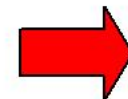


راهنمای پیکر بندی IFD9506

روش اتصال به PLC و UPLOAD/DOWNLOAD
برنامه در WPLSOFT

روش اتصال به HMI و مانیتورینگ

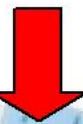
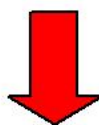
پیکر بندی شبکه:



Ethernet



RS-485



IP 192.168.1.1



ES2/EX2



EH2/SV/SA/SX/SC/SS

پیکر بندی شبکه مدباس IFD9506

۱- تنظیم پروتکل IFD9506 از روی پنل

7,E,1,9600

Station address= 8 :

Address Switch

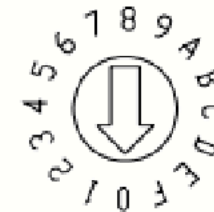
Switch setting	Content
01...F7	Valid node address setting



Data format= 7-E-1:

Data Format

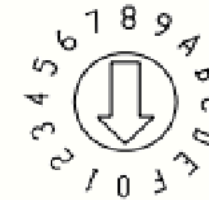
Switch setting	Format	Switch setting	Format
0	7-N-1	8	7-N-2
1	8-N-1	9	8-N-2
2	7-O-1	A	7-O-2
3	8-O-1	B	8-O-2
6	7-E-1	E	7-E-2
7	8-E-1	F	8-E-2



Baud Rate for Modbus Communication

Data format= 9600 :

Switch setting	Baud rate	Switch setting	Baud rate
1	110	7	4,000
2	150	8	9,600
3	300	9	19,200
4	600	A	38,400



تنظیم IP شبکه IFD9506 بوسیله نرم افزار DCI SOFT

The screenshot displays the Delta DCISoft software interface for configuring an IFD9506 module. The main window is titled "Delta DCISoft - [IFD9506]". The "Network Setup" section is highlighted with a red box, showing the following configuration:

- IP Configuration: Static
- IP Address: 192 . 168 . 1 . 1
- Netmask: 255 . 255 . 255 . 0
- Gateway: 0 . 0 . 0 . 0

The "Communication Parameter" section shows the following configuration:

- COM Protocol Setup: Modbus COM2 (RS-485)
- Baudrate: 9600
- Data Length: 7
- Parity: Even
- Stop Bits: 1
- Mode: ASCII
- Station Address: 8

The "Timer Setting" section shows the following configuration:

- Keep Alive Time (s): 30 (5 - 65535 s)
- Modbus Timeout (ms): 5000 (5 - 65535 ms)
- Delay Time (ms): 0 (0 - 65535 ms)

۲-تنظیم پروتکل شبکه مدباس PLC (D1120,D1121,D1038)

The screenshot shows the Delta WPLSoft software interface. The main window is titled "Dvp0 - Delta WPLSoft - [Monitor Devices]". The menu bar includes File, Edit, Wizard, Compiler, Comments, Search, View, Communication, Options, Window, and Help. The toolbar contains various icons for file operations and device management. On the left, a tree view shows the project structure under "Communication", including RS232, Ethernet (with sub-items DVPEN01-SL and IFD9506), and DirectLink. The main area is a table with the following data:

Device Name	Comment	Status	T/C Set Value	Present Value (16 bits)	Present Value (32 bits)	Flag
D1120	COM2 (RS-485) com			H86	H10086	F9
D1121	COM1(RS-232) and C			K1	K1	F1
D1038	1. Delay time setting			K100	K100	F1

At the bottom of the window, the status bar displays "Overwrite", "Scan time: 0.1 ms", "28/15872 Steps", a green "RUN" button, "PLC COM: 1 (9600, 7, E, 1)", and "ES2/EX2/SX2 Series".

پیدا کردن آنلاین IFD9506 بر روی شبکه:

The screenshot shows the Delta WPLSoft software interface in Ladder Diagram Mode. The main window displays a ladder logic diagram with a search progress dialog box titled "Searching" overlaid on it. The dialog box shows a progress bar at 60%. The software interface includes a menu bar (File, Edit, Wizard, Compiler, Comments, Search, View, Communication, Options, Window, Help), a toolbar, and a left-hand tree view showing the project structure under "Communication" with "Ethernet" selected. The status bar at the bottom indicates "Overwrite Row: 0, Col: 1", "28/15872 Steps", a "RUN" button, and "PLC COM: 1 (9600, 7, E, 1) ES2/EX2/SX2 Series".

IFD 9506 را انتخاب کنید:

The screenshot shows the Delta WPLSoft software interface in Ladder Diagram Mode. The window title is "Dvp0 - Delta WPLSoft - [Ladder Diagram Mode]". The menu bar includes File, Edit, Wizard, Compiler, Comments, Search, View, Communication, Options, Window, and Help. The toolbar contains various icons for file operations, editing, and simulation. Below the toolbar is a "Relay Type" dropdown menu and a row of function key icons (F1-F12). The left pane shows a project tree with the following structure:

- Communication
 - RS232
 - Ethernet
 - DVPEN01-SL
 - Jason Set EN01-SL
 - 172.16.155.194
 - station_2
 - 192.168.1.7
 - IFD9506
 - DELTA ENA01-MOD
 - 172.16.157.251
 - IFD9506** (highlighted in red)
 - 192.168.1.1

The main workspace displays a ladder logic diagram with three rungs. The first rung contains a normally open contact labeled "M1000". The second rung contains a normally closed contact labeled "M1013". The third rung is empty. The status bar at the bottom shows "Overwrite Row: 0, Col: 1", "28/15872 Steps", a green indicator light, "PLC COM: 1 (9600, 7, E, 1)", and "ES2/EX2/SX2 Series".

مقدار موجود در STATION ADDRESS مقدار ریخته شده در رجیستر D1121 می باشد:

The image shows a 'Communication Setting' dialog box with the following fields and options:

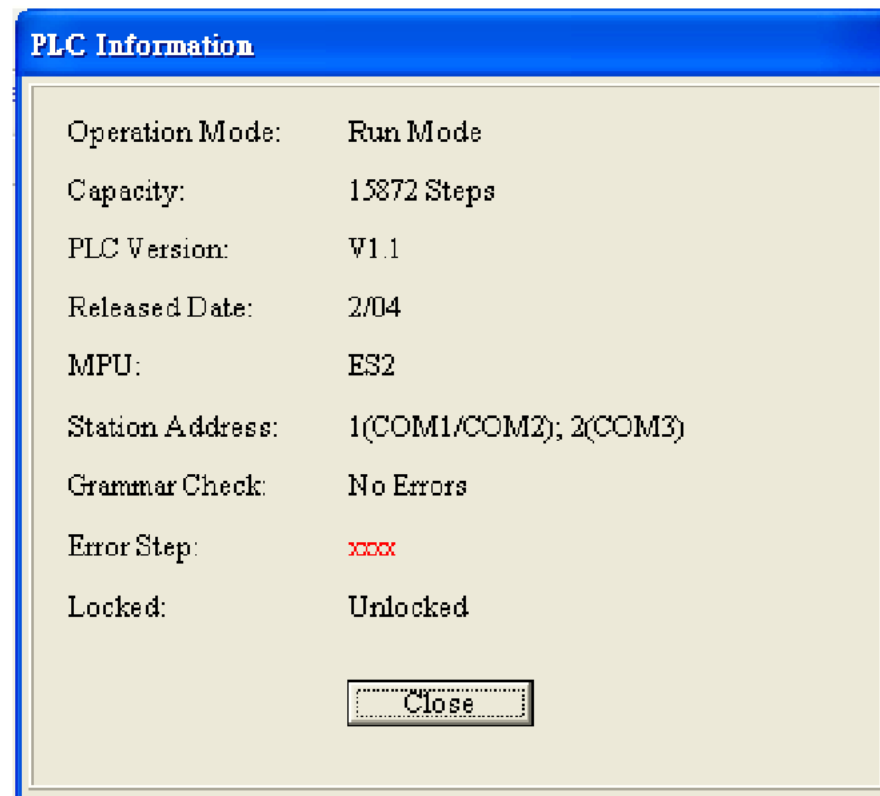
- Connection Setup**
 - Type: Ethernet
- Communication Setting**
 - COM Port: COM4
 - Data Length: 7
 - Parity: Even
 - Stop Bits: 1
 - Baud Rate: 9600
 - Station Address: 1 (highlighted with a red box)
- Ethernet Setting**
 - Assign IP: 59.125.18.229
 - Port: 502
- Communication Baud Rate Decided by**
 - PLC Setting (selected)
 - WPL Setting
- Setup Responding Time**
 - Times of Auto-retry: 3
 - Time Interval of Auto-retry (sec): 3
- Buttons**
 - Default
 - OK (highlighted with a red box)
 - Cancel

شما میتوانید از ارتباط بین IFD6905 و PLC اطمینان حاصل کنید:

The screenshot displays the Delta WPLSoft software interface in Ladder Diagram Mode. The main window is titled "Dvp0 - Delta WPLSoft - [Ladder Diagram Mode]". The menu bar includes File, Edit, Wizard, Compiler, Comments, Search, View, Communication, Options, Window, and Help. The Communication menu is open, showing various options with their respective keyboard shortcuts. The tree view on the left shows the communication configuration, with the IFD9506 device selected and highlighted by a red box. The status bar at the bottom indicates "Overwrite Row: 4, Col: 5" and "PLC COM: 1 (9600, 7, E, 1) ES2/EX2/SX2".

Option	Shortcut
Transfer Setup	Ctrl+F1
Verify with PLC	
Password Setting	Ctrl+F5
PLC ID Setting	
Run	Ctrl+F8
Stop	Ctrl+F7
Ladder Start Monitoring(L)	Shift+Ctrl+F1
SFC Start Monitoring	Shift+Ctrl+F2
Devices batch monitoring(D)	Shift+Ctrl+F3
Set Device On/Off	
Enter Value	Shift+Ctrl+F7
Edit Register Memory (T, C, D)	Ctrl+R
Edit Bit Memory (M, S)	Ctrl+M
Forced Devices List	
Format PLC Memory	Shift+Ctrl+F5
Edit File Register Memory	
Send Changes	Ctrl+Alt+S
Memory Card Service	
Communication Auto-Detect	
PLC Information	Ctrl+Alt+I

اگر ارتباط بین PLC و IFD6905 صحیح باشد پنجره مانند زیر نمایش داده میشود:



دانلود برنامه:

The screenshot displays the Delta WPLSoft software interface in Ladder Diagram Mode. The main window shows a ladder logic diagram with a network containing M1000, TRD, D0, and END. A 'Transfer Setup' dialog box is open, showing 'Communication Mode' set to 'PC => PLC'. The 'OK' button in the dialog is highlighted with a red box. A red arrow points from this 'OK' button to a blue confirmation message box that reads 'PC => PLC (0 %)', which is also highlighted with a red box. The software's menu bar includes File, Edit, Wizard, Compiler, Comments, Search, View, Communication, Options, Window, and Help. The status bar at the bottom shows 'Overwrite Row: 2, Col: 1', '5/15872 Steps', and 'ES2/EX2/SX2 Series'.

مانیتورینگ آنلاین برنامه بوسیله IFD9506:

The screenshot displays the Delta WPLSoft software interface for monitoring a ladder logic program. The window title is "Dvp0 - Delta WPLSoft - [Monitor Ladder Diagram]". The menu bar includes File, Edit, Wizard, Compiler, Comments, Search, View, Communication, Options, Window, and Help. The toolbar contains various icons for file operations, editing, and execution. A red box highlights the "Monitor" icon in the toolbar.

The main workspace shows a ladder logic diagram with a single rungs. The left rail is labeled "M1000" and has a green square indicating it is active. The right rail contains a timer coil labeled "TRD" with a time value of "D0" and a red "H5" label. Below the timer coil is an "END" terminal. A blue box highlights a blank area on the left rail.

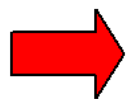
The left sidebar shows a communication tree under the "Communication" folder. It lists several Ethernet devices:

- RS232
- Ethernet
 - DVPEN01-SL
 - Jason Set EN01-SL
 - 172.16.155.194
 - station_2
 - 192.168.1.7
 - IFD9506
 - DELTA ENA01-MOD
 - 172.16.157.251
 - IFD9506 (checked)
 - 192.168.1.1
 - DirectLink

The status bar at the bottom shows "Overwrite Row: 2, Col: 1", "Scan time: 0.1 ms", "5/15872 Steps", a green "RUN" button, "Ethernet Connecting", and "ES2/EX2/SX2 Series". A red box highlights the "RUN" button and the "Ethernet Connecting" status.



IP 192.168.1.1



Ethernet



RS-485



EX2

D1120=H86
K1=D1121



SV

D1120=H86
K2=D1121



DTB

Station
K3=address

تنظیم HMI:

مدل HMI را انتخاب میکنیم:

Project Wizard

Series: DOP-B series

HMI List			
Model Type	Resolution	Color	
B03S210	480 * 272	65536 Colors	
B03S211	480 * 272	65536 Colors	
B03E211	480 * 272	65536 Colors	
B04S211	480 * 272	65536 Colors	
B05S100	320 * 234	65536 Colors	
B05S101	320 * 234	65536 Colors	
B05S111	320 * 234	65536 Colors	
B07S201	480 * 272	65536 Colors	
B07S211	480 * 272	65536 Colors	
B07S411	800 * 480	65536 Colors	
B07S401K	800 * 480	65536 Colors	
B07S411K	800 * 480	65536 Colors	
B07S415	800 * 480	65536 Colors	

Project Setup

Project Name: NewHMI

Screen Name: Screen_1


Screen No: 1

Printer: NULL

System Message Language: English

HMI Rotation: 0 degree

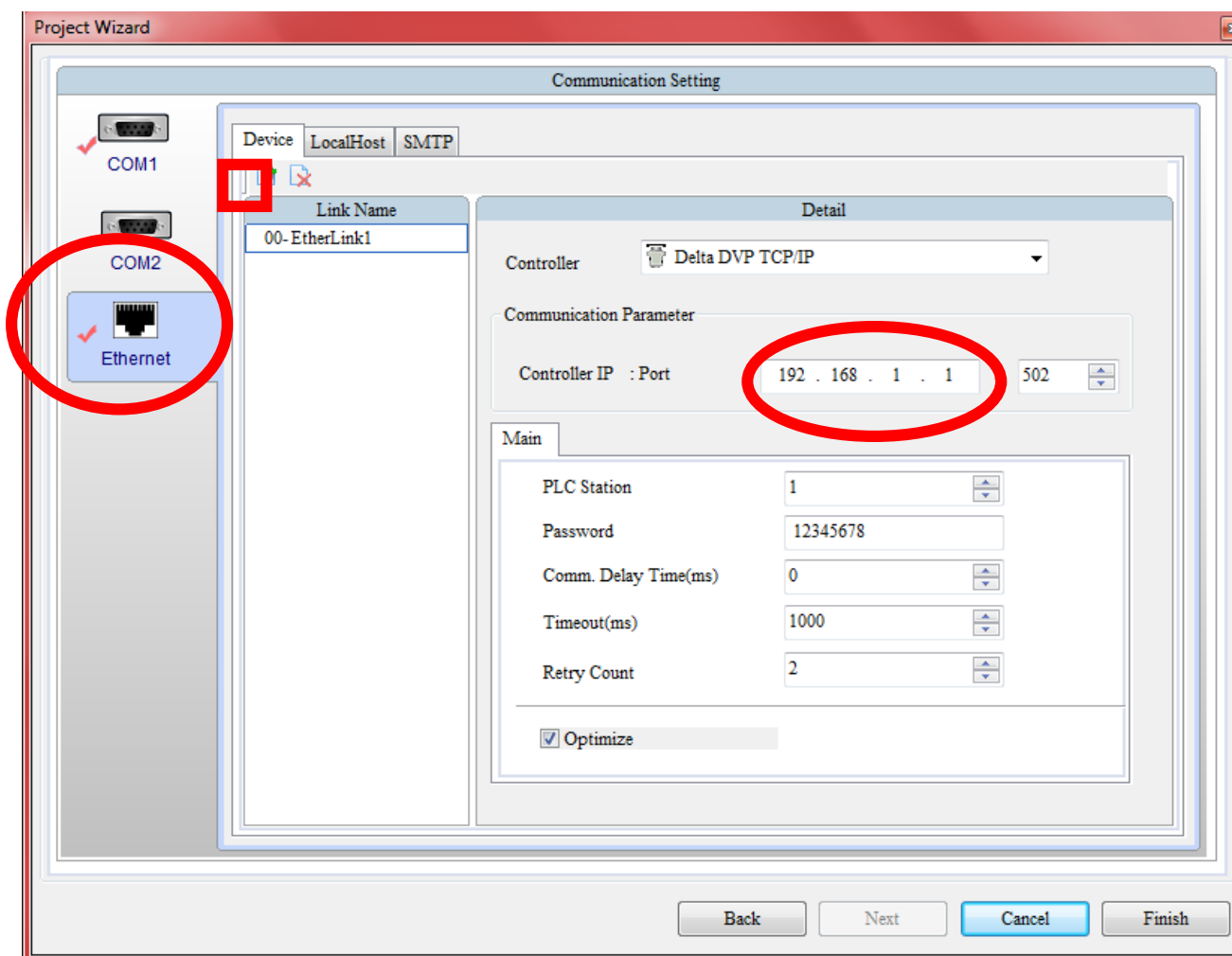
Back Next Cancel Finish



بر روی ETHERNET کلیک کرده

گزینه NEW را انتخاب کرده

در قسمت CONTROLLER IP , تنظیم شده بر روی IFD9506 را وارد میکنیم



برای اضافه کردن DEVICE های بیشتر دوباره بر روی NEW کلیک کرده و STATION ADDRESS آن را وارد میکنیم :

Project Wizard

Communication Setting

Device LocalHost SMTP

Link Name

Link Name
00-EtherLink1
01-EtherLink2

Detail

Controller Delta DVP TCP/IP

Communication Parameter

Controller IP : Port 192 . 168 . 1 . 1 : 502

Main

PLC Station 2

Password 12345678

Comm. Delay Time(ms) 0

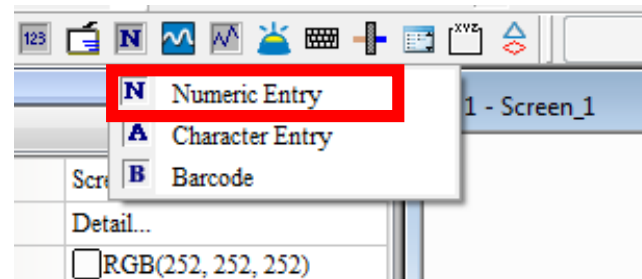
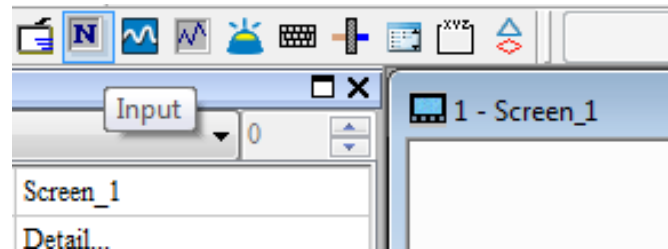
Timeout(ms) 1000

Retry Count 2

Optimize

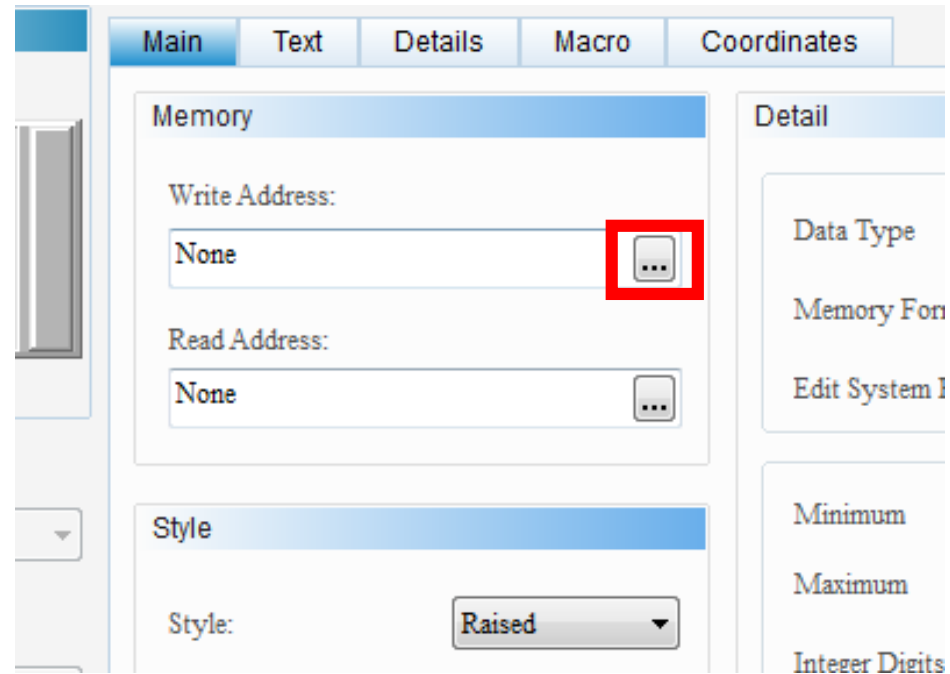
Back Next Cancel Finish

برای مثال پروژه تغییر ساعت و تاریخ بر روی plc ها و نوشتن مقدار sv کنترلر دما اجرا میشود.
در تنظیمات اولیه HMI سه LINK با STATION ADDRESS های ۱ و ۲ و ۳ ایجاد میکنیم.
۱- بر روی input کلیک کرده و numeric entry را انتخاب میکنیم.

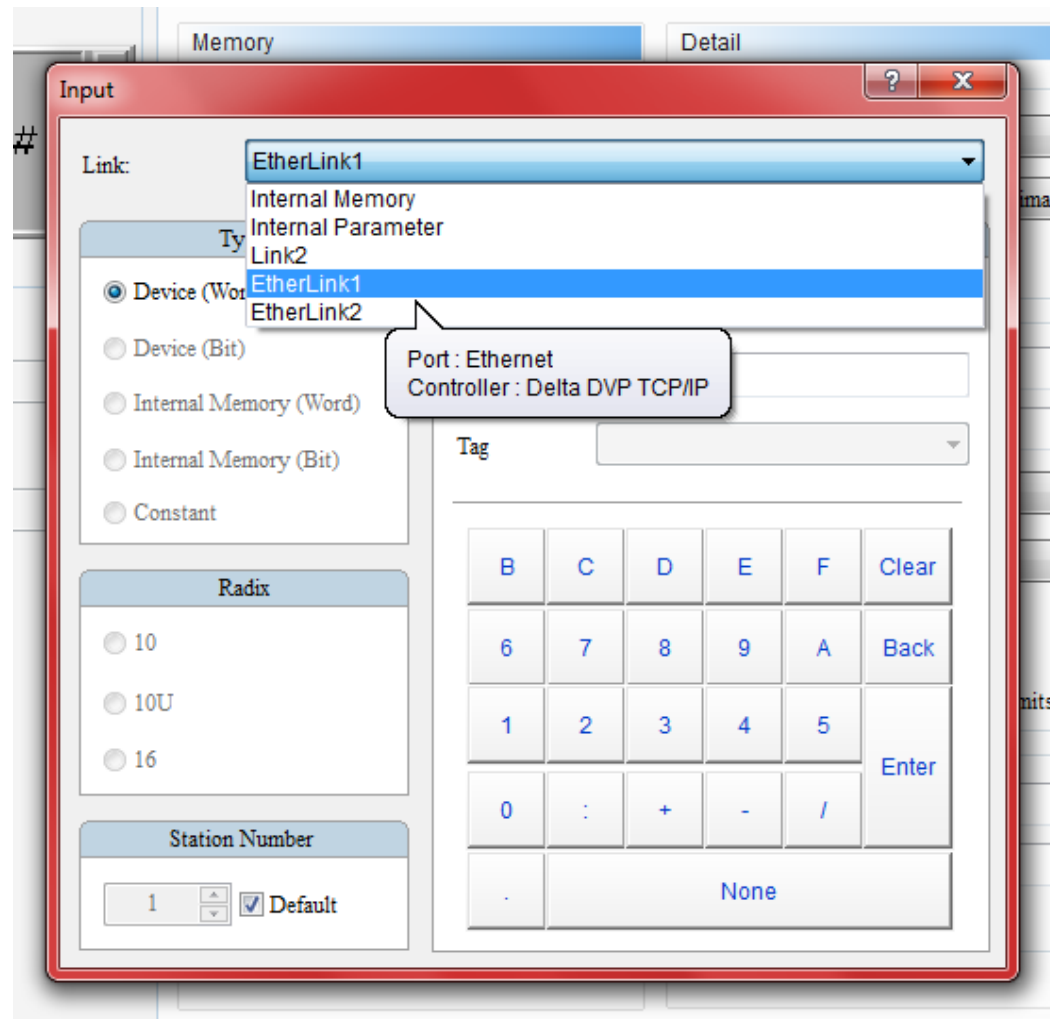


۲- بر روی numeric entry کلیک کرده تا صفحه تنظیمات آن باز شود.

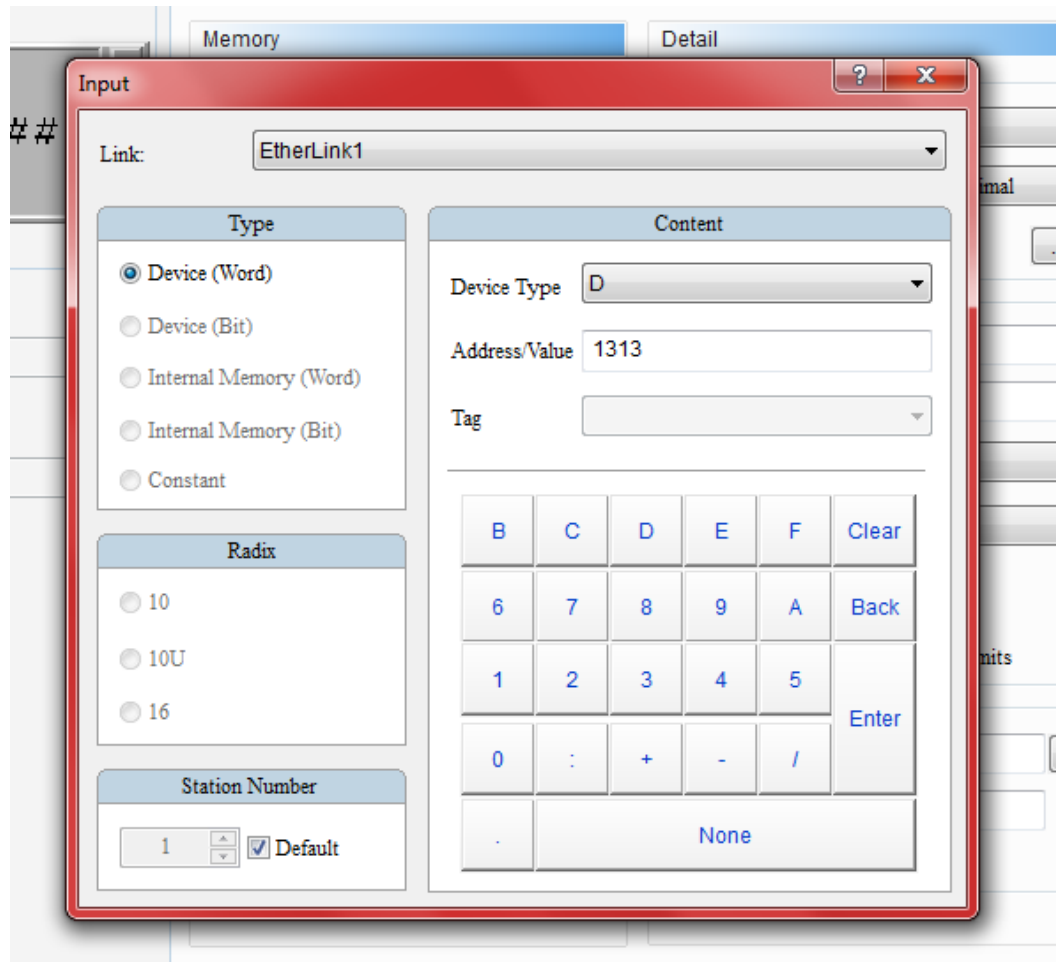
۳- در صفحه باز شده در قسمت write address بر روی آیکون مشخص شده کلیک میکنیم.

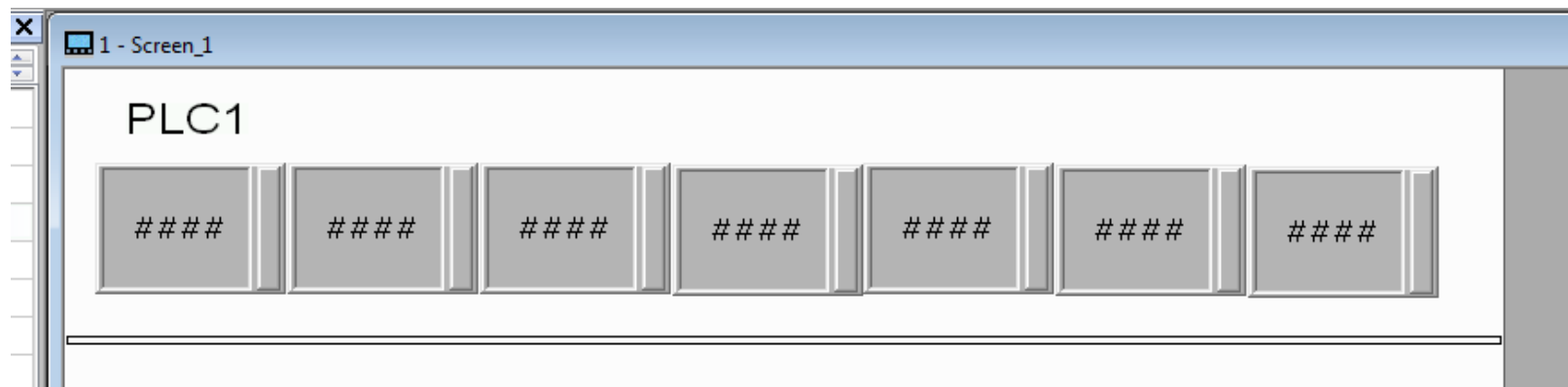
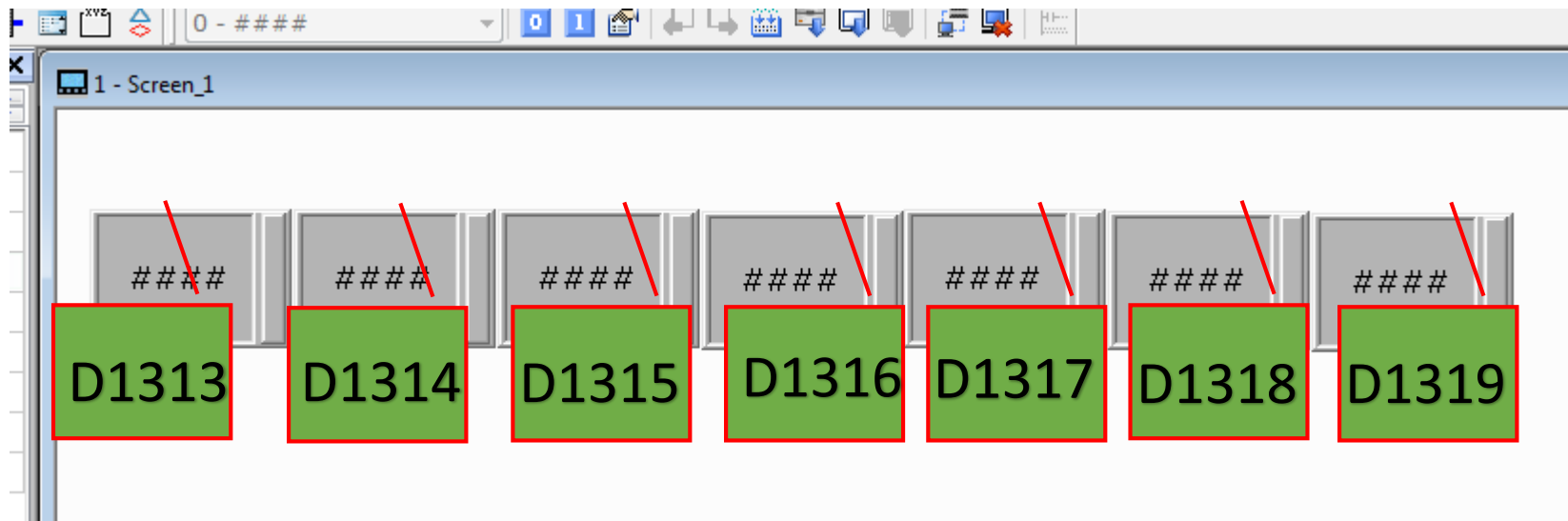


۴- در صفحه باز شده منوی لینک را باز کرده و ETHER LINK1 را انتخاب میکنیم.

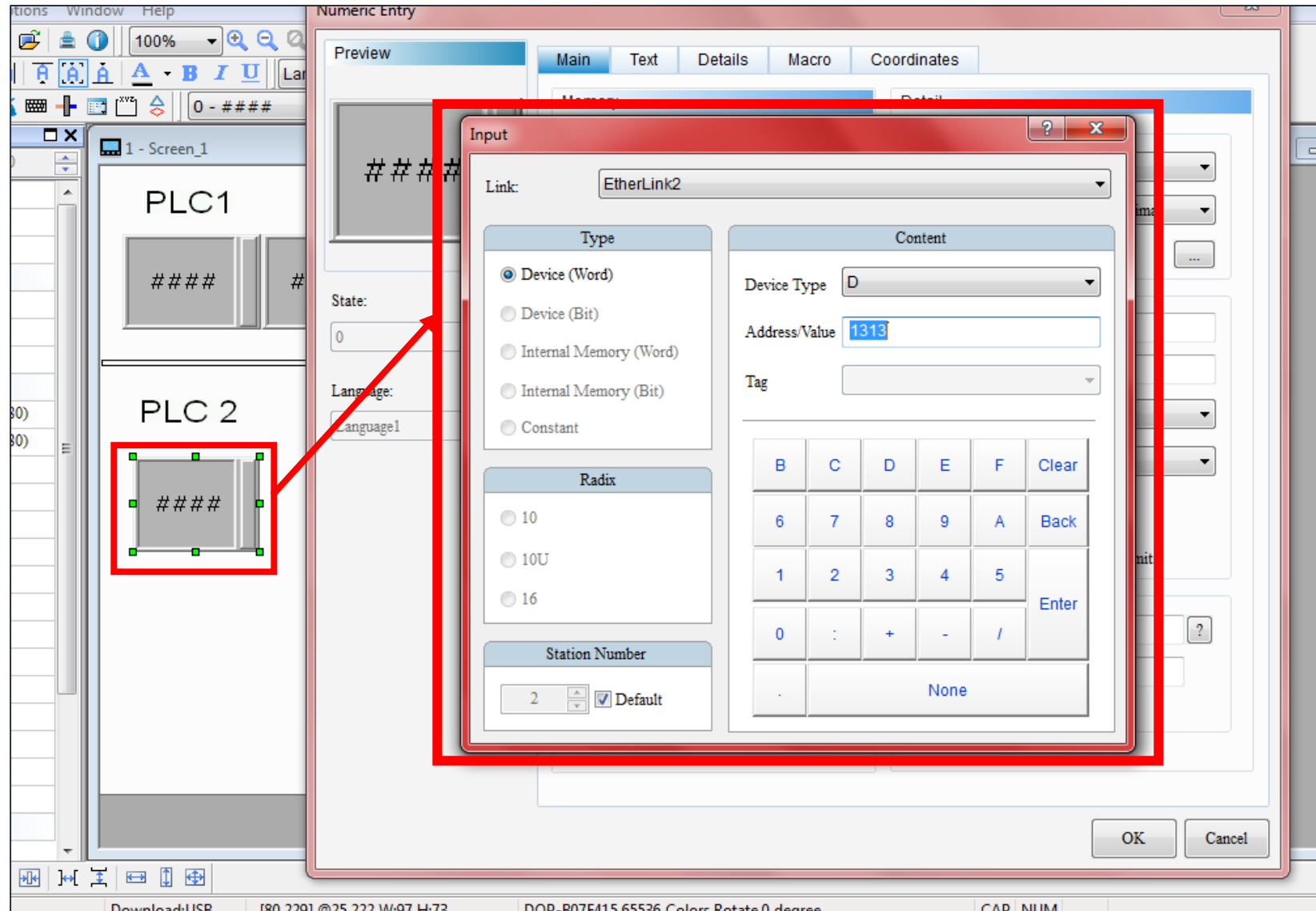


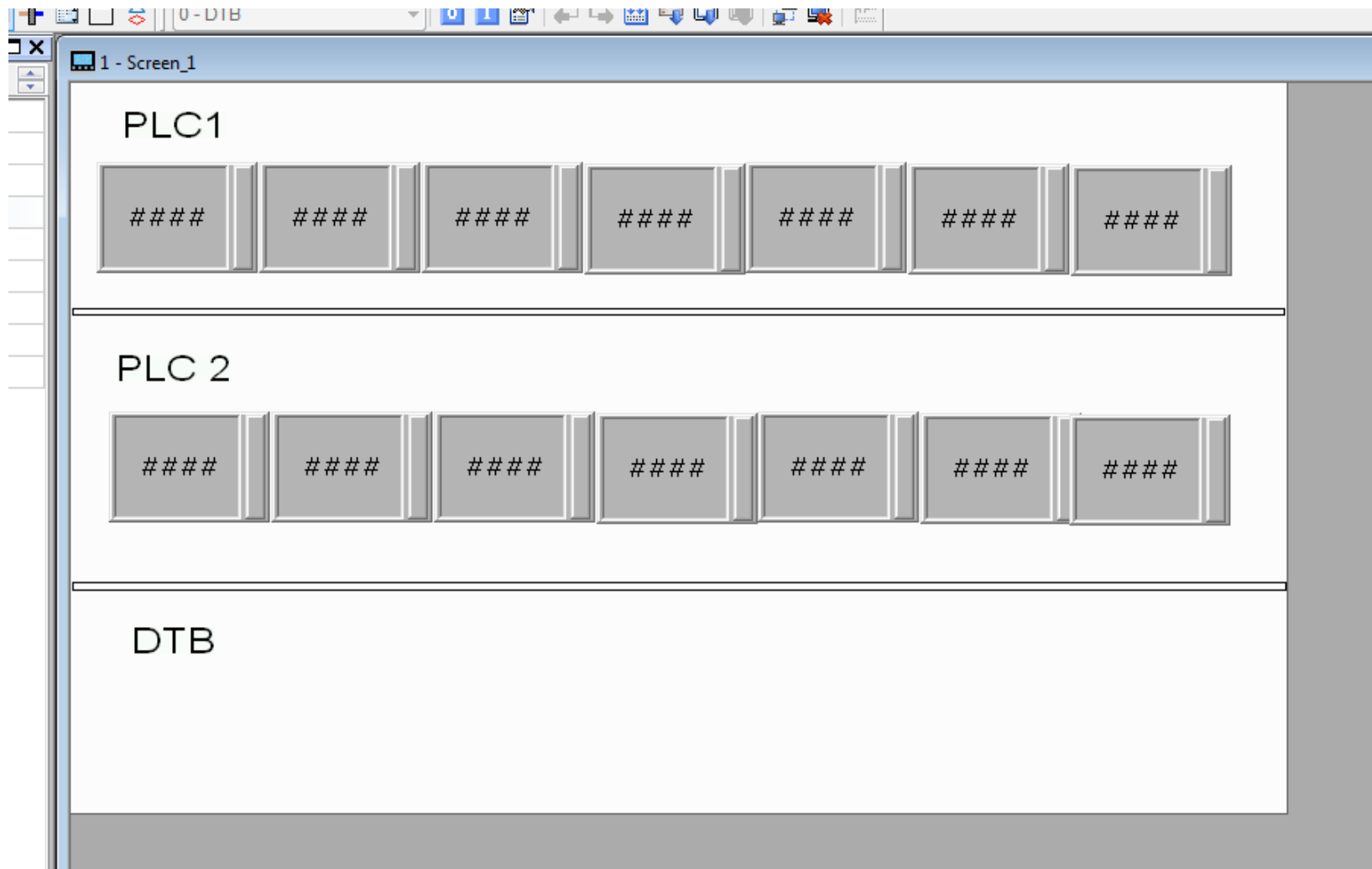
۵- در قسمت DEVICE TYPE رجیستر D را انتخاب کرده و در قسمت ADDRESS آدرس رجیستر مورد نظر را وارد میکنیم.





LINK را برای PLC دوم بر روی ETHER LINK 2 تنظیم میکنیم.





The image shows a software interface for configuring PLC components. The main window displays a schematic with sections for PLC1, PLC2, DTB, and SV. A 'Numeric Entry' dialog box is open, showing configuration options for a selected component. The dialog has tabs for 'Main', 'Text', 'Details', 'Macro', and 'Coordinates'. The 'Main' tab is active, showing an 'Input' section with a 'Link' dropdown set to 'EtherLink3'. Below this, there are sections for 'Type', 'Content', 'Radix', and 'Station Number'. The 'Type' section has 'Device (Word)' selected. The 'Content' section has 'Device Type' set to 'D' and 'Address/Value' set to '1001'. The 'Radix' section has '10' selected. The 'Station Number' section has '3' and 'Default' checked. A numeric keypad is visible at the bottom right of the dialog. A red box highlights the 'EtherLink3' dropdown, the 'D' dropdown, and the '1001' text field. A red arrow points from the 'SV' component in the schematic to the 'Input' section of the dialog.

Options Window Help

100%

Language1

0 - ####

1 - Screen_1

PLC1

####

PLC2

####

DTB

####

SV

80, 180)

80, 180)

Numeric Entry

Preview

Main Text Details Macro Coordinates

Memory Detail

Input

Link: EtherLink3

Type

- Device (Word)
- Device (Bit)
- Internal Memory (Word)
- Internal Memory (Bit)
- Constant

Content

Device Type: D

Address/Value: 1001

Tag

Radix

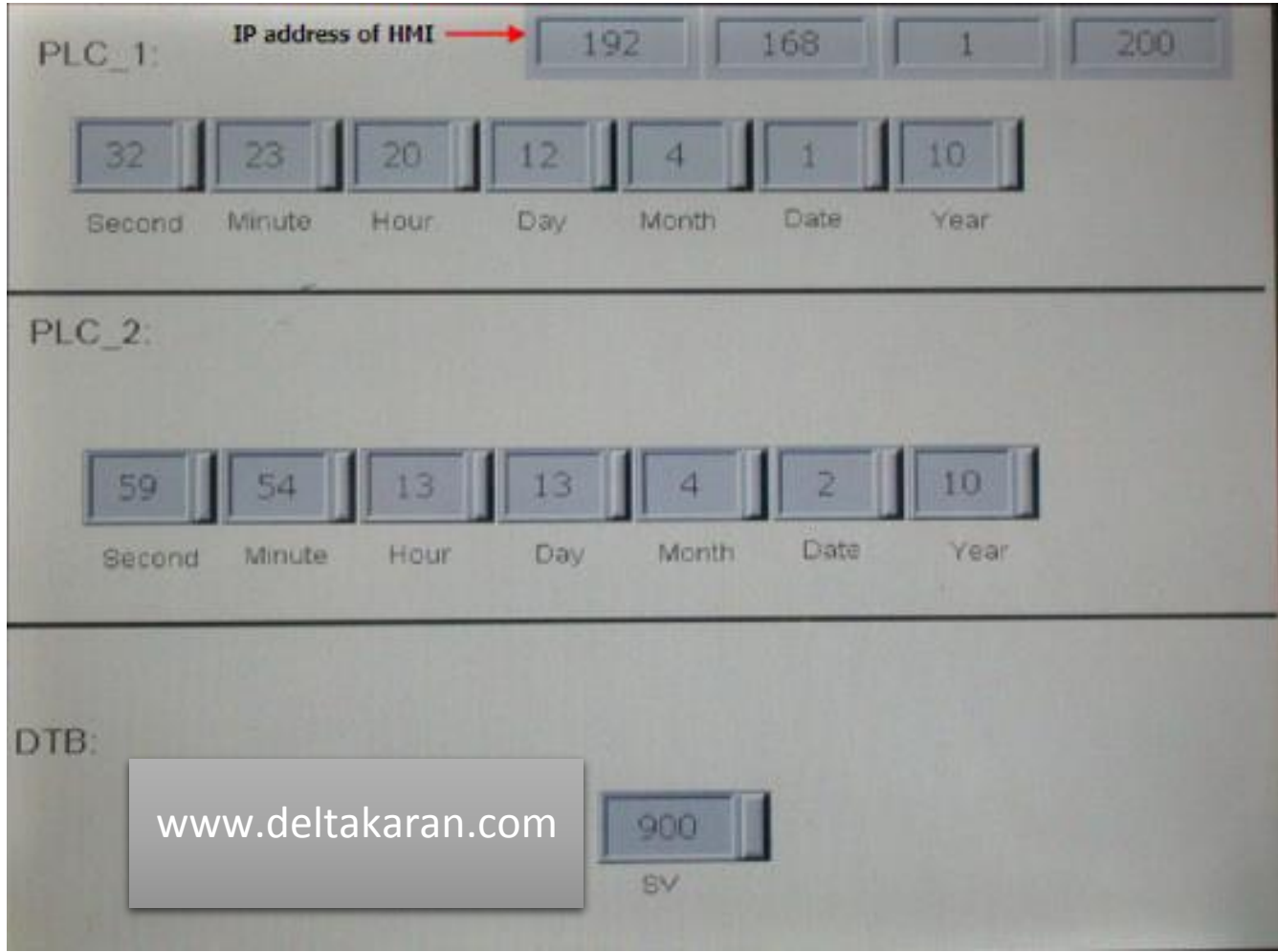
- 10
- 10U
- 16

Station Number

3 Default

B	C	D	E	F	Clear
6	7	8	9	A	Back
1	2	3	4	5	Enter
0	.	+	-	/	
None					

OK



اگر نتوانستید ارتباط بگیرید:

۱- تنظیمات شبکه مدباس IFD9506 و کنترلر را چک کنید. تنظیمات شبکه هر دو اعم از baud rate و Data format باید یکسان باشد.

۲- IP شبکه IFD 9506 و IP وارد شده در HMI یا PLC را چک کنید.

۳- STATION ADDRESS دستگاه های متصل به شبکه مدباس را چک کنید.