

Connecting Rockwell (Allen-Bradley) PLC

<u>Controllogix 5000 Series - DF1 Serial</u>

Communication Setting Sample

GP Settings		PLC Settings	
Speed	19200 bps	Baud Rate *1	19200 bps
Data Length	8 bit	Data Bits ^{*1}	8 bit
Stop Bit	1 bit	Stop Bit ^{*1}	1 bit
Parity	Even	Parity ^{*1}	Even
Flow Control	ER (DTR/CTS)		
SIO Type	RS-232C		
Machine No.	0	Station Address *2	0
		Mode *1	System
		Control Line *1	No Handshake
		RTS Send Delay *1	0
		RTS Off Delay *1	0
		Protocol *2	DF1 Slave
		Transmit Retries *2	3
		Slave Poll Timeout	3000
		*2	
		EOT Suppression *2	Not Checked
		Error Detection *2	BCC
		Enable Duplicate	Not Checked
		Detection *2	(Disable)

*1 Set in the [Serial Port] menu of the ladder software RSLogix5000 by Rockwell.

*2 Set in the [System Protocol] menu of the ladder software RSLogix5000 by Rockwell.



Selecting PLC Type

Start up GP-PRO /PBIII.

Select the following PLC Type when creating the project file.

🚰 a.prw : Untitled - Project Manager	- 🗆 🗵
<u>Project</u> <u>Screen/Setup</u> <u>Control</u> <u>Utility</u> <u>H</u> elp	
GP-PRO/PBIII -C-Package03	
GP Setup Project Logic Program Project Edit New Copen	
GP2600 Allon Readley Control Logiv DE1 none T	
Allen Bradley ControlLogixDF1	



Communication Settings [GP]

1 [GP-PRO/PB C-Package Setting]

Select [GP Setup] on Project Manager.





Select [Transfer] --> [Setup] --> [Transfer Settings].

ansfer Settings	
Send Information	Communications Port
✓ Upload Intermation	© COM
Filing Data(CF card)	Comm Port COM1 Retry Count 5
Data Trans Func CSV Data(CF card)	Baud Rate 115.2K 💌 (bps)
	C <u>E</u> thernet
Transfer Method	IP Address 0. 0. 0. 0 Port 8000
Send All Screens	
Automatically Send Changed Screens	C Ethernet: Auto Acquistion
	Memory Loader
Transfer Mode	
 Preparation for a transfer and a transfer are made 	e simultaneous.
U It is transferred after preparation for a transfer is filled.	nished.
Cable	
 Automatic Setup Us 	e Extended Program :
C Force System Setup	Simulation
C Do NOT Perform Setup	
	Sustem Screen
G Fundation	
C Selection C:\Program Files\pro-face\ProPI	RWinApprotocol Browse
	Distance in the second se
OK	Cancel Help
ster Settings 👘 GP Syste	m Settings: Checked

Transfer to GP after settings completed.



2 [GP Settings]

1) Checking GP Type	1) Checking GP Type
MAIN MENU '03/00/00 00:00 1 INITIALIZE 2 SCREEN DATA TRANSFER 3 SELF-DIAGNOSIS 4 RUN 2 Wax2000 V4.10 SIM-1 NK V3.34 CTRL_LOGIX_DF1 V1.41 CTRL_LOGIX_DF1 V1.41	If you have selected Allen Bradley ControlLogix DF1, the following will be shown. "CTRL_LOGIX_DF1"
2) Communication Settings	2) Communication Settings
MAIN MENU INITIALIZE SET UP 510 2 SET UP FRINTER 3 SET UP TOUCH PANEL 4 COMMUNICATION SETUP 5 SOUND SETTINGS	[MAIN MENU] [INITIALIZE] [SET UP I/O] [SET UP SIO]
SET LP SIO COMMUNICATION RATE 2400 4800 9601 19200 38400 57600 115200 DATA LENGTH 7 8 STOP BIT 1 2 PARITY OFF 000 EVED CONTROL X-CNTRL ER-CNTP COMMUNICATION FORMA R5232 4 LINE 2 LINE 1 2 3 4 5 6 7 8 9 0 1 4 BS	Communication Rate :19200bps Data Length : 8 Bit Stop Bit :1 Bit Parity :Even Control :ER Communication Format:RS-232C



3) Setting up Operation Surroundings	3) Setting up Operation Surroundings
MAIN MENU	[MAIN MENU]
INITIALIZE SYSTEM ENVIRONMENT SETUP	[INITIALIZE]
2 SET UP 1/0 3 PLC SETUP	[PLC SETUP]
4 INITIALIZE MEMORY 5 SET UP TIME	[PLC SETUP]
SET UP OPERATION SURROUNDINGS SET CANCEL	SYSTEM DATA AREA
SYSTEM DATA AREA START FILE No. [INTODO]	START FILE No.:
UNIT NO. [0]	Array Number (Arbitrary)
SYSTEM AREA READING AREA SIZE (0-256) [0]	START ADDRESS
RESET GP ON DATA WRITE ERROR ON OFF	Element Number (Arbitrary)
	Unit No . :0