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.

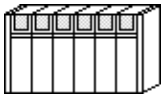
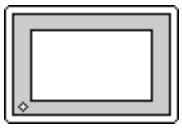
2.12 Koyo Electronics Industries

2.12.1 System Structure

The following describes the system structure for connecting the GP to Koyo Electronics Industries PLCs.

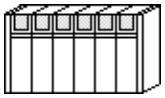
Reference *The Cable Diagrams mentioned in the following tables are listed in the section titled "**2.12.2 Cable Diagrams**".*

■ KOSTAC SG Series (using Link I/F)

CPU	Link I/F	Cable Diagram	Target Machine
	 Upper Link Module		
SG-8	G01-DM	RS-232C (Cable Diagram 1)	GP/GLC Series
			ST401/ST403
		RS-422 (Cable Diagram 2)	GP/GLC Series
			ST400/ST403
	CPU Unit Upper Link I/F *1	RS-232C (Cable Diagram 1)	GP/GLC Series
			ST401/ST403
		RS-422 Cable Diagram 3	GP/GLC Series
			ST400/ST403

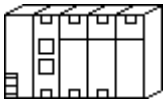
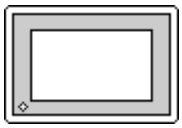
**1 Connect to the CPU module's generic communication port.*

■ KOSTAC SU Series (using Link I/F)

CPU	Link I/F	Cable Diagram	Target Machine
	 Upper Link Module		
SU-5	U01-DM	RS-232C (Cable Diagram 1)	GP/GLC Series
			ST401/ST403
SU-6	U01-DM	RS-232C (Cable Diagram 1)	GP/GLC Series
			ST401/ST403
	CPU Unit Upper Link I/F *1	RS-232C (Cable Diagram 1)	GP/GLC Series
			ST401/ST403
SU-6B	CPU Unit Upper Link I/F *1	RS-232C (Cable Diagram 1)	GP/GLC Series
			ST401/ST403
		RS-422 (Cable Diagram 3)	GP/GLC Series
			ST400/ST403
SU-5M SU-6M	CPU Unit Upper Link I/F (General SIO Port 1)	RS-232C (Cable Diagram 9)	GP/GLC Series
			ST401/ST403
		RS-422 (Cable Diagram 10)	GP/GLC Series
			ST400/ST403
	CPU Unit Upper Link I/F (General SIO Port 2)	RS-232C (Cable Diagram 11)	GP/GLC Series
			ST401/ST403
	CPU Unit Upper Link I/F (General SIO Port 3)	RS-422 (Cable Diagram 12)	GP/GLC Series
			ST400/ST403

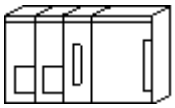
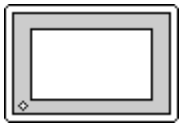
**1 Connect to the CPU module's generic communication port.*

■ KOSTAC SZ Series (using Link I/F on CPU unit)

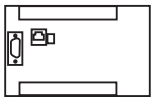
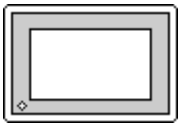
CPU	Cable Diagram	Target Machine
		
SZ-4 *1	RS-232C (Cable Diagram 4)	GP/GLC Series ST401/ST403

** 1 Connect to the CPU module's generic communication port.*

■ KOSTAC SR Series (using Link I/F)

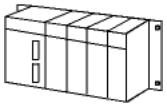
CPU	Link I/F	Cable Diagram	Target Machine
	 Upper Link I/F		
SR-21 SR-22	E-02DM-R1	RS-422 (Cable Diagram 2)	GP/GLC Series ST400/ST403

■ KOSTAC PZ3 Series (using Link I/F on CPU unit)

CPU	Link I/F	Cable Diagram	Target Machine
			
PZ3-16ND1-16TD1 PZ3-T PZ3M	Link unit on CPU unit *1	RS-232C (Cable Diagram 7)	GP/GLC Series ST401/ST403
		RS-422 (Cable Diagram 8)	GP/GLC Series ST400/ST403

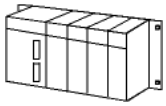
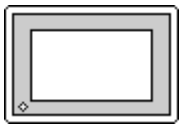
** 1 Connect to the CPU module's generic communication port.*

■ DL-205 Series (using Link I/F on CPU unit)

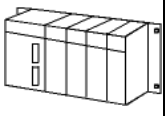
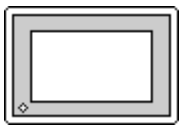
CPU	Cable Diagram	Target Machine
		
D2-240	RS-232C (Cable Diagram 5)	GP/GLC Series ST401/ST403

** 1 Connect to the CPU module's generic communication port.*

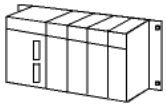
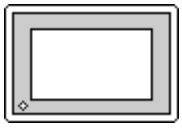
■ DL-305 Series (using Link I/F)

CPU	Link I/F	Cable Diagram	Target Machine
	 Upper Link I/F		
D3-330	D3-DCM	RS-422 (Cable Diagram 2)	GP/GLC Series ST400/ST403

■ DL-405 Series (using Link I/F)

CPU	Link I/F	Cable Diagram	Target Machine
	Upper Link Module 		
D4-430	D4-DCM	RS-232C (Cable Diagram 1)	GP/GLC Series ST401/ST403
D4-440	D4-DCM	RS-232C (Cable Diagram 1)	GP/GLC Series ST401/ST403
	CPU Unit Upper Link I/F *1	RS-232C (Cable Diagram 1)	GP/GLC Series ST401/ST403

■ Direct Logic 05 Series

CPU	Cable Diagram	GP
		
D0-05AA, D0-05AD D0-05AR, D0-05DA D0-05DD, D0-05DD-D D0-05DR, D0-05DR-D	RS-232C (Cable Diagram 6)	GP Series ST401/ST403

2.12.2 Cable Diagrams

The cable diagrams illustrated below and the cable diagrams recommended by Koyo Electronic Industries may differ, however, using these cables for your PLC operations will not cause any problems.

Careful!

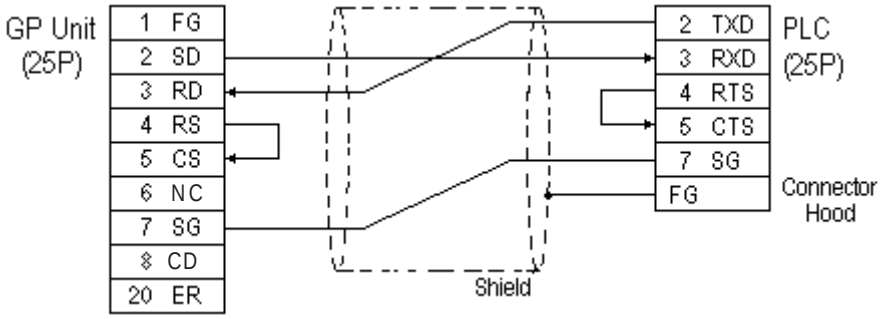
Ground your PLC's FG terminal according to your country's applicable standard. For details, refer to the corresponding PLC manual.

Important

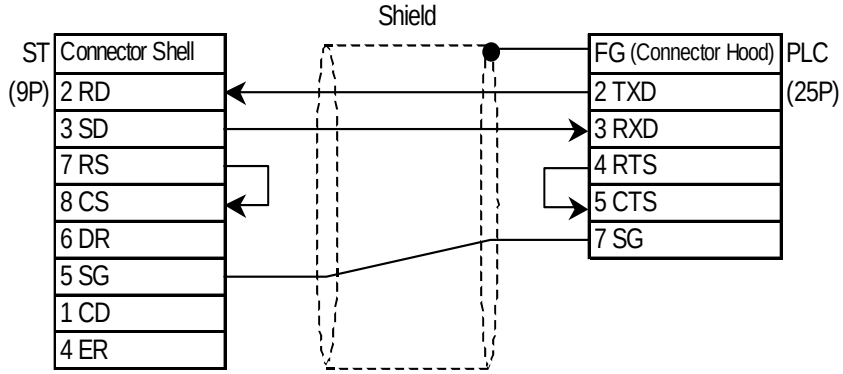
- ***Connect the FG line of the Shield cable to either the GP or PLC, depending on your environment. When using a* connector hood *and grounding the FG line, be sure to use an electrical conductor.***
- ***For the RS-232C connection, use a cable length less than 15m.***
- ***If a communications cable is used, it must be connected to the SG (signal ground).***
- ***For the RS-422 connection, use a cable length less than 600m.***

GP/GLC Series Units

Cable Diagram 1 (RS-232C)



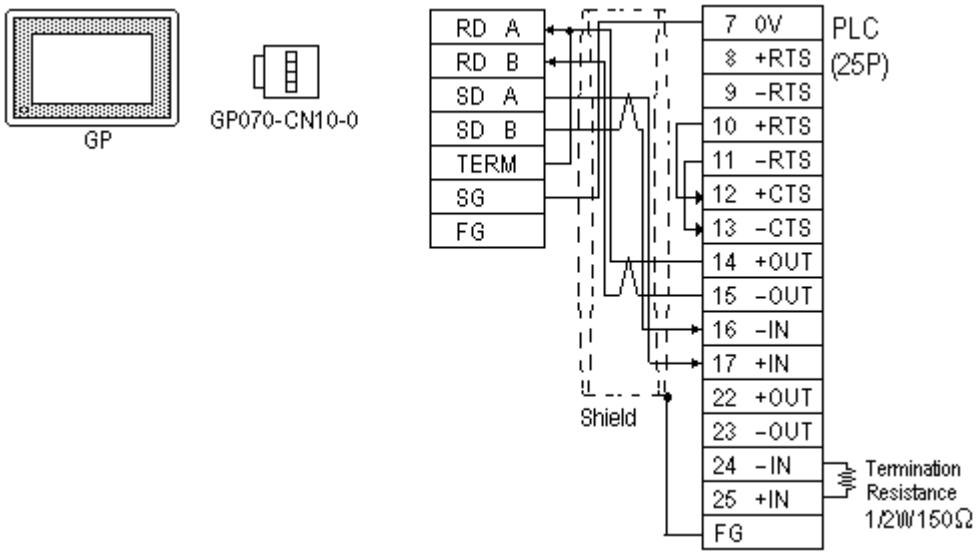
ST401/ST403 Unit



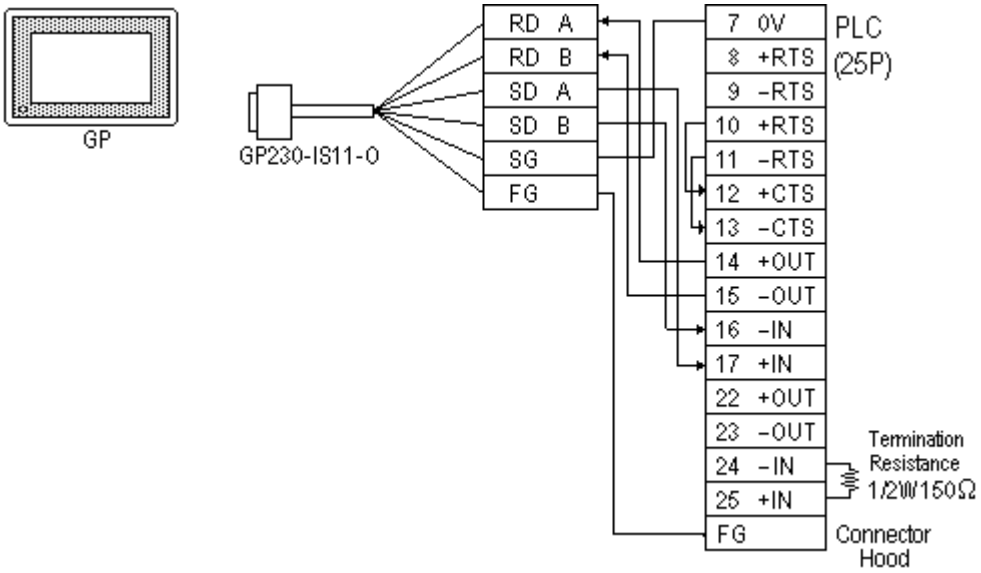
Cable Diagram 2 (RS-422)

GP/GLC Series Units

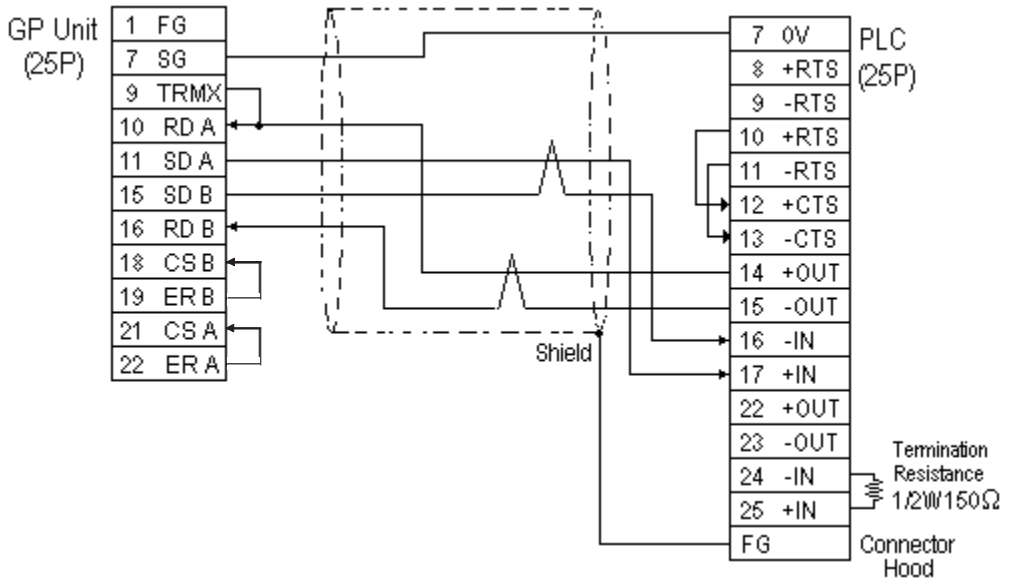
• When using Digital's RS-422 connector terminal adapter GP070-CN10-0



• When using Digital's RS-422 Cable, GP230-IS11-0



• When making your own cable connections

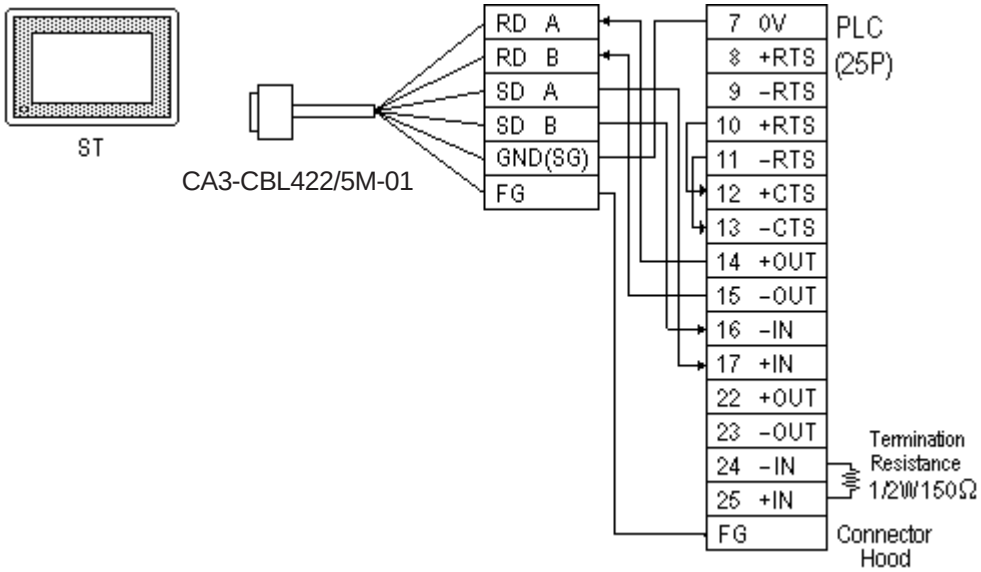


Note:

- **When making your own connections, we recommend using Hitachi Densen's CO-SPEV-SB(A)3P*0.3SQ cable.**
- **When connecting the #9 and #10 pins in the GP Serial I/F, a termination resistance of 100Ω is added between RDA and RDB.**
- **When using RS-422 connection, the cable length must not be any longer than 600 meters.**

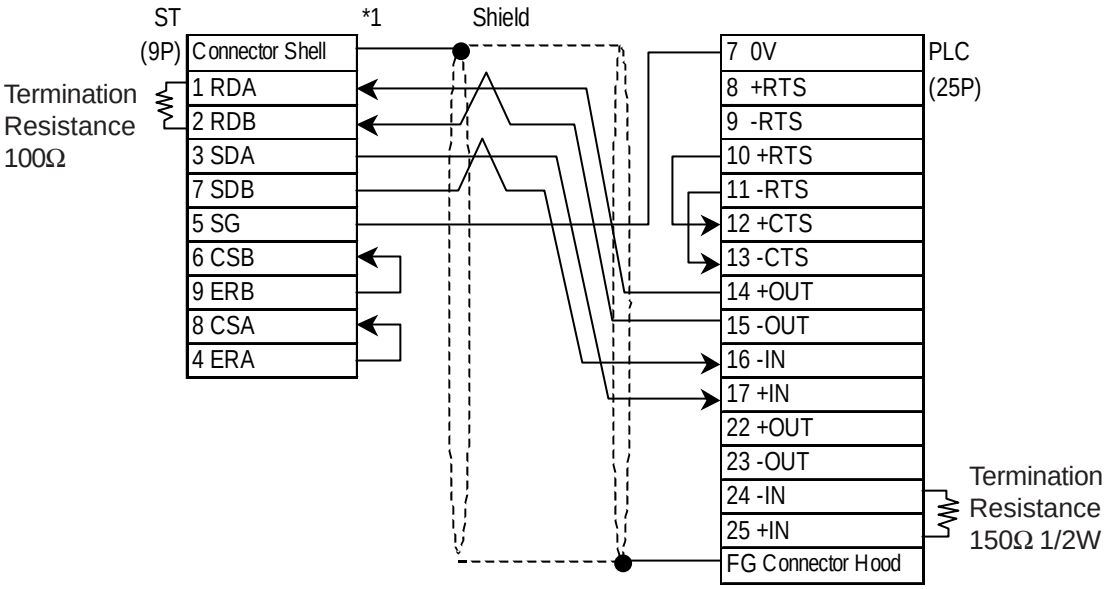
ST400/ST403 Unit

• When using Digital's RS-422 cable CA3-CBL422/5M-01



Be sure to connect the FG line to the FG terminal. For information about FG connections, refer to page 1-5 note *1, in the "Connecting a Device/PLC to the ST unit."

• When making your own cable connections

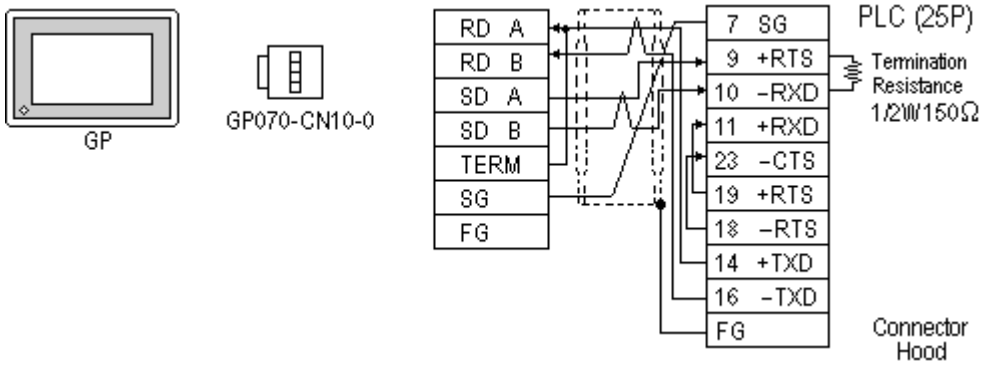


**1 Be sure to connect the shield to the Connector Shell. For information about FG connections, refer to page 1-2 "RS422 I/F (ST400/ST403)" section's Note, in the "Connecting a Device/PLC to the ST unit."*

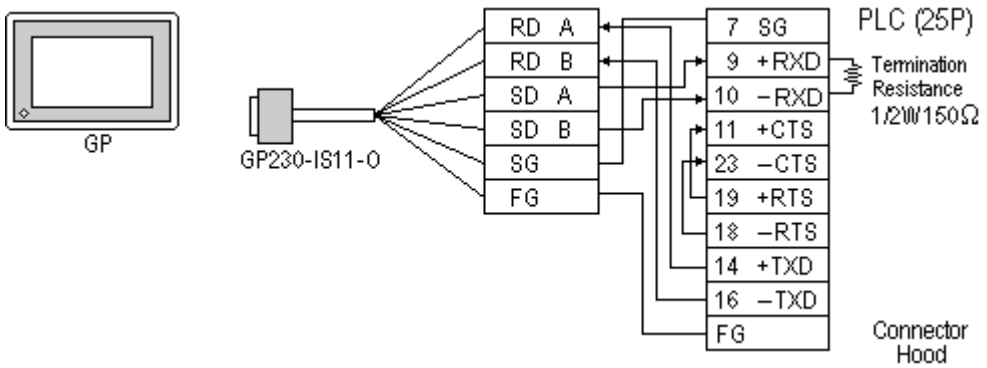
Cable Diagram 3 (RS-422)

GP/GLC Series Units

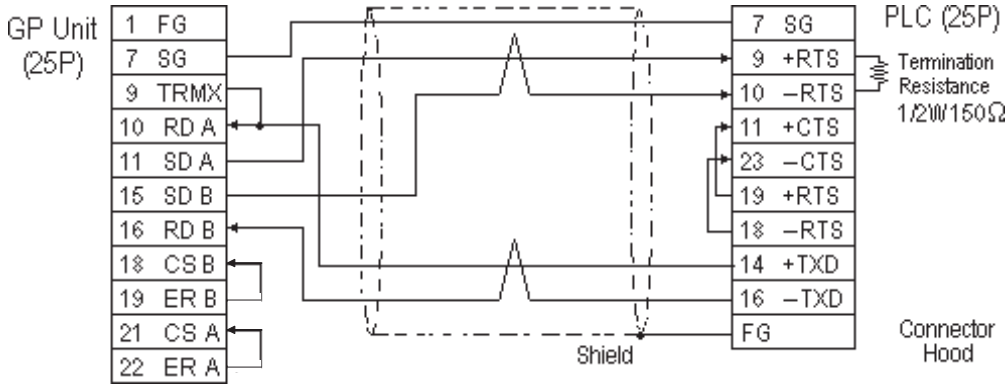
• When using Digital's RS-422 connector terminal adapter GP070-CN10-0



• When using Digital's RS-422 Cable, GP230-IS11-0



• When making your own cable connections

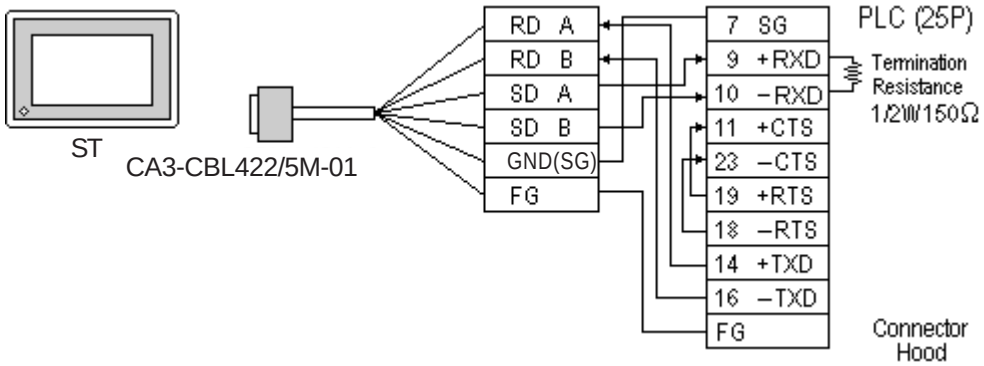


Note:

- **When making your own connections, we recommend using Hitachi Densen's CO-SPEV-SB(A)3P*0.3SQ cable.**
- **When connecting the #9 and #10 pins in the GP Serial I/F, a termination resistance of 100Ω is added between RDA and RDB.**
- **When using RS-422 connection, the cable length must not be any longer than 600 meters.**

ST400/ST403 Unit

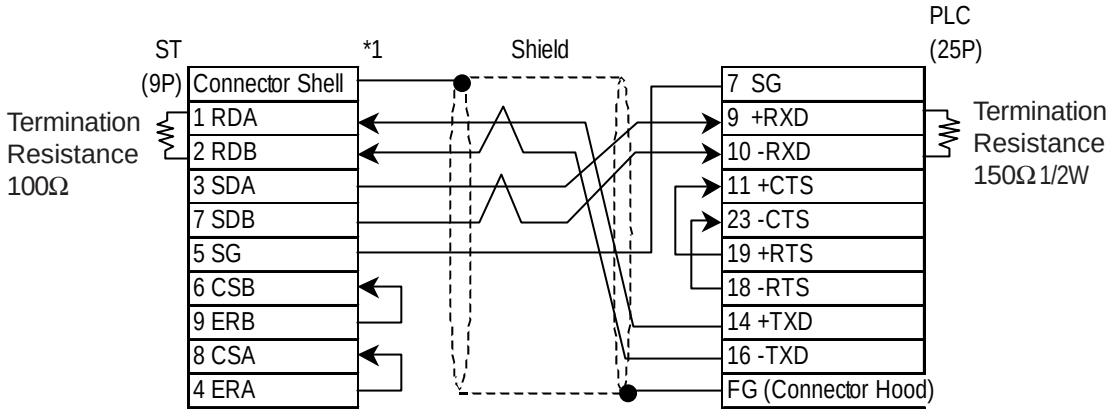
• When using Digital's RS-422 cable CA3-CBL422/5M-01



Note:

Be sure to connect the FG line to the FG terminal. For information about FG connections, refer to page 1-5 note *1, in the "Connecting a Device/PLC to the ST unit."

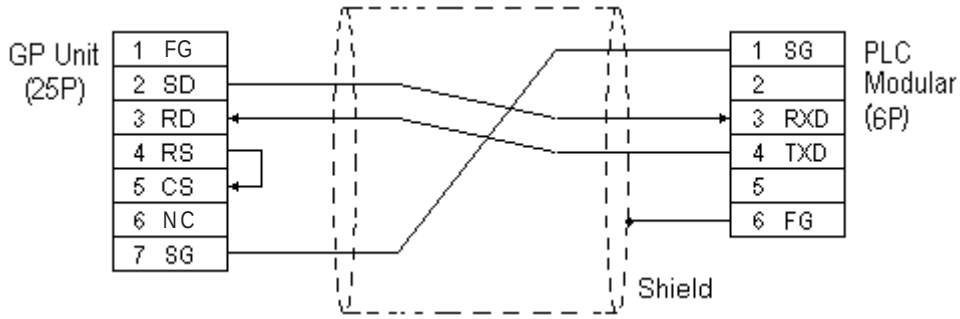
• When making your own cable connections



**1 Be sure to connect the shield to the Connector Shell. For information about FG connections, refer to page 1-2 "RS422 I/F (ST400/ST403)" section's Note, in the "Connecting a Device/PLC to the ST unit."*

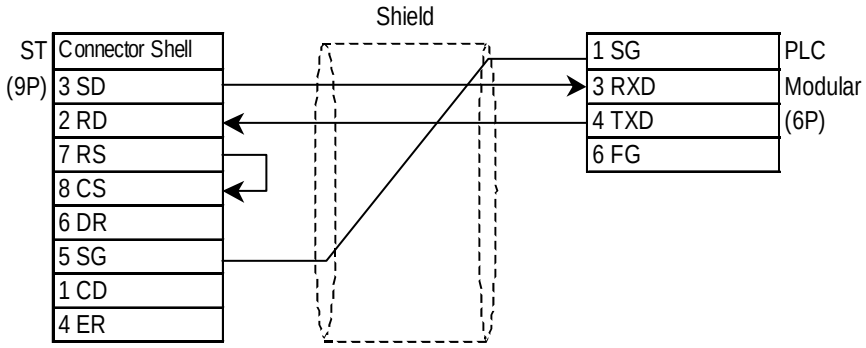
Cable Diagram 4 (RS-232C)

GP/GLC Series Units



Note: **The GP connection uses SZ-4's Port 2 (generic SIO port). Port 1 is the program communication port (Programming Console S-20P).**

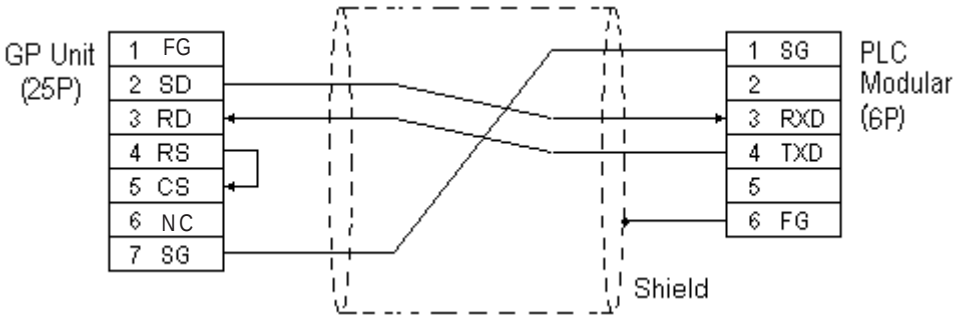
ST401/ST403 Unit



Note: **The GP connection uses SZ-4's Port 2 (generic SIO port). Port 1 is the program communication port (Programming Console S-20P).**

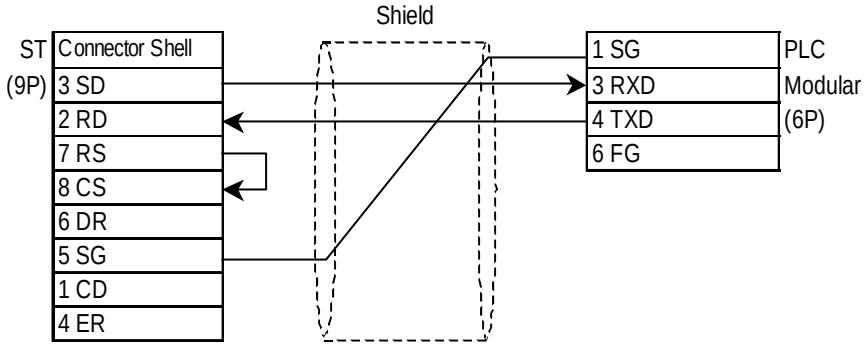
Cable Diagram 5 (RS-232C)

GP/GLC Series Units



Note: **The GP connection uses D2-240's Port 2 (generic SIO port). Port 1 is the program communication port.**

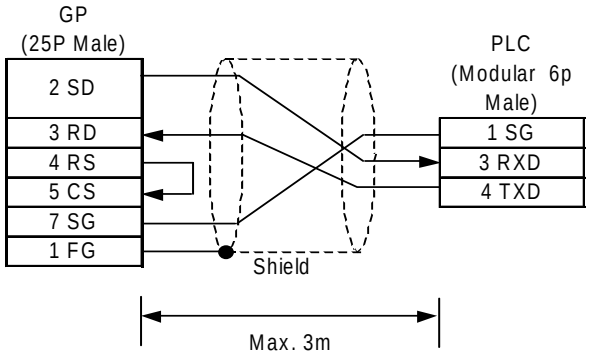
ST401/ST403 Unit



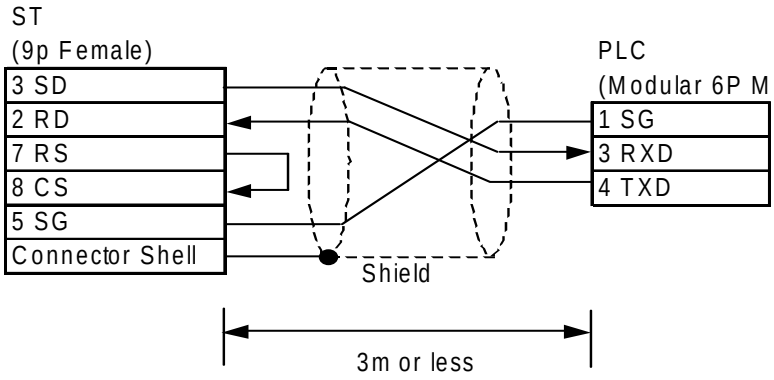
Note: **The GP connection uses D2-240's Port 2 (generic SIO port). Port 1 is the program communication port.**

Cable Diagram 6 (RS-232C)

GP/GLC Series Units

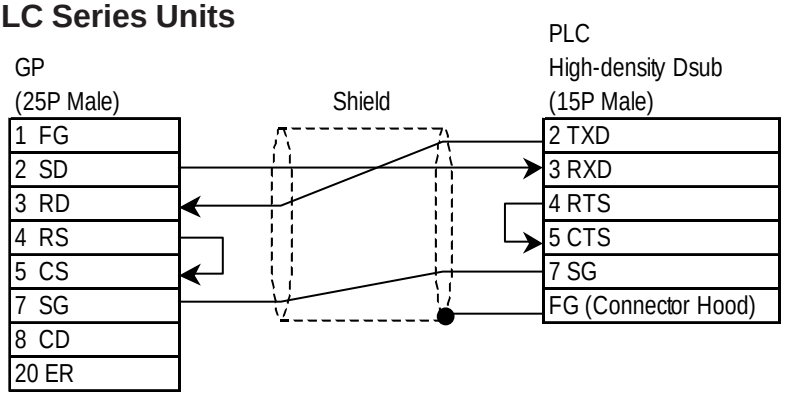


ST401/ST403 Unit

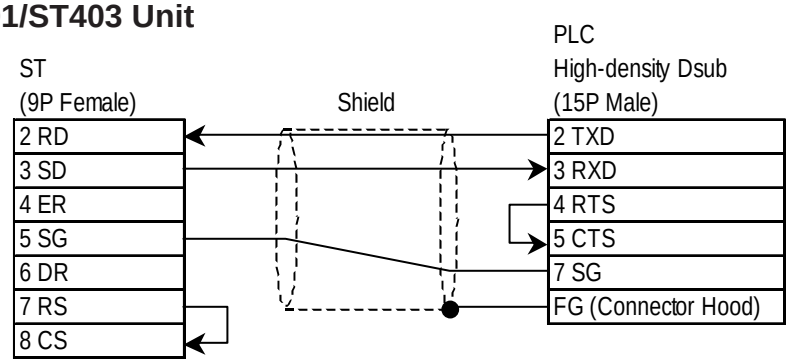


Cable Diagram 7 (RS-232C)

GP/GLC Series Units



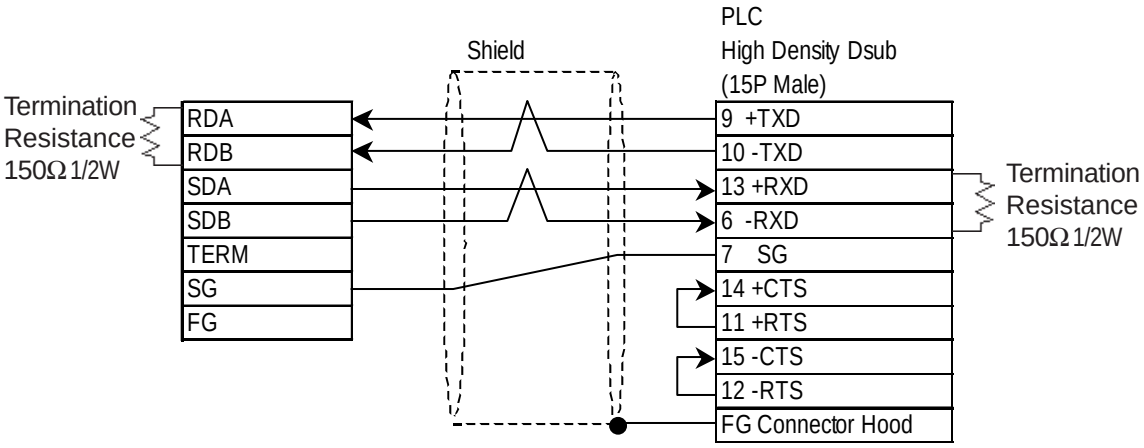
ST401/ST403 Unit



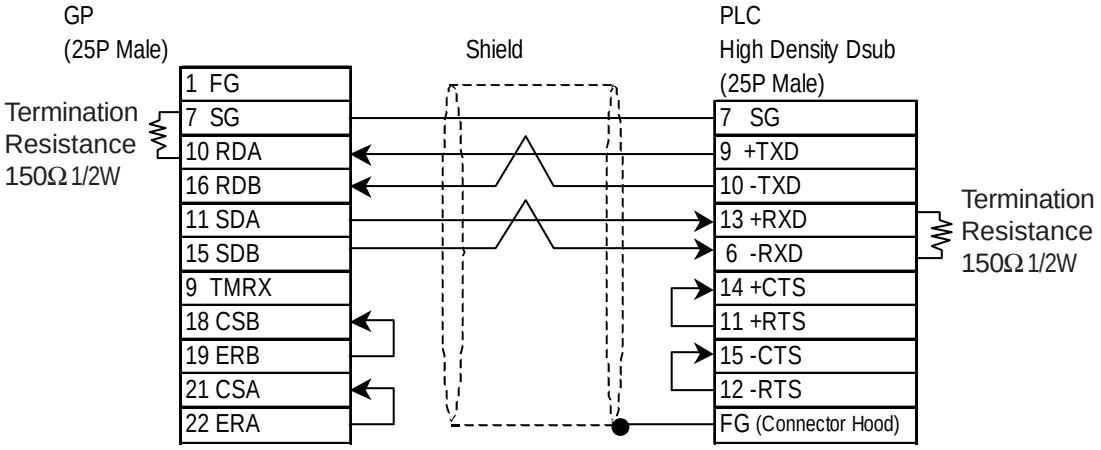
Cable Diagram 8 (RS-422)

GP/GLC Series Units

• When using Digital's RS-422 connector terminal adapter GP070-CN10-0

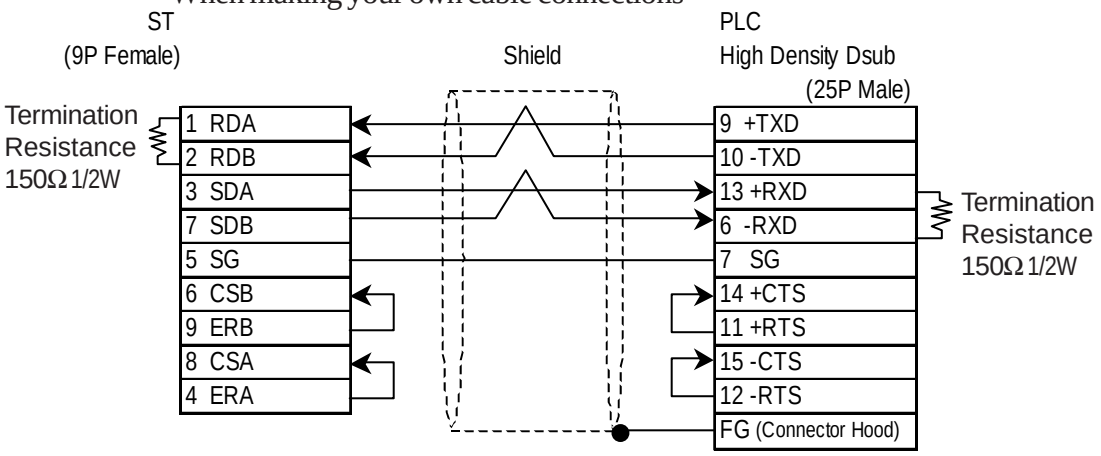


• When making your own cable connections



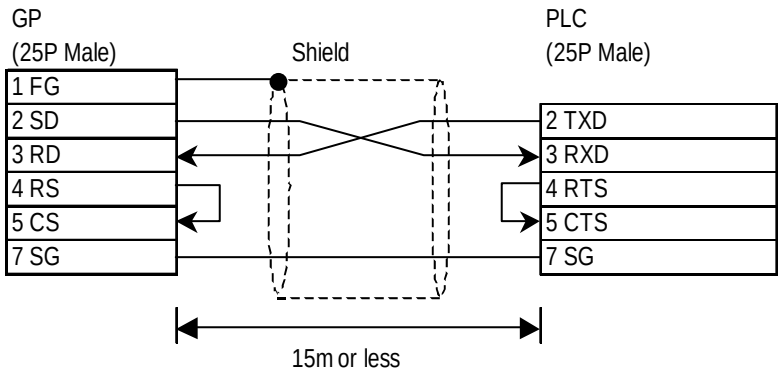
ST400/ST403 Unit

• When making your own cable connections

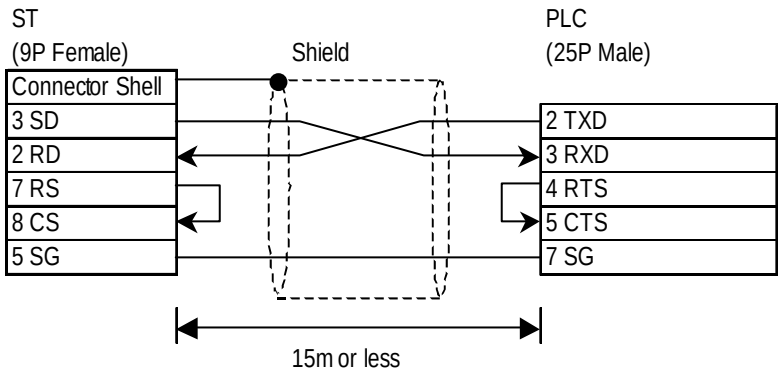


Cable Diagram 9 (RS-232C)

GP/GLC Series Units



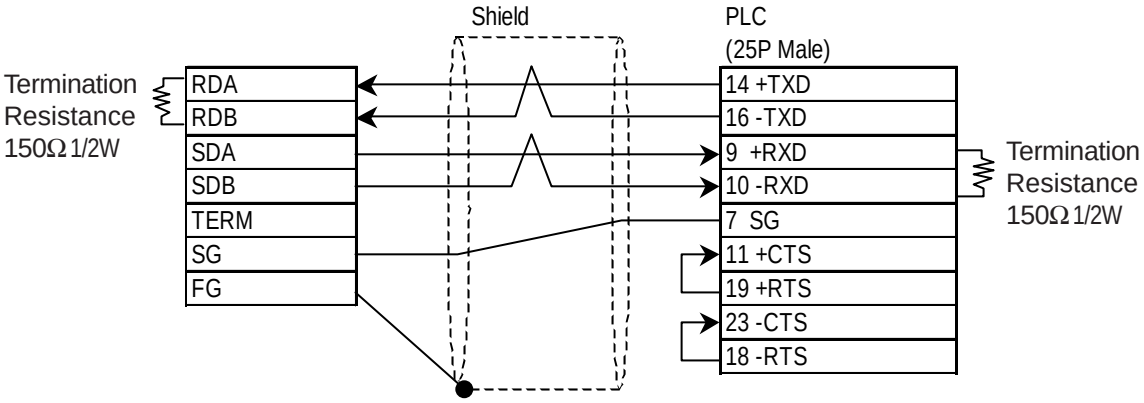
ST401/ST403 Unit



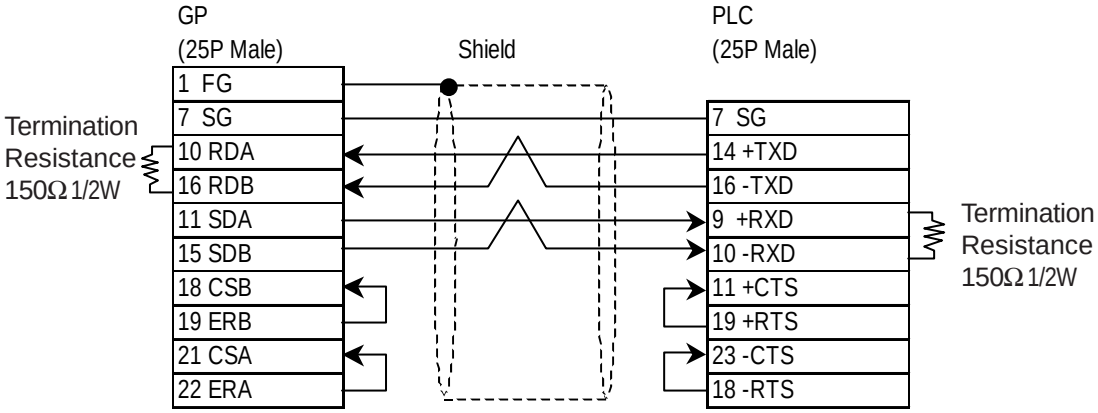
Cable Diagram 10 (RS-422)

GP/GLC Series Units

• When using Digital's RS-422 connector terminal adapter GP070-CN10-0

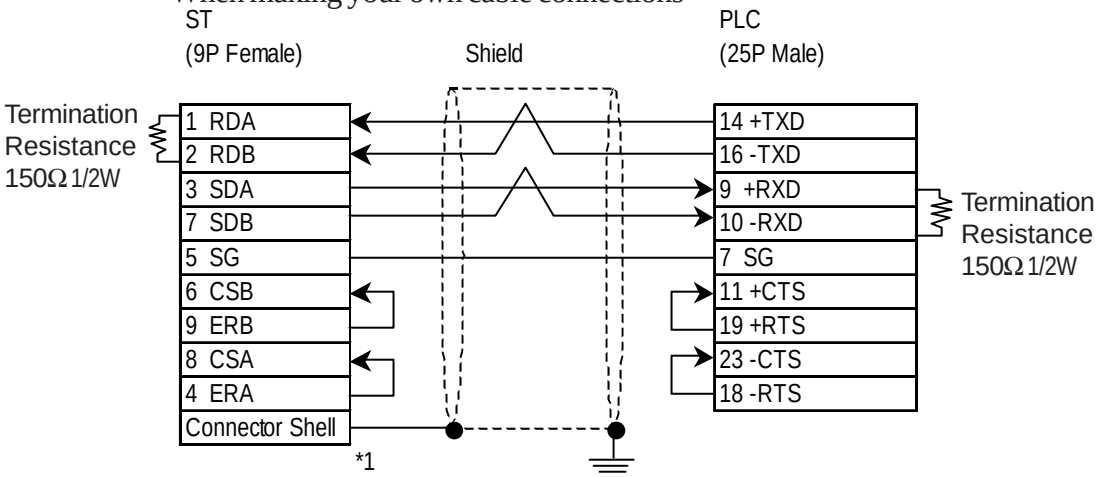


• When making your own cable connections



ST400/ST403 Unit

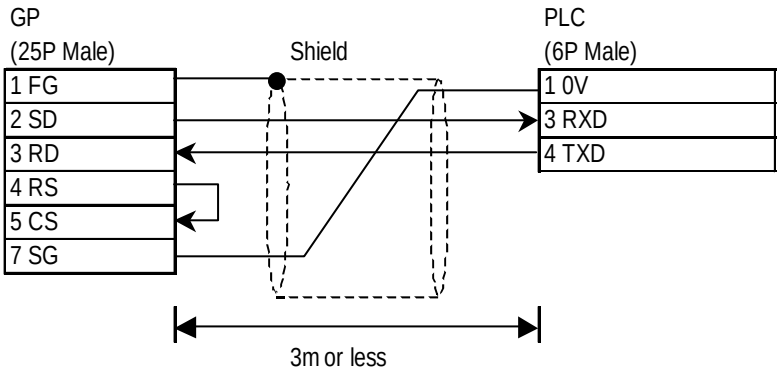
• When making your own cable connections



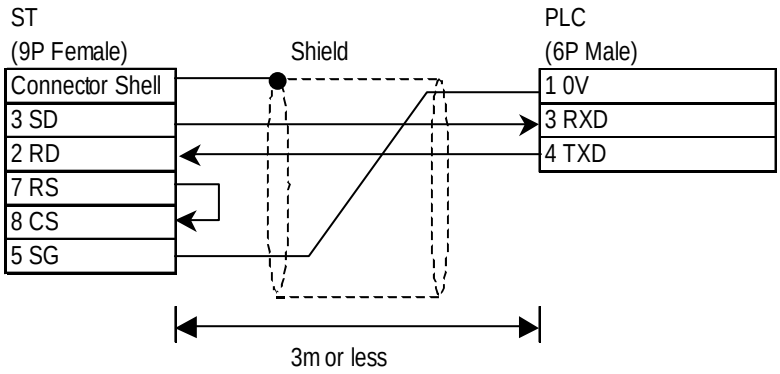
**1 Be sure to connect the shield to the Connector Shell. For information about FG connections, refer to page 1-2 "RS422 I/F (ST400/ST403)" section's Note, in the "Connecting a Device/PLC to the ST unit."*

Cable Diagram 11 (RS-232C)

GP/GLC Series Units



ST401/ST403 Unit



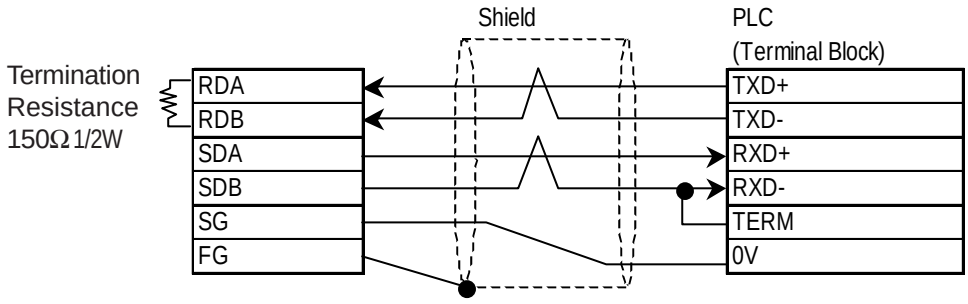
Cable Diagram 12 (RS-422)

Note:

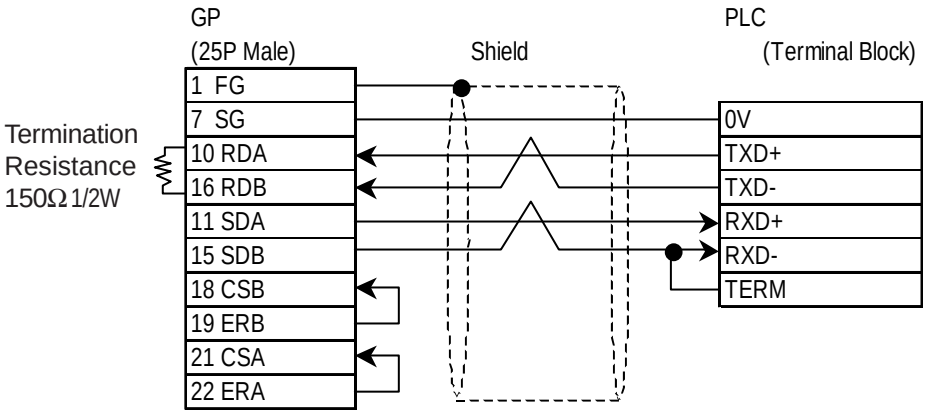
- **Connecting the RXD- to TERM on the PLC side causes termination resistance of 1/2W 180Ω to be inserted between the RXD+ and the RXD-.**

GP/GLC Series Units

• When using Digital's RS-422 connector terminal adapter GP070-CN10-0

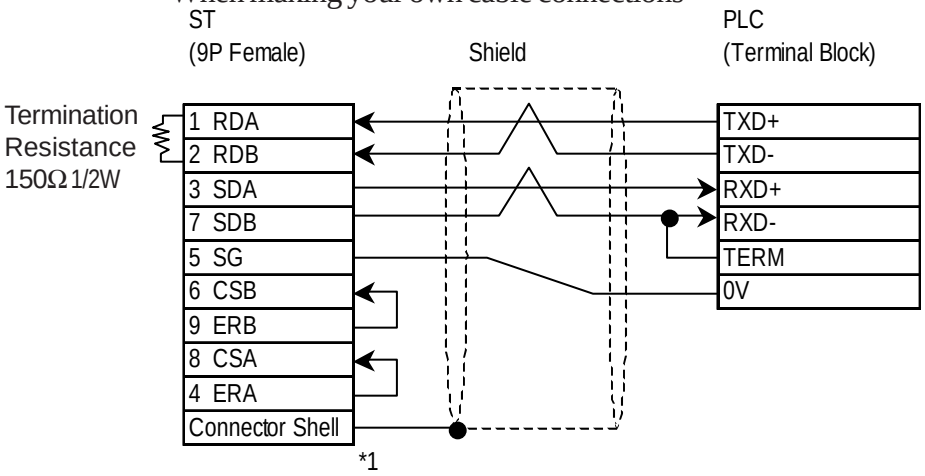


• When making your own cable connections



ST400/ST403 Unit

• When making your own cable connections



**1 Be sure to connect the shield to the Connector Shell. For information about FG connections, refer to page 1-2 "RS422 I/F (ST400/ST403)" section's Note, in the "Connecting a Device/PLC to the ST unit."*

2.12.3 Supported Devices

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

■ KOSTAC SG Series

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input Relay	I0000 ~ I1777	R40400 ~ R40477	OCT8]	L/H
Output Relay	Q0000 ~ Q1777	R40500 ~ R40577	OCT8]	
Control Relay	M0000 ~ M3777	R40600 ~ R40777	OCT8]	
Stage	S0000 ~ S1777	R41000 ~ R41077	OCT8]	
Link Relay (input)	GI0000 ~ GI3777	R40000 ~ R40177	OCT8]	
Specified Transfer Relay (output)	GQ0000 ~ GQ3777	R40200 ~ R40377	OCT8]	
Timer (contact)	T000 ~ T377	R41100 ~ R41117	OCT8]	
Counter (contact)	C000 ~ C377	R41140 ~ R41157	OCT8]	
Timer (elapsed time)	---	R0000 ~ R0377	OCT8]	
Counter (elapsed value)	---	R1000 ~ R1377	OCT8]	
Variable Memory 1	---	R400 ~ R777	OCT8] Bit15]	
Variable Memory 2	---	R1400 ~ R7377	OCT8] Bit15]	
Variable Memory 3	---	R10000 ~ R37777	OCT8] Bit15]	

■ KOSTAC SU Series (SU-5, SU-6, SU-6B)

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input Relay	I000 ~ I477	R40400 ~ R40423	OCT8]	L/H
Output Relay	Q000 ~ Q477	R40500 ~ R40523	OCT8]	
Control Relay	M0000 ~ M1777	R40600 ~ R40677	OCT8]	
Stage	S0000 ~ S1777	R41000 ~ R41077	OCT8]	
Link Relay/Link Input	GI0000 ~ GI1777	R40000 ~ R40077	OCT8]	
Special Relay	SP000 ~ SP137 SP320 ~ SP717	R41200 ~ R41205 R41215 ~ R41234	*1 OCT8]	
Timer (contact)	T000 ~ T377	R41100 ~ R41117	OCT8]	
Counter (contact)	C000 ~ C177	R41140 ~ R41157	OCT8]	
Timer (elapsed time)	---	R0000 ~ R0377	OCT8]	
Counter (elapsed value)	---	R1000 ~ R1177	OCT8]	
Data Register	---	R1400 ~ R7377	OCT8] Bit 15]	
Special Register	---	R700 ~ R737 R7400 ~ R7777	*1 OCT8] Bit 15]	
Expanded Register	---	R10000 ~ R17777	*2 OCT8] Bit 15]	

** 1 Only the SU-6B will check connections (Only the SU-6B can use special registers R700 to R737), however it cannot write data.*

**2 Only the SU-6B can be used.*

■ KOSTAC SU Series (SU-5M, SU-6M)

Device	Bit Address	Word Address	Particulars	
Input Relay	I0000~I1777	R4040~R40477	oct8]	
Output Relay	Q0000~Q1777	R40500~R40577	oct8]	
Link Relay	GI0000~GI3777	R40000~R40177	oct8]	
Link Output Relay	GQ0000~GQ3777	R40200~R40377	oct8]	
Internal Relay	M0000~M3777	R40600~R40777	oct8]	
Stage	S0000~S1777	R41000~R41077	oct8]	
Special Relay 1	SP0000~SP0777	R41200~R41237	oct8] *1	
Timer (contact)	T000~T377	R41100~R41117	oct8]	
Counter (contact)	C000~C377	R41140~R41157	oct8]	L/H
Timer (elapsed time)	———	R0000~R0377	oct8]	
Preparatory Resister	———	R0400~R0677	oct8] Bit15]	
Special Resister	———	R0700~R0777	oct8] Bit15] *2	
Counter (elapsed value)	———	R1000~R1377	oct8]	
Data Resister 1	———	R1400~R7377	oct8] Bit15]	
Special Resister 2	———	R7400~R7777	oct8] Bit15] *2	
Data Resister 2	———	R10000~R36777	oct8] Bit15]	
Special Resister 3	———	R37000~R37777	oct8] Bit15] *2	

**1 Not available for writes. (Even if you write data, no error will occur, but the value will not be changed.)*

**2 Use is determined on the PLC side. Do not write data from the GP.*

■ KOSTAC SZ Series

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input Relay	I0000 ~ I0477	R40400 ~ R40423	oct8]	
Output Relay	Q0000 ~ Q0477	R40500 ~ R40523	oct8]	
Control Relay	M0000 ~ Q0377	R40600 ~ R40617	oct8]	
Stage	---	R41000 ~ R41037	oct8]	
Timer (contact)	T000 ~ T177	R41100 ~ R41107	oct8]	L/H
Counter (contact)	C000 ~ C177	R41140 ~ R41147	oct8]	
Timer (elapsed time)	---	R0000 ~ R0177	oct8]	
Counter (elapsed value)	---	R1000 ~ R1177	oct8]	
Variable Memory 2	---	R2000 ~ R3777	oct8] Bit15]	

■ KOSTAC SR Series

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input/Output	000 ~ 157 700 ~ 767	R000 ~ R014 R070	OCT8	L/H
Control Relay	160 ~ 377 770 ~ 777	R016 ~ R036 R076	OCT8	
Shift Register	400 ~ 577	R040 ~ R056	OCT8	
Timer/Counter (contact)	600 ~ 677	R060 ~ R066	OCT8	
Timer/Counter (elapsed value)	---	R600 ~ R677	OCT8	
Data Register	---	R400 ~ R577	OCT8 Bit15 ÷2	

- ***Bit write operation of bit devices***

  When the GP writes to the PLC's bit addresses, it reads the data including the bit address to be written by a unit, word (as word data) first. After that, the GP changes only that bit to be written of the read out data and writes it to the PLC as word data. Therefore writing to the bit addresses before/after the bit address to be written from the ladder program in the middle of the bit write operation might cause the incorrect data to be written.

■ DL-405 Series

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input Relay	X000 ~ X477	V40400 ~ V40423	OCT8	L/H
Output Relay	Y000 ~ Y477	V40500 ~ V40523	OCT8	
Internal Relay	C0000 ~ C1777	V40600 ~ V40677	OCT8	
Stage	S0000 ~ S1777	V41000 ~ V41077	OCT8	
Link Relay/Link Input	GX0000 ~ GX1777	V40000 ~ V40077	OCT8	
Special Relay	SP000 ~ SP137 SP320 ~ SP717	V41200 ~ V41205 V41215 ~ V41234	OCT8	
Timer (contact)	T000 ~ T377	V41100 ~ V41117	OCT8	
Counter (contact)	CT000 ~ CT177	V41140 ~ V41147	OCT8	
Timer (elapsed time)	---	V0000 ~ V0377	OCT8	
Counter (elapsed value)	---	V1000 ~ V1177	OCT8	
Data Register	---	V1400 ~ V7377	OCT8 Bit15	
Special Register	---	V7400 ~ V7777	OCT8 Bit15	

■ DL-205 Series

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input Relay	X0000 ~ X0477	V40400 ~ V40423	oct 8]	
Output Relay	Y0000 ~ Y0477	V40500 ~ V40523	oct 8]	
Control Relay	C0000 ~ C0377	V40600 ~ V40617	oct 8]	
Stage	---	V41000 ~ V41037	oct 8]	
Timer (contact)	T000 ~ 177	V41100 ~ V41107	oct 8]	L/H
Counter (contact)	CT000 ~ CT177	V41140 ~ V41147	oct 8]	
Timer (elapsed time)	---	V0000 ~ V0177	oct 8]	
Counter (elapsed value)	---	V1000 ~ V1177	oct 8]	
Variable Memory 2	---	V2000 ~ V3777	oct 8] Bit 15]	

■ DL-305 Series

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input/Output	000 ~ 157 700 ~ 767	V000 ~ V014 V070	oct 8]	
Control Relay	160 ~ 377 770 ~ 777	V016 ~ V036 V076	oct 8]	
Shift Register	400 ~ 577	V040 ~ V056	oct 8]	
Timer/Counter (contact)	600 ~ 677	V060 ~ V066	oct 8]	L/H
Timer/Counter (elapsed value)	---	V600 ~ V677	oct 8]	
Data Register	---	V400 ~ V577	oct 8] Bit 15] ÷2]	

■ Direct Logic 05 Series

Device	Bit Address	Word Address	Particulars	
Input Relay	I0000 ~ I0377	R40400 ~ R40417	*1	
Output Relay	Q0000 ~ Q0377	R40500 ~ R40517	*1	
Internal Relay	M0000 ~ M0777	R40600 ~ R40637	*1	
Stage	S0000 ~ S0377	R41000 ~ R41017	*1	
Special Relay	SP0000 ~ SP0777	R41200 ~ R41237	*1	
Timer (status bit)	T000 ~ T177	R41100 ~ R41147	*1	
Counter (status bit)	C000 ~ C177	R41140 ~ R41147	*1	L/H
Timer (elapsed time)	---	R0000 ~ R0177	*1	
Counter (calculate)	---	R1000 ~ R1177	*1	
V-Memory	---	R1200 ~ R7377	Bit 15] *1 *2	
V-Memory (non-volatile)	---	R7400 ~ R7577	Bit 15] *1	
System Parameter	---	R7600 ~ R7777	Bit 15] *1	

**1 Octal data address.*

**2 R1200 to R1377 cannot be designated using bits. (R1400 - R7377 can.)*

■ KOSTAC PZ3 Series

Device	Bit Address	Word Address	Remarks	
Input Relay	I0000 to I0777	R40400 to R40437	OCT8] *1	L/H
Output Relay	Q0000 to Q0777	R40500 to R40537	OCT8]	
Internal Relay	M0000 to M1777	R40600 to R40677	OCT8]	
Stage	S0000 to S1777	R41000 to R41037	OCT8]	
Timer (Contact)	T000 to T377	R41100 to R41117	OCT8]	
Counter (Contact)	C000 to C177	R41140 to R41147	OCT8]	
Special Relay	SP000 to SP777	R41200 to R41237	OCT8] *2	
Timer (Elapsed time)	————	R0000 to R0377	OCT8]	
Counter (Elapsed time)	————	R1000 to R1177	OCT8]	
Data Register	————	R1400 to R7377	OCT8] Bit15]	
	————	R10000 to R17777	OCT8] Bit15]	
Special Register	————	R7400 to R7777	OCT8] Bit15] *2	
	————	R37000 to R37777	OCT8] Bit15] *2	

**1 Addresses allocated tothe PZ3 or the I/O units cannot be written to.*

**2 Depending on the address, data write is not permitted. (Even if data is written it will be ignored.)*

2.12.4 Environment Setup

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

■ KOSTAC SG Series (using Upper Link I/F)

GP Setup		Upper Link Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits	---	
Stop Bit	1 bit	---	
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	---	
Communication Format (RS-232C)	RS-232C	---	
Communication Format (RS-422)	4-wire type	---	
---		Master/Slave Setup	Slave
---		Transfer Mode	Hex
Unit No.	1	Station Number	1

■ KOSTAC SG Series (using General SIO Port)

GP Setup		Generic SIO Port Setup	
Baud Rate	19200 bps (fixed)	Baud Rate	19200 bps (fixed)
Data Length	8 bits (fixed)	Data Length	8 bits (fixed)
Stop Bit	1 bit (fixed)	Stop Bit	1 bit (fixed)
Parity Bit	Odd (fixed)	Parity Bit	Odd (fixed)
Data Flow Control	ER Control	---	
Communication Format (RS-232C)	RS-232C	Communication Format (RS-232C)	Dipswitch 1 (CCM SIO Port) is ON
Communication Format (RS-422)	4-wire type	Communication Format (RS-422)	Dipswitch 4 (CCM SIO Port) is Off
---		Transfer Mode *1	Hex
Unit No.	1	CCM Number *1	1

**1 Turn Dip Switch 2 (CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is not designated as Hex.*

■ KOSTAC SU Series (using Upper Link I/F (U01-DM))

GP Setup		Generic Link Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits (fixed)	---	
Stop Bit	1 bit (fixed)	---	
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	---	
Communication Format	RS-232C	---	
Unit No.	1	Station Number	1

■ KOSTAC SU Series (using General SIO Port (SU-6,SU-6B))

GP Setup		Generic SIO Port Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits (fixed)	---	
Stop Bit	1 bit (fixed)	---	
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	---	
Communication Format (RS-232C)	RS-232C	---	
Communication Format (RS-422)	4-wire type	---	
---		Data Format *1	Hex
Unit No.	1	Station Number	1

**1 Turn* Dip Switch 2 *(CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is* not *designated as Hex.*

■ KOSTAC SU Series (SU-5M, SU-6M)

GP Setup		Generic SIO Port Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits (fixed)	---	
Stop Bit	1 bit	Stop Bit	1 bit
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	---	
		Communication Settings	CCM or Auto
Communication Format (RS-232C)	RS-232C	---	
Communication Format (RS-422)	4-wire type	---	
Unit No.	1	Station Number	1

**1 Changing values of Special Register enables you to make PLC's system settings. For setting method, refer to KOSRAC SU Series Users Manual.*

■ KOSTAC SZ Series

GP Setup		Generic SIO Port Setup	
Baud Rate	9600 bps	Baud Rate	9600 bps
Data Length	8 bits	Data Length	8 bits
Stop Bit	1 bit	Stop Bit	1 bit
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	---	
Communication Format	RS-232C	---	
---		Data Format *1	Hex
Unit No.	1	Station Number	1

■ KOSTAC SR Series

GP Setup		CPU Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits	---	
Stop Bit	1 bit	---	
Parity Bit	None	Parity Bit	None
Data Flow Control	ER Control	---	
Communication Format	4-line	---	
---		Tum Around Relay	No delay
---		Power Up Mode	RUN mode
---		Transmission Mode	Hex
Unit No.	1	Station Number	1

■ DL405 Series (using Upper Link I/F)

GP Setup		Upper Link Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits (fixed)	---	
Stop Bit	1 bit (fixed)	---	
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	---	
Communication Format	RS-232C	---	
Unit No.	1	Station Number	1

■ DL-405 Series (using General SIO Port)

GP Setup		Generic SIO Port Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits (fixed)	---	
Stop Bit	1 bit (fixed)	---	
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	---	
Communication Format (RS-232C)	RS-232C	---	
Communication Format (RS-422)	4-wire type	---	
---		Data Format *1	Hex
Unit No.	1	Station Number	1

**1 Turn* Dip Switch 2 *(CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is* not *designated as Hex.*

■ DL-205 Series

GP Setup		Generic SIO Port Setup	
Baud Rate	9600 bps	Baud Rate	9600 bps
Data Length	8 bits	Data Length	8 bits
Stop Bit	1 bit	Stop Bit	1 bit
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	---	
Communication Format	RS-232C	---	
---		Data Format *1	Hex
Unit No.	1	Station Number	1

**1 Turn* Dip Switch 2 *(CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is* not *designated as Hex.*

■ DL-305 Series

GP Setup		CPU Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits	---	
Stop Bit	1 bit	---	
Parity Bit	None	Parity Bit	None
Data Flow Control	ER Control	---	
Communication Format	4-wire type	---	
---		Turn Around Relay	No delay
---		Power Up Mode	RUN mode
---		Data Format *1	Hex
Unit No.	1	Station Number	1

**1 Turn* Dip Switch 2 *(CCM Station No.) OFF, and run Transfer mode and CCM Station Number setup with the programmer. Communication will not occur when Dip Switch 2 is ON and the transfer Mode is* not *designated as Hex.*

■ Direct Logic 05 Series

GP Setup		CPU Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits	Data Length	8 bits
Stop Bit	1 bit	Stop Bit	1 bit
Parity Bit	odd	Parity Bit	odd
Data Flow Control	ER Control	---	
Communication Format	RS-232C	---	
---		Protocol	CCM2 (CCM Net)
---		Data Transfer Mode	HEX
Unit No.	1	Station Number	1

**1 The Baud Rate setting is for PORT2 only. PORT1 is fixed at 9600bps.*

■ **KOSTAC PZ3 Series** (using General SIO Port)

GP/GLC Settings		General SIO Port	
Baud Rate	9600 bps	Baud Rate	9600 bps
Data Length	8 bits	Data Length	8 bits (fixed)
Stop Bit	1 bit	Stop Bit	1 bit *1
Parity Bit	Odd	Parity Bit	Odd
Data Flow Control	ER Control	———	
Communication Format	RS-232C	———	
Communication Format	4-wire	———	
Unit No.	1 to 90	Station Number	1 to 90
———		Protocol	CCMNet (Direct NET)
———		Data Type	Hex