Delta

Delta DVPEN01-SL Ethernet(TCP)

Directory

❖ 1 Introduction to Drive

Driver protocol	Delta DVPEN01-SL Ethernet(TCP)
PLC Model number	DVP-32EH、DVP20ES2
website	https://www.delta-china.com.cn/zh-CN/index
communication mode	Ethernet
PLC interface	Ethernet
PLC port number	502
Online simulation	Support

Hardware wiring method:If PLC communicates directly with HMI without HUB or SWITCH, crossover cable is used;If the network communicates with the HMI through the HUB or SWITCH, use either a direct connection or a crossover cable.

A.Crossover cable wiring diagram

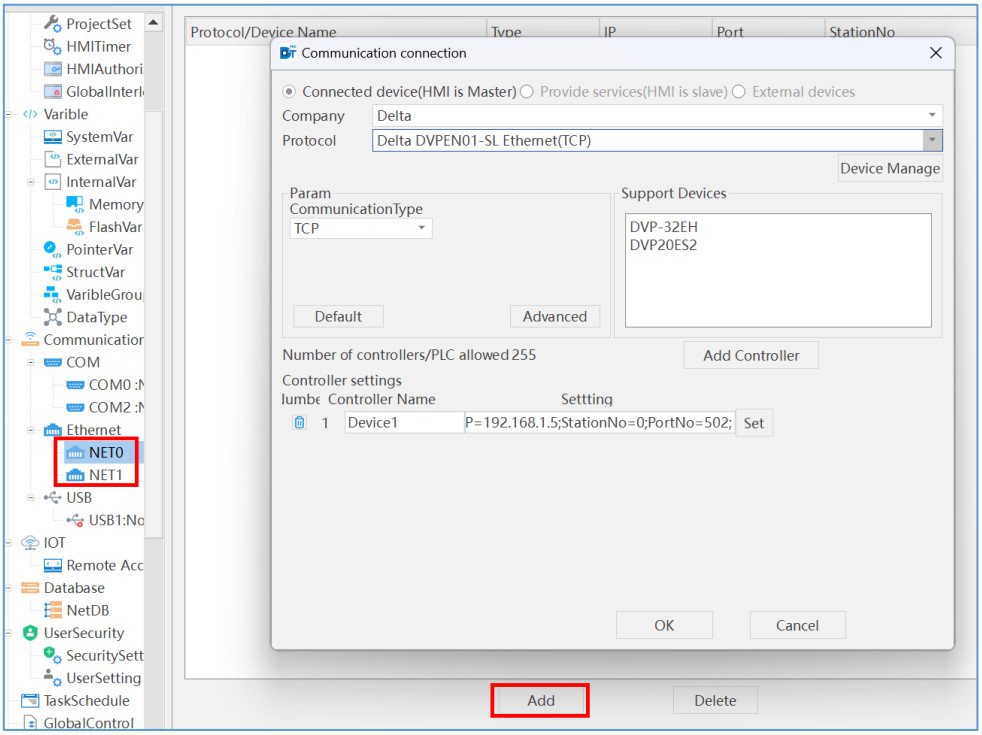
HMI Ethernet terminal RJ45		Controller terminal RJ45	
	1TX+ (Orange and white)	3RX+ (Green white)	
	2TX- (Orange)	6RX- (Green)	
	3RX+ (Green white)	1TX+ (Orange and white)	
	4BD4+ (Blue)	4BD4+ (Blue)	
	5BD4- (Blue and white)	5BD4- (Blue and white)	
	6RX- (Green)	2TX- (Orange)	
	7BD3+ (Brown white)	7BD3+ (Brown white)	
	8BD3- (Brown)	8BD3- (Brown)	

B.Wiring diagram of the direct cable

HMI Ethernet terminal RJ45		Ethernet HUB or Switch RJ45	
	1TX+ (Orange and white)	1RX+ (Orange and white)	
	2TX- (Orange)	2RX- (Orange)	
	3RX+ (Green white)	3TX+(Green white)	
	4BD4+ (Blue)	4BD4+ (Blue)	
	5BD4- (Blue and white)	5BD4-(Blue and white)	
	6RX- (Green)	6TX- (Green)	
	7BD3+ (Brown white)	7BD3+ (Brown white)	
	8BD3- (Brown)	8BD3- (Brown)	

❖ 2 HMI configure

➢ Configure communication connections



1.New connection

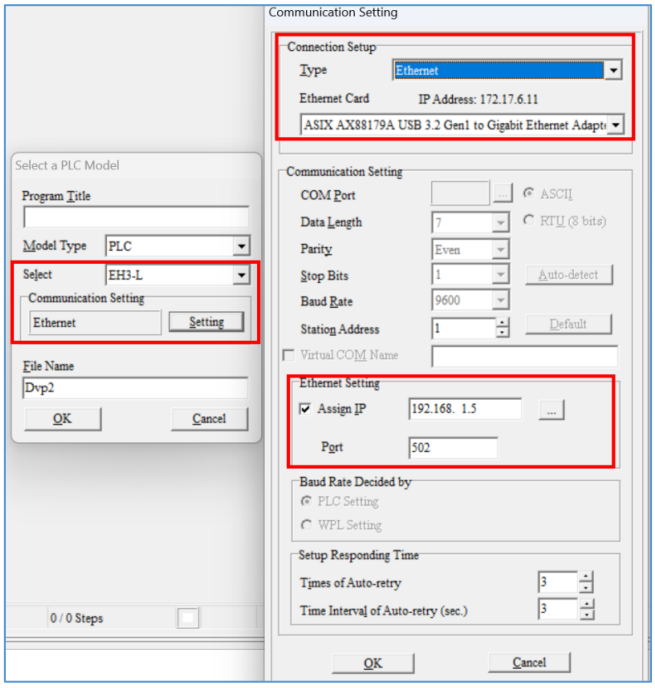
2.Select the Delta Corporation

3.Select the Delta DVPEN01-SL Ethernet (TCP) protocol

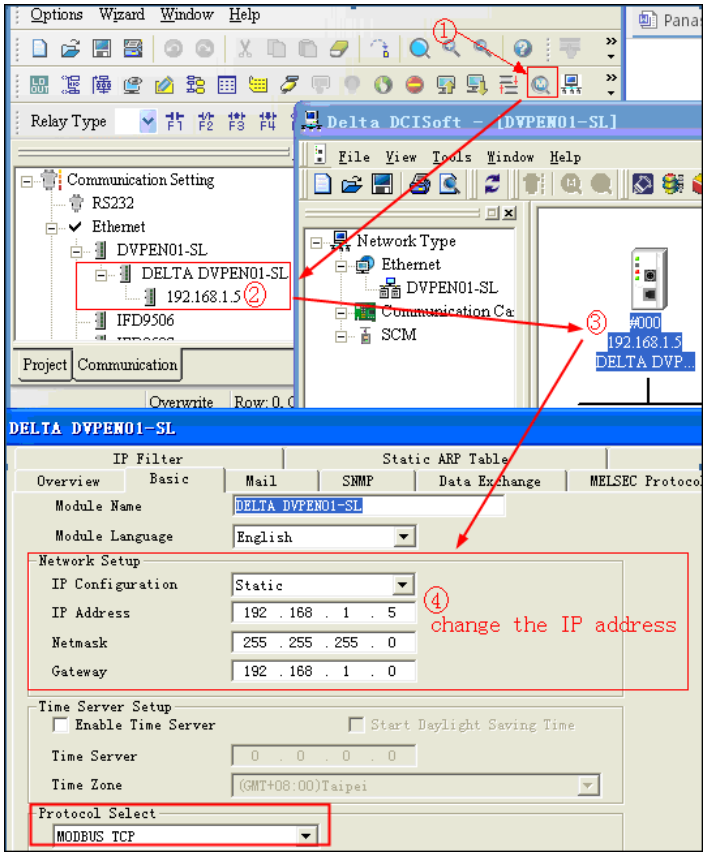
4.Set the device name and IP address, consistent with the PLC setting

❖ 3 External controller configuration

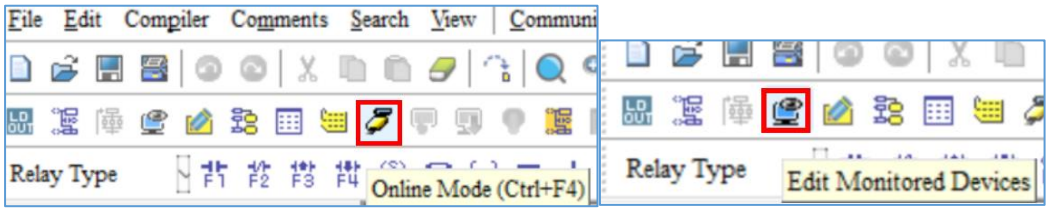
3.1 Open the WPLSoft software and create a new project.



3.2 Modify the IP address



3.3 Click Online mode to select [Device Monitor] or [Program Monitor]

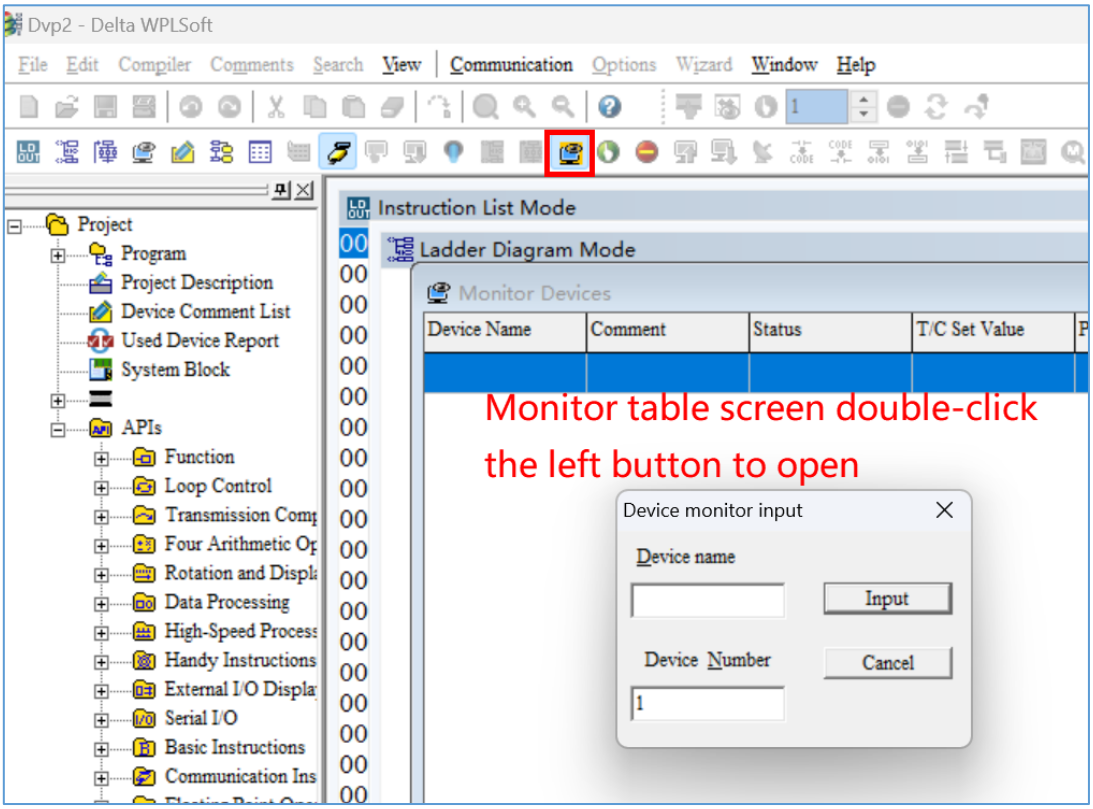


Device monitoring: The monitoring table can be used to monitor the current device status of the host in real time, and because in this mode, ISPSoft only needs to update the device status, so the program currently opened by ISPSoft does not need to be consistent with the program inside the host.

Program monitoring: In this mode, the system will show the operation of the program in real time in the program screen, so the system will require ISPSoft to open the program must be consistent with the host internal program.

Notice	The device monitor mode can be started separately, while the program monitor mode must be started with the device monitor mode.

3.4 Monitoring table establishment (either offline or online)



❖ 4 Supported registers

Device	Bit Address	Word Address	Format	Notes
External input	X0-377	------	OOO	
External output	Y0-377	------	OOO	
Internal auxiliary	M0-4095	------	DDDD	
Order control node	S0-1023	------	DDDD	

Timer node	T_bit0-255	------	DDD	
Counter node	C_bit0-255	------	DDD	
Timer cache	------	T0-255	DDD	
Counter cache	------	C0-199	DDD	
Counter cache (32-bit)	------	CD200-255	DDD	
Data register	------	D0-11999	DDDDD	

❖ 5 Advanced parameters and error messages

Reference Manual - Communication Advanced Parameters and Error Information Table