



# 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.

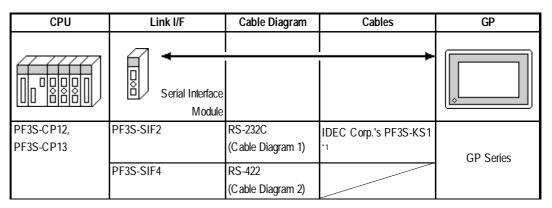
# 2.15 IDEC

# 2.15.1 System Structure

The following describes the system structure for connecting the GP to IDEC PLCs.

**The Cable Diagrams** mentioned in the following tables are listed in the section titled "2.15.2 Cable Diagrams".

# **■ FA Series** (using Link I/F)



<sup>\*1</sup> Due to the size of its connector, this cable cannot be used for GP-270, GP-370, GP-377, GP-377R and GP-2300 series.



• After powering up, it takes about 1 second to enter RUN mode when the *memory pack* capacity of the PF3S-SIF2(4) is 1K *step*, and it takes about 4 seconds when the memory pack capacity is 4K step. As a result, the GP Start Time setup needs to be set for these situations.

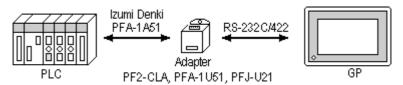
**Reference** About the GP Start Time setup, refer to each GP Series User Manual, "System Environment Setup"

• Wherever RS-422 appears, RS-485 can be substituted on the PLC.

#### Adapter \*2 CPU<sup>\*1</sup> Cable Diagram Cables GP PF2-CPU1, PF2-CLA RS-232C IDEC Corp.'s PFA-1A52 PF2-CPU5M. PFA-1U51 (Cable Diagram 3) shaped computer cable PF2J-CPU1, **GP** Series PF3S-CP11, PFJ-U21 RS-422 PF3S-CP12, (Cable Diagram 4) PF3S-CP13

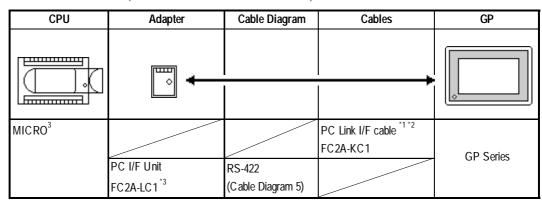
## ■ FA Series (CPU Direct Connection)

<sup>\*2</sup> It is necessary to connect the programming loader port and the adapter with Izumi PFA link cable PFA-1A51(30cm). Diagram below



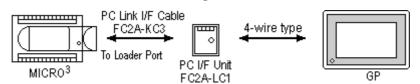
<sup>\*3</sup> Due to the size of its connector size, this cable cannot be used for GP-270, GP-370, GP-377 and GP-377R series.

## ■ MICRO³ (CPU Direct Connection)



<sup>\*1</sup> Use Izumi exclusive PC interface cable as the communication cable.

<sup>\*3</sup> Izumi PC Link I/F cable—FC2A-KC3—is necessary when connecting the PC I/F Unit—FC2A-LC1—and the PLC. Diagram below





Places noted as RS-422 can also use RS-485 on the PLC side.

<sup>\*1</sup> Connect to the programming loader port.

<sup>\*2</sup> When using the PC I/F cable FC2A-KC1, the GP side becomes RS-232C SIO.

#### CPU Link I/F Cables Cable Diagram GP/GLC Port 1 on CPU module **IDEC** Corporation FC4A-C10R2B RS-232C FC2A-KP1C (2.4m) \*2 FC4A-C16R2B <Cable Diagram 6> FC4A-PC1 FC4A-C24R2B RS-232C FC4A-KC2C (5m) \*3 (Mini DIN type)<sup>\*1</sup> <Cable Diagram 7> GP or FC4A-PC3 RS-422 **GLC Series** <Cable Diagram 8> (Terminal type)\*1 FC4A-PC2 RS-422 IDEC Corporation HG9Z-XC135 (Mini DIN type)\*1 <Cable Diagram 9>

# **■ MICROSmart FC4A Series (All-In-One Type)**

# **■ MICROSmart FC4A Series (Slim Type)**

CPU	Link I/F	Cable Diagram	Cables	GP/GLC
	<b>4</b>		<u> </u>	
FC4A-D20K3	Port 1 on CPU module	RS-232C	IDEC Corporation	
FC4A-D20S3		<cable 6="" diagram=""></cable>	FC2A-KP1C (2.4m) *2	
FC4A-D20RK1	FC4A-PC1	RS-232C	FC4A-KP2C (5m) *3	
FC4A-D20RS1	(Mini DIN type)*4	<cable 7="" diagram=""></cable>	` ′	
FC4A-D40K3	FC4A-PC3	RS-422		
FC4A-D40S3	(Terminal type)*4	<cable 8="" diagram=""></cable>		
	FC4A-PC2	RS-422	IDEC Corporation	CD
	(Mini DIN type)*4	<cable 9="" diagram=""></cable>	HG9Z-XC135	GP or GLC Series
	FC4A-HPC1	RS-232C	IDEC Corporation	GLC Series
	(Mini DIN Type) *1	<cable 7="" diagram=""></cable>	FC2A-KP1C (2.4 m) *2	
			FC4A-KP2C (5 m) *3	
	FC4A-HPC2	RS-422		
	(Terminal Type) *1	<cable 8="" diagram=""></cable>		
	FC4A-HPC3	RS-422	IDEC Corporation	
	(Mini DIN Type) *1	<cable 9="" diagram=""></cable>	HG9Z-XC135	

<sup>\*1.</sup> Connect to Port 2 Connector.

<sup>\*1</sup> Connect to Port 2 Connector.

<sup>\*2</sup> The connector for the GP unit must be created.

<sup>\*3</sup> This cable has the connector for the GP unit.

<sup>\*2.</sup> The connector for the GP unit must be created.

<sup>\*3.</sup> The connector for the GP unit will not need to be created.

<sup>\*4.</sup> The HMI base module (model FC4A-HPH1) is required.

# **■**OpenNet Controller FC3 Series

CPU	Link I/F	Cable Diagram	Cables	GP/GLC
	*		<u> </u>	
FC3A-CP2K FC3A-CP2S	RS-232C Port 1 on CPU module RS-232C Port 2 on CPU module	RS-232C <cable 7="" diagram=""></cable>	IDEC Corporation HG9Z-XCM12 (2m) FC2A-KP1C (2.4m) *1 FC4A-KC2C (5m) *2	GP or GLC Series
	RS-485 Port on CPU module	RS-422 <cable 10="" diagram=""></cable>		

<sup>\*1</sup> The connector for the GP unit must be created.

<sup>\*2</sup> This cable has the connector for the GP unit.

# 2.15.2

# **Cable Diagrams**

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



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

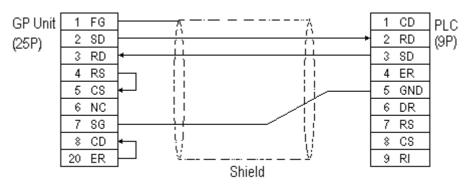


- Connect the FG line of the Shield cable to either the GP or PLC, depending on your environment settings. When using a connector hood and grounding the FG line, be sure to use an electrical conductor.
- If a communications cable is used, it must be connected to the SG (signal ground).

Cable Diagram 1 (RS-232C)

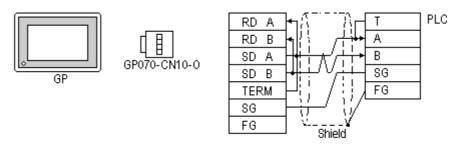


• Be sure the RS-232C cable length is 15m or less.

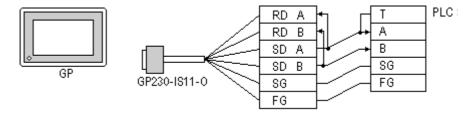


#### Cable Diagram 2 (RS-422)

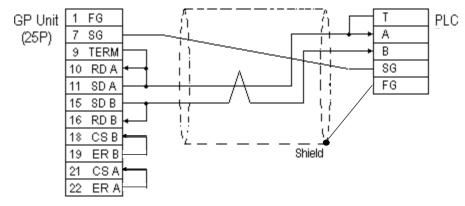
• When using Digital's RS-422 connector terminal adapter, GP070-CN



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



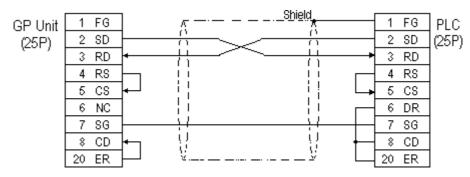
• When making your own cable connections





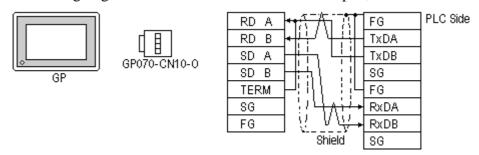
- When making your own connections, we recommend using Hitachi Densen's CO-SPEV-SB(A)3P\*0.5SQ twist pair cable.
- When connecting the #9 and #10 pins in the GP Serial I/F, a termination resistance of  $100\Omega$  is added between RDA and RDB.
- For the RS-422 connection, refer to IDEC's PLC manual for the cable length.

# Cable Diagram 3 (RS-232C)

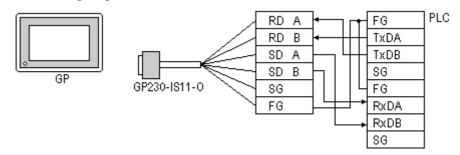


## Cable Diagram 4 (RS-422)

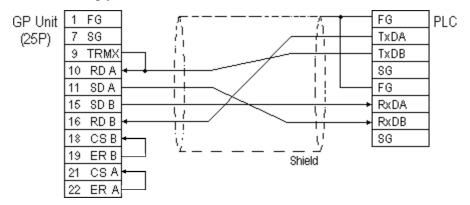
• When using Digital's RS-422 connector terminal adapter, GP070-CN10-0



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



• When making your own cable connections



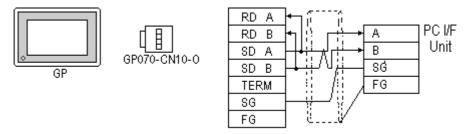


When connecting the #9 and #10 pins in the GP Serial I/F, a termination resistance of  $100\Omega$  is added between RDA and RDB.

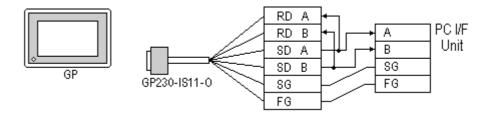
• For the RS-422 connection, refer to IDEC's PLC manual for the cable length.

## Cable Diagram 5 (RS-422)

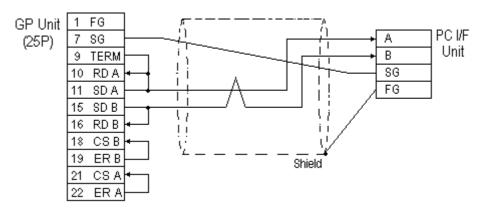
• When using Digital's RS-422 connector terminal adapter, GP070-CN10-0



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



• When making your own cable connections





- When connecting the #9 and #10 pins in the GP Serial I/F, a termination resistance of  $100\Omega$  is added between RDA and RDB.
- For the RS-422 connection, refer to IDEC's PLC manual for the cable length.

## Cable Diagram 6 (RS-232C)



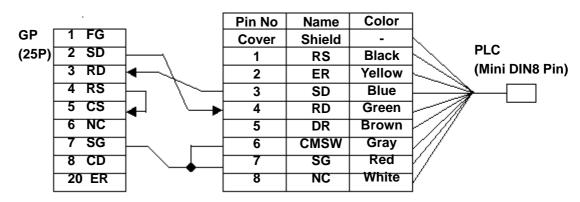
- For RS-232C communication format, use IDEC Corporation Communication Cable.
- When connecting the cable more than 5m, use RS-422 communication format.

**▼Reference ▲** *Cable Diagram 8.* 

• Using IDEC Corporation Communication Cable (model:FC2A-KP1C)> The GP's Dsub 25-pin connector must be created by the user. Be sure to make your own cable as shown below.



**Dsub25-pin Connector (male)** 



## Cable Diagram 7 (RS-232C)



- For RS-232C communication format, use IDEC Corporation Communication Cable.
- When connecting the cable more than 5m, use RS-422 communication format.

**TReference** 

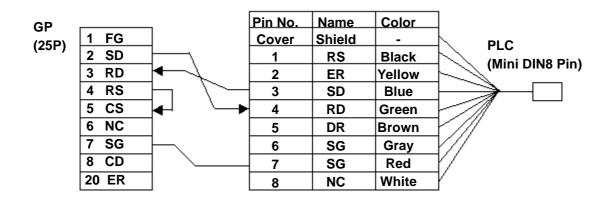
Cable Diagram 8 for MICROSmart FC4A Series, or Cable Diagram 10 for OpenNet Controller FC3 Series.

• Using IDEC Corporation Communication Cable (model:FC2A-KP1C)

The GP's Dsub 25-pin connector must be created by the user. Be sure to make your own cable as shown below.



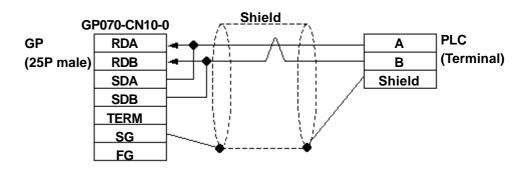
**Dsub25-pin Connector (male)** 



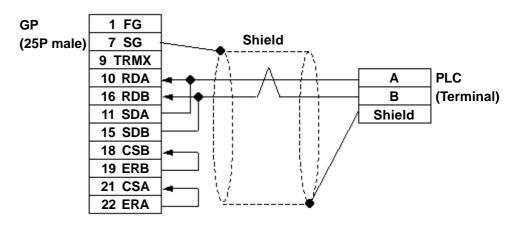
Cable Diagram 8 (RS-422, 2-wire type)



- Use the following cable for the MICROSmart RS-485 Communication Board FC4A-PC3 (Terminal type):
  - Coaxial Twisted pair wire
- All RS-422 cables should be no more than 200 meters long.
- When using RS-422 communication format, be sure not to connect the termination resistance. If you do, the GP will not work properly.
- Using Pro-face RS-422 connector terminal adaptor GP070-CN10-0



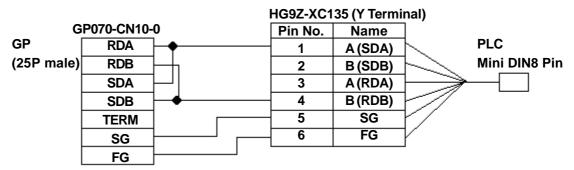
• When making your own cables



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



- When using RS-422 communication format, be sure not to connect the termination resistance. If you do, the GP will not work properly.
- Using IDEC Corporation cable HG9Z-XC135



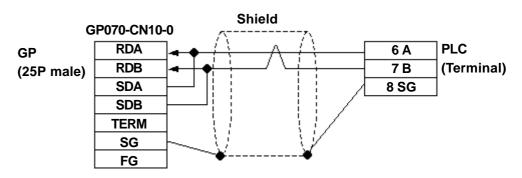


- The PLC side connector's No. 1 and No. 3 pins, and No. 2 and No. 4 pins, respectively, are connected internally.
- Since the HG9Z-XC135 cable's No. 2 and No. 3 terminals cannot be used, be sure to wrap them with insulating tape.

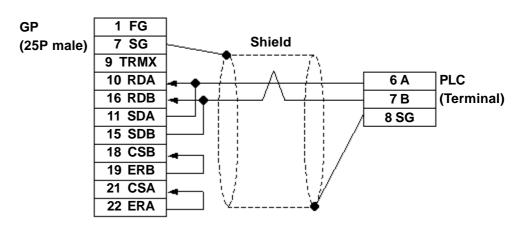
Cable Diagram 10 (RS-422, 2-wire type)



- Recommended cable for OpenNet Controller RS-485 Port: Twisted pair wire with f 0.9 Shield
- All RS-422 cables should be no more than 200 meters long.
- When using RS-422 communication format, be sure not to connect the termination resistance. If you do, the GP will not work properly.
- Using Pro-face RS-422 connector terminal adaptor GP070-CN10-0



• When making your own cable



# 2.15.3 Supported Devices

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

## **■ FA Series**

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input Relay	X000 ~ X637	WX00 ~ WX63	<u>:2</u>	
Output Relay	Y000 ~ Y637	WY000 ~ WY63	:27	
Internal Relay	M000 ~ M2557	WM000 ~ WM255	<u> </u>	
Shift Register	R000 ~ R223	WR000 ~ WR223	<u> </u>	
Timer (contact)	T000 ~ T255		*1	
Timer 10msec (contact)	H000 ~ H079		*1	
Counter (contact)	C000 ~ C255		*1	
Timer (setup value)		TS000 ~ TS255		L/H
Timer (current value)		T000 ~ T255	*1	
Timer 10msec (current value)		H000 ~ H079	*1	
Counter (setup value)		CS000 ~ CS255		
Counter (current value)		C000 ~ C255	*1	
Data Register		D0000 ~ D2989	Bit 1 5 1	
Control Register		D3000 ~ D3071	Bit 151	

<sup>\*1</sup> Cannot perform data write.



Enter Decimal Octal bit address input for the Input Relay, Output Relay, and the Internal Relay.

## ■ MICRO<sup>3</sup>

Setup System Area here.

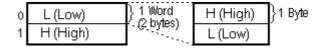
Device	Bit Address	Word Address	Particulars	
Input Relay	x00000 ~ x0037	X0000 ~ X0002	<u>÷2</u>	
Output Relay	y00000 ~ y0037	Y0000 ~ Y0002	<u>÷</u> 2⊃	
Internal Relay	m00000 ~ m0277	M0000 ~ M0026	<u>:2</u>	
Shift Register	r0000 ~ r0063	R0000 ~ R0048	<u>÷16</u>	
Timer (contact)	T0000 ~ T0031		*1*2	
Counter (contact)	C 0000 ~ C 0031		*1*2	L/H
Timer (setup value)		T0000 ~ T0031	*2	
Timer (elapsed time)		t0000 ~ t0031	*2	
Counter (setup value)		C0000 ~ C0031	*2	
Counter (elapsed value)		c0000 ~ c0031	*2	
Data Register		D0000 ~ D0099	Bit 1 51	

<sup>\*1</sup> Cannot perform data write.

<sup>\*2</sup> The combined total of timers and counters can be up to 32.

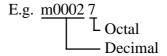


- The Input/Output Relay range depends on the basic unit's Input/Output number.
- The address' High/Low relationship is as follows:





Enter Decimal Octal bit address input for the Input Relay, Output Relay, and the Internal Relay.



## **■ MICROSmart FC4A Series**

	Setup System	Area	here
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Device	Bit Address	Word Address	Other	
Input	X0000 ~ X0307	X000 ~ X030	÷2¬ ′¹	
Output	Y0000 ~ Y0307	Y000 ~ Y030	÷2¬	
Internal Relay	M0000 ~ M1277	M000 ~ M126	<u>÷2</u>	
Special Internal Relay	M8000 ~ M8157	M800 ~ M814	<u>÷</u> 2¬	
Shift Register	R0000 ~ R0127	R0000 ~ R0112	<u>:16</u>	
Timer (contact value)	T0000 ~ T0099		*1 *2	
Counter (contact value)	C0000 ~ C0099		*1*2	L/H
Timer (setup value)		T0000 ~ T0099	1	L/П
Timer (elapsed value)		t0000 ~ t0099		
Counter (setup value)		C0000 ~ C0099		
Counter (elapsed value)		c0000 ~ c0099		
Data Register		D0000 ~ D1299	Bit 1 5 1	
Special Data Register		D8000 ~ D8199	Bit 1 5 1	
Extended Data Register		D2000 ~ D7999	Bit 1 51 *4	
Enter Timer/Counter setup value		Q0 *3	-	

<sup>\*1</sup> Data Write is not possible.

<sup>\*2</sup> When writing to this device, the "Host Communication Error (02:FB)" will appear.

<sup>\*3</sup> Q0 is a virtual device. This is the only device used to write Timer/Counter setup values to Non-volatile Memory. When data is written to this address, new Timer/Counter setup values are written to Non-volatile Memory. To prevent accidental deletion of data due to RAM Backup Battery recharge failure, be sure to write your data to Non-volatile Memory. However, when Non-volatile Memory is written to, the Ladder program's scan time is delayed. Be sure not to write to this device every time the Timer/Counter setup value is changed. Also, data cannot be read out from this device.

<sup>\*4</sup> Depending on the CPU used, the devices address ranges may differ.

# **■** OpenNet Controller FC3 Series

	Setup System	Area	here
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Device	Bit Address	Word Address	Other
Input	X0000 ~ X0597	X000 ~ X058	÷2¬ "
Output	Y0000 ~ Y0597	Y000 ~ Y058	<u>=2</u>
Internal Relay	M0000 ~ M2557	M000 ~ M254	<u>:27</u>
Special Internal Relay	M8000 ~ M8237	M800 ~ M822	<u>÷2</u> ¬
Shift Register	R0000 ~ R0255	R0000 ~ R0240	<u>:16</u>
Timer (contact value)	T0000 ~ T0255		*1 *2
Counter (contact value)	C0000 ~ C0255		*1 *2
Timer (setup value)		T0000 ~ T0255	Un
Timer(elapsed value)		t0000 ~ t0255	
Counter (setup value)		C0000 ~ C0255	
Counter (elapsed value)		c0000 ~ c0255	
Data Register		D0000 ~ D7999	Bit 1 51
Special Data Register		D8000 ~ D8999	Bit 1 51
Link Register		L0100 ~ L1317	Bit 1 5 1 3

<sup>\*1</sup> Data Write is not possible.

#### \*2 Link Register Device Restrictions

In GP-PRO/PBIII for Windows, even though from 0 to 9 (Decimal) can be entered as the last digit of a word address, only 0 to 7 can be entered for a PLC address.

Also, even though addresses L0728 to L0999 can be entered, this range does not exist on the PLC, and therefore cannot be used.

Additionally, when entering tag settings, any of the following conditions may occur.

#### A) During Data Read

When a non-existing address is designated for a Tag, or when Read Out is performed from an area that includes a non-existing address, a Host Communication Error (02:06) will appear on the GP.

Ex) When an N-tag's word address is designated as L0108.

Or, when an S-tag's word address is designated as L0100, and the number of display characters is set to 20.

<sup>\*2</sup> When writing to this device, the "Host Communication Error (02:FB)" will appear.

#### B) During Data Write

When a non-existing address is designated for a Tag, or when Block Write is performed for a block that exceeds 40 words, a Host Communication Error (02:06) will appear on the GP.

Ex) When an N-tag's word address is designated as L0108.

Or, when using the D-Script Memory Copy function, if the Word Address starts from L0100 and 41 copies are designated.

#### C) Using the Tag Multiple Copy Feature

When creating multiple copies of a Tag, after the copying is finished, be sure to check that all the Tag addresses created can actually be used.

Ex) When an L-Tag's initial word address is designated as L0100 and the copy setting is 10, addresses L0100 to L0109 will be used. In this case, L0108 and L0109 will be out of the available (Base 8) range.



For the available range of Link Register Addresses and detailed information, refer to the IDEC Corporation's "OpenNet Controller FC3 Series Instruction Manual".

# 2.15.4 Environment Setup

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

# **■ FA Series (using Serial Interface Module)**

GP Setup		Serial Interface Module Setup	
Baud Rate	19200 bps	Baud Rate	19200 bps
Data Length	8 bits	Data Bit	8 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-422)	2-wire type		
Unit No.	0	Device Number	0

# ■ FA Series (CPU Direct Connection)

GP Setup			PLC Setup	
Baud Rate	9600 bps	Baud Rate	9600 bps	
Data Length	8 bits	Data Bit	8 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-2422)	4-wire type			
Unit. No.	0	Device Number	0	

## ■ MICRO<sup>3</sup>

GP Setup		Loader Port Setup	
Baud Rate	9600 bps	Baud Rate	9600 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 (when using PC I/F Unit FC2A-KC1)	RS-232C	-	
Communication Format (RS-422)	2-wire type	-	
Unit No.	0	Device Number	0



The PLC setup above is the same as the Basic setup mode. When connected to the GP or Loader, communication is available in Basic setup mode (condition when the Mode Change Input Number terminal is OFF). To change the communication setup, use Option setup mode (condition when the Mode Change Input Number terminal is ON).

## **■ MICROSmart FC4A Series**

GP/GLC Settings		PLC Settings	
Baud Rate	9600 bps	Baud Rate	9600 bps
Data Length	7 bits	Data Length	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		<del></del>
Communication Format (RS-485)	2-wire type	***	
Unit No.	0	Device No.	0
	***	Port Communication Type	Maintenance Communication
		Communication Switchover Input	No

# **■** OpenNet Controller FC3 Series

GP/GLC Settings		PLC Settings	
Baud Rate	9600 bps	Baud Rate	9600 bps
Data Length	7 bits	Data Length	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-485)	2-wire type		
Unit No.	0	Device No. DIP-SW4 ~ 8	0
		RS-485 Communication Mode DIP-SW1 RS-232C Port 1Communication Mode DIP-SW2 RS-232C Port 2 Communication Mode DIP-SW3	OFF (Maintenance) OFF (Maintenance) OFF (Maintenance)
***		Communication Switchover Input	No

#### **♦**Monitor Register

When using OpenNet Controller FC3 Series, the Monitor Register feature can be set. Using this function, Block reads of discrete addresses (maximum of 40 words) can be made. This function can also be used, when using the Multi Port Communication or connecting your PC. Be sure to set the Monitor Register feature from the SETUP OPERATION SURROUNDINGS MENU in the GP OFFLINE mode or from [GP SETUP] -> [MODE SETTINGS] in the GP Screen Editor (GP-PRO/PBIII for Windows).

**TREFERENCE** Refer to each GP User Manual, OFFLINE MODE.



• The Monitor Register feature cannot be used on MICROSmart FC4A Series. Be sure to set the Monitor Register setting to "No". If the MONITOR SETTING feature is set to "Yes", a "Host Communication Error (02:03)" will appeare.

**Reference** Refer to this manual, 2.15.4 Error Codes.

- Default setting is "No".
- Depending on whether you are using a GP or a GLC series unit, the OFFLINE mode's SETUP OPERATION SURROUNDING MENU, the menu that appears may differ. Setup the Monitor Register area as shown below.

#### <GP-H70/ GP-270/GP-370/GLC-100 Series>

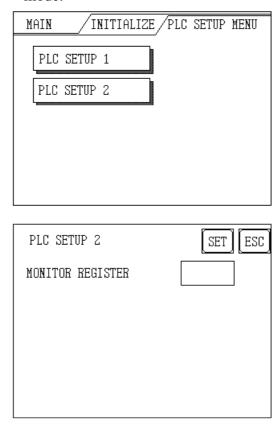
SET UP OPERATION SURROUNDI	NGS SET ESC
SYSTEM AREA START DEV	
START ADR	
UNIT No.	
SYSTEM AREA READ SIZE	
MONITOR REGISTER	

#### <GP-470/GP-570/GP-675/GP-870 Series>

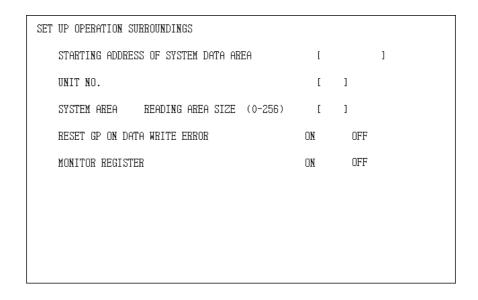
SET UP OPERATION SURROUNDINGS			
STARTING ADDRESS OF SYSTEM DATA AREA	]	1	
UNIT NO.	[	]	
SYSTEM AREA READING AREA SIZE (0-256)	[	]	
MONITOR REGISTER		OFF	

#### <GP-377/GP-377R/GP-2300/GLC-2300Series>

Set the Monitor Register feature from the SETUP OPERATION SURROUND-INGS MENU [PLC SETUP MENU] -> [PLC SETUP 2] in the GP OFFLINE mode.

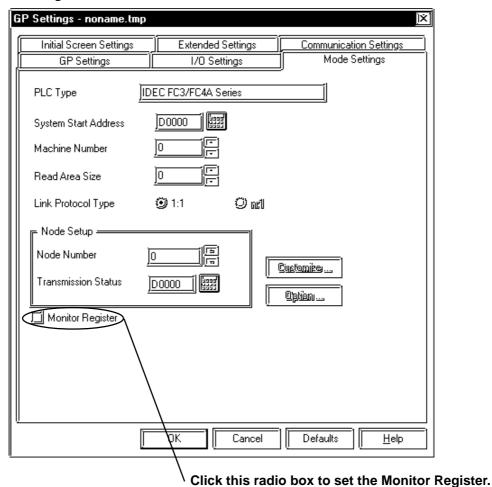


#### <GP-477R/GP-577R/GP2000/GLC300/GLC2000 Series>



• Setting Monitor Register from the GP Screen Editor (GP-PRO/PBIII for Windows)

Set the Monitor Register feature from [GP SETUP] -> [MODE SETTINGS] in the GP Screen Editor (GP-PRO/PBIII for Windows). This feature's default setting is "not selected".



# 2.15.5 Error Codes

# **■PLC Specific Error Codes**

# **♦**MICROSmart FC4A Series/OpenNet Controller FC3 Series

IDEC Corporation PLCs have two types of error codes, "Communication Error Code" and "NG Code". A "Communication Error" means the error occurred during transmission. "NG Error" means the error occurred after receiving the message from the PLC. "NG Code" is the error code for standard GP/GLC units. "Communication Error Code" and "NG Error Code" are displayed via the "Host Communication Error (02:\*\*)", and will appear in the left lower corner of the GP/GLC screen (\*\* indicates the PLC's error code).

#### • Communication Error Code

Error Code	Error Type	Error Contents
00	BCC error	Appended BCC code does not match BCC calculated value of
		received data.
01	Flame error	Quantity of received bits differs from the preset value (stop bit is
		0 for example).
02	Data send/receive error	Parity Error or Overrun error occured.
03	Command error	Unsupported request message is received.
04	Procedure/data quantity	Received request message does not match the expected data
	error	(including quantity of data).

#### • NG Code

Error Code	Error Name	Meanings
06	Data range error	Invalid data range designated.
07	Timer/Counter preset value	Preset value change attempted to timer or counter with preset
07	change error	value designated by data register.
10	Data error	Invalid data other than 0 (30h) - 9 (39h) or A (41h) - F(46h).
11	Setting error	Incorrect setting for user communication.



For more details about error codes, refer to the IDEC Corporation's "COMPUTER LINK SYSTEM USER'S MANUAL".

