

# MATRIXPRO 2

## User manual

## FCC STATEMENT



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### NOTE:

1. THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.
2. The antenna(s) used for this transmitter must not be co-located of operating in conjunction with any other antenna or transmitter.  
This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the Fcc

radio frequency exposure limits, human proximity to the antenna shall not be less than 21cm (8inches) during normal operation.

## **FCC RF Radiation Exposure Statement**

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

“To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.”

## **CE Mark Warning**



This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

# CONTENTS

Product introduction

1. Product interface introduction

2. Product function brief

※AP Bridge Mode

※Client Bridge Mode

※WDS Mode

How to Apply MATRIXPRO 2

3. How to Install MATRIXPRO 2

Device

4. How to Configure MATRIXPRO 2

4-1. How to Setup your PC

4-2. MATRIXPRO 2's Function

Settings

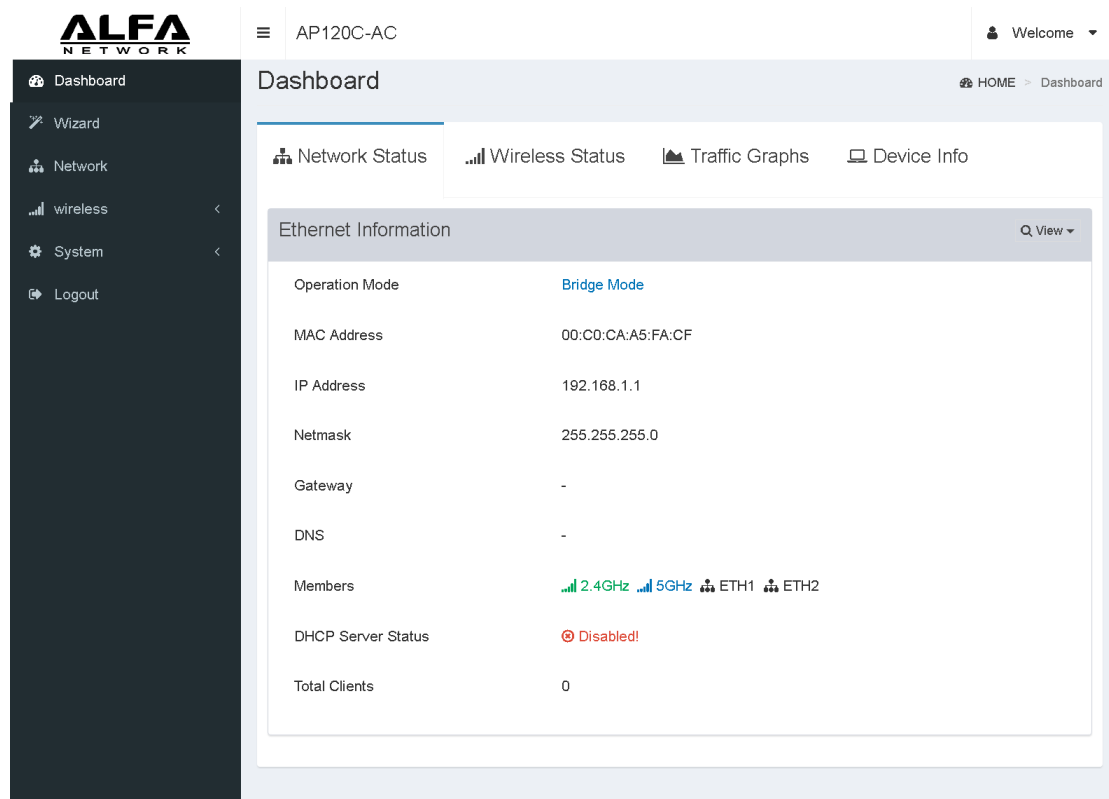
※AP Bridge Mode Setting

※Client Bridge Mode Setting

※WDS Mode Setting

# Product introduction

## 1. Product interface introduction



Dashboard: Show the current status information about the MATRIXPRO 2.

Wizard: Configure your MATRIXPRO 2 quickly and work it.

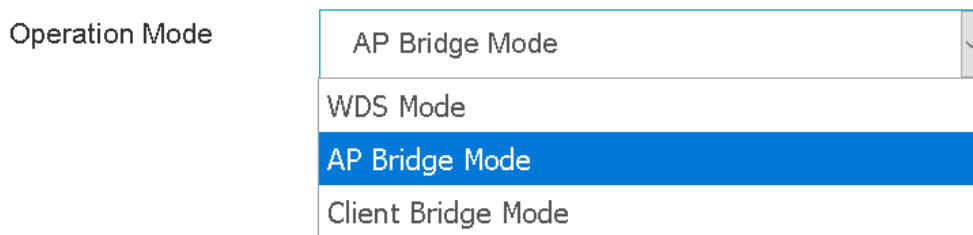
Network: Configure Local Network IP, Subnet Mask, etc., and enable DHCP Server.

Wireless: Setup Wireless Settings on your MATRIXPRO 2.

System: Important settings for related information with hardware.

## 2. Product function brief

There are 3 operation Modes, AP Bridge Mode, Client Bridge Mode, and WDS Mode can be selected



✘ AP Bridge Mode: The AP Mode is the most commonly and widely used mode of operation. Let mobile devices such as smart phones, tablets, etc. access Internet.

✘ Client Bridge Mode: In Client Mode, the MATRIXPRO 2 is receive other wireless signals; the unlimited device only be used by connecting to the MATRIXPRO 2.

✘ WDS Mode: Provides service operate in one of three modes; WDS AP Mode, WDS Client Mode, or WDS Repeater Mode. Please refer to the detailed instructions in section 4-2.

Operation Mode	<input type="text" value="WDS Mode"/>
WDS Mode	<input type="text" value="WDS AP Mode"/> <b>WDS AP Mode</b> WDS Client Mode WDS Repeater Mode

- 1) WDS AP Mode: WDS AP Mode is an access point, but it only work on other WDS Mode
- 2) WDS Client Mode: WDS Client, in which WDS APs communicate with WDS Client to access them
- 3) WDS Repeater Mode: WDS repeater, in which WDS Aps communicate with each other and with WDS Client. And extend the original wireless signal.

# How to Apply MATRIXPRO 2

## 3. How to Install MATRIXPRO 2 Device

- 1) Connect the PC in PoE LAN port or normal LAN port of MATRIXPRO 2.
- 2) Connect the power to MATRIXPRO 2.



## 4. How to Configure MATRIXPRO 2

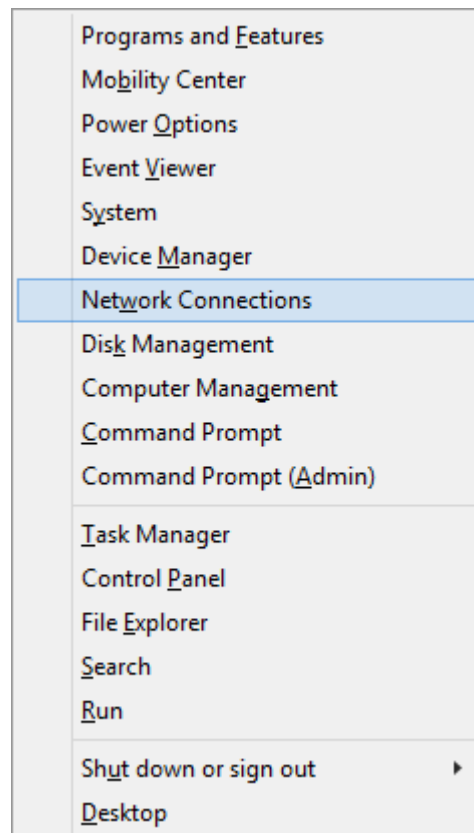
### 4-1. How to Setup your PC

Follow the steps below to configure in Windows OS.

1) Press on the **Windows Key** and **X** on your Keyboard.

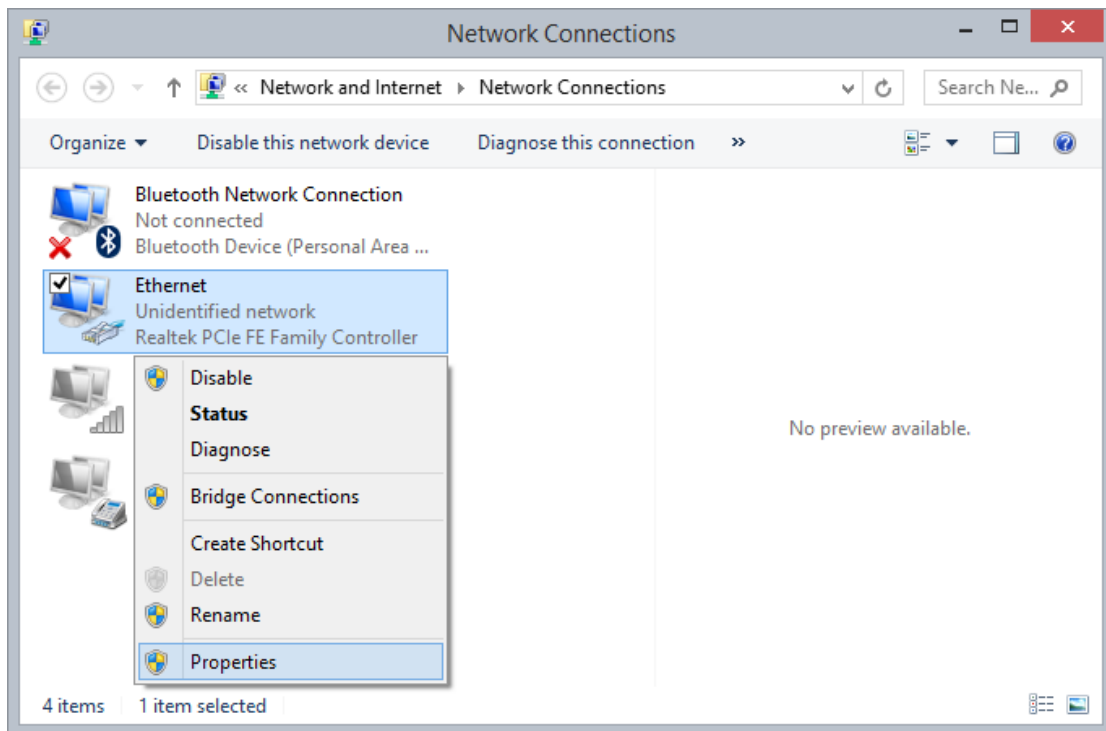


2) On the menu that appears and click **Network Connections**.

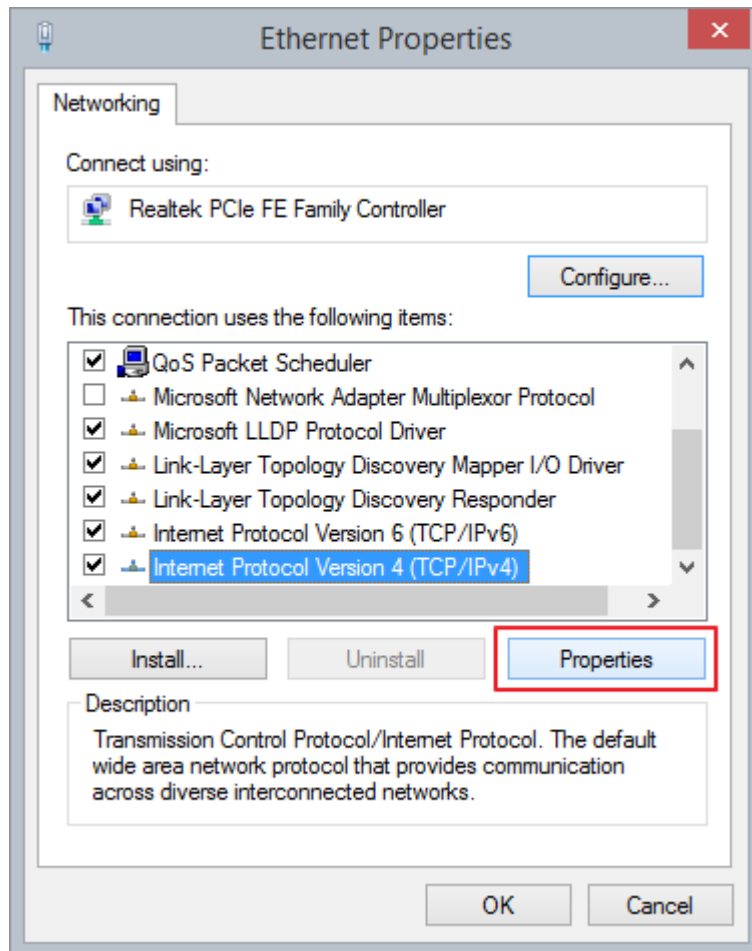


3) On the Network Connections screen; Right click on Local

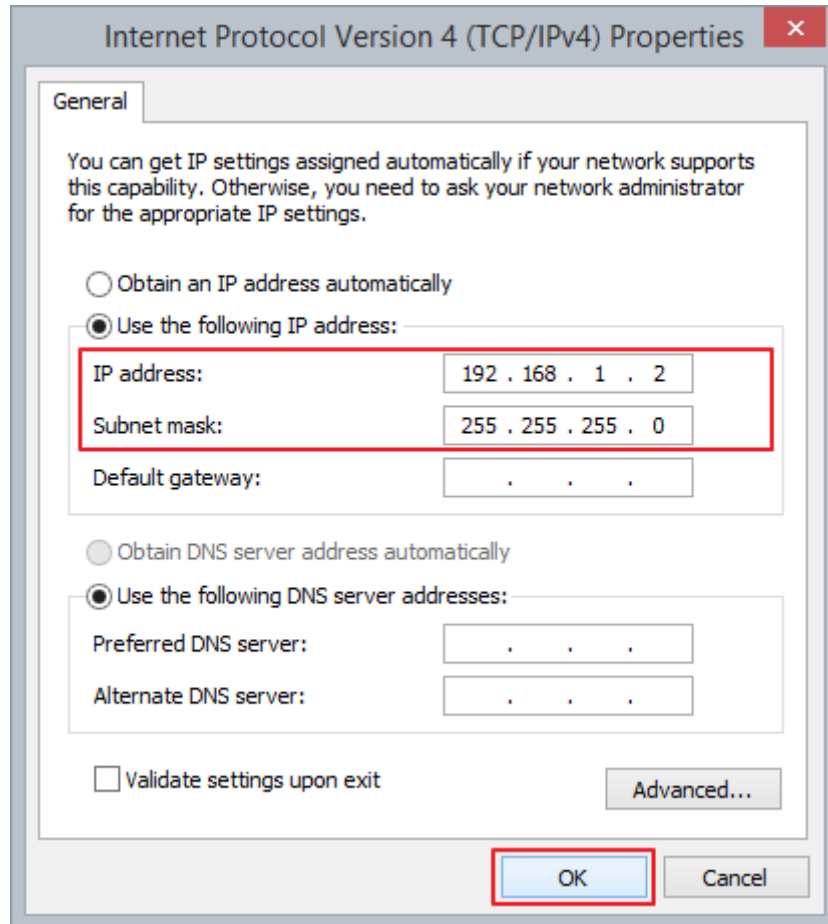
Area Connection and click **Properties** (if your Windows OS is **Windows 10**, click **Change adapter settings** first and follow up the step)



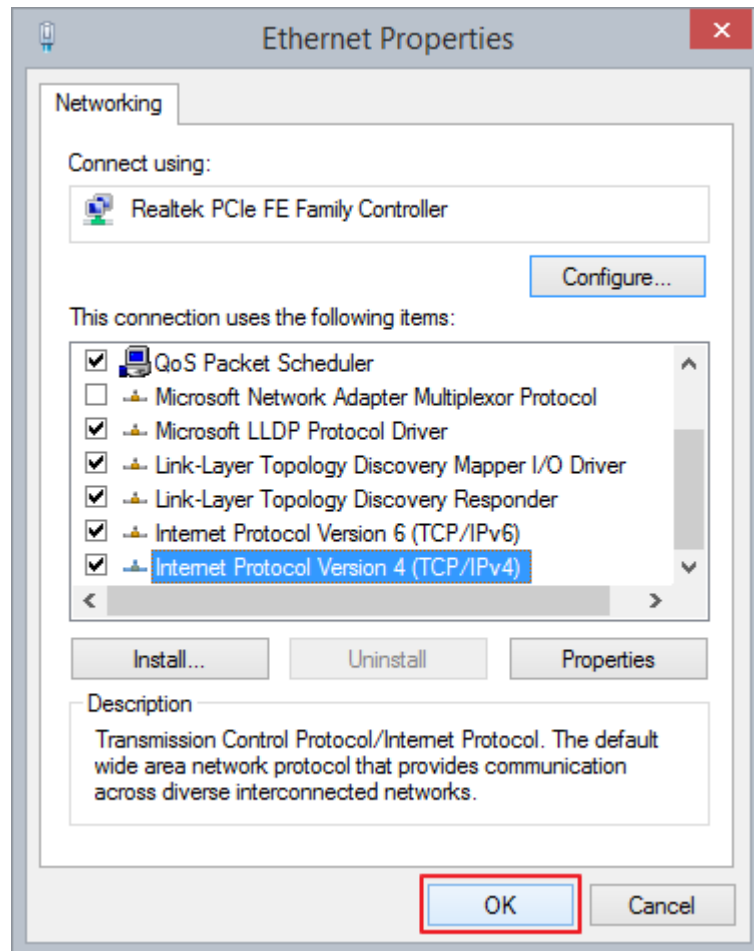
4) Click Internet Protocol Version 4 (TCP/IP) then click Properties



- 5) Set your PC's IP address manually to 192.168.1.2. And set Subnet mask to 255.255.255.0( or other address in the same subnet).

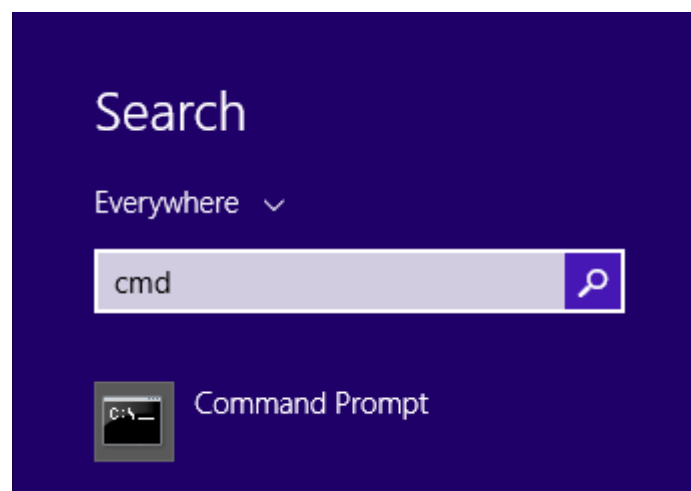


6) Click OK to save and apply your settings.

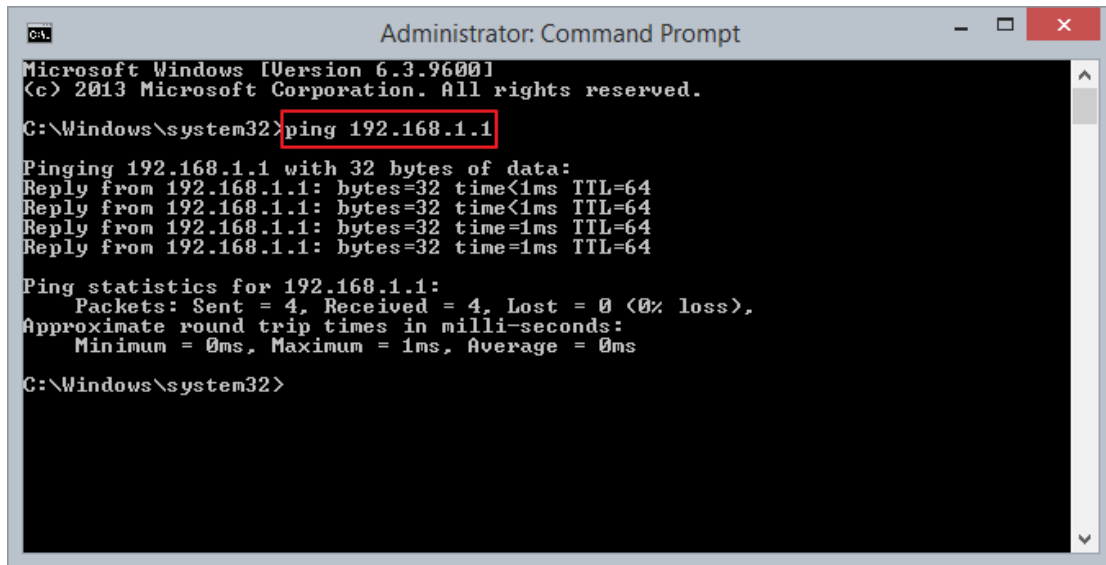


Now, you can run the Ping command in the command prompt.

- 7) Click on **Search Icon**; Typing cmd and click on the **Command Prompt Icon**.



- 8) On the Command Prompt screen; Typing “ping 192.168.1.1”  
If the result is similar to the one shown below, it means the connection success. If the result is not similar to the one shown below, back to set PC’s address steps.



```
Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Windows\system32>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time<1ms TTL=64
Reply from 192.168.1.1: bytes=32 time<1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64

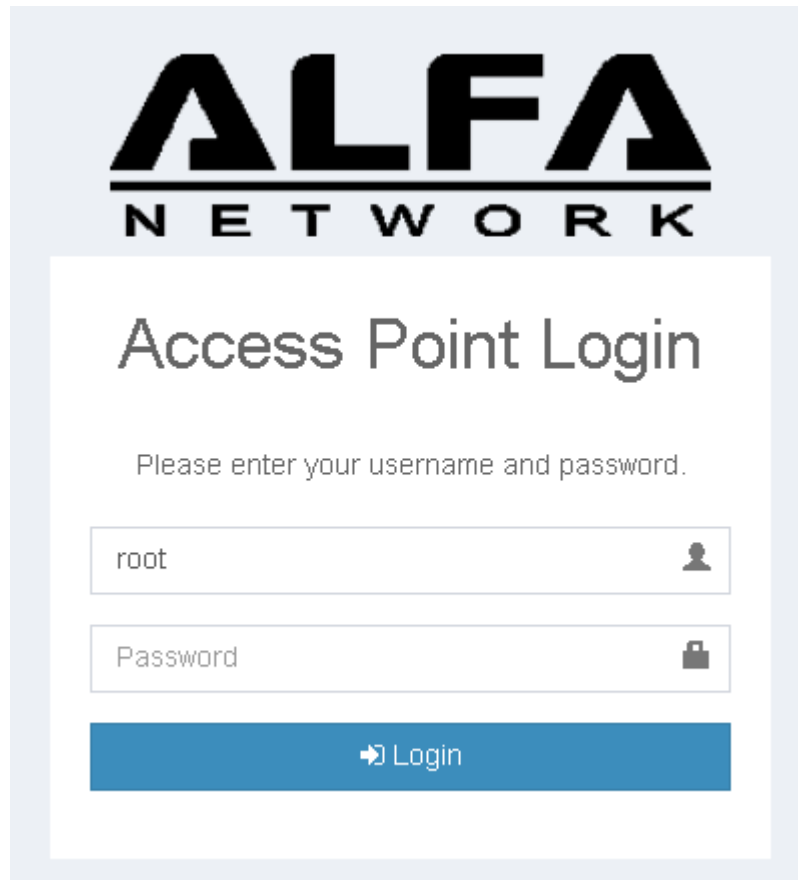
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Windows\system32>
```

- 9) After connect success, open a web-browser and type in the default address <http://192.168.1.1> in the address of the browser.



- 10) A login window will display, and enter the default password "admin" to login.



## 4-2. MATRIXPRO 2's Function Settings

Please follow the teaching steps to configure.

- 1) Open Wizard Settings by clicking on **Wizard** on the left control menu.

## Wizard Settings

HOME > WIZARD SETTINGS

### Device setting

Country Code

US - United States

Operation Mode

AP Bridge Mode

### LAN Settings

IP Address

192.168.1.1

Subnet Mask

255.255.255.0

Gateway

DNS

→ Next

Country Code: Please select your country code to ensure that the radio operates according to local regulations.

Operation Mode: Select the mode of operation you need to apply.

- 2) If you complete the configuration, please press "Next" to the next teaching step.



The teaching steps here only teach you the configuration method. If you want to know more about the operation mode, please go back to Chapter 2 Product function brief.

## ✂️ AP Bridge Mode Setting

Wizard Settings HOME > WIZARD SETTINGS

**2.4GHz (Radio 0)**

Radio:

AP SSID:

Security Settings:

**5GHz (Radio 1)**

Radio:

AP SSID:

Security Settings:

1) Radio: The default Radios is on. You can enable the radio according to your needs.

Wizard Settings HOME > WIZARD SETTINGS

**2.4GHz (Radio 0)**

Radio:

AP SSID:

Security Settings:

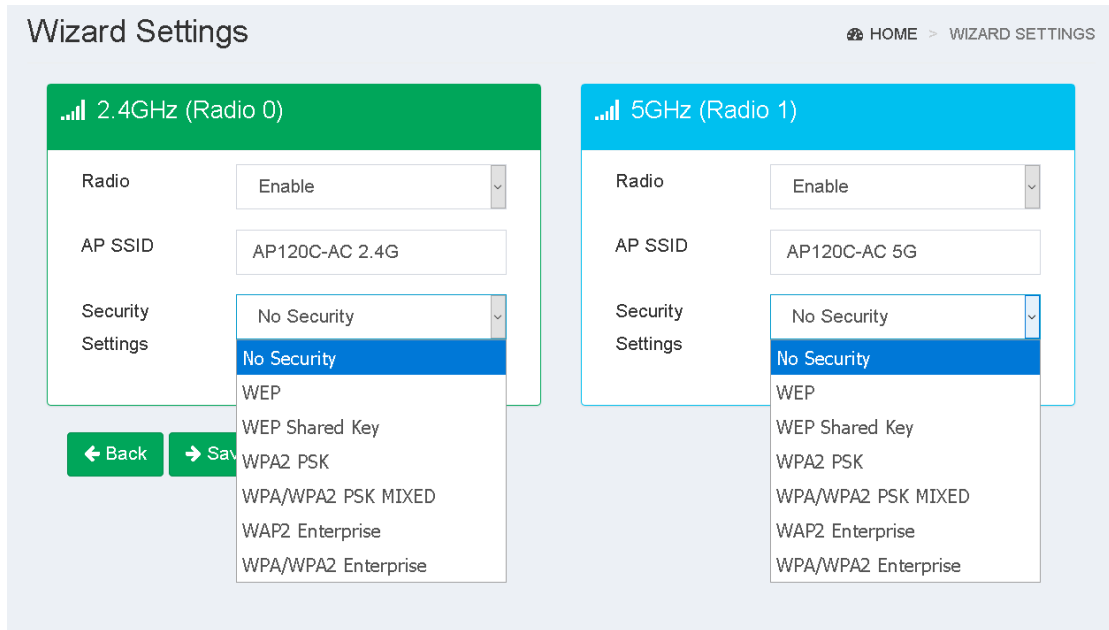
**5GHz (Radio 1)**

Radio:

AP SSID:

Security Settings:

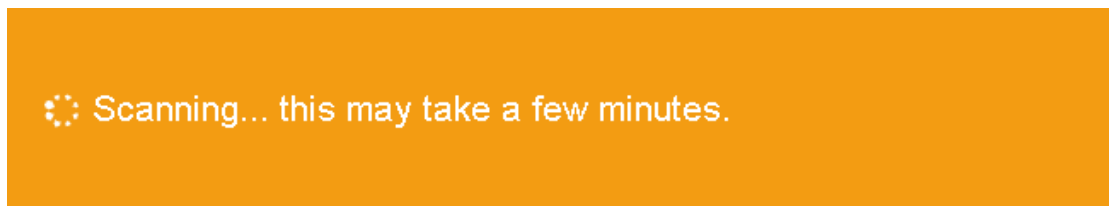
2) AP SSID: The default AP SSID of 2.4GHz Radio is “AP12C-AC 2 2.4G”, and 5GHz Radio is " AP12C-AC 5G". You can be modified and the SSID length is up to 32 characters.



3) Security settings: It allows you to use encryption provide association authentication to secure your data, and you can select different security policy.

## ⌘ Client Bridge Mode Setting

When you select this mode of operation, you may need to wait until the wireless scan is complete.



When the wireless scan is complete, the available wireless radios and associated status will be displayed.

Wireless Scan

10 records per page

Search:

Quality	Channel	SSID	MAC Address	Security	Join Network
-59dB	7	WISP-NR	00:C0:CA:87:3F:BC	WPA PSK (CCMP)	<a href="#">Join Network</a>
-74dB	11	ALFA Network Inc. 2.4G	02:C0:CA:A5:F8:C5	mixed WPA/WPA2 PSK (CCMP)	<a href="#">Join Network</a>
-75dB	11	ALFA Network Inc.	00:C0:CA:A5:F8:C5	mixed WPA/WPA2 PSK (CCMP)	<a href="#">Join Network</a>
-82dB	1	11ac	88:89:99:01:00:AC	WPA2 PSK (CCMP)	<a href="#">Join Network</a>
-82dB	149	ALFA Network Inc. 5G	02:C0:CA:A5:F8:C6	mixed WPA/WPA2 PSK (CCMP)	<a href="#">Join Network</a>
-83dB	149	ALFA Network Inc. 5G 002	06:C0:CA:A5:F8:C6	mixed WPA/WPA2 PSK (CCMP)	<a href="#">Join Network</a>
-83dB	149	ALFA Network Inc.	00:C0:CA:A5:F8:C6	mixed WPA/WPA2 PSK (CCMP)	<a href="#">Join Network</a>
-88dB	1	AP120C-AC 2.4G	00:C0:CA:A5:FB:1D	None	<a href="#">Join Network</a>
-88dB	36	11ac	88:89:99:01:10:AC	WPA2 PSK (CCMP)	<a href="#">Join Network</a>
-88dB	157	MikroTik-B5C209	64:D1:54:B5:C2:09	mixed WPA/WPA2 PSK (CCMP)	<a href="#">Join Network</a>

Showing 1 to 10 of 18 entries

First < 1 2 > Last

[Repeat scan](#)

- 1) Search: Typing keywords to filter wireless radio.
- 2) Join Network: Click to join the wireless radio of your choice.
- 3) Repeat scan: Rescan for available wireless radios.

When you click on the wireless radio you have joined, "Add Wireless Profile" will pop up.

**.. Add Wireless Profile** ×

---

Radio	<input type="text" value="ALL Radio"/>
AP SSID	<input type="text" value="ALFA Network Inc."/>
Security Settings	<input type="text" value="WPA/WPA2 PSK MIXED"/>
Cipher	<input type="text" value="AES/TKIP Mixed"/>
WPA Passphrase	<input type="text"/>

If the security of the wireless radio you joined is "None", it will pop up as shown below.

**.. Add Wireless Profile** ×

---

Radio	<input type="text" value="ALL Radio"/>
AP SSID	<input type="text" value="AP120C-AC 2.4G"/>
Security Settings	<input type="text" value="No Security"/>

If you have confirmed the wireless radio you are joining, press "Apply" to save the settings.

## ※WDS Mode Setting

If you selected WDS mode, please select the function mode you need first, and follow the teaching steps to complete the configuration.

### 1) WDS AP Mode:

This configuration is similar to "※AP Bridge Mode Setting".

Please refer to the "※AP Bridge Mode Setting" method for configuration.

### 2) WDS Client Mode:

This configuration is similar to "※Client Bridge Mode Setting".

Please refer to the "※Client Bridge Mode Setting" method for configuration.

### 3) WDS Repeater Mode:

This configuration is similar to "※Client Bridge Mode Setting".

Please refer to the "※Client Bridge Mode Setting" method for configuration.