



ET-2242U Quick Start

v1.1, Mar. 2018

What's in the box?

The package includes the following items:



ET-2242U Module x 1



Quick Start x1
(This Document)

Related Information

- ET-2200 Series Product Page:
http://www.icpdas.com/root/product/solutions/remote_io/ethernet_io/petl-7000_tpet_tet/petl_series_main_page.html
- Documentation & Firmware:
<http://ftp.icpdas.com.tw/pub/cd/6000cd/napdos/et2200/>
- NS-205/MDR-20-24 Product Page (optional):
http://www.icpdas.com/root/product/solutions/industrial_ethernet_switch/ns-205.html
http://www.icpdas.com/root/product/solutions/accessories/power_supply/mdr-20-24.html

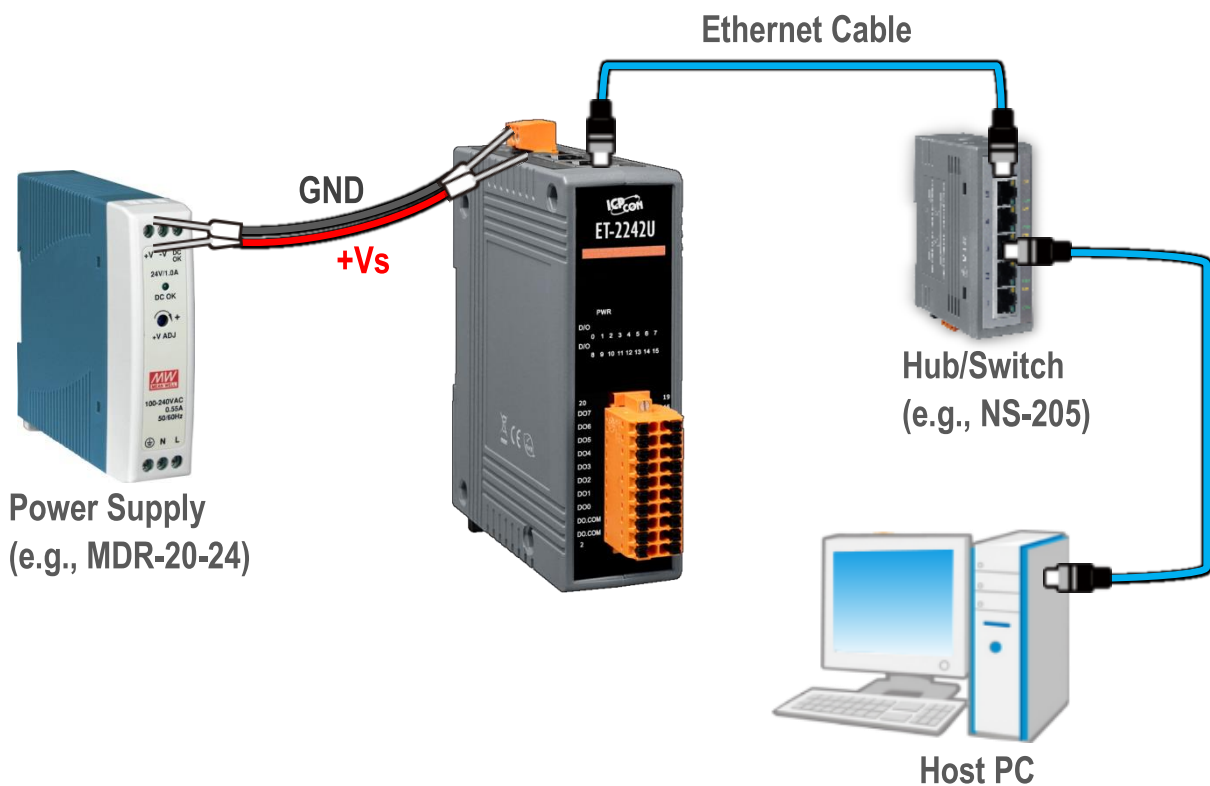
1 Connecting the Power and Host PC

1) Make sure your PC has workable network settings.

Disable or well configure your Windows firewall and Anti-Virus firewall first, else the “**Search Servers**” on **Chapter 5** may not work. (Please contact with your system Administrator)

2) Connect both the ET-2242U and your PC to the same sub network or the same Ethernet switch.

3) Supply power (+10~+30 VDC) to the ET-2242U.



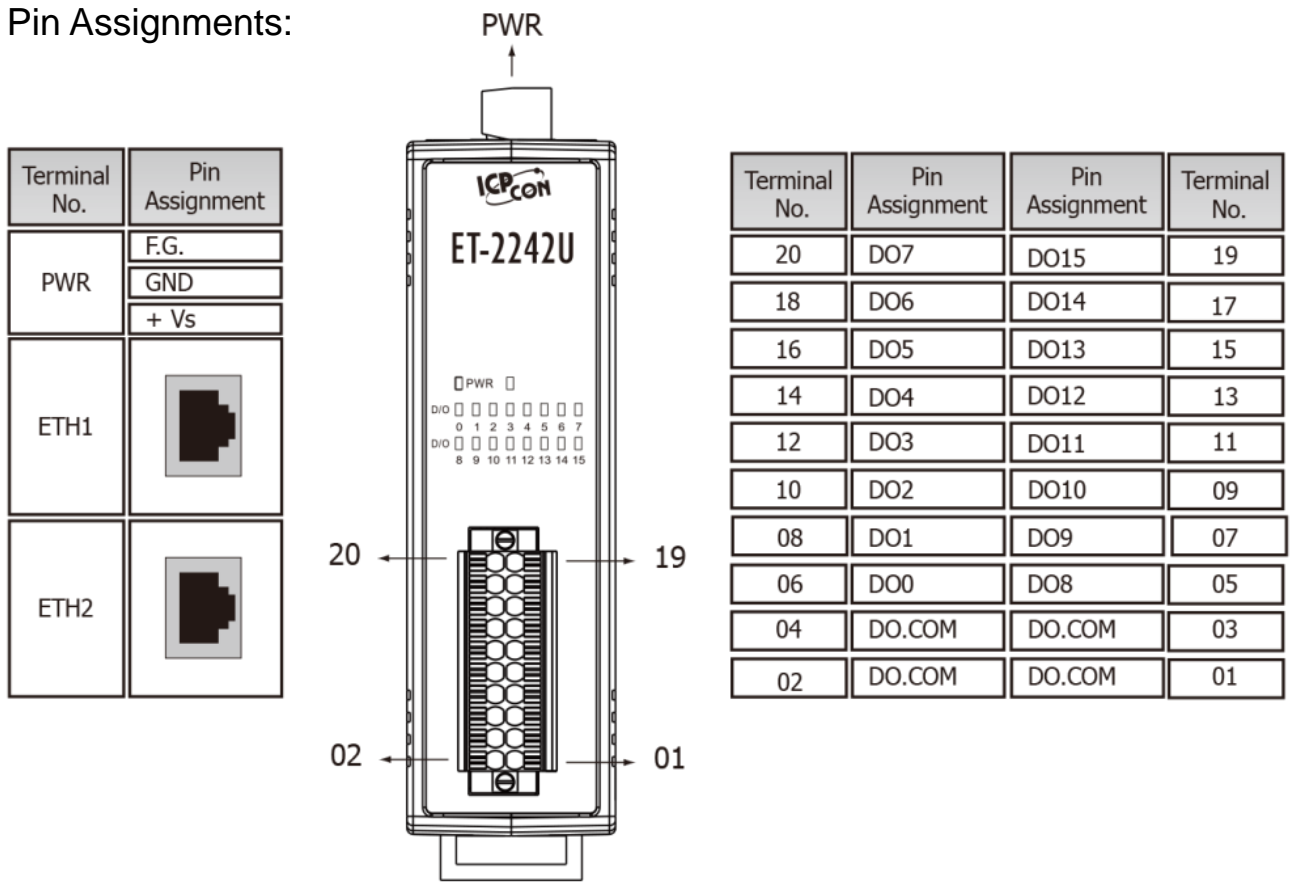
4) Verify that the “PWR” LED indicator on the ET-2242U is flashing.



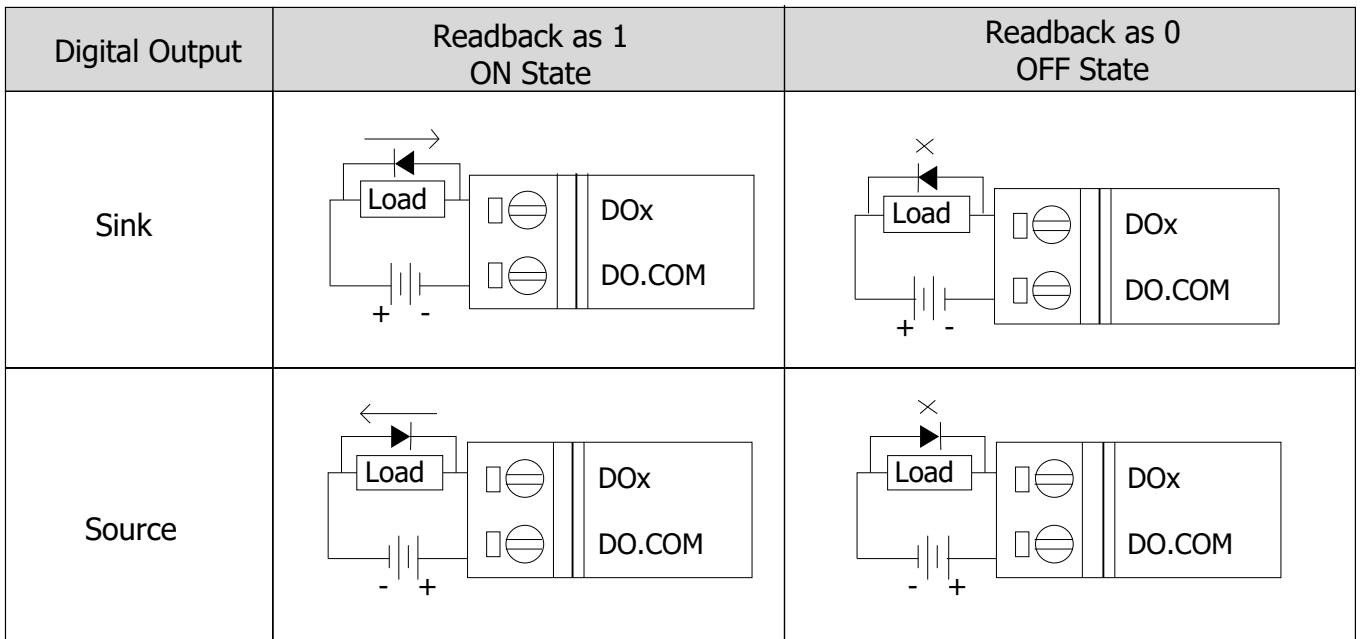
2

Pin Assignments & Wiring Note

➤ Pin Assignments:



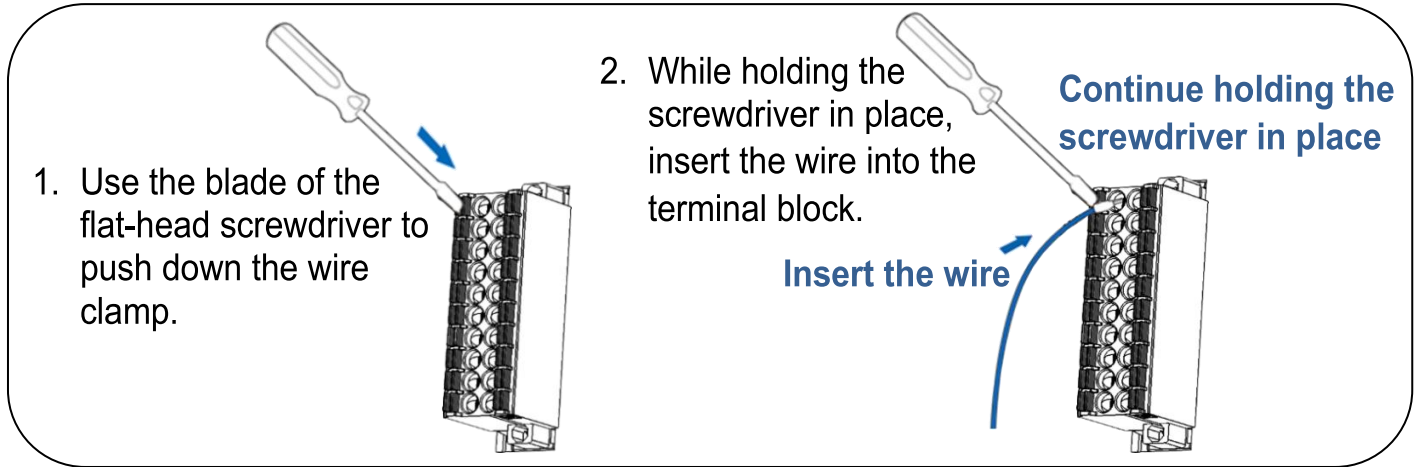
➤ Wire Connections:



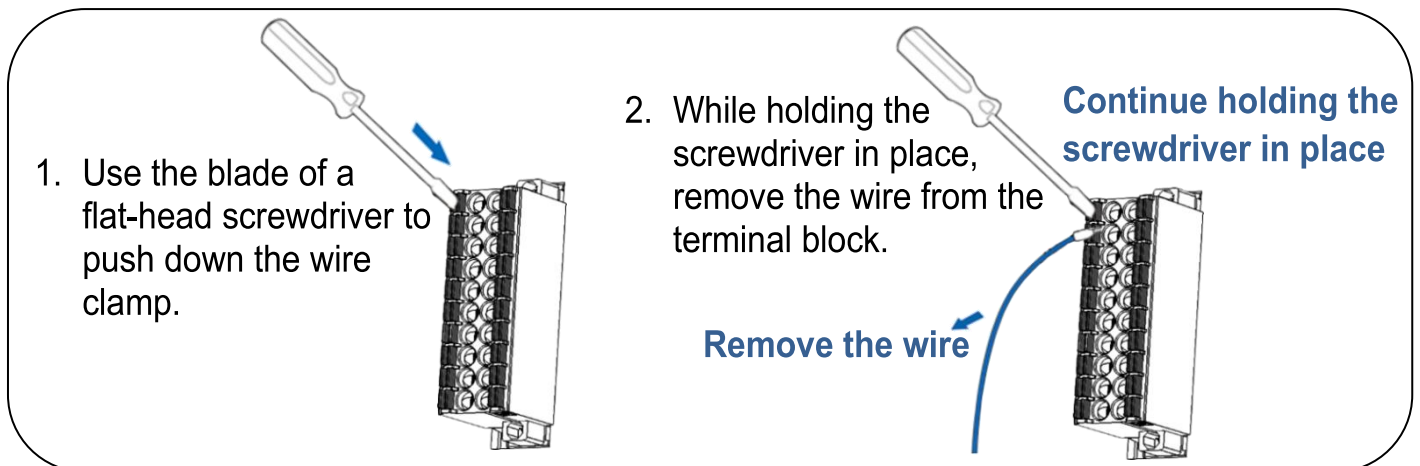
3

Wiring the DI and DO for Self-test

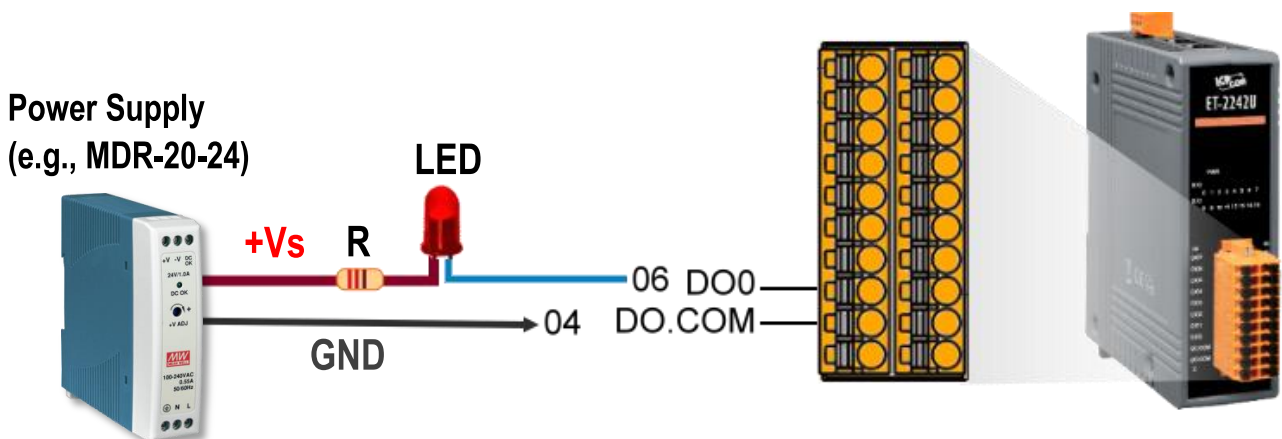
- A tip for connecting the wire to the connector



- A tip for removing the wire from the connector



- 1) Use output LED to connect the DO.COM pin (Pin04) to the DO0 pin (Pin06).
- 2) Connect the External Power +24V to the DO0 pin (Pin06).
- 3) Connect the External Power GND to the DO.COM (Pin04).



4 Modbus Address

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

| Mode Name | Universal DIO | Number of DO channels (nDO) | Number of DI channels (nDI) |
|-----------|---------------|-----------------------------|-----------------------------|
| ET-2242U | - | 16 | - |

➤ (0xxxx) DO address:

| Begin address | Points | Description | Bits Per Point | Range | Access Type |
|---------------|--------|--|----------------|---------------------------------------|-------------|
| 0 (0x0) | 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 | 0: cannot be write 1: can be write | W |
| . | . | . | . | . | . |
| 100 (0x21) | 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.

 **Note**

For detail "DI/DO Modbus Address" information, refer to Section 6.3 Modbus Register Table of user's manual (<http://ftp.icpdas.com/pub/cd/6000cd/napdos/et2200/document/>).

5

Configuring Network Settings

- 1) Run the eSearch Utility.

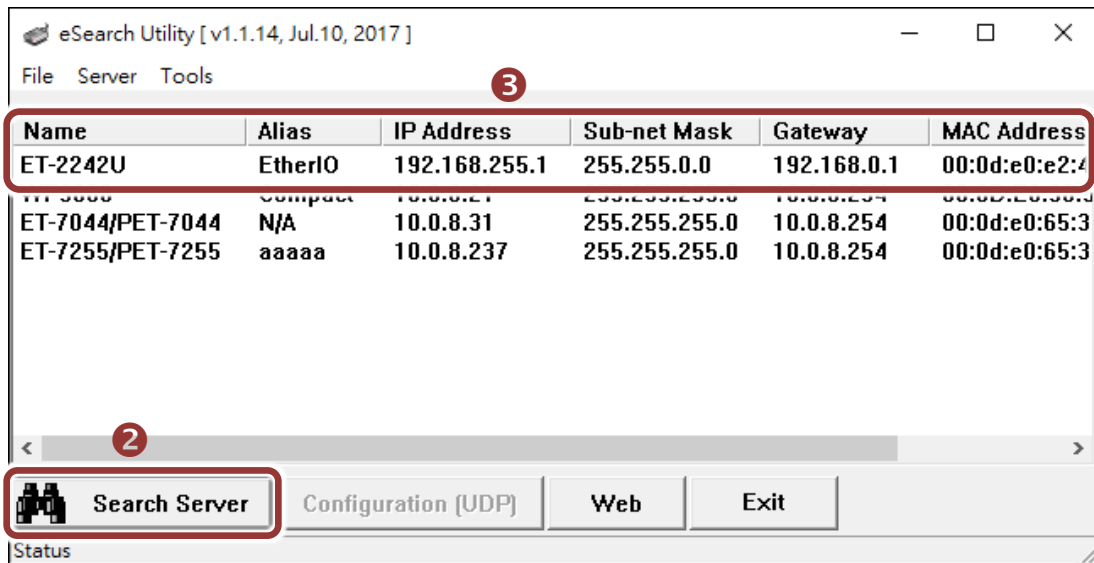
The eSearch Utility is located at:

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



- 2) Click the “**Search Servers**” to search your ET-2242U.

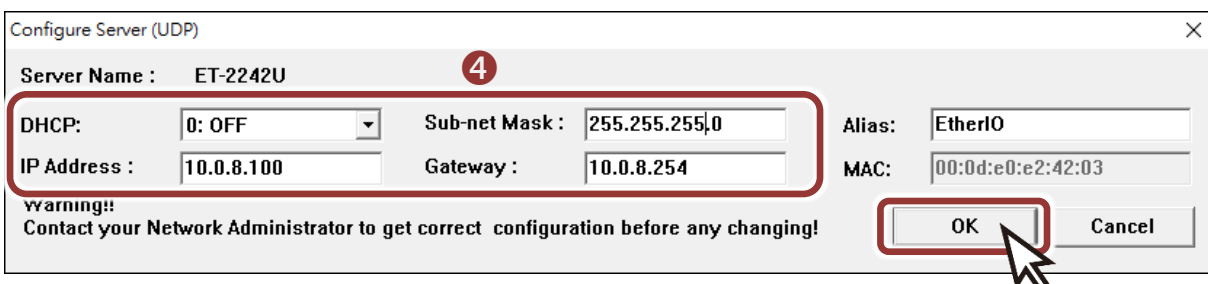
- 3) Double-click your ET-2242U to configure the settings



Factory Default Settings of ET-2242U:

| | |
|-------------|---------------|
| IP Address | 192.168.255.1 |
| Subnet Mask | 255.255.0.0 |
| Gateway | 192.168.0.1 |

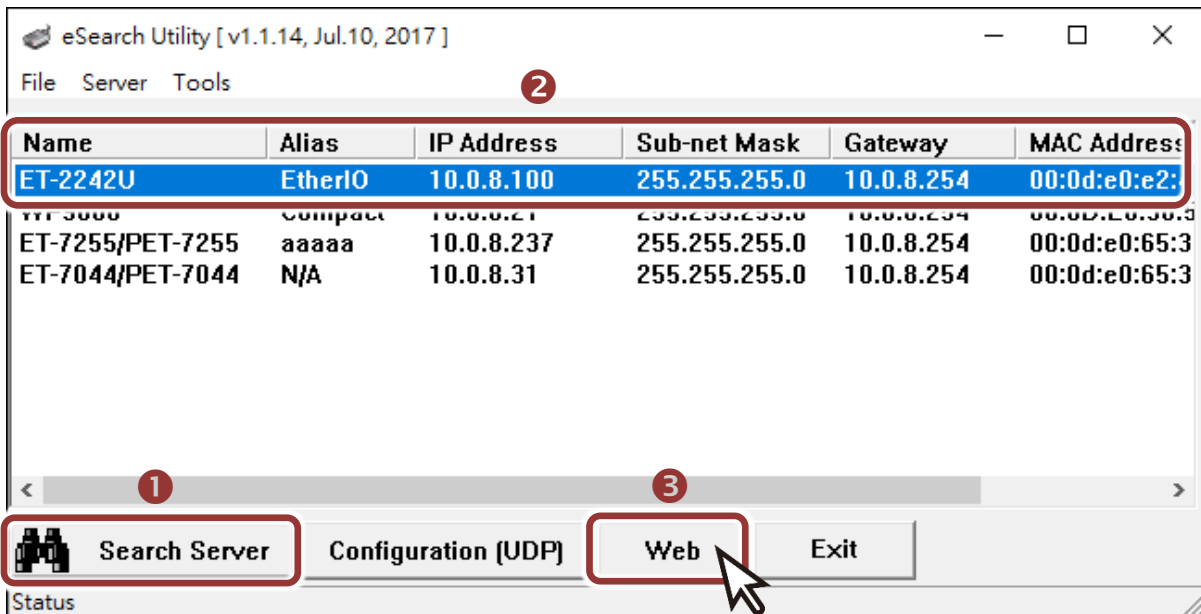
- 4) Contact your Network Administrator to obtain a correct network configuration (such as **IP/Mask/Gateway**). **Enter the network settings** and click “**OK**”. **⚠ Note: The ET-2242U will use the new settings 2 seconds later.**



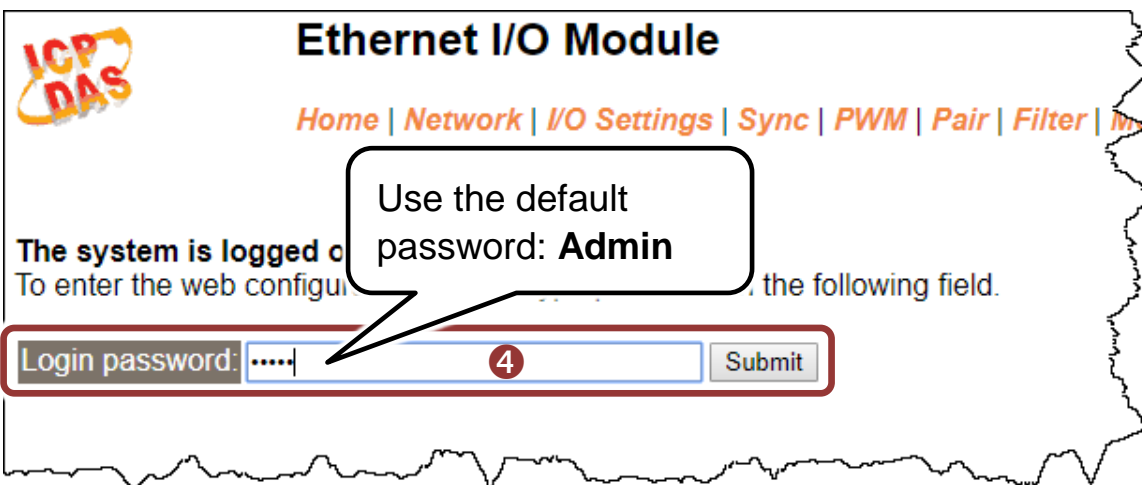
6

Testing your Ethernet I/O Module

- 1) Wait 2 seconds and click “**Search Servers**” button again to ensure the ET-2242U is working well with new configuration.
- 2) Click the name of ET-2242U to select it.
- 3) Click the “**Web**” button to log in to the web configuration pages.
(Or enter the URL address of the ET-2242U in the address bar of the browser.)



- 4) Enter the password (default: **Admin**) in the “login password” field and click “**Submit**”.



- 5) In the “Home” page allows a simple test to be performed to verify the Digital Input and Output functionality.
- 6) In the “Digital I/O” section, click the “DO0” button to **ON (Red)**.

Ethernet I/O Module

5 [Home](#) | [Network](#) | [I/O Settings](#) | [Sync](#) | [PWM](#) | [Pair](#) | [Filter](#) | [Monitor](#) | [Change Password](#) | [Logout](#)

| | | | |
|--|----------------------|--|-------------------|
| Model Name: | ET-2242U | Alias Name: | EtherIO |
| Firmware Version: | v1.4.7 [Nov.20 2017] | MAC Address: | 00-0d-e0-e2-42-03 |
| IP Address: | 10.0.8.100 | Initial Switch: | OFF |
| TCP Port Timeout: (Socket Watchdog, Seconds): | 180 | System Timeout: (Network Watchdog, Seconds) | 0 |

Digital I/O (Modbus Address: DO=00000 to 00015, DI=10000 to 10015)

DO15 DO14 DO13 DO12 DO11 DO10 DO9 DO8
DO7 DO6 DO5 DO4 DO3 DO2 DO1 DO0

Current port settings:

| | |
|---------------------------------|--------|
| Pair-Connection Settings | Port 1 |
| Sen Mode | Sen |

- 7) Verify that the **output LED** status for “high”.

