

Tech Note

TN510D

Communication settings between OMRON CP1L/CP1H and PanelMaster HMI

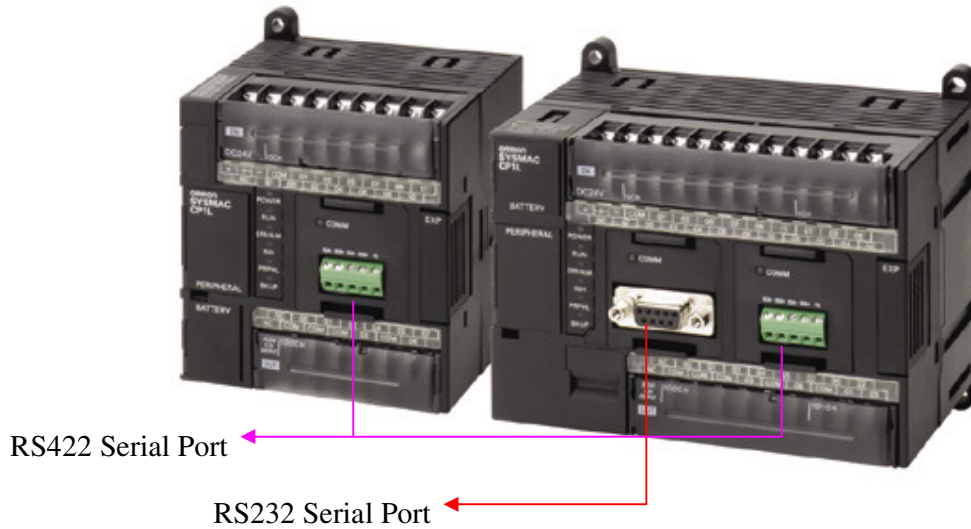
Revision 0.0, Nov. 2008

PanelMaster, PanelExpress and PM Designer



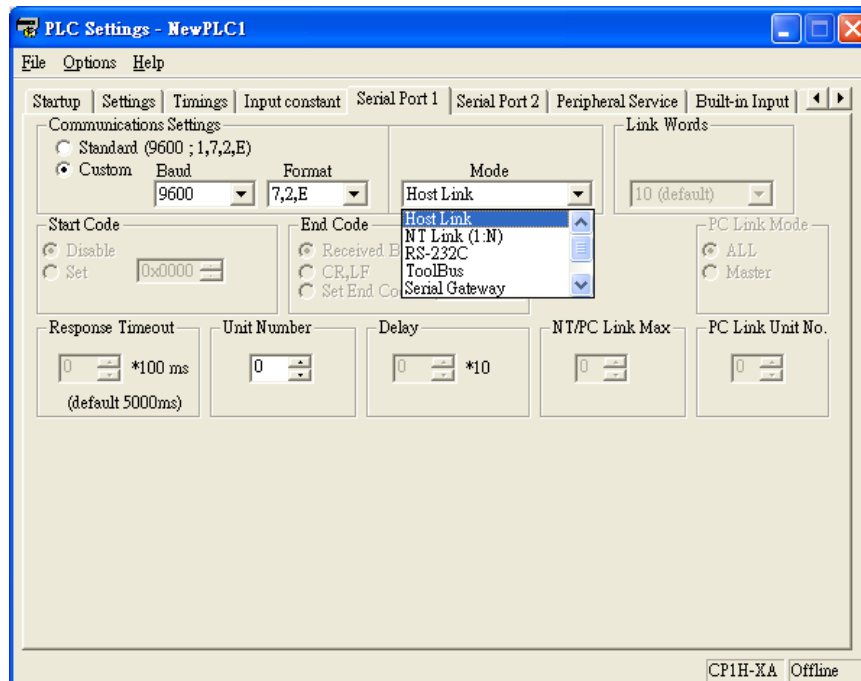
Preface

This tech note introduces how to connect **OMRON CP1L/CP1H** with PanelMaster HMI.



1) PLC Parameter setting:

- (a) Use "CX Programmer" software to link with the CP1L/CP1H PLC via its USB communication port, and then double click "Setting" option to set the Serial Port format. Standard (9600; 1,7,2,E) or Custom (Baud; Format; Mode: **Host Link**; Unit No.)



(b) Connection Cable diagram

RS232 Module:



CJ1W-CIF01 / CP1W-CIF01

HMI Side		PLC Cable Side	
COM1 9-PIN Male		Serial Port 9-PIN Male (RS232)	
RXD 2	-----	2 TXD	
TXD 3	-----	3 RXD	
GND 5	-----	9 SG	
RTS 7]	4 RTS	[
CTS 8]	5 CTS	[

HMI Side		PLC Cable Side	
COM1 9-PIN Male		Serial Port 9-PIN Female (RS232)	
RXD 2	-----	2 TXD	
TXD 3	-----	3 RXD	
GND 5	-----	9 SG	
RTS 7]	4 RTS	[
CTS 8]	5 CTS	[

(c) Connection Cable diagram

RS422 Module:



CJ1W-CIF11 / CP1W-CIF11

HMI Side		PLC Cable Side
COM1 9-PIN Male		Serial Port 9-PIN Male (RS422)
TX+ 1	-----	RDB+
RX+ 4	-----	SDB+
TX- 6	-----	RDA-
RX- 9	-----	SDA-

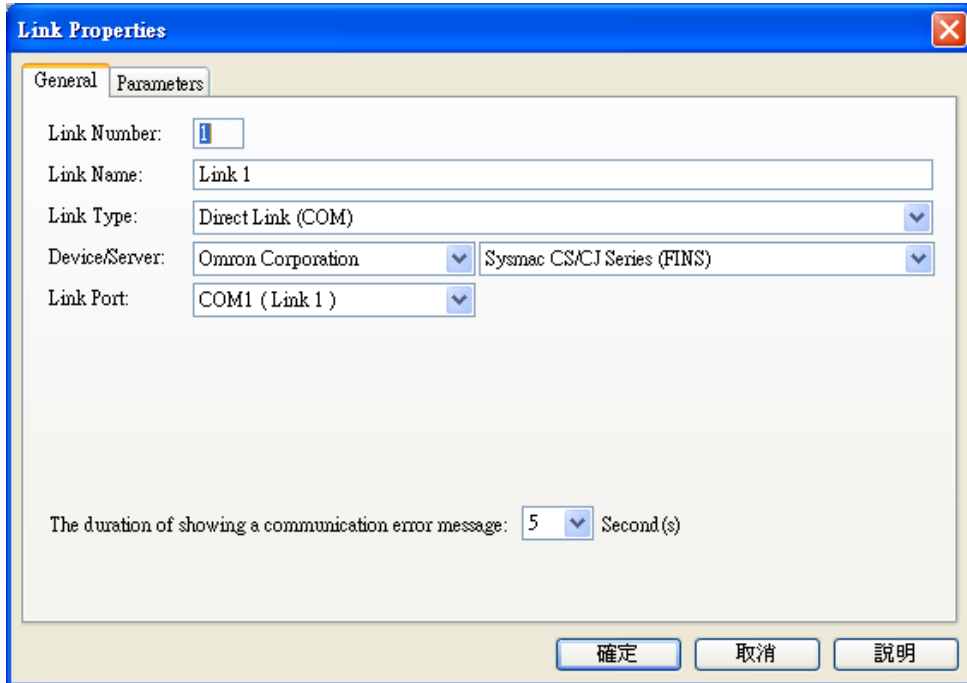
HMI Side		PLC Cable Side
COM2 4-PIN Terminal Block		Serial Port 9-PIN Male (RS422)
TX+	-----	RDB+
RX+	-----	SDB+
TX-	-----	RDA-
RX-	-----	SDA-

Note:

When using the RS422 module (CJ1W-CIF11 / CP1W-CIF11) to link with PV series HMI, please set the DIP SW6 as "ON".

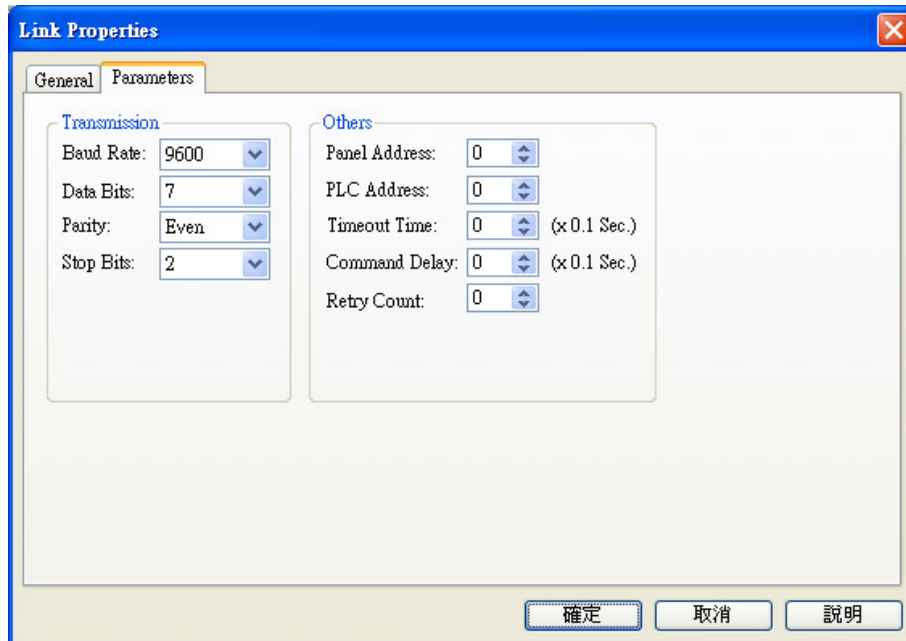
2) HMI setting:

Select 【Device/Server : OMRON Corporation → Sysmac CS/CJ Series (FINS)】



NOTE: Driver (C2B031.dll / C2B031.mod) Release Date --- 12th-Feb., 2009.

Set the HMI link port parameter identical with PLC communication parameter



3) PLC Memory Address

Bit Devices:

Bit Device (Sysmac CS/CJ Series (FINS))

Bit Device	Address Range	Block Address	Comment
DIOnb	n: 0~6143; b: 00~15	b=0	
WRnb	n: 0~511; b: 00~15	b=0	
HRnb	n: 0~511; b: 00~15	b=0	
ARnb	n: 0~959; b: 00~15	b=0	
Tn	n: 0~4095	n=16q	
Cn	n: 0~4095	n=16q	
Dnb	n: 0~32767; b: 00~15	b=0	
ER0nb	n: 0~32767; b: 00~15	b=0	
ER1nb	n: 0~32767; b: 00~15	b=0	
ER2nb	n: 0~32767; b: 00~15	b=0	
ER3nb	n: 0~32767; b: 00~15	b=0	
ER4nb	n: 0~32767; b: 00~15	b=0	
ER5nb	n: 0~32767; b: 00~15	b=0	
ER6nb	n: 0~32767; b: 00~15	b=0	
ER7nb	n: 0~32767; b: 00~15	b=0	
ER8nb	n: 0~32767; b: 00~15	b=0	
ER9nb	n: 0~32767; b: 00~15	b=0	
ERAnb	n: 0~32767; b: 00~15	b=0	
ERBnb	n: 0~32767; b: 00~15	b=0	
ERCnb	n: 0~32767; b: 00~15	b=0	

Close

Word Devices:

Word Device (Sysmac CS/CJ Series (FINS))

Word Device	Address Range	Size	Comment
DIOn	n: 0~6143	Word	
Wn	n: 0~511	Word	
Hn	n: 0~511	Word	
An	n: 0~959	Word	
Tn	n: 0~4095	Word	
Cn	n: 0~4095	Word	
Dn	n: 0~32767	Word	
E0n	n: 0~32767	Word	
E1n	n: 0~32767	Word	
E2n	n: 0~32767	Word	
E3n	n: 0~32767	Word	
E4n	n: 0~32767	Word	
E5n	n: 0~32767	Word	
E6n	n: 0~32767	Word	
E7n	n: 0~32767	Word	
E8n	n: 0~32767	Word	
E9n	n: 0~32767	Word	
EAn	n: 0~32767	Word	
EBn	n: 0~32767	Word	
ECn	n: 0~32767	Word	
EMn	n: 0~32767	Word	
IRn	n: 0~15	32 bits	
DRn	n: 0~15	Word	

Close

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