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.

Hitachi Industrial Equipment Systems PLC - 1:1

1   System Structure

The following describes the system structure for connecting the GP to Hitachi Industrial Equipment System PLCs.
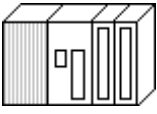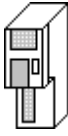
▼*Reference*▼   *The Cable Diagrams mentioned in the following tables are listed in the section titled "**2.5.2 Cable Diagrams**".*

Note:
- **"HIDIC H Series" is made by Hitachi Industrial Equipment System Co., Ltd.**
- **For connecting the PLC with ST series, refer to the manual, "About the ST unit."**

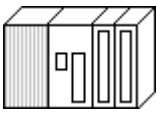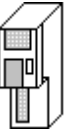### ■ HIDIC H Series (using Link I/F)
Procedure 1 for transmission control

CPU	Link I/F	Cable Diagram	Cable	GP
	COMM Module			
H-300 (CPU-03Ha) H-700 (CPU-07Ha) H-2000 (CPU-20Ha) H-2002 (CPU2-20H)	COMM-H COMM-2H	RS-232C (Cable Diagram 1) RS-422 (Cable Diagram 3)	RS-232C Hitachi Industrial Equipment System's peripheral cable GPCB05H [1] or WPCB02H [1]	GP Series
H-302 (CPU2-03H) H-702 (CPU2-07H) H-4010 (CPU3-40H)	COMM-2H			

[1] Due to the size of its connector case, this cable cannot be used for GP-270, GP-370, GP-377R and GP-2300 series units.

■ HIDIC H Series/COMM-2H (using Link I/F)
Procedure 2 for transmission control

CPU	Link I/F	Cable Diagram	Cable	GP
	COMM Module			
H-302 (CPU2-03H) H-702 (CPU2-07H) H-2002 (CPU2-20H) H-4010 (CPU3-40H)	COMM-2H	RS-232C (Cable Diagram 1) RS-422 (Cable Diagram 3)	RS-232C Hitachi Industrial Equipment System's peripheral cable GPCB05H [1] or WPCB02H [1]	GP Series

[1] Due to the size of its connector case, this cable cannot be used for GP-270, GP-370, GP-377, GP-377R, and GP-2300 series units.

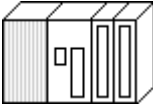# ■ HIDIC H Series (CPU Direct Connection)

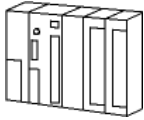| CPU	Cable Diagram	Cable	GP
H20,H28,H40,H64 H-200(CPU-02H) [*1] H-300(CPU-03Ha) [*1] H-700(CPU-07Ha) [*1] H-2000(CPU-20Ha) [*1]	RS-232C (Cable Diagram 1)	Hitachi Industrial Equipment System's peripheral cable GPCB05H [*9]	GP Series
H-252C(CPU22-02HC) [*1 *2] H-302(CPU2-03H) [*1] H-702(CPU2-07H) [*1] H-2002(CPU2-20H) [*1] H-4010(CPU3-40H) [*1 *4]	(Cable Diagram 1,2) [*3]	Hitachi Industrial Equipment System's peripheral cable GPCB05H(4800bps) [*9] or WPCB02H(19200bps)	
EH-150(EH-CPU104, EH-CPU208, EH-CPU316, EH-CPU448, EH-CPU104A, EH-CPU208A, EH-CPU308A, EH-CPU316A, EH-CPU448A EH-CPU516, EH-CPU548) [*5 *7]	RS-232C (Cable Diagram 1,2) [*8]		
EH-150(EH-CPU308A, EH-CPU316A, EH-CPU448A,EH-CPU448, EH-CPU516, EH-CPU548) [*6 *7]	RS-422 (Cable Diagram 4)		
MICRO-EH(EH-D10□□□, EH-14□□□, EH-D14□□□, EH-A23□□□, EH-A28□□□, EH-D28□□□) [*10]	RS-232C (PORT1) (Cable Diagram 1) [*7]		
MICRO-EH(EH-A23□□□, EH-A28□□□, EH-D28□□□) [*10]	RS-422 (PORT2) (Cable Diagram 5)		

1 Connect to the CPU module's peripheral port.

* 2 If the CPU is connected to port 2, a Hitachi Industrial Equipment System's CNCOM-05 conversion cable between the round connector (8-pin) and the D sub-connector (15-pin) is required.

<Fig. 1>

Hitachi Industrial Equipment System's CNCOM-05   **Hitachi Industrial Equipment System's GPCB05H**

H-252C (CPU22-02HC)
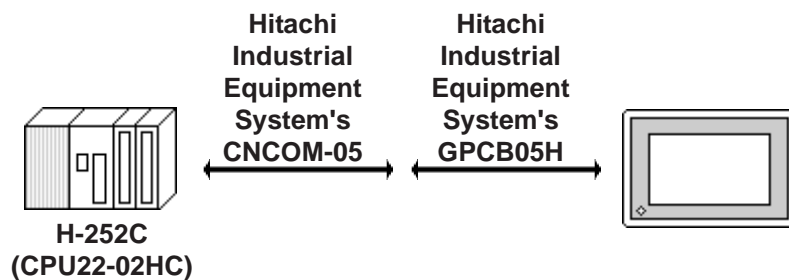
3 You will need to change the wiring depending on the baud rate. Use (Cable Diagram 1) when the baud rate is 4800bps, and use (Cable Diagram 2) when the baud rate is 19200bps. <Fig.1> is only for when using the Hitachi Industrial Equipment System's cable.

4 If the CPU's software revision is J or later, and DIPSWI's No.3 and No.4 are turned OFF, you can set the baud rate to 38400bps by using (Cable Diagram2).

5 Connect to the CPU module's serial port 1 or serial port 2.

6   Connect to the CPU module's serial port 1.

7 If the CPU is connected to a GP, a Hitachi Industrial Equipment System's EH-RS05 conversion cable between the modular jack (8-pin) and the D sub-connector (15-pin) is required.

8 When using Serial Port 2, you will need to change the wiring depending on the baud rate.

When the baud rate is 4800bps or 9600bps, use Cable Diagram 1.

When the baud rate is 19200bps or 38400bps, use Cable Diagram 2.

Either wiring diagram can be used when using Serial Port 1.

* 9 Due to the size of its connector case, this cable cannot be used for GP-270, GP-370, GP-377, GP-377R, and GP-2300 series.*

10 The Controller's model number "□" will vary, depending on each controller's specifications.

■ HIDIC H Series/EH-SIO (using Link I/F)
Procedure 1 for transmission control
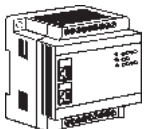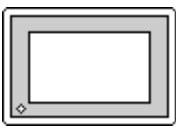
CPU [1]	Link I/F	Cable Diagram	Cable	GP
	Serial Communication module			
EH-CPU516 EH-CPU548	EH-SIO [2]	RS-232C <Cable Diagram6> [3]	Hitachi Industrial Equipment System's cable EH-RS05(0.5m) + WPCB02H(2m) or EH-RS05(0.5m) + User-created cable	GP/GLC Series
			Hitachi Industrial Equipment System's cable EH-RS05(0.5m) + WVCB02H(2m) or EH-RS05(0.5m) + User-created cable	ST401/ST403
		RS-422 <Cable Diagram7>		GP/GLC Series
				ST400/ST403

*1 The ROM versions of the connectable EH-CPU are as follows;
   EH-CPU516:Ver.E2.07 and more
   EH-CPU548:Ver.E4.06 and more*

*2 The versions of the connectable EH-SIO are as follows;
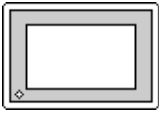   Function Software Version 2.0 and more*

3 If the CPU is connected to a GP, a Hitachi Industrial Equipment System's EH-RS05 conversion cable between the modular jack (8-pin) and the D sub-connector (15-pin) is required.

■ Web Controller

CPU	Cable Diagram	Cable	GP
EH-WD10DR	RS-232C <Cable Diagram6> [1]	Hitachi Industrial Equipment System's cable EH-RS05(0.5m) + WPCB02H(2m) or EH-RS05(0.5m) + User-created cable	GP/GLC Series
		Hitachi Industrial Equipment System's cable EH-RS05(0.5m) + WVCB02H(2m) or EH-RS05(0.5m) + User-created cable	ST401/ST403

1 If the CPU is connected to a GP, a Hitachi Industrial Equipment System's EH-RS05 conversion cable between the modular jack (8-pin) and the D sub-connector (15-pin) is required.

2 Cable Diagrams

The cable diagrams illustrated below and the cable diagrams recommended by Hitachi Industrial Equipment System Co., Ltd. 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. The following connection diagrams show examples for connecting a shielded cable to the PLC.**
- **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, refer to Hitachi Industrial Equipment System's PLC manual for the cable length.**

Cable Diagram 1 (RS-232C)
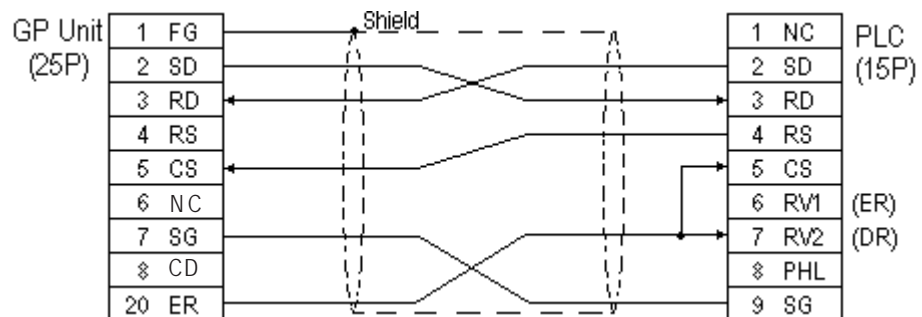
Note: When an error develops during communication, there may be a delay before the error message displays as the unit runs the retry process.

Careful! *In Procedure 1 for transmission control, when the GP and PLC program console (GPCL) are operated at the same time, a PLC COM ERROR: (02:37) on the GP and a CPU Hold Error may develop in the GPCL. In such cases, the GP automatically reverts to its normal state. Run the GPCL operation again.*

Cable Diagram 2 (RS-232C)
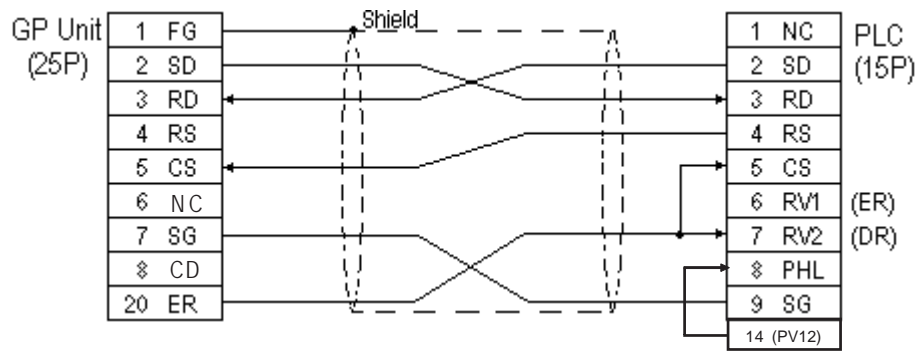
> **Note:** **When an error develops during communication, there may be a delay before the error message displays, as the unit runs the *retry* process.**

> **Careful!** *In Procedure 1 for transmission control, when the GP and PLC program console (GPCL) are operated at the same time, a PLC COM ERROR: (02:37) on the GP and a CPU Hold Error may develop in the GPCL. In such cases, the GP automatically reverts to its normal state. Run the GPCL operation again.*

Cable Diagram 3 (RS-422)

• When using Digital's RS-422 connector terminal GP070-CN10-0 adapter
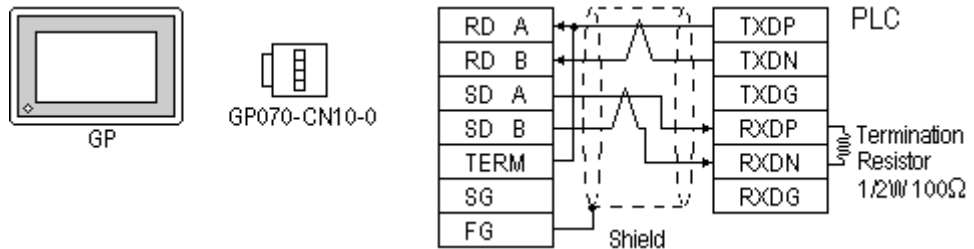
• When using Digital's RS-422 Cable, GP230-IS11-0
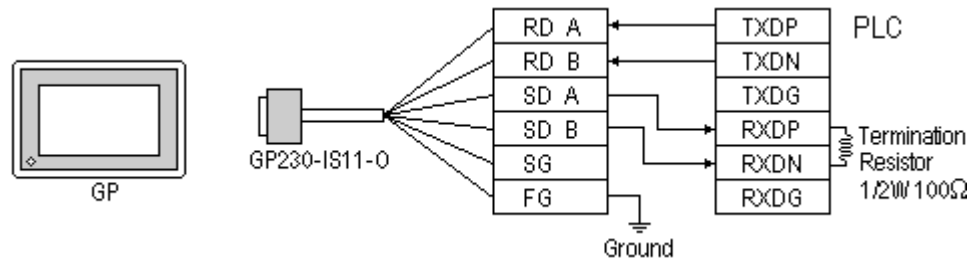
• When making your own cable connections
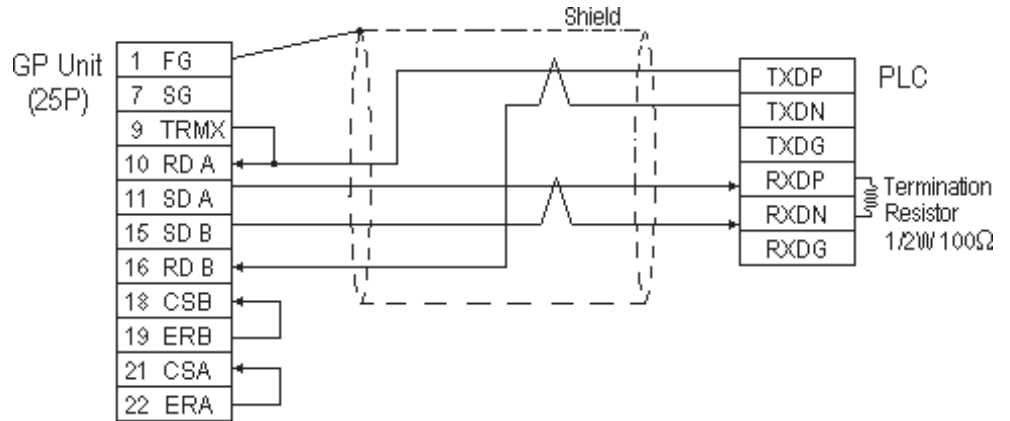
Note: **When an error develops during communication, there may be a delay before the error message displays, as the unit runs the *retry* process.**

Careful! *When the GP and PLC program consoles (GPCL) are operated at the same time, a PLC COM ERROR: (02:37) on the GP and a CPU Hold Error may develop in the GPCL. In such cases, the GP automatically reverts to its normal state. Run the GPCL operation again.*

Note: • **When making your own connections, we recommend using Hitachi Densen's KPEV-SB-3P0.5mm² 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.**

Cable Diagram 4 (RS-422, 4-wire)

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

• When making your own cable connections

GP
(25P Male)

1 FG	
7 SG	
9 TRMX	
10 RDA	
11 SDA	
15 SDB	
16 RDB	
18 CSB	
19 ERB	
21 CSA	
22 ERA	

PLC
(15P Male)

9 SG
7 RX
3 RXN
14 TX
2 TXN

Shield
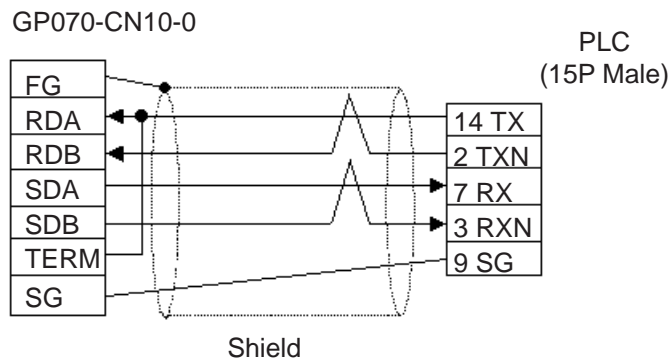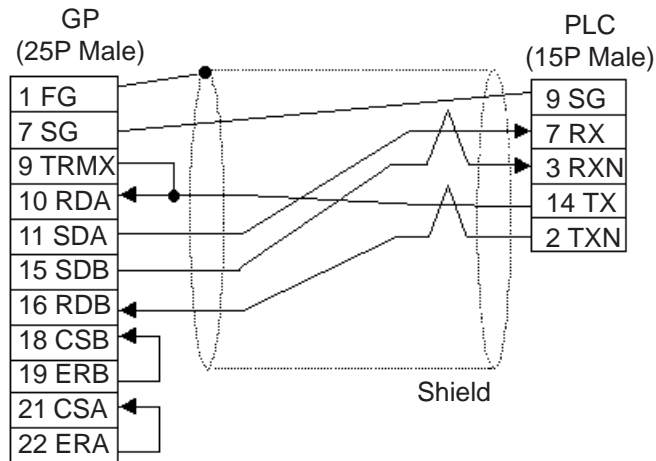
Note: **Contact Hitachi Industrial Equipment System Co., ltd. for enquiries regarding termination resistance.**

Cable Diagram 5 (RS-422, 4-wire)

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

GP
GP070-CN10-0
(25P Male)

RDA
RDB
SDA
SDB
TERM
SG
FG

Termination Resistor
1/2W 100Ω

PLC
(15P Male)

13 SDP
12 SDN
11 RDP
10 RDN
7 SG
9 RT
14 RSP
15 CSN

Shield

• When making your own cable connections

GP
(25P Male)

1 FG
7 SG
9 TRMX
10 RDA
11 SDA
15 SDB
16 RDB
18 CSB
19 ERB
21 CSA
22 ERA

Termination Resistor
1/2W 100Ω

PLC
(15P Male)

7 SG
9 RT
10 RDN
11 RDP
12 SDN
13 SDP
14 RSP
15 CSN

Shield
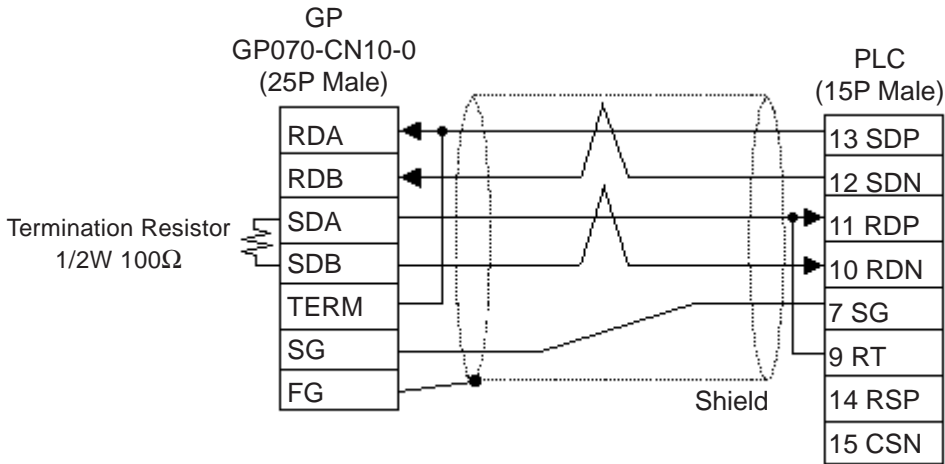
Note: **Short-circuiting pin Nos. 9 and 10 on the PLC provides a termination resistance of 120Ω**

Cable Diagram 6 (RS-232C)

> *Note:* **When using the serial port 2A, turn OFF the Bit8 of the DIPSW2 of the EH-SIO.**

GP/GLC Series

•When using Hitachi Industrial Equipment System's cable WPCB02H and EH-RS05.
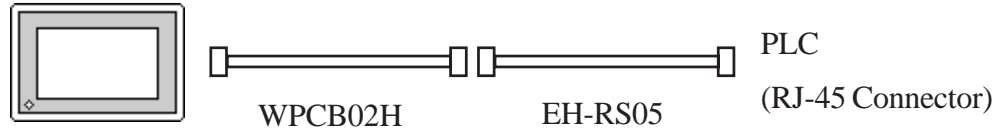
PLC

WPCB02H   EH-RS05   (RJ-45 Connector)

• When using Hitachi Industrial Equipment System's cable EH-RS05 and making your own cable connections

Shield

GP (25P male)		EH-RS05 (15P male)	PLC
2 SD	2 RD		
3 RD	3 SD		(RJ-45 Connector)
5 CS	4 CS	EH-RS05	
7 SG	9 SG		
20 ER	7 ER		
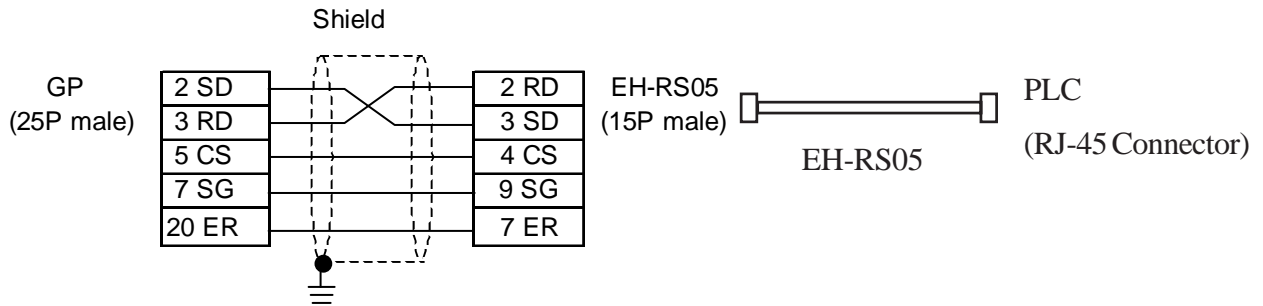
ST401/ST403

•When using Hitachi Industrial Equipment System's cable WVCB02H and EH-RS05.
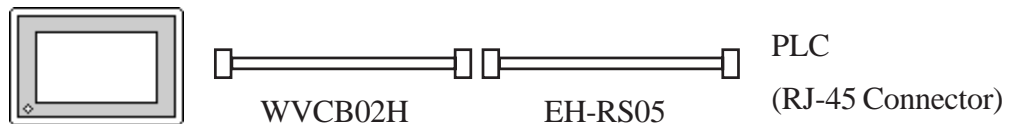
PLC

WVCB02H   EH-RS05   (RJ-45 Connector)

• When using Hitachi Industrial Equipment System's cable EH-RS05 and making your own cable connections

Shield

ST (9P female)		EH-RS05 (15P male)	PLC
2 SD	2 RD		
3 RD	3 SD		(RJ-45 Connector)
5 CS	4 CS	EH-RS05	
7 SG	9 SG		
20 ER	7 ER		
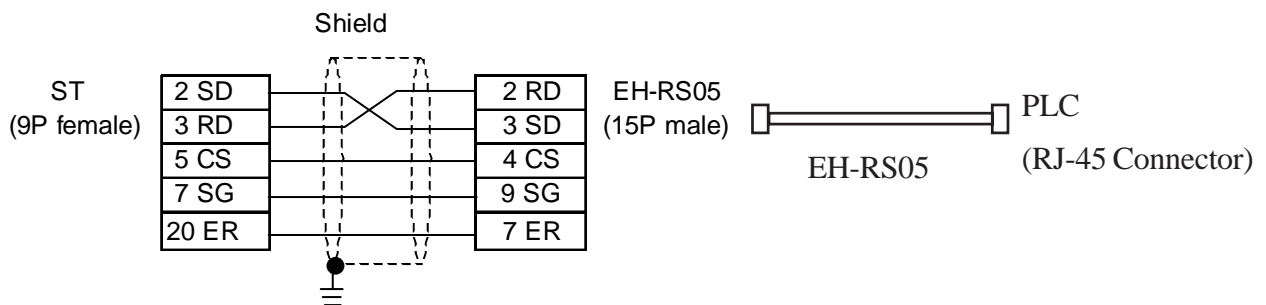
Cable Diagram 7 (RS-422)

📝 *Note:* **When using the serial port 2B, turn ON the Bit8 of the DIPSW2 of the EH-SIO.**

GP/GLC Series
•When using Digital's RS-422 connector terminal GP070-CN10-0 adapter

GP070-CN10-0		Shield		PLC RS-422 Port
TERM				
RDA			SDA	
RDB			SDB	
SDA			RDA	
SDB			RDB	
SG			TERM	
			SG	

• When making your own cable connections

GP
(25P male)

	Shield		PLC RS-422Port
9 TERM			
10 RDA		SDA	
16 RDB		SDB	
11 SDA		RDA	
15 SDB		RDB	
7 SG		SG	
18 CSB		TERM	
19 ERB			
21 CSA			
22 ERA			
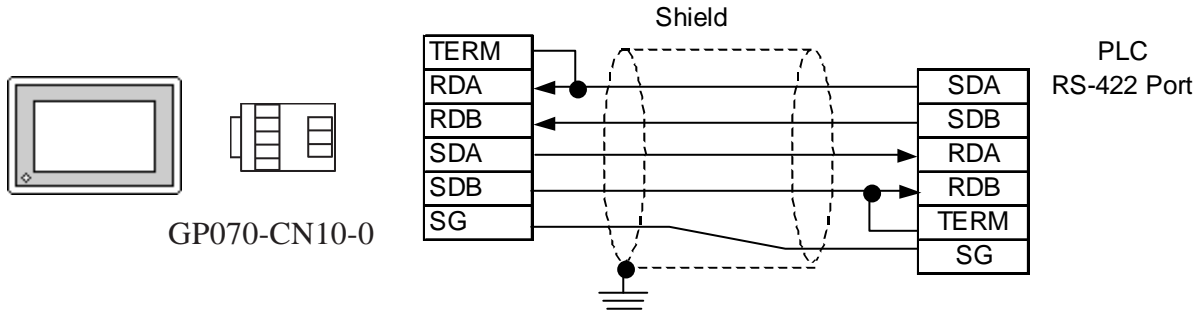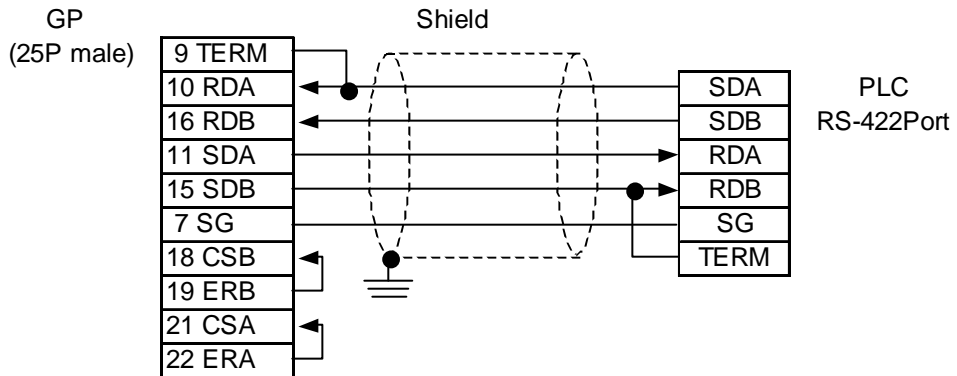
ST400/ST403
• When making your own cable connections

ST
(9P female)

	Shield		PLC RS-422 Port
Connector Shell			
1 RDA		SDA	
2 RDB		SDB	
3 SDA		RDA	
7 SDB		RDB	
5 SG		SG	
6 CSB		TERM	
9 ERB			
8 CSA			
4 ERA			
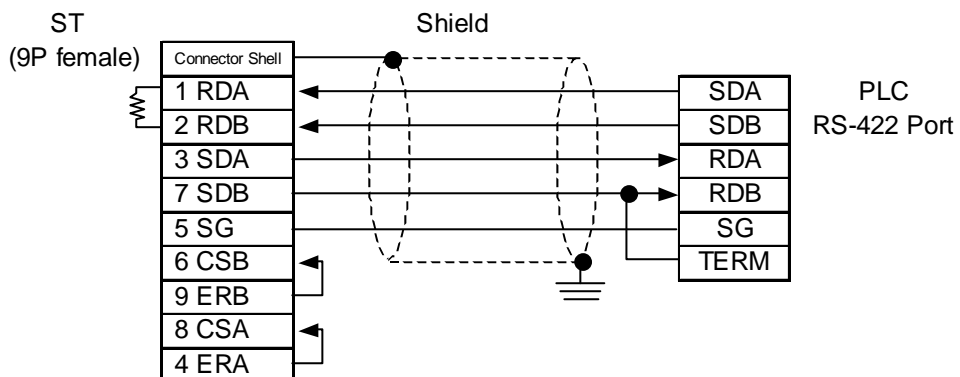
3   Supported Devices

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

■ HIDIC H (HIZAC H) Series

[▭] Setup System Area here.

Device	Bit Address	Word Address	Particulars	
External Input	X00000 ~ X05A95	WX0000 ~ WX05A7	*1	
External Output	Y00000 ~ Y05A95	WY0000 ~ WY05A7	*1	
Remote Input Relay	X10000 ~ X49995	WX1000 ~ WX4997	*2	
Remote Output Relay	Y10000 ~ Y49995	WY1000 ~ WY4997	*2	
Internal Output	R000 ~ R7BF	---		
Special Internal Output	R7C0 ~ R7FF	---		
CPU Link Area 1	L0000 ~ L3FFF	WL000 ~ WL3FF		
CPU Link Area 2	L10000 ~ L13FFF	WL1000 ~ WL13FF		
Data Area	M0000 ~ M3FFF	WM000 ~ WM3FF		
On-Delay Timer	TD000 ~ TD1023	---		
Extended Timer	TM0000 ~ TM2047	---		
Single Shot Timer	SS000 ~ SS1023	---		L/H
Watch Dog Timer	WDT000 ~ WDT1023	---		
Monostable Timer	MS000 ~ MS1023	---		
Accumulation Timer	TMR000 ~ TMR1023	---		
Up Counter	CU000 ~ CU2047	---		
Ring Counter	RCU000 ~ RCU2047	---		
Up/Down Counter	CT000 ~ CT2047	---		
Timer/Counter (Elapsed Value)	---	TC000 ~ TC2047		
Extended Timer (Elapsed Value)	---	TV0000 ~ TV2047		
Word Internal Output	---	WR0000 ~ WRC3FF	Bit ⌐	
Word Special Internal Output	---	WRF000 ~ WRF1FF	Bit ⌐	
Network Link Area	---	WN0000~WN7FFF		

*1   Write your data as follows.

E.g.   *External Input* unit No. 1, Slot No. 2, Module Bit No. 34

X   0   1   2   3 4
└─ Module Bit No.
└─ Slot No.
└─ Unit No.
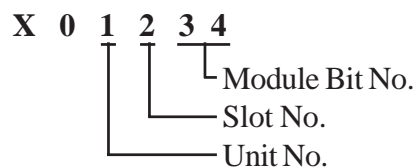
E.g.   *External Input* unit No. 1, Slot No. 2, Module Word No. 3.

W X 0   1   2   3
└─ Module Word No.
└─ Slot No.
└─ Unit No.
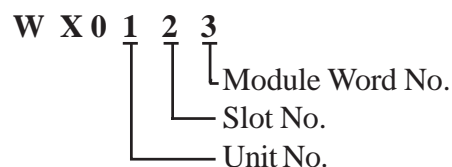
2 Write your data as follows.

E.g.   *Remote Input* Remote Master No. 1, Remote Slave No. 2, Slot No. 3, Module Bit No. 45

X   1   2   3   4 5

                  Module Bit No.(0 to 95)
                Slot No.(1 to 9)
            Remote Slave No.(0 to 9)
        Remote Master No.(1 to 4)
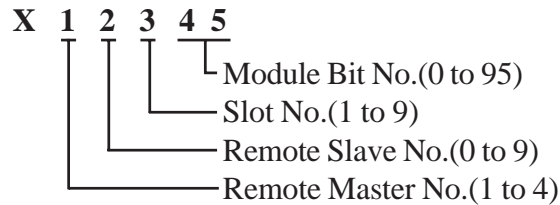
E.g.   *External Input* Remote Master No. 1, Remote Slave No. 2, Slot No. 3, Module Word No. 4.

W   X 1   2   3   4

                Module Word No.(0 to 7)
            Slot No.(1 to 9)
          Remote Slave No.(0 to 9)
        Remote Master No.(1 to 4)

⚠ Important
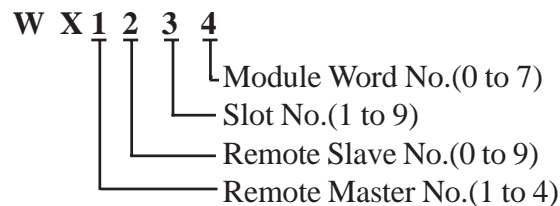
If the first CPU link (L0000 to L3FFF) and the second CPU link (L10000 to L13FFF) are used with any GP-PRO/PB III for Windows drawing software which is Ver. 1.0 or earlier, enter L00000 to L03FFF for the first CPU link; and enter L100000 to L103FFF for the second CPU link by adding a zero to each one.

If GP-PRO/PB III for Windows Ver. 2.0 or later is used, enter the addresses shown in the previous page's table.

If you upgrade your GP-PRO/PB III for Windows Ver. 1.0 or earlier to Ver. 2.0 or later, your internal data will not be affected. Only the addresses to be entered are different.

The device type, the applicable range, and the ability or disability of writing may be different depending upon your CPU. Check with the manual for your CPU before use.

■ Web Controller

☐ Setup System Area here.

Device	Bit Address	Word Address	Particulars	
External Input	X00000~X00005	WX0000~WX0000	*1*2*3	
External Output	Y00100~Y00103	WY0010~WY0010	*1*3	
Internal Output	R000~R7BF	———		
Bit Special Internal Output	R7C0~R7FF	———		
Word Internal Output	———	WR0000~WR3FFF	Bit 15	
Word Special Internal Output	———	WRF000~WRF1FF	Bit 15	
Bit/Word Common Internal Output	M0000~M3FFF	WM000~WM3FF		L/H
On-Delay Timer	TD000~TD255	———		
Single Shot Timer	SS000~SS255	———		
Up Counter	CU000~CU255	———		
Up/Down Counter	CT000~CT255	———		
Timer/Counter (Elapsed Value)	———	TC000~TC255		

*1 *Device address designation (External input/output).*

> Bit: Xusb *u: Unit No. (0 to 4)*
>
>   Yusb *s: Slot No. (0 to A)*
>
>   *b: Bit No. in the unit (0 to 63)*
>
> Word WXusw *u: Unit No. (0 to 4)*
>
>   WYusw *s: Slot No. (0 to A)*
>
>   *w: Word No. in the unit (0 to 7)*

*2 *Not available for writes.*

*3 *For X/Y device, this range is applicable when the max I/O allocation is designated. For the setting method, refer to the manual of the controller.*

4   Environment Setup

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

■ HIDIC H Series (using COMM module)
Procedure 1 for transmission control

GP Setup		COMM Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	7 bits	Data Bit	7 bits
Stop Bit	1 bit	Stop Bit	1 bit
Parity Bit	Even	Parity Bit	Even
Data Flow Control	ER Control	———	
Communication Format (RS-232C)	RS-232C	Communication Format (RS-232C)	RS-232C
Communication Format (RS-422)	4-wire type	Communication Format (RS-422) Mode Switch	RS-422 2
———		Sum Check	Yes
Unit No. (RS-232C)	0	Station No. (RS-232C)	0
Unit No. (RS-422)	1	Station No. (RS-422)	1

■ HIDIC-H Series/COMM-2H
Procedure 2 for transmission control

GP Setup		COMM Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	7 bits	Data Bit	7 bits
Stop Bit	1 bit	Stop Bit	1 bit
Parity Bit	Even	Parity Bit	Even
Data Flow Control	ER Control	———	
Communication Format (RS-232C)	RS-232C	Communication Format (RS-232C) Mode Switch	RS-232C 9
Communication Format (RS-422)	4-wire type	Communication Format (RS-422) Mode Switch	RS-422 9
———		Sum Check	Yes
Unit No. (RS-232C)	0	Station No. (RS-232C)	0
Unit No. (RS-422)	1	Station No. (RS-422)	1

■ **HIDIC-H Series** (CPU Direct Connection)

GP Setup		PLC Setup	
Baud Rate	4800 bps [*1]	Baud Rate	4800 bps [*1]
Data Length	7 bits	Data Bit	7 bits
Stop Bit	1 bit	Stop Bit	1 bit
Parity Bit	Even	Parity Bit	Even
Data Flow Control	ER Control	Data Flow Control	DTR Control
Communication Format	RS-232C	Communication Format	RS-232C
		Operation Mode	Transmission Control Procedure 1
Unit No.	0	Station No.	0

*1 With some CPUs, a baud rate of 19200bps or 38400bps can be used. Refer to"**2.5.1 System Structure**" for details.*

■ **HIDIC EH150 Series**

GP Settings		PLC Settings	
Baud Rate	19200 bps	Baud Rate [*1]	19200 bps
Data Length	7 bits	Data Bit	7 bits
Stop Bit	1 bit	Stop Bit	1 bit
Parity Bit	Even	Parity Bit	Even
Data Flow Control	ER Control	-	
Communication Format	RS-232C or 4-wire type [*4]	Mode Setting Switch	SW1:OFF (Normal mode)
			SW5:ON (Exclusive mode)
			SW7:OFF (Normal Operation mode)
			SW8:OFF (Normal Operation mode)
		Port ON/OFF Switch	ON (Programer Connection)
		Exclusive Port Setting [*2]	Special Internal Output WRF037 [*3]
Unit No.	0	-	

1 Set the Mode Setting Switch. (SW3, 4 : Port 1, SW6 : Port 2)
   When using Port 2, the cable diagram needs to be changed.

   ▼**Reference**▲ *refer to 2.5.1 System Structure*

2 Set when using EH-CPU448.

3 Depending on your Interface and Procedure, varies as shown below.
   RS-232C Procedure 1 : 8000H
   RS-232C Procedure 2 : C000H
   RS-422 Procedure 1 with unit No. : A1xxH (xx indicates GP's Unit No.)
   RS-422 Procedure 2 with unit No. : E1xxH (xx indicates GP's Unit No.)

4 Only EH-CPU448's serial port1 can be set.

■ MICRO-EH Series

GP Setup		PLC Setup	
Baud Rate	9600 bps	Baud Rate	19200 bps
Data Length	7 bits (fixed)	———	———
Stop Bit	1 bit (fixed)	———	———
Parity Bit	Even (fixed)	———	———
Data Flow Control	ER Control	———	———
Communication Format	RS-232C, 4-wire	———	———
Unit No.	0	———	———
———	———	Port 1 Setup	Special Internal Output Set to WRF01A [*1]
		Port 2 Setup	Special Internal Output Set to WRF03D [*2]

*1 Transmission Control Procedure 1: 000H
  Transmission Control Procedure 2: 8000H

*2 Transmission Control Procedure 1 (with Station Number) (192000 bps): A200H
  Transmission Control Procedure 2 (with Station Number) (192000 bps): E200H

■ HIDIC H Series / EH-SIO

Procedure 1 for transmission control

GP Settings		PLC Settings	
Baud Rate	19200 bps	Baud Rate [*1]	19200 bps
Data Length	7 bits	Data Length [*1]	7 bits
Stop Bit	1 bit	Stop Bit [*1]	1 bit
Parity Bit	Even	Parity Bit [*1]	Even
Flow Control	ER Control	———	
Communication Format (RS-232C)	RS-232C	TRANS 9 [*2]	WYus4 [*3]
Communication Format (RS-422)	4-wire type	TRANS 9 [*2]	WYus5 [*3]
———		Task Code [*2]	with Station No. (used to RS-422)
			None (Used to RS-232C)
Unit No.	0	Station No. [*2]	0
———		Communication Mode [*2]	Hi-Protocol
———		Memory cassette / Ladder allocation	RAM-48H
———		I/O allocation (Unit 0/Slot 0)	Word 4W / 4W

*1 Set by a dip switch. For the details, refer to the EH-SIO Manual.
*2 Necessary to be set with the [TRANS9] command in the ladder program. For
  the details, refer to the EH-SIO Manual.
*3 The contents that each mark means are as follows;(For the details, refer to
  the EH-SIO Manual.
  u: Unit No., s: Slot No., 4: Port 1 Set, 5: Port 2 Set

◆ **Serial Communication Module EH-SIO**

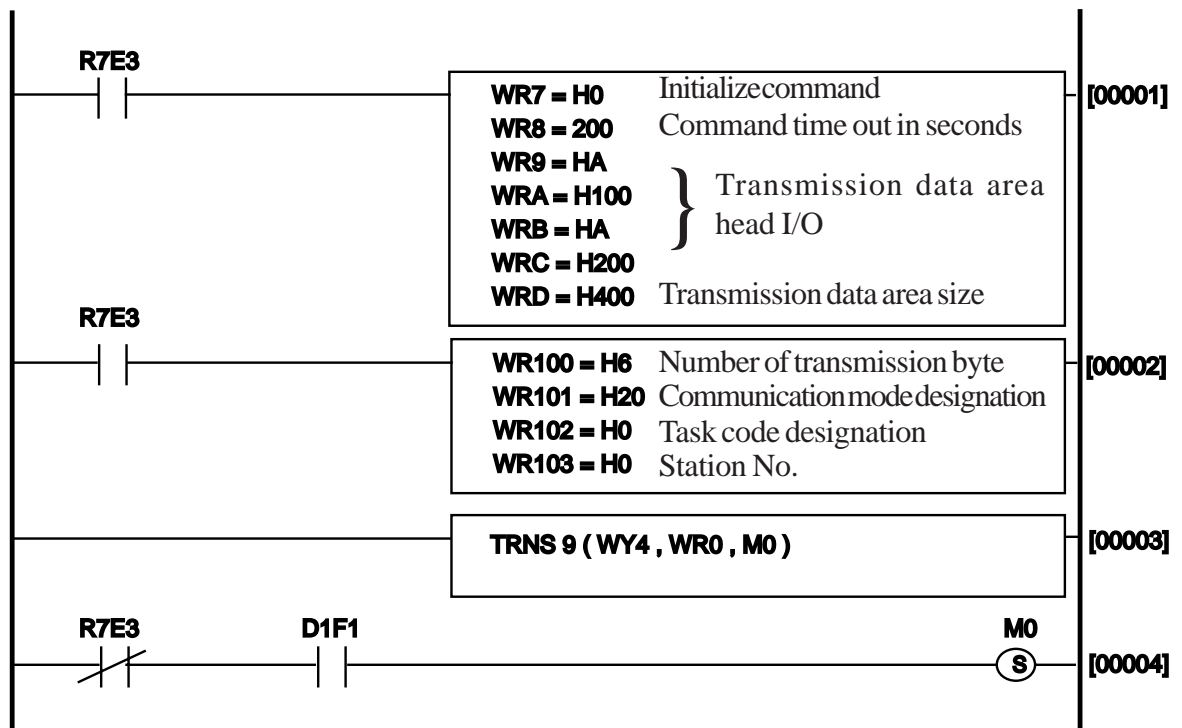The PLC's ladder program is required for the GP's communicating with the EH-SIO.

Note: **For the detailed settings, refer to the manual of the EH-SIO or the ladder software.**

The sample ladder will be shown below.

[PLC Settings]

Module Slot No.   :0

Unit No.   :0

Port 1 is specified

Station No.   :0

Task Code   :None

Communication Mode :Hi-Protocol

[Sample Ladder Program]

```
     R7E3
     ┤├─────────────────────┐   WR7 = H0    Initialize command            [00001]
                             │   WR8 = 200   Command time out in seconds
                             │   WR9 = HA
                             │   WRA = H100  }  Transmission data area
                             │   WRB = HA       head I/O
                             │   WRC = H200
                             │   WRD = H400  Transmission data area size

     R7E3
     ┤├─────────────────────┐   WR100 = H6    Number of transmission byte     [00002]
                             │   WR101 = H20   Communication mode designation
                             │   WR102 = H0    Task code designation
                             │   WR103 = H0    Station No.

     ──────────────────────────  TRNS 9 ( WY4 , WR0 , M0 )                     [00003]

     R7E3        D1F1                                                  M0
     ─┤/├─────────┤├──────────────────────────────────────────────────(S)──   [00004]
```

■ **Web Controller**

GP Settings		PLC Settings	
Transmission Speed	19200 bps	Transmission Speed	19.2 kbps
Data Length	7 bits	———	
Stop Bit	1 bit	———	
Parity Bit	even	———	
Flow Control	ER Control	———	
Serial Interface	RS-232C	———	
———		Protocol	Passive HIProtocol
———		Transmission Control Procedure	Procedure1 1:1