



Quick Start for ET-2242 Module

English / Dec. 2015 / Version 1.0

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What's in the Shipping Package?

The package includes the following items:

❶ ET-2242 Module



❷ Quick Start Guide (This Document)



❸ Companion CD



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Installing the Software

The eSearch Utility can be obtained from either the companion CD-ROM or from the ICPDAS website, as indicated below:



CD:\NAPDOS\software\eSearch\Windows\





<http://ftp.icpdas.com/pub/cd/6000cd/napdos/software/esearch/windows/>

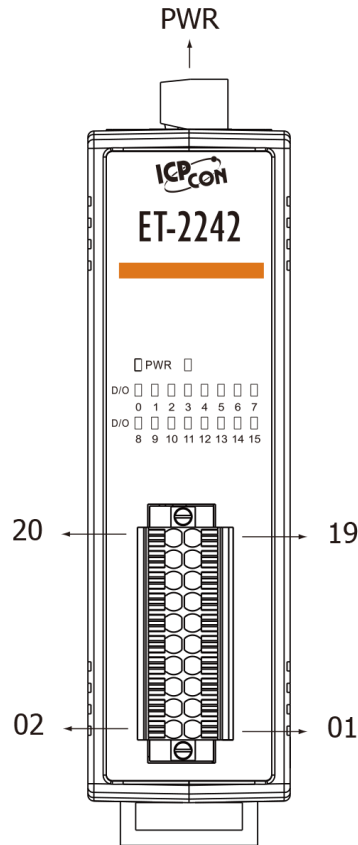
- ❶ Double-click the “**eSearch_vxxx_setup.exe**” file icon to execute the driver installation.
- ❷ Click the “**Next>**” button to start the installation.
- ❸ Select the destination location. The default path is **C:\ICPDAS\eSearch**. Verify that the destination path is correct and click the “**Next>**” button.
- ❹ Click the “**Next>**” button to continue.
- ❺ Click the “**Finish**” button to complete the installation.

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Pin Assignments and Wiring Notes

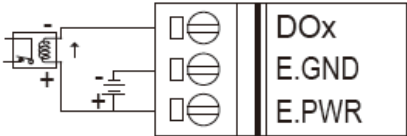
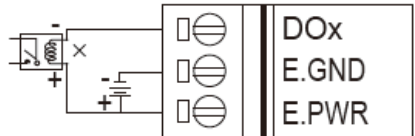


➤ Pin Assignments:

Terminal No.	Pin Assignment
PWR	F.G.
	GND
	+ Vs
ETH1	
ETH2	



Terminal No.	Pin Assignment	Pin Assignment	Terminal No.
20	DO7	DO15	19
18	DO6	DO14	17
16	DO5	DO13	15
14	DO4	DO12	13
12	DO3	DO11	11
10	DO2	DO10	09
08	DO1	DO9	07
06	DO0	DO8	05
04	E.PWR	E.PWR	03
02	E.GND	E.GND	01

➤ Wire Connections:

Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay		
Resistance Load		

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DO Modbus Addresses

The nDO parameters in the following Modbus Address Tables are as follows:

Model Name	Universal DIO	Number of DO channels (nDO)	Number of DI channels(nDI)
ET-2242	-	16	0

➤ **(0xxxx) DO Address:**

Starting Address	Points	Description	Bits Per Point	Range	Access Type
0 (0x00)	1 ~ nDO	Digital Output Channels	1	0 = Off 1 = On	R/W
60 (0x3C)	1	Saves specific data to Flash (The access type for some registers is labeled with an "E")	1	1 = Clear	W
100 (0x64)	1 ~ nDO	Enables the PWM for all DO Channels	1	0 = Off 1 = On (Default= 0)	R/W
235 (0xEB)	1 ~ nDO	Sets the Power-on value for all DO Channels	1	0 = Off 1 = On (Default= 0)	R/W/F
267 (0x10B)	1 ~ nDO	Sets the Safe value for all DO Channels	1	0 = Off 1 = On (Default= 0)	R/W/F

"R": Read, "W": Write, "F": Settings are recorded in flash by default, "E": After writing DO[60] register, the data will be stored in flash.



For detailed information related to DO Modbus Addresses, refer to Section 6.3 "Modbus Register Table" in the ET-2200 User Manual, which can be found at:

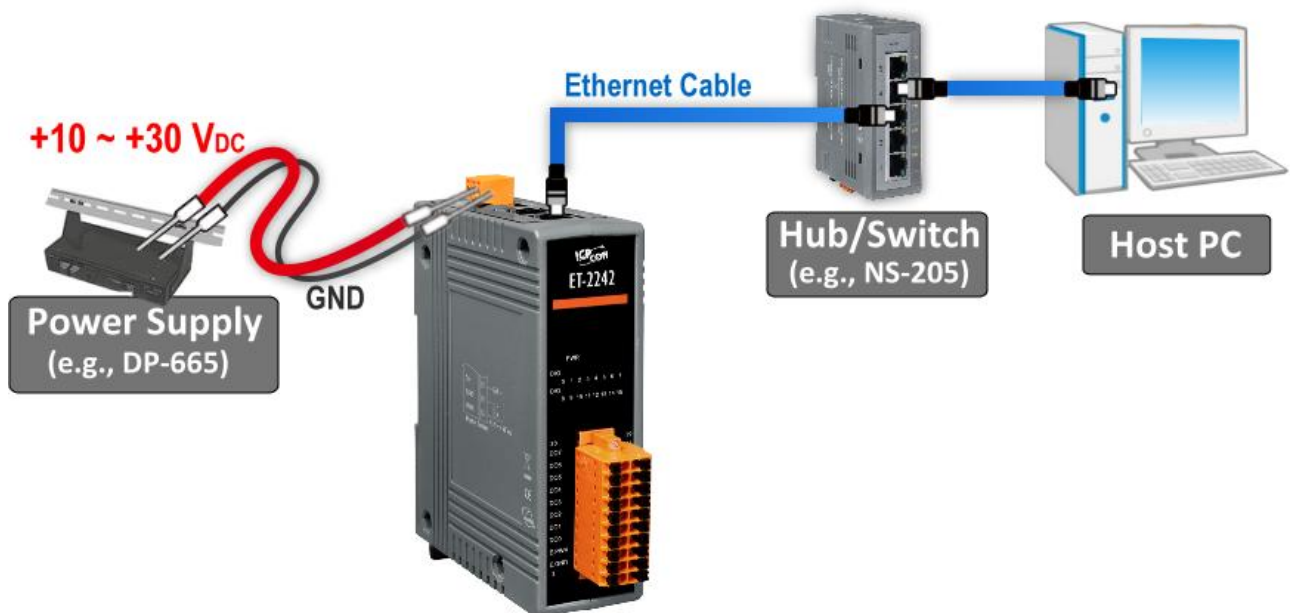
CD:\NAPDOS\ET2200\document\

<http://ftp.icpdas.com/pub/cd/6000cd/napdos/et2200/document/>

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Connecting the Power and the Host PC

- 1 Ensure that the network settings on the Host PC have been correctly configured and are functioning normally. Ensure that the Windows firewall or any Anti-Virus firewall is properly configured to allow incoming connections, or temporarily disable these functions, otherwise the **“Search Servers”** function in the eSearch Utility described in **Section 7** may not perform as expected. Contact the System Administrator for instructions of how to do this.
- 2 Connect both the ET-2242 module and the Host PC to the same sub network or the same Ethernet Switch.
- 3 Apply power to the ET-2242 module. The valid power voltage range is from **+10 to +30 V_{DC}**.



- 4 Verify that the **“PWR”** LED indicator on the ET-2242 module is flashing.

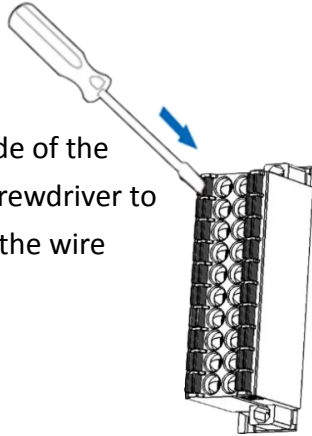
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Wiring the DI and DO for Self-Test

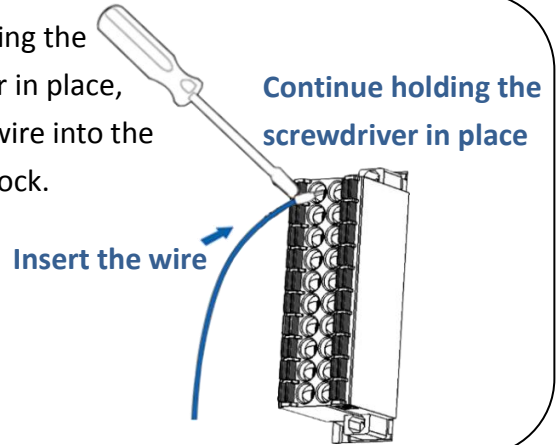


A tip for connecting the wire to the connector

1. Use the blade of the flat-head screwdriver to push down the wire clamp.

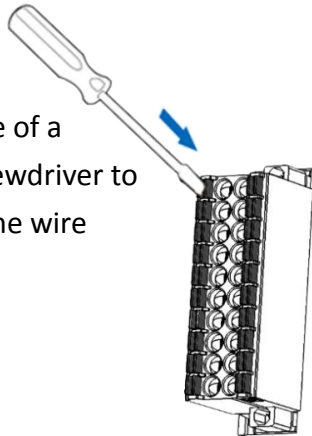


2. While holding the screwdriver in place, insert the wire into the terminal block.

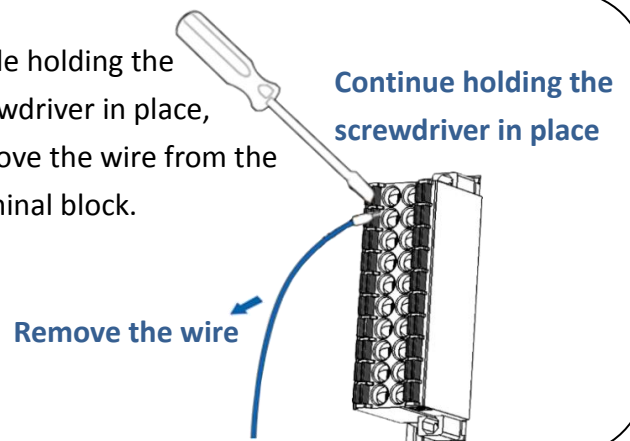


A tip for removing the wire from the connector

1. Use the blade of a flat-head screwdriver to push down the wire clamp.



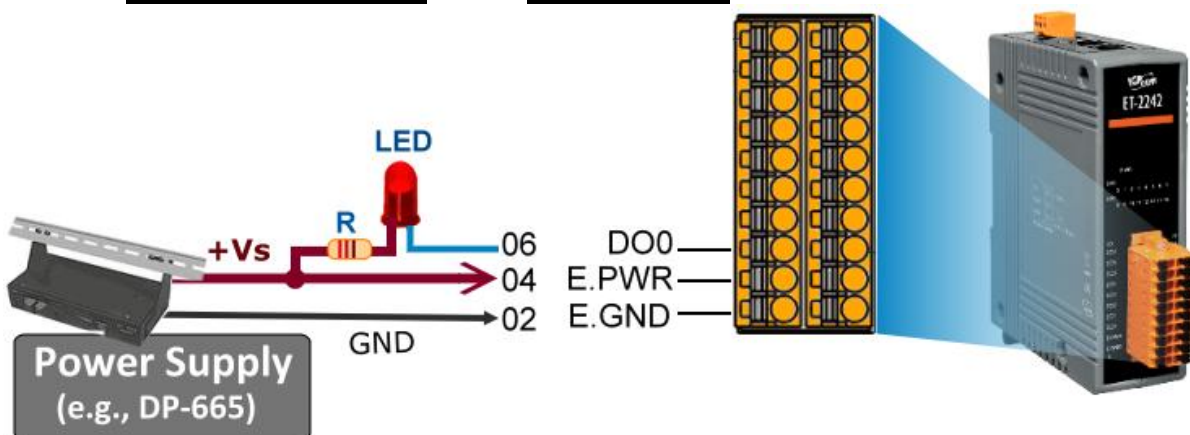
2. While holding the screwdriver in place, remove the wire from the terminal block.



❶ Use output LED to connect the **E.PWR (Pin04)** and **DO0 (Pin06)**.

❷ Connect the **External Power +24V** to the **E.PWR (Pin04)**.

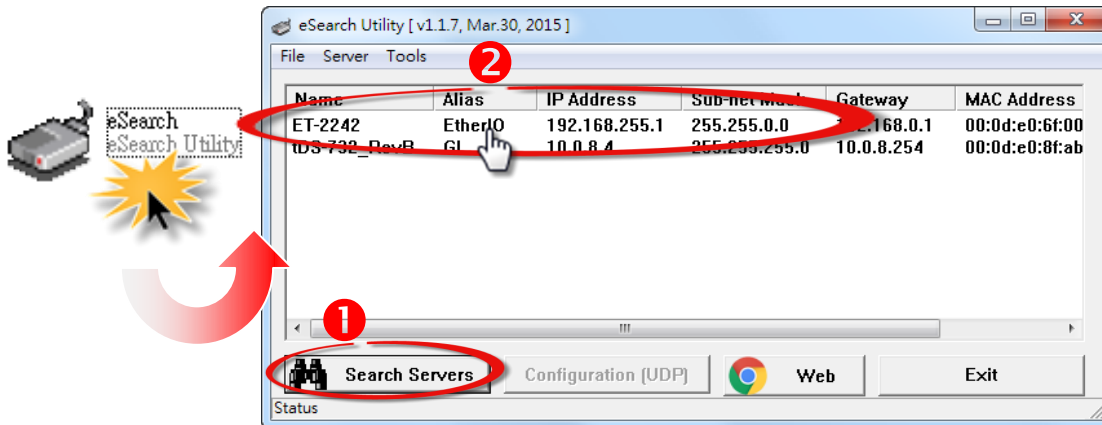
❸ Connect the **External Power GND** to the **E.GND (Pin02)**.



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Configuring the Correct Network Settings

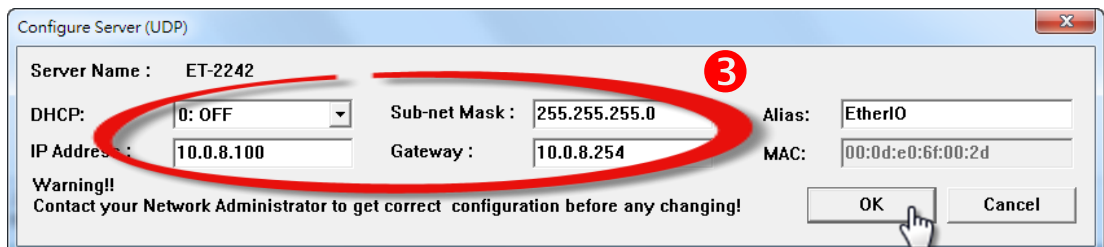
- 1 Execute the eSearch Utility and click the **“Search Servers”** button to search for the ET-2242 module.
- 2 Once the search process is complete, double-click the name of the ET-2242 module to open the **“Configure Server (UDP)”** dialog box.



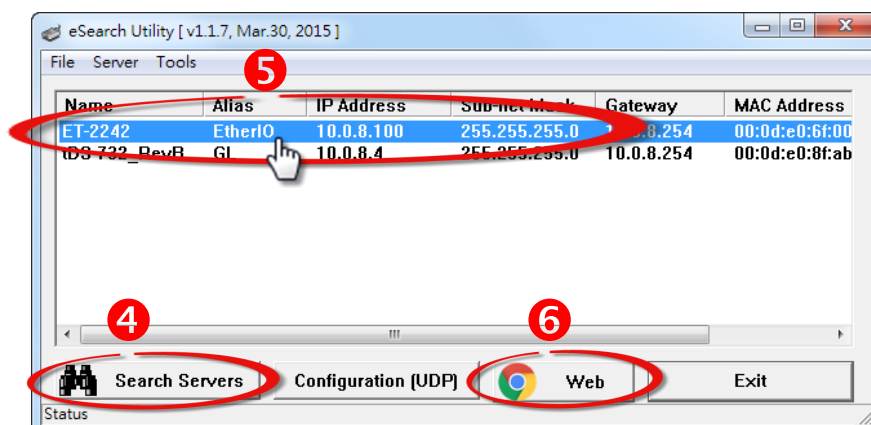
Factory Default Settings for the ET-2242 Series:

IP	192.168.255.1
Gateway	192.168.0.1
Mask	255.255.0.0

- 3 Enter the relevant values for the IP Address, Subnet Mask and Gateway, etc., and then click the **“OK”** button. The new settings for the ET-2242 module will take effect within 2 seconds. If the correct network configuration information is unknown, contact the Network Administrator to obtain the relevant details.



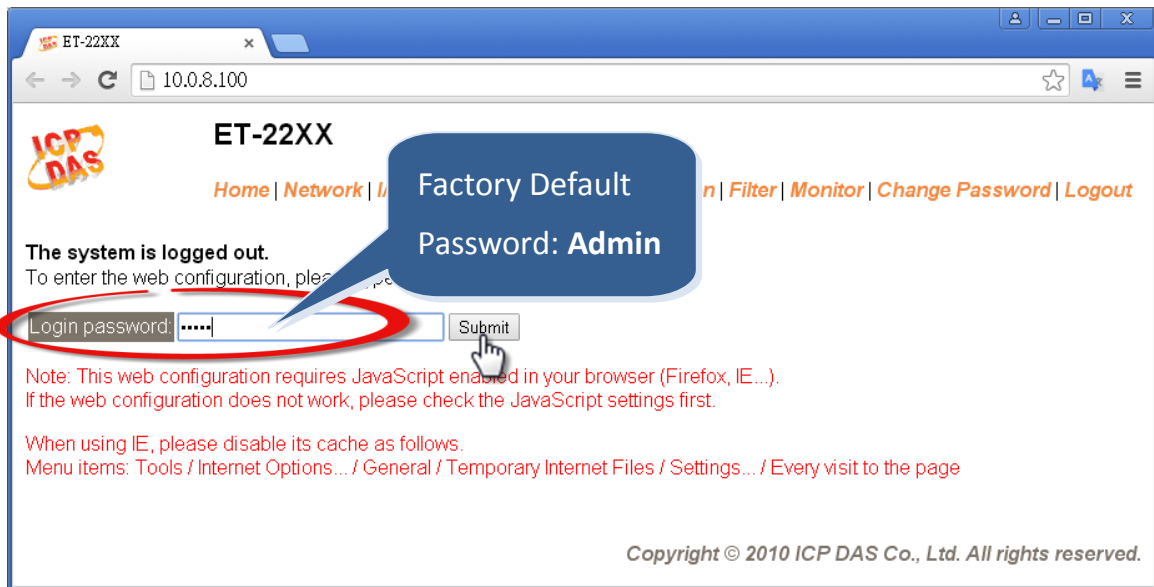
- 4 Wait for 2 seconds and then click the **“Search Servers”** button again to ensure that the ET-2242 module is operating correctly using the new configuration.
- 5 Click the name of the ET-2242 module to select it.
- 6 Click the **“Web”** button to log in to the web configuration pages.



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Performing the Self-Test

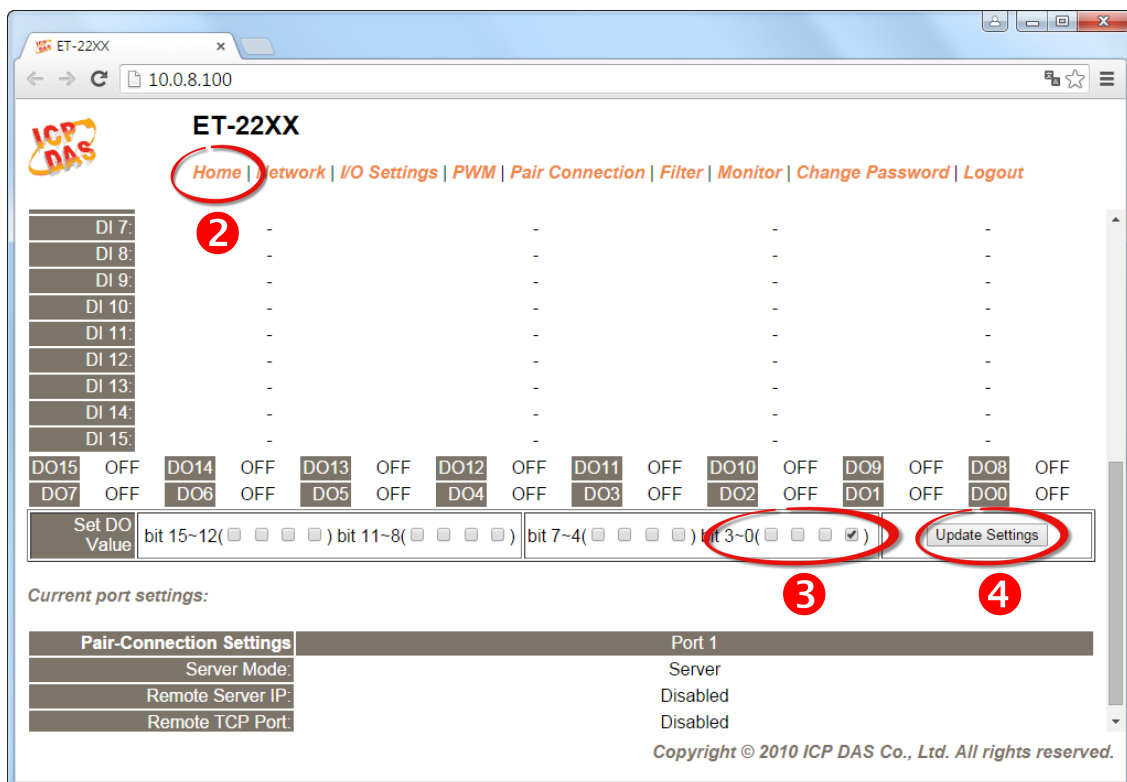
❶ Once the login screen is displayed, enter the password in the login password field (use the default password is “Admin”), and then click the “Submit” button to enter the configuration web page.



❷ Click the “Home” tab to access the DI/DO settings page for the ET-2242 module. This page allows a simple test to be performed to verify the Digital Input/Output functionality.

❸ In the “Set DO Value” section, check the checkbox for “bit0” to set DO0 to ON.

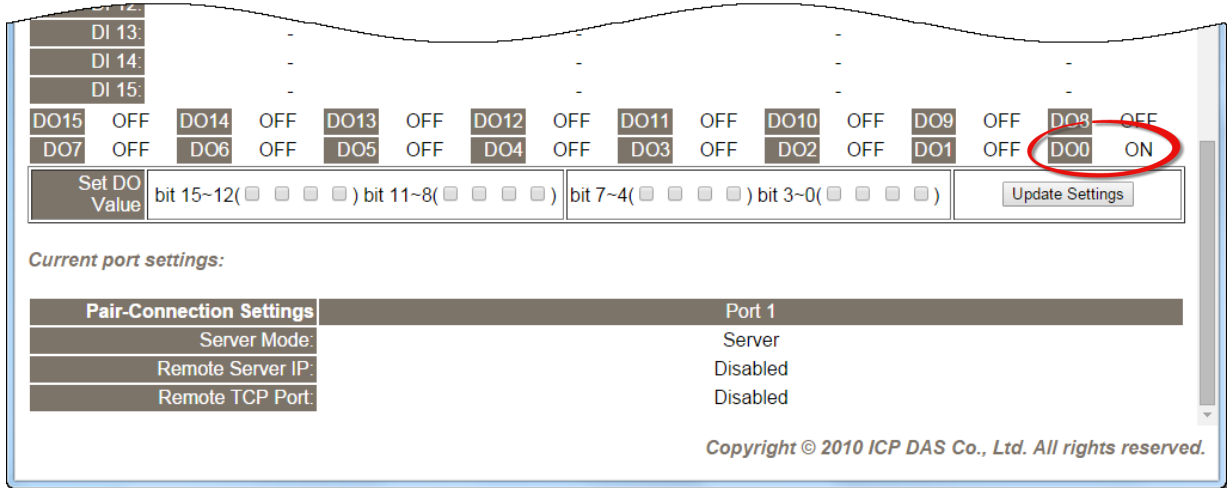
❹ Click the “Update Settings” button to save the revised settings to the ET-2242 module.



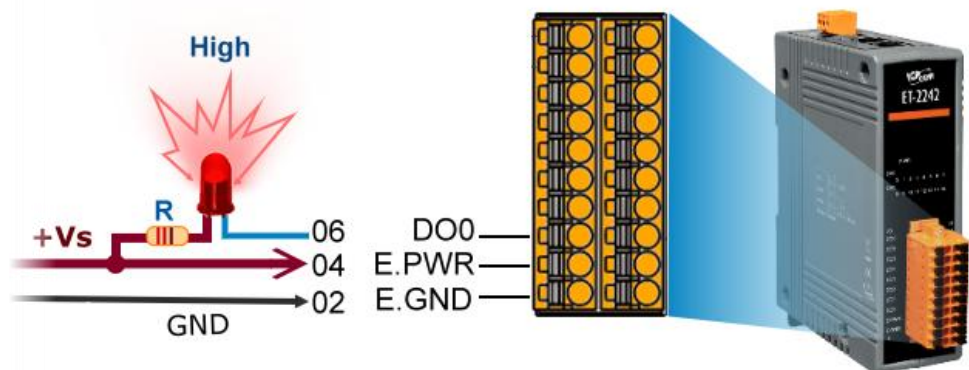
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Verifying the Test

- 5 Once the new settings have been saved, the page will be refreshed to indicate the new values. Verify that the **DO0** status should show current status are **“ON”**.



- 6 Verify that the **DO0** of output LED status for **“high”**.



Related Information

- ET-2242 Product Page:
http://www.icpdas.com/root/product/solutions/remote_io/ethernet_io/petl-7000_tpet_tet/et-2242.html
- Documentation & Firmware:
CD:\Napdos\ET2200
<http://ftp.icpdas.com/pub/cd/6000cd/napdos/et2200/>
- NS-205 and DP-665 Product Page (Optional):
http://www.icpdas.com/root/product/solutions/industrial_ethernet_switch/ns-205.html
http://www.icpdas.com/products/Accessories/power_supply/dp-665.htm