Yamatake Corporation

Digital Controller SIO Driver

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PREFACE

This manual describes how to connect the Display and the External Device (target Controller).

In this manual, the connection procedure will be described by following the below sections:



1 System Configuration

The system configuration in the case when the External Device of Yamatake Corporation and the Display are connected is shown.

Series CPU		Link I/F	SIO Type	Setting Example	Cable Diagram
SDC10	C1000000500	Terminal block on the controller	RS422/485(2 wire)	"Setting Example 1" (page 7)	" Cable Diagram5" (page 90)
SDC15	C15□□□□03□□ C15□□□□06□□	Terminal block on the controller	RS422/485(2 wire)	"Setting Example 2" (page 9)	" Cable Diagram6" (page 97)
	C2000000000000000000000000000000000000	Terminal block on the controller	RS232C	"Setting Example 3" (page 11)	" Cable Diagram 1" (page 71)
SDC20/21	C2000000200 C200000400 C200000900	Terminal block on the controller		"Setting Example 4" (page 13)	" Cable Diagram 2" (page 72)
	C210000300 C210000600 C210000800	the controller	RS422/485(2 wire)	"Setting Example 5" (page 15)	" Cable Diagram 3" (page 76)
SDC25/26	C2500000200 C2600000200	Terminal block on the controller	RS422/485(2 wire)	"Setting Example 6" (page 17)	" Cable Diagram6" (page 97)
SDC30/31		Terminal block on	RS422/485(4 wire)	"Setting Example 7" (page 19)	" Cable Diagram 2" (page 72)
50030/31	C3100044600 C3100054600	the controller RS422/485(2 wire)		"Setting Example 8" (page 21)	" Cable Diagram 3" (page 76)
SDC35/36	C35DDDDD2DD C35DDDDD4DD C36DDDD2DD C36DDDD2DD C36DDDDD4DD	Terminal block on the controller	RS422/485(2 wire)	"Setting Example 9" (page 23)	" Cable Diagram6" (page 97)
	C40ADDDDDD3DD	Terminal block on the controller	RS232C	"Setting Example 10" (page 25)	" Cable Diagram 1" (page 71)
SDC40A		Terminal block on	RS422/485(4 wire) "Setting Example 11" (page 27)	"Setting Example 11" (page 27)	" Cable Diagram 2" (page 72)
		the controller	RS422/485(2 wire)	"Setting Example 12" (page 29)	" Cable Diagram 3" (page 76)

Series	CPU	Link I/F	SIO Type	Setting Example	Cable Diagram
	C40BDDDDDD3DD	Terminal block on the controller	RS232C	"Setting Example 13" (page 31)	" Cable Diagram 1" (page 71)
SDC40B		Terminal block on	RS422/485(4 wire)	"Setting Example 14" (page 33)	" Cable Diagram 2" (page 72)
		the controller	RS422/485(2 wire)	"Setting Example 15" (page 35)	" Cable Diagram 3" (page 76)
SDC40G		Terminal block on	RS422/485(4 wire)	"Setting Example 16" (page 37)	" Cable Diagram 2" (page 72)
300400		the controller	RS422/485(2 wire)	"Setting Example 17" (page 39)	" Cable Diagram 3" (page 76)
DMC10	DMC10000000000	Terminal block on the controller	RS422/485(2 wire)	"Setting Example 18" (page 41)	" Cable Diagram4" (page 83)
DCD21		Terminal block on	RS422/485(4 wire)	"Setting Example 19" (page 43)	" Cable Diagram 2" (page 72)
Dersi		the controller	RS422/485(2 wire)	"Setting Example 20" (page 45)	" Cable Diagram 3" (page 76)
DCB22		Terminal block on	RS422/ 485(4wire)	"Setting Example 21" (page 47)	" Cable Diagram 2" (page 72)
DCI 32		the controller	RS422/485(2 wire)	"Setting Example 22" (page 49)	" Cable Diagram 3" (page 76)
			RS232C	"Setting Example 23" (page 51)	" Cable Diagram 1" (page 71)
DCP551	DCP551000200	Terminal block on the controller	RS422/485(4 wire)	"Setting Example 24" (page 53)	" Cable Diagram 2" (page 72)
			RS422/485(2 wire)	"Setting Example 25" (page 55)	" Cable Diagram 3" (page 76)
	DCP552Terminal block on the controllerRS422/ 485(4wire)"Setting Example 26" (page 57)		RS232C	"Setting Example 26" (page 57)	" Cable Diagram 1" (page 71)
DCP552		DCP552000200	DCP552 DCP552 DCP552 DCP552	Terminal block on the controller	Terminal block on the controller
			RS422/485(2 wire)	"Setting Example 28" (page 61)	" Cable Diagram 3" (page 76)

Connection Configuration

[Connection example 1:n]



[Connection example 1:n When using COM1 or COM2]



[Connection example 1:n When using COM1 and COM2]



*1 You can connect maximum 16 units of External Device. Note that maximum 15 units can be connected if DMC10 is included.

NOTE
 Do not add the termination resistance when the Controller to be connected using 1:n connection includes the following series.
 SDC15
 SDC25/26
 SDC35/36
 DMC10

2 Selection of External Device

Select the External Device to be connected to the Display.

ا 🗞	💋 New Project File					
Г	Device/PL	C				
	Maker	Yamatake Corporation				
	Driver	Digital Controller SIO				
	🗖 Use S	ystem Area Refer to the manual of this Device/PLC				
Г	Connection	Method				
	Port	COM1				
		Go to Device/PLC Manual				
	Back	Communication Detail Settings New Screen Cancel				

Setup Items	Setup Description
Maker	Select the maker of the External Device to be connected. Select "Yamatake Corporation".
Driver	Select a model (series) of the External Device to be connected and connection method. Select "Digital Controller SIO". Check the External Device which can be connected in "Digital Controller SIO" in system configuration. I System Configuration" (page 3)
Use System Area	Cannot use in this driver.
Port	Select the Display port to be connected to the External Device.

3 Example of Communication Setting

Examples of communication settings of the Display and the External Device, recommended by Digital Electronics Corp., are shown.

3.1 Setting Example 1

Setting of GP-Pro EX

Communication Settings

To display the setting screen, select [Device/PLC Settings] from [System setting window] in workspace.

Device/PLC 1					
Summary Change Device/PLC					
Maker Yamatake (Corporation	Driver Digital Controller SIO Port COM1			
Text Data Mode	1 Change				
Communication Settings					
SIO Type	C RS232C				
Speed	9600	T			
Data Length	0.7	· 8			
Parity	O NONE				
Stop Bit	● 1	○ 2			
Flow Control	O NONE	C ER(DTR/CTS) C XON/XOFF			
Timeout	4 📫	(sec)			
Retry	2 +				
Wait To Send	70 🕂	(ms)			
RI / VCC	© BI	C VCC			
In the case of RS2 or VCC (5V Power Isolation Unit, plea	232C, you can sele Supply), If you us se select it to VCC	et the 9th pin to RI (Input) e the Digital's RS232C , Default			
Device-Specific Settings					
Allowable No. of Device/PLCs 16 Unit(s)					
No. Device Na 1 PLC1	ame	Settings			

IMPORTANT |

• When using SDC10, you need to set Wait To Send to 70ms or more.

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🗙			
PLC1			
Series	SDC10	•	
Please reconfirm all of a you are using if you have	ddress set e changed	tings that I the series.	
Device Address	1	-	
		Default	
OK (<u>0</u>)		Cancel	

Settings of External Device

Use the PARA key, ENT key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press and hold the PARA key in operation mode (3 seconds) to move to the parameter mode.

2.Press and hold the PARA key in parameter mode (3 seconds) to move to the setup mode.

3. Press the PARA key several times to display the setup items.

4.Use the down/up keys to select the setting contents. (Setting value will blink.)

5. When you stop operating for 2 seconds, blinking of the setting value ends to confirm the change.

6.Press and hold the PARA key (3 seconds) to move to the standard display.

Setting Value

Setup Items	Setting Value
C22	1
C23	0

NOTE

3.2 Setting Example 2

Setting of GP-Pro EX

Communication Settings

Device/PLC1					
Summary Change Device/PLC					
Maker Yamatake Corporation	Driver Digital Controller SIO Port COM1				
Text Data Mode 1 <u>Change</u>					
Communication Settings					
SIO Type C RS232C	RS422/485(2wire) O RS422/485(4wire)				
Speed 9600	▼				
Data Length 📀 7	• 8				
Parity C NONE	EVEN O ODD				
Stop Bit 💿 1	O 2				
Flow Control 💿 NONE	O ER(DTR/CTS) O XON/XOFF				
Timeout 3	(sec)				
Retry 2					
Wait To Send 10 📑	(ms)				
RI / VCC © RI	O VCC				
In the case of RS232C, you can sel or VCC (5V Power Supply). If you u	lect the 9th pin to RI (Input) ise the Digital's RS232C				
Isolation Unit, please select it to VCI	C. Default				
Device-Specific Settings					
Allowable No. of Device/PLCs 16 Ur No. Device Name	nit(s) 🛄 Settings				
1 PLC1	Series=SDC15,Device Address=1				

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🗙			
PLC1			
Series	SDC15	•	
Please reconfirm all of a you are using if you have	ddress set e changed	tings that I the series.	
Device Address	1	-	
		Default	
OK (<u>0</u>)		Cancel	

Settings of External Device

Use the PARA key, mode key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press and hold the PARA key in operation display (2 seconds) to move to the parameter setting display.

2.Press and hold the PARA key in the parameter setting display (2 seconds) to move to the setup display.

3. Press the PARA key several times to display the setup items.

4.Use the down/up keys to select the setting contents. (Setting value will blink.)

5. When you stop key operation for 2 seconds, blinking of the setting value ends to confirm the change.

6.Press the mode key to move to the standard display.

Setting Value

Setup Items	Setting Value
C64	0
C65	1
C66	1
C67	1
C68	0
C69	0

NOTE

3.3 Setting Example 3

Setting of GP-Pro EX

Communication Settings

Device/PLC 1		
Summary		Change Device/PLC
Maker Yamatake	Corporation	Driver Digital Controller SIO Port COM1
Text Data Mode	1 <u>Change</u>	
Communication Settings		
SIO Type	RS232C	O RS422/485(2wire) O RS422/485(4wire)
Speed	9600	v
Data Length	0.7	• 8
Parity	C NONE	EVEN ODD
Stop Bit	● 1	0 2
Flow Control	C NONE	O ER(DTR/CTS) O XON/XOFF
Timeout	3 ÷	(sec)
Retry	2 ÷	
Wait To Send	10 🛨	(ms)
RI / VCC	• RI	O VCC
In the case of RS or VCC (5V Powe Isolation Unit, ple	232C, you can sele er Supply). If you us ase select it to VCC	ect the 9th pin to RI (Input) ise the Digital's RS232C C. Default
Device-Specific Settings		
Allowable No. of De	vice/PLCs 16 Un	nit(s) ᡙ
No. Device N	ame	Settings Seties-SDC20/21 Device Address=1

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings	×	
PLC1			
Series	SDC20/	21 💌	
Please reconfirm all of address settings that you are using if you have changed the series.			
Device Address	1	-	
		Default	
OK (<u>0</u>)		Cancel	

Settings of External Device

Use the ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press and hold the ENT key and the down key together (3 seconds or more) to display the setup items.

2.Press the down/up keys to select the setup items and press the ENT key.

3.Use the down/up keys to select the setup contents and press the ENT key.

4. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C31	1
C32	0
C33	0



3.4 Setting Example 4

Setting of GP-Pro EX

♦ Communication Settings

Devic	e/PLC1			
Sum	mary		Change Device/PLC	
	Maker Vamatake Co	orporation	Driver Digital Controller SIO Port COM1	
	Text Data Mode	1 <u>Change</u>		
Com	munication Settings			
	SIO Type	C RS232C	C RS422/485(2wire) © RS422/485(4wire)	
	Speed	9600		
	Data Length	C 7	• 8	
	Parity	C NONE	C EVEN C ODD	
	Stop Bit	€ 1	C 2	
	Flow Control	O NONE	C ER(DTR/CTS) C XON/XOFF	
	Timeout	3 📑 ((sec)	
	Retry	2 🔹		
	Wait To Send	10 📫 ((ms)	
Γ	RI / VCC	© BI	C VCC	
	In the case of RS232C, you can select the 9th pin to RI (Input)			
Isolation Unit, please select it to VCC. Default				
Dev	ice-Specific Settings			
	Allowable No. of Dev	ice/PLCs_16 Unit	(s) 🔤	
	No. Device Nar	me	Settings Series=SDC20/21 Device Address=1	

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings	×
PLC1		
Series	SDC20/2	21 💌
Please reconfirm all of address settings that you are using if you have changed the series.		
Device Address	1	-
		Default
OK (<u>0</u>)		Cancel

Settings of External Device

Use the ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press and hold the ENT key and the down key together (3 seconds or more) to display the setup items.

2.Press the down/up keys to select the setup items and press the ENT key.

3.Use the down/up keys to select the setup contents and press the ENT key.

4. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C31	1
C32	0
C33	0



3.5 Setting Example 5

Setting of GP-Pro EX

♦ Communication Settings

Device/F	2LC 1		
Summar	у		Change Device/PLC
Ma	aker Yamatake Co	orporation	Driver Digital Controller SID Port COM1
Te	xt Data Mode	1 <u>Change</u>	
Commu	nication Settings		
SIC) Type	C RS232C	• RS422/485(2wire)
Sp	eed	9600	v
Da	ita Length	0.7	• 8
Pa	rity	C NONE	EVEN ODD
Sto	op Bit	⊙ 1	0 2
Flo	w Control	NONE	O ER(DTR/CTS) O XON/XOFF
Tin	neout	3 📑 (sec)
Re	łry	2 ÷	
Wa	ait To Send	10 🕂 (ms)
BI	/ VCC	© BI	O VCC
li	n the case of RS23	32C, you can seled	the 9th pin to RI (Input)
o Is	r VLL (5V Power s solation Unit, pleas	e select it to VCC.	e the Digital's H5232L Default
Device-	Specific Settinas		
Alle	owable No. of Devi	ce/PLCs 16 Unit	(s) 📊
V	No. Device Nar 1 Pict	ne	Settings
1 0			

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings	×
PLC1		
Series	SDC20/2	21 💌
Please reconfirm all of address settings that you are using if you have changed the series.		
Device Address	1	-
		Default
OK (<u>0</u>)		Cancel

Settings of External Device

Use the ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press and hold the ENT key and the down key together (3 seconds or more) to display the setup items.

2.Press the down/up keys to select the setup items and press the ENT key.

3.Use the down/up keys to select the setup contents and press the ENT key.

4. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C31	1
C32	0
C33	0



3.6 Setting Example 6

Setting of GP-Pro EX

Communication Settings

Device/PLC 1			
Summary		Change Device/PLC	
Maker Vamatake Corp	poration	Driver Digital Controller SIO Port COM1	
Text Data Mode	1 <u>Change</u>		
Communication Settings			
SIO Type	C RS232C	RS422/485(2wire) RS422/485(4wire)	
Speed	9600	•	
Data Length	0 7	• 8	
Parity	O NONE	• EVEN O ODD	
Stop Bit	● 1	0 2	
Flow Control	NONE	C ER(DTR/CTS) C XON/XOFF	
Timeout	3 📑 (s	ec)	
Retry	2 📫		
Wait To Send	10 📑 (m	(21	
RI / VCC	© RI	C VCC	
In the case of RS232C, you can select the 9th pin to RI (Input)			
Isolation Unit, please select it to VCC. Default			
Device-Specific Settings			
Allowable No. of Device	e/PLCs 16 Unit(s	i) 📷	
No. Device Name	e	Settings Seties=SDC25/26 Device Address=1	

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings	×
PLC1		
Series	SDC25/	26 💌
Please reconfirm all of address settings that you are using if you have changed the series.		
Device Address	1	-
		Default
OK (<u>0</u>)		Cancel

Settings of External Device

Use the PARA key, mode key, enter key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press and hold the PARA key in operation display (2 seconds) to move to the bank selection display.

2.Press the enter key in the bank selection display to move to the bank setup display.

3. Press the PARA key several times to display the setup items.

4. Press the enter key to blink the display area of the setting value.

5.Use the down/up keys to select the setting contents.

6.Press the enter key to confirm the change.

7.Press the mode key to move to the operation display.

Setting Value

Setup Items	Setting Value
C64	0
C65	1
C66	1
C67	1
C68	0
C69	0



3.7 Setting Example 7

Setting of GP-Pro EX

♦ Communication Settings

Devic	e/PLC1		
Sum	mary		Change Device/PLC
	Maker Yamatake Co	orporation	Driver Digital Controller SIO Port COM1
	Text Data Mode	1 <u>Change</u>	
Com	munication Settings		
	SIO Type	C RS232C	© RS422/485(2wire) © RS422/485(4wire)
	Speed	9600	•
	Data Length	O 7	• 8
	Parity	C NONE	EVEN O ODD
	Stop Bit	⊙ 1	© 2
	Flow Control	O NONE	O ER(DTR/CTS) O XON/XOFF
	Timeout	3 📑 (;	sec)
	Retry	2	
	Wait To Send	10 🔅 (ms)
	RI / VCC	© BI	O VCC
In the case of RS232C, you can select the 9th pin to RI (Input) or VCC (5V Power Supply). If you use the Digital's RS232C Isolation Unit, please select it to VCC.			
Device-Specific Settings			
Allowable No. of Device/PLCs 16 Unit(s)			
	1 PLC1		Securys Secury

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings 🛛 🔀
PLC1	
Series	SDC30/31
Please reconfirm all of a you are using if you have	ddress settings that e changed the series.
Device Address	1
	Default
OK (<u>0</u>)	Cancel

Settings of External Device

Use the ENT key, DISP key, MODE key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting.

Please refer to the manual of the Controller for more details.

Procedure

1.Press the MODE key twice in the standard display. When the RUN/READY mode switch display appears, change to the READY mode.

2.Press and hold the ENT key and the down key together (3 seconds or more) to display the setup items.

3.Press the down/up keys to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C31	1
C32	0
C33	0

NOTE

3.8 Setting Example 8

Setting of GP-Pro EX

Communication Settings

Device/P	LC 1			
Summary	y		Change Device/PLC	
Ma	ker 🛛 Yamatake Co	rporation	Driver Digital Controller SIO Port COM1	
Tex	kt Data Mode	1 Change		
Commun	nication Settings			
SIC) Type	C RS232C	RS422/485(2wire) RS422/485(4wire)	
Spe	eed	9600	T	
Dat	ta Length	0.7	• 8	
Par	ity	O NONE	● EVEN ○ ODD	
Sto	ip Bit	⊙ 1	© 2	
Flor	w Control	NONE	C ER(DTR/CTS) C X0N/X0FF	
Tim	neout	3 📫 ((sec)	
Ret	try	2 ÷		
Wa	ait To Send	10 📑 (i	(ms)	
BL	/ VCC	© BI	O VCC	
In	the case of RS23	2C, you can selec	ect the 9th pin to RI (Input)	
or Is	r VCC (5V Power 3 olation Unit, please	e select it to VCC.	. Default	
Device-9	Specific Settings			
Allowable No. of Device/PLCs 16 Unit(s)				
V	No. Device Name Settings No. Device Name Settings 1 PL C1 Parings SDC20/21 Device Address=1			
do l				

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings 🛛 🔀
PLC1	
Series	SDC30/31
Please reconfirm all of a you are using if you have	ddress settings that e changed the series.
Device Address	1
	Default
OK (<u>0</u>)	Cancel

Settings of External Device

Use the ENT key, DISP key, MODE key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting.

Please refer to the manual of the Controller for more details.

Procedure

1.Press the MODE key twice in the standard display. When the RUN/READY mode switch display appears, change to the READY mode.

2.Press and hold the ENT key and the down key together (3 seconds or more) to display the setup items.

3.Press the down/up keys to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C31	1
C32	0
C33	0

NOTE

3.9 Setting Example 9

Setting of GP-Pro EX

Communication Settings

Device/PL	_C1			
Summary			Change Device/PLC	
Mak	ker Yamatake Co	orporation	Driver Digital Controller SIO Port COM1	
Text	t Data Mode	1 <u>Change</u>		
Communi	ication Settings			
SIO	Туре	C RS232C	RS422/485(2wire) RS422/485(4wire)	
Spe	ed	9600	T	
Data	a Length	0.7	© 8	
Pari	ty	O NONE	● EVEN ○ ODD	
Stop	o Bit	⊙ 1	© 2	
Flov	v Control	NONE	O ER(DTR/CTS) O XON/XOFF	
Time	eout	3 📑 ((sec)	
Retr	ry	2 🔅		
Wai	it To Send	10 🕂 ((ms)	
BL/		© RI	C VCC	
In	In the case of RS232C, you can select the 9th pin to RI (Input)			
or VCC (5V Power Supply). If you use the Digital's HS232C Isolation Unit, please select it to VCC. Default				
Device-S	ipecific Settinas			
Allo	wable No. of Devi	ce/PLCs 16 Unit(it(s)	
	No. Device Name Settings No. Device Name Settings 1 PLC1 PLC1 PLC25/26 Device Address=1			
do l				

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🗙		
PLC1		
Series	SDC35/3	6 💌
Please reconfirm all of a you are using if you have	ddress settir changed t	ngs that he series.
Device Address	1	-
	l	Default
OK (<u>0</u>)		Cancel

Settings of External Device

Use the PARA key, mode key, enter key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press and hold the PARA key in operation display (2 seconds) to move to the bank selection display.

2.Press the enter key in the bank selection display to move to the bank setup display.

3. Press the PARA key several times to display the setup items.

4. Press the enter key to blink the display area of the setting value.

5.Use the down/up keys to select the setting contents.

6.Press the enter key to confirm the change.

7.Press the mode key to move to the operation display.

Setting Value

Setup Items	Setting Value
C64	0
C65	1
C66	1
C67	1
C68	0
C69	0



3.10 Setting Example 10

- Setting of GP-Pro EX
- Communication Settings

Device/PL	.01			
Summary			Change Device/PLC	
Mak	er Yamatake Co	orporation	Driver Digital Controller SIO Port COM1	
Tex	t Data Mode	1 <u>Change</u>		
Communi	cation Settings			
SIO	Туре	RS232C	O RS422/485(2wire) O RS422/485(4wire)	
Spe	ed	9600	×	
Data	a Length	C 7	• 8	
Pari	ty	C NONE	• EVEN C ODD	
Stop	o Bit	⊙ 1	C 2	
Flov	v Control	ONONE	O ER(DTR/CTS) O XON/XOFF	
Time	eout	3 📑 (sec)	
Retr	у	2 📫		
Wai	t To Send	10 🕂 (ms)	
BL/	VCC	• BI	C VCC	
In	In the case of RS232C, you can select the 9th pin to RI (Input)			
Isolation Unit, please select it to VCC. Default				
Device-Specific Settings				
Allowable No. of Device/PLCs 16 Unit(s)				
V	No. Device Name Settings No. Device Name Settings 1 PLC1 Excise_SDC40A Device Address=1			
<u>d0</u>				

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings 🛛 🗙
PLC1	
Series	SDC40A
Please reconfirm all of a you are using if you have	ddress settings that e changed the series.
Device Address	1
	Default
OK (<u>0</u>)	Cancel

Settings of External Device

Use the PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting.

Please refer to the manual of the Controller for more details.

Procedure

1. Press the PARA key in the standard display to display PARA. Next, press the ENT key to display rnry and move to the READY mode.

2.Press the PARA key several times in the standard display to display SETUP.

3. Press the ENT key to display the setup items.

4. Press the down/up keys to select the setup items and press the ENT key.

5.Use the down/up keys to select the setup contents and press the ENT key.

6.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C84	1
C85	0

NOTE

3.11 Setting Example 11

- Setting of GP-Pro EX
- ♦ Communication Settings

Device.	/PLC 1			
Summ	ary		Change Device/PLC	
M	faker Yamatake Co	rporation	Driver Digital Controller SID Port COM1	
Т	ext Data Mode	1 Change		
Comm	unication Settings			
S	ilo Type	C RS232C	RS422/485(2wire) RS422/485(4wire)	
s	peed	9600		
D)ata Length	0.7	• 8	
F	Parity	C NONE	• EVEN O ODD	
S	itop Bit	● 1	0 2	
F	Tow Control	O NONE	O ER(DTR/CTS) O XON/XOFF	
т	imeout	4 :	(sec)	
F	Retry	2 🔹		
V	Vait To Send	10 📑 (r	[ms]	
F		© BI	O VCC	
	In the case of RS232C, you can select the 9th pin to RI (Input)			
or VLL (5V Power Supply). If you use the Digital's HS232L Isolation Unit, please select it to VCC. Default				
Device-Specific Settings				
Allowable No. of Device/PLCs 16 Unit(s)				
No. Device Name Settings Y 1 PLC1 PLC1				
6				

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings 🛛 🗙		
PLC1			
Series	SDC40A		
Please reconfirm all of address settings that you are using if you have changed the series.			
Device Address	1		
	Default		
OK (<u>0</u>)	Cancel		

Settings of External Device

Use the PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting.

Please refer to the manual of the Controller for more details.

Procedure

1. Press the PARA key in the standard display to display PARA. Next, press the ENT key to display rnry and move to the READY mode.

2. Press the PARA key several times in the standard display to display SETUP.

3. Press the ENT key to display the setup items.

4. Press the down/up keys to select the setup items and press the ENT key.

5.Use the down/up keys to select the setup contents and press the ENT key.

6.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C84	1
C85	0

NOTE

3.12 Setting Example 12

- Setting of GP-Pro EX
- Communication Settings

Device/PLC 1					
Summary		Change Device/PLC			
Maker Vamatake C	orporation	Driver Digital Controller SIO Port COM1			
Text Data Mode	1 <u>Change</u>				
Communication Settings					
SIO Type	C RS232C	RS422/485(2wire) RS422/485(4wire)			
Speed	9600				
Data Length	0.7	• 8			
Parity	C NONE	EVEN C ODD			
Stop Bit	• 1	O 2			
Flow Control	O NONE	O ER(DTR/CTS) O XON/XOFF			
Timeout	4 🕂 1	(sec)			
Retry	2 +				
Wait To Send	10 📑 I	(ms)			
RI / VCC	© BI	C VCC			
In the case of RS2	In the case of RS232C, you can select the 9th pin to RI (Input)				
or VCC (5V Power Supply). If you use the Digital's RS232C Isolation Unit, please select it to VCC. Default					
Device-Specific Settings					
Allowable No. of Dev	ice/PLCs 16 Unit	t(s) 📊			
No. Device Na	me	Settings			

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings 🛛 🗙		
PLC1			
Series	SDC40A		
Please reconfirm all of address settings that you are using if you have changed the series.			
Device Address	1		
	Default		
OK (<u>0</u>)	Cancel		

Settings of External Device

Use the PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting.

Please refer to the manual of the Controller for more details.

Procedure

1. Press the PARA key in the standard display to display PARA. Next, press the ENT key to display rnry and move to the READY mode.

2. Press the PARA key several times in the standard display to display SETUP.

3. Press the ENT key to display the setup items.

4. Press the down/up keys to select the setup items and press the ENT key.

5.Use the down/up keys to select the setup contents and press the ENT key.

6.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C84	1
C85	0

NOTE

3.13 Setting Example 13

- Setting of GP-Pro EX
- Communication Settings

Device/PLC 1				
Summary		Change Device/PLC		
Maker Yamatake Corp	ooration	Driver Digital Controller SIO Port COM1		
Text Data Mode	1 <u>Change</u>			
Communication Settings				
SIO Type	RS232C	C RS422/485(2wire) O RS422/485(4wire)		
Speed	9600	•		
Data Length	07	© 8		
Parity	O NONE			
Stop Bit	• 1	© 2		
Flow Control	🖲 NONE	C ER(DTR/CTS) C X0N/X0FF		
Timeout	4 📫 (s	ec)		
Retry	2 🚦			
Wait To Send	10 📫 (n	(21		
RI / VCC	• RI	○ VCC		
In the case of RS232C, you can select the 9th pin to RI (Input) or VCC (5V Power Supply). If you use the Digital's RS232C Isolation Unit, please select it to VCC.				
Device-Specific Settings				
Allowable No. of Device	e/PLCs=16 Unit(s	a) 🚾 🔐		
No. Device Name	9	Settings Settings Image: Species = SDC40B, Device Address=1		

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🗙		
PLC1		
Series	SDC40B	•
Please reconfirm all of a you are using if you have	ddress setti changed	ings that the series.
Device Address	1	-
		Default
OK (<u>0</u>)		Cancel

Settings of External Device

Use the PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press the PARA key in the standard display to move to the setup mode.

2.Press the ENT key to display the setup items.

3.Press the down/up keys to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C25	1
C26	0
C27	0

NOTE

3.14 Setting Example 14

- Setting of GP-Pro EX
- ♦ Communication Settings

Device/PLC 1				
Summary	Change Device/PLC			
Maker Yamatake Corporation Driver Digital Controller SIO	Port COM1			
Text Data Mode 1 Change				
Communication Settings				
SIO Type O RS232C O RS422/485(2wire) @ RS422/485(4wire)			
Speed 9600 💌				
Data Length C 7 📀 8				
Parity ONONE CEVEN ODD				
Stop Bit 1 2				
Flow Control 💿 NONE 🔿 ER(DTR/CTS) 🔿 XON/XOFF				
Timeout 4 (sec)				
Retry 2				
Wait To Send 10 🛨 (ms)				
In the case of RS232C, you can select the 9th pin to RI (Input)				
or VCC (5V Power Supply). If you use the Digital's RS232C Isolation Unit, please select it to VCC. Default				
Device-Specific Settinas				
Allowable No. of Device/PLCs 16 Unit(s)				
No. Device Name Settings				
	·			

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🗙		
PLC1		
Series	SDC40B	•
Please reconfirm all of a you are using if you have	ddress setti changed	ings that the series.
Device Address	1	-
		Default
OK (<u>0</u>)		Cancel

Settings of External Device

Use the PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press the PARA key in the standard display to move to the setup mode.

2.Press the ENT key to display the setup items.

3.Press the down/up keys to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C25	1
C26	0
C27	0

NOTE

3.15 Setting Example 15

- Setting of GP-Pro EX
- Communication Settings

Devic	e/PLC 1				
Sumr	nary		Change Device/PLC		
	Maker Yamatake Co	orporation	Driver Digital Controller SIO Port COM1		
	Text Data Mode	1 <u>Change</u>			
Com	munication Settings				
00.11	SIO Type	C RS232C	• RS422/485(2wire)		
	Speed	9600	▼		
	Data Length	0.7	• 8		
	Parity	O NONE	EVEN ODD		
	Stop Bit	⊙ 1	0 2		
	Flow Control	O NONE	O ER(DTR/CTS) O XON/XOFF		
	Timeout	4 📫 (sec)		
	Retry	2 📫			
	Wait To Send	10 🕂 (ims)		
Г	BL/VCC	© BI			
	In the case of RS232C, you can select the 9th pin to RI (Input)				
	or VCC (5V Power Supply). If you use the Digital's RS232C Isolation Unit, please select it to VCC, Default				
 Devi	ca-Spacific Sattings				
Devi	Allowable No. of Devi	ce/PLCs 16 Unit	(s)		
ſ	No. Device Nar	ne	Settings		
l	n PLUI		Selies=201040B,Device Address=1		

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🗙			
PLC1			
Series	SDC40B	•	
Please reconfirm all of address settings that you are using if you have changed the series.			
Device Address	1	-	
		Default	
OK (<u>0</u>)		Cancel	

Settings of External Device

Use the PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. Press the PARA key in the standard display to move to the setup mode.

2.Press the ENT key to display the setup items.

3.Press the down/up keys to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value	
C25	1	
C26	0	
C27	0	

NOTE
3.16 Setting Example 16

- Setting of GP-Pro EX
- Communication Settings

Device/	PLC1		
Summa	ary		Change Device/PLC
M	aker Yamatake Co	rporation	Driver Digital Controller SIO Port COM1
Τe	ext Data Mode 🛛 🗍	1 Change	
Commu	unication Settings		
SI	IO Type	C RS232C	C RS422/485(2wire)
Sp	peed	9600	•
Da	ata Length	0.7	• 8
Pa	arity	O NONE	● EVEN ○ DDD
St	top Bit	● 1	0 2
Flo	ow Control	NONE	O ER(DTR/CTS) O XON/XOFF
Ti	imeout	4 🔅 (sec)
Be	etry	2	
W	/ait To Send	10 📑 (i	ms)
BI		© RI	O VCC
I	In the case of RS23	2C, you can selec	t the 9th pin to RI (Input)
	or VLL (by Power S Isolation Unit, please	select it to VCC.	befault
Device	-Specific Settings		
Al	llowable No. of Devic	ce/PLCs 16 Unit(s) 📊
	No. Device Nam	ie	Settings Series=SDC40G Device Address=1
00			

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🔀				
PLC1				
Series	SDC40G	-		
Please reconfirm all of address settings that you are using if you have changed the series.				
Device Address	1	-		
	Default			
OK (<u>0</u>)	Cancel			

Settings of External Device

Use the PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting.

Please refer to the manual of the Controller for more details.

Procedure

1. Press the PARA key in the standard display to display PARA. Next, press the ENT key to display rnry and move to the READY mode.

2. Press the PARA key several times in the standard display to display SETUP.

3. Press the ENT key to display the setup items.

4. Press the down/up keys to select the setup items and press the ENT key.

5.Use the down/up keys to select the setup contents and press the ENT key.

6.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C25	1
C26	0
C27	0

NOTE

3.17 Setting Example 17

- Setting of GP-Pro EX
- ♦ Communication Settings

Devic	e/PLC1		
Sum	mary		Change Device/PLC
	Maker Vamatake Co	orporation	Driver Digital Controller SIO Port COM1
	Text Data Mode	1 <u>Change</u>	
Com	munication Settings		
	SIO Type	C RS232C	RS422/485(2wire) RS422/485(4wire)
	Speed	9600	T
	Data Length	0.7	© 8
	Parity	C NONE	• EVEN O ODD
	Stop Bit	• 1	O 2
	Flow Control	NONE	O ER(DTR/CTS) O XON/XOFF
	Timeout	4 📫	(sec)
	Retry	2 +	
	Wait To Send	10 📑 I	(ms)
Γ	RI / VCC	© BI	O VCC
	In the case of RS2	32C, you can sele	ct the 9th pin to RI (Input)
	or VCC (5V Power Isolation Unit, pleas	Supply]. If you us e select it to VCC.	e the Digital's HS232U Default
∟ Dev	ice-Specific Settings		
	Allowable No. of Devi	ice/PLCs 16 Unit	(s) 📊
	No. Device Nar	me	Settings
	l i l con		

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🔀				
PLC1				
Series	SDC40G	-		
Please reconfirm all of address settings that you are using if you have changed the series.				
Device Address	1	-		
	Default			
OK (<u>0</u>)	Cancel			

Settings of External Device

Use the PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting.

Please refer to the manual of the Controller for more details.

Procedure

1. Press the PARA key in the standard display to display PARA. Next, press the ENT key to display rnry and move to the READY mode.

2. Press the PARA key several times in the standard display to display SETUP.

3. Press the ENT key to display the setup items.

4. Press the down/up keys to select the setup items and press the ENT key.

5.Use the down/up keys to select the setup contents and press the ENT key.

6.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C25	1
C26	0
C27	0

NOTE

3.18 Setting Example 18

- Setting of GP-Pro EX
- ♦ Communication Settings

Device/PLC 1				
Summary		Change Device/PLC		
Maker Yamatake (Corporation Driver Digital Controller SIO	Port COM1		
Text Data Mode	1 Change			
Communication Settings				
SIO Type	O RS232C			
Speed	9600			
Data Length	07 08			
Parity	O NONE O EVEN O ODD			
Stop Bit				
Flow Control	NONE O ER(DTR/CTS) O XON/XOFF			
Timeout	3 • (sec)			
Retry	2			
Wait To Send	10 📑 (ms)			
RI / VCC				
In the case of RS2	In the case of RS232C, you can select the 9th pin to RI (Input)			
or VCC (5V Power Supply). If you use the Digital's HS232C Isolation Unit, please select it to VCC. Default				
Device-Specific Settings				
Allowable No. of Device/PLCs 16 Unit(s)				
No. Device No.	ame Settings			

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

🐔 Individual Device Settings 🛛 🛛 🔀				
PLC1				
Series	DMC10	•		
Please reconfirm all of address settings that you are using if you have changed the series.				
Device Address	1	•		
		Default		
OK (<u>0</u>)		Cancel		

Settings of External Device

Use the ladder software for communication setting of the External Device. (Operation confirmed using SLP-D10 V3.0.1) Set the device address of the External Device with the rotary switch on the front of the Controller. Please refer to the manual of the Controller for more details.

Procedure

1.Set the device address with the rotary switch for the device address on the front of the Controller.

After setting, turn ON the power of the External Device again.

2.Click [Set] with the ladder software to display the setting screen.

3. Click [Model Setting] from the menu to select the model No. of the External Device.

4. Click [Environmental Setting] from the menu to perform the setup transfer setting.

5.Select [Communication] from [Basic Function] in the tree view to set the communication.

6. Transfer the setting to the External Device.

When writing is completed, turn on the power of the External Device again.

Setting Value

Setup Items	Setting Value
Line Speed	3
Data Format	0
Communication Minimum Response Time	1
Value including communication minimum response time	0
CPL/MODBUSswitch	0
Memory Protect	0

NOTE

3.19 Setting Example 19

- Setting of GP-Pro EX
- Communication Settings

Device/P	LC 1		
Summary	y.		Change Device/PLC
Mal	ker Yamatake Co	orporation	Driver Digital Controller SID Port COM1
Tex	«t Data Mode	1 <u>Change</u>	
Commun	ication Settings		
SIO) Type	C RS232C	RS422/485(2wire) SS422/485(4wire)
Spe	eed	9600	•
Dat	ta Length	0.7	• 8
Par	ity	O NONE	⊙ EVEN ○ ODD
Sto	p Bit	● 1	0 2
Flov	w Control	O NONE	O ER(DTR/CTS) O XON/XOFF
Tim	eout	3 📫 (sec)
Ret	try	2 📫	
Wa	iit To Send	10 📑 (i	ms)
BL	/ VCC	© BI	O VCC
In	the case of RS23	2C, you can selec	the 9th pin to BI (Input)
or Is	olation Unit, please	e select it to VCC.	e the Digital's H5232L Default
Device-9	Specific Settings		
Allo	wable No. of Devi	ce/PLCs 16 Unit((s) 📊
V	No. Device Nan	ne	Settings Series=DCP31 Device Address=1
0	1 1 1 201		

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Se	ttings	×
PLC1		
Series	DCP31	•
Please reconfirm all of a you are using if you have	ddress set e changed	tings that I the series.
Device Address	1	-
		Default
OK (<u>0</u>)		Cancel

Settings of External Device

Use the FUNC key, PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. While pressing the FUNC key, press the PARA key to move to the screen of the setting group selection.

2.Press the PARA key several times to display the setup data setting group, and press the ENT key.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C84	1
C85	0
C93	0

NOTE

3.20 Setting Example 20

- Setting of GP-Pro EX
- Communication Settings

Device/PLC 1]							
Summary							Cł	hange Device/PLC
Maker	Yamatake Corp	oration	Driver Di	gital Con	troller SIO		Port	COM1
Text Data	a Mode 🛛 🗍	<u>Change</u>						
Communication	n Settings							
SIO Type	, Č	D RS232C	RS422/485(2w)	ire)	C RS422/485	(4wire)		
Speed	Γ	9600	•					
Data Len	igth (7	• 8					
Parity	() NONE	EVEN	0.0	DDD			
Stop Bit	(1	02					
Flow Con	itrol 🤇	O NONE	C ER(DTR/CTS)	0 >	KON/XOFF			
Timeout	F	3 📑 (se	c)					
Retry	ļ.	2 🕂						
Wait To 9	Send [10 🗦 (m)					
RI / VCC	(ð ri	O VCC		1			
In the c	ase of RS2320), you can select	he 9th pin to RI (In	iput)				
Isolation	n Unit, please s	elect it to VCC.	ie Digitalis nozozi	-		Default		
Device-Specif	ic Settings							
Allowable	No. of Device	/PLCs 16 Unit(s						
No.	Device Name PLC1		Settings)CP31 D	evice Address=1			
90	J		Here I and a					

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🔀				
PLC1				
Series	DCP31	•		
Please reconfirm all of a you are using if you have	ddress set e changed	tings that I the series.		
Device Address	1	-		
		Default		
OK (<u>0</u>)		Cancel		

Settings of External Device

Use the FUNC key, PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. While pressing the FUNC key, press the PARA key to move to the screen of the setting group selection.

2.Press the PARA key several times to display the setup data setting group, and press the ENT key.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C84	1
C85	0
C93	0

NOTE

3.21 Setting Example 21

- Setting of GP-Pro EX
- ♦ Communication Settings

Device/PLC1				
Summary	Change Device/PLC			
Maker Yamatake Corporation Driver Digital Controller SID	Port COM1			
Text Data Mode 1 Change				
Communication Settings				
SID Type O RS232C O RS422/485(2wire) RS422/485(4wire)				
Speed 9600 V				
Data Length O 7 O 8				
Parity C NONE O EVEN C ODD				
Stop Bit 💿 1 💿 2				
Flow Control © NONE O ER(DTR/CTS) O XON/XOFF				
Timeout 3 🙀 (sec)				
Retry 2				
Wait To Send 10 🚎 (ms)				
In the case of RS232C, you can select the 9th pin to RI (Input)				
Isolation Unit, please select it to VCC. Default				
Device-Specific Settings				
Allowable No. of Device/PLCs 16 Unit(s)				
No. Device Name Settings				
Series=DCP32,Device Address=1				

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🔀				
PLC1				
Series	DCP32	•		
Please reconfirm all of a you are using if you have	ddress set e changed	tings that I the series.		
Device Address	1	-		
		Default		
OK (<u>0</u>)		Cancel		

Settings of External Device

Use the FUNC key, PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. While pressing the FUNC key, press the PARA key to move to the screen of the setting group selection.

2.Press the PARA key several times to display the setup data setting group, and press the ENT key.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C84	1
C85	0
C93	0

NOTE

3.22 Setting Example 22

- Setting of GP-Pro EX
- Communication Settings

Devic	e/PLC 1		
Sumr	nary		Change Device/PLC
	Maker Yamatake Co	orporation	Driver Digital Controller SID Port COM1
	Text Data Mode	1 <u>Change</u>	
Comr	munication Settings		
	SIO Type	C RS232C	RS422/485(2wire) C RS422/485(4wire)
	Speed	9600	•
	Data Length	0.7	• 8
	Parity	O NONE	EVEN C ODD
	Stop Bit	⊙ 1	0 2
	Flow Control	💿 NONE	O ER(DTR/CTS) O XON/XOFF
	Timeout	3 📫 (sec)
	Retry	2 📫	
	Wait To Send	10 📫 (ms)
	RI / VCC	© RI	O VCC
	In the case of RS23	32C, you can selec	et the 9th pin to RI (Input)
	Isolation Unit, pleas	e select it to VCC.	e the Digital's HS232L Default
Devi	ce-Specific Settings		
	Allowable No. of Devi	ce/PLCs 16 Unit	(s) 📊
[No. Device Nar	ne	Settings Series=DCP32 Device Address=1
l	m . , 201		

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🔀				
PLC1				
Series	DCP32	•		
Please reconfirm all of a you are using if you have	ddress set changed	tings that the series.		
Device Address	1	-		
		Default		
OK (<u>0</u>)		Cancel		

Settings of External Device

Use the FUNC key, PARA key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. Please refer to the manual of the Controller for more details.

Procedure

1. While pressing the FUNC key, press the PARA key to move to the screen of the setting group selection.

2.Press the PARA key several times to display the setup data setting group, and press the ENT key.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5.Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C84	1
C85	0
C93	0

NOTE

3.23 Setting Example 23

- Setting of GP-Pro EX
- Communication Settings

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

💰 Individual Device Settings 🛛 🛛 🔀				
PLC1				
Series	DCP551	•		
Please reconfirm all of address settings that you are using if you have changed the series.				
Device Address	1	*		
		Default		
OK (<u>0</u>)		Cancel		

Settings of External Device

Use the PROG key, RUN/HOLD key, SETUP key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting. Please refer to the manual of the Controller for more details.

Procedure

1. Press the RUN/HOLD key while pressing the PROG key to move to the READY mode.

2.Press the SETUP key in the standard display to move to the setup mode.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C76	1
C77	0
C78	0
C79	0
C80	1
C97	0

NOTE

3.24 Setting Example 24

- Setting of GP-Pro EX
- Communication Settings

Device/PLC 1	
Summary	Change Device/PLC
Maker Yamatake Corporation Driver Digital Controller SIO Po	rt COM1
Text Data Mode 1 Change	
Communication Settings	
SID Type O RS232C O RS422/485(2wire) O RS422/485(4wire)	
Speed 9600 💌	
Data Length O 7 💿 8	
Parity O NONE O EVEN O ODD	
Stop Bit	
Flow Control O NONE O ER(DTR/CTS) O XON/XOFF	
Timeout 3 📑 (sec)	
Retry 2	
Wait To Send 10 💮 (ms)	
RI / VCC © RI © VCC	
In the case of RS232C, you can select the 9th pin to RI (input)	
Isolation Unit, please select it to VCC. Default	
Device-Specific Settings	
Allowable No. of Device/PLCs 16 Unit(s)	
No. Device Name Settings I PLC1 Series=DCP551.Device Address=1	

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

Individual Device Se	ttings	×
PLC1		
Series	DCP551	•
Please reconfirm all of a you are using if you have	ddress set changed	tings that the series.
Device Address	1	-
		Default
OK (<u>0</u>)		Cancel

Settings of External Device

Use the PROG key, RUN/HOLD key, SETUP key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting. Please refer to the manual of the Controller for more details.

Procedure

1. Press the RUN/HOLD key while pressing the PROG key to move to the READY mode.

2.Press the SETUP key in the standard display to move to the setup mode.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C76	1
C77	0
C78	0
C79	0
C80	0
C97	0

NOTE

3.25 Setting Example 25

- Setting of GP-Pro EX
- Communication Settings

Device/PLC 1	
Summary Change Dr	evice/PLC
Maker Yamatake Corporation Driver Digital Controller SIO Port COM1	
Text Data Mode 1 Change	
Communication Settings	
SID Type C RS232C C RS422/485(2wire) C RS422/485(4wire)	
Speed 9600 V	
Data Length O 7 O 8	
Parity ONONE OEVEN ODD	
Stop Bit 1 2	
Flow Control O NONE C ER(DTR/CTS) C XON/XOFF	
Timeout 3 (sec)	
Retry 2	
Wait To Send 10 📑 (ms)	
In the case of RS232C, you can select the 9th pin to RI (Input)	
or VCC (bV Power Supply). If you use the Digital's HS232C Isolation Unit, please select it to VCC. Default	
Device-Specific Settings	
Allowable No. of Device/PLCs 16 Unit(s)	
No. Device Name Settings	

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

Individual Device Se	ttings	×
PLC1		
Series	DCP551	•
Please reconfirm all of a you are using if you have	ddress set e changed	tings that I the series.
Device Address	1	-
		Default
OK (<u>D</u>)		Cancel

Settings of External Device

Use the PROG key, RUN/HOLD key, SETUP key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting. Please refer to the manual of the Controller for more details.

Procedure

1. Press the RUN/HOLD key while pressing the PROG key to move to the READY mode.

2.Press the SETUP key in the standard display to move to the setup mode.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C76	1
C77	0
C78	0
C79	0
C80	0
C97	0

NOTE

3.26 Setting Example 26

- Setting of GP-Pro EX
- Communication Settings

Devid	ce/PLC 1		
Sum	nmary		Change Device/PLC
	Maker Yamatake Co	orporation	Driver Digital Controller SIO Port COM1
	Text Data Mode	1 <u>Change</u>	
Corr	nmunication Settings		
	SIO Type	RS232C	C RS422/485(2wire) C RS422/485(4wire)
	Speed	9600	T
	Data Length	C 7	@ 8
	Parity	C NONE	
	Stop Bit	• 1	© 2
	Flow Control	NONE	C ER(DTR/CTS) C XON/XOFF
	Timeout	3 📫	(sec)
	Retry	2 *	
	Wait To Send	10 🕂 ((ms)
	RI / VCC	RI	C VCC
	In the case of RS2 or VCC (5V Power Isolation Unit, pleas	32C, you can selec Supply). If you use e select it to VCC.	et the 9th pin to RI (Input) ee the Digital's RS232C . Default
Dev	vice-Specific Settings		
	Allowable No. of Dev	ice/PLCs 16 Unit	t(s) 📷
	No. Device Nat 1 PLC1	ne	Settings Series=DCP552 Device Address=1
			54LE 1

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

<i></i> Individual Device Se	ttings	×
PLC1		
Series	DCP552	•
Please reconfirm all of a you are using if you have	ddress set changed	tings that the series.
Device Address	1	-
		Default
OK (<u>D</u>)		Cancel

Settings of External Device

Use the PROG key, RUN/HOLD key, SETUP key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting. Please refer to the manual of the Controller for more details.

Procedure

1. Press the RUN/HOLD key while pressing the PROG key to move to the READY mode.

2.Press the SETUP key in the standard display to move to the setup mode.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C76	1
C77	0
C78	0
C79	0
C80	1
C97	0

NOTE

3.27 Setting Example 27

- Setting of GP-Pro EX
- Communication Settings

Device/PLC 1	
Summary	Change Device/PLC
Maker Vamatake Corporation Driver Digital Controller SID	Port COM1
Text Data Mode 1 Change	
Communication Settings	
SIO Type C RS232C C RS422/485(2wire) © RS422/485(4wire)	
Speed 9600 💌	
Data Length O 7 💿 8	
Parity C NONE C EVEN C ODD	
Stop Bit 💿 1 💿 2	
Flow Control 💿 NONE O EB(DTB/CTS) O XON/XOFF	
Timeout 3 📑 (sec)	
Retry 2	
Wait To Send 10 🚊 (ms)	
RI / VCC © RI © VCC	
In the case of RS232C, you can select the 9th pin to RI (Input) or VCC (5V Power Supply). If you use the Digital's RS232C	
Isolation Unit, please select it to VCC. Default	
Device-Specific Settings	
Allowable No. of Device/PLCs 16 Unit(s)	
A PLC1 Settings	

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

Individual Device Se	ttings	×
PLC1		
Series	DCP552	•
Please reconfirm all of a you are using if you have	ddress set changed	tings that the series.
Device Address	1	-
		Default
OK (<u>D</u>)		Cancel

Settings of External Device

Use the PROG key, RUN/HOLD key, SETUP key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting. Please refer to the manual of the Controller for more details.

Procedure

1. Press the RUN/HOLD key while pressing the PROG key to move to the READY mode.

2.Press the SETUP key in the standard display to move to the setup mode.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C76	1
C77	0
C78	0
C79	0
C80	0
C97	0

NOTE

3.28 Setting Example 28

- Setting of GP-Pro EX
- Communication Settings

Device/PLC 1			
Summary			Change Device/PLC
Maker 🛛	Yamatake Corp	poration	Driver Digital Controller SIO Port COM1
Text Dat	a Mode 🛛 🗌	1 Change	
Communicatio	n Settings		
SIO Type	e	O RS232C	RS422/485(2wire) RS422/485(4wire)
Speed		9600	_
Data Ler	ngth	07	• 8
Parity		O NONE	• EVEN O ODD
Stop Bit		• 1	© 2
Flow Cor	ntrol	NONE	O ER(DTR/CTS) O XON/XOFF
Timeout		3 📫 (s	(sec)
Retry		2 📫	
Wait To	Send	10 📑 (r	(ms)
RI / VCC	:	© RI	O VCC
In the o or VCC Isolatio	case of RS232 (5V Power Su n Unit, please	C, you can selec upply). If you use select it to VCC.	ect the 9th pin to RI (Input) se the Digital's RS232C J. Default
Device-Speci	ic Settings		
Allowable	No. of Device	e/PLCs_16Unit(:	it(s)
No.	PLC1	9	Settings Series=DCP552.Device Address=1
90	1		PACE 1

To display the setting screen, click 📻 ([Setting]) of the External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

Individual Device Se	ttings	×
PLC1		
Series	DCP552	•
Please reconfirm all of a you are using if you have	ddress set changed	tings that the series.
Device Address	1	-
		Default
OK (<u>D</u>)		Cancel

Settings of External Device

Use the PROG key, RUN/HOLD key, SETUP key, ENT key, DISP key, down key and up key in front of the Controller for communication settings of the External Device. You can change the communication setting only in the READY mode. Move the External Device to the READY mode before setting. Please refer to the manual of the Controller for more details.

Procedure

1. Press the RUN/HOLD key while pressing the PROG key to move to the READY mode.

2.Press the SETUP key in the standard display to move to the setup mode.

3.Press the down/up keys several times to select the setup items and press the ENT key.

4.Use the down/up keys to select the setup contents and press the ENT key.

5. Press the DISP key to move to the standard display.

Setting Value

Setup Items	Setting Value
C76	1
C77	0
C78	0
C79	0
C80	0
C97	0

NOTE

4 Setup Items

Set communication settings of the Display with GP-Pro Ex or in off-line mode of the Display. The setting of each parameter must be identical to that of External Device. "3 Example of Communication Setting" (page 7)

4.1 Setup Items in GP-Pro EX

Communication Settings

To display the setting screen, select [Device/PLC Settings] from [System setting window] in workspace.

Device/PLC 1		
Summary		Change Device/PLC
Maker Yar	natake Corporation	Driver Digital Controller SIO Port COM1
Text Data M	lode 1 <u>Change</u>	
Communication S	ettinas	
SIO Type	C RS232C	RS422/485(2wire) RS422/485(4wire)
Speed	9600	
Data Lengtł	0.7	• 8
Parity	O NONE	EVEN O ODD
Stop Bit	• 1	O 2
Flow Contro	I NONE	O ER(DTR/CTS) O XON/XOFF
Timeout	4 🗧	(sec)
Retry	2 +	1
Wait To Ser	nd 70 🕂	(ms)
RI / VCC	© RI	O VCC
In the cas	e of RS232C, you can sel	lect the 9th pin to RI (Input)
Isolation U	nit, please select it to VCI	C. Default
Device-Specific :	Settings	
Allowable N	o. of Device/PLCs 16 Ur	nit(s)
No. D	evice Name	Settings Settings Series=SDC10 Device Address=1
<u> </u>		

Setup Items	Setup Description		
SIO Type	Select the SIO type to communicate with the External Device.		
Speed	Select speed between the External Device and the Display.		
Data Length	elect data length.		
Parity	Select how to check parity.		
Stop Bit	Select stop bit length.		
Flow Control	Display the communication control method to prevent overflow of transmission and reception data.		
Timeout	Use an integer from 1 to 127 to enter the time (s) for which the Display waits for the response from the External Device.		

continued to next page

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Setup Items	Setup Description		
Retry	In case of no response from the External Device, use an integer from 0 to 255 to enter how many times the Display retransmits the command.		
Wait To Send	Use an integer from 0 to 255 to enter standby time (ms) for the Display from receiving packets to transmitting next commands.		
RI/VCC	Switches RI/VCC of the 9th pin.		

To display the setting screen, click I ([Setting]) of External Device you want to set from [Device-Specific Settings] of [Device/PLC Settings].

When you connect multiple External Device, click if from [Device-Specific Settings] of [Device/PLC Settings] to add another External Device.

🐔 Individual Device Settings 🛛 🛛 🔀				
PLC1				
Series	SDC10			
Please reconfirm all of a you are using if you have	ddress settings that e changed the series.			
Device Address	1			
	Default			
OK (<u>O</u>)	Cancel			

Setup Items	Setup Description
Series	Displays a model of the External Device.
Device Address	Enter the address of the External Device, using 1 to 127.

4.2 Settings in Off-Line Mode

NOTE

• Please refer to Maintenance/Troubleshooting for more information on how to enter off-line mode or about operation.

Cf: Maintenance/Troubleshooting "2.2 Offline Mode"

Communication Settings

To display the setting screen, touch [Device/PLC Settings] from [Peripheral Equipment Settings] in the off-line mode. Touch External Device you want to set from the displayed list.

Comm,	Device	Option		
				Ì
Digital Controller	\$I0		[COM1]	Page 1/1
	SIO Type Speed Data Length Parity Stop Bit Flow Control Timeout(s) Retry Wait To Send(ms)	R\$422/485(9600 7 NONE 1 NONE	4wire)	ODD
	Exit		Back	2006/01/31 15:56:38

Setup Items	Setup Description		
SIO Type	Select the SIO type to communicate with the External Device.		
Speed	Select speed between the External Device and the Display.		
Data Length	Select data length.		
Parity	Select how to check parity.		
Stop Bit	Select stop bit length.		
Flow Control	Display the communication control method to prevent overflow of transmission and reception data.		
Timeout	Use an integer from 1 to 127 to enter the time (s) for which the Display waits for the response from the External Device.		
Retry	In case of no response from the External Device, use an integer from 0 to 255 to enter how many times the Display retransmits the command.		
Wait To Send	Use an integer from 0 to 255 to enter standby time (ms) for the Display from receiving packets to transmitting next commands.		
RI/VCC	Switches RI/VCC of the 9th pin.		

To display the setting screen, touch [Device/PLC Settings] from [Peripheral Equipment Settings]. Touch the External Device you want to set from the displayed list, and touch [Device Settings].

Comm.	Device	Option		
Digital Controller	SIO		[COM1]	Page 1/1
Device	/PLC Name PLC	1		
	Series	SDC30/31		
	Device Address			1 🔻 🔺
		,		
	Exit		Back	2006/01/31 15:56:42

Setup Items	Setup Description
Device/PLC Name	Select the External Device to set. Device name is a title of the External Device set with GP- Pro EX. (Initial value [PLC1])
Series	Displays a model of the External Device.
Device Address	Enter the address of the External Device, using 1 to 127.

Option

To display the setting screen, touch [Device/PLC Settings] from [Peripheral Equipment Settings]. Touch the External Device you want to set from the displayed list, and touch [Option].

Comm,	Device	Option		
Digital Controller	\$10		[COM1]	Page 1/1
	RI / VCC In the case of the 9th pin to Power Supply). RS232C Isolati it to VCC.	• RI f RS232C, you can sel o RI(Input) or VCC(5 If you use the Digit ion Unit, please sele	VCC lect V tal's ect	
	Exit		Back	2006/01/31 15:56:48
				,

Setup Items	Setup Description
RI/VCC	Switches RI/VCC of the 9th pin.

5 Cable Diagram

The cable diagram shown below may be different from the cable diagram recommended by Yamatake Corporation. Please be assured there is no operational problem in applying the cable diagram shown in this manual.

- The FG pin of the main body of the External Device must be D-class grounded. Please refer to the manual of the External Device for more details.
- SG and FG are connected inside the Display. When connecting SG to the External Device, design the system not to form short-circuit loop.
- Check the terminal No. on the side of External Device in the manual of the External Device. It varies depending on the additional function.
- Connect the isolation unit, when communication is not stabilized under the influence of a noise etc.
- Recommended cable

Company Name		Model No.
Fujikura Densen	2 cores	IPEV-S-0.9mm ² x1P
i ujikura Densen	3 cores	ITEV-S-0.9mm ² x1T
Hitachi Densen	2 cores	KPEV-S-0.9mm ² x1P
Thachi Densen	3 cores	KTEV-S-0.9mm ² x1T

• When connecting IPC with External Device by RS-232C, the COM port which can be used changes with series. Please refer to the manual of IPC for details.

Usable port

Series	Usable port	
PS-2000B	COM1 ^{*1} , COM2, COM3 ^{*1} , COM4	
PS-3650A, PS-3651A	COM1 ^{*1}	
PS-3700A (Pentium®4-M)	COM1 ^{*1} , COM2 ^{*1} , COM3 ^{*2} , COM4	

*1 The RI/5V can be switched. Please switch with the change switch of IPC.

*2 It is necessary to set up the SIO type with the Dip switch.

• When connecting to the COM3 of PS-3700A (Pentium®4-M) with External Device, it is necessary to set up the SIO type of COM3 with a Dip switch. Please refer to the manual of PS-3700A (Pentium®4-M) for details.

Dip switch	Setting	Description
1	OFF	Reserve (always OFF)
2	OFF	SIO type of COM3: RS-232C
3	OFF	510 type of COM5. K5-252C
4	OFF	Output mode of TX data: Always output
5	OFF	Terminal resistance insertion to TX (220 Ω): None
6	OFF	Terminal resistance insertion to RX (220 Ω): None
7	OFF	Short-circuit of TXA and RXA: Does not Exist
8	OFF	Short-circuit of TXB and RXB: Does not Exist
9	OFF	Auto Detection: Disable
10	OFF	

Dip switch setting: RS-232C

Dip switch setting: RS-422/485 (4 wire)

Dip switch	Setting	Description
1	OFF	Reserve (always OFF)
2	ON	SIO type of COM3: RS /22//85
3	ON	510 type of COM5. K5-422/465
4	OFF	Output mode of TX data: Always output
5	OFF	Terminal resistance insertion to TX (220Ω): None
6	OFF	Terminal resistance insertion to RX (220 Ω): None
7	OFF	Short-circuit of TXA and RXA: Does not Exist
8	OFF	Short-circuit of TXB and RXB: Does not Exist
9	OFF	Auto Detection: Disable
10	OFF	

Dip switch setting: RS-422/485 (2 wire)

Dip switch	Setting	Description	
1	OFF	Reserve (always OFF)	
2	ON	SIO type of COM3: RS_422/485	
3	ON	510 type of COM5. R5 +22/+65	
4	OFF	Output mode of TX data: Always output	
5	OFF	Terminal resistance insertion to TX (220 Ω): None	
6	OFF	Terminal resistance insertion to RX (220 Ω): None	
7	ON	Short-circuit of TXA and RXA: Exists	
8	ON	Short-circuit of TXB and RXB: Exists	
9	ON	Auto Detection: Enable	
10	ON		

Cable Diagram 1

Display (Connection Port)	Cable	Remarks
GP (COM1) IPC ^{*1*2}	Your own cable	Cable length: 15m or less

*1 Usable ports are different by the series.

*2 When use the COM3 of PS-3700A (Pentium®4-M), set the SIO type of COM3 with Dip switch. "Dip switch setting: RS-232C" (page 69)

	D-Sub 9 I	Pin (socket)	Shield	Controller Terminal Block
	Pin	Signal name		Signal name
	2	RD(RXD)		SD
Display	3	SD(TXD)		RD
	4	ER(DTR)		SG
	5	SG		FG
	6	DR(DSR)		
	7	RS(RTS)	$ h \setminus $	
	8	CS(CTS)		

Cable Diagram 2

Display (Connection Port)		Cable	Remarks
GP ^{*1} (COM1) AGP-3302B (COM2) IPC ^{*2} (COM3)	А	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	В	Your own cable	
GP*3 (COM2)	С	Online adapter by Pro-face CA4-ADPONL-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	D	Online adapter by Pro-face CA4-ADPONL-01 + Your own cable	

*1 All GP models except AGP-3302B

*2 Only COM3 of PS -3700A (Pentium®4-M) can be used. When use the COM3, set the SIO type of COM3 with Dip switch.

"Dip switch setting: RS-422/485 (4 wire)" (page 69)

*3 All GP models except GP-3200 series and AGP-3302B
- A. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection



1:n Connection



- B. When self-made cable is used
- 1:1 Connection

	Terminal resistance	D-Sub 9 F	Pin (socket)		Controller Terminal block	Terminal resistance $150 \ \Omega \pm 5\%$
	150 $\Omega \pm 5\%$	Pin	Signal name	Shield	Signal name	(more than)
	(III01e IIIali 1/2W)	1	RDA		SDA	
	́ ≥_	2	RDB		SDB	<u> </u> ≯
Display	~	3	SDA		RDA	
	Terminal	7	SDB		RDB	
	resistance $150 \Omega + 5\%$	5	SG	······	SG	Terminal resistance
	(more than	4	ERA		FG	$150 \Omega \pm 5\%$
	1/2W)	8	CSA	۲		1/2W)
		9	ERB			,
		6	CSB	↓		
		Shell	FG			

1:n Connection



- C. When using the online adapter (CA4-ADPONL-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection





- D. When using the online adapter (CA4-ADPONL-01) by Pro-face and your own cable
- 1:1 Connection





Cable Diagram 3

Display (Connection Port)		Cable	Remarks
GP ^{*1} (COM1) AGP-3302B (COM2)	А	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	В	Your own cable	
GP*2 (COM2)	С	Online adapter by Pro-face CA4-ADPONL-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable Online adapter by Pro-face	Cable length: 500m or less
	D	CA4-ADPONL-01 + Your own cable	
IPC ^{*3} (COM3)	Е	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	F	Your own cable	

All GP models except AGP-3302B *1

*2 All GP models except GP-3200 series and AGP-3302B

*3 Only COM3 of PS -3700A (Pentium®4-M) can be used. When use the COM3, set the SIO type of COM3 with Dip switch. ""Dip switch setting: RS-422/485 (2 wire)" (page 70)

- A. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection





Your own cable

- B. When self-made cable is used
- 1:1 Connection





- C. When using the online adapter (CA4-ADPONL-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection





D.When using the online adapter (CA4-ADPONL-01) by Pro-face and your own cable

• 1:1 Connection





- E. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection





- F. When self-made cable is used
- 1:1 Connection





Cable Diagram4

Display (Connection Port)		Cable	Remarks
GP ^{*1} (COM1) AGP-3302B (COM2)	А	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	В	Your own cable	
GP*2 (COM2)	С	Online adapter by Pro-face CA4-ADPONL-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	Cable length: 500m or less
	D	Online adapter by Pro-face CA4-ADPONL-01 + Your own cable	
IPC ^{*3} (COM3)	E	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	F	Your own cable	

*1 All GP models except AGP-3302B

*2 All GP models except GP-3200 series and AGP-3302B

*3 Only COM3 of PS -3700A (Pentium®4-M) can be used. When use the COM3, set the SIO type of COM3 with Dip switch. "Dip switch setting: RS-422/485 (2 wire)" (page 70)

- A. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection





- B. When self-made cable is used
- 1:1 Connection



- **NOTE** Termination resistance is not necessary.
- 1:n Connection



- C. When using the online adapter (CA4-ADPONL-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection



NOTE • Termination resistance is not necessary.

• 1:n Connection



NOTE •

Termination resistance is not necessary.

- D. When using the online adapter (CA4-ADPONL-01) by Pro-face and your own cable
- 1:1 Connection



NOTE

Termination resistance is not necessary.

• 1:n Connection

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- E. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection



NOTE •

Termination resistance is not necessary.

1:n Connection



NOTE • Ter

Termination resistance is not necessary.

- F. When self-made cable is used
- 1:1 Connection



NOTE

• Termination resistance is not necessary.

1:n Connection



NOTE

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Termination resistance is not necessary.

Cable Diagram5

Display (Connection Port)		Cable	Remarks
GP ^{*1} (COM1) AGP-3302B (COM2)	A	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	В	Your own cable	
GP*2 (COM2)	С	Online adapter by Pro-face CA4-ADPONL-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	Cable length: 500m or less
	D	Online adapter by Pro-face CA4-ADPONL-01 + Your own cable	
IPC ^{*3} (COM3)	Е	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	F	Your own cable	

*1 All GP models except AGP-3302B

*2 All GP models except GP-3200 series and AGP-3302B

*3 Only COM3 of PS -3700A (Pentium®4-M) can be used. When use the COM3, set the SIO type of COM3 with Dip switch. "Dip switch setting: RS-422/485 (2 wire)" (page 70)

- A. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection



1:n Connection



- B. When self-made cable is used
- 1:1 Connection





- C. When using the online adapter (CA4-ADPONL-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection



Terminal resistance $150 \ \Omega \pm 5\%$ Terminal resistance Signal name Shield (more than Controller Controller 1/2W) CA4-ADPONL-01 RDA Terminal block Terminal block $150 \ \Omega \pm 5\%$ Shield Display (more than RDB Signal name Signal name 1/2W) SDA + + пп ₹ SDB _ _ CA3-ADPTRM-01 SG SG SG TERM FG FG Your own cable

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D. When using the online adapter (CA4-ADPONL-01) by Pro-face and your own cable

• 1:1 Connection





Your own cable

- E. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection





- F. When self-made cable is used
- 1:1 Connection





Cable Diagram6

Display (Connection Port)		Cable	Remarks
GP ^{*1} (COM1) AGP-3302B (COM2)	А	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	В	Your own cable	
GP ^{*2} (COM2)	С	Online adapter by Pro-face CA4-ADPONL-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	Cable length: 500m or less
	D	Online adapter by Pro-face CA4-ADPONL-01 + Your own cable	
IPC ^{*3} (COM3)	E	COM port conversion adapter by Pro-face CA3-ADPCOM-01 + Terminal block conversion adapter by Pro-face CA3-ADPTRM-01 + Your own cable	
	F	Your own cable	

*1 All GP models except AGP-3302B

*2 All GP models except GP-3200 series and AGP-3302B

*3 Only COM3 of PS -3700A (Pentium®4-M) can be used. When use the COM3, set the SIO type of COM3 with Dip switch. ""Dip switch setting: RS-422/485 (2 wire)" (page 70)

- A. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection





Termination resistance is not necessary.

• 1:n Connection

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- B. When self-made cable is used
- 1:1 Connection



NOTE

• Termination resistance is not necessary.

• 1:n Connection



NOTE

Termination resistance is not necessary.

- C. When using the online adapter (CA4-ADPONL-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection







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NOTE • Termination resistance is not necessary.
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- D. When using the online adapter (CA4-ADPONL-01) by Pro-face and your own cable
- 1:1 Connection



NOTE

Termination resistance is not necessary.

1:n Connection

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NOTE

Termination resistance is not necessary.

- E. When using the COM port conversion adapter (CA3-ADPCOM-01), the terminal block conversion adapter (CA3-ADPTRM-01) by Pro-face and your own cable
- 1:1 Connection





Termination resistance is not necessary.

1:n Connection



NOTE • Termination resistance is not necess	ary.
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- F. When self-made cable is used
- 1:1 Connection



NOTE

• Termination resistance is not necessary.



1:n Connection

6 Supported Device

Range of supported device address is shown in the table below. Please note that the actually supported range of the devices varies depending on the External Device to be used. Please check the actual range in the manual of your External Device.

Enter the External Device address in the dialog below.

	🏄 I	npu	t Ad	ldres	s (W	ord)	ĸ	4
	Devi	ice/P	LC	PLC1	_	_	•		/
			-	005	01		-		
	Ba	ick				C	Clr		
	А	В	С		7	8	9		
2	D	Е	F		4	5	6		
					1	2	3		
	Re	eterer	nce		0	E	nt		

1. Address

Enter the address.

2. Reference

Available parameter list is displayed. Click the parameter to use and press "Select", then the address is entered.

6.1 SDC10

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00501.0-04504.F	00501-04504	[L/H]	*1

*1 When you write the bit address, the Display reads the word address corresponding to that of the External Device first. Then, it changes the target bit address among the word data once read and returns the word data to the External Device. Note that the correct data may not be written if you change the word address value in the ladder program while the Display reads the data of the External Device and returns it to the External Device.

• To set [Enable System Data Area] in the system area setting of GP-Pro EX may cause malfunction. Do not set [Enable System Data Area].

• You can set only reading area size for the system data area available to use in the Controller. Please refer to the GP-Pro EX Reference Manual for reading area size.

- Cf: GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
- Please refer to the precautions on manual notation for icons in the table.

Manual Symbols and Terminology

• Even if you use the nonexistent address, read error may not be displayed. In this case, "0" is retained for the read data. Note that the writing error is displayed.

6.2 SDC15/SDC25/SDC26/SDC35/SDC36

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00273.0-31243.F	00273-31243	[L/H]	*1

IMPORTANT	 To set [Enable System Data Area] in the system area setting of GP-Pro EX may cause malfunction. Do not set [Enable System Data Area].
NOTE	• You can set only reading area size for the system data area available to use in the Controller. Please refer to the GP-Pro EX Reference Manual for reading area size.
	Cf: GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
	• Please refer to the precautions on manual notation for icons in the table.
	Manual Symbols and Terminology
	• Even if you use the nonexistent address, read error may not be displayed. In this case, "0" is retained for the read data. Note that the writing error is displayed.

6.3 SDC20/SDC21

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	0301.0-0690.F	0301-0690	[L/H]	*1

IMPORTANT	• To ma	set [Enable System Data Area] in the system area setting of GP-Pro EX may cause Ifunction. Do not set [Enable System Data Area].
NOTE	• You refe	a can set only reading area size for the system data area available to use in the Controller. Please or to the GP-Pro EX Reference Manual for reading area size.
	Cf:	GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
	• Plea	ase refer to the precautions on manual notation for icons in the table.
	 Events retain 	in if you use the nonexistent address, read error may not be displayed. In this case, "0" is

6.4 SDC30/SDC31

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00501.0-06049.F	00501-06049	[L/H]	*1

IMPORTANT	• To ma	set [Enable System Data Area] in the system area setting of GP-Pro EX may cause Ifunction. Do not set [Enable System Data Area].
NOTE	• You refe	a can set only reading area size for the system data area available to use in the Controller. Please or to the GP-Pro EX Reference Manual for reading area size.
	Cf:	GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
	• Plea	ase refer to the precautions on manual notation for icons in the table.
	• Eve	in if you use the nonexistent address, read error may not be displayed. In this case, "0" is

6.5 SDC40A

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00501.0-06100.F	00501-06100	[L/H]	*1

IMPORTANT	• To ma	set [Enable System Data Area] in the system area setting of GP-Pro EX may cause Ifunction. Do not set [Enable System Data Area].
NOTE	• You refe	a can set only reading area size for the system data area available to use in the Controller. Please or to the GP-Pro EX Reference Manual for reading area size.
	Cf:	GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
	• Plea	ase refer to the precautions on manual notation for icons in the table.
	• Eve	in if you use the nonexistent address, read error may not be displayed. In this case, "0" is
6.6 SDC40B

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00501.0-08902.F	00501-08902	[L/H]	*1

IMPORTANT	• To ma	set [Enable System Data Area] in the system area setting of GP-Pro EX may cause Ifunction. Do not set [Enable System Data Area].
NOTE	• You refe	a can set only reading area size for the system data area available to use in the Controller. Please or to the GP-Pro EX Reference Manual for reading area size.
	Cf:	GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
	• Plea	ase refer to the precautions on manual notation for icons in the table.
	 Events retain 	in if you use the nonexistent address, read error may not be displayed. In this case, "0" is

6.7 SDC40G

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00501.0-06100.F	00501-06100	[L/H]	*1

IMPORTANT	 To set [Enable System Data Area] in the system area setting of GP-Pro EX may cause malfunction. Do not set [Enable System Data Area]. 	_
		_
NOTE	• You can set only reading area size for the system data area available to use in the Controller. Please refer to the GP-Pro EX Reference Manual for reading area size.	÷
	Cf: GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"	
	 Please refer to the precautions on manual notation for icons in the table. Manual Symbols and Terminology 	
	• Even if you use the nonexistent address, read error may not be displayed. In this case, "0" is retained for the read data. Note that the writing error is displayed.	

6.8 DMC10

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	01001.0-07806.F	01001-07806	[L/H]	*1

IMPORTANT	• To ma	set [Enable System Data Area] in the system area setting of GP-Pro EX may cause Ifunction. Do not set [Enable System Data Area].
NOTE	• You refe	a can set only reading area size for the system data area available to use in the Controller. Please or to the GP-Pro EX Reference Manual for reading area size.
	Cf:	GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
	• Plea	ase refer to the precautions on manual notation for icons in the table.
	 Events retain 	in if you use the nonexistent address, read error may not be displayed. In this case, "0" is

6.9 DCP31/DCP32

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00501.0-04600.F	00501-04600	[L/H]	*1

IMPORTANT	• To ma	set [Enable System Data Area] in the system area setting of GP-Pro EX may cause Ifunction. Do not set [Enable System Data Area].
NOTE	• You refe	a can set only reading area size for the system data area available to use in the Controller. Please or to the GP-Pro EX Reference Manual for reading area size.
	Cf:	GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
	• Ple	ase refer to the precautions on manual notation for icons in the table.
	• Eve	en if you use the nonexistent address, read error may not be displayed. In this case, "0" is nined for the read data. Note that the writing error is displayed.

6.10 DCP551

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00256.0-01712.F	00256-01712	[L/H]	*1

IMPORTANT	 To set [Enable System Data Area] in the system area setting of GP-Pro EX may cause malfunction. Do not set [Enable System Data Area]. 	_
		_
NOTE	• You can set only reading area size for the system data area available to use in the Controller. Please refer to the GP-Pro EX Reference Manual for reading area size.	÷
	Cf: GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"	
	 Please refer to the precautions on manual notation for icons in the table. Manual Symbols and Terminology 	
	• Even if you use the nonexistent address, read error may not be displayed. In this case, "0" is retained for the read data. Note that the writing error is displayed.	

6.11 DCP552

This address can be specified as system data area.

Device	Bit Address	Word Address	32 bit	Remarks
Data	00256.0-02003.F	00256-02003	[L/H]	*1

IMPORTANT	• To ma	set [Enable System Data Area] in the system area setting of GP-Pro EX may cause Ifunction. Do not set [Enable System Data Area].
NOTE	• You refe	a can set only reading area size for the system data area available to use in the Controller. Please or to the GP-Pro EX Reference Manual for reading area size.
	Cf:	GP-Pro EX Reference Manual "Appendix 1.4 LS Area (only for direct access method)"
	• Plea	ase refer to the precautions on manual notation for icons in the table.
	 Events retain 	in if you use the nonexistent address, read error may not be displayed. In this case, "0" is

7 Device Code and Address Code

Use device code and address code when you select "Device Type & Address" for the address type in data displays. Address of the External Device is configured as follows.

7.1 SDC10

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.2 SDC15/SDC25/SDC26/SDC35/SDC36

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.3 SDC20/SDC21

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.4 SDC30/SDC31

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.5 SDC40A

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.6 SDC40B

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.7 SDC40G

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.8 DMC10

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.9 DCP31/DCP32

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.10 DCP551

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

7.11 DCP552

Device	Device Name	Device Code (HEX)	Address Code
Data		0080	Word Address

8 Error Messages

Error messages are displayed on the screen of Display as follows: "No. : Device Name: Error Message(Error Occurrence Area)". Each description is shown below.

Item	Requirements
No.	Error No.
Device Name	Name of External Device where error occurs. Name of External Device is a title of External Device set with GP-Pro EX.(Initial value[PLC1])
Error Message	Displays messages related to the error which occurs.
Error Occurrence Area	Displays IP address or device address of External Device where error occurs, or error codes received from External Device.
	 NOTE IP address is displayed such as "IP address(Decimal): MAC address(Hex)". Device address is displayed such as "Address: Device addressî. Received error codes are displayed such as "Decimal[Hex]".

Display Examples of Error Messages

"RHAA035: PLC1: Error has been responded for device write command (Error Code: 2[02H])"

NOTE

Please refer to the manual of External Device for more detail of received error codes.

• Please refer to "When an error message is displayed (Error code list)" of "Maintenance/ Troubleshooting" for a common error message to the driver.