



OMRON CP Series Host Link

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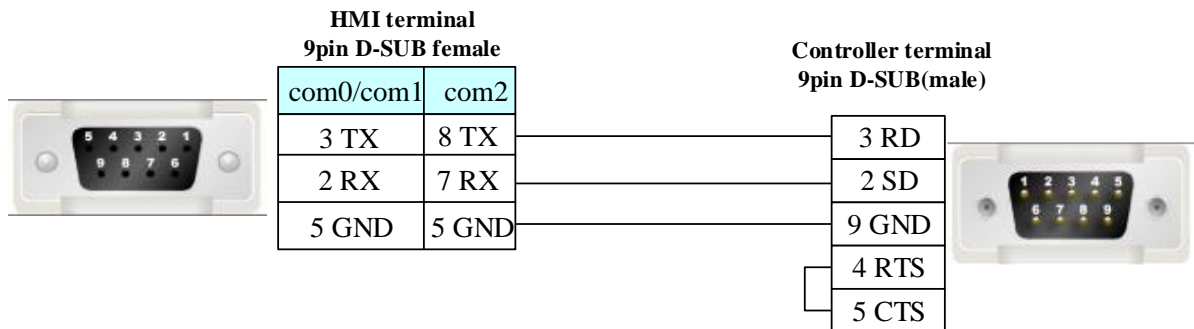
❖ 1 Introduction to Drive

Driver protocol	OMRON CP Series Host Link
PLC Model number	Omron CP1H/CP1L/CP1E
PLC interface	Serial port
Serial port parameters	Default baud rate 9600, data bit 7, even parity, stop bit 2
Online simulated	Support

Hardware wiring method:

1. RS232 on the CPU unit

RS232 communication cable

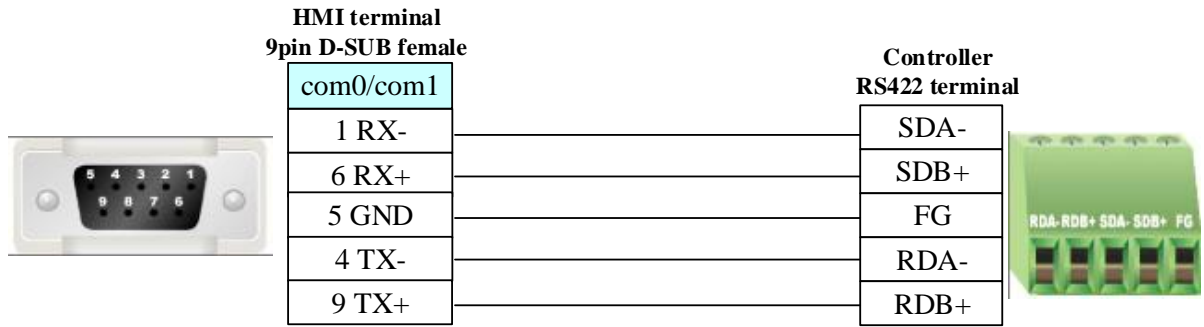


2. CP1W-CIF11/CP1W-CIF12 module

Note: CP1W-CIF11 without photoelectric isolation, the maximum allowable communication distance is 50 meters; CP1W-CIF12 with photoelectric isolation, the maximum allowable communication distance is 500 meters, other parameters have the same specifications and the same dip switch settings.

DIP	CONTENT		
1	ON	Yes (Both sides)	Terminal resistance selection
	OFF	No	
2	ON	2-wires (RS485)	2、3 must be the same.
	OFF	4-wires (RS422A)	
3	ON	2-wires (RS485)	
	OFF	4-wires (RS422A)	
4	-----	-----	N/A
5	ON	With RS control	Set ON when loop back is forbidden.
	OFF	Without RS control (Receive)	
6	ON	With RS control	If connecting to multiple devices, set ON when using RS422A, it must set as ON.
	OFF	Without RS control (Send)	

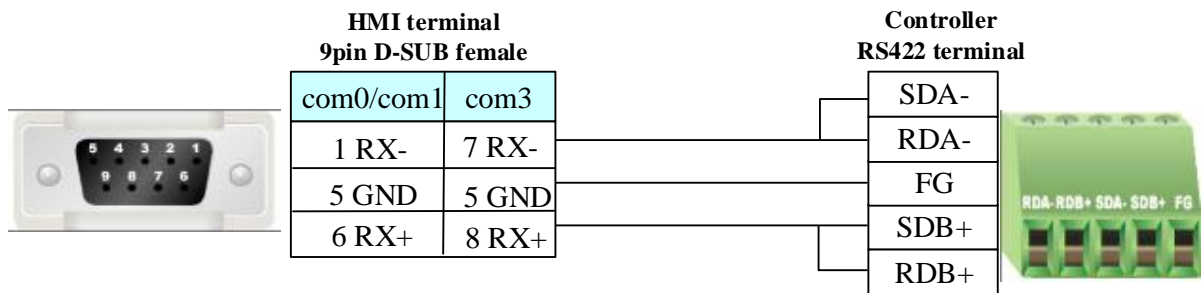
RS422 communication cable



Notice When PLC uses CP1W-CIF11 or CP1W-CIF12 module to communicate, if it adopts 1:1 RS422 mode to communicate, the dip switches SW1~6 on the back of the module should be set to OFF; if it adopts 1:N and PLC is N side RS422 mode to communicate, the dip switches SW1~5 on the back of the module should be set to OFF and SW6 to ON.

RS485 communication cable

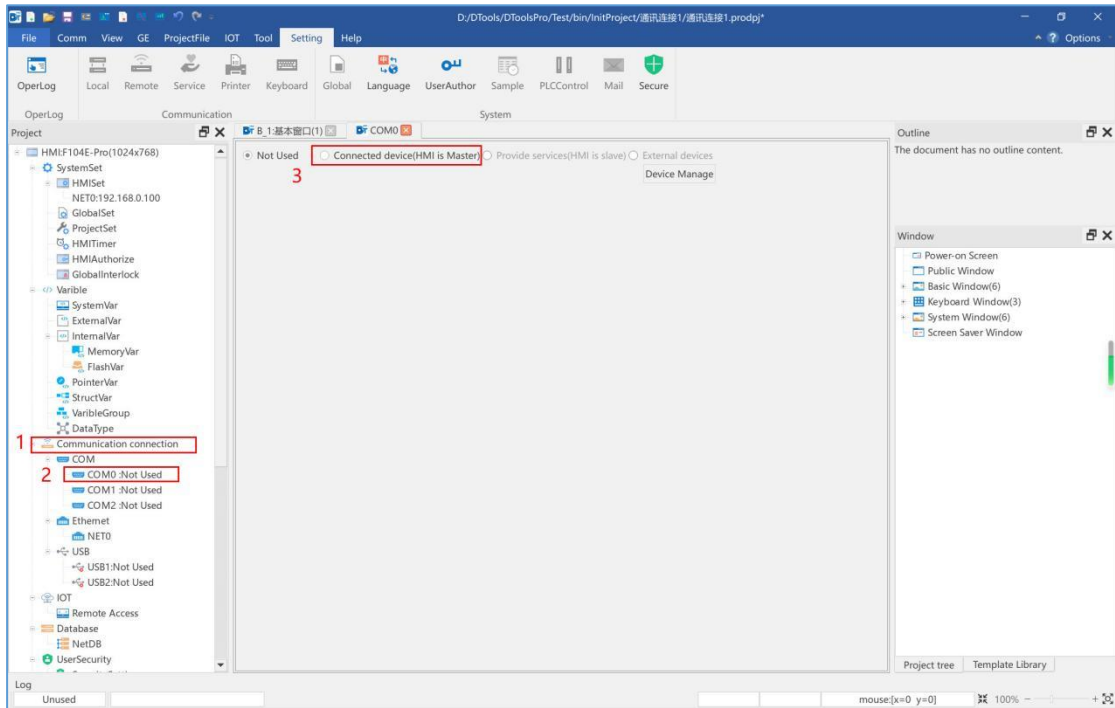
CP1W-CIF11/CIF12 module



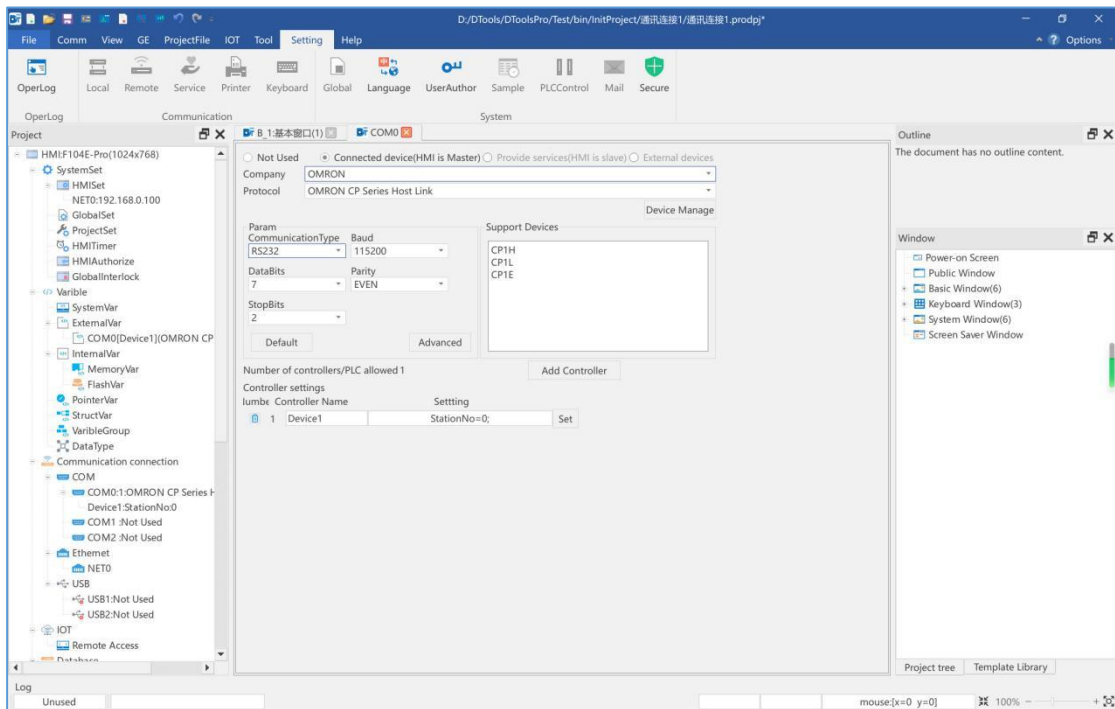
Notice When using CP1W-CIF11 or CP1W-CIF12 module with RS485 communication, please make sure the dip switch SW1 on the back of CP1W-CIF11 or CP1W-CIF12 module is set to OFF; SW2, SW3, SW5, SW6 are all set to ON, while SW4 is set to either ON or OFF.

❖ 2 HMI Configuration

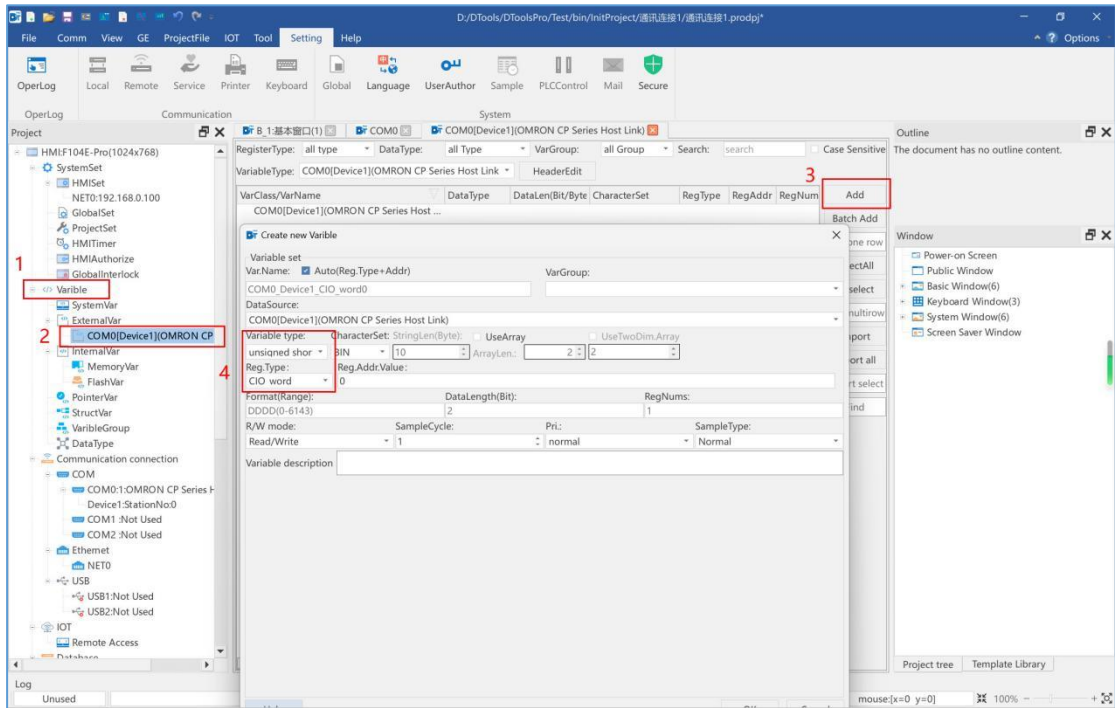
- Configuring communication connections
 - When using for the first time, select the corresponding serial port according to the protocol supported by the touch screen serial port, and check the connected device (HMI as the main device)



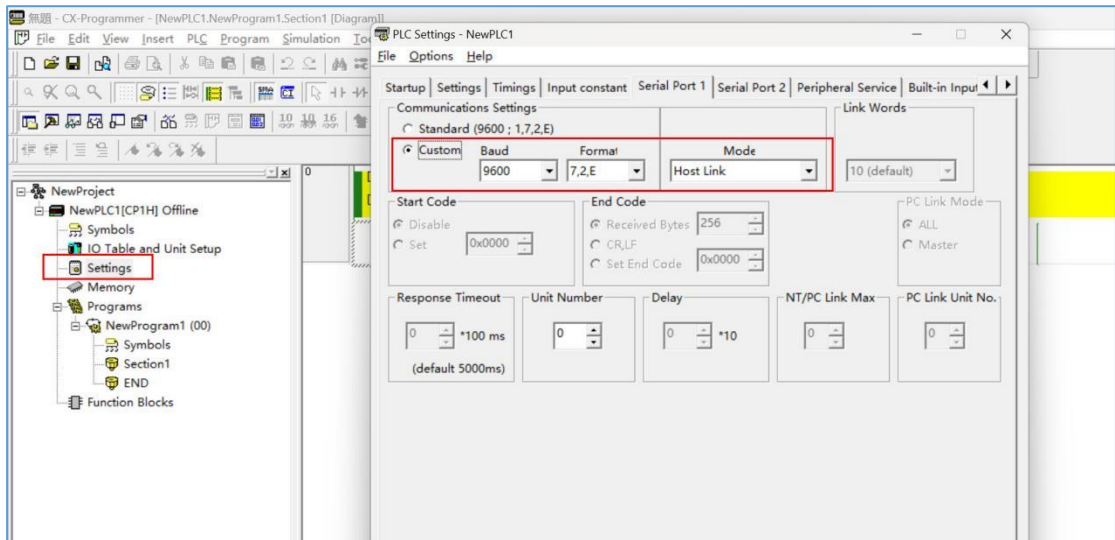
- Company select Omron, protocol select Omron CP Series Host Link



- Add Variable
Double-click COM0 in the variables and click Add, select different data types according to your needs and then add them, if you need to create a large number of variables of the same data type, you can choose the batch creation shortcut to generate



❖ 3 External Controller Configuration



❖ 4 Supported Register Types

Device	Bit Address	Word Address	Format
Channel I/O	CIO_bit 0.00-6143.15	CIO_word 0000-6143	DDDD.DD
Internal Auxiliary Relay	W_bit 0.00-511.15	W_word 0-511	DDD.DD
Special Auxiliary Relay	A_bit 0.00-959.15	A_word 0-959	DDD.DD
Latch Relay	H_bit 0.00-1535.15	H_word 0-1535	DDDD.DD
Timer (Timer Up Flag)	T_FLAG 0-4095	-----	DDDD

Counter (Counter Up Flag)	C_FLAG 0-4095	-----	DDDD
Data Memory	D_bit 0.00-32767.15	D_word 0-322767	DDDDD.DD
Timer (current Value)	T_bit 0.00-4095.15	T_word 0-4095	DDDD.DD
Counter (Current Value)	C_bit 0.00-4095.15	C_word 0-4095	DDDD.DD
Index Register	-----	IR 00-15	DD
Data Register	-----	DR 00-15	DD

❖ 5 Advanced parameters and error messages

Reference Manual - Communication Advanced Parameters and Error Information Table