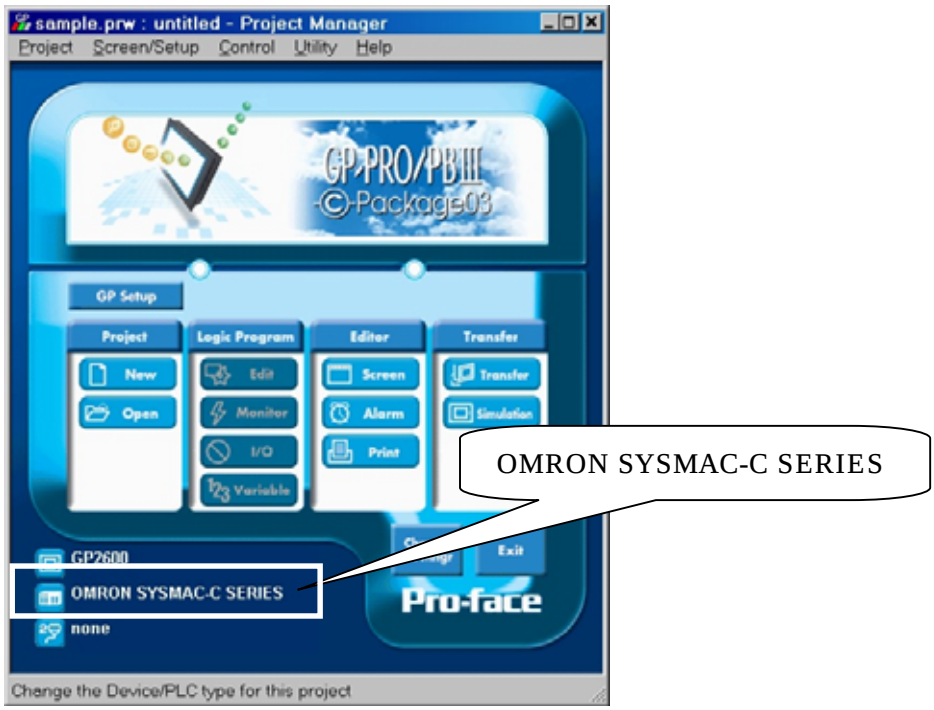
OMRON Corporation PLC
SYSMAC α Series Connection

Selecting PLC Type

Start up GP-PRO /PBIII.

Select the following PLC Type when creating the project file.



Communication Setting Sample

・ SYSMAC α Series <Communication Board>

GP Setup		Communication Board Setup	
Baud Rate	19200bps	Baud Rate	19200bps
Data Length	7 Bits	Data Bit	7 Bits
Stop Bit	2 Bits	Stop Bit	2 Bits
Parity Bit	Even	Parity Bit	Even
Data Flow Control	ER Control	————	
Communication Format (RS-232C)	RS-232C	————	
Communication Format (RS-422)	4-Wire Type	RS-422/485 Cable (2-Wire/4-Wire Type) Switching Settings (Dipswitch 1)	4
Unit No.	0	Station Number	0

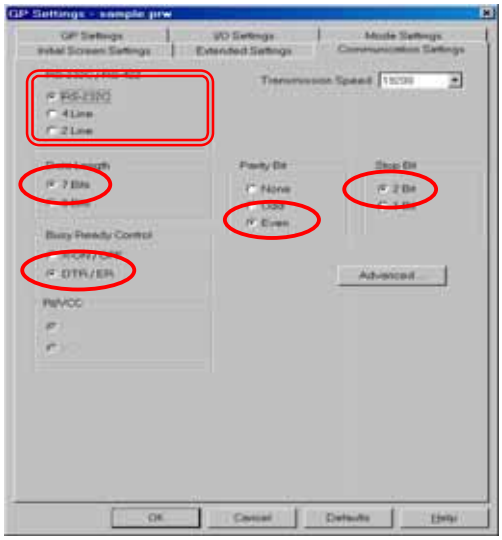
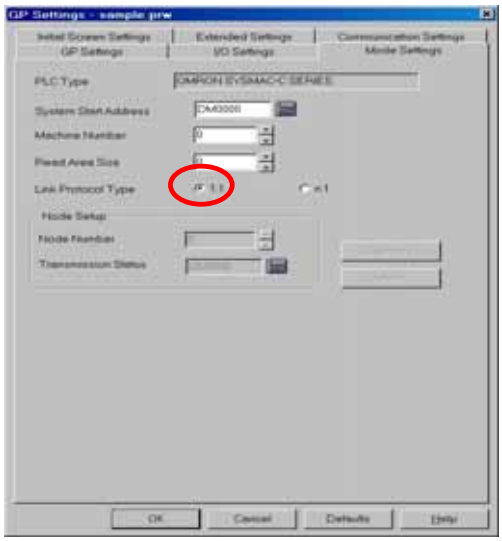
・SYSMAC α Series <RS-232C Port on CPU Unit>

GP Setup		RS-232C Port Setup	
Baud Rate	19200bps	Baud Rate	19200bps
Data Length	7 Bits	Data Bit	7 Bits
Stop Bit	2 Bits	Stop Bit	2 Bits
Parity Bit	Even	Parity Bit	Even
Data Flow Control	ER Conrtrol	————	
Communication Format	RS-232C	Mode	Host Link
Unit No.	0	Station Number	0

Communication Settings [GP]

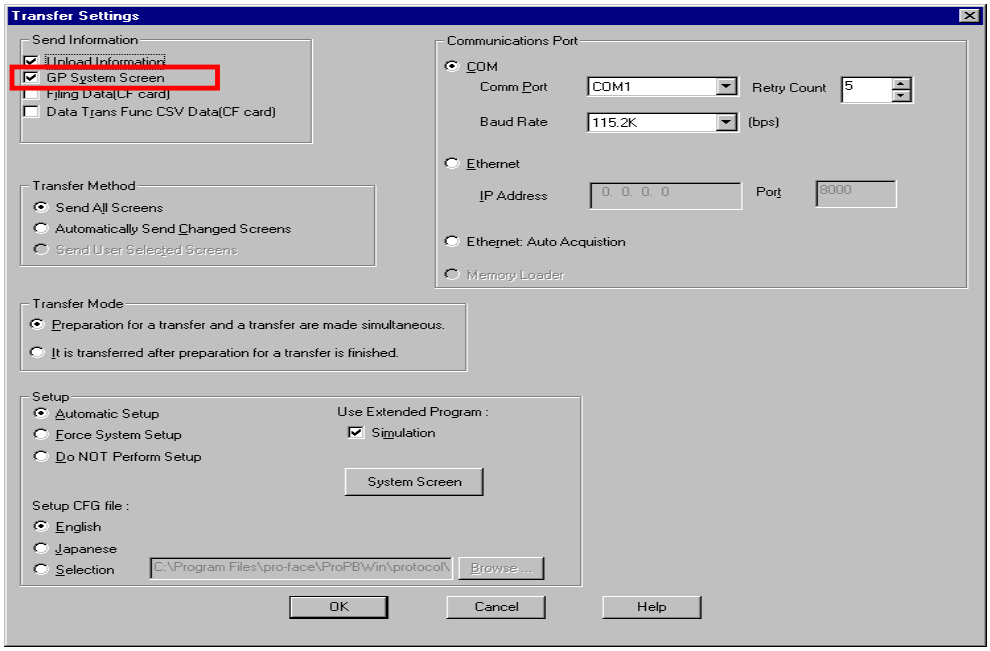
1 [GP-PRO/PBIII C-Package Setting]

Select [GP Setup] on Project Manager.

1) Communication Settings 	1) Communication Settings Transmission Speed: 19200bps Data Length: 7 Bits Stop Bit: 2 Bits Parity Bit: Even Busy Ready Control: DTR / ER RS-232C/ RS-422 RS-232C Connection: RS-232C RS-422 Connection: 4 Line * Select one in ▭.
2) Mode Settings 	2) Mode Settings System Start Address: Arbitrary Address Machine Number: 0 Link Protocol Type: 1:1

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

3) Transfer Settings



3) Transfer Settings GP System Settings: Checked

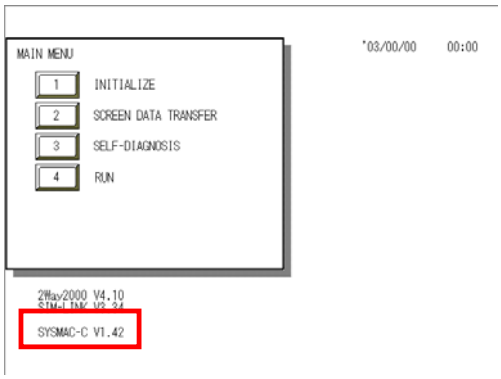
Transfer to GP after settings completed.

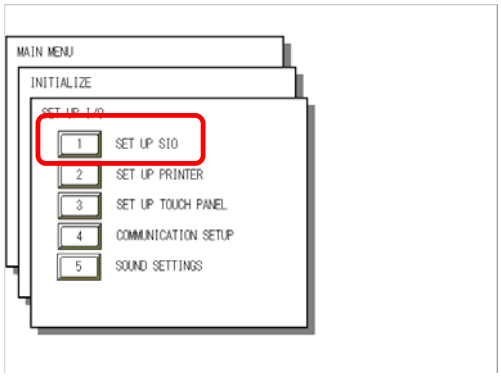
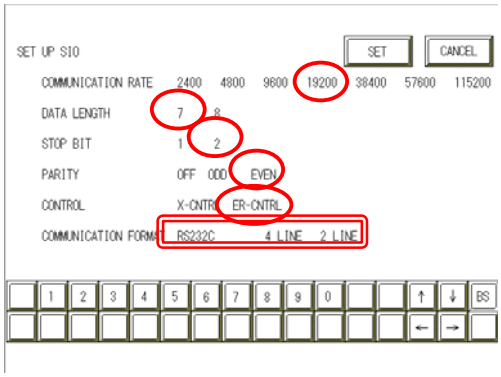
2. [GP Settings]

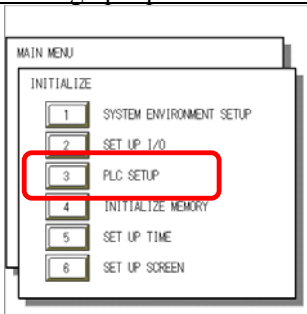
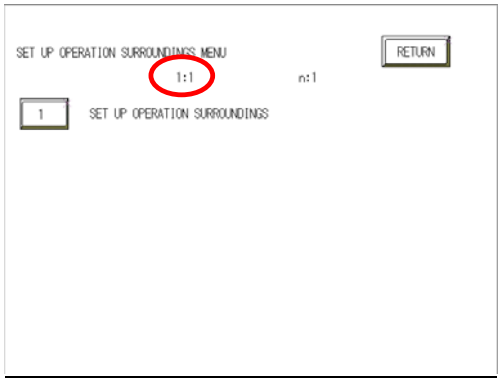
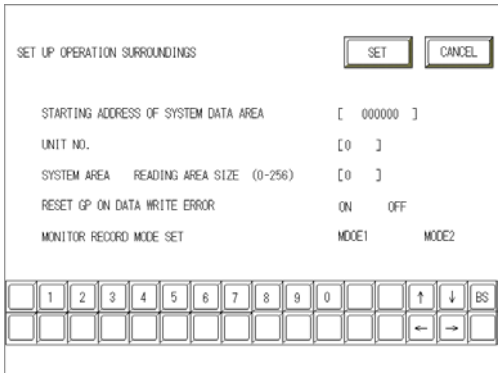
—Displaying Setting Screen—

Touch the top left of the screen within 10 second after powering on.

Or touch the top right and the bottom right of the screen at the same time. Keep 2 points touched and touch the bottom left. The menu bar will display on the bottom of the screen. Then touch [Offline].

	1) Checking GP Type If you have selected OMRON SYSMAC-C Series, following will be shown. "SYSMAC-C"

2) Communication Settings 	2) Communication Settings [MAIN MENU] ↓ [INITIALIZE] ↓ [SET UP I/O] ↓ [SET UP SIO]
	Communication Rate: 19200bps Data Length: 7 Bits Stop Bit: 2 Bits Parity: Even Control: ER Cntrl Communication Format RS-232C Connection: RS-232C RS-422 Connection: 4 Line * Select one in ▭.

3) Setting up Operation Surroundings 	3) Setting up Operation Surroundings [MAIN MENU] ↓ [INITIALIZE] ↓ [PLC SETUP] ↓ [PLC SETUP]
	SET UP OPERATION SURROUNDINGS MENU: 1:1
	Starting Address of System Data Area: Arbitrary Address Unit No.: 0

Communication Settings [PLC]

1. RS-232C Port on CPU Unit

Word Address	Value	Setting Contents
DM6645	0001 (HEX)	Depending on the settings of DM6646 Mode Setup: Host Link
DM6646	0304 (HEX)	Baud Rate: 19200bps Data Length: 7 Bits Stop Bit: 2 Bits Parity Bit: Even
DM6648	0000 (HEX)	Host Link Station No. Settings: Station No. 0

* Please make sure to turn OFF the mode setup switch SW5 on the CPU unit.

2-1 Communication Board C200HW-COM06 (RS-232C Connection)

[Port B]

Word Address	Value	Setting Contents
DM6550	0001 (HEX)	Depending on the settings of DM6551 Mode Setup: Host Link
DM6551	0304 (HEX)	Baud Rate: 19200bps Data Length: 7 Bits Stop Bit: 2 Bits Parity Bit: Even

* Please make sure to turn OFF the mode setup switch SW5 on the CPU unit.

2-2 Connection Board C200HW-COM06 (RS-422 Connection)

[Port A]

Word Address	Value	Setting Contents
DM6555	0001 (HEX)	Depending on the settings of DM6556 Mode Setup: Host Link
DM6556	0304 (HEX)	Baud Rate: 19200bps Data Length: 7 Bits Stop Bit: 2 Bits Parity Bit: Even

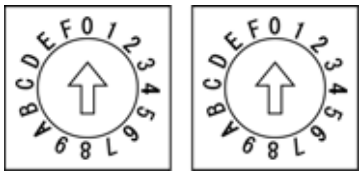
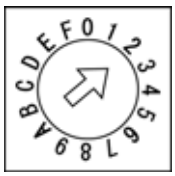
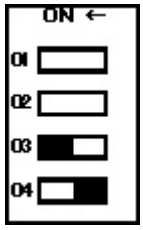
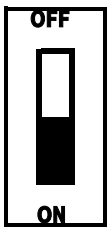
* Please make sure to turn OFF the mode setup switch SW5 on the CPU unit.

* Set the dipswitch on the communication board as below.

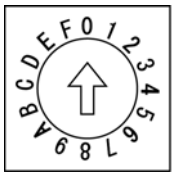
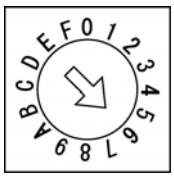
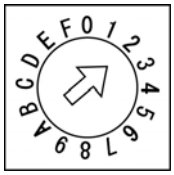
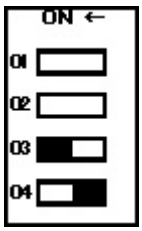
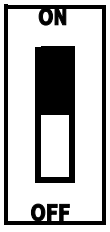
SW1 : 4

SW2 : ON

3. Host Link Unit C200H-LK201-V1

1) Front Switch Settings SW1 SW2  SW3  SW4 	1) Front Switch Settings 0: Station No. Settings (× 10) 0: Station No. Settings (× 1) 6: Baud Rate Settings (19200bps) 2: (Parity/Data/Stop Bit Settings) Parity Bit: Even Data Bit: 7 Bits Stop Bit: 2 Bits
2) Back Dipswitch Settings **Set the switches to the black.**  	2) Back Dipswitch Settings SW1: Unused SW2: Unused SW3 (Relation): 1 to n SW4 (5V Power Supply): No
3) CTS Switch Settings  	3) CTS Switch Settings ON (Turning CTS ON)

4. Host Link Unit C200H-LK202-V1

1) Front Switch Settings	1) Front Switch Settings
SW1  SW2 	0: Station No. Settings (× 10) 0: Station No. Settings (× 1)
SW3 	6: Baud Rate Settings (19200bps)
SW4 	2: (Parity/Data/Stop Bit Settings) Parity Bit: Even Data Bit: 7 Bits Stop Bit: 2 Bits
2) Relation Switch Settings 	2) Relation Switch Settings OFF (1 to n Relation)
3) Termination Resistance Connection Switch Settings 	3) Termination Resistance Connection Switch Settings ON (With Termination Resistance)