

AP 300 / AP 300 LP

330001 / 330004

Wireless Access Point



User manual

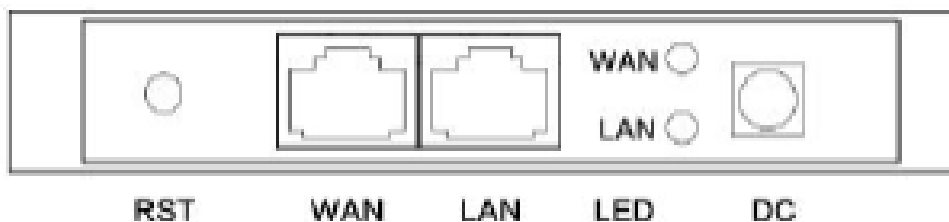


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Hardware interface



- **RST:** Reset Button, it makes 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

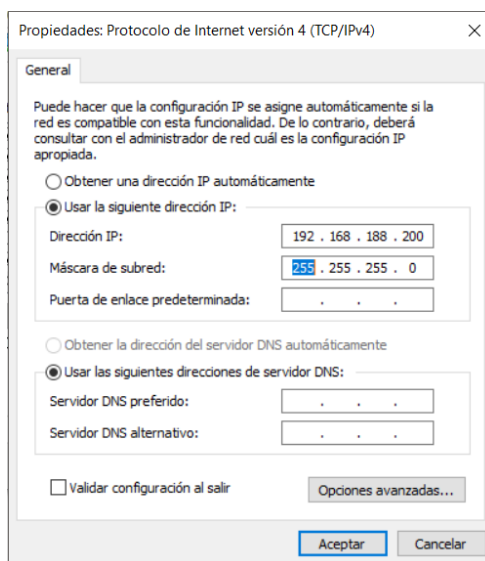


Connect

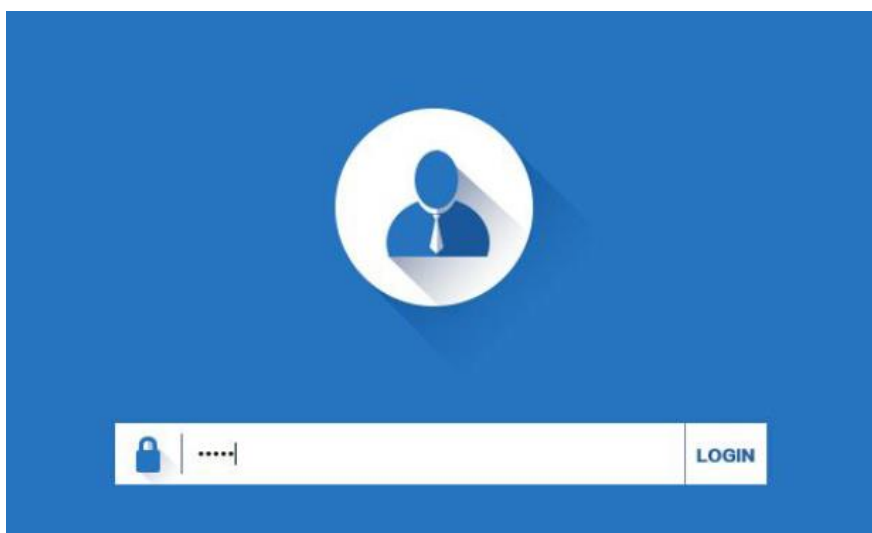
Note: The default SSID is Ek_2.4G with password 123456789

To connect to AP 300 / LP please follow these steps:

1. Connect to AP 300 / LP with Ethernet cable or wireless.
2. Set our Ethernet / Wireless adapter with Static IP:



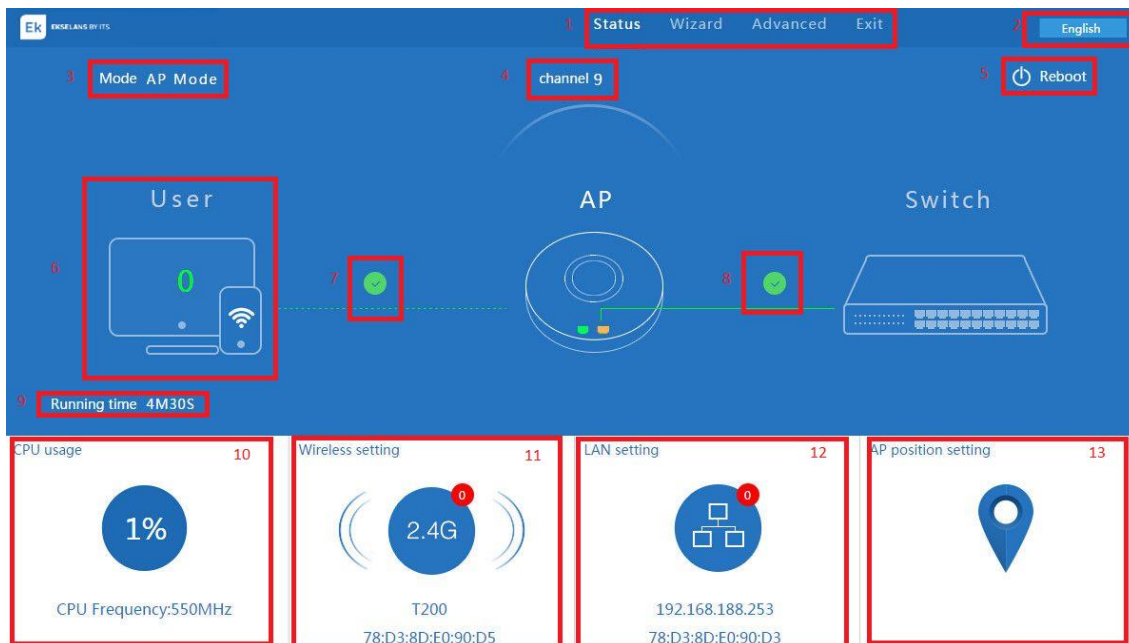
3. Open a Web browser and navigate to the URL: <http://192.168.188.253>



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

Web interface

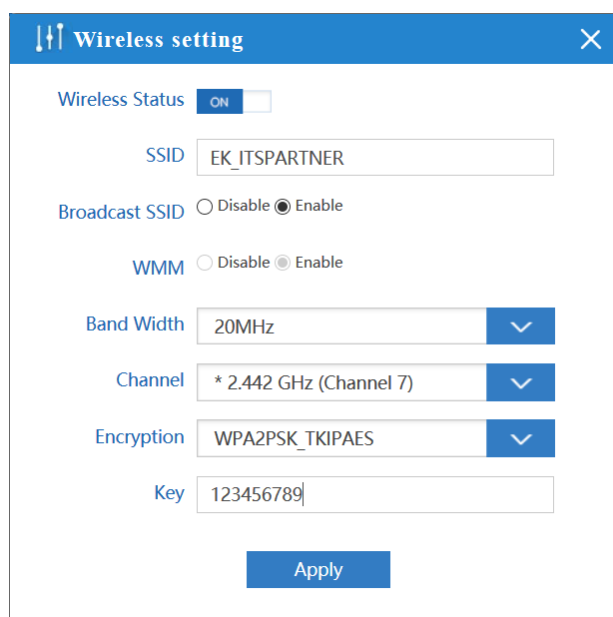
After entering, the password will appear the main interface



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 the CPU Usage of the device.
11. Displays Wireless information such as Wireless SSID and Wireless MAC. 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 11)

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



Wireless setting

Wireless Status ON

SSID

Broadcast SSID Disable Enable

WMM Disable Enable

Band Width ▼

Channel ▼

Encryption ▼

Key

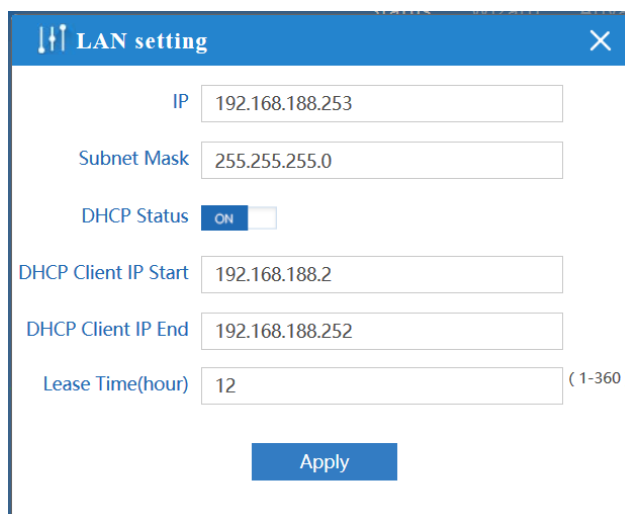
Apply

- 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 or 40MHz.
- 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

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



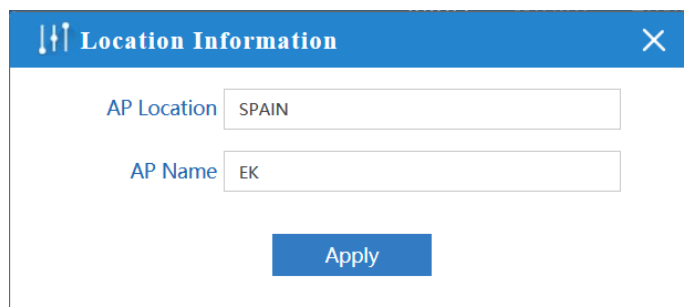
- IP: Set the IP for this device.
- Subnet Mask: Set the Subnet Mask for this device.
- DHCP Status: ON – To enable the DHCP, OFF – To disable the DHCP.
- DHCP Client IP Start: The starting IP for the DHCP range.
- DHCP Client IP End: The ending IP for the DHCP range.
- Lease Time (hour): The time to 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 300 / LP is using.

Location Information (Main Window 13)

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



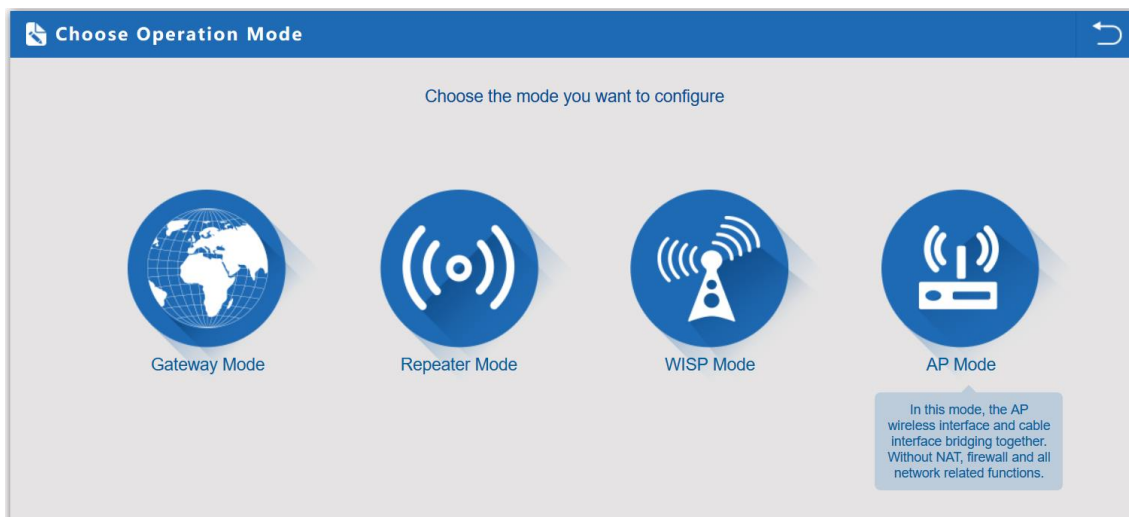
The screenshot shows a configuration window titled "Location Information" with a close button (X) in the top right corner. Inside the window, there are two input fields: "AP Location" with the value "SPAIN" and "AP Name" with the value "EK". Below these fields is a blue "Apply" button.

- **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.

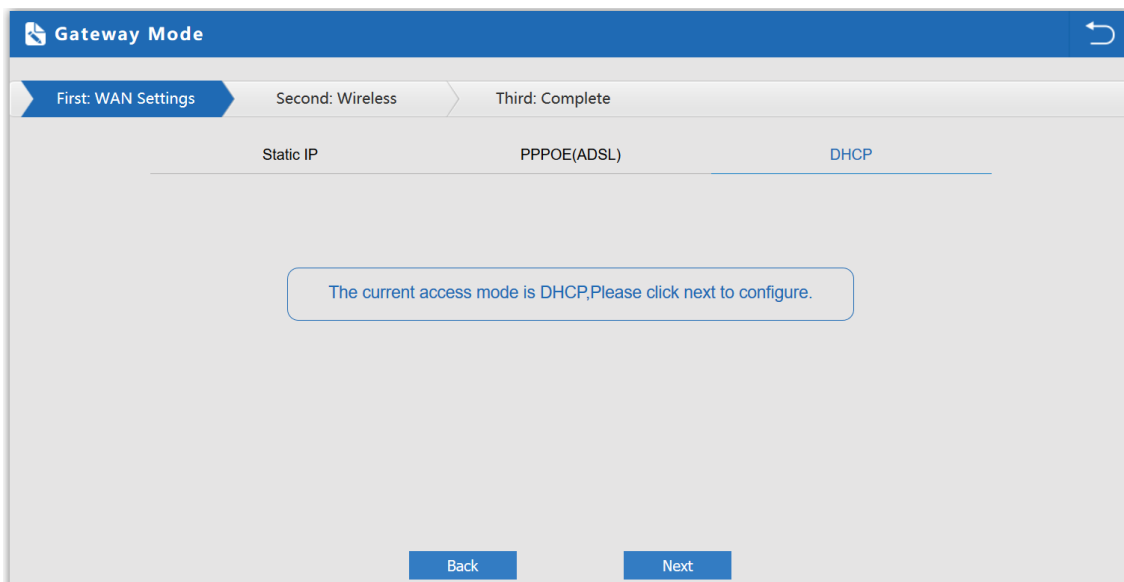


- **Gateway Mode:** Connect to the network through LAN cable and operate AP 300 / LP as router.
- **Repeater Mode:** Connects to a SSID and broadcast a new SSID
- **WISP Mode:** Connect to the provider SSID and get the connection through LAN.
- **AP Mode:** Connect to the network through LAN cable and operate AP 300 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

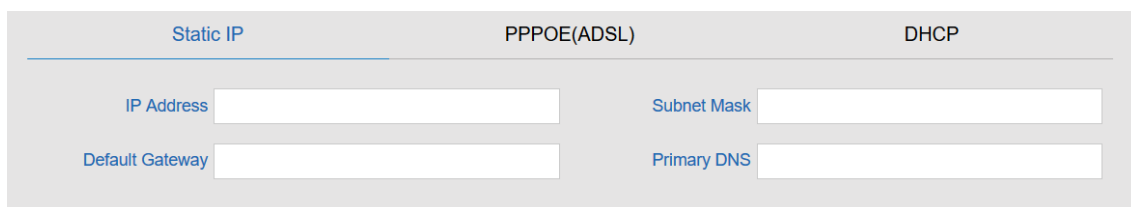
The Gateway Mode wizard will guide you through few step and few options to properly configuring the device.



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.

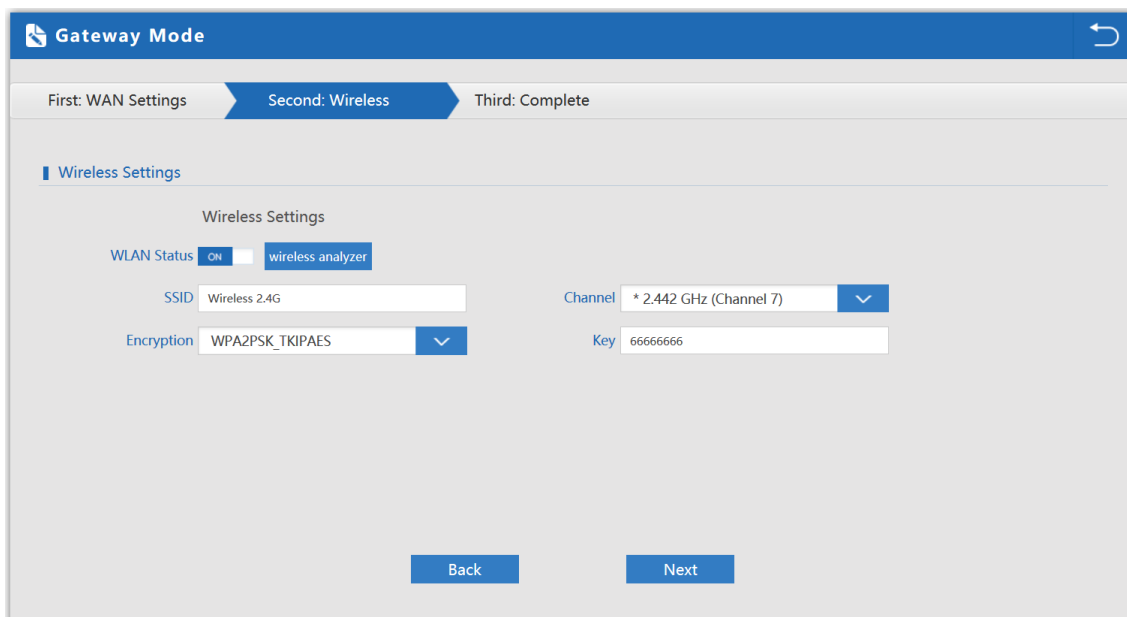


- **PPPoE:** You can also connect through PPPoE it will ask username and password.



When you are done, press Next to continue.

Second Step



Gateway Mode

First: WAN Settings Second: Wireless Third: Complete

Wireless Settings

WLAN Status ON wireless analyzer

SSID Channel

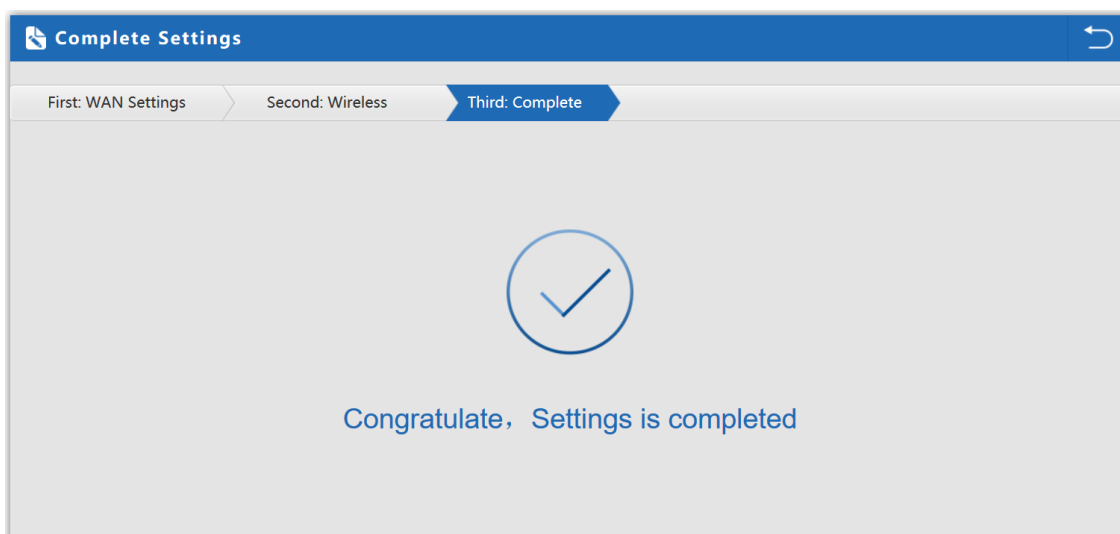
Encryption Key

Back Next

- 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

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

Third Step



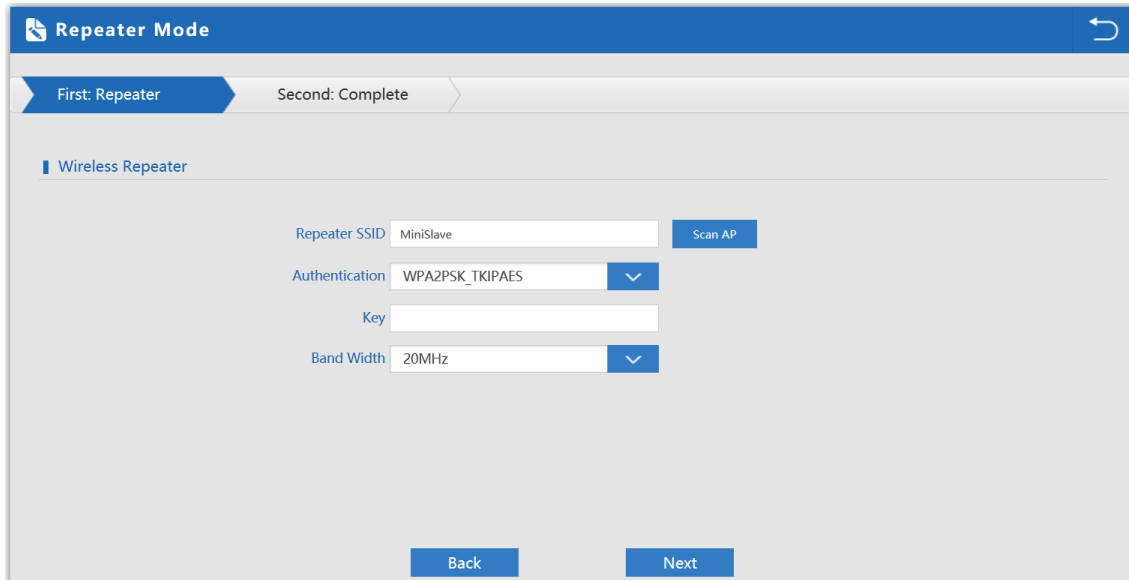
Complete Settings

First: WAN Settings Second: Wireless Third: Complete

Congratulate, Settings is completed

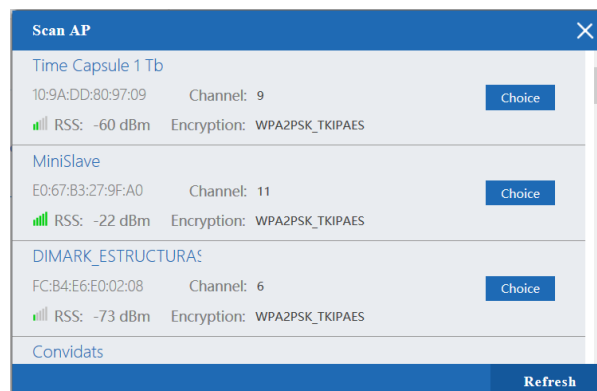
Wizard: Repeater Mode

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



First Step

Select 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.

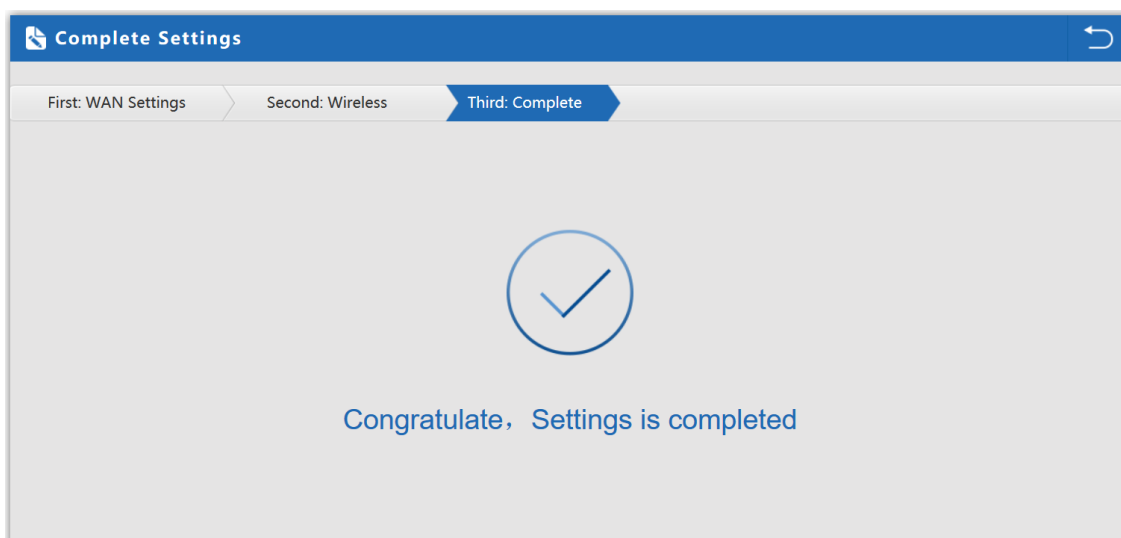
Static IP	PPPOE(ADSL)	DHCP
IP Address <input type="text"/>	Subnet Mask <input type="text"/>	
Default Gateway <input type="text"/>	Primary DNS <input type="text"/>	

- **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.

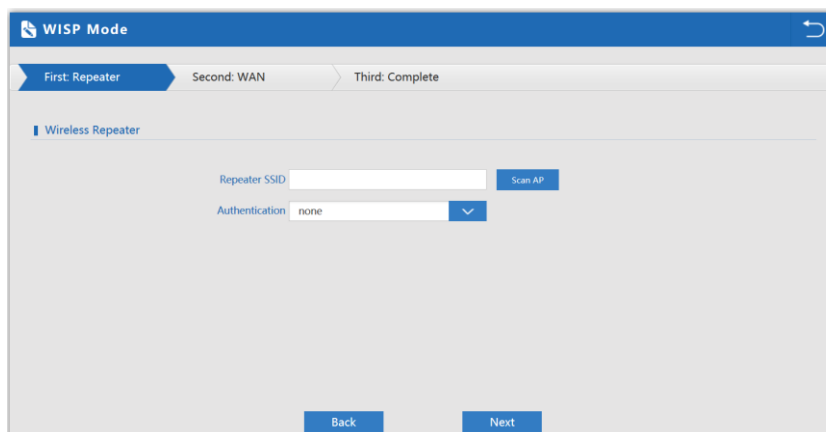
Third Step



The image shows a 'Complete Settings' screen with a blue header and a progress bar. The progress bar has three steps: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'Third: Complete' step is highlighted. In the center of the screen is a large blue checkmark icon. Below the icon, the text reads 'Congratulate, Settings is completed'.

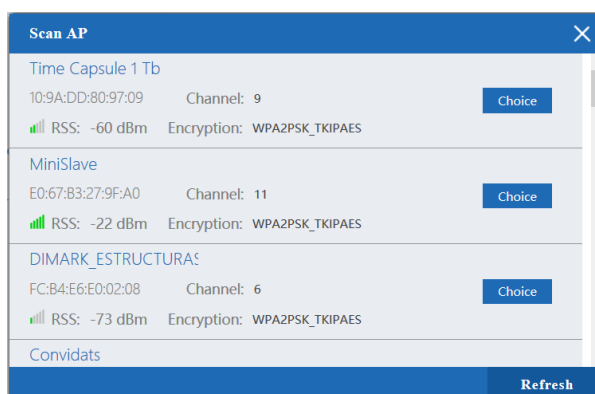
Wizard: WISP Mode

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



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.



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.

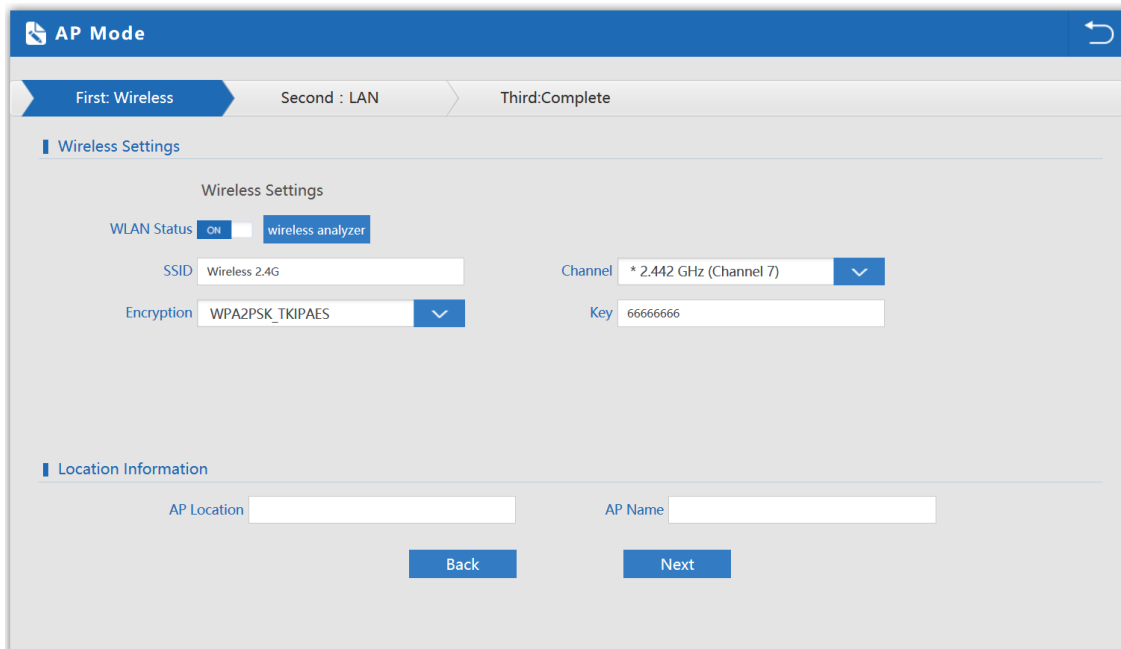
When you are done, press Next to continue. It will guide you to the second step.

Second step

Once the first step is completed on 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

- **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

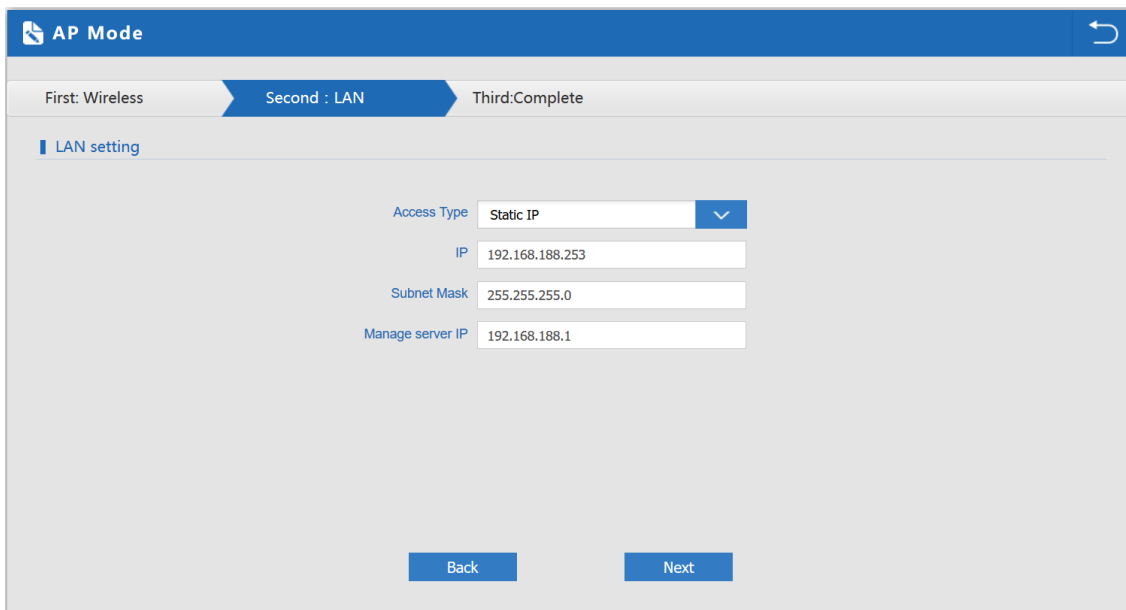
Set the location information values

- **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 300 / LP is connected to your network.

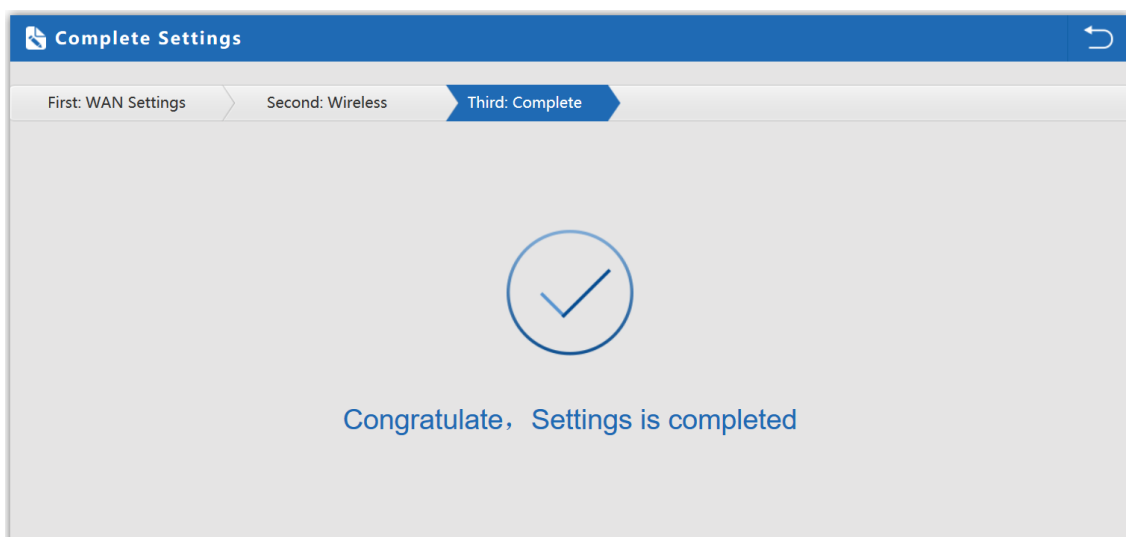


The screenshot shows the 'AP Mode' configuration window. At the top, there is a progress bar with three steps: 'First: Wireless', 'Second : LAN' (which is highlighted), and 'Third:Complete'. Below the progress bar, the 'LAN setting' section is visible. It contains four input fields: 'Access Type' is 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 form, 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

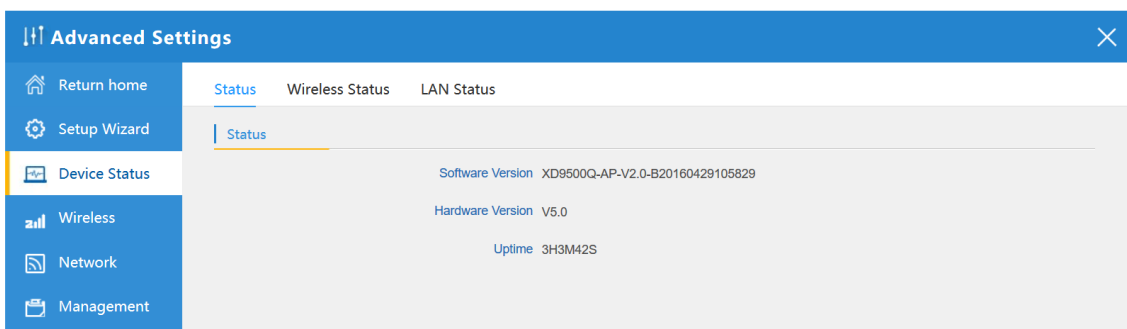


The screenshot shows the 'Complete Settings' confirmation window. At the top, there is a progress bar with three steps: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete' (which is highlighted). In the center of the screen, there is a large blue circular icon containing a white checkmark. Below the icon, the text 'Congratulate, Settings is completed' is displayed.

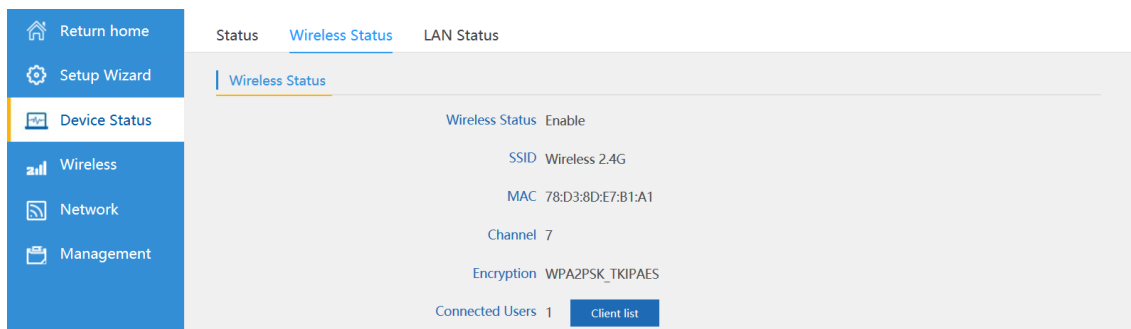
Advanced settings

Device Status

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



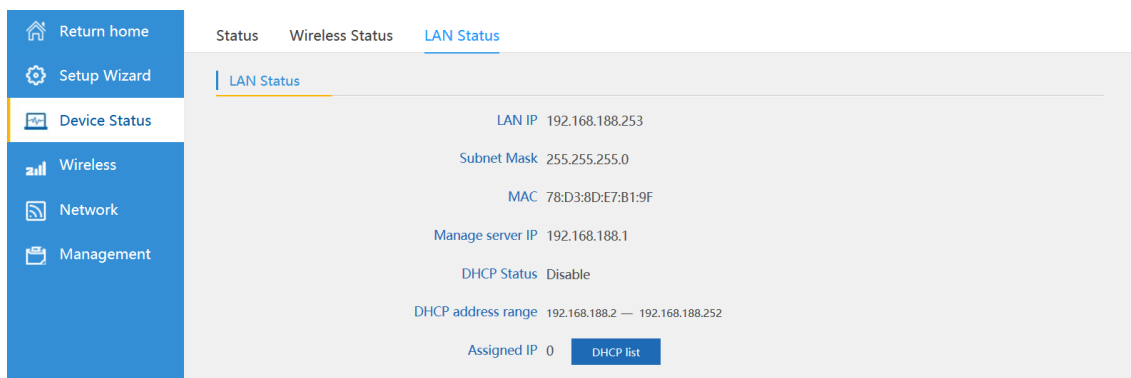
- **Wireless Status:** Shows the current configuration for the Wireless, it also displays the connected users.



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

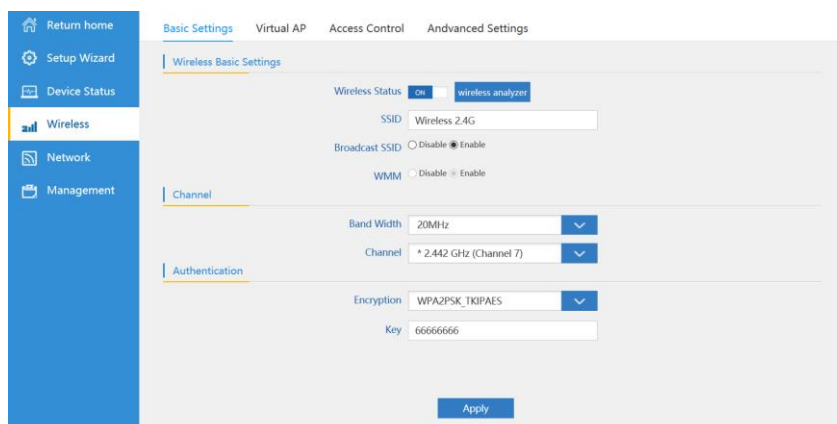
- **LAN Status:** Displays the current configuration for the LAN interface of the device. It also shows the configuration for the DHCP.



Wireless

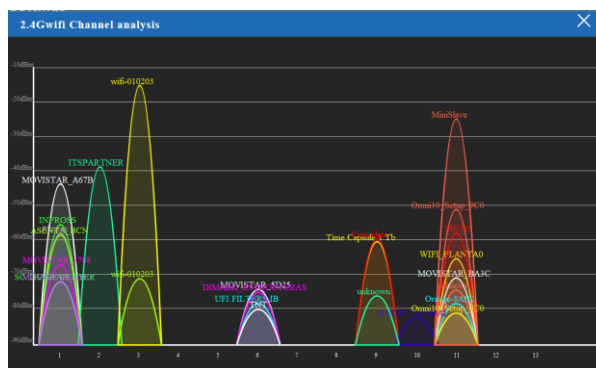
Basic Settings

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



- 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 or 40MHz.
- 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.

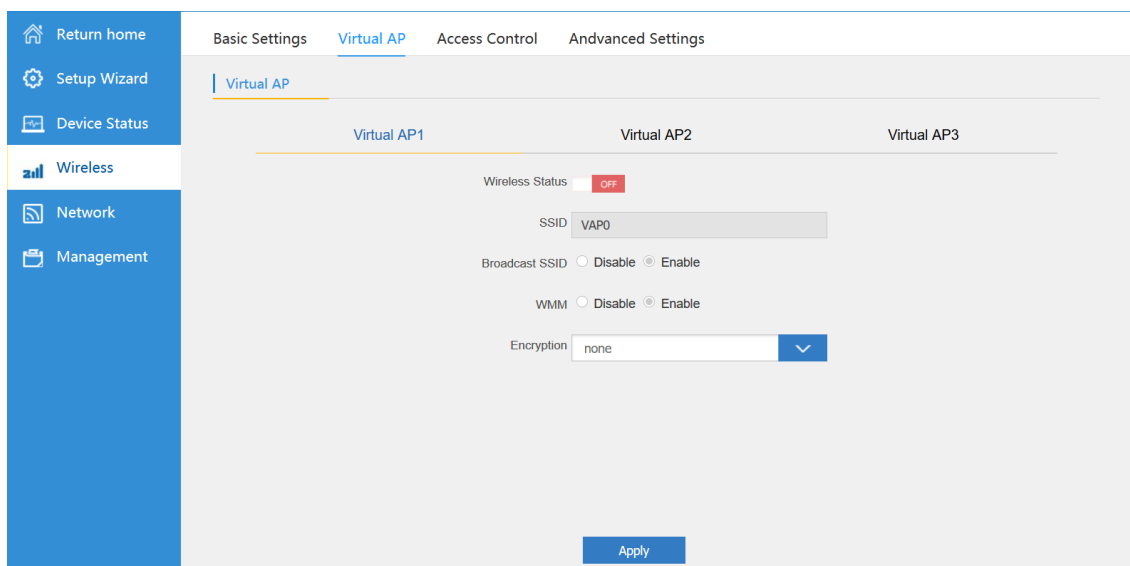
Wireless Analyzer will show open a window displaying all the SSID with its channel so you can properly select a channel for your SSID.



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.



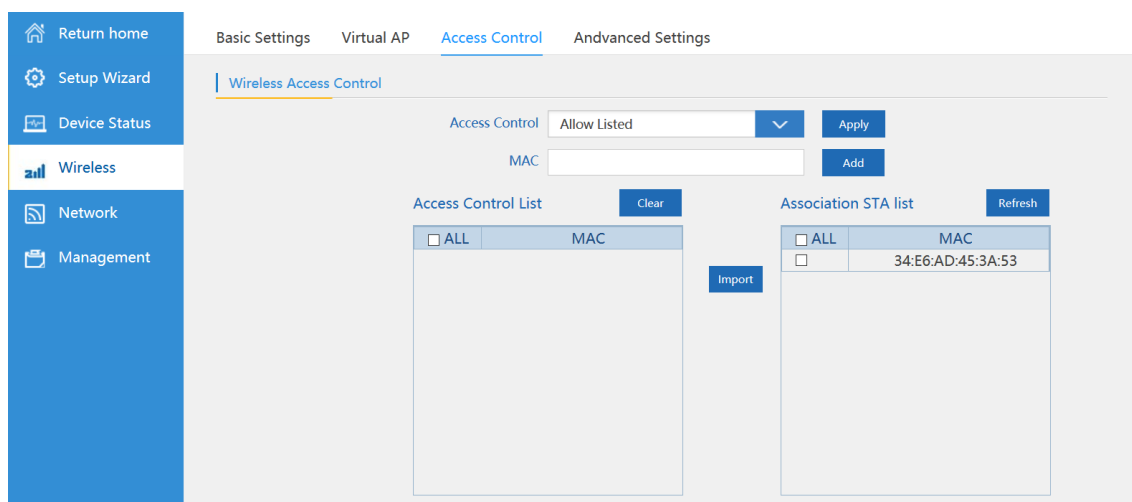
The screenshot shows a web-based configuration interface for Virtual APs. On the left is a blue sidebar with navigation options: Return home, Setup Wizard, Device Status, Wireless (highlighted), Network, and Management. The main content area has a top navigation bar with 'Basic Settings', 'Virtual AP' (selected), 'Access Control', and 'Advanced Settings'. Below this, there are three tabs: 'Virtual AP1', 'Virtual AP2', and 'Virtual AP3'. The 'Virtual AP1' tab is active, showing configuration options: 'Wireless Status' is a toggle switch set to 'OFF'; 'SSID' is a text input field containing 'VAP0'; 'Broadcast SSID' has radio buttons for 'Disable' and 'Enable', with 'Enable' selected; 'WMM' has radio buttons for 'Disable' and 'Enable', with 'Enable' selected; and 'Encryption' is a dropdown menu currently set to 'none'. An 'Apply' button is located at the bottom center of the configuration area.

Press apply to save the changes.

Access Control

The access control limits the devices that can connect to AP 300 / LP. We can set the access control to:

- **MAC Access All:** In this mode all the devices can connect to AP 300 / LP.
- **Allow Listed:** In this mode the all the MAC address on the Access Control List can access the AP 300 / LP.
- **Deny Listed:** In this mode all the MAC address on the Access Control List cannot access the AP 300 / LP.



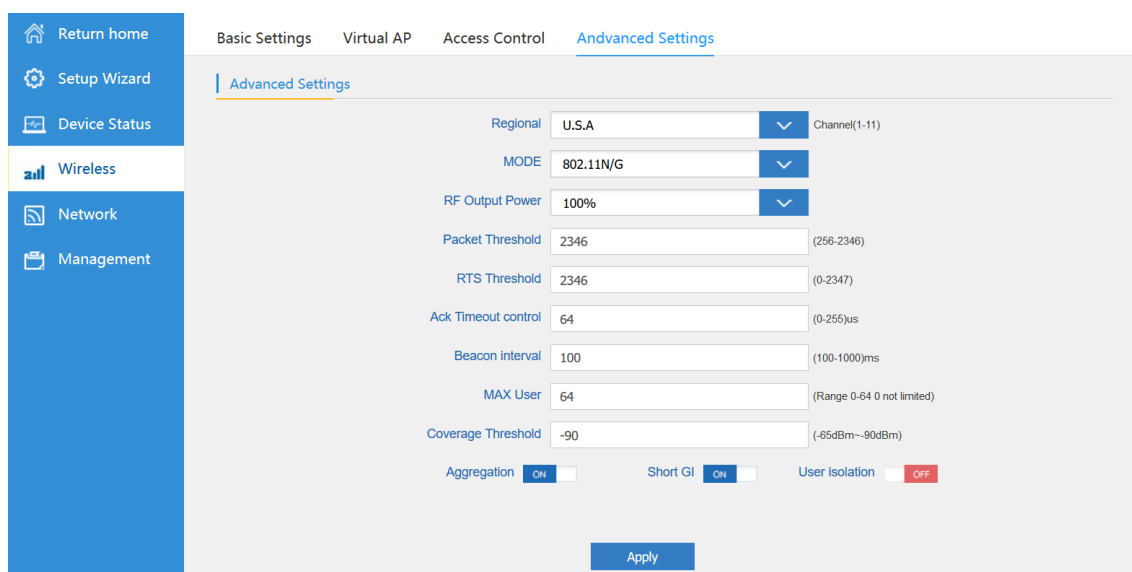
- **Association STA list:** In this list will appear the already connected MAC to the device. You can select them and press import to move them to the Access Control List.

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

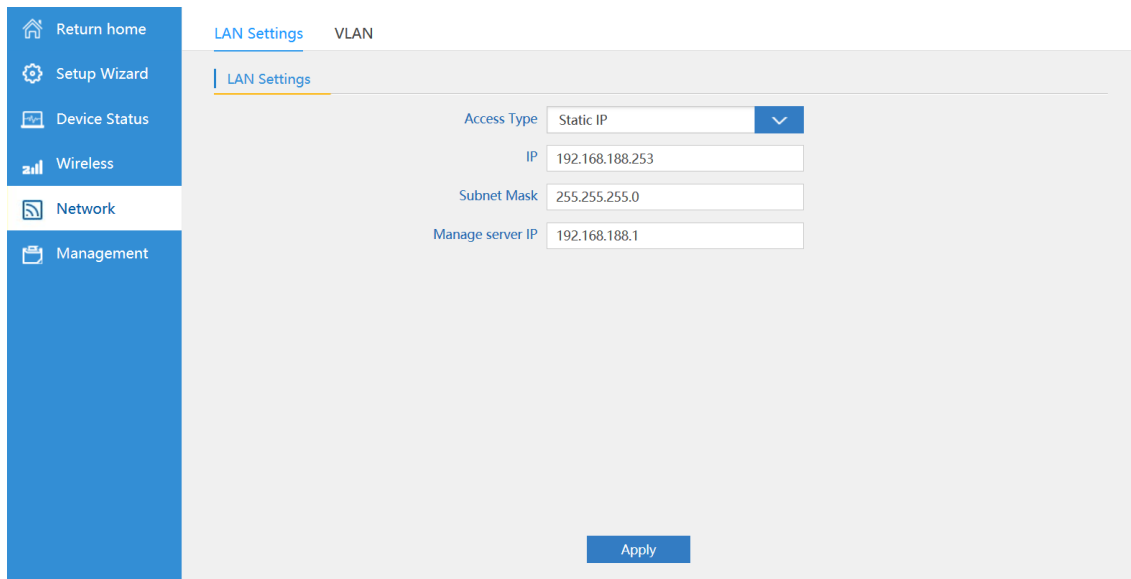
This tab is used to configure all the Wireless advanced settings.



- **Regional:** Select the region
- **MODE:** Select the standard for the Wireless N/G or B/G
- **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 device 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 send 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

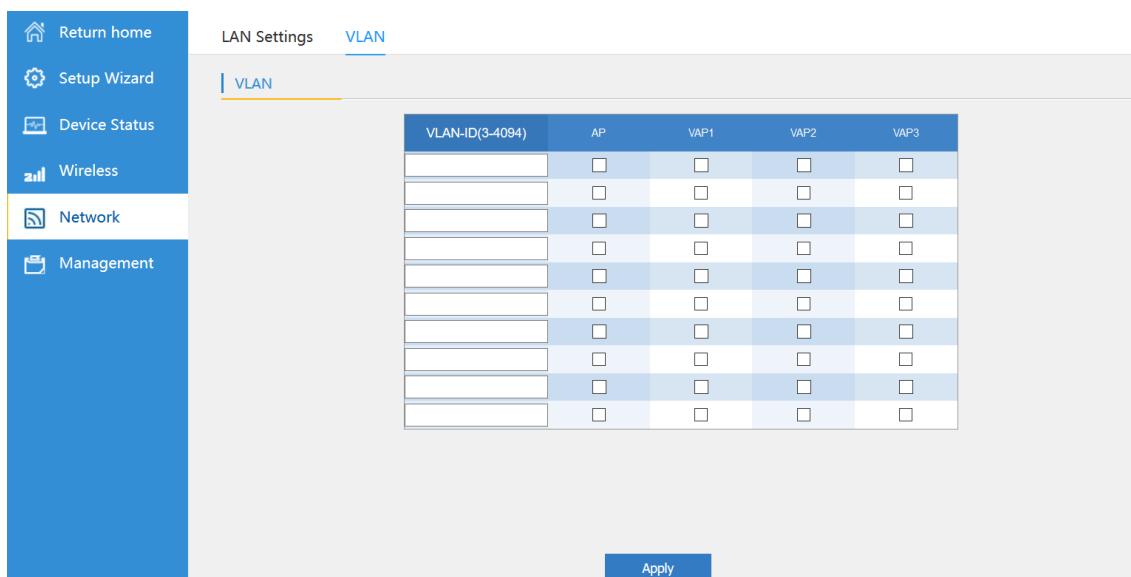


The screenshot shows the LAN Settings configuration page. On the left is a navigation menu with options: Return home, Setup Wizard, Device Status, Wireless, Network (highlighted), and Management. The main content area has tabs for LAN Settings and VLAN. Under LAN Settings, there are four input fields: Access Type (Static IP), IP (192.168.188.253), Subnet Mask (255.255.255.0), and Manage server IP (192.168.188.1). An Apply button is at the bottom.

- **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.



The screenshot shows the VLAN configuration page. On the left is the same navigation menu as in the LAN Settings page. The main content area has tabs for LAN Settings and VLAN. Under the VLAN tab, there is a table with 10 rows and 5 columns. The columns are labeled: VLAN-ID(3-4094), AP, VAP1, VAP2, and VAP3. Each cell in the table contains a checkbox. An Apply button is at the bottom.

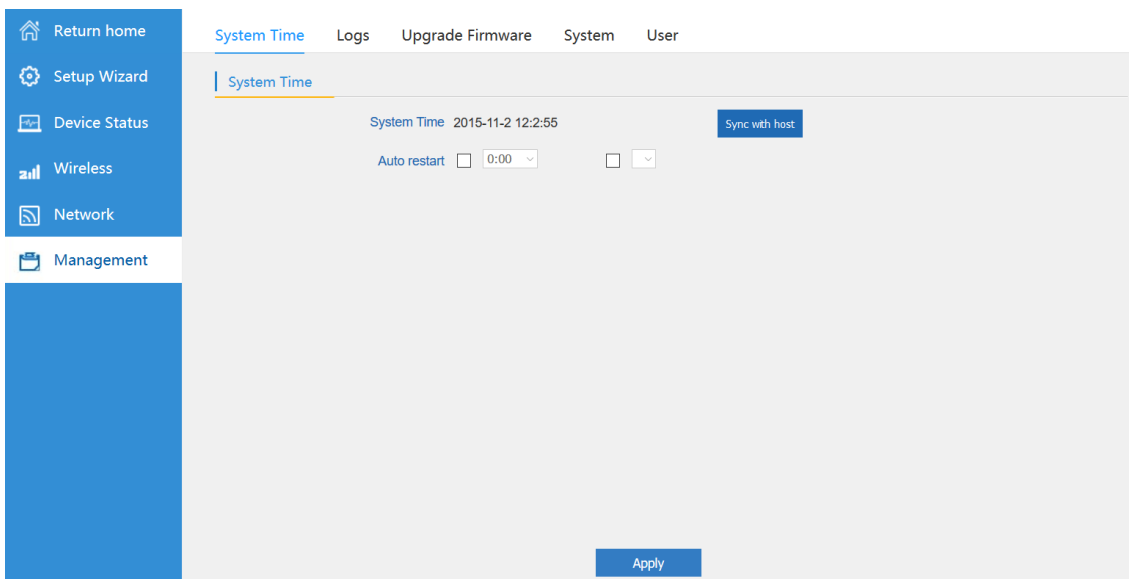
VLAN-ID(3-4094)	AP	VAP1	VAP2	VAP3
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>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

Management

System Time

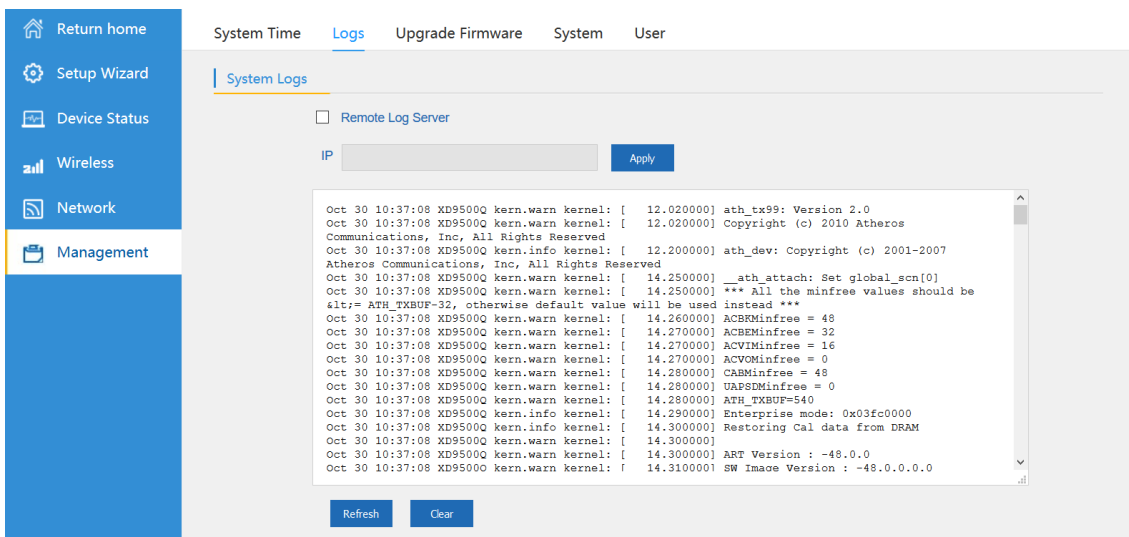
Manage the device timezone.

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.

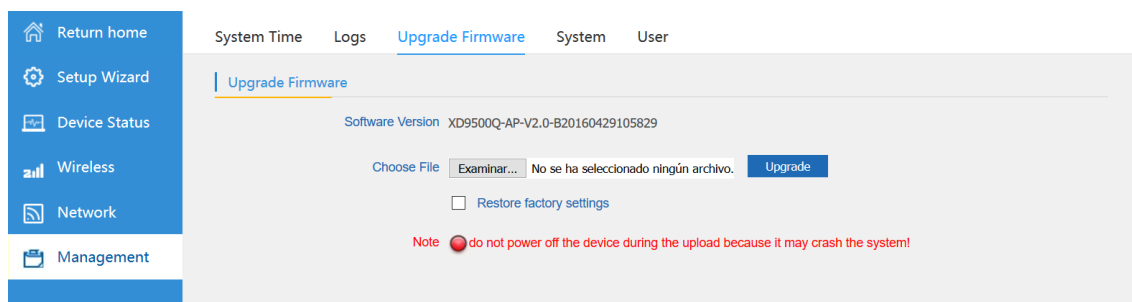


- Remote Log Server: Enable to register the logs to a remote server.
- IP: Set the IP where the logs will be saved.

Upgrade firmware

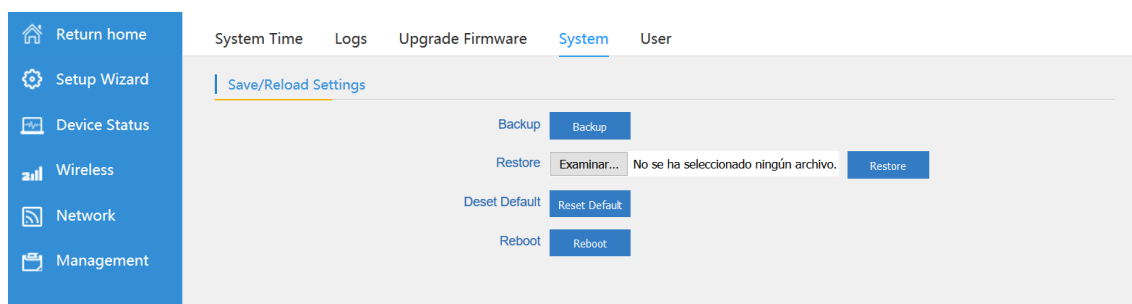
Select the new firmware version file and press “Upgrade” to upgrade the device firmware.

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



The screenshot shows the 'Upgrade Firmware' page. On the left is a navigation menu with options: Return home, Setup Wizard, Device Status, Wireless, Network, and Management. The main content area has a breadcrumb trail: System Time > Logs > Upgrade Firmware > System > User. Below this, the page title is 'Upgrade Firmware'. The current software version is 'XD9500Q-AP-V2.0-B20160429105829'. There is a 'Choose File' section with an 'Examinar...' button and the text 'No se ha seleccionado ningún archivo.' followed by an 'Upgrade' button. Below this is a checkbox for 'Restore factory settings'. A red note at the bottom states: 'Note do not power off the device during the upload because it may crash the system!'.

System

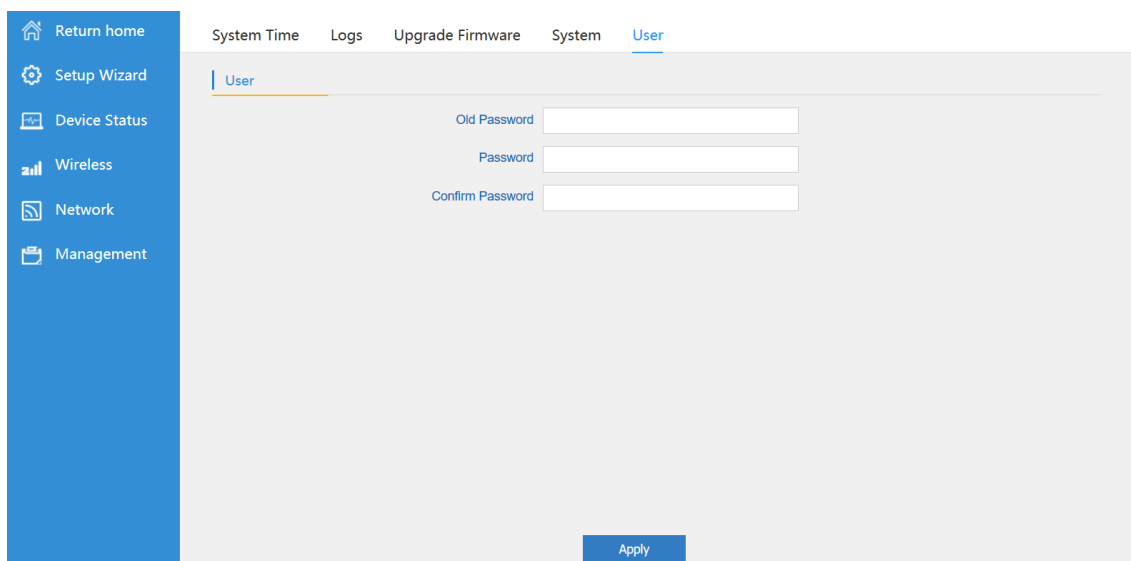


The screenshot shows the 'System' page. The navigation menu on the left is the same as in the previous screenshot. The breadcrumb trail is: System Time > Logs > Upgrade Firmware > System > User. The page title is 'System'. Below this, the sub-page title is 'Save/Reload Settings'. There are four main sections: 'Backup' with a 'Backup' button; 'Restore' with an 'Examinar...' button, the text 'No se ha seleccionado ningún archivo.', and a 'Restore' button; 'Deset Default' with a 'Reset Default' button; and 'Reboot' with a 'Reboot' button.

- **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 a web interface for configuring the user. On the left is a blue sidebar with navigation options: Return home, Setup Wizard, Device Status, Wireless, Network, and Management. The top navigation bar includes System Time, Logs, Upgrade Firmware, System, and User. The main content area is titled 'User' and contains three input fields: 'Old Password', 'Password', and 'Confirm Password'. An 'Apply' button is located at the bottom right of the form.

System Time Logs Upgrade Firmware System User

User

Old Password

Password

Confirm Password

Apply

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