

# **OMRON Corporation PLC**

SYSMAC CV Series Connection

# Selecting PLC Type

Start up GP-PRO /PBIII.

Select the following PLC Type when creating the project file.



## **Communication Setting Sample**

■ SYSMAC CV Series

GP	Setup	PLC	Setup
Baudrate	19200bps	Baudrate	19200bps
Data Length	7 bits	Data Length	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	Communication Format	RS-232C
Communication Format	4 Line	Communication Format	RS-422
Unit No.	0	Station Number	0

\*1 When GP is connected to COM Port 1 on the host link unit CV500-LK201, the unit number must be fixed as "0". The station number cannot be set on the PLC.



Communication Settings [GP]

1 [GP-PRO/PB

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



nsfer Settings	
Transfer Settings	X
- Send Information	Communications Port
V Upload Information	© CDM
GP System Screen	Comm Port COM1  Retry Count 5
Fjiing Data(CF card)     Data Trans Func CSV Data(CF card)	
· · · ·	Baud Rate 115.2K 💌 (bps)
	C Ethernet
Transfer Method	IP Address 0. 0. 0. 0 Port 8000
Send All Screens	
C Automatically Send Changed Screens	C Ethernet: Auto Acquistion
C Sena User Selected Screens	
	• менау Loader
Transfer Mode	· •
Preparation for a transfer and a transfer are made	smultaneous.
C It is transferred after preparation for a transfer is fin	ished.
- Setup	
<ul> <li>O Automatic Setup</li> <li>Use</li> </ul>	Extended Program :
C Eorce System Setup	Simulation
C Do NOT Perform Setup	
	System Screen
Setup CFG file :	
English	
O Japanese	
C Selection U:\Program Files\pro-face\ProPB	Win\protocol\ Browse
<u> </u>	Cancel Help
<u>nsfer Settings</u> GP System Se	ttings: Checked

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

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	1) Checking GP Type
MAIN MENU I INITIALIZE SCREEN DATA TRANSFER SELF-DIAGNOSIS A R.N 2 2 2 3 3 3 4 R.N 2 2 3 3 3 4 1 4 1 5 1 4 5 1 1 1 1 1 1 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 1 1 5 1 5 1 1 1 5 1 5 1 1 1 5 1 5 1 1 1 5 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1	If you have selected OMRON SYSMAC-CV Series, following will be shown. "SYSMAC-CV"

2) Communication Settings	2) Communication Settings
MAIN MENU INITIALIZE SET UP SIO 2 SET UP SIO 2 SET UP PRINTER 3 SET UP TOUCH PAVEL 4 COMMANICATION SETUP 5 SOUND SETTINGS	[MAIN MENU] ↓ [INITIALIZE] ↓ [SET UP I/O] ↓ [SET UP SIO]
SET UP SIO COMMUNICATION RATE 2400 4800 9600 19200 38400 57600 115200 DATA LENSTH 7 8 STOP BIT 1 2 PARITY OFF 000 EVEN COMMUNICATION FORMAR R5232C 4 LINE 2 LINE 1 2 3 4 5 8 7 8 9 0 1 4 88 COMMUNICATION FORMAR R5232C 4 LINE 2 LINE	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 1 SYSTEM ENVIRONMENT SETUP 2 SET UP I/O 3 PLC SETUP 4 INITIALIZE MEMORY 5 SET UP TIME 6 SET UP SCREEN	$[MAIN MENU]  \downarrow  [INITIALIZE]  \downarrow  [PLC SETUP]  ↓  [PLC SETUP]$
SET UP OPERATION SURROUNDINGS MENU 1:1 n:1 1 SET UP OPERATION SURROUNDINGS	SET UP OPERATION SURROUNDINGS MENU: 1:1
SET UP OPERATION SURROUNDINGS       SET       CANCEL         STARTING ADDRESS OF SYSTEM DATA AREA       [ 000000 ]         UNIT NO.       [0 ]         SYSTEM AREA       READING AREA SIZE (0-256)       [0 ]         RESET OP ON DATA HRITE ERROR       ON       OFF         MONITOR RECORD MODE SET       MODE1       MODE2         1       2       3       4       5       6       7       8       0       1       4       BS	Starting Address of System Data Area: Arbitrary Address Unit No.: 0



### Communication Settings [PLC]

1. Link I/F on CPU Unit

[RS-232C Connection]





### 2. Link I/F on CPU Unit

[RS-422 Communication]





3. Host Link Unit CV500-LK201

3-1 [COM Port 1 Connection (RS-232C Fixed)]

1) Station No. Switch Settings	1) Station No. Switch Settings
	00 (Fixed)
68L 68L	* Settings of SW1 and SW2 are not required
(SW3: ×10 SW4: ×1)	for the communication with the GP.
* Settings of SW1 and SW2 are not required for the communication with the GP.	
2) 5V Output Switch Settings	2) 5V Output Switch Settings
TOP BOTTOM	Bottom (Not Supply)
3) Termination Resistance Switch Settings	3) Termination Resistance Switch Settings
BOTTOM	Bottom (Without Termination Resistance)



4) Dipswitch Settings	4) Dipswitch Settings
Set the switches to the black.	*1
ON ←	SW1 (Transmission Condition Settings): OFF
	SW2 (CTS Switch of Port 1): ON
œ <b>—</b> ——	SW3 (CTS Switch of Port 2): ON
03	SW4 (Spare): OFF
04	SW5 (Loopback Test): OFF
05	* Settings of SW6 are not required for the
06	communication with the GP.

- \*1 The default values of transmission condition settings are as below. Change the baud rate to 19200bps on the ladder software, etc.
- Baud Rate: 9600bps
- Stop Bit: 2 Bits
- Parity Bit: Even
- Data Length: 7 Bits



#### 3-2 [COM Port 2 Communication (RS-232C/RS-422 Switchable)]





5) Dipswitch Settings	5) Dipswitch Settings
Set the switches to the black.	
ON ←	SW1 (Transmission Condition Settings): OFF *1
	SW2 (CTS Switch of Port 1): ON
02 <b>—</b>	SW3 (CTS Switch of Port 2): ON
03	SW4 (Spare): OFF
04	SW5 (Loopback Test): OFF
05 <u> </u>	* Settings of SW6 are not required for the
06	communication with the GP.

- \*1 The default values of transmission condition settings are as below.Change the baud rate to 19200bps on the ladder software, etc.
- Baud Rate: 9600bps
- Stop Bit: 2 Bits
- Parity Bit: Even
- Data Length: 7 Bits