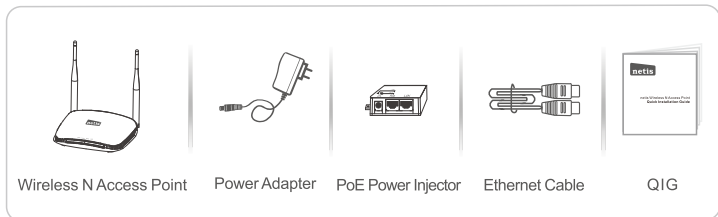




netis Wireless N Access Point
Quick Installation Guide



1.Package Contents



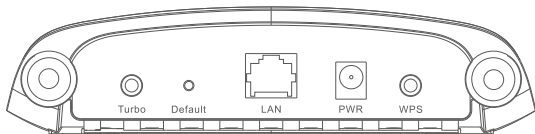
*This QIG is for all netis 150Mbps/300Mbps wireless N access points, including models-WF2210, WF2220, etc.

*The product model shown in this QIG is WF2220, as an example.

2.LED and Button Description



LED	Color	Status	Indication
PWR	Green	On	The device is initializing.
		Flashing	The device is working properly.
		Off	The device is powered off.
Turbo	Blue	On	The device works in Normal Power mode.
	Red	On	The device works in High Power mode.
WPS	Green	On	The device is initializing.
		Flashing	A wireless device is connecting to the network by WPS function. This process will last in the first 2 minutes.
		Off	No WPS connection is running.
LAN	Green	On	There's a device connected to the LAN port but no activity.
		Flashing	Data is transmitting through the LAN port.
		Off	There's no device connected to the LAN port.



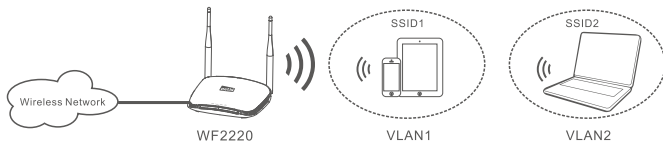
Button	Description
Turbo	The Turbo button is used to change signal strength by turning the router from Normal Power mode to High Power mode.
Default	The Default button is used to restore the device's factory default settings.
WPS	The WPS button is used to quickly establish a secured wireless connection between the device and client devices (such as wireless adapters with WPS supported).

3. Typical Applications and Installation

The netis Access Point supports multiple modes including **AP**, **Multi-SSID (VLAN)**, **Repeater**, **WDS** and **Client** to meet two kinds of typical applications as below.

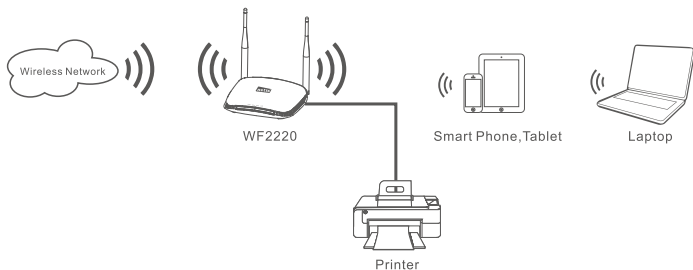
Application 1: Build a wireless network

The netis Access Point can be used to create one (default **AP** mode) or more (**Multi-SSID**) wireless networks from an Ethernet connection. It is suitable for the room where there's already a wired router but you need additional wireless hotspots.



Application 2: Extend the existing wireless network

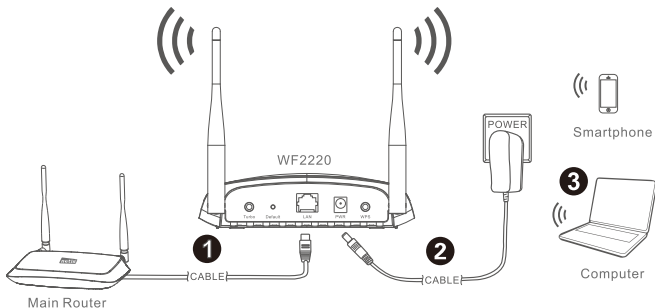
The netis Access Point can be used to bridge or repeat signal from the existing wireless network. It is suitable to setup the connection between two or more wireless networks (**WDS mode**), or extend wireless coverage for the places where the existing network signal is too weak to maintain a stable connection (**Repeater/Client mode**).



Please check the correct application according to your network environment, and follow the corresponding steps for the selected application.

Application 1: Build a wireless network

3.1.1 Hardware Connection



- 1) Connect the **LAN** port of netis Access Point to your existing main router with an Ethernet cable.
- 2) Plug the provided power adapter into the **PWR** jack of netis Access Point and the other end to a standard electrical socket.
- 3) Search and connect to the netis Access Point's network "**netis_XXXXXX**" on your wireless computers or mobile devices. The **XXXXXX** is the last 6 digits of the Access Point's MAC address. The default wireless password is "**password**".

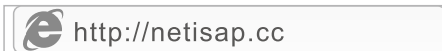
Note: If the distance between the electrical socket and the netis Access Point is too long to supply the power, you can refer to the Power over Ethernet (PoE) solution in "**Appendix A: With PoE Setup**".

3.1.2 Configuration (Optional)

If your main router is already connected to the Internet, you'll be online through your wireless computers or mobile devices now!

If you want to change the default wireless network name and password for netis Access Point or set up more wireless networks (**Multi-SSID** mode), please go on with the following steps.


1) Open your browser on your wireless computer and type “<http://netisap.cc>” in the address field to visit netis Access point's web management page.



2) In this **Quick Setup** page, you will see the blue section for the default wireless network “**netis_XXXXXX**”.



Situation A

You may click the icon  to change the settings for “**netis_XXXXXX**”, including the wireless network name (SSID) and password. Click **Save** button to make your settings take effect.

Wireless Network Name(SSID):

Basic Settings | Wireless Management | Wireless Advanced

SSID Broadcast: Enable Disable

**For the best security of your wireless network,
we strongly recommend you to select WPA2-PSK, AES.**

Authentication Type:


Encryption Type: TKIP AES TKIP & AES

Key Mode: HEX ASCII

Password:
(Please enter 8-63 ASCII characters (any combination of a-z, A-Z, 0-9).)

Note: Now you're wirelessly connected to the netis Access Point's network with default wireless name and password. Once the new settings take effect, you'd better search for the new one and connect to it with the new password.

Situation B

To create more wireless networks, you can click on the “AP” tab  on the left and set the wireless network name (SSID) and password.

Wireless Network Name(SSID):

Basic Settings | Wireless Management | Wireless Advanced

SSID Broadcast: Enable Disable

**For the best security of your wireless network,
we strongly recommend you to select WPA2-PSK, AES.**

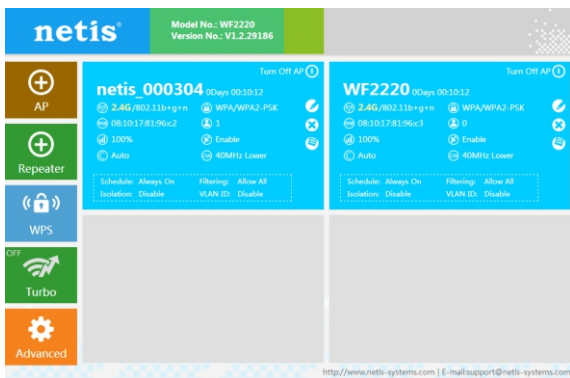
Authentication Type:

Encryption Type: TKIP AES TKIP & AES

Key Mode: HEX ASCII

Password:
(Please enter 8-63 ASCII characters (any combination of a-z, A-Z, 0-9).)

Click **Save** button to make your settings take effect. Then you will see the settings updated in the **Quick Setup** page. There're two blue sections for two wireless networks broadcasted by netis Access Point.

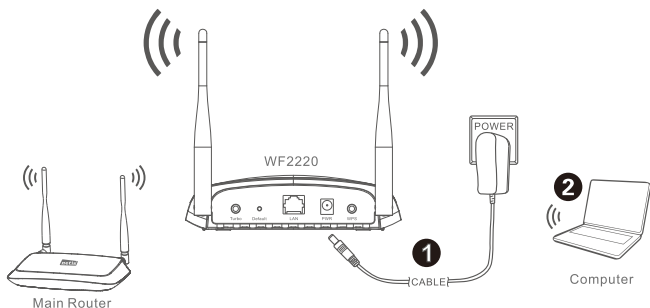


Note: The netis Access Point supports up to 3 different AP networks in one time. You may click the icon  for each network to change the settings for the corresponding section.

3) Now you can connect your wireless devices to the modified wireless network or new AP networks for Internet Access wirelessly.

Application 2: Extend the existing wireless network

3.2.1 Hardware Connection



1) Plug the provided power adapter into the **PWR** jack of netis Access Point and the other end to a standard electrical socket.

2) Search and connect to the netis Access Point's network "**netis_XXXXXX**" on your wireless computers or mobile devices. The **XXXXXX** is the last 6 digits of the Access Point's MAC address. The default wireless password is "**password**".

Note 1: If you want to setup the Access Point through cable connection,

1) Please connect the **LAN** port of netis Access Point to your computer with an Ethernet cable.


2) Then set a static IP (such as 192.168.1.110) for the wired adapter of your computer. Please refer to "**Appendix B: Set Static IP for Computer**".

Note 2: If the distance between the electrical socket and the netis Access Point is too long to supply the power, you can refer to the Power over Ethernet (PoE) solution in "**Appendix A: With PoE Setup**".

3.2.2 Configuration

1) Open your browser on your wireless computer and type “<http://netisap.cc>” in the address field to visit netis Access point's web management page.



2) In **Quick Setup** page, click on the “**Repeater**” tab  on the left, select the “**Quick Bridge---Client**” mode, then click **AP Scan** and **Connect** to the existing wireless network of your main router.

Remote Connection Type: **Quick Bridge---Client** Standard Bridge---WDS

Quick Client Bridge only requires the settings on your current device; Standard WDS Bridge requires the same settings on current device and the bridge network of the other side.

Local MAC Address:2.4G -- 04:8d:38:66:1f:48

Quick Bridge---Client Wireless Management **AP Scan**

ID	SSID	MAC Address	Channel	Radio Mode	Security	Signal Strength	Connect
0	netis123	00:90:4c:d1:30:01	6 (B+G+N)	AP	WPA-PSK/WPA2-PSK	100%	
1	netis	04:8d:38:5d:d6:86	1 (B+G+N)	AP	WPA2-PSK	100%	
2	netis	04:8d:38:3d:d1:d8	6 (B+G+N)	AP	WPA-PSK/WPA2-PSK	100%	
3	netis_2.4G_4...	04:8d:38:28:35:91	6 (B+G+N)	AP	WPA2-PSK	100%	
4	WiFi-409	04:8d:38:00:d3:95	8 (B+G+N)	AP	WPA-PSK/WPA2-PSK	100%	

Items show in every single page 5 Apply < + - > 1 All 3 pages

Connect **Refresh**

If the selected wireless network is secured with a password, please input the correct password for connection.

Remote Connection Type: **Quick Bridge---Client** Standard Bridge---WDS

Quick Client Bridge only requires the settings on your current device; Standard WDS Bridge requires the same settings on current device and the bridge network of the other side.

Local MAC Address:2.4G -- 08:10:17:81:96:c1

Quick Bridge---Client Wireless Management

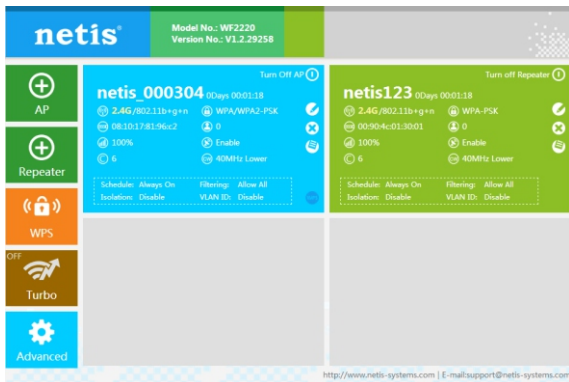
Configuration: Automatic Manual

Remote SSID: **AP Scan**

Please Input Password:

Save

3) Click Save button to make your settings take effect. Then you will see the settings updated in the Quick Setup page. There's a new green section for the extended wireless network broadcasted by netis Access Point.



Note 1: The netis Access Point will broadcast an extended wireless network with the same network name and password as your main router. Also, the default wireless network (blue section) is still available for connection.

4) Relocate netis Access Point between the main router's position and the place where the main router's network is not strong enough. Then connect your wireless devices to the default or extended wireless network, from where the main router's network is not strong enough.

Note 2: Generally, we recommend you to try “**Quick Bridge---Client**” mode to connect to the existing wireless network. If you want to try “**Standard Bridge---WDS**” mode, you should try the same settings on all the access points/routers.

1) Click **AP Scan** to add the wireless MAC address of the remote access points/routers, and set an independent password just for WDS connection.

2) On the other side of the remote access points/routers, scan and add the MAC address of netis Access Point and input the same WDS connection password.

Remote Connection Type: Quick Bridge---Client Standard Bridge---WDS

Quick Client Bridge only requires the settings on your current device; Standard WDS Bridge requires the same settings on current device and the bridge network of the other side.

Local MAC Address: 24G -- 08:10:17:81:96:c1

Standard Bridge---WDS

Remote BSSID/MAC1: 00:90:4c:01:30:01 + AP Scan

Authentication Type: WPA (TKIP)

Key Mode: HEX ASCII

Password: 12345678
(Please enter 8-63 ASCII characters (any combination of a-z, A-Z, 0-9.))

Save

Note 3: If you set a static IP for the adapter of your computer during the configuration, please remember to change the IP address settings you set on your computer back to DHCP after all the settings finished.

Tip 1:

Default Login Address: <http://netisap.cc>

Default Wireless SSID: netis_XXXXXX

Default Wireless Password: password

(XXXXXX: Last 6 digits of MAC Address, you may find it from the bottom label of the device.)

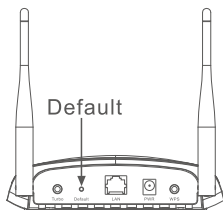
Tip 2:

You can click on “Advanced” button  on the left for the further settings.

Troubleshooting

Q How do I restore my netis Access Point's configuration to its default settings?

A With the Access Point powered on, use a pin to press and hold the **Default** button for 8 to 10 seconds before releasing it. The Access Point will reboot and all configurations are back to factory default.

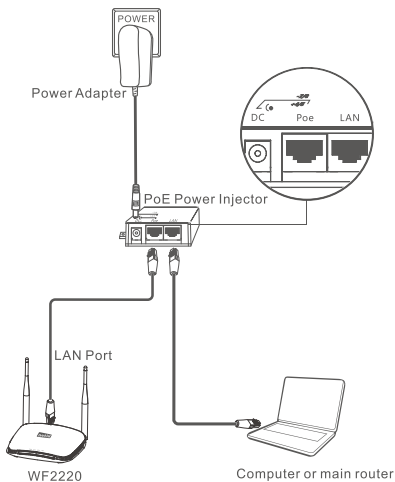


Q What can I do if I cannot access my Access Point's web management page?

A

- 1) Check the hardware connection according to your application and make sure that your computer is connected to netis Access Point successfully.
- 2) Please try to set a static IP (such as 192.168.1.110) for the wired/wireless adapter of your computer. Please refer to "**Appendix B: Set Static IP for Computer**".
- 3) If there's no change, please reset the device by **Default** button and try all the settings from the beginning.

Appendix A: With PoE Setup



1. Turn off all your network devices, including your computer and netis Access Point.
2. Connect your computer or main router to the **LAN** port on the PoE Power Injector with an Ethernet Cable.
3. Connect netis Access Point to the **PoE** port on the PoE Power Injector with an Ethernet Cable.
4. Plug the provided Power Adapter into the **DC** jack on the PoE Injector and the other end to a stand electrical wall socket.
5. Power on your computer, then wait for one minute.

Note: Passive PoE Injector supports a maximum Ethernet Cable length up to 40 meters due to the environment.

Appendix B: Set Static IP for Computer

Please make sure that your computer is connected to netis Access Point with an Ethernet cable (or wirelessly). Then you may manually set the IP address of the wired (or wireless) network adapter on your computer as below.

IP Address/ IPv4 Address: 192.168.1.x (1<x<254)

Subnet Mask: 255.255.255.0

Default Gateway/ Router: 192.168.1.254

For Window 8/7/Vista

- 1) Go to **“Setting”** (Win 8)/**“Start”** (Win 7/Vista)>**“Control Panel”**.
- 2) Left-click on **“Network and Internet”**>**“Network and Sharing Center”**>**“Change adapter settings”** (Win 8/7)/ **“Manage network connections”** (Win Vista).
- 3) Right-click on **“Local Area Connection”** (wired adapter)/ **“Wireless network Connection”** (wireless adapter) and left-click on **“Properties”**.
- 4) Double-clicked on **“Internet Protocol Version 4 (TCP/IPv4)”**.
- 5) Select **“Use the following IP address”** and enter the address manually in corresponding field, then click **OK**.

For Window XP/2000

- 1) Go to **“Start”**>**“Control Panel”**.
- 2) Left-click on **“Network and Internet Connections”**>**“Network Connections”**.
- 3) Right-click on **“Local Area Connection”** (wired adapter)/ **“Wireless network Connection”** (wireless adapter) and left-click on **“Properties”**.
- 4) Double-clicked on **“Internet Protocol (TCP/IP)”**.
Select **“Use the following IP address”** and enter the address manually in corresponding field, then click **OK**.

For MAC OS

- 1) Click on the **“Apple”** menu>**“System Preferences”**.
- 2) Click on **“Network”** icon.
- 3) Click on **“Ethernet”** (wired adapter)/ **“Airport”** (wireless adapter) in the left side box and click on **“Advanced”** in the lower right corner.
- 4) In the top options, select **“TCP/IP”**.
- 5) In the pull-down menu next to **“Configure Ipv4”**, select **“Manually”** and enter the address manually in corresponding field, then click **Apply**.

Appendix C: Wireless Power Control

WF2210 and WF2220 are both wireless high power access points, they work in normal power mode. You may change it into high power mode to improve the signal strength.

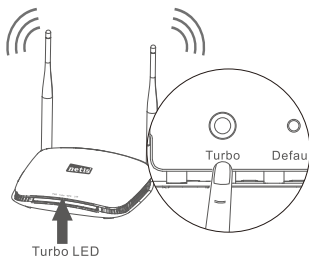
Before you change the settings, please check the color of the Turbo LED on your access point.

Blue — Normal Power Mode

Red — High Power Mode

There're two methods to change the wireless power for your access point.

Method 1: Through Turbo Button (Particularly recommended)



Press the **Turbo Button**, then the **Turbo LED** color will change from blue to red. Now the access point will work in the high power mode with perfect wireless performance in penetrating walls and eliminating the Wi-Fi dead zones.

Method 2: Through Web Management Page



In **Quick Setup** page, click on **"Turbo"**, select **"Enable"** as the Signal Strength. Now the access point will work in the high power mode with perfect wireless performance in penetrating walls and eliminating the Wi-Fi dead zones.

Appendix D: 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.

FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

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, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution!

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

Technical Support:

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E-mail: usa_support@netis-systems.com

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MADE IN CHINA