

AP 1200

330003

Wireless Access Point



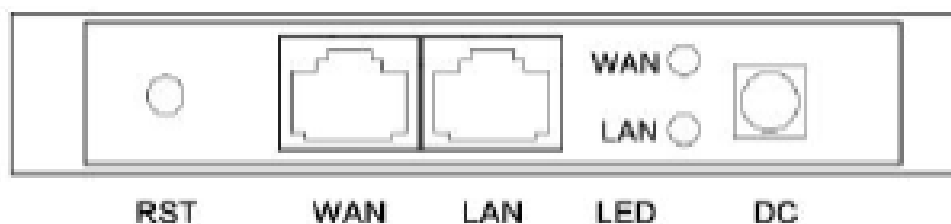
User manual



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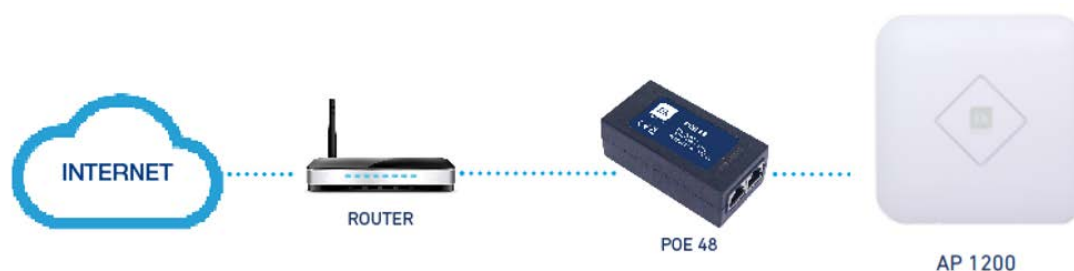
AP 1200 Hardware interface



- **RST:** Reset Button, it make AP revert to default data after press it 15 seconds.
- **WAN:** WAN Port, connect with ADSL modem or Internet mainly. It will be LAN port under Wireless AP and Wireless Repeater operation mode.
- **LAN:** LAN Port to end users.
- **LED:** LED indicator of WAN port and LAN port.
- **DC:** DC power connector.

Installation diagram

1. PoE Injector Power Supply



2. Powered by PoE Switch

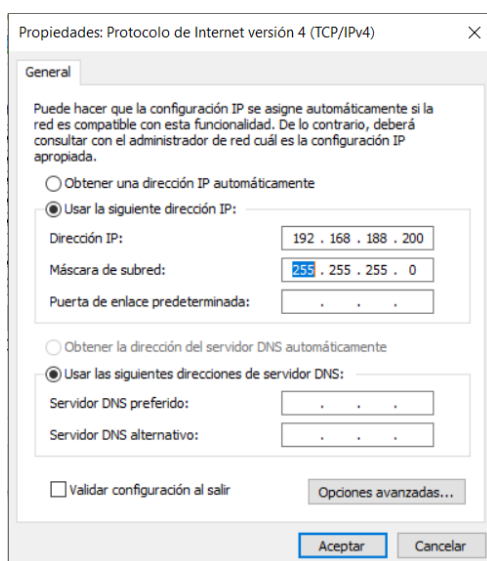


Connect to AP 1200

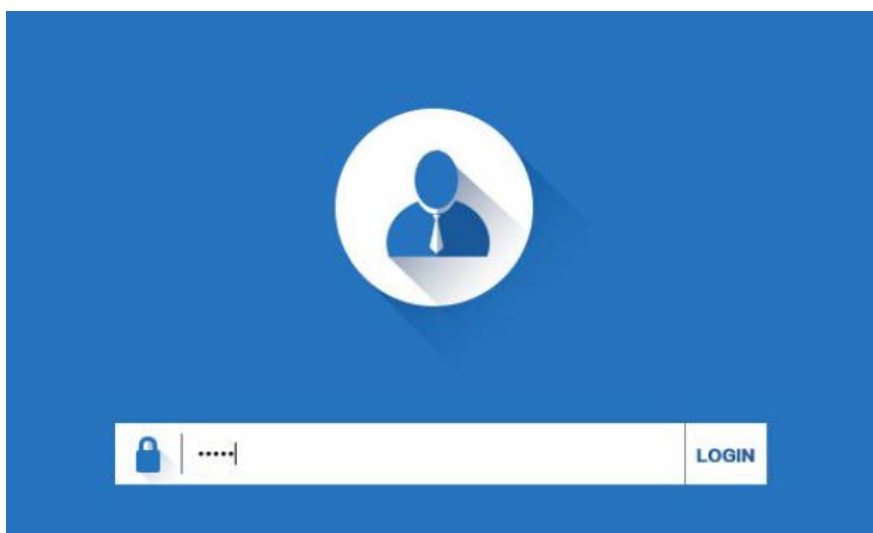
Note: The default SSID is **Ek_2.4G** and **Ek_5.8G** with password **12345678**

To connect to **AP 1200** please follow these steps:

1. Connect to **AP 1200** with Ethernet cable or wireless.
2. Set our Ethernet / Wireless adapter with Static IP:



3. Open a Web browser and navigate to the URL: <http://192.168.188.253>



4. To enter use the password: **admin**

AP 1200 Web interface

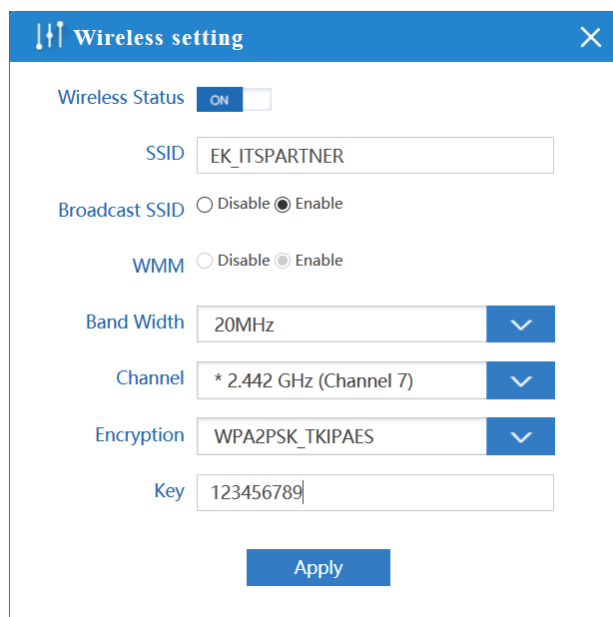
After entering, the password will appear the main interface



1. Displays the Menu.
2. Language Selector can be English / Spanish.
3. Displays the Operational mode (AP Mode, Gateway Mode, and Repeater).
4. Displays the channel that the wireless is broadcasting.
5. To reboot the device
6. Shows the number of users connected to the device.
7. Displays if the user connection to the device is good or bad.
8. Displays if the device connection to the external network is good or bad.
9. Shows the running time of the device.
10. Displays Wireless information such as Wireless SSID and Wireless MAC for 5.8G. Also by doing click on it will open the fast configuration menu for Wireless
11. Displays Wireless information such as Wireless SSID and Wireless MAC for 2.4G. Also by doing click on it will open the fast configuration menu for Wireless
12. Displays LAN information such as device IP and LAN MAC. Also by doing click on it will open the fast configuration menu for LAN network.
13. Displays the AP position information, by doing click on it will open the fast configuration menu for AP position.

Wireless setting (Main Window 10 and 11)

Clicking in the Wireless section will open the fast configuration menu for Wireless



The image shows a 'Wireless setting' configuration window. It has a title bar with a window icon, the text 'Wireless setting', and a close button. The settings are as follows:

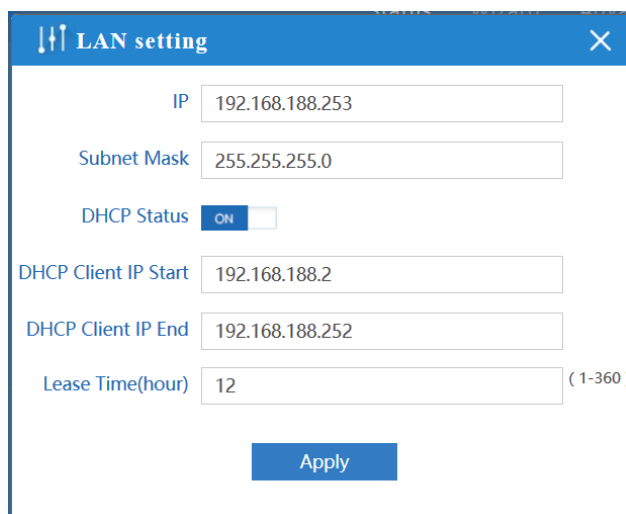
- Wireless Status:** A toggle switch set to 'ON'.
- SSID:** A text field containing 'EK_ITSPARTNER'.
- Broadcast SSID:** Radio buttons for 'Disable' and 'Enable', with 'Enable' selected.
- WMM:** Radio buttons for 'Disable' and 'Enable', with 'Enable' selected.
- Band Width:** A dropdown menu showing '20MHz'.
- Channel:** A dropdown menu showing '* 2.442 GHz (Channel 7)'.
- Encryption:** A dropdown menu showing 'WPA2PSK_TKIPAES'.
- Key:** A text field containing '123456789'.
- Apply:** A blue button at the bottom right.

- **Wireless Status:** ON / OFF.
- **SSID:** Name of the wireless.
- **Broadcast SSID:** Enable - Show SSID, Disable – Hide SSID,
- **WMM:** Enable or Disable WMM.
- **Band Width:** The width that Wireless will use 20MHz, 40MHz or 80MHz.
- **Channel:** The channel that Wireless will use.
- **Encryption:** Select the encryption wanted for the wireless SSID.
- **Key:** The password for the SSID

After filling the above value as we want, we can press “Apply” to save the changes for our Wireless.

LAN setting (Main Window 12)

Clicking in the Wireless section will open the fast configuration menu for Wireless



The screenshot shows a 'LAN setting' window with the following fields and values:

Field	Value
IP	192.168.188.253
Subnet Mask	255.255.255.0
DHCP Status	ON
DHCP Client IP Start	192.168.188.2
DHCP Client IP End	192.168.188.252
Lease Time(hour)	12 (1-360)

An 'Apply' button is located at the bottom center of the window.

- **IP:** Set the IP for this device.
- **Subnet Mask:** Set the Subnet Mask for this device.
- **DHCP Status:** ON – To enable the DHCP, OFF – To disable the DHCP.
- **DHCP Client IP Start:** The starting IP for the DHCP range.
- **DHCP Client IP End:** The ending IP for the DHCP range.
- **Lease Time (hour):** The time to renew the IP for the connected devices.

After filling the above values as we want, we can press “Apply” to save the changes for our LAN settings.

Note: This window can change based on the **Operational Mode** our **AP 1200** is using.

Location Information (Main Window 13)

Clicking in the Location section will open the fast configuration menu for Location Information



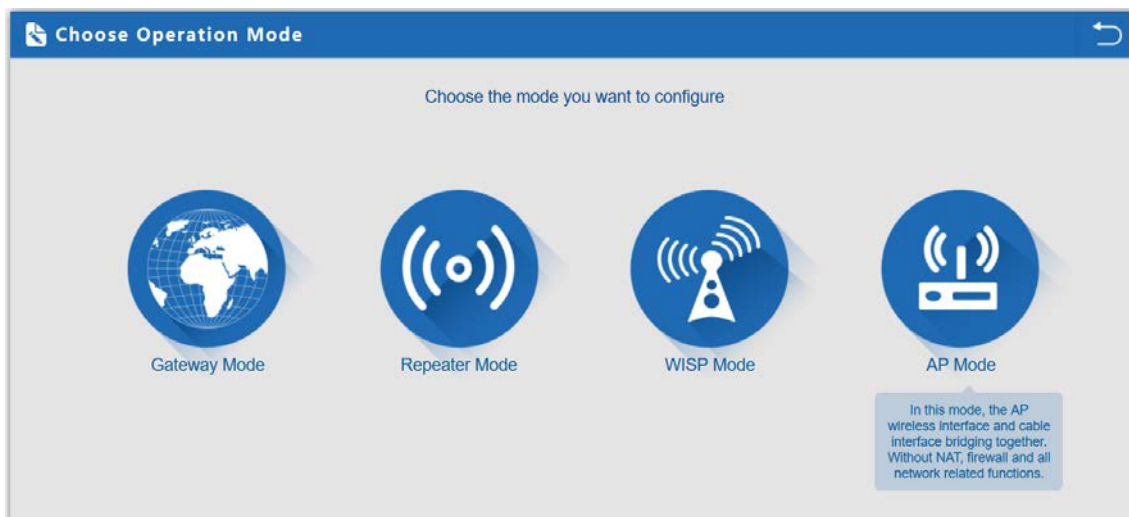
The image shows a 'Location Information' configuration window. It has a blue header bar with a double arrow icon, the title 'Location Information', and a close button (X). The main area contains two text input fields: 'AP Location' with the value 'SPAIN' and 'AP Name' with the value 'EK'. Below these fields is a blue 'Apply' button.

- **AP Location:** Set the AP Location, this is just information for the user to know.
- **AP Name:** Set the identification name for our AP.

After filling the above values as we want, we can press “Apply” to save the changes for our Location information settings.

Wizard

There are four-operation mode available. Putting the mouse over each mode will display a tip explaining the use of each mode.

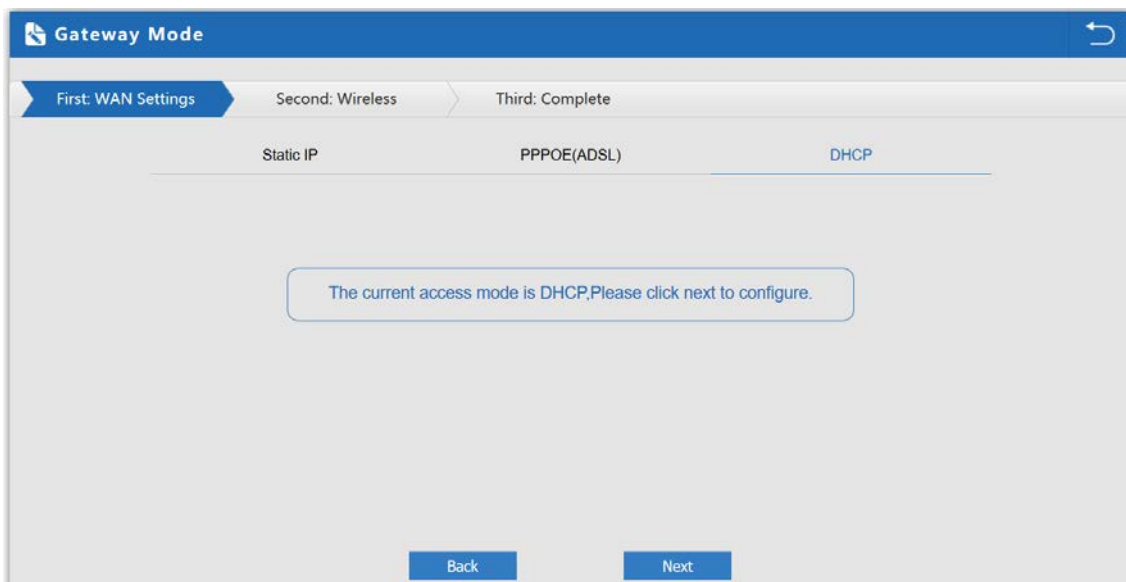


- **Gateway Mode:** Connect to the network through LAN cable and operate **AP 1200** as router.
- **Repeater Mode:** Connects to a SSID and broadcast a new SSID
- **WISP Mode:** Connect to the provider SSID and get the connection through LAN.
- **AP Mode:** Connect to the network through LAN cable and operate **APE 1200** as bridge mode (the device is transparent).

When you click in the desired operation mode, you will go to the wizard window for the selected mode. The wizard will guide you systematically to fully set it up.

Wizard: Gateway Mode

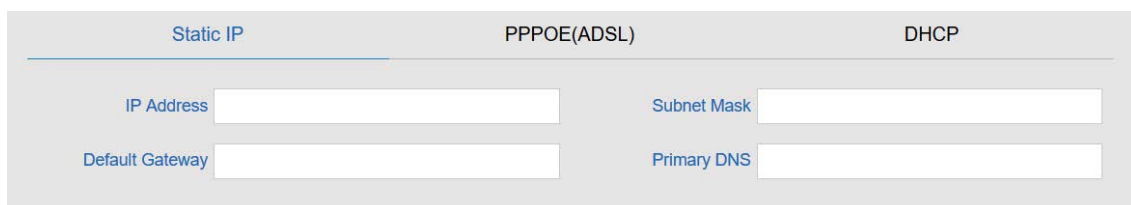
The Gateway Mode wizard will guide you through few step and few options to properly configuring the device.



First Step

Select the WAN connection mode:

- **DHCP:** The WAN connection will get the IP value from a DHCP server
- **Static IP:** You can set the WAN IP manually; you will need to fill IP Address, Subnet Mask, Default Gateway and Primary DNS.

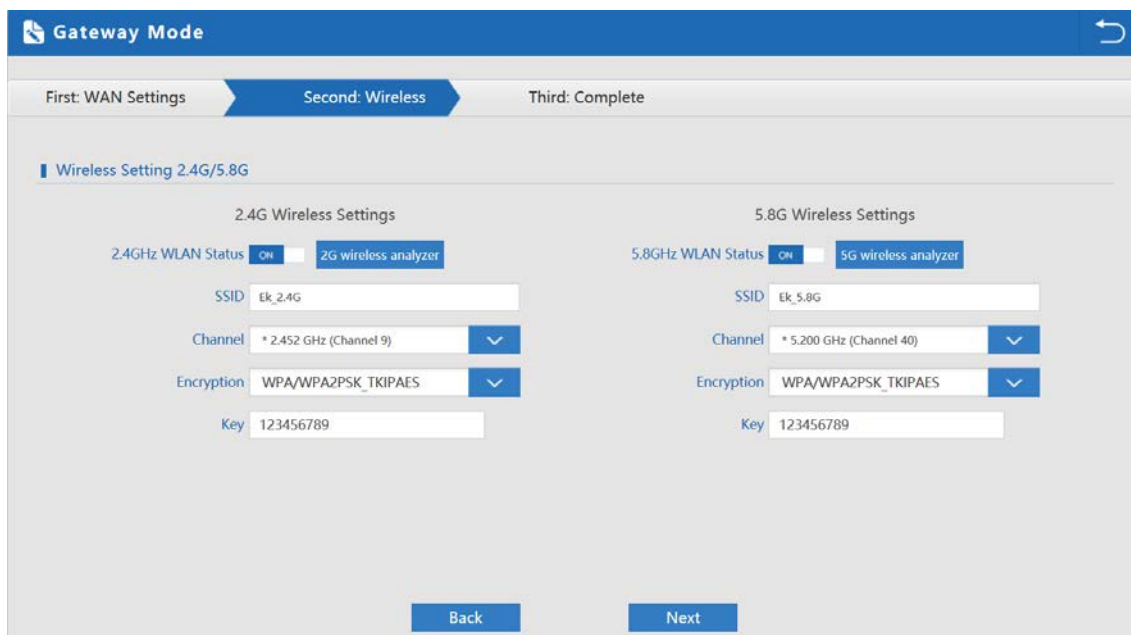


- **PPPoE:** You can also connect through PPPoE it will ask username and password.



When you are done, press Next to continue.

Second Step



Gateway Mode

First: WAN Settings **Second: Wireless** Third: Complete

Wireless Setting 2.4G/5.8G

2.4G Wireless Settings

2.4GHz WLAN Status ☒ ON [2G wireless analyzer](#)

SSID

Channel ▼

Encryption ▼

Key

5.8G Wireless Settings

5.8GHz WLAN Status ☒ ON [5G wireless analyzer](#)

SSID

Channel ▼

Encryption ▼

Key

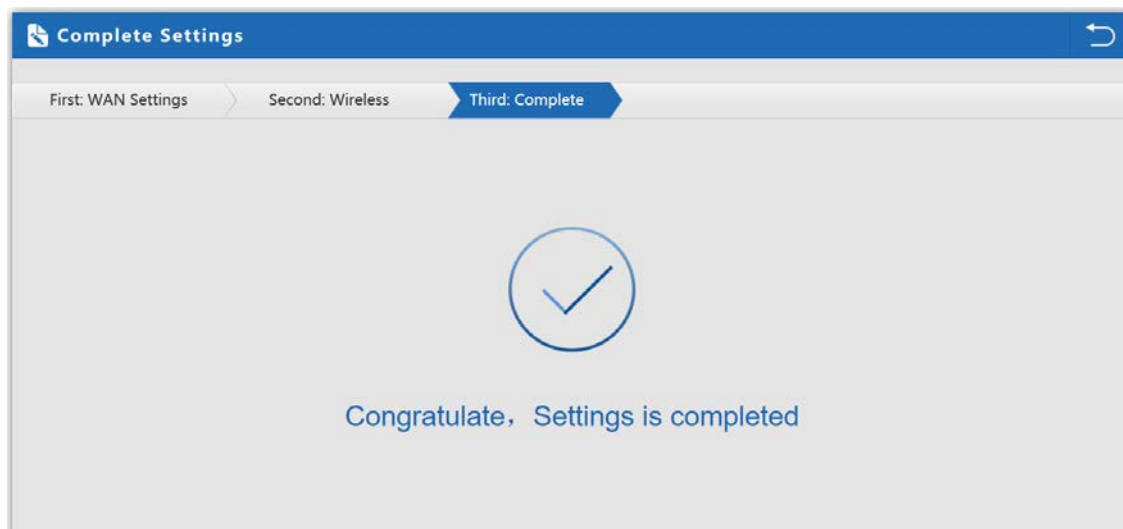
[Back](#) [Next](#)

Configure both Wireless settings for 2.4G and 5.8G

- **Wireless Status:** ON / OFF.
- **SSID:** Name of the wireless.
- **Channel:** The channel that Wireless.
- **Encryption:** Select the encryption wanted for the wireless SSID.
- **Key:** The password for the SSID


When you are done, press Next to continue. It will guide you to the third step.

Third Step



Complete Settings

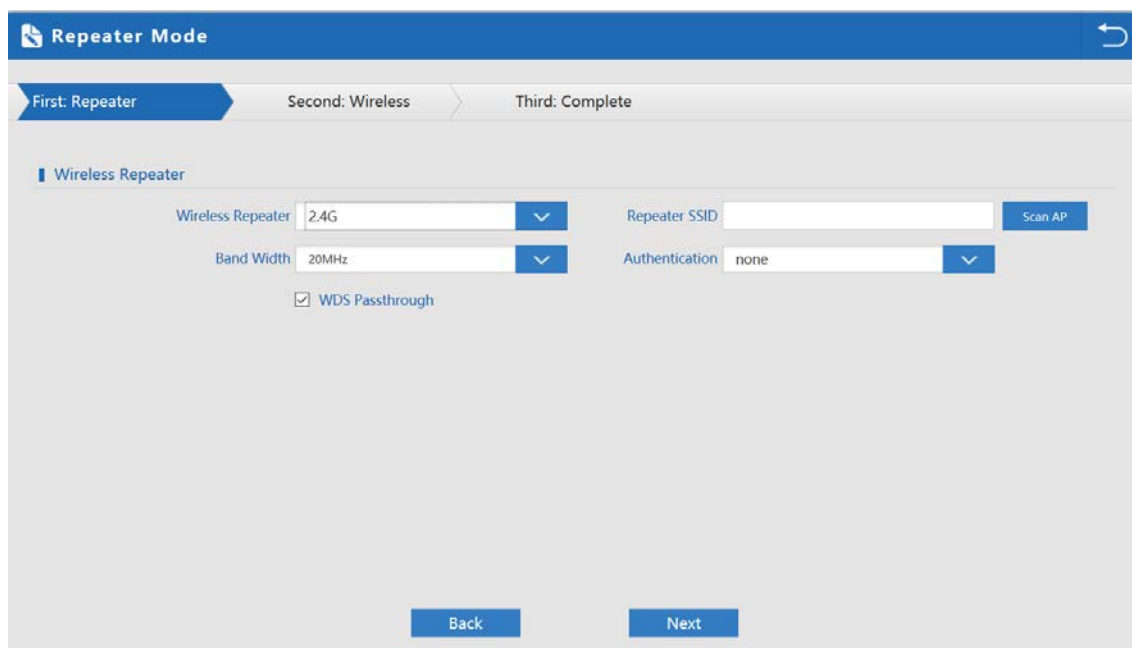
First: WAN Settings Second: Wireless **Third: Complete**



Congratulate, Settings is completed

Wizard: Repeater Mode

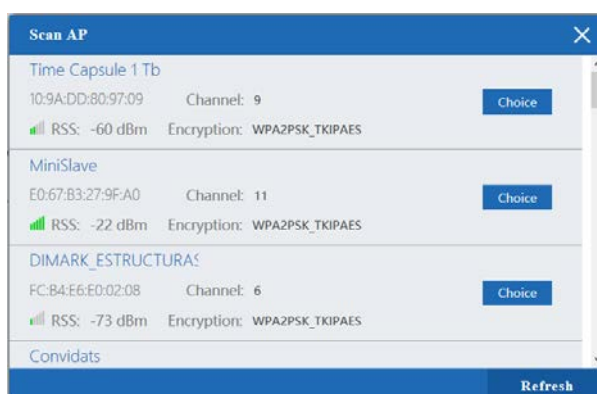
The Gateway Mode wizard will guide you through few step and few options to properly configuring the device.



First Step

Select which band we will be using as repeater 2.4G or 5.8G

Select the SSID that we want to connect to by pressing Scan AP button. It will load a list of all the SSID in range.



Select the desired SSID using the button Choice. It will load the values on the Wireless Repeater form.

- **Repeater SSID:** The name of the SSID selected.

- **Authentication:** Encryption of the SSID selected.
- **Key:** Input the SSID key for the SSID selected.
- **Band Width:** The bandwidth of the SSID selected.

When you are done, press Next to continue. It will guide you to the second step.

Second step

Select the WAN connection mode:

- **DHCP:** The WAN connection will get the IP value from a DHCP server
- **Static IP:** You can set the WAN IP manually; you will need to fill IP Address, Subnet Mask, Default Gateway and Primary DNS.



Static IP	PPPOE(ADSL)	DHCP
IP Address <input type="text"/>	Subnet Mask <input type="text"/>	
Default Gateway <input type="text"/>	Primary DNS <input type="text"/>	

- **PPPoE:** You can also connect through PPPoE it will ask username and password.


Static IP	PPPOE(ADSL)	DHCP
PPPOE Name <input type="text"/>	PPPOE Password <input type="text"/>	

When you are done, press Next to continue.

Third Step


Complete Settings


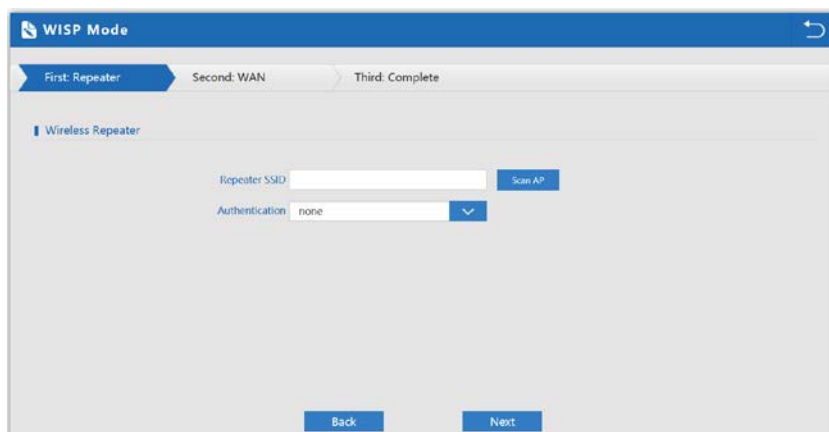
First: WAN Settings > Second: Wireless > **Third: Complete**



Congratulate. Settings is completed

Wizard: WISP Mode

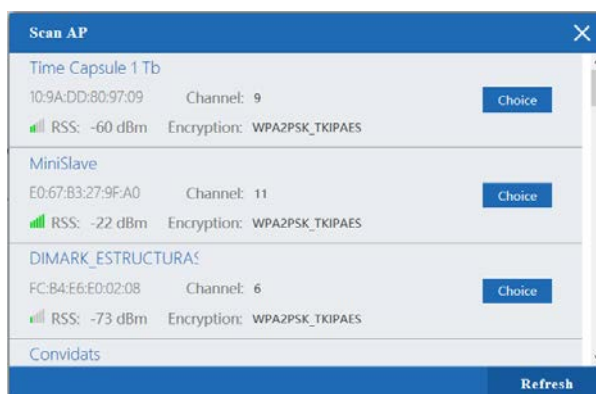
The WISP Mode wizard will guide you through few step and few options to properly configuring the device.



The screenshot shows the 'WISP Mode' wizard interface. At the top, there are three steps: 'First: Repeater' (active), 'Second: WAN', and 'Third: Complete'. Below the steps, there is a section titled 'Wireless Repeater'. It contains two input fields: 'Repeater SSID' and 'Authentication'. The 'Authentication' dropdown is currently set to 'none'. To the right of the 'Repeater SSID' field is a 'Scan AP' button. At the bottom of the form, there are 'Back' and 'Next' buttons.

First Step

Select the SSID that we want to connect to by pressing Scan AP button. It will load a list of all the SSID in range.



The screenshot shows the 'Scan AP' window. It lists three available wireless networks with their details and a 'Choice' button for each:

SSID	MAC Address	Channel	RSS	Encryption	Action
Time Capsule 1 Tb	10:9A:DD:80:97:09	9	-60 dBm	WPA2PSK_TKIPAES	Choice
MiniSlave	E0:67:B3:27:9F:A0	11	-22 dBm	WPA2PSK_TKIPAES	Choice
DIMARK_ESTRUCTURA	FC:B4:E6:E0:02:08	6	-73 dBm	WPA2PSK_TKIPAES	Choice

At the bottom of the window, there is a 'Refresh' button.

Select the desired SSID using the button Choice. It will load the values on the Wireless Repeater form.

- **Repeater SSID:** The name of the SSID selected.
- **Authentication:** Encryption of the SSID selected.
- **Key:** Input the SSID key for the SSID selected.

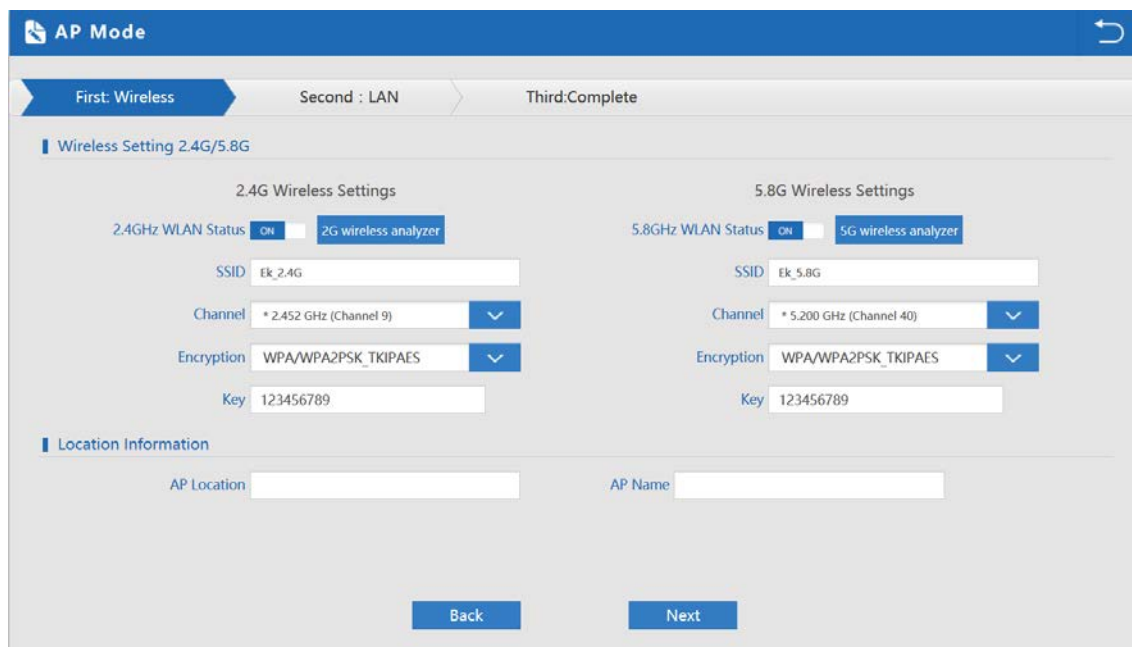
When you are done, press Next to continue. It will guide you to the second step.

Second step

Once the first step is completed in this mode the SSID is disabled thus the window screen will not appear if we are connected through Wi-Fi.

Wizard: AP Mode

The AP Mode wizard will guide you through few step and few options to properly configuring the device.



First step

Set the values for the wanted SSID for 2.4G and 5.8G

- **Wireless Status:** ON / OFF.
- **SSID:** Name of the wireless.
- **Channel:** The channel that Wireless will use from 1 to 13.
- **Encryption:** Select the encryption wanted for the wireless SSID.
- **Key:** The password for the SSID

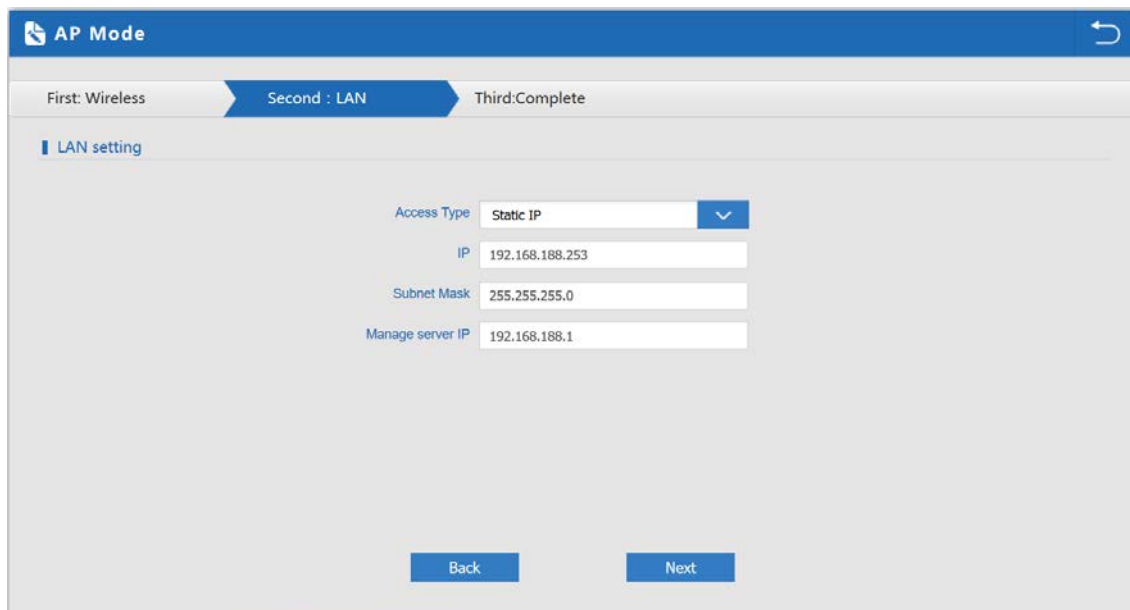
Set the location information values

- **AP Location:** Set the AP Location, this is just information for the user to know.
- **AP Name:** Set the identification name for our AP.

When you are done, press Next to continue. It will guide you to the second step.

Second step

Specify how the AP 1200 is connected to your network.

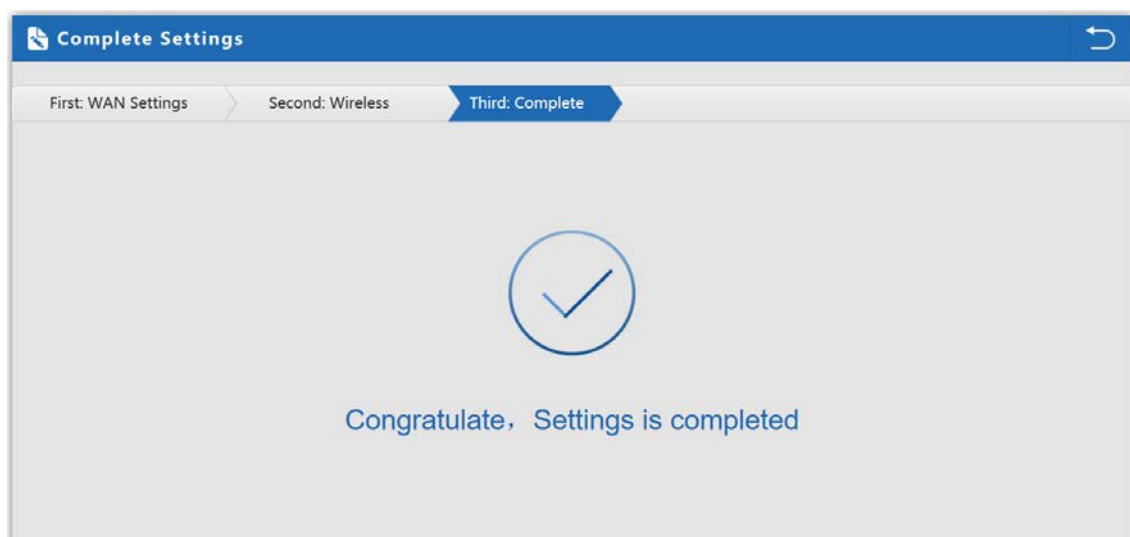


The screenshot shows the 'AP Mode' configuration window. At the top, there are three tabs: 'First: Wireless', 'Second : LAN' (which is selected and highlighted in blue), and 'Third:Complete'. Below the tabs, the 'LAN setting' section is visible. It contains four input fields: 'Access Type' is a dropdown menu set to 'Static IP'; 'IP' is a text box containing '192.168.188.253'; 'Subnet Mask' is a text box containing '255.255.255.0'; and 'Manage server IP' is a text box containing '192.168.188.1'. At the bottom of the window, there are two buttons: 'Back' and 'Next'.

You can select either DHCP or Static IP

- **IP:** Set the IP for this device.
- **Subnet Mask:** Set the Subnet Mask for this device.
- **Manage server IP:** Set the network gateway for the device.

Third Step



The screenshot shows the 'Complete Settings' window. At the top, there are three tabs: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete' (which is selected and highlighted in blue). In the center of the window, there is a large blue circle containing a white checkmark. Below the circle, the text 'Congratulate, Settings is completed' is displayed in a blue font.

Advanced settings

Device Status

- **Status:** This tab displays the information regarding Software Version, Hardware Version and the time that the device is online.



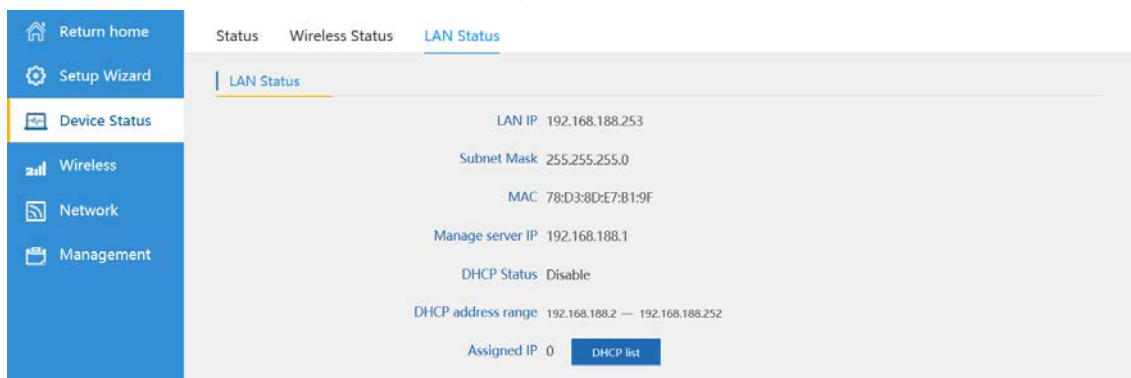
- **2.4G Wireless Status:** Shows the current configuration for the Wireless, it also displays the connected users. It is the same for 5.8G.



Client list button will show a pop up window showing the connected clients.

Client List		
MAC	Connection time	Signal Strength
34:E6:AD:45:3A:53	1H4M11S	-50 dBm

- **LAN Status:** Displays the current configuration for the LAN interface of the device. It also shows the configuration for the DHCP.



Wireless 2.4G and 5.8G

NOTE: The pictures below are for 2.4G Wireless. The options for 5.8G are the same as for 2.4G.

Basic Settings

This tab is used to configure all the Wireless basic settings.

Return home

Setup Wizard

Device Status

2.4G Wireless

5.8G Wireless

Network

Management

2.4G Basic Settings

2.4G Virtual AP

2.4G Access Control

2.4G Advanced Settings

Wireless Basic Settings

Wireless Status

ON

2G wireless analyzer

SSID

Ek_2.4G

Broadcast SSID

☐ Disable

☒ Enable

WMM

☐ Disable

☒ Enable

Channel

Band Width

20MHz

Channel

* 2.452 GHz (Channel 9)

Authentication

Encryption

WPA/WPA2PSK/TKIP/AES

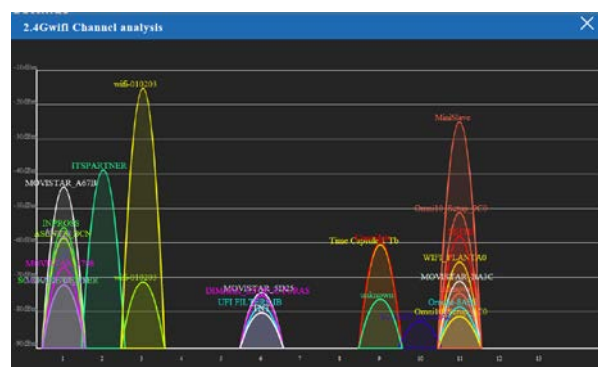
Key

123456789

Apply

- **Wireless Status:** ON / OFF.
- **SSID:** Name of the wireless.
- **Broadcast SSID:** Enable - Show SSID, Disable – Hide SSID,
- **WMM:** Enable or Disable WMM.
- **Band Width:** The width that Wireless will use 20MHz, 40MHz or 80MHz.
- **Channel:** The channel that Wireless will use.
- **Encryption:** Select the encryption wanted for the wireless SSID.
- **Key:** The password for the SSID.

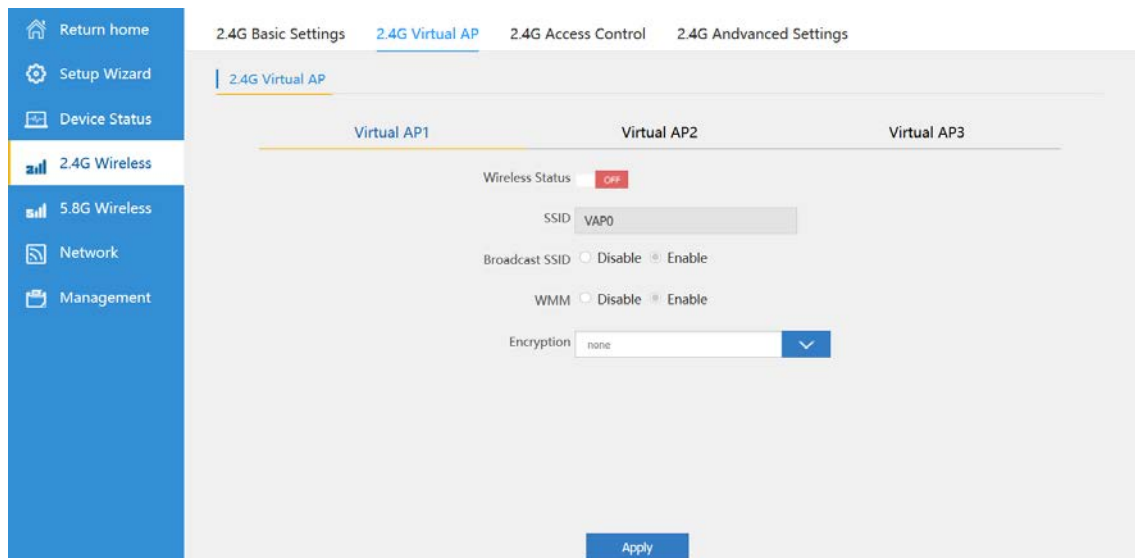
Wireless Analyzer will show open a window displaying all the SSID with its channel so you can properly select a channel for your SSID.



Press apply to save the changes.

Virtual AP

In this tab we can create up to 3 more SSID, each Virtual AP 1 is a new SSID.



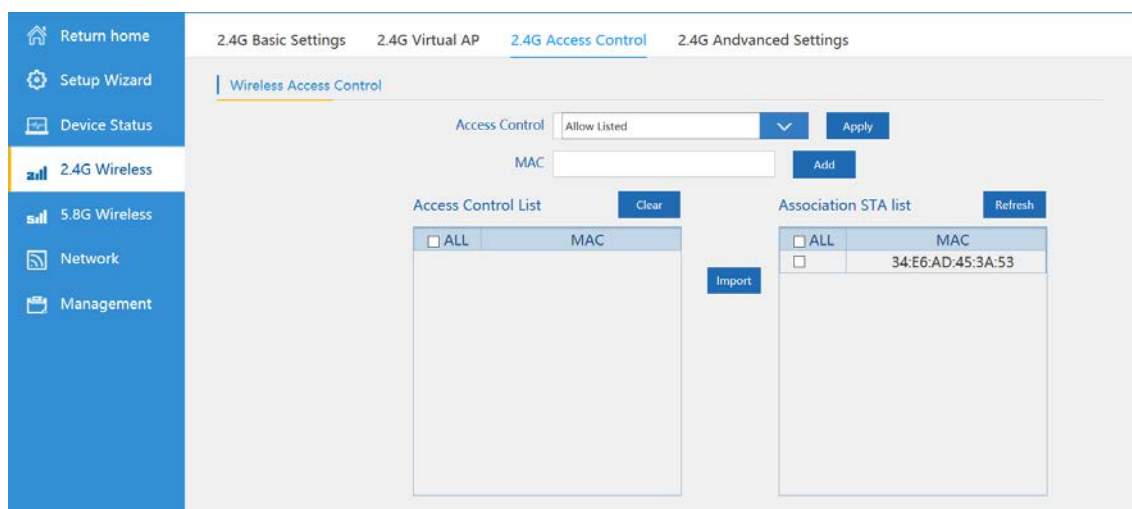
The screenshot shows the '2.4G Virtual AP' configuration page. On the left is a blue sidebar with navigation links: 'Return home', 'Setup Wizard', 'Device Status', '2.4G Wireless' (highlighted), '5.8G Wireless', 'Network', and 'Management'. The top navigation bar includes '2.4G Basic Settings', '2.4G Virtual AP' (active), '2.4G Access Control', and '2.4G Advanced Settings'. The main content area has three tabs: 'Virtual AP1', 'Virtual AP2', and 'Virtual AP3'. Under 'Virtual AP1', the settings are: 'Wireless Status' (OFF), 'SSID' (VAP0), 'Broadcast SSID' (Disable/Enable radio buttons), 'WMM' (Disable/Enable radio buttons), and 'Encryption' (none). An 'Apply' button is at the bottom right.

Press apply to save the changes.

Access Control

The access control limits the devices that can connect to **AP 1200**. We can set the access control to:

- **MAC Access All:** In this mode all the devices can connect to **AP 1200**.
- **Allow Listed:** In this mode the all the MAC address on the Access Control List can access the **AP 1200**.
- **Deny Listed:** In this mode all the MAC address on the Access Control List cannot access the **AP 1200**.



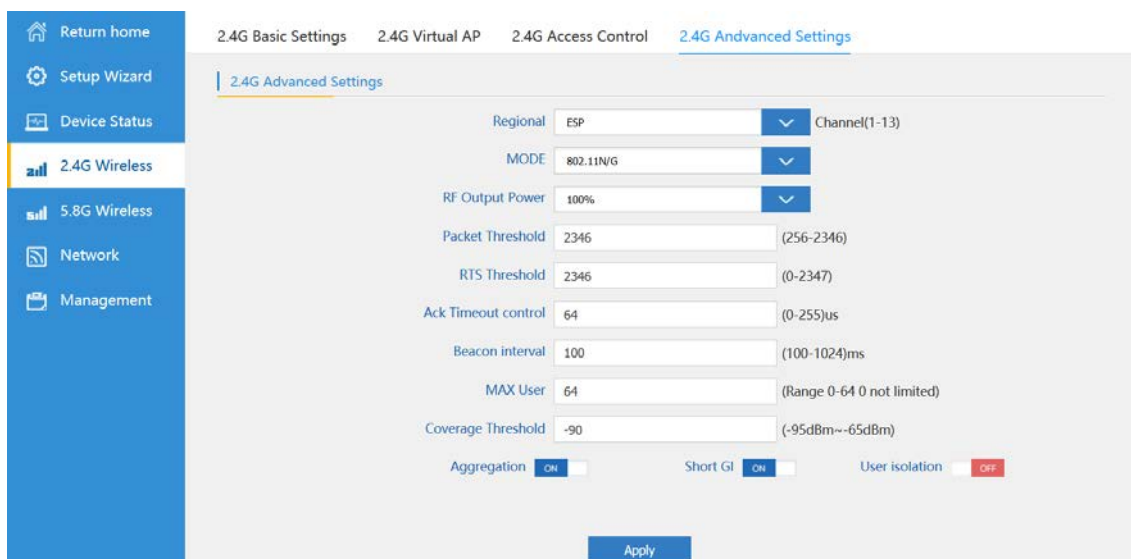
- **Association STA list:** In this list will appear the already connected MAC to the device. You can select them and press import to move them to the Access Control List.

How to add MAC to the list:

1. Pick Allow Listed or Deny Listed
2. Input the MAC
3. Press Add
4. The added MAC will go to the Access Control List
5. Press Apply

Advanced Settings

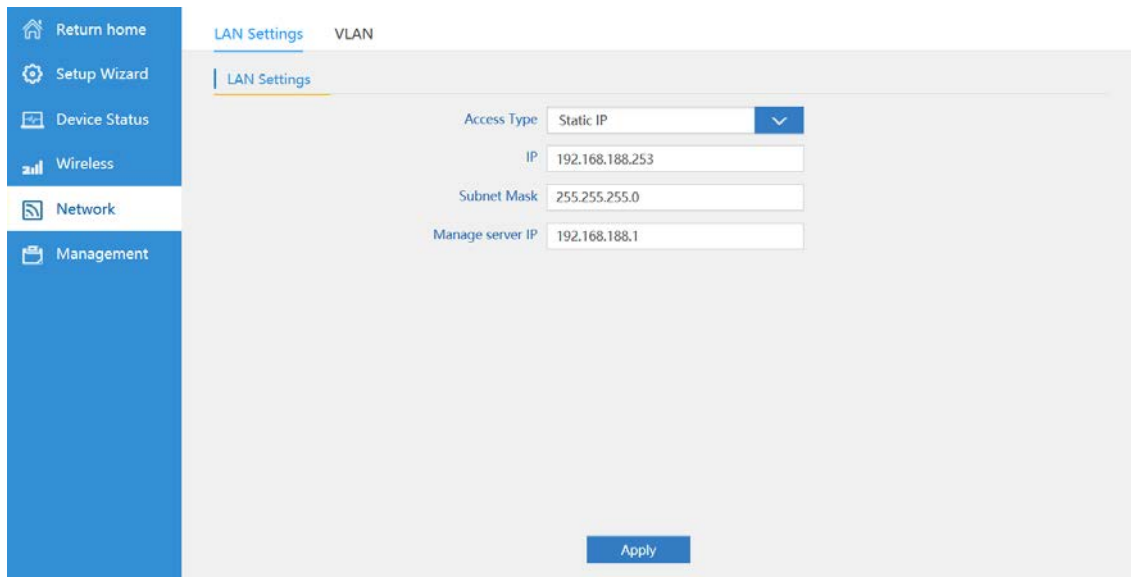
This tab is used to configure all the Wireless advanced settings.



- **Regional:** Select the region
- **MODE:** Select the standard for the Wireless N/AC
- **RF Output Power:** Control the wireless output power. This affects the coverage range.
- **RTS Threshold:** Lower this value if you have problems with electromagnetic interface or overload of traffic on a network.
- **Ack Timeout control:** Interval for the ACK, the devices is waiting to get the ACK response from the device. Too long time might reduce a bit the bandwidth.
- **Beacon interval:** The time interval for the beacon. The beacon time is a packet sent to the client device to notify if the device is on. Reducing this time will sent more packets making the net a bit slower. Too high value will make the device disconnect more often.
- **MAX User:** Set the max client numbers that can connect to the device
- **Coverage Threshold:**
- **Aggregation:** Allows a higher throughput
- **Short GI:** Help improve the throughput, use it only for N mode if used mixed mode please disable.
- **User isolation:** ON: The users cannot see each other in the network

Network

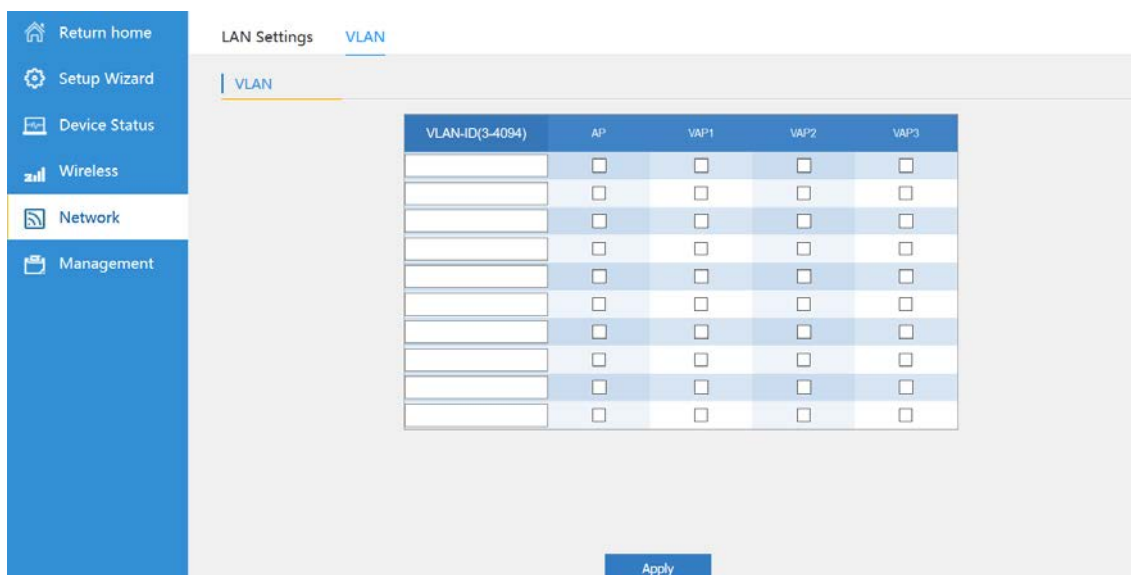
LAN Settings



- **Access Type:** Use DHCP to get automatically IP, Subnet Mask and Manage server IP or use Static IP to manually set the values.
- **IP:** Set the IP for this device.
- **Subnet Mask:** Set the Subnet Mask for this device.
- **Manage server IP (gateway):** Set the gateway IP

VLAN

Each SSID can be set to the wanted VLAN.



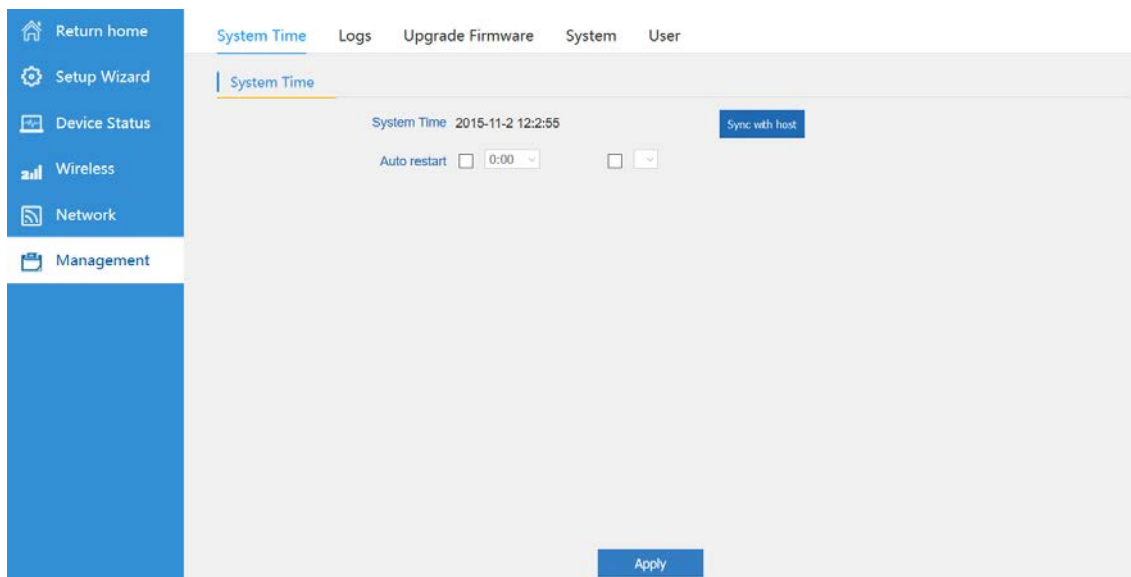
VLAN-ID(3-4094)	AP	VAP1	VAP2	VAP3
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Management

System Time

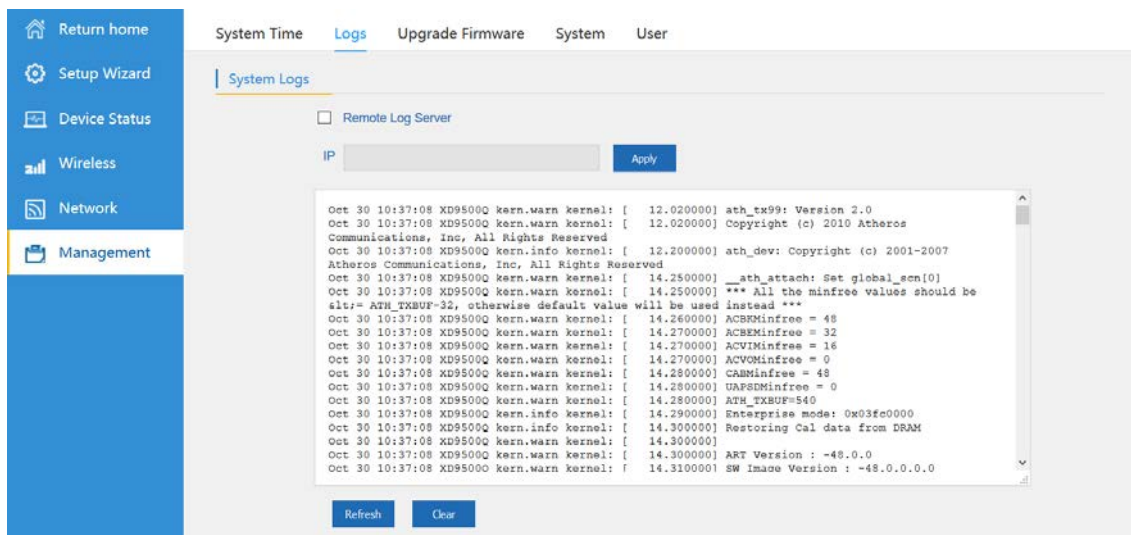
Manage the device timezone.

Auto restart function enables the device to be rebooted at the setup time.



Logs

This tab will display all the logs related to the device.

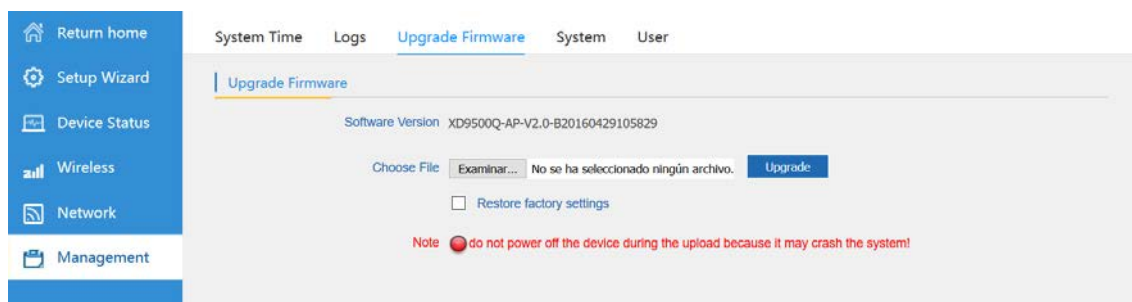


- **Remote Log Server:** Enable to register the logs to a remote server.
- **IP:** Set the IP where the logs will be saved.

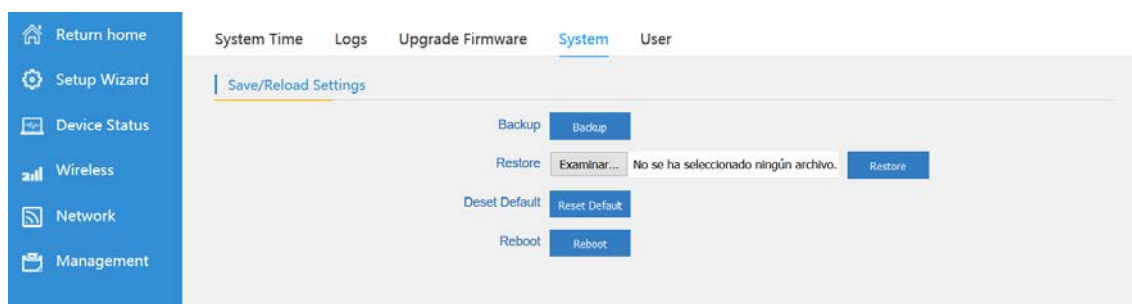
Upgrade firmware

Select the new firmware version file and press “Upgrade” to upgrade the device firmware.

If selected restore factory setting the device will upgrade the firmware and also put the device back to factory default.



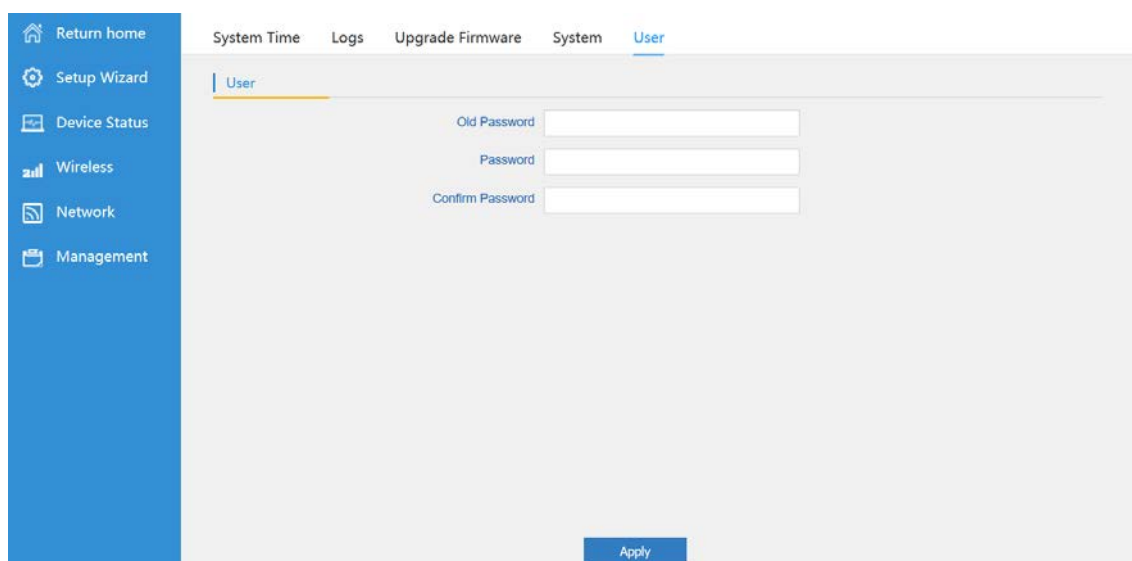
System



- **Backup:** Will save to disk the device configuration.
- **Restore:** Select the saved configuration to be imported on the device.
- **Reset Default:** Restore all the device values to default.
- **Reboot:** Reboot the device.

User

Change the default admin password for the device.



The screenshot shows the 'User' management page in the Ek device web interface. On the left is a blue sidebar with navigation links: 'Return home', 'Setup Wizard', 'Device Status', 'Wireless', 'Network', and 'Management'. The top navigation bar includes 'System Time', 'Logs', 'Upgrade Firmware', 'System', and 'User' (which is highlighted). Below the 'User' tab, there is a sub-tab 'User' and three input fields labeled 'Old Password', 'Password', and 'Confirm Password'. An 'Apply' button is located at the bottom right of the form area.

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