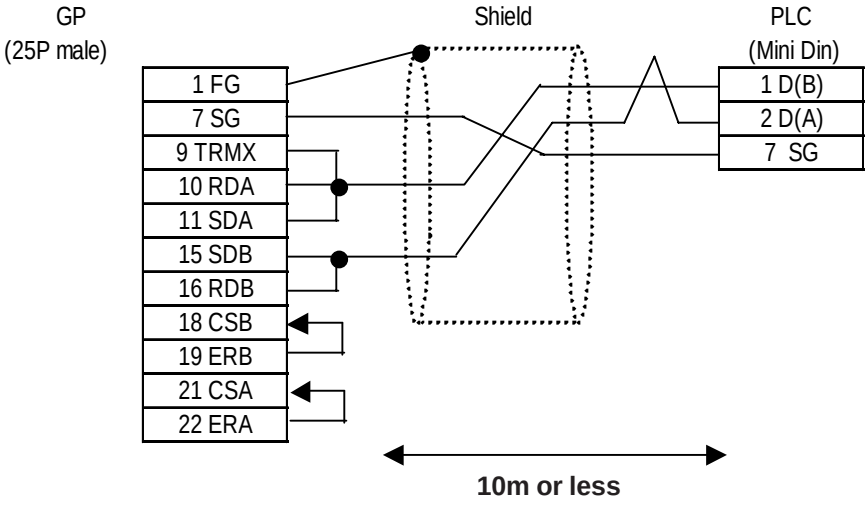
Important

- ***Connect the transfer cable's shield line to the GP unit's FG terminal.***
- ***When wiring, be sure to connect the GP unit's SG terminal to the PLC unit's SG terminal.***
- ***Be sure the cable length is 10m or less.***
  When wanting to increase cable length to beyond 10m, use an accessory box.



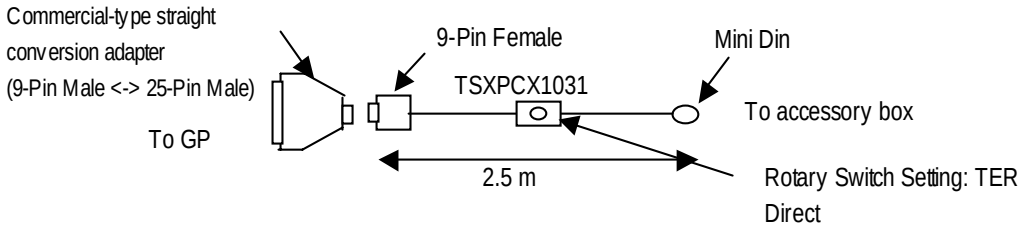
Note: **The PLC connector model will vary depending on the type of interface used.**

• When making your own cable



Note: **Connecting the GP serial I/F Pins #9 and #10 introduces a termination resistance of 100Ω between RDA and RDB.**

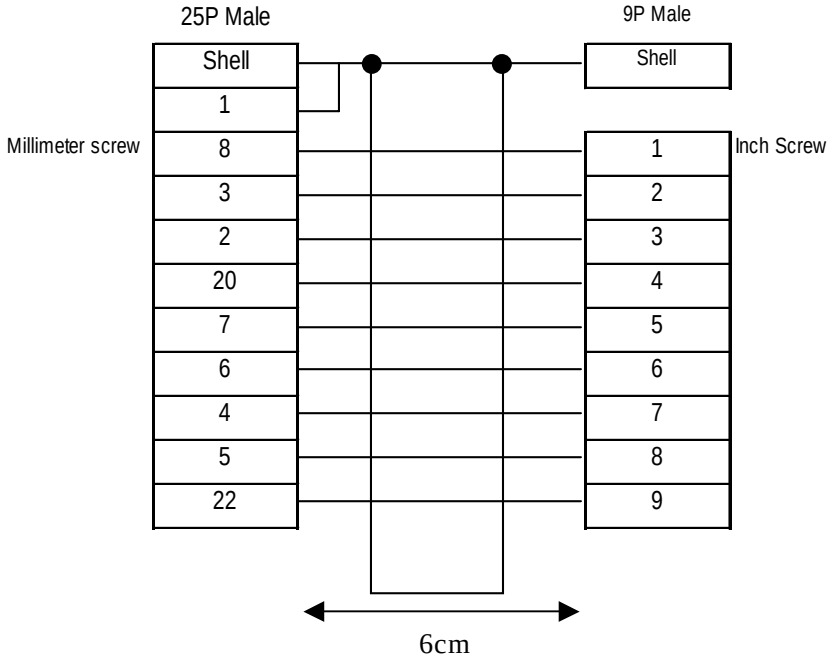
Cable Diagram 2 RS-232C



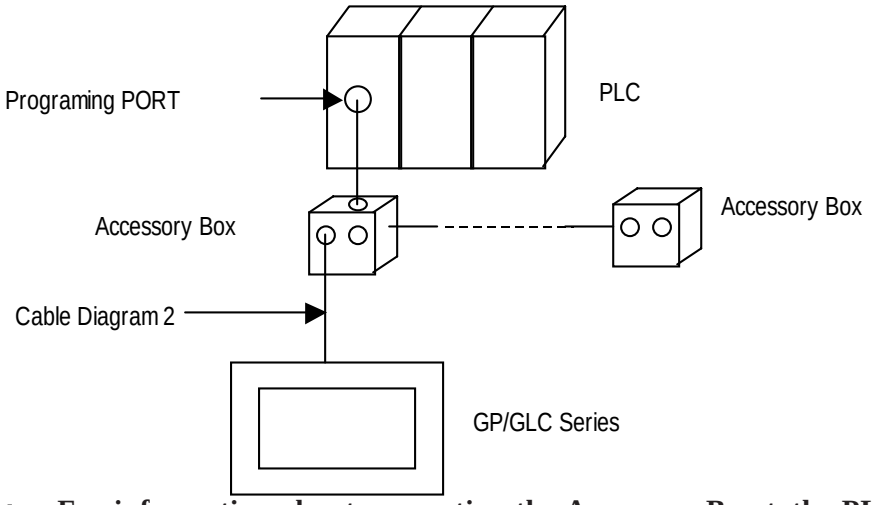
■ Dsub 25-pin male <-> Dsub 9-pin male conversion adaptor

- Straight cable type
- 25-pin male side lock screw (millimeter screw)
- 9-pin male side lock nut (inch screw)

* Connector for testing Loas Co. (Model No. ZA-403)



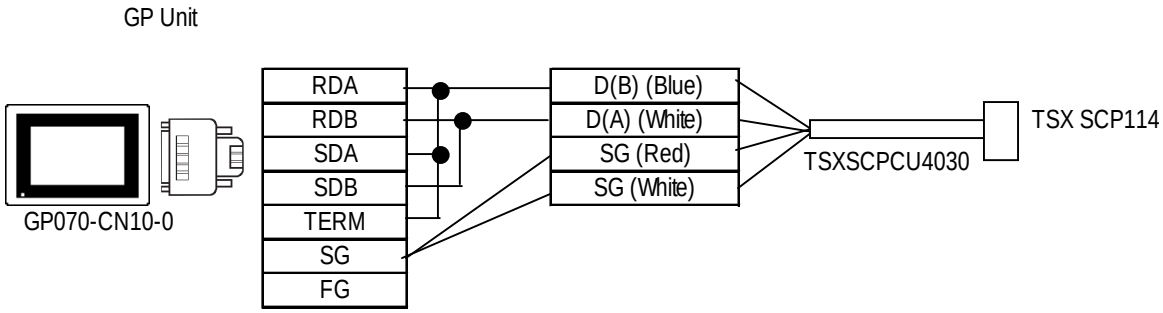
<Connection Example>



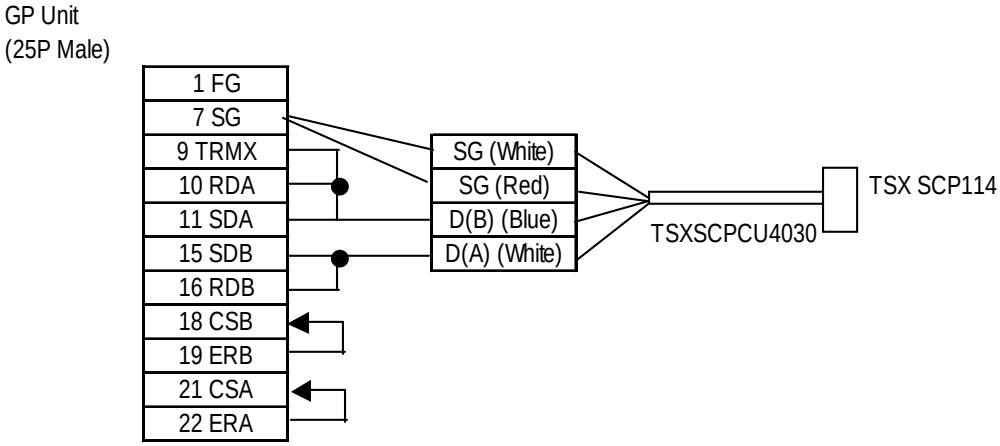
Note: **For information about connecting the Accessory Box tothe PLC, or connecting the Accessory Box to another Acessory Box, refer to the manufacturer's PLC manual.**

Cable Diagram 3 RS-422 (2-wire type)

• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



• When making your own cable

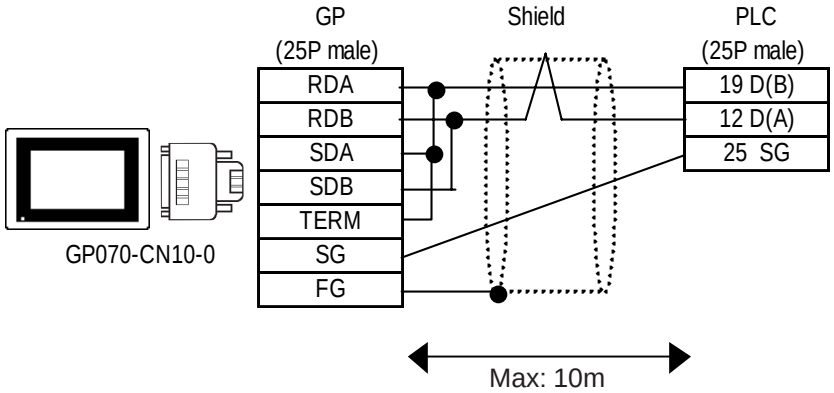


Note:

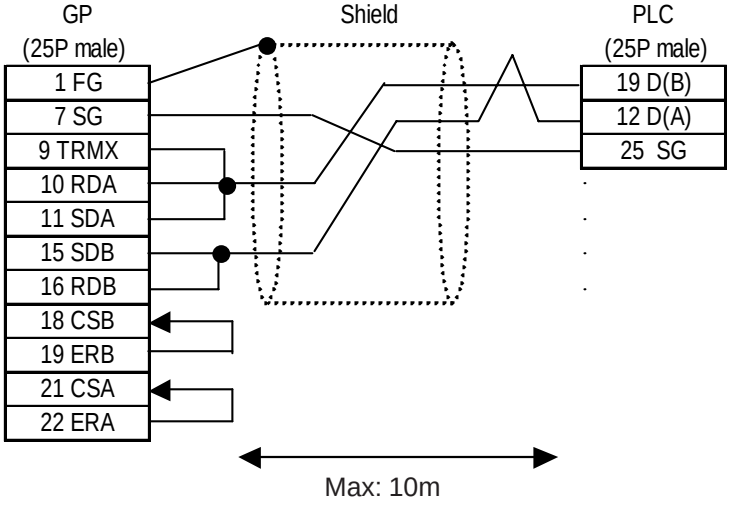
The D(A) and the SG wire colors are the same.
However, identifying the wires is not a problem, since the SG (red) and SG (white), and the D (A) and D (B) are twisted pairs.

Cable Diagram 4 RS-422 (2-wire type)

• When using Digital's RS-422 connector terminal adapter GP070-CN10-O

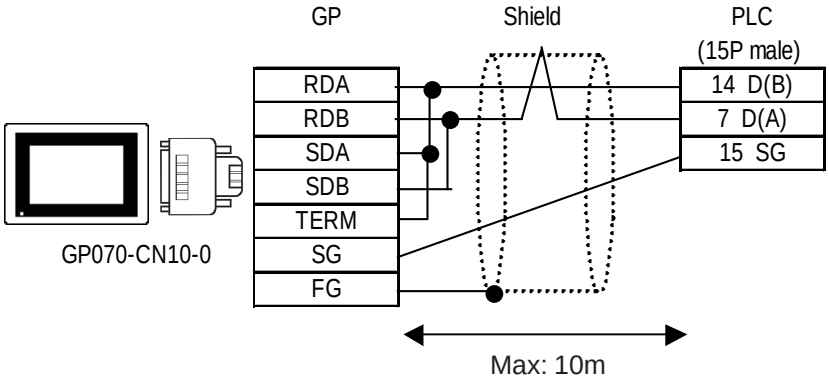


• When making your own cable

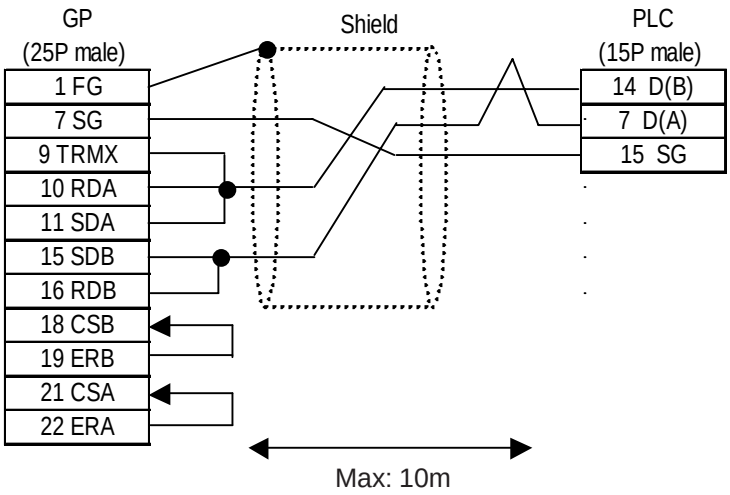


Cable Diagram 5 RS-422 (2-wire type)

• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



• When making your own cable



■ Modbus RTU Cable Diagrams

Note:

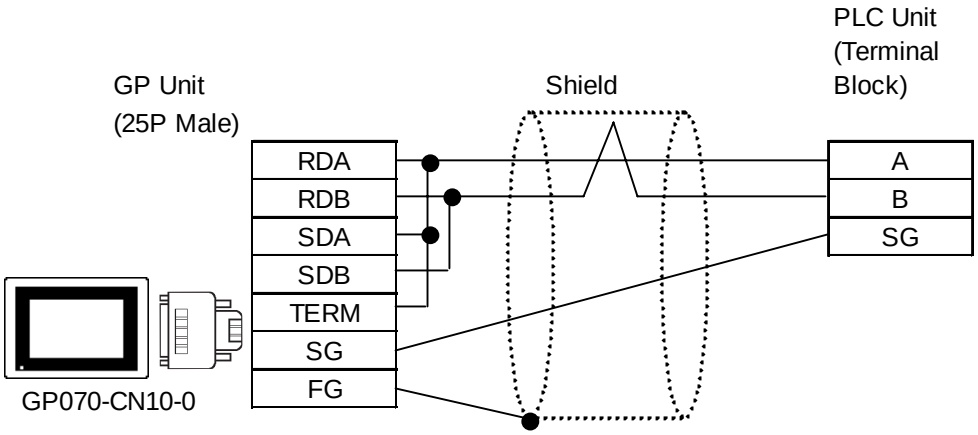
- **Connect the transfer cable's shield line to the GP unit's FG terminal.**
- **When wiring, be sure to connect the GP unit's SG terminal to the PLC unit's SG terminal.**
- **For an RS-422 connection, be sure to check each PLC unit's specifications.**
- **For an RS-232C connection, be sure to use a cable length of 15m or less.**

Cable Diagram 6 RS-422 (2-wire type)

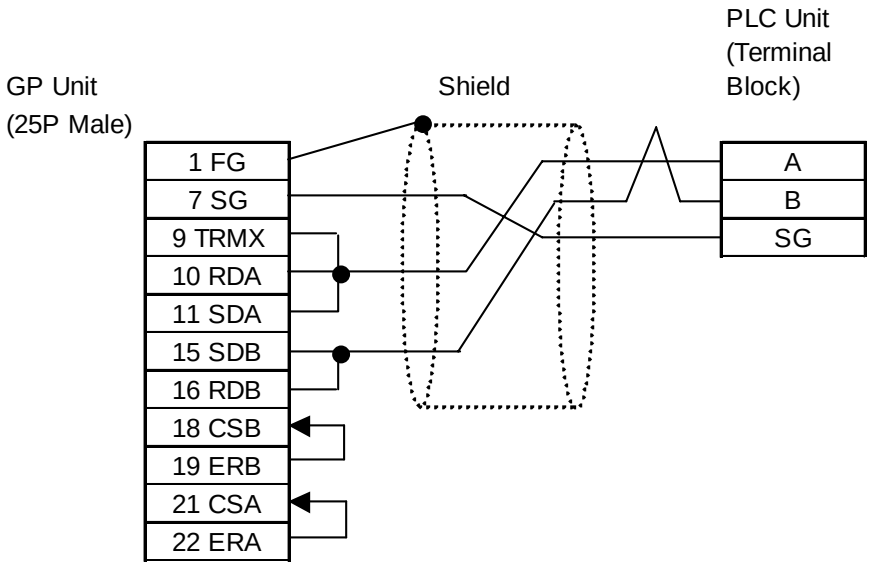
<1:1 Connection>

Note: **For an RS-422 connection, the total cable length should be 200m or less.**

• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



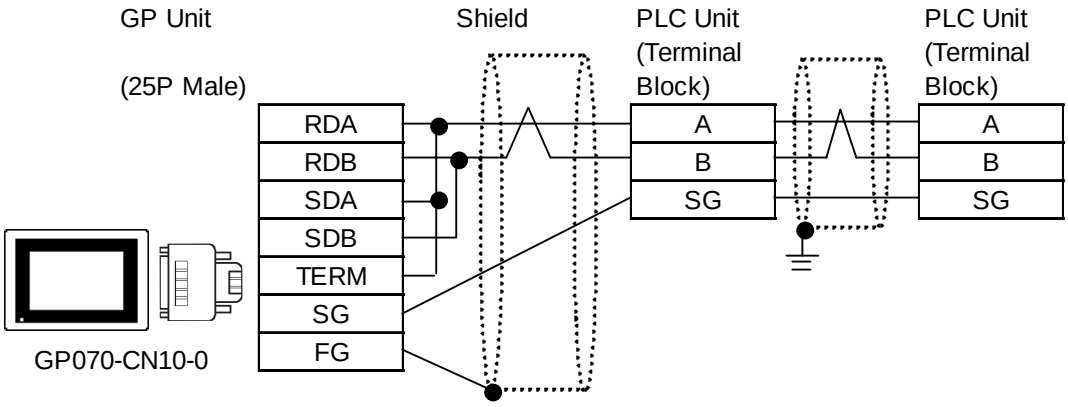
• When making your own cable



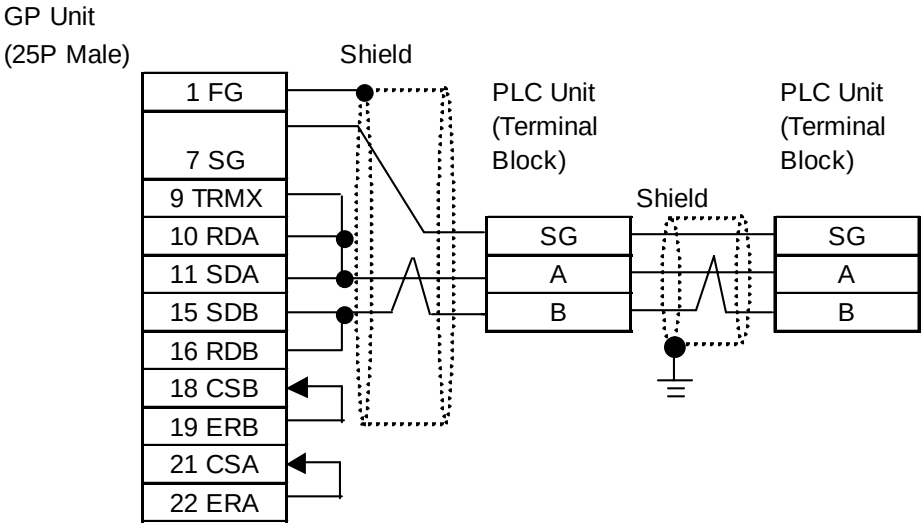
Note: **Connecting the GP/GLC serial interface's pin #9 and #10 will insert a termination resistance of 100Ω between RDA and RDB.**

<1:n Connection>

• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



• When making your own cable

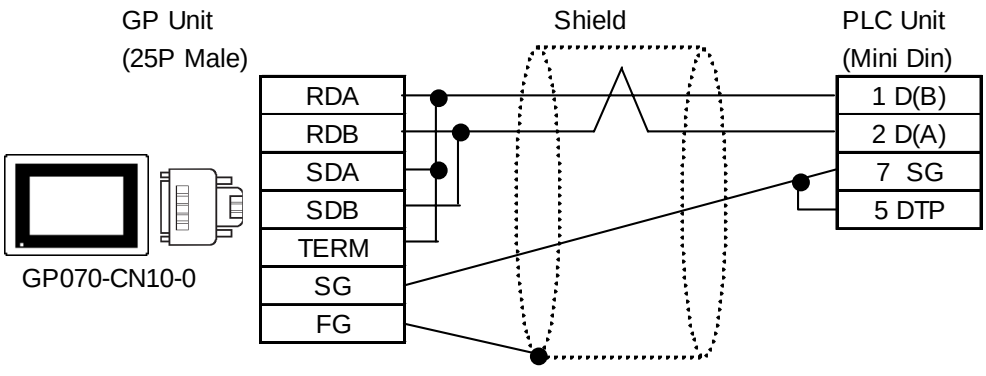


Cable Diagram 7 RS-422 (2-wire type)

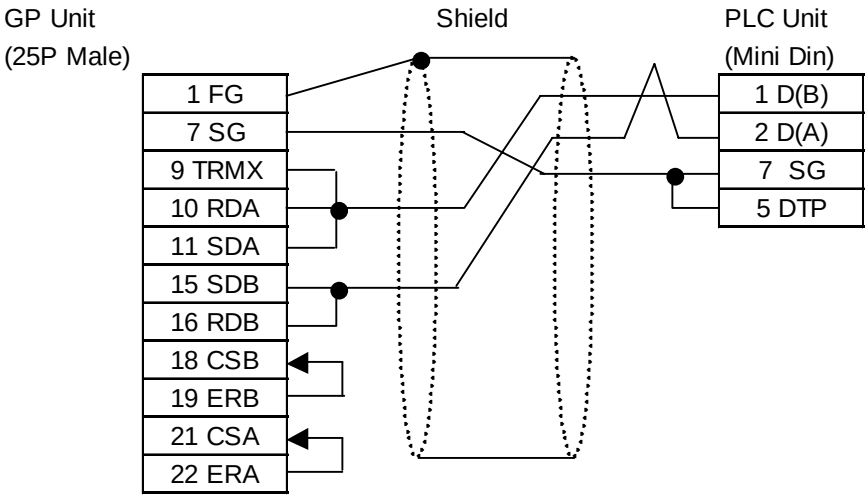
Note:

- **Connect the transfer cable's shield line to the GP unit's FG terminal.**
- **When wiring, be sure to connect the GP unit's SG terminal to the PLC unit's SG terminal.**
- **Be sure the cable length is 10m or less.**
  When wanting to increase cable length to beyond 10m, use an accessory box.

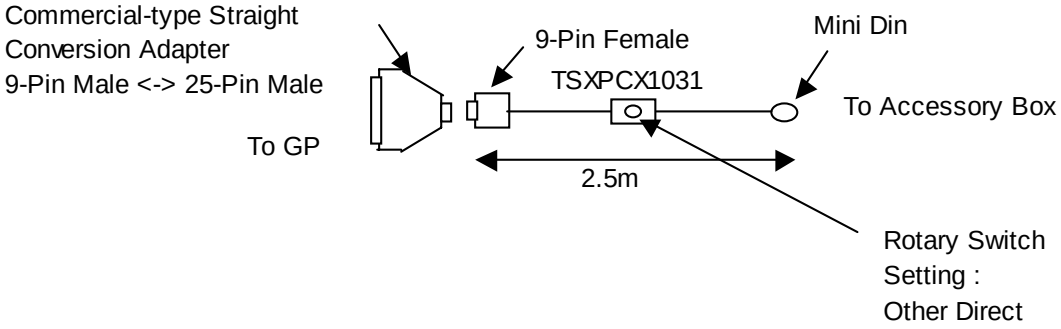
• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



• When making your own cable



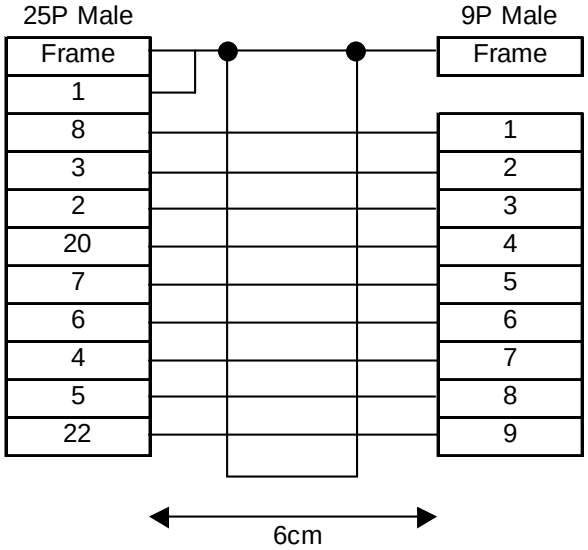
Cable Diagram 8 RS-232C



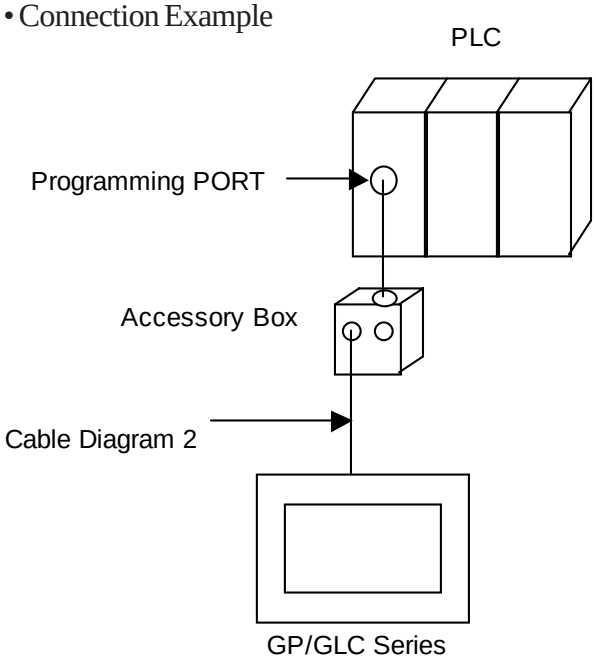
■ **D-sub25 Pin Male <-> D-sub9 Pin Male Adapter Specifications**

- Straight connection type
- D-sub 25pin male - Lock-screw (mm)
- D-sub 9pin male - Lock-nut (inch)

<Adaptor: Roas Co. Model No. ZA-403>



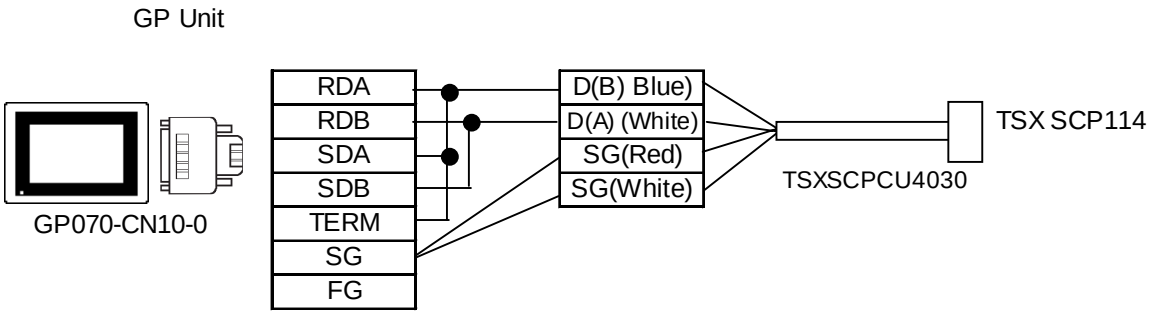
• Connection Example



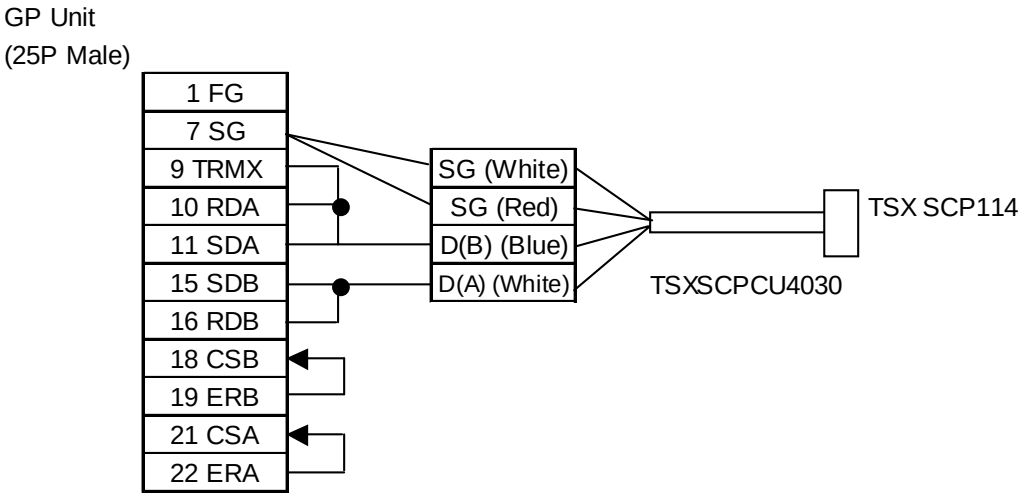
For details regarding connecting the PLC unit to the accessory box,
Reference *your PLC Manual*

Cable Diagram 9 RS-422 (2-wire type)

• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



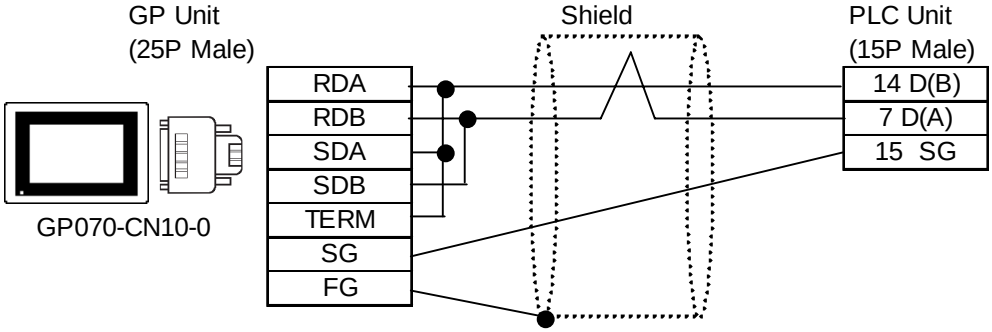
• When making your own cable



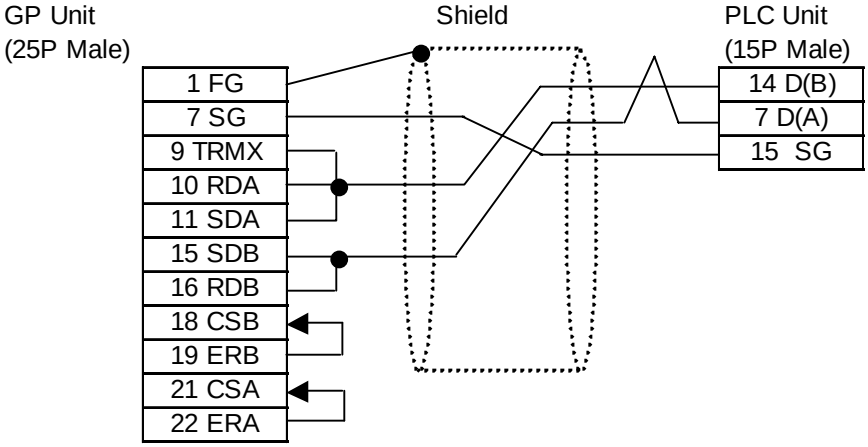
The wire color of both D(A) and SG terminals is white.
SG(Red) and SG(White) make a twisted pair, as do D(A) and D(B).
This helps in determining which of the wires is SG and which is D(A).

Cable Diagram 10 RS-422 (2-wire type)

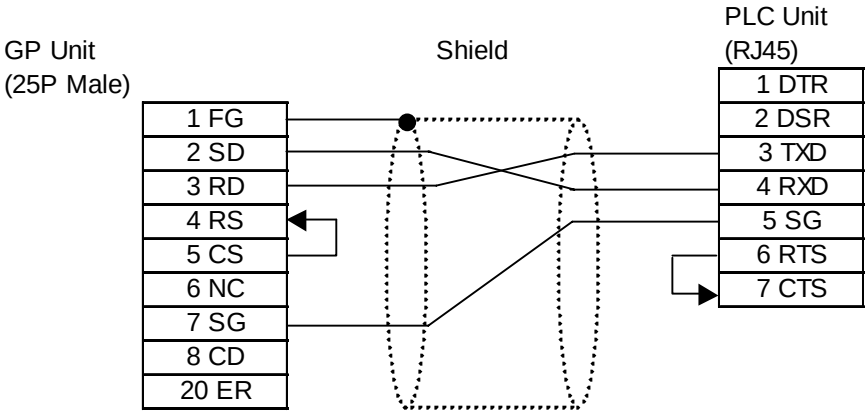
• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



• When making your own cable

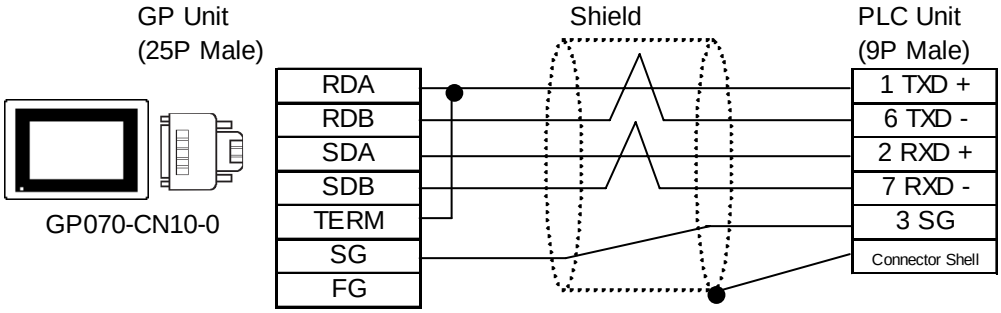


Cable Diagram 11 RS-232C

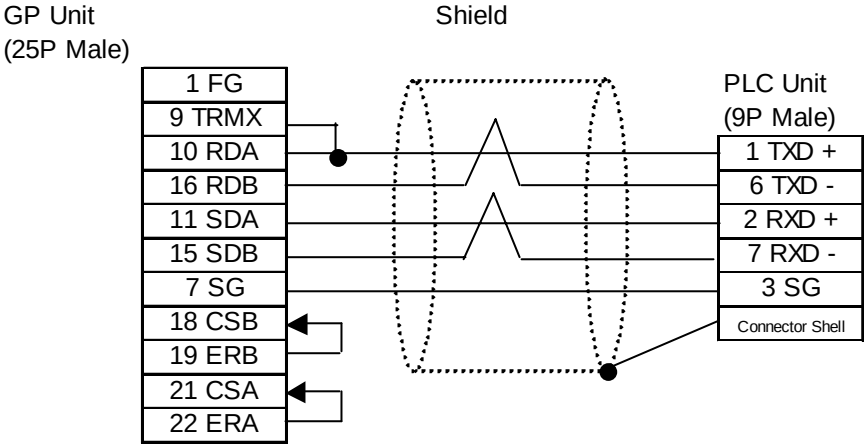


Cable Diagram 12 RS-422

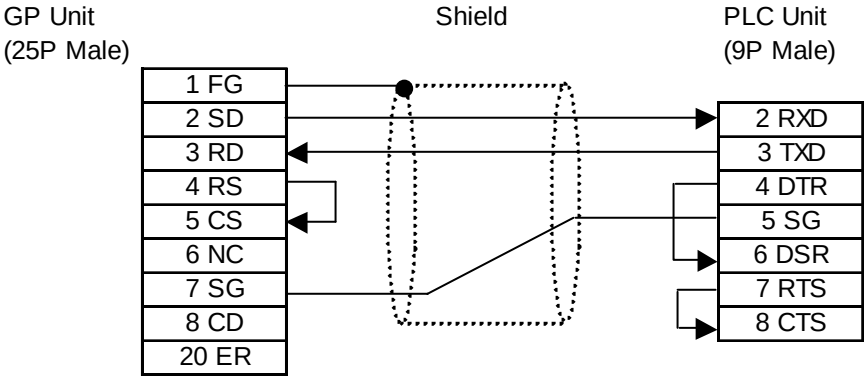
• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



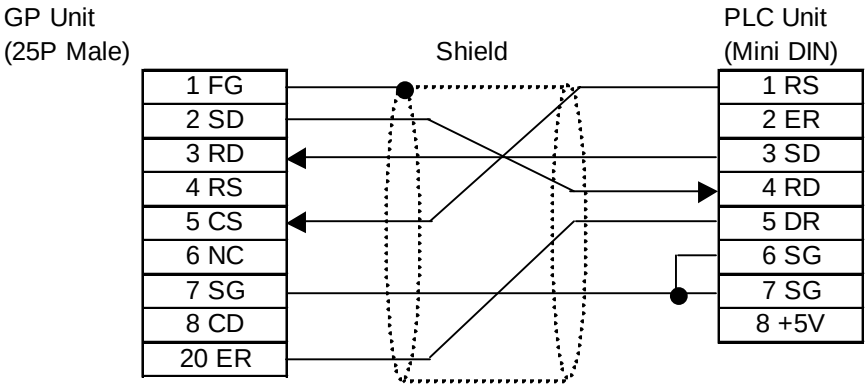
• When making your own cable



Cable Diagram 13 RS-232C

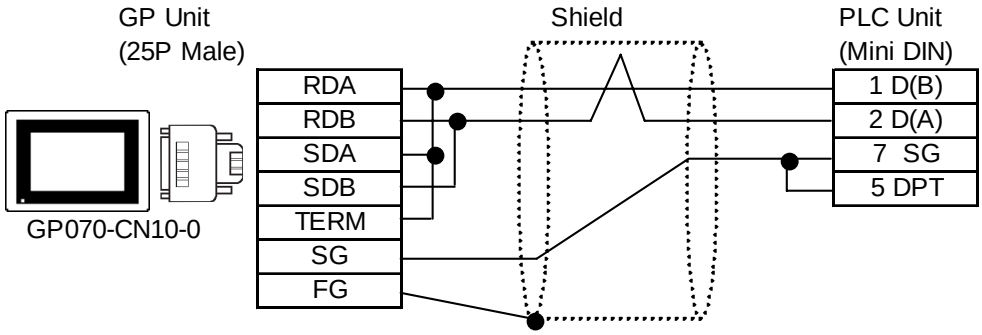


Cable Diagram 14 RS-232C

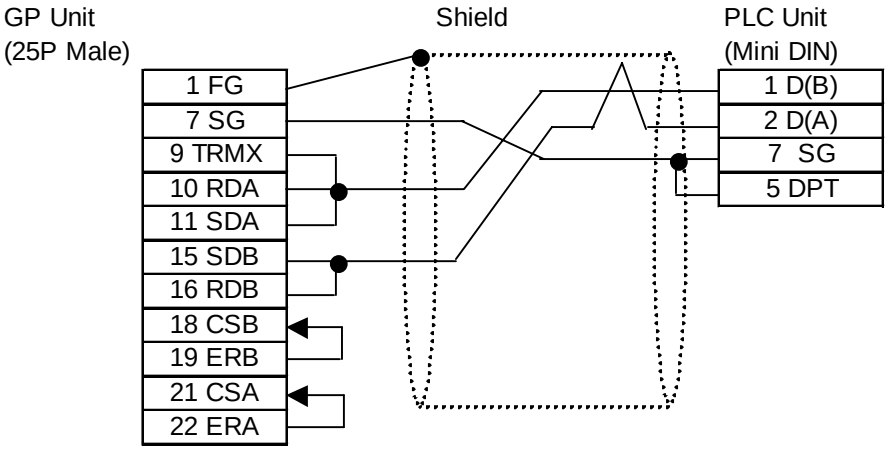


Cable Diagram 15 RS-422

• When using Digital's RS-422 connector terminal adapter GP070-CN10-O



• When making your own cable



2.24.3 Supported Devices

The following describes the range of devices supported by the GP.

■ Nano Series (Uni-Telway)

Setup System Area here.

Device	Bit Address	Word Address	Remarks	
Internal Word	%MW00000:X00 to %MW00255:X15	%MW00000 to %MW00255		L/H
Constant Word	----------	%KW0000 to %KW0063	Bit 15 *1	
System Word	----------	%SW000 to %SW127	Bit 15	
Internal Bit	%M0000 to %M0127	----------		
System Bit	%S000 to %S127	----------		

**1 The device is read-only. Writing data to the device is not possible. Trying to write data will cause a Host Communication Error (02:FB).*

■ Micro Series (Uni-Telway)

Setup System Area here.

Device	Bit Address	Word Address	Remarks	
Internal Word	%MW00000:X00 to %MW17375:X15	%MW00000 to %MW17375		L/H
Constant Word	----------	%KW0000 to %KW13879	Bit 15 *1	
System Word	----------	%SW000 to %SW127	Bit 15	
Internal Bit	%M000 to %M255	----------		
System Bit	%S000 to %S127	----------		

**1 The device is read-only. Writing data to the device is not possible. Trying to write data will cause a Host Communication Error (02:FB).*

■ Premium Series (Uni-Telway)

Setup System Area here.

Device	Bit Address	Word Address	Remarks	
Internal Word	%MW00000:X00 to %MW32463:X15	%MW00000 to %MW32463		L/H
Constant Word	----------	%KW0000 to %KW32759	Bit 15 *1	
System Word	----------	%SW000 to %SW255	Bit 15	
Internal Bit	%M00000 to %M32633	----------		
System Bit	%S000 to %S127	----------		

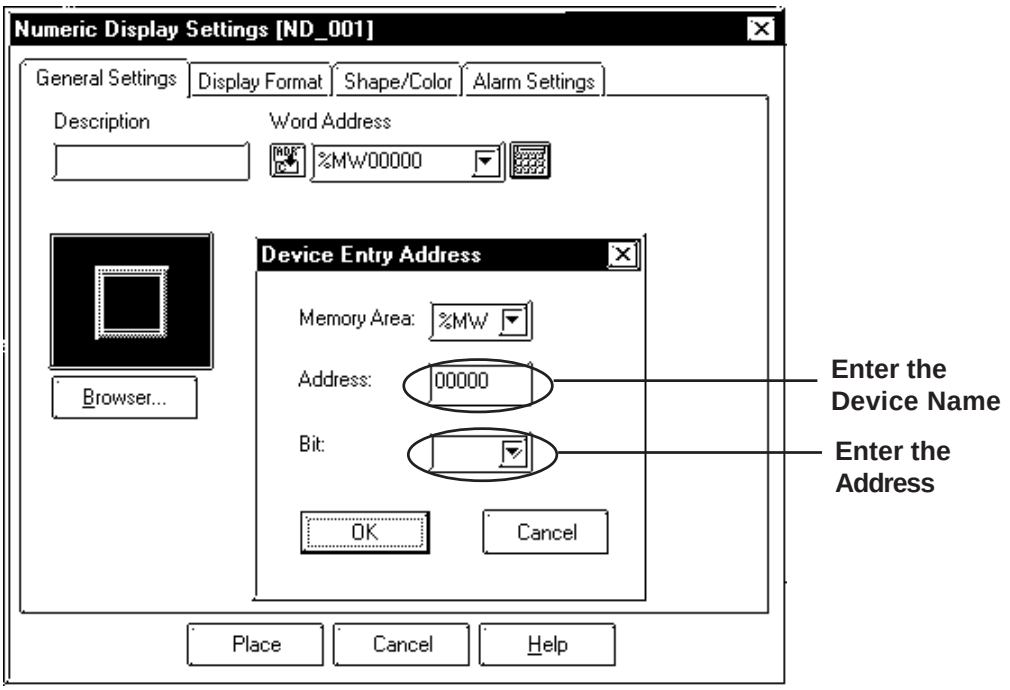
*1 The device is read-only. Writing data to the device is not possible. Trying to write data will cause a Host Communication Error (02:FB).

Device addresses %MW, %KW and %M have to be allocated via the ladder software. For details, refer to Schneider Electric's Manual. Also, when allocating device address %M, be sure to allocate addresses in multiples of 16.

If device addresses are not allocated, a "Host Communication Error (02:FB)" error is displayed.

■ When designating a word address

Perform the following entries/selections when designating a word address.



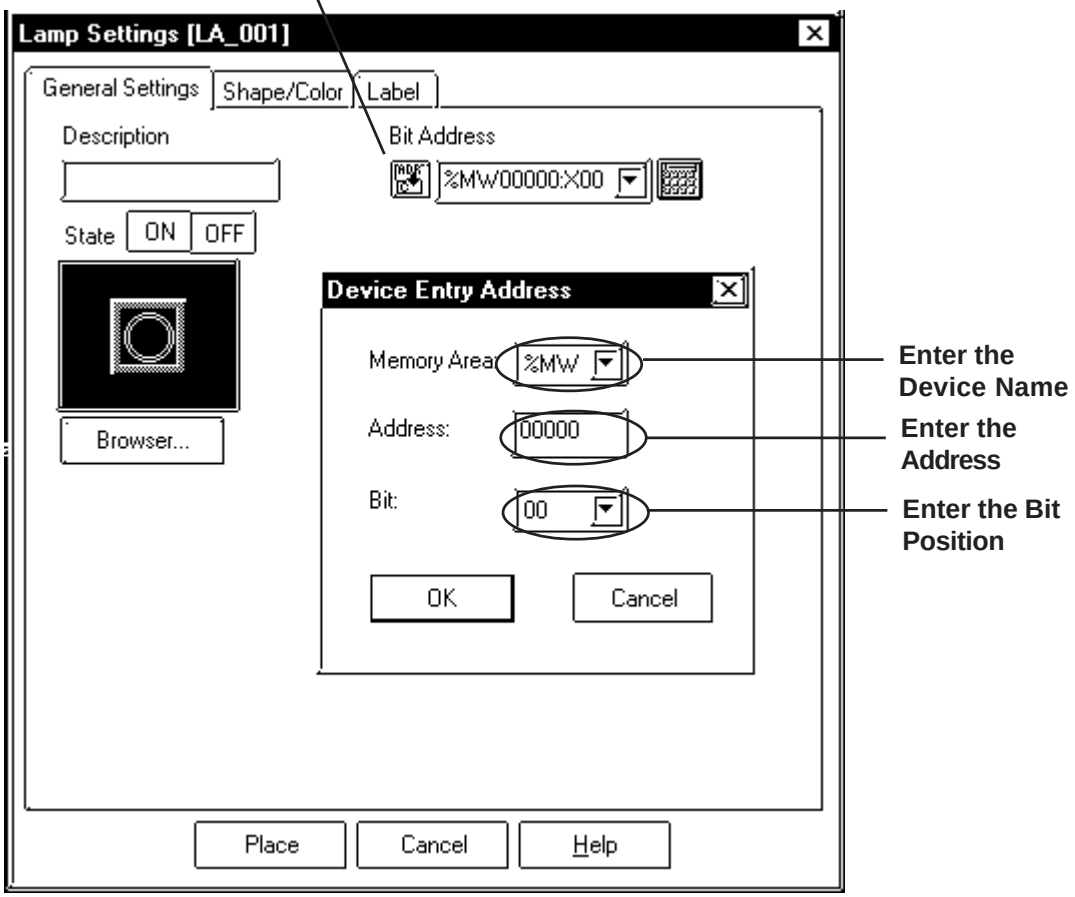
■ When designating a bit address

Perform the following entries/selections when designating a bit address. A ":X" will be appended to indicate the bit position.

E.g.) When designating Bit 0 of %MW00000

%MW00000 : X00

Bit position



■ Modbus RTU

The following describes the range of devices supported by the GP.

Setup System Area here.

Device	Bit Address	Word Address	Description	
Output Discrete	1_000001 ~ 31_065535	1_000001 ~ 31_065521	÷16+1 *3	L/H
Input Discrete	1_100001 ~ 31_165535	1_100001 ~ 31_165521	÷16+1 *1	
Output Register	1_40000100 ~ 31_46553515	1_400001 ~ 31_465535	*2	
Input Register	————	1_300001 ~ 31_365535	Bit 15 *1	

** 1 The device is read-only. Data write is not possible. When writing to this device, "Host Communication Error (02:FB)" is displayed.*

**2 The bit address designation for node addresses 17 to 31 operate bit 15.*

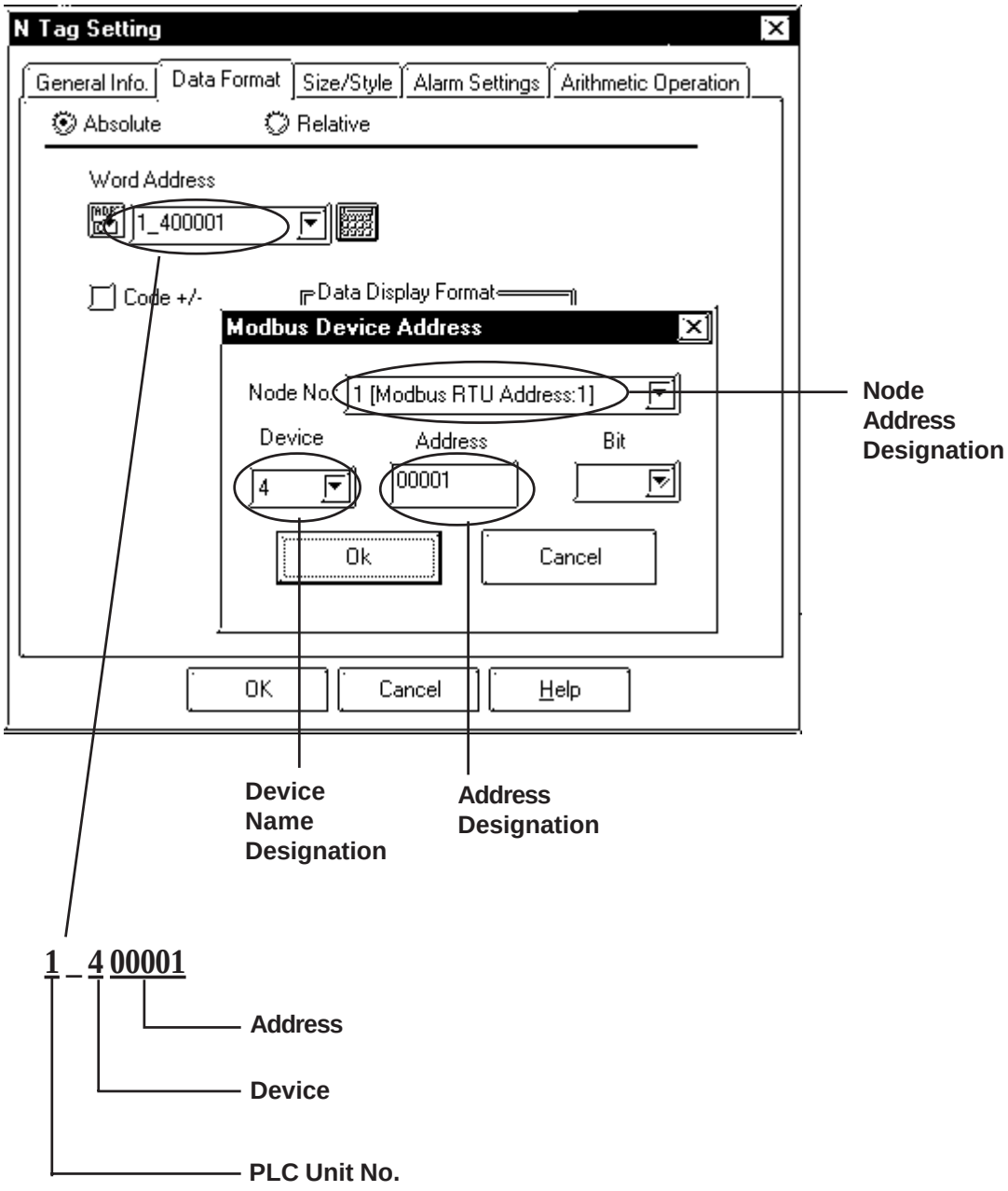
3 When writing to a word address on a Twido series unit, the Firmware must be version 2.0 or later. Attempting to write data using Firmware earlier than Ver. 2.0 causes a Higher Communication Error (02:01:*) (*** indicates PLC Unit No.).*

Note: **The address range varies depending on the PLC unit. For details,**
Reference *your PLC Manual*

Important

- ***Pro-Server Usage Restrictions : When accessing devices from Pro-Server, be sure to symbolically define the device address you want to access. Create a screen and import the symbol to this screen via Pro-Server. For details,***
  Reference *your Pro-Server Operation Manual*

■ When designating a word address



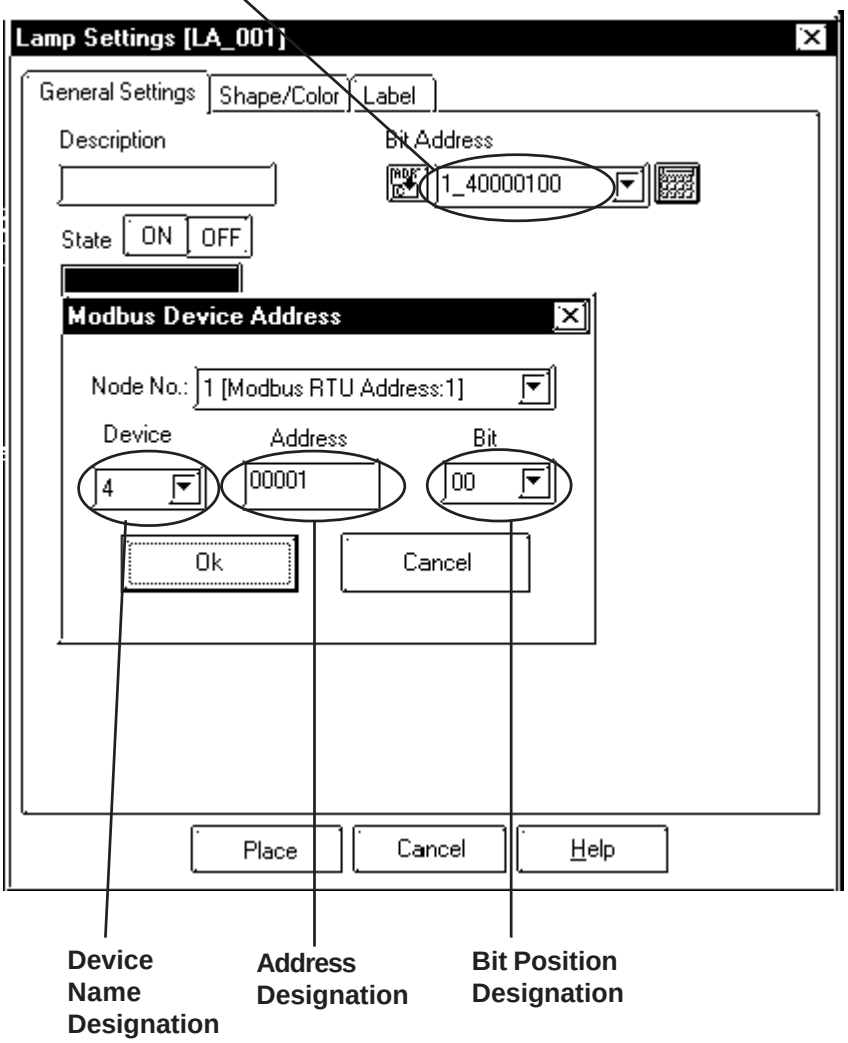
■ When designating a bit address

Perform the following entries/selections when designating a bit address. A ":X" will be appended to indicate the bit position.

E.g.) When designating Bit 0 of %MW00000

%MW00000 : X00

Bit position



Device Name Designation

Address Designation

Bit Position Designation

2.24.4 Environment Setup

The following lists Digital's recommended GP and PLC communication settings.

■ Uni-Telway

◆ Nano Series

GP Settings		PLC Settings	
Baud Rate	9600bps(fixed)	---------	---------
Data Length	8bit (fixed)	---------	---------
Stop Bit	1bit (fixed)	---------	---------
Parity Bit	Odd (fixed)	---------	---------
Communication Format (RS-232C)	RS-232C	---------	---------
Communication Format (RS-485)	2-wire type	---------	---------
Unit No. *1	4	---------	---------
---------	---------	Number of slaves *2	4 to 8
---------	---------	Type	UNI-TELWAY Master

**1 "Unit No." indidcates the GP unit's number. Be sure that all Slave unit numbers used are unique (i.e. are not duplicated).*

**2 The "Number of slaves" setting designates the number of slaves connected tothe PLC. Even though the PLC's setting is 3 to 8, the GP can only communicate using 4 to 8. Be sure to use only numbers 4 or above when entering this setting.*

◆ Micro Series

GP Settings		PLC Settings	
Baud Rate	9600bps(fixed)	Transmission Speed	19200bps
Data Length	8bit (fixed)	---------	---------
Stop Bit	1bit (fixed)	---------	---------
Parity Bit	Odd	Parity	Odd
Communication Format (RS-232C)	RS-232C	---------	---------
Communication Format (RS-485)	2-wire type	---------	---------
Unit No. *1	4	---------	---------
---------	---------	Number of slaves *2	4 to 8
---------	---------	Channel	UNI-TELWAY LINK
---------	---------	Type	Master

**1 "Unit No." indidcates the GP unit's number. Be sure that all Slave unit numbers used are unique (i.e. are not duplicated).*

**2 The "Number of slaves" setting designates the number of slaves connected tothe PLC. Even though the PLC's setting is 3 to 8, the GP can only communicate using 4 to 8. Be sure to not use the number "3" when entering this setting.*

- *When using a RS232C or RS-422 PCMCIA card: 3 to 98*
- *When using the CPU's TER or AUX port: 3 to 8*

However, all PLC unit to GP unit communication must start from "4".

◆ Premium Series

GP Settings		PLC Settings	
Baud Rate	19200bps	Transmission Speed	19200bps
Data Length	8bit (fixed)	---------	---------
Stop Bit	1bit (fixed)	---------	---------
Parity Bit	Odd	Parity	Odd
Communication Format (RS-232C)	RS-232C	---------	---------
Communication Format (RS-485)	2-wire type	---------	---------
Unit No. *1	4	---------	---------
---------	---------	Number of slaves *2	4 to 8
---------	---------	Channel	UNI-TELWAY LINK
---------	---------	Type	Master

**1 "Unit No." indidcates the GP unit's number. Be sure that all Slave unit numbers used are unique (i.e. are not duplicated).*

**2 The "Number of slaves" setting designates the number of slaves connected tothe PLC. Even though the PLC's setting is 3 to 8, the GP can only communicate using 4 to 8. Be sure to not use the number "3" when entering this setting.*

- *When using a RS232C or RS-422 PCMCIA card: 3 to 98*
- *When using the Communication Unit: 3 to 98*
- *When using the CPU's TER or AUX port: 3 to 8*

However, all PLC unit to GP unit communication must start from "4".

■ Modbus RTU

GP Settings		PLC Settings	
Baud Rate	19200bps	Baud Rate	19200bps
Data Length	8 bits	Data bit	8 bits
Stop Bit	1 bit	Stop bit	1 bit
Parity Bit	Even	Parity bit	Even
Communication Format (When using RS-232C)	RS-232C	————	————
Communication Format (When using RS-485)	2-wire type	————	————
Modbus RTU Address	1	Slave Address	1
————	————	Protocol Type	MODBUS
————	————	Type	Slave

When connecting to two or more PLC units via a 1:n connection, be sure the GP side send wait time is 20ms or more. If data is sent with the send wait time set to the default value (0ms), a "No Response from PLC (02:FE:*)" error message may be displayed.**

2.24.5 Error Codes

■ Uni-Telway

PLC error codes are displayed in the left lower corner of the GP screen in the format shown below. ** indicates PLC specific error codes.

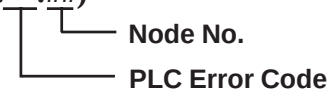
Host Communication Error (02:)**

Error Code	Description	Cause
FD	Address Error	No allocation has been made to the designated address, or it is out of range.

■ Modbus RTU

PLC error codes are displayed in the left lower corner of the GP screen in the format shown below. ** indicates PLC specific error codes. ## indicates the node no. of the PLC where the error occurred.

Host Communication Error (02::##)**



Error Code	Description	Cause
01	Function Code Error	The designated function code does not exist.
02	Address Error	The designated address cannot be used with the designated function.
03	Number Error	The designated number of addresses does not exist.