

INSTRUCTION MANUAL

ETHERNET (TCP) **SET UP GUIDE Ver E3.0**

Ethernet Guide

This document only applies to products that have a built-in Ethernet Port.

You will find this unit easy to install and highly reliable. It is essential that you read this manual thoroughly before attempting to use it.

INTRODUCTION

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The Ethernet port (TCP) allows control of the unit via a computer by redirecting serial commands (COM port) to the unit's IP address. To do this, you must:

- (1) Install the unit and your computer on the same sub-network . **(Step 1~4)**
- (2) Locate the Routing Control software on the supplied CD and install it on the computer. **(Step 5)**

Follow the steps below to configure your device for control via the included Application Program (GUI) interface. The GUI only operates on a Windows device. You can also control the device using 3rd party applications via Telnet. The default IP address of the unit is **192.168.1.3**. If your PC is not on the same sub-net, you must first change your computer's IP address to allow access to the unit. Once this is done, you can change the IP address or enable DHCP of the unit and then restore your computer's IP address. The Ethernet port is not a web server and will not support direct access via a web browser.

The default setting for Telnet access is port 5000. When using Telnet access, you cannot send commands via a line prompt as you can't type the characters fast enough. You must use a 3rd party interface (ex; [Realterm¹](#)) that supports "sending" ASCII commands. All devices with an Ethernet port only support one session. This means you can only have one instance of the GUI software running at a time. You cannot have the Ethernet port and RS-232 ports connected simultaneously.

¹: www.realterm.sourceforge.net

SETUP THE NETWORK (1)

STEP 1. NETWORK THE UNIT

(1-1) Set up the network of the unit.

(1-1.1) Plug the unit into a power outlet.

(1-1.2) Plug the Ethernet cable to the unit and the other end to an open port on your hub.

(1-1.3) Turn the unit on.

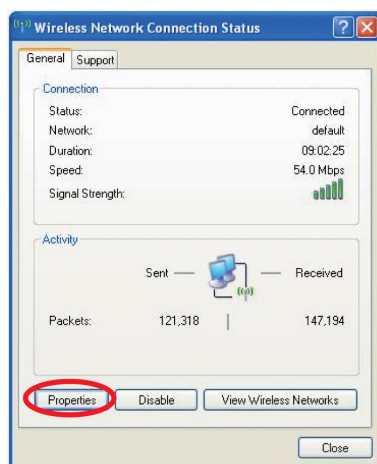
(1-2) Set up your computer in the same network of the unit.

(1-2.1) Go to **start** and click on **control panel**.

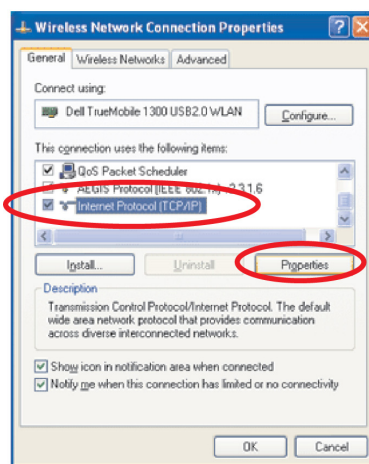
(1-2.2) Double click on **Network Connections**.

(1-2.3) Click on **Properties**.

(1-2.4) Click to select **Internet Protocol** (TCP/IP) and click **Properties**.



Picture 1-2.3



Picture 1-2.4

1. You can also locate the unit on any network provided you setup port forwarding on your router.

2. You can also use an external controller provided it is capable of communication to a COM port AND you can install the re-direct software.

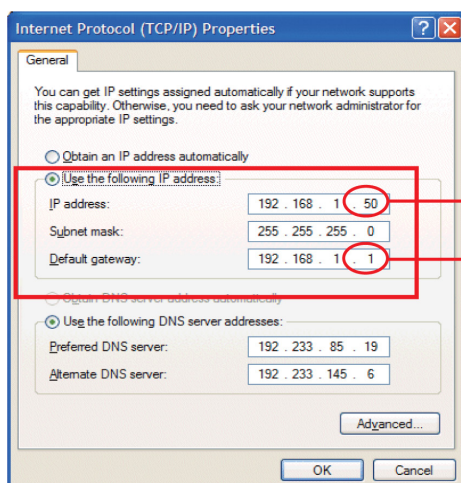
(1.2-5) Make note of the numbers for IP address and Default gateway.

(1.2-6) Choose **use the following IP address** and key in the IP number of the unit:

IP address: 192.168.0.x

Default Gateway: 192.168.0.x

The first three numbers must be 192.168. 0 while the last number must not be: number 3; lower than 255; one that has been assigned to another device. After the numbers are set, press **enter**.



Picture 1-2.6

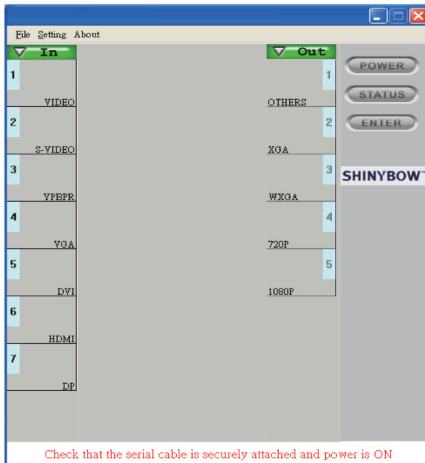
→ Assign a number to it.

→ Assign a number to it.

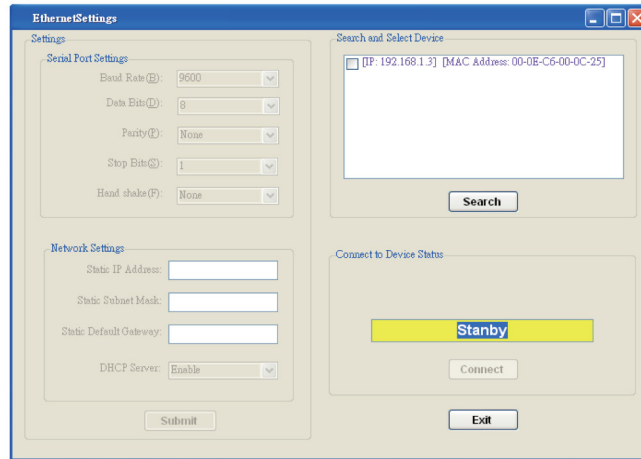
SETUP THE NETWORK (2)

STEP 2. NETWORK THE UNIT

(2-1) Open the AP and enter find **Ethernet Settings** find **Setting**. Click **Search** to detect the presence of the unit. Click on the detected **IP** of the unit. If the unit is not detected, return to Step 1 and reset the IP address of your computer.

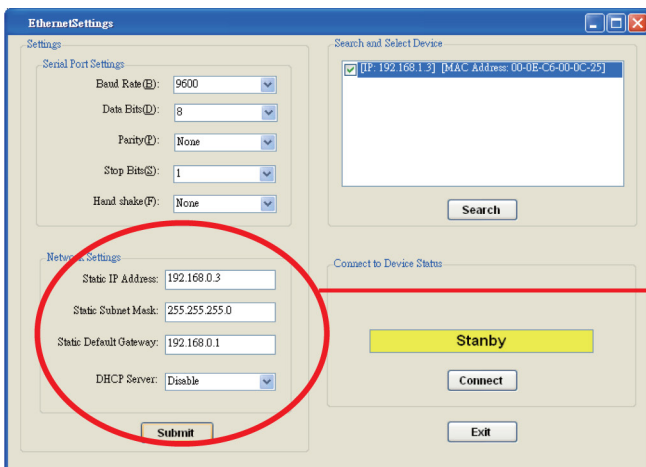


Enter Ethernet Settings find Setting.



Unit IP detected

(2-2) After you click the unit IP, the box will be checked off. Then, you can begin to select the options on the left. Look for the **Network Settings** area, get the DHCP Server to Enable. Then, change the first three numbers of Static IP Address and **Static Default Gateway** to the ones noted in step 1.2-5. Then, click **Submit**. (If the IP address 192.168.1.3 has already been in use in your network, you have to assign a different number to the unit, for example, 192.168.1.6.)



Assign the unit a unique IP address so it can be identified in your network.

SETUP THE NETWORK (3)

STEP 3. RETURN TO THE ORIGINAL IP ADDRESS

(3-1) Repeat Step 1 to reset the network of your computer. Let all the numbers of the IP address and the Default gateway match those noted in step 1.2-5. This step shall bring your computer to the original network.

The screenshot shows the 'Internet Protocol (TCP/IP) Properties' dialog box with the 'General' tab selected. The dialog box contains instructions on how to obtain IP settings. Under the 'Use the following IP address:' section, the IP address is set to 192.168.1.50, the Subnet mask is 255.255.255.0, and the Default gateway is 192.168.1.1. Under the 'Use the following DNS server addresses:' section, the Preferred DNS server is 192.233.85.19 and the Alternate DNS server is 192.233.145.6. There are 'Advanced...', 'OK', and 'Cancel' buttons at the bottom.

Internet Protocol (TCP/IP) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address:

IP address: 192 . 168 . 1 . 50

Subnet mask: 255 . 255 . 255 . 0

Default gateway: 192 . 168 . 1 . 1

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses:

Preferred DNS server: 192 . 233 . 85 . 19

Alternate DNS server: 192 . 233 . 145 . 6

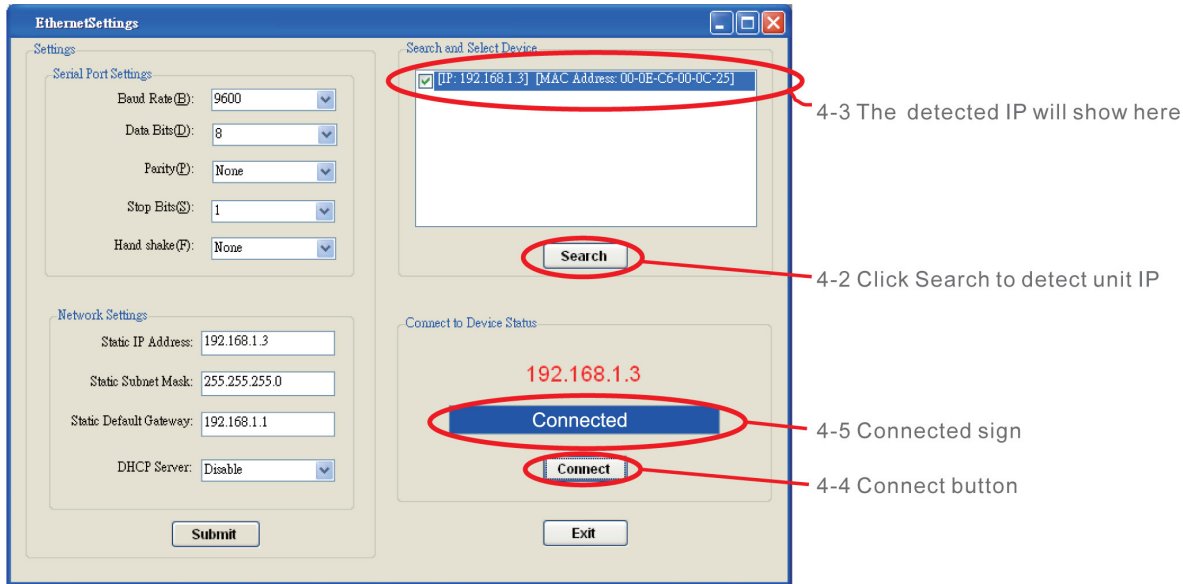
Advanced...

OK Cancel

SETUP THE NETWORK (4)

STEP 4. CONNECT THE UNIT TO THE NETWORK

- (4-1) Open the AP again. Go to the **Ethernet Settings** find **Setting**.
- (4-2) Click **Search** to detect the unit IP.
- (4-3) Then, click the unit IP to check off the box.
- (4-4) Next, click **Connect**. Wait for a few seconds for the **Connected** sign to show up.
- (4-5) After **Connected** appears, click **Exit** to close the window.



AP OPERATION (5)

AP OPERATION

STEP 5. START USING THE AP

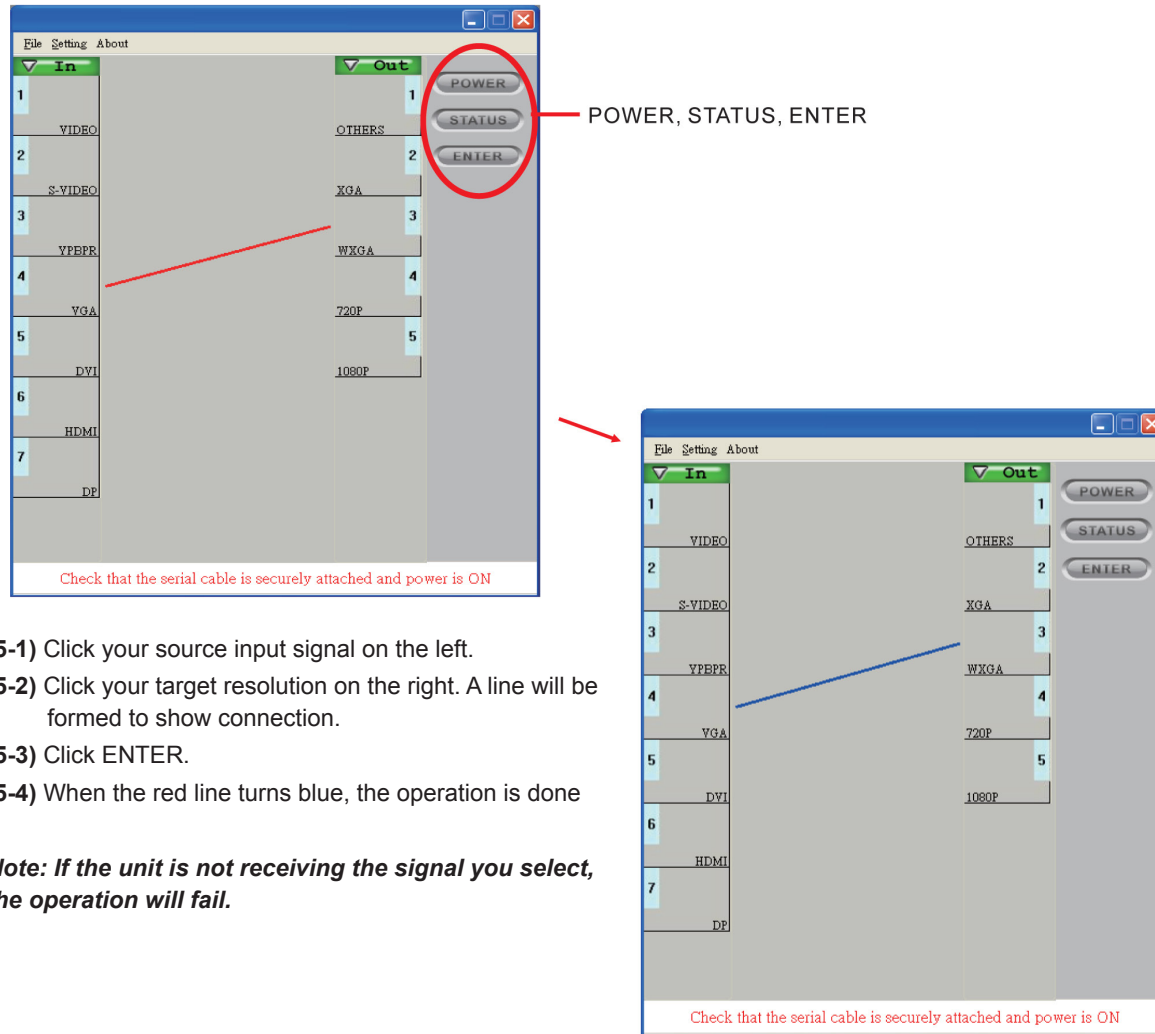
Interface Introduction:

The left side shows the 7 input signals and the right shows the 5 resolution options.

Use POWER to turn on and off the unit.

Use STATUS to see the current input and output status.

Use ENTER to confirm your connection from input to output.



(5-1) Click your source input signal on the left.

(5-2) Click your target resolution on the right. A line will be formed to show connection.

(5-3) Click ENTER.

(5-4) When the red line turns blue, the operation is done

Note: If the unit is not receiving the signal you select, the operation will fail.

Picture 5-4: The input VGA signal has been successfully set to display in WXGA resolution.

ALTERNATIVE OPTION (6)

ALTERNATIVE OPTION FOR SETUP

An alternative method for finding the IP address is to use a Network Scanner application such as the app “Fing” on an iOS device.

The unit will have a description “Shinybow Technology” or “Axis Electronics”

