

User's Guide

**TRENDNET**<sup>®</sup>



**AC1200 Dual Band PoE Access Point**

**TEW-821DAP**

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## Product Overview



**TEW-821DAP**

## Package Contents

In addition to your router, the package includes:

- TEW-821DAP
- 5 ft. (1.5 m) network cable
- CD-ROM (Utility and User's Guide)
- Quick Installation Guide
- Power adapter (12V DC, 1A)
- Mounting bracket

If any package contents are missing or damaged, please contact the retail store, online retailer, or reseller/distributor from which the product was purchased.

## Features

TRENDnet's high performance AC1200 Dual Band Wireless PoE Access Point, model TEW-821DAP, supports Access Point (AP), Client, Wireless Distribution System (WDS) AP, WDS Bridge, WDS Station, and Repeater modes. It generates concurrent 867 Mbps WiFi AC and 300 Mbps WiFi N networks. The included Windows-based software controller manages multiple TEW-821DAPs and reduces WiFi management and troubleshooting time. It features advanced access control, QoS, traffic management, band steering, and captive portal support. The low profile blends into most environments and a mounting plate eases installation.

### Multi-Language

Multi-Language Interface: English, Spanish, French, German, and Russian

### Power over Ethernet (PoE)

Saves remote location installation time and costs with Gigabit PoE support (Optional power port for non-PoE installations)

### Concurrent Dual Band

AC1200: concurrent 867 Mbps WiFi AC + 300 Mbps WiFi N bands

### Multi-Mode Support

Supports Access Point (AP), Client, WDS AP, WDS Bridge, WDS Station, and Repeater modes for each WiFi band independently

### Software Controller

The included Windows-based Software Controller manages multiple TEW-821DAPs and reduces WiFi configuration, management, and troubleshooting time

### Gigabit Port

Gigabit PoE LAN port maintains high performance connections to the wired network

### Wireless Coverage

Extended wireless coverage with MIMO antenna technology

### Encrypted Wireless

Support for wireless encryption of up to WPA2

### Band Steering

Band steering alleviates network congestion by automatically directing wireless devices from the 2.4 GHz band to the 5 GHz band

### WiFi Traffic Shaping

Manage traffic allocation per VLAN for each band separately

### Multiple SSIDs

Create up to 8 SSIDs per band (16 total)

### Targeted Beamforming

Increased real-time performance by directing stronger wireless signals to your specific location

### IPv6

IPv6 network support

### Low Profile

Off white low profile shape blends into most environments

### LED Control

Further reduce product visibility by turning off LED indicators

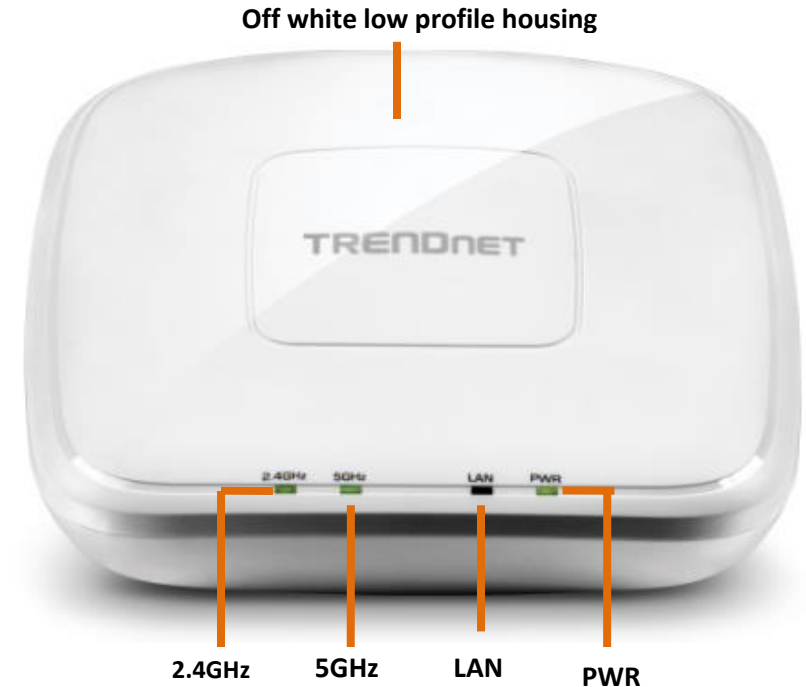
### Mounting Plate

Mounting plate reduces installation time

\*Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions.

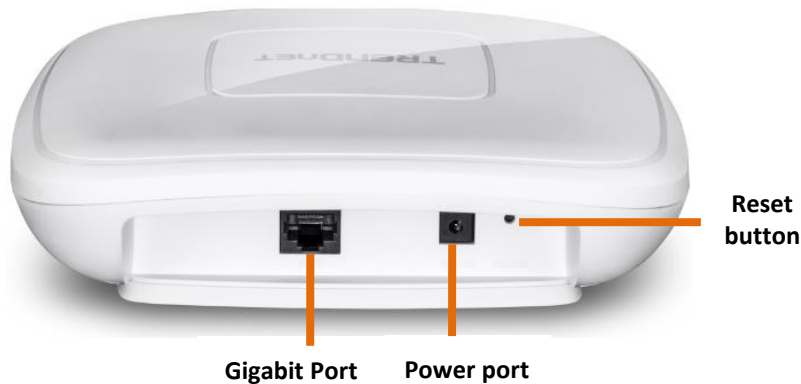
## Product Hardware Features

### Top View



- **2.4GHz:** This LED indicator turns green when the wireless is enabled. The LED indicator blinks during data transmission
- **5GHz:** This LED indicator turns green when the wireless is enabled. The LED indicator blinks during data transmission
- **LAN:** This LED indicator turns green when the access point LAN port is connected. The LED indicator blinks during data transmission
- **PWR:** This indicator turns green when the device is powered.

## Front View



- **Gigabit port:** Plug an Ethernet cable (also called network cables) from your access point to your router and wired network devices.
- **Power port:** Connect the power adapter from your access point power port to an available power outlet.
- **Reset button:** Use a sharp tool to press and hold this button for 10 seconds to reset the access point.

Application Diagram

The access point provides concurrent 867 Mbps and WiFi AC and 300 Mbps WiFi N combined with AP, Client, WDS and Repeater modes support multiple applications.

Connect wireless devices to your access point

A variety of wireless network devices can connect to your wireless network such as:

- Wireless Laptop computers
- Network media players
- Wireless IP cameras
- Smart Phones
- Gaming Consoles
- Internet enabled TVs

Each device may have its own software utility for searching and connecting to available wireless networks, therefore, you must refer to the User's Manual/Guide of your wireless client device to determine how to search and connect to this router's wireless network.

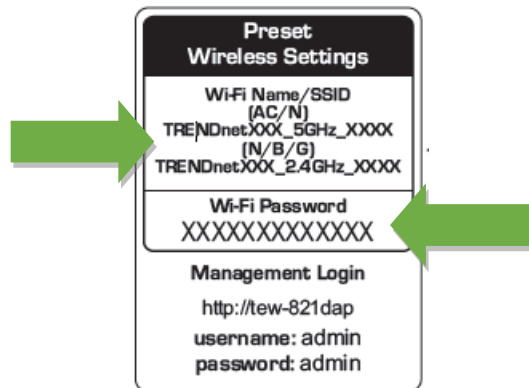
See the "Appendix" on [page 53](#) for general information on connecting to a wireless network.

## Getting Started

For a typical wireless setup at home or office when using the access point in AP mode, please do the following:

### Installation

1. Connect the power adapter to the power port of the access point. Or simply plug an Ethernet cable on the access point to a PoE (Power over Ethernet) switch that connects to your router or network.
2. If using the power adapter, plug an Ethernet cable to the access point and plug the other end to your router or network.
3. Verify that all LEDs are on.
4. For your security, each TEW-821DAP comes pre-encrypted with a unique WiFi Name (SSID) and WiFi Password. You can find your device's SSID and WiFi password on the white labels located on the device. Use this information to connect to the TEW-821DAP access point.



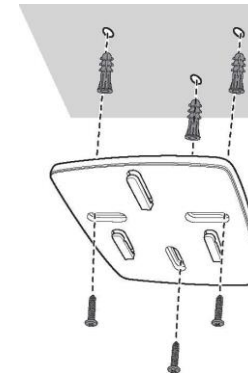
5. Verify your connection to you network by accessing the Internet. For advanced configuration continue to the advanced sections of the user manual.

### Mounting device

1. Remove the mount plate from the access point.



2. Place the mounting plate on the wall or ceiling where the device will be located and mark the location of the screw holes. Ensure that the device has enough clearance to slide on and off the mounting plate.
3. Drill out the marked holes and insert the plastic wall anchors in to the wall.
4. Secure the mounting plate using the screws that came with the device.



5. Place the access point on the mounting plate and slide to lock into position.



### **Steps to improve wireless connectivity**

There are a number of factors that can impact the range of wireless devices. Follow these tips to help improve your wireless connectivity:

1. Keep the number of obstructions to a minimum. Each obstruction can reduce the range of a wireless device. Position the wireless devices in a manner that will minimize the amount of obstructions between them.
  - a. For the widest coverage area, install your router near the center of your home, and near the ceiling, if possible.
  - b. Avoid placing the router on or near metal objects (such as file cabinets and metal furniture), reflective surfaces (such as glass or mirrors), and masonry walls.
  - c. Any obstruction can weaken the wireless signal (even non-metallic objects), so the fewer obstructions between the router and the wireless device, the better.
  - d. Place the router in a location away from other electronics, motors, and fluorescent lighting.
  - e. Many environmental variables can affect the router's performance, so if your wireless signal is weak, place the router in several locations and test the signal strength to determine the ideal position.
2. Building materials can have a large impact on your wireless signal. In an indoor environment, try to position the wireless devices so that the signal passes through less dense material such as dry wall. Dense materials like metal, solid wood, glass or even furniture may block or degrade the signal.
3. Antenna orientation can also have a large impact on your wireless signal. Use the wireless adapter's site survey tool to determine the best antenna orientation for your wireless devices.
4. Interference from devices that produce RF (radio frequency) noise can also impact your signal. Position your wireless devices away from anything that generates RF noise, such as microwaves, radios and baby monitors.

If possible, upgrade wireless network interfaces (such as wireless cards in computers) from older wireless standards to 802.11n. If a wirelessly networked device uses an older standard, the performance of the entire wireless network may be slower. If you are still experiencing low or no signal consider repositioning the wireless devices or installing additional access points.



## Connect wireless devices to your access point

A variety of wireless network devices can connect to your wireless network such as:

- Gaming Consoles
- Internet enabled TVs
- Network media players
- Smart Phones
- Wireless Laptop computers
- Wireless IP cameras

Each device may have its own software utility for searching and connecting to available wireless networks, therefore, you must refer to the User's Manual/Guide of your wireless client device to determine how to search and connect to this router's wireless network.

See the "[Appendix](#)" on page 63 for general information on connecting to a wireless network.

## Configuration

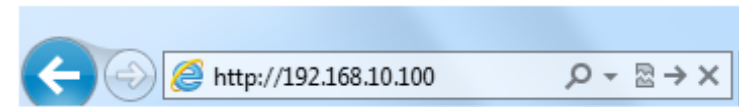
**Note:** The access point's default management page <http://192.168.10.100> is accessed through the use of your Internet web browser (e.g. Internet Explorer, Firefox, Chrome, Safari, and Opera) and will be referenced frequently in this User's Guide.

Before accessing the web-based management page, configure the IP address and subnet mask of your computer to the following:

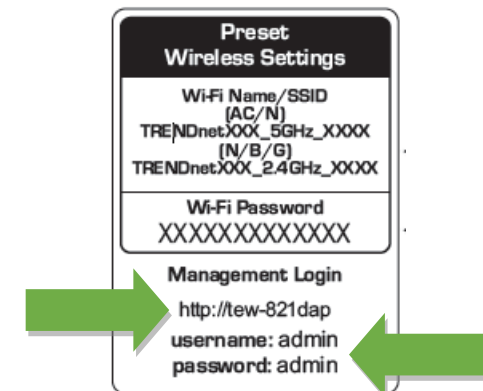
IP Address: 192.168.10.xxx

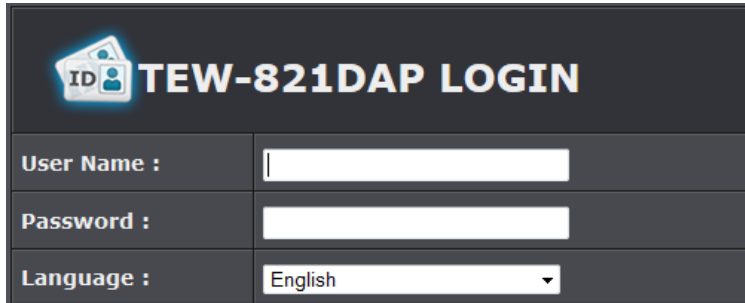
Subnet Mask: 255.255.255.0

1. Open your web browser (e.g. Internet Explorer, Firefox, Safari, Chrome, or Opera) and go to <http://tew-821dap> or type in <http://192.168.10.100>.



2. Enter the default user name and password and then click **Login**. You can find your device's SSID and WiFi password on the white labels located on the device. Use this information to connect to the TEW-821DAP access point.





The login screen features a header with a house icon and the text 'TEW-821DAP LOGIN'. Below the header are three input fields: 'User Name :', 'Password :', and 'Language :'. The 'Language' field is a dropdown menu currently set to 'English'.

**Wizard**

1. For the first time logging into the device the setup wizard will start automatically.
2. Your security the first step is to change the login password of the access point. Enter your new login password and click OK.



The 'Administrator Settings' screen has three rows of input fields: 'Account' (with 'admin' entered), 'New Password', and 'Verify Password'. A red note next to the 'New Password' field says '(Max: 16 characters)'.

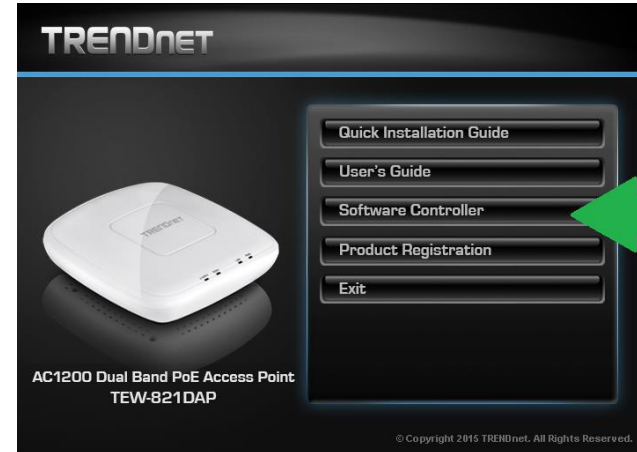
3. Your new password settings will be applied and you will be redirected to the login screen. You will need to use the new login password to proceed.



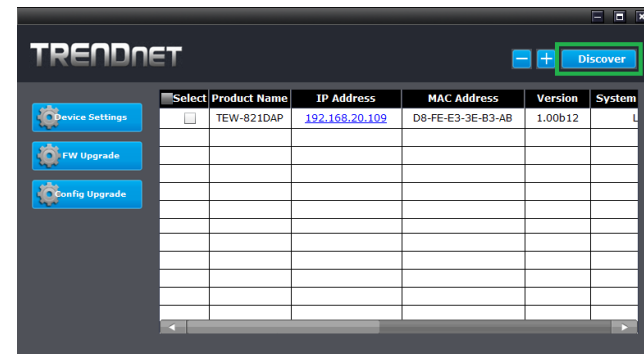
**Using the utility**

For additional information on the utility please go to software controller section.

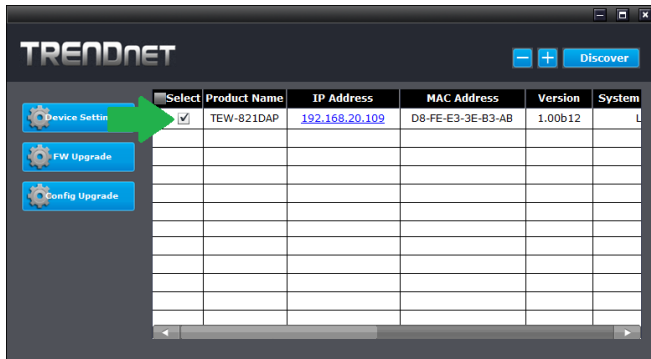
1. Insert the CD ROM included with the access point.
2. Click on Software controller to install the utility.



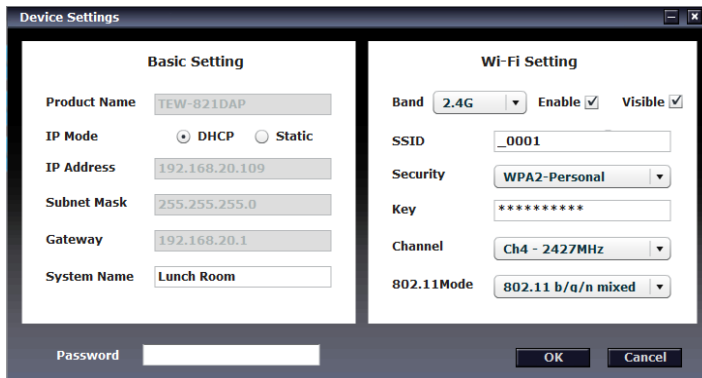
3. Once the utility is installed click on Discover to refresh the list of access points.



4. Select the access point you want to configure.



5. Click on Device settings to configure the access point.



- **Product Name:** Displays the device model
- **IP Mode:** Select the IP mode to apply on the device
  - **DHCP:** Select this option to allow the device to receive IP address from your DHCP server
  - **Static:** Select this option to manually set the IP address of the device
    - **IP Address:** Enter the IP address to assign to the device
    - **Subnet Mask:** Enter the subnet mask to assign to the device
    - **Gateway:** Enter the gateway IP address to assign to the device
- **System Name:** Assign name of the device to help distinguish between similar devices
- **Band:** Select on the pull down menu the wireless interface to configure
- **Enable:** Select this option to enable the selected wireless interface
- **Visible:** Select this option to wireless broadcast the selected wireless interface

- **SSID:** Enter the SSID (Wireless Network Name) of the selected wireless interface
- **Security:** Select the wireless encryption security for to assign the selected wireless interface
- **Key:** Enter the wireless encryption security key or password
- **Channel:** Select the wireless channel of the selected wireless interface
- **802.11 Mode:** Select the 802.11 mode of the selected wireless interface
- **Password:** Enter the login password of the device and click OK to save settings.

## Wireless Networking and Security

### How to choose the type of security for your wireless network

Setting up wireless security is very important. Leaving your wireless network open and unsecured could expose your entire network and personal files to outsiders. TRENDnet recommends reading through this entire section and setting up wireless security on your new router.

There are a few different wireless security types supported in wireless networking each having its own characteristics which may be more suitable for your wireless network taking into consideration compatibility, performance, as well as the security strength along with using older wireless networking hardware (also called legacy hardware). It is strongly recommended to enable wireless security to prevent unwanted users from accessing your network and network resources (personal documents, media, etc.). In general, it is recommended that you choose the security type with the highest strength and performance supported by the wireless computers and devices in your network. Please review the security types to determine which one you should use for your network.

#### Wireless Encryption Types

- **WEP:** Legacy encryption method supported by older 802.11b/g hardware. This is the oldest and least secure type of wireless encryption. It is generally not recommended to use this encryption standard, however if you have old 802.11 b or 802.11g wireless adapters or computers with old embedded wireless cards (wireless clients), you may have to set your router to WEP to allow the old adapters to connect to the router.  
*Note: This encryption standard will limit connection speeds to 54Mbps.*
- **WPA:** This encryption is significantly more robust than the WEP technology. Much of the older 802.11g hardware was upgraded (with firmware/driver upgrades) to support this encryption standard. Total wireless speeds under this encryption type however are limited to 54Mbps.
- **WPA-Auto:** This setting provides the router with the ability to detect wireless devices using either WPA or WPA2 encryption. Your wireless network will automatically change the encryption setting based on the first wireless device connected. For example, if the first wireless client that connects to your wireless network uses WPA encryption your wireless network will use WPA encryption. Only when all wireless clients disconnect to the network and a wireless client with WPA2 encryption connects your wireless network will then change to WPA2 encryption.

*Note: WPA2 encryption supports 802.11n speeds and WPA encryption will limit your connection speeds to 54Mbps*

- **WPA2:** This is the most secure wireless encryption available today, similar to WPA encryption but more robust. This encryption standard also supports the highest connection speeds. TRENDnet recommends setting your router to this encryption standard. If you find that one of your wireless network devices does not support WPA2 encryption, then set your router to either WPA or WPA-Auto encryption.

*Note: Check the specifications of your wireless network adapters and wireless appliances to verify the highest level of encryption supported. Below is brief comparison chart of the wireless security types and the recommended configuration depending on which type you choose for your wireless network.*

Security Standard	WEP	WPA	WPA2
<b>Compatible Wireless Standards</b>	IEEE 802.11a/b/g (802.11n devices will operate at 802.11g to connect using this standard)	IEEE 802.11a/b/g (802.11n devices will operate at 802.11g to connect using this standard)	IEEE 802.11a/b/g/n
<b>Highest Performance Under This Setting</b>	Up to 54Mbps	Up to 54Mbps	Up to 450Mbps (11n) and up to 1.3Gbps (11ac)*
<b>Encryption Strength</b>	Low	Medium	High
<b>Additional Options</b>	Open System or Shared Key, HEX or ASCII, Different key sizes	TKIP or AES, Preshared Key or RADIUS	TKIP or AES, Preshared Key or RADIUS
<b>Recommended Configuration</b>	Open System ASCII 13 characters	TKIP Preshared Key 8-63 characters	AES Preshared Key 8-63 characters

\*Dependent on the maximum 802.11n/ac data rate supported by the device (150Mbps, 300Mbps, 450Mbps, 867Mbps, or 1.3Gbps)

## Secure your wireless network

Wireless (2.4GHz or 5GHz) > Security

After you have determined which security type to use for your wireless network (see [“How to choose the security type for your wireless network”](#) on page 12), you can set up wireless security.

1. Log into your router management page (see [“Access the management page”](#) on page 16).

WEP Key Format	HEX	ASCII
Character set	0-9 & A-F, a-f only	Alphanumeric (a,b,C,?,*,/,1,2, etc.)
64-bit key length	10 characters	5 characters
128-bit key length	26 characters	13 characters

2. Click on the Wireless network you want to configure button (Wireless 2.4GHz or 5GHz).

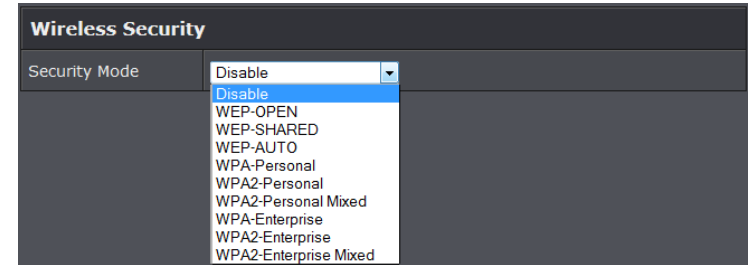


3. Underneath the basic wireless band section, you will see **Wireless Network** and all your wireless network profiles will be listed.

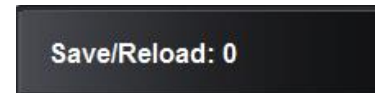
4. Click on the Edit button next to the wireless profile you want to configure.

Current Profiles			
Enable	SSID	Security Mode	Edit
<input checked="" type="checkbox"/>	_0001	WPA2-PSK AES	<input type="button" value="Edit"/>
<input checked="" type="checkbox"/>	1234	WPA2-PSK AES	<input type="button" value="Edit"/>

5. Select from the drop-down list to the wireless security to configure.



6. Click on Save/Reload button located on the top left section to apply settings.

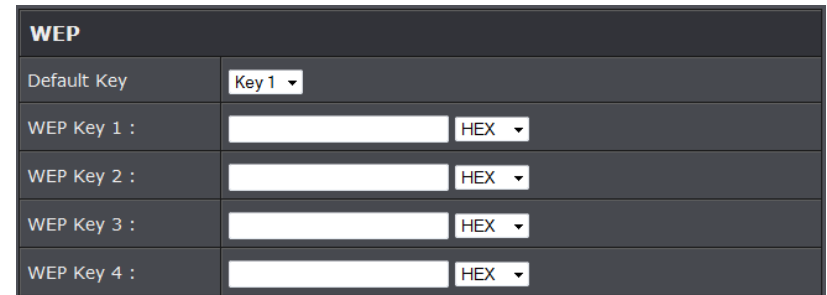


**Selecting WEP-OPEN, WEP-SHARED:** If selecting **WEP** (Wired Equivalent Privacy), please review the WEP settings to configure and click **Apply** to save the changes.

**Note:** WPS functionality is not available when using WEP.

In the **Security Mode** drop-down list, select **WEP-OPEN** or **WEP-SHARED**.

**Note:** It is recommended to use **WEP-OPEN** because it is known to be more secure than **Shared Key**.



- **Default Key:** Select the WEP Key from the drop down list to use
- **Network Key 1-4**
  - This is where you enter the WEP key needed for a computer to connect to the router wirelessly

- You can define up to 4 passwords or 4 keys. Only one key can be active at a given time. Most users simply define one key.
- Choose a key index 1, 2, 3, or 4 and enter the key.
- When connecting to the router, the client must match both the password and the Key number. (e.g. if you have activated Key 2 with a password of 12345, then the client must select: Key 2 (entering Key 1, 3, or 4 will block the ability to connect) and enter password 12345)

**Note:** It is recommended to use 128-bit format because it is more secure to use a key that consists of more characters.

- **HEX or ASCII:** Select which WEP code type to assign

**Selecting WPA- Personal, WPA2- Personal, WPA2- Personal, or Mixed (WPA2-PSK recommended):** In the **Security Mode** drop-down list, select **WPA- Personal**

WPA	
WPA Cipher	AES
Pre-Shared Key :	1234567890
Key Update Interval :	3600 seconds

The following section outlines options when selecting **WPA-Personal, WPA2- Personal, or WPA2- Personal Mixed (Preshared Key Protocol)**,

- **WPA Cipher:** Select a Cipher Type to use. When selecting **WPA-PSK** security, it is recommended to use **TKIP + AES**.
  - When selecting **WPA2- Personal Mixed** security, it is recommended to use **TKIP+AES**.
  - When selecting **WPA2- Personal** security, it is recommended to use **AES**.
- **Pre-Shared Key:** Enter the passphrase or password
  - This is the password or key that is used to connect your computer to this router wirelessly

**Note:** 8-63 alphanumeric characters (a,b,c,?,\*,/,1,2, etc.)
- **Key Update Interval:** Enter the time interval (seconds) of when the network passphrase will rotate.
 

**Note:** It is recommended to use the default interval time. Your passphrase will not change, rotation of the key is part of the WPA protocol and designed to increase security.

**Selecting WPA-Enterprise, WPA2-Enterprise, or WPA2-Enterprise Mixed:**

WPA	
WPA Cipher	AES
Key Update Interval :	3600 seconds
Radius Server	
IP Address :	0.0.0.0
Port :	1812
Shared Secret :	

The following section outlines options when selecting **WPA-Enterprise, WPA2-Enterprise or WPA2-Enterprise Mixed** known as EAP (Extensible Authentication Protocol). Also known as called Remote Authentication Dial-In User Service or **RADIUS**.

**Note:** This security type requires an external RADIUS server, PSK only requires you to create a passphrase.

- **WPA Cipher:** Select a Cipher Type to use. When selecting **WPA-PSK** security, it is recommended to use **TKIP + AES**.
- **Key Update Interval:** Enter the time interval (seconds) of when the network passphrase will rotate.
 

**Note:** It is recommended to use the default interval time. Your passphrase will not change, rotation of the key is part of the WPA protocol and designed to increase security.
- **IP Address:** Enter the IP address of the RADIUS server. (e.g. 192.168.10.250)
- **Port:** Enter the port your RADIUS server is configured to use for RADIUS authentication.
 

**Note:** It is recommended to use port 1812 which is typical default RADIUS port.
- **Shared Secret:** Enter the shared secret used to authorize your router with your RADIUS server.

## Connect wireless devices using WPS

WPS (Wi-Fi Protected Setup) is a feature that makes it easy to connect devices to your wireless network. If your wireless devices support WPS, you can use this feature to easily add wireless devices to your network.

**Note:** You will not be able to use WPS if you set the SSID Broadcast setting to Disabled or if you are using WEP security.

There are two methods the WPS feature can easily connect your wireless devices to your network.

- Push Button Configuration (PBC) method
  - WPS Software/Virtual Push Button - located in router management page
- PIN (Personal Identification Number) Method - located in router management page

**Note:** Refer to your wireless device documentation for details on the operation of WPS.

For connecting additional WPS supported devices, repeat this process for each additional device.

### PBC (Software/Virtual Push Button)

Wireless (2.4GHz or 5GHz) > WPS

In addition to the hardware push button located physically on your router, the router management page also has push button which is a software or virtual push button you can click to activate WPS on your router.

1. Log into your router management page (see "[Access the management page](#)" on page 16).
2. Click on the Wireless network you want to configure button (Wireless 2.4GHz or 5GHz) and click **WPS**.



3. Click on WPS to configure the selected wireless band's WPS feature. Click Apply to save settings
4. Click on Save/Reload button located on the top left section to apply settings.

Save/Reload: 0

### WPS Config

WPS Config	
WPS	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
WPS External Registrar Lock	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

- **WPS:** Select enable to turn on WPS feature
- **WPS External Registrar Lock:** Select to enable or disable external registrar feature on the select wireless band.

### WPS Summary

WPS Summary	
WPS Current Status	Idle
WPS Configured	Yes
WPS SSID	_0001
WPS Security Mode	WPA2-PSK AES
WPS Key	1234567890
AP PIN	12345678

- **WPS Current Status:** Displays the status of WPS feature on the selected wireless band
- **WPS Configure:** Displays the configured mode of the WPS feature
- **WPS SSID:** Displays the SSID of the WPS network
- **WPS Security Mode:** Display the security mode of the WPS network
- **WPS Key:** Displays the security password
- **AP PIN:** Display the WPS PIN information.



## WPS Action

WPS Action	
If you are using the Virtual Push Button method, click Start Push Button, then push and activate WPS on your wireless client device. If you are using the PIN method, enter the wireless client device PIN in the field and click Start PIN, then activate the WPS PIN method on your wireless client device.	
PIN	<input type="text"/> <input type="button" value="Start PIN"/>
PBC	<input type="button" value="Start Push Button"/>

- PIN:** Enter the PIN information of the wireless client you want to connect to the network. Click Start PIN button to activate WPS once you enter the client's PIN information  
**Note:** You may need to initiate the WPS PIN on your wireless device first when using this method. Refer to your wireless device documentation for details on the operation of WPS.
- PBC:** Click **Start Push Button** to activate WPS PBC configuration.

## Advance configuration

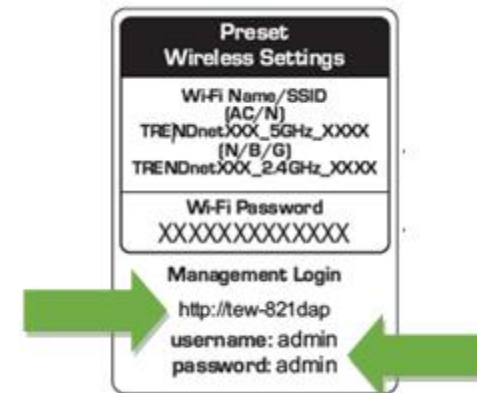
Access the management page

**Note:** Your router management page URL/domain name `http://TEW-821DAP` or IP address `http://192.168.10.100` is accessed through the use of your Internet web browser (e.g. Internet Explorer, Firefox, Chrome, Safari, Opera) and will be referenced frequently in this User's Guide.

- Open your web browser (e.g. Internet Explorer, Firefox, Safari, Chrome, or Opera) and go to URL/domain name `http://TEW-821DAP` or IP address `http://192.168.10.100`. Your router will prompt you for a user name and password.

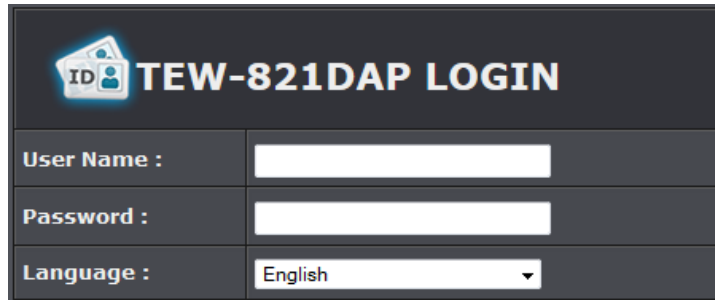


- You can find the **Password** on a sticker on the side of the router and on the label on the bottom of the router.



- Enter your **Username** and **Password**, select your preferred language, and then click **Login**.





The login form for the TEW-821DAP device. It features a header with the device ID icon and the text 'TEW-821DAP LOGIN'. Below the header are three input fields: 'User Name' with a text box, 'Password' with a text box, and 'Language' with a dropdown menu currently set to 'English'.

## Operating Modes

This section outlines the available operating modes available on the access point.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on **System** and **Operation Modes**.



3. Select the operating mode to apply on each wireless band.

Device Name	
Operation Mode	<b>2.4GHz Configuration</b> <input checked="" type="radio"/> Access Point <input type="radio"/> Client Bridge <input type="radio"/> WDS Access Point <input type="radio"/> Repeater <input type="radio"/> WDS Bridge <input type="radio"/> WDS Station
	<b>5GHz Configuration</b> <input checked="" type="radio"/> Access Point <input type="radio"/> Client Bridge <input type="radio"/> WDS Access Point <input type="radio"/> Repeater <input type="radio"/> WDS Bridge <input type="radio"/> WDS Station

- **Access Point:** In this mode the device creates a wireless network to your existing network.
- **Client Bridge:** Select this mode to allow the access point the ability to wireless connect to your wireless network. This is similar to a wireless laptop or mobile device connecting to a wireless network.
- **WDS Access Point:** In the mode the access point connects to other WDS bridge enable devices for backbone communication and provides wireless connection to clients (STAs) at the same time.
- **WDS Bridge:** When this mode is selected the access point connects ONLY to other WDS bridge enabled devices and local networks (the other wireless interface and Ethernet interface) as a wireless backbone bridge.
- **WDS Station:** The wireless interface connects to other WDS bridge enabled devices for backbone communication and connects to other wireless access points at the same time. Use this mode to pair with the next hop access point as a WDS network outlet.  
*Note: Please note that only one bridge can be set up on 2.4GHz or 5.0GHz band, but not both.*
- **Repeater:** In this mode, the wireless interface repeats wireless signal and packets for backbone communication as well as a client access. This feature is used to expand your existing wireless network to areas that your current access point is unable to reach. Make sure all of the settings of the wireless interface matches to your root or connecting wireless access points, same SSID, channel and wireless encryption settings.

## Access Point

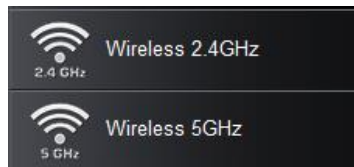


### Basic

Wireless (2.4GHz or 5GHz) > Wireless Network

This section outlines the available features to configure for both wireless 2.4GHz and 5GHz when Access Point mode is selected.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless Network**.



3. Configure the below settings and click Apply to save settings.

Wireless Mode	2.4GHz 802.11 b/g/n mixed mode
Channel Width	Auto 20/40 MHz
Extension Channel	Auto
Frequency (Channel)	Ch4 - 2427MHz
AP Detection	Scan

4. Click on Save/Reload button located on the top left section to apply settings.

Save/Reload: 0

- **Wireless Mode:** If all of the wireless devices you want to connect with this Access Point can connect in the same transmission mode, you can improve performance slightly by choosing the appropriate mode. If you have some devices that use a different transmission mode, choose the appropriate mode.

#### 2.4GHz Wireless

- **B/G/N mixed:** Select this mode for the best compatibility. This mode allows older 802.11b and 802.11g wireless devices to connect to the router in addition to newer 802.11n devices.
- **B/G mixed:** This mode only allows devices to connect to the router using older and slow 802.11b or 802.11g technology and it thereby reduces the router's maximum speed to 54Mbps (typically not recommended).
- **N only:** This mode only allows newer 802.11n devices to connect to your router. This mode does ensure the highest speed and security for your network, however if you have older 802.11g wireless clients, they will no longer be able to connect to this router.
- **G only:** This mode only allows devices to connect to the router using older and slow 802.11g technology (typically not recommended).
- **B only:** This mode only allows devices to connect to the router using older and slow 802.11b technology (typically not recommended).

**Note:** Please check the specifications on your wireless devices for the highest wireless capability supported first before applying these settings. If you are unsure, it is recommended that you keep the default setting (B/G/N mixed) for the best compatibility.

#### 5GHz Wireless

- **A only:** This mode only allows devices to connect to the router using older and slow 802.11a technology (typically not recommended).
- **A/N mixed:** This mode only allows devices to connect to the router using older and slow 802.11a or 802.11n technology and it thereby reduces the router's maximum speed to 54Mbps (typically not recommended).
- **N only:** This mode only allows newer 802.11n devices to connect to your router. This mode does ensure the highest speed and security for your network, however if you have older 802.11a wireless clients, they will no longer be able to connect to this router.
- **N/AC mixed:** Select this mode for the best compatibility. This mode allows older 802.11a wireless devices to connect to the router in addition to newer 802.11ac devices.

- **AC only:** This mode only allows devices to connect to the router using newer and faster 802.11ac technology (typically not recommended).
- **A/N/AC mixed:** Select this mode for the best compatibility. This mode allows older 802.11a and 802.11n wireless devices to connect to the router in addition to newer 802.11ac devices.

**Note:** Please check the specifications on your wireless devices for the highest wireless capability supported first before applying these settings. If you are unsure, it is recommended that you keep the default setting (B/G/N mixed) for the best compatibility.

When applying the 802.11 mode setting, please keep in mind the following:

- Wireless devices that support 802.11n are backwards compatible and can connect wirelessly at 802.11g or 802.11b.
- Connecting at 802.11b or 802.11g will limit the capability of your 802.11n supported wireless devices from obtaining higher performance and data rates.
- Allowing 802.11b or 802.11g devices to connect to an 802.11n capable wireless network may degrade the wireless network performance below the higher performance and data rates of 802.11n.
- Wireless devices that only support 802.11b or 802.11g will not be able to connect to a wireless network that is set to 802.11n only mode.
- Wireless devices that only support 802.11b will not be able to connect to a wireless network that is set to 802.11g only mode.
- **Channel Width: Extension channel:** When 20/40 channel bandwidth has been chosen, you should select extension channel to get higher throughput.
- **Frequency (Channel):** In North America, this router can broadcast on 1 of 11 Channels for 2.4GHz (13 in Europe and other countries). Selecting the Auto option enables the router to automatically select the best Channel for wireless communication. To manually set the channel on which the router will broadcast, click the drop-down list and select the desired Channel for wireless communication. The goal is to select the Channel that is least used by neighboring wireless networks.

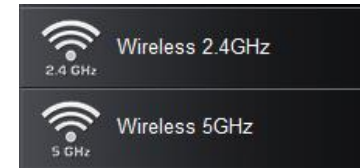
## Wireless Profile

Wireless (2.4GHz or 5GHz) > Wireless Network

This section outlines the available features to configure for both wireless 2.4Ghz and 5GHz when Access Point mode is selected.

1. Log into your management page (see "[Access the management page](#)" on page 16).

2. Click on the wireless band you would like to configure and click **Wireless Network**.



3. Underneath the basic wireless band section, you will see **Wireless Network** and all your wireless network profiles will be listed.
4. Click on the Edit button next to the wireless profile you want to configure.

Current Profiles			
Enable	SSID	Security Mode	Edit
<input checked="" type="checkbox"/>	_0001	WPA2-PSK AES	<input type="button" value="Edit"/>
<input checked="" type="checkbox"/>	1234	WPA2-PSK AES	<input type="button" value="Edit"/>

5. Review the wireless settings, click **Apply** and **Save/Reload** when finished.

Wireless Settings	
SSID	<input type="text" value="_0001"/>
Hide SSID	<input type="checkbox"/>
undefined	<input type="checkbox"/>

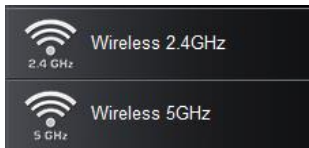
- **SSID:** Enter the wireless network name (SSID) to assign to the selected wireless profile
- **Hide SSID:** Select option to disable the wireless network name to broadcast

## Wireless MAC filter

Wireless (2.4GHz or 5GHz) > Wireless MAC Filter

Every network device has a unique, 12-digit MAC (Media Access Control) address. Using wireless MAC filters, you can allow or deny specific wireless clients using this router's wireless network.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless MAC Filter**.



3. Review the settings and click **Apply** and **Save/Reload** button to save settings.

Wireless MAC Filter	
Filter Mode	DENY listed computers access and allow all others
MAC Address	<input type="text"/> (Ex: 00:11:22:33:44:55)

- **Filter Mode:** Select from the pull down list the MAC filter rule to apply.
  - **Disable:** Select to turn off MAC filter feature
  - **DENY:** Select this option to DENY all listed MAC addressed
  - **ALLOW:** Select this option to only ALLOW the listed MAC address to the the network.
- **MAC Address:** Enter the MAC address to apply on the MAC filter rule

### MAC Filter List

MAC Filter List	
MAC	Delete
00:33:22:44:55:55	

- **MAC:** List of all MAC addresses
- **Delete:** Click to delete selected MAC address

## Client Bridge



### Basic

Wireless (2.4GHz or 5GHz) > Wireless Network

This section outlines the available features to configure for both wireless 2.4Ghz and 5GHz when Access Point mode is selected.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless Network**.

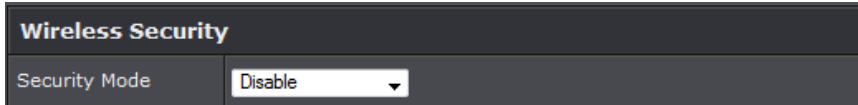


3. Configure the below settings and click **Apply** and **Save/Reload** to save settings.

Wireless Mode	2.4GHz 802.11 b/g/n mixed mode
SSID	Specify the static SSID : AP SSID Or press the button to search for any available WLAN Service. <input type="button" value="Site Survey"/>
Preferred BSSID	<input type="checkbox"/> <input type="text"/>

- **Wireless Mode:** Select the wireless mode to set on the selected wireless band in client bridge mode
- **SSID:** Manually enter the wireless network name (SSID) you want to establish connection. Or simply click on Site Survey to scan for available wireless network.

- **Preferred BSSID:** Click option and enter the preferred wireless network you would like to connect to.



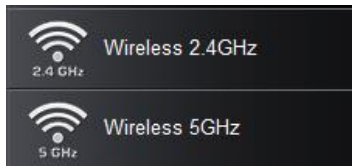
- **Security Mode:** Select from the pull down menu the wireless security that is used on the wireless network you would like to connect to.

### Scan for wireless networks

Wireless (2.4GHz or 5GHz) > Wireless Network

This section outlines the available features to configure for both wireless 2.4Ghz and 5GHz when Access Point mode is selected.

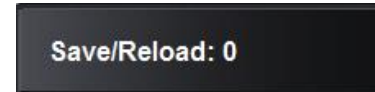
1. Log into your management page (see [“Access the management page”](#) on page 16).
2. Click on the wireless band you would like to configure and click **Wireless Network**.



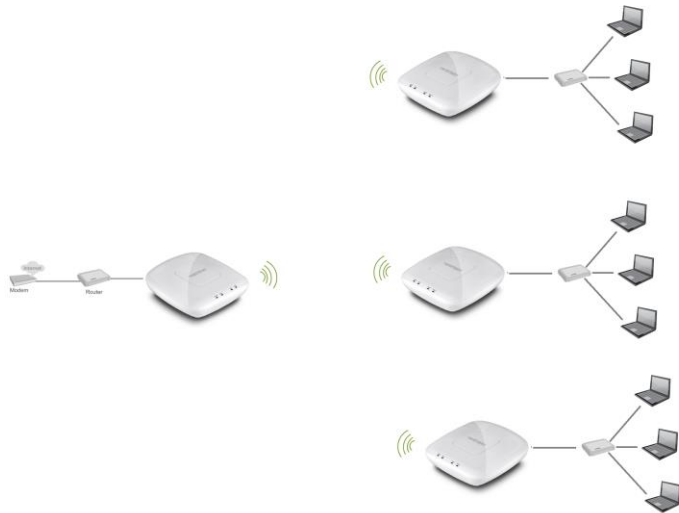
3. Under SSID section click Site Survey to wireless scan for available wireless networks.

SSID	BSSID	Channel	Signal Level	Type	Security	Mode
PortalTest	D8:EB:97:A2:87:4C	2	-49 dbm	802.11NG HT20	WPA2-PSK AES	AP
sonnytest	00:14:D1:BF:0B:37	1	-56 dbm	802.11NG HT20	WPA2-PSK AES	AP
TrendnetSkvN	00:14:D1:C5:7D:44	1	-76 dbm	802.11NG HT20	WPA2-PSK AES	AP
TrendnetOp	00:14:D1:B1:E1:B4	2	-80 dbm	802.11NG HT20	WPA2-PSK AES	AP
TrendnetOpWork	00:14:D1:B1:E1:B5	2	-81 dbm	802.11NG HT20	WPA2-PSK AES	AP
823_2.4GHz_itest	D8:EB:97:2A:CD:FE	1	-50 dbm	802.11NG HT20	WPA2-PSK AES	AP
TRENDnetGuest	00:14:D1:C6:A1:6E	4	-74 dbm	802.11NG HT20	WPA/WPA2-PSK TKIP/AES	AP

4. Click on the wireless network you would like to connect. The information will automatically fill on the previous screen. You will then need to select and enter the wireless security.
5. Click on Save/Reload button located on the top left section to apply settings.



WDS

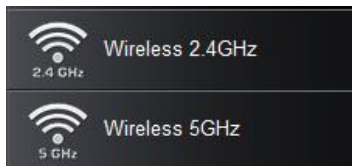


**WDS Link**

Wireless (2.4GHz or 5GHz) > WDS Link Settings

This section outlines the available features to configure for both wireless 2.4Ghz and 5GHz when Access Point mode is selected.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless Network**.



3. Configure the below settings and click **Apply** to save settings.

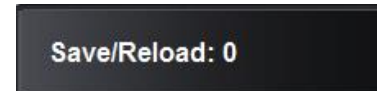
Wireless Distribution System(WDS)	
Local AP MAC Address	unavailable
Site Survey	<a href="#">Site Survey</a>
Remote AP MAC Address	<input type="text"/>
Remote AP MAC Address	<input type="text"/>
Remote AP MAC Address	<input type="text"/>
Remote AP MAC Address	<input type="text"/>

- **Site Survey:** Click this option to scan for available WDS networks
- **Remote AP MAC:** Enter the MAC address of the remote access point you want to establish WDS connection.

Wireless Security	
Security Mode	<input type="text" value="Disable"/>

- **Security Mode:** Select from the pull down menu the wireless security that is used on the wireless network you would like to connect to.

4. Click on **Save/Reload** button located on the top left section to apply settings.



**Basic**

Wireless (2.4GHz or 5GHz) > Wireless Network

This section outlines the available features to configure for both wireless 2.4Ghz and 5GHz when Access Point mode is selected.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless Network**.





3. Configure the below settings and click **Apply** to save settings.

Wireless Mode	2.4GHz 802.11 b/g/n mixed mode ▾
Channel Width	Auto 20/40 MHz ▾
Extension Channel	Auto ▾
Frequency (Channel)	Ch4 - 2427MHz ▾
AP Detection	<input type="button" value="Scan"/>

- **Wireless Mode:** If all of the wireless devices you want to connect with this Access Point can connect in the same transmission mode, you can improve performance slightly by choosing the appropriate mode. If you have some devices that use a different transmission mode, choose the appropriate mode.

#### 2.4GHz Wireless

- **B/G/N mixed:** Select this mode for the best compatibility. This mode allows older 802.11b and 802.11g wireless devices to connect to the router in addition to newer 802.11n devices.
- **B/G mixed:** This mode only allows devices to connect to the router using older and slow 802.11b or 802.11g technology and it thereby reduces the router's maximum speed to 54Mbps (typically not recommended).
- **N only:** This mode only allows newer 802.11n devices to connect to your router. This mode does ensure the highest speed and security for your network, however if you have older 802.11g wireless clients, they will no longer be able to connect to this router.
- **G only:** This mode only allows devices to connect to the router using older and slow 802.11g technology (typically not recommended).
- **B only:** This mode only allows devices to connect to the router using older and slow 802.11b technology (typically not recommended).

**Note:** Please check the specifications on your wireless devices for the highest wireless capability supported first before applying these settings. If you are

unsure, it is recommended that you keep the default setting (B/G/N mixed) for the best compatibility.

#### 5GHz Wireless

- **A only:** This mode only allows devices to connect to the router using older and slow 802.11a technology (typically not recommended).
- **A/N mixed:** This mode only allows devices to connect to the router using older and slow 802.11a or 802.11n technology and it thereby reduces the router's maximum speed to 54Mbps (typically not recommended).
- **N only:** This mode only allows newer 802.11n devices to connect to your router. This mode does ensure the highest speed and security for your network, however if you have older 802.11a wireless clients, they will no longer be able to connect to this router.
- **N/AC mixed:** Select this mode for the best compatibility. This mode allows older 802.11a wireless devices to connect to the router in addition to newer 802.11ac devices.
- **AC only:** This mode only allows devices to connect to the router using newer and faster 802.11ac technology (typically not recommended).
- **A/N/AC mixed:** Select this mode for the best compatibility. This mode allows older 802.11a and 802.11n wireless devices to connect to the router in addition to newer 802.11ac devices.

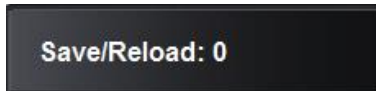
**Note:** Please check the specifications on your wireless devices for the highest wireless capability supported first before applying these settings. If you are unsure, it is recommended that you keep the default setting (B/G/N mixed) for the best compatibility.

When applying the 802.11 mode setting, please keep in mind the following:

- Wireless devices that support 802.11n are backwards compatible and can connect wirelessly at 802.11g or 802.11b.
- Connecting at 802.11b or 802.11g will limit the capability of your 802.11n supported wireless devices from obtaining higher performance and data rates.
- Allowing 802.11b or 802.11g devices to connect to an 802.11n capable wireless network may degrade the wireless network performance below the higher performance and data rates of 802.11n.
- Wireless devices that only support 802.11b or 802.11g will not be able to connect to a wireless network that is set to 802.11n only mode.
- Wireless devices that only support 802.11b will not be able to connect to a wireless network that is set to 802.11g only mode.
- **Channel Width: Extension channel:** When 20/40 channel bandwidth has been chosen, you should select extension channel to get higher throughput.

- **Frequency (Channel):** In North America, this router can broadcast on 1 of 11 Channels for 2.4GHz (13 in Europe and other countries). Selecting the Auto option enables the router to automatically select the best Channel for wireless communication. To manually set the channel on which the router will broadcast, click the drop-down list and select the desired Channel for wireless communication. The goal is to select the Channel that is least used by neighboring wireless networks.

4. Click on **Save/Reload** button located on the top left section to apply settings.



### Wireless Profile

*Wireless (2.4GHz or 5GHz) > Wireless Network*

This section outlines the available features to configure for both wireless 2.4GHz and 5GHz when Access Point mode is selected.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless Network**.



3. Underneath the basic wireless band section, you will see **Wireless Network** and all your wireless network profiles will be listed.
4. Click on the Edit button next to the wireless profile you want to configure.

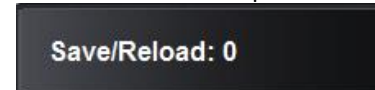
Current Profiles			
Enable	SSID	Security Mode	Edit
<input checked="" type="checkbox"/>	_0001	WPA2-PSK AES	<a href="#">Edit</a>
<input checked="" type="checkbox"/>	1234	WPA2-PSK AES	<a href="#">Edit</a>

5. Review the wireless settings, click **Apply** when finished.

Wireless Settings	
SSID	<input type="text" value="_0001"/>
Hide SSID	<input type="checkbox"/>
undefined	<input type="checkbox"/>

- **SSID:** Enter the wireless network name (SSID) to assign to the selected wireless profile
- **Hide SSID:** Select option to disable the wireless network name to broadcast

6. Click on **Save/Reload** button located on the top left section to apply settings.



### Repeater



### Basic

*Wireless (2.4GHz or 5GHz) > Wireless Network*

This section outlines the available features to configure for both wireless 2.4GHz and 5GHz when Access Point mode is selected.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless Network**.





3. Configure the below settings and click Apply to save settings.

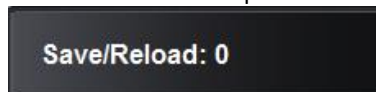
Wireless Mode	2.4GHz 802.11 b/g/n mixed mode
SSID	Specify the static SSID : AP SSID Or press the button to search for any available WLAN Service. <a href="#">Site Survey</a>
Preferred BSSID	<input type="checkbox"/> <input type="text"/>

- **Wireless Mode:** Select the wireless mode to set on the selected wireless band in client bridge mode
- **SSID:** Manually enter the wireless network name (SSID) you want to establish connection. Or simply click on Site Survey to scan for available wireless network.
- **Preferred BSSID:** Click option and enter the preferred wireless network you would like to connect to.

Wireless Security	
Security Mode	Disable

- **Security Mode:** Select from the pull down menu the wireless security that is used on the wireless network you would like to connect to.

4. Click on **Save/Reload** button located on the top left section to apply settings.



### Scan for wireless networks

Wireless (2.4GHz or 5GHz) > Wireless Network

This section outlines the available features to configure for both wireless 2.4GHz and 5GHz when Access Point mode is selected.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless Network**.

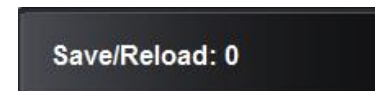


3. Under SSID section click Site Survey to wireless scan for available wireless networks.

SSID	BSSID	Channel	Signal Level	Type	Security	Mode
PortalTest	D8:EB:97:A2:87:4C	2	-49 dbm	802.11NG HT20	WPA2-PSK AES	AP
sonnytest	00:14:D1:BF:0B:37	1	-56 dbm	802.11NG HT20	WPA2-PSK AES	AP
TrendnetSkvN	00:14:D1:C5:7D:44	1	-76 dbm	802.11NG HT20	WPA2-PSK AES	AP
TrendnetOp	00:14:D1:B1:E1:B4	2	-80 dbm	802.11NG HT20	WPA2-PSK AES	AP
TrendnetOpWork	00:14:D1:B1:E1:B5	2	-81 dbm	802.11NG HT20	WPA2-PSK AES	AP
823_2.4GHz_itest	EB:97:2A:CD:FE	1	-50 dbm	802.11NG HT20	WPA2-PSK AES	AP
TRENDnetGuest	00:14:D1:C6:A1:6E	4	-74 dbm	802.11NG HT20	WPA/WPA2-PSK TKIP/AES	AP

4. Click on the wireless network you would like to repeat. The information will automatically fill on the previous screen. You will then need to select and enter the wireless security.

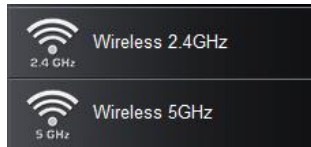
5. Click on **Save/Reload** button located on the top left section to apply settings.



## Advanced wireless settings

Wireless (2.4GHz or 5GHz) > Advanced Wireless

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the wireless band you would like to configure and click **Wireless MAC Filter**.



3. Review the settings and click **Apply** to save settings.

### Advanced Wireless

Advanced Wireless	
Data Rate	Auto
Transmit Power	Auto
RTS/CTS Threshold	2347 (range 1 - 2347, default 2347)
Beacon Period	100 ms (range 100 - 1000, default 100)
DTIM	1 (range 1 - 255, default 1)

- **Data Rate:** Select the operating wireless data rate.
- **Transmit Power:** The wireless transmit power can be modified to a lower setting such as 50%, 25%, and 12% if necessary. Lowering the wireless transmit may help to better stabilize the wireless connectivity and reduce the effects of wireless interference in areas where there are several 2.4GHz wireless devices. (Default: 100%)
- **RTS/CTS Threshold:** The Request To Send (RTS) function is part of the networking protocol. A wireless device that needs to send data will send a RTS before sending the data in question. The destination wireless device will send a response called Clear to Send (CTS). The RTS Threshold defines the smallest data packet size allowed to initiate the RTS/CTS function. Default Value: 2347 (range: 256-2346)
- **Beacon Period:** A beacon is a management frame used in wireless networks that transmitted periodically to announce the presence and provide information about

the router's wireless network. The interval is the amount time between each beacon transmission.

- **DTIM:** DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages. When the access point has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. Wireless clients detect the beacons and awaken to receive the broadcast and multicast messages. The default value is 1. Valid settings are between 1 and 255.

### HT Physical Mode

HT Physical Mode	
Guard Interval	<input checked="" type="radio"/> Auto <input type="radio"/> Long
A-MPDU	<input checked="" type="radio"/> Enable <input type="radio"/> Disable 32 Frames 50000 Bytes(Max)

- **Guard Interval:** Select to enable short guard interval (400ns).
- **A-MPDU:** MPDU aggregation also collects Ethernet frames to be transmitted to a single destination, but it wraps each frame in an 802.11n MAC header. Normally this is less efficient than MSDU aggregation, but it may be more efficient in environments to maintain performance in noisy networks and to prevent hidden nodes from degrading the performance.

### Client Limit

Client Limit	
Client Limit	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Max Client	48

- **Client Limit:** Select enable to turn on client limit of the select wireless band
- **Max Client:** Enter the amount of clients to allow

4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

## Band Steering

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **System** tab and click **Band Steering**.
3. Select enable to turn on band steering feature and click Apply to save settings.

### Band steering

Enable

4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

## Change your IP address

System > IP Settings

In most cases, you do not need to change the IP address settings. Typically, the IP address settings only needs to be changed, if you plan to use another access point in your network with the same IP address settings, if you are connecting your access point to an existing network that is already using the IP address settings your access point is using.

**Note:** If you are not encountering any issues or are not faced with one of the cases described above or similar, it is recommended to keep your router IP address settings as default.

Default Router IP Address: 192.168.10.100 / 255.255.255.0

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **System** tab and click **IP Settings**.
3. Review the settings and click **Apply** to save changes.

LAN Connection Type	
Connection Type	DHCP
DNS Server Setting	
Primary DNS Server	
Secondary DNS Server	

- **Connection Type:** Select on the pull down menu the LAN connection type.
  - **DHCP:** Select this option to have the access point obtain an IP address from your DHCP server
  - **STATIC:** Select this option to manually assign and IP address to your access point
- **DNS Server:** Enter your network's DNS server IP address

4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

## Create schedules

Maintenance > Schedule

Create a schedule to define the days/time period when a feature should be active or inactive:

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Schedule**.
3. Review the settings and click **Add** to save settings.

Name	
Day	<input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat
Time	00:00 ~ 23:59

- **Name:** Enter desired schedule name.

- **Day:** Check the day(s) to implement the schedule.
- **Time:** Specify the time period.

4. Click on **Save/Reload** button located on the top left section to apply settings.



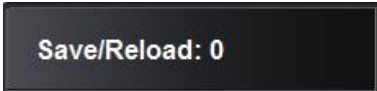
### Configure Spanning Tree

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **System** tab and click **Spanning Tree Settings**.
3. Review the settings and click **Apply** to save changes.

Spanning Tree Settings	
Spanning Tree Status	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Bridge Hello Time	<input type="text" value="2"/> seconds(1-10)
Bridge Max Age	<input type="text" value="20"/> seconds(6-40)
Bridge Forward Delay	<input type="text" value="4"/> seconds(4-30)
Priority	<input type="text" value="32768"/> (0-65535)

- **Spanning Tree Status:** Select On or Off to enable or disable spanning tree feature.
- **Bridge Hello Time:** Enter the bridge duration
- **Bridge Max Age:** Enter the max duration
- **Bridge Forward Delay:** Enter the delay duration
- **Priority:** Enter the priority

4. Click on **Save/Reload** button located on the top left section to apply settings.



### Set date and time

Management > Time and Date Settings

There are two ways to set the router's date and time. NTP (Network Time Protocol) is based on time servers. You can also manually set the router's date and time.

**Note:** It is important that the time is configured correctly before setting any schedules.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Management VLAN**.
3. Next to **Time Zone**, click the drop-down list to select your time zone.

Time Setting	
Time Zone	(GMT-05:00) Eastern Time (US & Canada) ▼

### NTP

1. Review the settings below and click Apply to save settings.

NTP Settings	
Enable NTP Server	<input checked="" type="checkbox"/>
NTP Server	Select NTP Server ▼
NTP synchronization	<input type="text" value="300"/> (1~300) Minute

- **Enable:** Check option to enable NTP feature
- **NTP Server:** Select the NTP server to use
- **NTP synchronization:** Enter the time of when the router will continue to check for NTP updates.

When using NTP time settings you may also configure Daylight Saving feature.

Daylight Saving Time				
Enable Daylight Saving	<input checked="" type="checkbox"/>			
Daylight Saving Offset	+1:00 ▼			
Daylight Saving Dates	Month	Week	Day of Week	Hour
	DST Start	Mar ▼	3rd ▼	Sun ▼
DST End	Nov ▼	2nd ▼	Sun ▼	01 ▼

- **Enable:** Check option to enable daylight savings
  - **Daylight Saving Offset:** Select the offset amount for daylight savings to apply
  - **Start/End Time:** Configure the start and end time of daylight savings.
4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

### Manual

1. Manually set the date and time of the router by select the from the pull down menus. Click **Sync Time** to synchronize with your computer's current time.

Manually Set Time					
Year	2014 ▾	Month	Oct ▾	Day	17 ▾
Hour	17 ▾	Minute	04 ▾	Second	03 ▾

- **Year:** Enter the year to Enable: Check option to enable NTP feature
  - **Server IP:** Enter the NTP server IP address or domain to use.
  - **First Poll Frequency:** Enter the initial time to check NTP
  - **Thereafter Frequency:** Select the time of when the router will continue to check for NTP updates.
4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

## Manage VLAN

Management > Manage VLAN

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Management VLAN**.
3. Review the settings and click Apply to save settings.

Enable	VID	SSID	WiFi Security
<input type="checkbox"/>	<input type="text"/>	_0001	WPA2-PSK AES
<input type="checkbox"/>	<input type="text"/>	1234	WPA2-PSK AES
<input type="checkbox"/>	<input type="text"/>	5678	WPA2-PSK AES

- **Enable:** Check box of the selected SSID to enable VLAN feature
- **VID:** Enter the VID to assign on the selected wireless network
- **SSID:** Displays the available SSID
- **WiFi Security:** Displays the wireless security type of the wireless network

Management VLAN ID	<input checked="" type="radio"/> No VLAN tag <input type="radio"/> Specified VLAN ID <input type="text"/> (must be in the range 1 ~ 4094. )
--------------------	---

- **No VLAN Tag:** Select this option to use no VLAN Tag
  - **Specified VLAN ID:** Select this option and enter the assigned VLAN ID.
4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

## Traffic Shaping

Management > Traffic Shaping

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Traffic Shaping**.
3. Review the settings and click Apply to save settings.

Enable Traffic Shaping	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Incoming Traffic Limit	10000 kbit/s (512-99999999)
Outgoing Traffic Limit	180000 kbit/s (512-99999999)
Total Percentage	30 %
SSID #1 : _0001	10 %
SSID #2 : 1234	10 %
SSID #3 : 5678	10 %
SSID #4 : (Off)	10 %
SSID #5 : (Off)	10 %
SSID #6 : (Off)	10 %

- **Enable:** Check box to enable traffic shapping of the selected wireless band
  - **Incoming Traffic:** Enter your network's inbound traffic limit
  - **Outgoing Traffic Limit:** Enter your network's outbound traffic limit
  - **Total percentage:** Enter the selected wireless band's traffic percentage to assign
  - **SSID:** Enter the SSID's assigned traffic percentage allowed
4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

## Enable SNMP

Management > SNMP Settings

SNMP (Simple Network Management Protocol) is a network management protocol used to monitor (read) and/or manage (write) multiple network devices on a network. This preconfigured external SNMP server.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Management VLAN**.
3. Review the settings and click Apply to save settings.

SNMP	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Contact	
Location	
Community Name (Read Only)	public
Community Name (Read/Write)	private
Trap Destination Address	
Trap Destination Community Name	public
SNMPv3	<input checked="" type="radio"/> v3Enable <input type="radio"/> v3Disable
User Name	admin
Auth Protocol	MD5
Auth Key (8-32 Characters)	12345678
Priv Protocol	DES
Priv Key (8-32 Characters)	12345678
Engine ID	

- **SNMP:** Select enable to enable SNMP feature
  - **Contact:** Enter the contact person or contact information for your access point.
  - **Location:** Enter an assigned location for your access point.
  - **Community Name (Read only):** Enter an assigned name for your access point.
  - **Community (Read/Write):** Enter a public and private community name.
  - **Trap Destination Address:** Enter the destination IP address of the SNMP trap.
  - **Trap Destination Community Name:** Enter the name of the destination community
  - **SNMPv3:** Select option to enable or disable SNMPv3
  - **Username:** Enter the username
  - **Auth Protocol:** Select from the pull down menu the authentication protocol to use
  - **Authentication Key:** Enter the authentication key
  - **Priv Protocol:** Select the private protocol
  - **Priv Key:** Enter the private key
  - **Engine ID:** Enter the engine name
4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

## Enable CLI

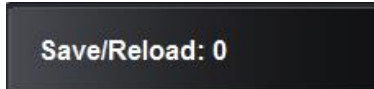
Management > CLI Settings

To enable the Command Line Interface for batch management or advanced configuration, select CLI **ON** and then click **Apply**.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **CLI**.
3. Select ON and click **Apply** to save settings.



4. Click on **Save/Reload** button located on the top left section to apply settings.



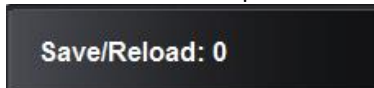
## LED Controls

Management > LED Control

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **LED Control**.
3. Review the settings and click Apply to save settings.

Power LED	<input checked="" type="radio"/> ON <input type="radio"/> OFF
LAN LED	<input checked="" type="radio"/> ON <input type="radio"/> OFF
2.4GHz LED	<input checked="" type="radio"/> ON <input type="radio"/> OFF
5GHz LED	<input checked="" type="radio"/> ON <input type="radio"/> OFF

- **Power LED:** Select On to leave Power LED on or Off option to turn off.
  - **LAN LED:** Select On to leave LAN LED on or Off option to turn off.
  - **2.4GHz LED:** Select On to leave wireless 2.4GHz LED on or Off option to turn off.
  - **5GHz LED:** Select On to leave wireless 5GHz LED on or Off option to turn off.
4. Click on **Save/Reload** button located on the top left section to apply settings.



## Maintenance & Monitoring

### Reset to factory defaults

Management > Backup/Restore Settings

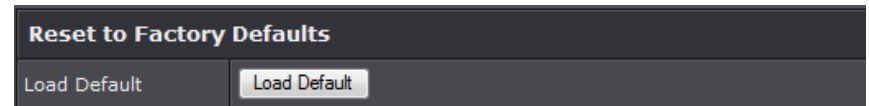
You may want to reset the access point to factory defaults if you are encountering difficulties and have attempted all other troubleshooting. Before you reset to defaults, if possible, you should backup your router configuration first, see "Backup and restore your router configuration settings" on page 23.

There are two methods that can be used to reset your router to factory defaults.

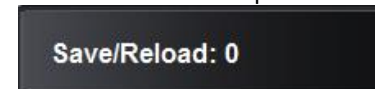
- **Reset Button:** Located on the front panel of your router, see "Product Hardware Features" on [page 2](#) . Use this method if you are encountering difficulties with accessing your router management page.

OR

- **Router Management Page**
    1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Backup/Restore Settings**.
  3. Click **Load Default**.



4. Click on **Save/Reload** button located on the top left section to apply settings.





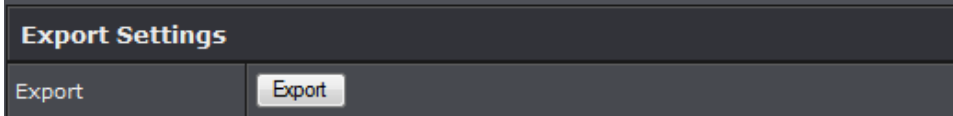
## Backup and restore your configuration settings

Management > Backup/Restore Settings

You may have added many customized settings to your router and in the case that you need to reset your router to default, all your customized settings would be lost and would require you to manually reconfigure all of your router settings instead of simply restoring from a backed up router configuration file.

### To backup your configuration:

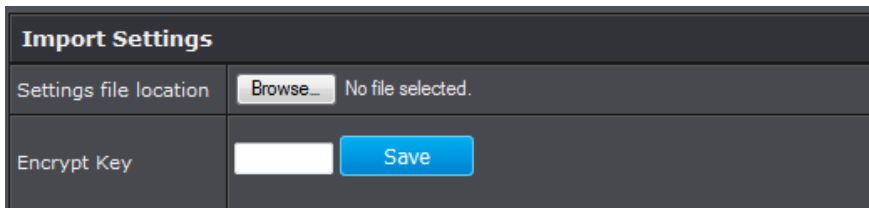
1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Backup/Restore Settings**.
3. Click **Export Settings**.



4. Depending on your web browser settings, you may be prompted to save a file (specify the location) or the file may be downloaded automatically to the web browser settings default download folder. (Default Filename: *config.bin*)
5. Save the configuration file to location on your computer.

### To restore your configuration:

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Backup/Restore Settings**.
3. Under **Import Settings**, depending on your web browser, click on **Browse** or **Choose File**. A separate file navigation window should open.



4. Navigate to the location of the router configuration file to restore. (Default Filename: *config.bin*).
5. Select the router configuration file to restore. Enter the login password under Encrypt Key and click **Save**.

- (Default Filename: *config.bin*). If prompted, click **Yes** or **OK**.
6. Wait for the router to restore settings.

## Restart access point

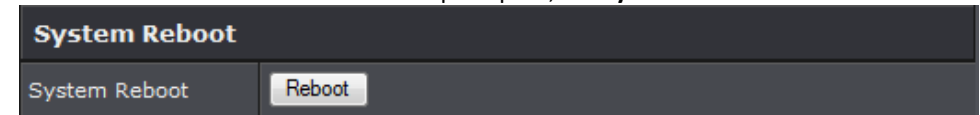
Management > Backup/Restore Settings

You may want to restart your router if you are encountering difficulties with your router and have attempted all other troubleshooting.

There are two methods that can be used to restart your router.

- **Turn the router off** disconnect the power adapter from the rear panel of your router for 10 seconds and reconnect the power adapter, see "Product Hardware Features" on [page 2](#).  
Use this method if you are encountering difficulties with accessing your router management page. This is also known as a hard reboot or power cycle.  
OR
- **Router Management Page:** This is also known as a soft reboot or restart.

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Backup/Restore Settings**.
3. Click **Reboot** to restart the router. If prompted, click **yes** or **OK**.



## Upgrade your firmware

Maintenance > FW Upgrade

TRENDnet may periodically release firmware upgrades that may add features or fix problems associated with your TRENDnet router model and version. To check if there is a firmware upgrade available for your device, please check your TRENDnet model and version using the link. <http://www.trendnet.com/downloads/>

In addition, it is also important to verify if the latest firmware version is newer than the one your router is currently running. To identify the firmware that is currently loaded on your router, log in to the router, and check the version located at the top right of the router management page. If there is a newer version available, also review the release



notes to check if there were any new features you may want or if any problems were fixed that you may have been experiencing.

1. If a firmware upgrade is available, download the firmware to your computer.
2. Unzip the file to a folder on your computer.

**Please note the following:**

- Do not interrupt the firmware upgrade process. Do not turn off the device or press the Reset button during the upgrade.
- If you are upgrade the firmware using a laptop computer, ensure that the laptop is connected to a power source or ensure that the battery is fully charged.
- Disable sleep mode on your computer as this may interrupt the firmware upgrade process.
- Do not upgrade the firmware using a wireless connection, only using a wired network connection.
- Any interruptions during the firmware upgrade process may permanently damage your router.

1. Log into your router management page (see "Access your router management page" on [page 22](#)).

**Note:** You can check your router's current firmware version at the top right of the page.

2. Click on **Maintenance**, and click on **FW Upgrade**.

**Note:** This page also displays the current firmware version of your router.

3. Depending on your web browser, next to **Upgrade Firmware**, click **Browse** or **Choose File**.

Upgrade Firmware	
Current Firmware Version	V1.00.B12
Upgrade Firmware	<input type="button" value="Browse..."/> No file selected.
<input type="button" value="Apply"/>	

4. Navigate to the folder on your computer where the unzipped firmware file (.bin) is located and select it.
5. Click **Upgrade** to start the firmware upgrade process. If prompted, click **yes** or **OK**.

## Configure log

Management > Log

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Log**. Click apply to save settings

System Log	
Enable System Log	<input checked="" type="checkbox"/>
Syslog Server IP Address	<input type="text" value="0.0.0.0"/> << Computer Name ▾
Local Log	
Local Log	<input type="text" value="Enable"/> ▾

- **Enable System log:** Select option to enable system log feature
  - **Syslog Server IP Address:** Enter the IP address of the syslog server or select from the pull down menu
  - **Local Log:** Select enable to enable local log feature
4. Click on **Save/Reload** button located on the top left section to apply settings.

Save/Reload: 0

## Test connectivity

Management > Diagnostics

### Ping Test

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Diagnostic**.

Ping Test Parameter	
IP	<input type="text"/>
Packet Length	<input type="text" value="64"/> (bytes)
Number of Pings	<input type="text" value="4"/>

- **IP :** Enter the IP address you would like to conduct the ping test
- **Packet Length:** Enter the packet size
- **Number of Pings:** Enter the amount of pings to conduct.

- **Ping:** Click to start ping test

### TraceRoute

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Management** tab and click **Diagnostic**.

Traceroute Parameter	
Target	<input type="text"/>

- **Target:** Enter the IP address to conduct traceroute test
- **Traceroute:** Click to start traceroute test

### Check system information

Status > Main

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Status** tab and click **Main**.
3. Review the device information.

### System

System Info	
Device Name	Room
Firmware Version	1.00 , 08, Jul, 2015
System Time	Fri Jun, 12, 2015 22:39:57
System Up Time	0 Day, 6:44:32

- **Device Name:** Displays the assigned device name
- **Firmware Version:** Displays the firmware version currently loaded on the router
- **System Time:** Displays the current time of the device
- **System Up Time:** Displays the time duration of how long the device has been running

### Network

Network	
MAC Address	D8:FE:E3:3E:B3:AB
IP Address	192.168.20.109
Subnet Mask	255.255.255.0
Default Gateway	192.168.20.1
Primary Domain Name Server	192.168.20.1
Secondary Domain Name Server	0.0.0.0

- **MAC Address:** Displays the device's MAC address
- **IP Address:** Displays the assigned IP address
- **Subnet Mask:** Displays the subnet mask of the device
- **Default Gateway:** Displays the default gateway of the device
- **Primary/Secondary DNS:** Displays the DNS IP address of the device

### Wireless

Operation Mode	Access Point		
Wireless Mode	2.4GHz 802.11 b/g/n mixed mode		
Channel Width	Auto 20/40 MHz		
Frequency (Channel)	4		
TX(Packets)	0 B (0 PKts.)		
RX(Packets)	0 B (0 PKts.)		
SSID List:			
<b>SSID</b>	<b>MAC Address</b>	<b>Security Mode</b>	<b>Status</b>
_0001	00:18:E7:95:92:3D	WPA2-PSK AES	On
1234	02:18:E7:95:92:3D	WPA2-PSK AES	On
5678	12:18:E7:95:92:3D	WPA2-PSK AES	On

- **Operation Mode:** Displays the current operating mode for each wireless band
- **Wireless Mode:** Displays the wireless mode set on each wireless band
- **Channel Width:** Displays the applied channel width
- **Frequency (Channel):** Displays the current operating wireless channel
- **Tx/Rx Packets:** Displays the Transmit (Tx) and Receive (Rx) packet rate
- **SSID List:** Displays the multiple SSID settings.

## Check connected wireless clients

Status > 2.4GHz/5GHz Wireless Client

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Status** tab and click **Wireless Client List**.

Wireless Network					
SSID:#	MAC Address	Mode	Rate	Signal	Kick and Ban

## IPv6 Status

Status > IPv6 Status

1. Log into your management page (see "[Access the management page](#)" on page 16).
2. Click on the **Status** tab and click **IPv6 Status**.

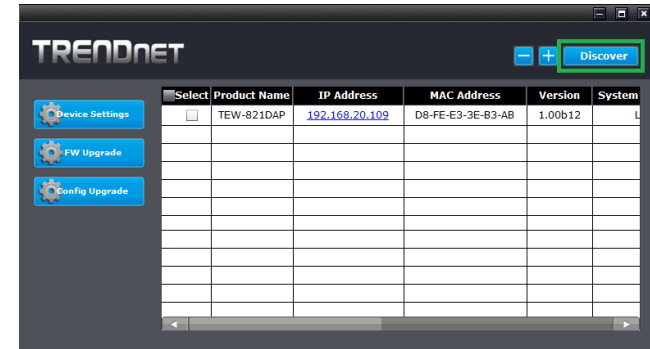
Network	
IPv6 Connection Type	Local Connectivity Only
LAN IPv6 Link-Local Address	fe80::dafe:e3ff:fe3e:b3ab/64

## Software Controller utility Installation

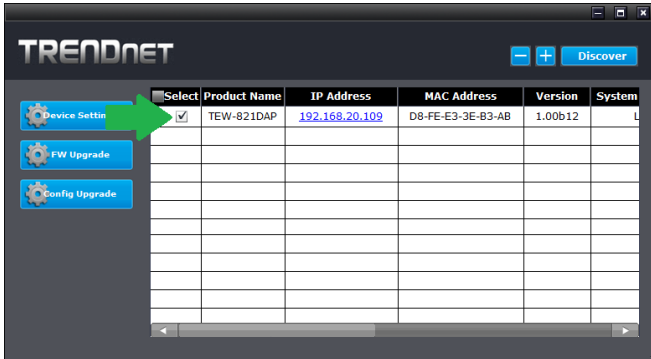
1. Insert the CD ROM included with the access point.
2. Click on Software controller to install the utility.



3. Once the utility is installed click on Discover to refresh the list of access points.



4. Select the access point you want to configure.

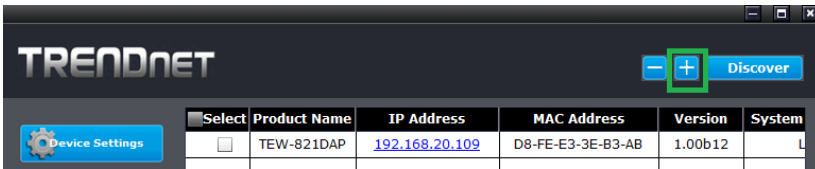


5. Click on Device settings to configure the access point.

### Add and Delete Device

#### Add device

1. Run the utility
2. To add a device to control select the "+" on the upper right corner

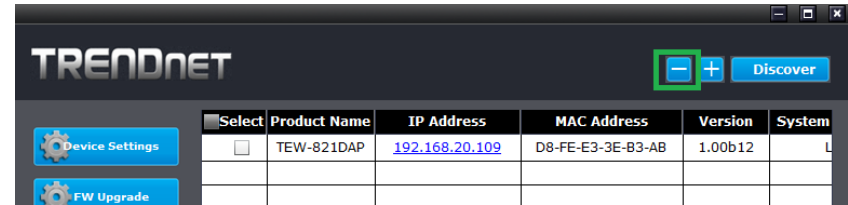


3. Enter the IP address of the device you would like to add to the controller and press OK.



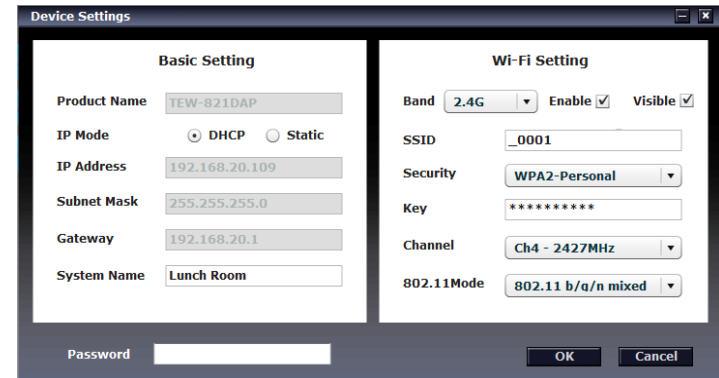
#### Delete device

1. Run the utility
2. To delete a device from the controller. Select the device from the listed devices and click "-" on the upper right corner



3. Enter the IP address of the device you would like to add to the controller and press OK.

### Device Settings

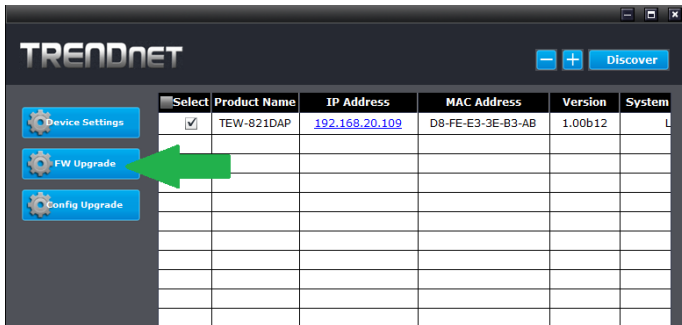


- **Product Name:** Displays the device model
- **IP Mode:** Select the IP mode to apply on the device
  - **DHCP:** Select this option to allow the device to receive IP address from your DHCP server
  - **Static:** Select this option to manually set the IP address of the device
    - **IP Address:** Enter the IP address to assign to the device
    - **Subnet Mask:** Enter the subnet mask to assign to the device
    - **Gateway:** Enter the gateway IP address to assign to the device

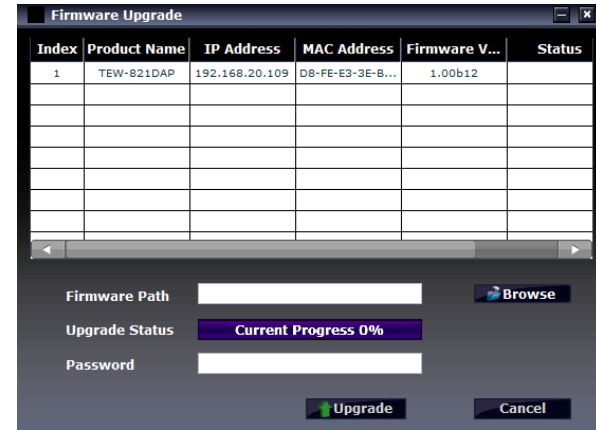
- **System Name:** Assign name of the device to help distinguish between similar devices
- **Band:** Select on the pull down menu the wireless interface to configure
- **Enable:** Select this option to enable the selected wireless interface
- **Visible:** Select this option to wireless broadcast the selected wireless interface
- **SSID:** Enter the SSID (Wireless Network Name) of the selected wireless interface
- **Security:** Select the wireless encryption security for to assign the selected wireless interface
- **Key:** Enter the wireless encryption security key or password
- **Channel:** Select the wireless channel of the selected wireless interface
- **802.11 Mode:** Select the 802.11 mode of the selected wireless interface
- **Password:** Enter the login password of the device and click OK to save settings

### Upgrade Firmware

1. Run the utility
2. Select the devices you want to conduct a firmware upgrade and click on FW upgrade button



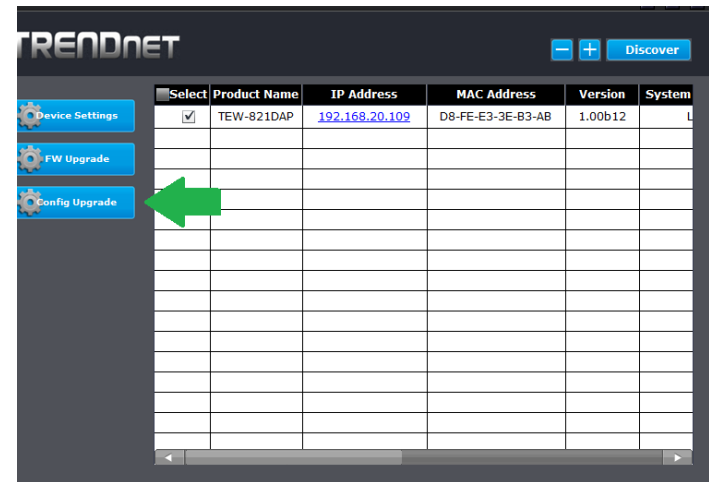
2. Click Browse button and navigate to the folder on your computer where the unzipped firmware file (.bin) is located and select it to select the firmware



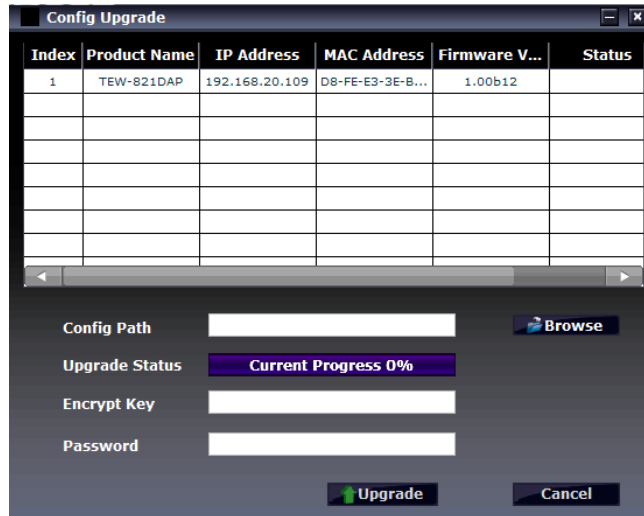
3. Enter the login password of the devices and click **Upgrade** to start the firmware upgrade process.

### Load configuration

1. Run the utility
2. Select the devices you want to conduct a firmware upgrade and click on FW upgrade button



2. Click Browse button and navigate to the folder on your computer where the unzipped firmware file (.bin) is located and select it to select the firmware



Index	Product Name	IP Address	MAC Address	Firmware V...	Status
1	TEW-821DAP	192.168.20.109	D8-FE-E3-3E-B...	1.00b12	

Config Path

Upgrade Status

Encrypt Key

Password

3. Enter the login password of the devices and click **Upgrade** to start the firmware upgrade process.

## Troubleshooting

**Q: I typed `http://192.168.10.1` in my Internet Browser Address Bar, but an error message says "The page cannot be displayed." How can I access the router management page?**

**Answer:**

1. Check your hardware settings again. See "[Router Installation](#)" on page 8.
2. Make sure the LAN and WLAN lights are lit.
3. Make sure your network adapter TCP/IP settings are set to [Obtain an IP address automatically](#) or [DHCP](#) (see the steps below).
4. Make sure your computer is connected to one of the router's LAN ports
5. Press on the factory reset button for 15 seconds, the release.

**Windows 7**

- a. Go into the **Control Panel**, click **Network and Sharing Center**.
- b. Click **Change Adapter Settings**, right-click the **Local Area Connection** icon.
- c. Then click **Properties** and click **Internet Protocol Version 4 (TCP/IPv4)**.
- d. Then click **Obtain an IP address automatically** and click **OK**.

**Windows Vista**

- a. Go into the **Control Panel**, click **Network and Internet**.
- b. Click **Manage Network Connections**, right-click the **Local Area Connection** icon and click **Properties**.
- c. Click **Internet Protocol Version (TCP/IPv4)** and then click **Properties**.
- d. Then click **Obtain an IP address automatically** and click **OK**.

**Windows XP/2000**

- a. Go into the **Control Panel**, double-click the **Network Connections** icon
- b. Right-click the **Local Area Connection** icon and the click **Properties**.
- c. Click **Internet Protocol (TCP/IP)** and click **Properties**.
- d. Then click **Obtain an IP address automatically** and click **OK**.

**Note:** *If you are experiencing difficulties, please contact your computer or operating system manufacturer for assistance.*

**Q: I am not sure what type of Internet Account Type I have for my Cable/DSL connection. How do I find out?**

**Answer:**

Contact your Internet Service Provider (ISP) for the correct information.

**Q: The Wizard does not appear when I access the router. What should I do?**

**Answer:**

1. Click on Wizard on the left hand side.
2. Near the top of the browser, "Pop-up blocked" message may appear. Right click on the message and select Always Allow Pop-ups from This Site.
3. Disable your browser's pop up blocker.

**Q: I went through the Wizard, but I cannot get onto the Internet. What should I do?**

**Answer:**

1. Verify that you can get onto the Internet with a direct connection into your modem (meaning plug your computer directly to the modem and verify that your single computer (without the help of the router) can access the Internet).
2. Power cycle your modem and router. Unplug the power to the modem and router. Wait 30 seconds, and then reconnect the power to the modem. Wait for the modem to fully boot up, and then reconnect the power to the router.
3. Contact your ISP and verify all the information that you have in regards to your Internet connection settings is correct.

**Q: I cannot connect wirelessly to the router. What should I do?**

**Answer:**

1. Double check that the WLAN light on the router is lit.
2. Power cycle the router. Unplug the power to the router. Wait 15 seconds, then plug the power back in to the router.
3. Contact the manufacturer of your wireless network adapter and make sure the wireless network adapter is configured with the proper SSID. The preset SSID is `TRENDnet(model_number)`.
4. To verify whether or not wireless is enabled, login to the router management page, click on *Wireless*.
5. Please see "[Steps to improve wireless connectivity](#)" on page 21 if you continue to have wireless connectivity problems.

## Appendix

### How to find your IP address?

**Note:** Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for configuring network settings.

#### Command Prompt Method

##### **Windows 2000/XP/Vista/7**

1. On your keyboard, press **Windows Logo+R** keys simultaneously to bring up the Run dialog box.
2. In the dialog box, type **cmd** to bring up the command prompt.
3. In the command prompt, type **ipconfig /all** to display your IP address settings.

##### **MAC OS X**

1. Navigate to your **Applications** folder and open **Utilities**.
2. Double-click on **Terminal** to launch the command prompt.
3. In the command prompt, type **ipconfig getifaddr <en0 or en1>** to display the wired or wireless IP address settings.

**Note:** **en0** is typically the wired Ethernet and **en1** is typically the wireless Airport interface.

#### Graphical Method

##### **MAC OS 10.6/10.5**

1. From the Apple menu, select **System Preferences**.
2. In System Preferences, from the **View** menu, select **Network**.
3. In the Network preference window, click a network port (e.g., Ethernet, AirPort, modem). If you are connected, you'll see your IP address settings under "Status:"

##### **MAC OS 10.4**

1. From the Apple menu, select **Location**, and then **Network Preferences**.
2. In the Network Preference window, next to "Show:", select **Network Status**. You'll see your network status and your IP address settings displayed.

**Note:** If you are experiencing difficulties, please contact your computer or operating system manufacturer for assistance.

### How to configure your network settings to obtain an IP address automatically or use DHCP?

**Note:** Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for configuring network settings.

#### **Windows 7**

- a. Go into the **Control Panel**, click **Network and Sharing Center**.
- b. Click **Change Adapter Settings**, right-click the **Local Area Connection** icon.
- c. Then click **Properties** and click **Internet Protocol Version 4 (TCP/IPv4)**.
- d. Then click **Obtain an IP address automatically** and click **OK**.

#### **Windows Vista**

- a. Go into the **Control Panel**, click **Network and Internet**.
- b. Click **Manage Network Connections**, right-click the **Local Area Connection** icon and click **Properties**.
- c. Click **Internet Protocol Version (TCP/IPv4)** and then click **Properties**.
- d. Then click **Obtain an IP address automatically** and click **OK**.

#### **Windows XP/2000**

- a. Go into the **Control Panel**, double-click the **Network Connections** icon
- b. Right-click the **Local Area Connection** icon and the click **Properties**.
- c. Click **Internet Protocol (TCP/IP)** and click **Properties**.
- d. Then click **Obtain an IP address automatically** and click **OK**.

#### **MAC OS 10.4/10.5/10.6**

- a. From the **Apple**, drop-down list, select **System Preferences**.
- b. Click the **Network** icon.
- c. From the **Location** drop-down list, select **Automatic**.
- d. Select and view your Ethernet connection.
  - In MAC OS 10.4, from the **Show** drop-down list, select **Built-in Ethernet** and select the **TCP/IP** tab.
  - In MAC OS 10.5/10.6, in the left column, select **Ethernet**.
- e. Configure TCP/IP to use DHCP.



In MAC 10.4, from the **Configure IPv4**, drop-down list, select **Using DHCP** and click the **Apply Now** button.

In MAC 10.5, from the **Configure** drop-down list, select **Using DHCP** and click the **Apply** button.

In MAC 10.6, from the **Configure** drop-down list, select **Using DHCP** and click the **Apply** button.

f. Restart your computer.

**Note:** If you are experiencing difficulties, please contact your computer or operating system manufacturer for assistance.

### How to find your MAC address?

In Windows 2000/XP/Vista/7,

Your computer MAC addresses are also displayed in this window, however, you can type **getmac -v** to display the MAC addresses only.

In MAC OS 10.4,

1. **Apple Menu > System Preferences > Network**
2. From the **Show** menu, select **Built-in Ethernet**.
3. On the **Ethernet** tab, the **Ethernet ID** is your MAC Address.



In MAC OS 10.5/10.6,

1. **Apple Menu > System Preferences > Network**
2. Select **Ethernet** from the list on the left.
3. Click the **Advanced** button.
3. On the **Ethernet** tab, the **Ethernet ID** is your MAC Address.


### How to connect to a wireless network using the built-in Windows utility?

**Note:** Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for connecting to a wireless network using the built-in utility.

#### Windows 7

1. Open Connect to a Network by clicking the network icon ( or ) in the notification area.
2. In the list of available wireless networks, click the wireless network you would like to connect to, then click **Connect**.
4. You may be prompted to enter a security key in order to connect to the network.
5. Enter in the security key corresponding to the wireless network, and click **OK**.

#### Windows Vista

1. Open Connect to a Network by clicking the **Start Button**  and then click **Connect To**.
2. In the **Show** list, click **Wireless**.
3. In the list of available wireless networks, click the wireless network you would like to connect to, then click **Connect**.
4. You may be prompted to enter a security key in order to connect to the network.
5. Enter in the security key corresponding to the wireless network, and click **OK**.

#### Windows XP

1. Right-click the network icon in the notification area, then click **View Available Wireless Networks**.
2. In **Connect to a Network**, under **Available Networks**, click the wireless network you would like to connect to.
3. You may be prompted to enter a security key in order to connect to the network.
4. Enter in the security key corresponding to the wireless network, and click **Connect**.

### Federal Communication Commission Interference 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 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 Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

#### IMPORTANT NOTE:

##### Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/CANADA

### Europe – EU Declaration of Conformity

TRENDnet hereby declare that the product is in compliance with the essential requirements and other relevant provisions under our sole responsibility.

#### Safety

EN60950-1 : 2006 + A11 : 2009 + A1: 2010 + A12: 2011 + A2: 2013

#### EMC

EN 55022: 2010 + AC: 2011 Class B

EN 55024: 2010

EN 301 489-1 V1.9.2: 09-2011

EN 301 489-17 V2.2.1: 09-2012



#### Radio Spectrum & Health

EN 300 328 V1.8.1 : (2012-06)

EN 301 893 V1.7.1 : (2012-06)

EN 62311 : 2008

#### Energy Efficiency

Regulation (EC) No. 1275/2008, Regulation, No. 278/2009, No. 801/2013

This product is herewith confirmed to comply with the Directives.

#### Directives

Low Voltage Directive 2006/95/EC

EMC Directive 2004/108/EC

R&TTE Directive 1999/5/EC

Ecodesign Directive 2009/125/EC

RoHS Directive 2011/65/EU

REACH Regulation (EC) No. 1907/2006

Operations in the 5.15-5.25GHz / 5.470 ~ 5.725GHz band are restricted to indoor usage only.

The band from 5600-5650MHz will be disabled by the software during the manufacturing and cannot be changed by the end user. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

<b>[cs]</b> Český [Czech]	TRENDnet tímto prohlašuje, že tento TEW-821DAP je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
<b>[da]</b> Dansk [Danish]	Undertegnede TRENDnet erklærer herved, at følgende udstyr TEW-821DAP overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
<b>[de]</b> Deutsch [German]	Hiermit erklärt TRENDnet, dass sich das Gerät TEW-821DAP in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
<b>[et]</b> Eesti [Estonian]	Käesolevaga kinnitab TRENDnet seadme TEW-821DAP vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
<b>[en]</b> English	Hereby, TRENDnet, declares that this TEW-821DAP is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
<b>[es]</b> Español [Spanish]	Por medio de la presente TRENDnet declara que el TEW-821DAP cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
<b>[el]</b> Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑΤRENDnet ΔΗΛΩΝΕΙ ΟΤΙ ΤΟ TEW-821DAP ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
<b>[fr]</b> Français [French]	Par la présente TRENDnet déclare que l'appareil TEW-821DAP est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
<b>[it]</b> Italiano [Italian]	Con la presente TRENDnet dichiara che questo TEW-821DAP è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo TRENDnet deklarē, ka TEW-821DAP deklarē, ka [type of equipment / iekārtas tips] atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo TRENDnet deklaruoja, kad šis TEW-821DAP atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
<b>[nl]</b> Nederlands	Hierbij verklaart TRENDnet dat het toestel TEW-821DAP in

<b>[Dutch]</b>	overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
<b>[mt]</b> Malti [Maltese]	Hawnhekk, TRENDnet, jiddikjara li dan TEW-821DAP jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
<b>[hu]</b> Magyar [Hungarian]	Alulírott, TRENDnet nyilatkozom, hogy a TEW-821DAP megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
<b>[pl]</b> Polski [Polish]	Niniejszym TRENDnet oświadcza, że TEW-821DAP] jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
<b>[pt]</b> Português [Portuguese]	TRENDnet declara que este TEW-821DAP está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
<b>[sl]</b> Slovensko [Slovenian]	TRENDnet izjavlja, da je ta TEW-821DAP v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	TRENDnettýmto vyhlasuje, že TEW-821DAP spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
<b>[fi]</b> Suomi [Finnish]	TRENDnet vakuuttaa täten että TEW-821DAP tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
<b>[sv]</b> Svenska [Swedish]	Härmed intygar TRENDnet att denna TEW-821DAP står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

**Industry Canada Statement**

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes:

(1) Ce dispositif ne peut causer d'interférences; et(2) Ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

Caution:

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

**Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

**Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

### Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

#### TEW-821DAP – 3 Years Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDnet within the applicable warranty period and providing a copy of the dated proof of the purchase. Upon proper submission of required documentation a Return Material Authorization (RMA) number will be issued. An RMA number is required in order to initiate warranty service support for all TRENDnet products. Products that are sent to TRENDnet for RMA service must have the RMA number marked on the outside of return packages and sent to TRENDnet prepaid, insured and packaged appropriately for safe shipment. Customers shipping from outside of the USA and Canada are responsible for return shipping fees. Customers shipping from outside of the USA are responsible for custom charges, including but not limited to, duty, tax, and other fees.

**WARRANTIES EXCLUSIVE:** IF THE TRENDNET PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE, AT TRENDNET'S OPTION, REPAIR OR REPLACE. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING

WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TRENDNET NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION MAINTENANCE OR USE OF TRENDNET'S PRODUCTS.

TRENDNET SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLIGENCE, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO REPAIR OR MODIFY, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OR OTHER HAZARD.

LIMITATION OF LIABILITY: TO THE FULL EXTENT ALLOWED BY LAW TRENDNET ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATE, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT TRENDNET'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

**Governing Law:** This Limited Warranty shall be governed by the laws of the state of California.

Some TRENDnet products include software code written by third party developers. These codes are subject to the GNU General Public License ("GPL") or GNU Lesser General Public License ("LGPL").

Go to <http://www.trendnet.com/gpl> or <http://www.trendnet.com> Download section and look for the desired TRENDnet product to access to the GPL Code or LGPL Code. These codes are distributed WITHOUT WARRANTY and are subject to the copyrights of the developers. TRENDnet does not provide technical support for these codes. Please go to <http://www.gnu.org/licenses/gpl.txt> or <http://www.gnu.org/licenses/lgpl.txt> for specific terms of each license.

PWP05202009v2

2015/11/13



## Product Warranty Registration

Please take a moment to register your product online.  
Go to TRENDnet's website at <http://www.trendnet.com/register>

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