User's Guide

TRENDNET



Indoor Wireless Access Point User Guide

TEW-823DAP (V2) / TEW-923DAP / TEW-925DAP

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Product Overview TEW-823DAP



TEW-823DAP

Package Contents

In addition to your access point, the package includes:

- TEW-823DAP
- 1.64 ft. (0.5 m) network cable
- Quick Installation Guide
- Mounting plates

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 AC1300 Dual Band Indoor Wireless PoE Access Point, model TEW-823DAP, supports Access Point (AP) and Repeater modes. This wireless indoor access point generates concurrent 867Mbps WiFi AC and 400Mbps WiFi N networks. MU-MIMO technology processes multiple data streams simultaneously, increasing real-time WiFi performance when multiple devices access the network. The wireless access point features access control, bandwidth control, and band steering. The low-profile housing design blends into most environments, and includes a convenient wall / ceiling mounting plate.

Concurrent Dual Band AC1300: concurrent 867Mbps WiFi AC + 400Mbps WiFi N bands

Power over Ethernet (PoE)

Saves installation time and setup costs with gigabit PoE support

WiFi Operation Modes Supports Access Point (AP) and Repeater modes

Gigabit Port Gigabit PoE LAN port maintains a high-performance connection to the wired network

Wireless Coverage Extended wireless coverage with MU-MIMO antenna technology

MU-MIMO Performance

MU-MIMO technology enables the access point to process multiple data streams simultaneously, and increases real-time WiFi performance

Band Steering

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

Multiple SSIDs

Create up to 8 SSIDs per band (16 total)

Encrypted Wireless

Support for wireless encryption of up to WPA3

Low Profile

Low-profile housing design blends into most environments

Mounting Plate

Wall / Ceiling mounting plate

*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



• **PWR:** This indicator turns blue when the device is powered.



- Gigabit PoE port: Plug an Ethernet cable (also called network cables) from your access point to your router and wired network devices. The Gigabit port complies with standard 802.3af/at PoE/PoE+ so you can connect to connect the AP to a PoE switch or injector that complies with 802.3af/at.
- **Power port (optional):** If you are not using PoE to power the AP, you can 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 15 seconds to reset the access point.

AC1300 WiFi

Two concurrent high-speed WiFi bands to maximize device networking speeds: 867Mbps WiFi AC on 5GHz and 400Mbps WiFi N on 2.4GHz.

Built For Busy Homes

MU-MIMO technology processes multiple data streams simultaneously, increasing real-time WiFi performance when multiple devices access the network.

Power over Ethernet (PoE) Saves installation time and setup costs with gigabit PoE support .

Application Diagram









Product Overview TEW-923DAP



TEW-923DAP

Package Contents

In addition to your access point, the package includes:

- TEW-923DAP
- 1.64 ft. (0.5 m) network cable
- Quick Installation Guide
- Mounting plates

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 AX3000 Dual Band WiFi 6 PoE+ Access Point, model TEW-923DAP, features two concurrent WiFi bands to maximize networking speeds with the latest WiFi 6 technology. The two separate high-speed WiFi 6 bands provide speeds up to 2402Mbps on the 5GHz band and 573Mbps on the 2.4GHz band. The access point also supports Access Point (AP) and Repeater modes.

Faster speeds are possible on this WiFi 6 access point with 1024-QAM, OFDMA, and MU-MIMO technologies. MU-MIMO technology processes multiple data streams simultaneously, increasing real-time WiFi performance when multiple devices access the network. The wireless access point features access control, bandwidth control, and band steering. The low-profile housing design blends into most environments, and includes a convenient wall / ceiling mounting plate.

Concurrent Dual Band

AX3000: concurrent 2402Mbps on 5GHz band + 573Mbps on 2.4GHz band

Power over Ethernet (PoE+)

Saves installation time and setup costs with 2.5GbE PoE+ support

WiFi Operation Modes

Supports Access Point (AP) and Repeater modes

MU-MIMO & OFDMA Performance

MU-MIMO technology enables the access point to process multiple data streams simultaneously along with WiFi 6 OFDMA technology to increase real-time WiFi performance

Band Steering

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

WiFi Traffic Shaping

Manage traffic allocation on the WiFi 6 access point per SSID for each band separately

Encrypted Wireless

Support for wireless encryption of up to WPA3

Multiple SSIDs

Create up to 8 SSIDs per band (16 total)

2.5GBASE-T PoE+ Port

2.5GBASE-T PoE+ LAN port maintains a high-performance connection to the wired network

LED Control

LED control reduces product visibility by disabling the LED indicator

Low Profile

Low-profile housing design blends into most environments

Mounting Plate

Wall / Ceiling mounting plate

*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



• **PWR:** This indicator turns blue when the device is powered.



2.5GBASE-T PoE+ Port

- 2.5GBASE-T PoE+ port: Plug an Ethernet cable (also called network cables) from your access point to your router and wired network devices. The Gigabit port complies with standard 802.3af/at PoE/PoE+ so you can connect to connect the AP to a PoE switch or injector that complies with 802.3af/at.
- **Power port (optional):** If you are not using PoE to power the AP, you can 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 15 seconds to reset the access point.

AX3000 WiFi 6

2.4GHz 573Mbps

Two concurrent high-speed WiFi 6 bands to maximize device networking speeds: 2402Mbps on 5GHz and 573Mbps on 2.4GHz.

Power over Ethernet (PoE+)

Saves installation time and setup costs with 2.5GbE PoE+ support, delivering power and data over one cable.

5GHz 2402Mbps



multiple data streams simultaneously, increasing real-time WiFi performance when multiple devices access the network.



Product Overview TEW-925DAP





Package Contents

In addition to your access point, the package includes:

- TEW-925DAP
- 1.64 ft. (0.5 m) network cable
- Quick Installation Guide
- Mounting plates

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 AX5400 Dual Band WiFi 6 PoE+ Access Point, model TEW-925DAP, features two concurrent WiFi bands to maximize networking speeds with the latest WiFi 6 technology. The two separate high-speed WiFi 6 bands provide speeds up to 4804Mbps on the 5GHz band and 573Mbps on the 2.4GHz band. The WiFi 6 access point also supports Access Point (AP) and Repeater modes.

Faster speeds are possible on this WiFi 6 access point with 1024-QAM, OFDMA, and MU-MIMO technologies. MU-MIMO technology processes multiple data streams simultaneously, increasing real-time WiFi performance when multiple devices access the network. The wireless access point features access control, bandwidth control, and band steering. The low-profile housing design blends into most environments, and includes a convenient wall / ceiling mounting plate.

Concurrent Dual Band

AX5400: concurrent 4804Mbps on 5GHz band + 573Mbps on 2.4GHz band

Power over Ethernet (PoE+)

Saves installation time and setup costs with 2.5GbE PoE+ support

WiFi Operation Modes

The 802.11ax access points supports Access Point (AP) and Repeater modes

MU-MIMO & OFDMA Performance

MU-MIMO technology enables the WiFi 6 access point to process multiple data streams simultaneously along with WiFi 6 OFDMA technology to increase real-time WiFi performance

Band Steering

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

WiFi Traffic Shaping

Manage traffic allocation on the WiFi 6 access point per SSID for each band separately

Encrypted Wireless

Support for wireless encryption of up to WPA3

Multiple SSIDs

Create up to 8 SSIDs per band (16 total)

2.5GBASE-T PoE+ Port

2.5GBASE-T PoE+ LAN port maintains a high-performance connection to the wired network

LED Control

LED control on the WiFi 6 access point reduces product visibility by disabling the LED indicator

Low Profile

Low-profile housing design blends into most environments

Mounting Plate

The WiFi 6 access points includes a wall / ceiling mounting plate

*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



• PWR: This indicator turns blue when the device is powered.



2.5GBASE-T PoE+ Port

- 2.5GBASE-T PoE+ port: Plug an Ethernet cable (also called network cables) from your access point to your router and wired network devices. The Gigabit port complies with standard 802.3af/at PoE/PoE+ so you can connect to connect the AP to a PoE switch or injector that complies with 802.3af/at.
- **Power port (optional):** If you are not using PoE to power the AP, you can 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 15 seconds to reset the access point.

AX5400 WiFi 6

Two concurrent high-speed WiFi 6 bands to maximize device networking speeds: 4804Mbps on 5GHz and 573Mbps on 2.4GHz.

2.4GHz 5GHz 4804Mbps 573Mbps

Power over Ethernet (PoE+) Saves installation time and setup









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 access point 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 access point.
- **Note:** The white label below may be different than the label included with your 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

To mount the access point, first route the network cable through the largest opening in the mounting plate and install the mounting plate to the desired wall or ceiling using the included drywall anchors and screws. Install the mounting plate with the correct orientation. After the mounting plate is properly installed, connect the network cable to the network LAN port of the access point, align the access point mounting holes with the mounting plate clips and slide the bracket into the access point to lock into place



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Ceiling mounting



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:

- 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 access point 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 access point 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 access point in several locations and test the signal strength to determine the ideal position.
- 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.
- 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.
- 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 "<u>Appendix</u>" on page 63 for general information on connecting to a wireless network.

Configuration

Note: The access point's default management page <u>http://192.168.10.100</u> 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://model number" (ie: if your AP is TEW-823DAP, type in <u>http://tew-823dap)</u> or type in <u>http://192.168.10.100</u>.



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 access point.

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Wizard

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

| Administrator Settings Administrator Settings | | | |
|--------------------------------------------------|--|---|----------------------|
| | | | |
| New Password | | - | (Max: 20 Characters) |
| Verify Password | | ~ | |
| Apply | | | |

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.

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 unsecure 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 access point.

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

- WPA/WPA2-Personal: 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-Personal: 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.

- WPA3-Personal: This is the latest wireless encryption. It is similar to WPA2 encryption, but more robust. This encryption standard also supports the highest possible connection speed. TRENDnet recommends setting your router to this encryption standard. If you find that one of your wireless network devices does not support WPA3 encryption, then set your router to either WPA2 or WPA encryption.
- WPA2/WPA3-Personal: This setting provides the router with the ability to detect wireless devices using either WPA2 or WPA3 encryption. Your wireless network will automatically change the encryption setting based on the first wireless device connected.

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 | WPA | WPA2 | WPA3 |
|-----------------------|--------------------------------------------|--------------------------------------------|---------------------|
| | IEEE 802.11a/b/g (802.11n devices | | |
| Compatible | will operate at | | |
| Wireless | 802.11g to connect | | |
| Standards | using this standard) | IEEE 802.11a/b/g/n | IEEE 802.11 n/ac/ax |
| Highest | | | |
| Performance | | Up to 450Mbps | Up to 600Mbps (11n) |
| Under This | | (11n) and up to | and up to 4.8Gbps |
| Setting | Up to 54Mbps | 1.3Gbps (11ac)* | (11ax)* |
| Encryption | | | |
| Strength | Medium | High | Highest |
| Additional Options | TKIP or AES, Preshared Key or RADIUS | TKIP or AES, Preshared Key or RADIUS | AES |
| Recommended | ТКІР | AES | AES |
| Configuration | Preshared Key | Preshared Key | Preshared Key |
| comparation | 8-63 characters | 8-63 characters | 8-63 characters |

*Dependent on the maximum 802.11n/ac/ax data rate supported by the device (150Mbps, 300Mbps, 450Mbps, 867Mbps, 1.3Gbps, 2.4Gbps, or 4.8Gbps)

Secure your wireless network

Wireless (2.4GHz or 5GHz)> Security

After you have determined which security type to use for your wireless network (see "<u>How to choose the security type for your wireless network</u>" on page 12), you can set up wireless security.

1. Log into your management page (see "<u>Access the management page</u>" on page 13).

2. Click on the Wireless 2.4GHz or 5GHz.



- 3. Underneath the wireless band section, you will see the **Current Profiles** of all your wireless network listed.
- 4. Select the desired **Security Mode** from the drop down menu and enter the password in the **Password field.**

Note: To select an encryption mode not included in the **Security Mode** drop down, click on **Edit** to select another encryption mode.



5. Click **Apply** then click the **Save** button on the top-right when finished.



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

| Wireless Security | | | | |
|---------------------|------------------------------|---------|--|--|
| Security Mode | WPA/WPA2-Enterprise | / | | |
| | | | | |
| WPA | | | | |
| WPA Cipher | Both(TKIP+AES) | 1 | | |
| Key Update Interval | 3600 | Seconds | | |
| | | | | |
| Radius Server | | | | |
| IP Address | Invalid IPv4 address format | | | |
| | Value must be 1 ~ 65535 | | | |
| Port | | | | |
| | Value length must be 1 ~ 256 | | | |
| Shared Secret | * | | | |

The following section outlines options when selecting **WPA/WPA2-Enterprise**, **WPA2-Enterprise** or **WPA3-Enterprise** 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.

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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
 - o WPS Software/Virtual Push Button located in the management page
- PIN (Personal Identification Number) Method located in the 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 management page (see "Access the management page" on page 13).
- 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. Select **Enabled** to enable WPS on the selected wireless band.

| Enabled | ~ |
|----------|---|
| Disabled | |
| Enabled | |

4. Click **Apply** then click the **Save** button on the top-right when finished.



WPS Config

| WPS External Registrar | | |
|------------------------|----------|---|
| Look | Disabled | ~ |
| LOCK | | |

 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 | TRENDnet823_2.4GHz_6ACE | |
| WPS Security Mode | WPA2/WPA3-Personal | |
| WPS Key | 823E1000020 | |
| AP PIN | 63824360 | |

- 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

| activate WPS or wireless client d | your wireless client de avice PIN in the field an wireless client device. | evice. If you are using the PIN method, enter the nd click Start PIN, then activate the WPS PIN |
|--------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| inothod on your | | |

• **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.

Advanced configuration

Access the management page

1. Open your web browser (e.g. Internet Explorer, Firefox, Safari, Chrome, or Opera) and go to "http://model number" (ie: if your AP is TEW-823DAP, type in <u>http://tew-823dap</u>) or type in <u>http://192.168.10.100</u>.



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 access point.



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

| * | | | | |
|----------|----------|--|--|--|
| a | Password | | | |
| | English | | | |
| | Login | | | |

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 13).

2. Click on System and Operation Mode.

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

| Device Name : TEW-823DAP | | | |
|--------------------------|--|--------------|---|
| 2.4GHz Operation Mode | | Access Point | ~ |
| 5GHz Operation Mode | | Access Point | ~ |
| | | Access Point | |
| Apply | | Repeater | |

- Access Point: In this mode, the device creates a wireless network to your existing network.
- **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.

4. Click Apply then click the Save button on the top-right when finished.



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.

Log into your management page (see "<u>Access the management page</u>" on page 13).
 Click on the wireless band you would like to configure and click Wireless Network.



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

| Wireless Network | | |
|---------------------|--------------|---|
| Wireless Mode | 802.11 b/g/n | * |
| Channel Width | 20 MHz | * |
| Frequency (Channel) | Auto | * |
| AP Detection | Scan | |

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4. Click **Apply** then click the **Save** button on the top-right when finished.





• 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

• **AX only:** This mode only allows devices to connect to the access point using the latest 802.11ax technology. This mode ensures the highest throughput from the access point, however, if you have older 802.11n wireless clients, they will no longer be able to connect to this router.

Note: This wireless mode is only available with TEW-923DAP and TEW-925DAP.

- 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 access point in addition to newer 802.11n devices.
- B/G mixed: This mode only allows devices to connect to the access point 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 access point. 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 access point using older and slower 802.11g technology (typically not recommended).
- B only: This mode only allows devices to connect to the access point using older and slower 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

 AX only: This mode only allows devices to connect to the access point using newer and faster 802.11ax technology. Devices with 802.11ac connected on this mode will not result in the full throughput allowed by the 802.11ax standard.
 Note: This wireless mode is only available with TEW-923DAP and TEW-925DAP.

- A only: This mode only allows devices to connect to the access point using older and slower 802.11a technology (typically not recommended).
- **A/N mixed:** This mode only allows devices to connect to the access point using older and slower 802.11a or 802.11n technology and it thereby reduces the access point's maximum speed to 54Mbps (typically not recommended).
- N only: This mode only allows newer 802.11n devices to connect to your access point. 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 access point 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 (N/AC 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:** Select the channel width for the access point to operate on. By default, the access point is on 20MHz for 2.4GHz and 80MHz for 5GHz.
- 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 access point can broadcast on 1 of 11 Channels for 2.4GHz (13 in Europe and other countries). On 5GHz, this access point can broadcast on 36, 40, 44, 48, 149, 153, 157, 161 in North America. 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.

Indoor Wireless Access Points

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 "<u>Access the management page</u>" on page 13).

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.

| SSID | Security Mode | Password | Edit / Add |
|-----------------------|----------------------|----------|------------|
| TRENDnet823_5GHz_6ACF | WPA2/WPA3-Personal V | ····· ¥ | Edit |

5. Review the wireless settings, click Save and Apply/Discard Changes when finished.

| Wireless Settings | | |
|-------------------|-----------------------|---|
| SSID | TRENDnet823_5GHz_6ACF | |
| Status | Enabled | ~ |
| Hide SSID | Disabled | ~ |
| Separate Stations | Disabled | ~ |

• **SSID:** Enter the wireless network name (SSID) to assign to the selected wireless profile

- Status: Select Disabled to disable this wireless profile or Enabled to enable it
- Hide SSID: Select option to disable the wireless network name to broadcast
- Separate Stations: Select this option to restrict wireless client devices from accessing other client devices connected to this network(s).

MAC filter (TEW-823DAP)

System > 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 access point's wireless network.

1. Log into your management page (see "Access the management page" on page 13).

2. Click on System and click MAC Filter.



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

| Wireless MAC Filter | | |
|---------------------|----------------------------|-------------------------|
| Filter Status | Enabled | • |
| Filter Mode | ALLOW listed computers acc | • |
| ALLOW MAC Address | | (Ex: 00:11:22:33:44:55) |

- Filter Status: Select Enable to enable Wireless MAC Filter Settings, or Disabled to disable it.
- Filter Mode: Select from the pull-down list the MAC filter rule to apply.
 - \circ **DENY:** Select this option to DENY all listed MAC addressed
 - $\,\circ\,$ ALLOW: Select this option to only ALLOW the listed MAC address to the network.
- ALLOW MAC Address: Enter the MAC address to apply on the MAC filter rule

MAC Filter List

| 4 | ALLOW MAC Filter List | |
|---|-----------------------|--------|
| | MAC | Delete |
| | 00:11:22:33:44:55 | Delete |

- MAC: List of all MAC addresses
- Delete: Click to remove the selected MAC address from the MAC Filter List

MAC Filter Schedule

| MAC Filter Schedu | le | |
|-------------------|--------------|-------------------|
| Status | Disabled V | |
| Day | Availability | Start / End Time |
| Sunday | Enabled V | 00 : 00 - 24 : 00 |

- Status: Select Enabled to enable MAC Filter Schedule, or Disabled to disable it
- Availability: Select Enabled for the AP to allow access for all the MAC addresses on the MAC Filter List based off of the day
- Start/End Time: Input the time when the selected MAC addresses will be allowed to have access

Wireless MAC Filter (TEW-923DAP / TEW-925DAP)

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 access point's wireless network.

1. Log into your management page (see "<u>Access the management page</u>" on page 13).

2. Click on System and click MAC Filter.



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

| Filter Status | | | |
|---------------|----------|----------------------|-----|
| Filter Mode | Disabled | ~ | |
| MAC Address | | (Ex: 00:11:22:33:44: | 55) |

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

MAC Filter List

| MAC Filter List | |
|-------------------|--------|
| MAC | Delete |
| 00:11:22:33:44:55 | Delete |

- MAC: List of all MAC addresses
- Delete: Click to remove the selected MAC address from the MAC Filter List

Band Steering

System > Band Steering

When both 2.4GHz and 5GHz bands are using the same SSID and WiFi security settings, this feature allows the AP to automatically detect if clients are 11AC capable and automatically pushing them over to the underutilized 5GHz bands. This allows your AP to use both bands more efficiently and making sure clients capable of the 11AC standard for faster speeds are establish WiFi links at 11AC connectivity whenever possible.

1. Log into your management page (see "<u>Access the management page</u>" on page 13).

- 2. Click on the System tab and click Band Steer.
- 3. Select enable to turn on band steering feature and click **Apply** to save settings.



- 4. Click **Apply** button to save the settings and then click on the **Save** button located on the top left section to save the settings.
- To enable band steering, you have to setup steering SSID the same in both 2.4GHz and ${\rm 5GHz}$



Roaming Support (802.11k / 802.11r)

Wireless (2.4GHz or 5GHz) > Wireless Network

The 802.11k standard is an enhancement to wireless roaming technology. It allows wireless access points to exchange and learn information about other access points on the network such as signal strength and client utilization and provide this information to 802.11k capable wireless client devices. Wireless client devices can use the information about other wireless network and make more intelligent decisions when roaming from one wireless access point to another. This also assists in better access point client utilization. *Note:* This function can only work with 802.11k capable wireless client devices. Please check your device specifications with your manufacturer for details.

Log into your management page (see "<u>Access the management page</u>" on page 13).
 Click on Wireless (2.4GHz or 5GHz), and click Wireless Network.

3. Under the Current Profiles section, click **Edit** for the profile you would like to configure.

| SSID | Security Mode | Password | Edit / Add |
|-----------------------|--------------------|----------|------------|
| TRENDnet823_5GHz_6ACF | WPA2/WPA3-Personal | ₩ | Edit |

4. Under the Roaming Assistant section, select **Enabled** for **802.11k** and **802.11r support** option to enable 802.11k and 802.11r support. The Scan Period defines how often the access point will scan for information about other access points on the wireless network.

| Roaming Assistant | | |
|-------------------|----------|---|
| 802.11r Support | Disabled | * |
| 802.11k Support | Disabled | * |

5. Click **Apply** then click the **Save** button on the top-right when finished.



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.

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Default Access Point IP Address: 192.168.10.100 / 255.255.255.0

- 1. Log into your management page (see "Access the management page" on page 13).
- 2. Click on the System tab and click IP Settings.

3. Review the settings and click **Save** 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.
 - $\circ\,$ DHCP: Select this option to have the access point obtain an IP address from your DHCP server
 - $\circ\,$ 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 **Apply** then click the **Save** button on the top-right when finished.



Reboot Schedule (TEW-823DAP)

System > Schedule

Create a schedule to define the days/time period when the access point will be rebooted. Rebooting the access point could help clear the cache and improve performance.

- 1. Log into your management page (see "Access the management page" on page 13).
- 2. Click on the **System** tab and click **Schedule**.
- 3. Select from the pull-down menu under **Reboot Schedule** to **enable** wireless schedules.

| Schedule Reboot Statu | S | | |
|-----------------------|----------|---|--|
| Reboot Schedule | Enabled | ~ | |
| | Disabled | | |
| | Enabled | | |

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

| Add Schedule Rule | |
|-------------------|-------------------------------------|
| Dav(s) | Select Day(s) |
| Day(s) | □Sun □Mon □Tue □Wed □Thur □Fri □Sat |
| Time | 00 🗸 : 00 🗸 |

- Day: Check the day(s) to implement the schedule.
- Time: Select the time from the drop down menu.
- 4. After clicking **Add**, click on the **Save** button located on the top right section to save the settings.



Schedule (TEW-923DAP/TEW-925DAP)

System > Schedule

Indoor Wireless Access Points

Create a schedule to define the days/time period when the access points will be rebooted, or when the wireless networks will be activated.

- 1. Log into your management page (see "<u>Access the management page</u>" on page 13).
- 2. Click on the **System** tab and click **Schedule**.
- 3. Select from the pull-down menu under **Wireless Schedule** to **enable** wireless schedules.

| Schedule Rule Status | | |
|----------------------|---------|---|
| Wireless Schedule | Enabled | ~ |

4. Review the settings and click **Add** to save the settings.

| Add Schedule Rule | |
|-------------------|-------------------------------------|
| Rule Name | |
| Service | Reboot ~ |
| | Select Day(s) |
| Day(s) | □Sun □Mon □Tue □Wed □Thur □Fri □Sat |
| Start Time | 00 • : 00 • |
| End Time | 00 🗸 : 00 🗸 |

- Rule Name: Input the name for the current schedule
- Service: Select the type of rule for this schedule
 - Reboot: Automatically reboots the access point at the scheduled time
 - **2.4GHz/5GHz/Dual Wireless**: Select the selected wireless band on when it will be enabled within your scheduled time
- Days: Select the days of when this schedule will be activated
- Start / End Time: Input the start and end time for this rule

Configure Spanning Tree

- 1. Log into your management page (see "<u>Access the management page</u>" on page 13).
- 2. Click on the System tab and click Spanning Tree Settings.
- 3. Review the settings and click **Save** to save changes.

| Spanning Tree Settings | | |
|------------------------|----------|----------------|
| Spanning Tree Status | Disabled | ~ |
| Bridge Hello Time | 2 | Seconds (1-10) |
| Bridge Max Age | 20 | Seconds (6-40) |
| Bridge Forward Delay | 15 | Seconds (4-30) |
| Priority | 32768 | (0-65535) |

- Spanning Tree Status: Select Enabled or Disabled 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 **Apply** then click the **Save** button on the top-right when finished.



Set date and time

System > Time and Date Settings

There are two ways to set the access point'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 13).

- 2. Click on the System tab and click Time and Date Settings.
- 3. Next to **Time Zone**, click the drop-down list to select your time zone.

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| Time Configuration | |
|--------------------|--------------------------------|
| System Time | Fri Jun, 23, 2023 17:31:38 |
| Time Zone | GMT-08:00 Pacific Time (US)(V |

Daylight Saving Time

When using NTP or manual configuration, you may also configure Daylight Saving feature.

| Daylight Savings Time | |
|------------------------|-----------------------------------------------|
| Enable Daylight Saving | Enabled v |
| DST Start | Month Mar v Week 2nd v Day of Sun v Hour 02 v |
| DST End | Month Nov Veek 1st Day of Sun Hour 02 Veek |

• Enable: Select Enabled to enable daylight savings or Disabled to disable it

• DST Start / DST END: Configure the start and end time of daylight savings

<u>NTP</u>

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

| Date/Time Settings | | |
|--------------------|---------------|---|
| Clock Mode | SNTP | ~ |
| NTP Server | time.nist.gov | ~ |

- Clock Mode: Select SNTP
- NTP Server: Select the NTP server to use

2. Click Apply then click the Save button on the top-right when finished.



<u>Manual</u>

1. Manually set the date and time of the access point by selecting **Local Time** from the pull-down menu.

| Date/Time Settings | | | |
|--------------------|-------------------|-------|-------------|
| Clock Mode | Local Time | ~ | |
| Date Settings | Year 2022 - Month | Aug 🗸 | Day 20 🗸 |
| Time Settings | Hour 00 v Minutes | 00 🗸 | Second 00 v |

2. Click **Apply** then click the **Save** button on the top-right when finished.



Management VLAN

System > Management VLAN

- 1. Log into your management page (see "<u>Access the management page</u>" on page 13).
- 2. Click on the Management tab and click Management VLAN.
- 3. Review the settings for both 2.4G and 5G profiles and click Save to save settings.

| 2.4GHz Current Profiles | | | |
|-------------------------|--------|-------------------------|--------------------|
| Status | VID | SSID | WiFi Security |
| Disabled v | | TRENDnet823_2.4GHz_6ACE | WPA2/WPA3-Personal |
| 4 | | | F |
| 5GHz Current Pr | ofiles | | |
| Status | VID | SSID | WiFi Security |
| Disabled v | | TRENDnet823_5GHz_6ACF | WPA2/WPA3-Personal |

• Status: Select Enabled from the drop down menu 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 Settings | | |
|--------------------------|----------------------|----------------------------------------|
| Management VLAN ID | Specified VLAN I 🖌 1 | (must be in the range 1 \sim 4092.) |

- 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 **Apply** then click the **Save** button on the top-right when finished.



Wireless Bandwidth Control

Wireless (2.4GHz or 5GHz) > Wireless Bandwidth Control

- 1. Log into your management page (see "Access the management page" on page 13).
- 2. Click on the Wireless (2.4GHz or 5GHz) tab and click Wireless Bandwidth Control.
- 3. Review the settings for both wireless bands (2.4GHz and 5GHz) and click **Save** to save settings.

| Current Profiles | | | |
|------------------|-------------------------|--------------|--------------|
| Status | SSID | Download MAX | Upload Limit |
| Enabled V | TRENDnet823_2.4GHz_6ACE | 10 M | Ibps 1 Mbps |

- Status: Select Enable to enable bandwidth control on this SSID
- SSID: The SSID that the following limits will apply to
- **Download MAX:** Enter your network's inbound traffic limit for the selected wireless SSID
- Upload Limit: Enter your network's outbound traffic limit for the selected wireless SSID
- 4. Click **Apply** then click the **Save** button on the top-right when finished.



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 "<u>Access the management page</u>" on page 13).
- 2. Click on the Management tab and click SNMP Settings.
- 3. Review the settings and click **Save** to save settings.

| SNMP Settings | |
|------------------------------------|------------------|
| SNMP | Disabled V |
| Contact | |
| Location | |
| Community Name (Read Only) | public |
| Community Name (Read/Write) | private |
| Trap Destination Address | |
| Trap Destination Community Name | public |
| SNMPv3 | Disabled v |
| User Name | admin |
| Auth Protocol | None 🗸 |
| Auth Key (8-32 Characters) | |
| Priv Protocol | None 🗸 |
| Priv Key (8-32 Characters) | > _W C |
| 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
- Auth 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 **Apply** then click the **Save** button on the top-right when finished.



SSH Management

Management > SSH Management

SSH (Secure SHell) is a form of a CLI (Command Line Interface), a user interface where commands can be sent to the access point in the form of successive lines of text (command lines).

- 1. Log into your management page (see "<u>Access the management page</u>" on page 16).
- 2. Click on the Management tab and click SSH Management.
- 3. Select Enabled and click Apply to save settings.



4. Click **Apply** then click the **Save** button on the top-right when finished.



LED Controls

System > LED Control

1. Log into your management page (see "<u>Access the management page</u>" on page 13).

- 2. Click on the System tab and click LED Control.
- 3. Review the settings and click Save to save settings.



• **Power LED:** Select On to leave Power LED on or Off option to turn off. 4. Click **Apply** then click the **Save** button on the top-right when finished.



LLDP (TEW-923DAP / TEW-925DAP)

System > LLDP

LLDP (Link Layer Discovery Protocol) is a standard method to allow networked devices to advertise capabilities, identity and other information onto your LAN.

1. Log into your management page (see "<u>Access the management page</u>" on page 13).

- 2. Click on the System tab and click LLDP.
- 3. Select Enabled to enable LLDP.

| LLDP | | |
|--------|---------|---|
| Status | Enabled | ~ |

4. Click **Apply** then click the **Save** button on the top-right when finished.



<u>UPnP</u>

System > UPnP

UPnP (Universal Plug and Play) enables devices to discover each other and connect without the need for manual configuration.

- 1. Log into your management page (see "<u>Access the management page</u>" on page 16).
- 2. Click on the System tab and click UPnP.
- 3. Select **Enabled** to enable UPnP.

| 0111 | | |
|-----------------------------------------------------------------------------------------|---------|---|
| Status | Enabled | • |
| 4. Click Apply then click the Save button on the top-right when finished. | | |

Apply

Bonjour

System > Bonjour

Bonjour is a zero-configuration networking networking protocol that enables automatic discovery of devices and services on your local network.

1. Log into your management page (see "<u>Access the management page</u>" on page 16).

¥

- 2. Click on the **System** tab and click **Bonjour**.
- 3. Select **Enabled** to enable UPnP.



4. Click **Apply** then click the **Save** button on the top-right when finished.

Apply

Gateway Monitor

System > Gateway Monitor

Gateway monitor is a feature that will periodically send a ping to your router. If a ping is not received, the Access Point will automatically try to restore the connection by rebooting the Access Point.

1. Log into your management page (see "<u>Access the management page</u>" on page 16).

2. Click on the **System** tab and click **Bonjour**.

3. Review the settings and click Apply.

| Gateway Monitor | | |
|-----------------------------------|---------|---------------------------|
| Status | Enabled | ~ |
| Gateway IP Addres | | Get Current Gateway IP |
| Delay Between Timeouts | 30 | seconds (10-60) |
| Timeout Attempts Before Reboot | 10 | time-out(s) (3-10) |
| Ping Delay After Auto Reboot | 15 | minute(s) (5-30) |
| Reboot Attempts | 5 | (0-10, 0=Infinite reboot) |

- Status: Select Enabled to enable this feature
- Gateway IP Address: Input the IP address for your gateway, or click Get Current Gateway IP to have your access point automatically find the gateway on your network.

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• Delay Between Timeouts: Set the time between each ping

- **Timeout Attempts Before Reboot**: Set the number of failed pings before a reboot occurs
- **Ping Delay After Auto Reboot**: Set the time before the next ping after each reboot
- Reboot Attempts: Set the maximum number of reboots
- 4. Click **Apply** then click the **Save** button on the top-right when finished.



Repeater



<u>Basic</u>

Wireless (2.4GHz or 5GHz) > Wireless Network

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

Log into your management page (see "<u>Access the management page</u>" on page 13).
 Click on **System**, and select **Operation Mode**.

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3. Select **Repeater**, under the wireless band (2.4GHz or 5GHz) you would like to connect this access point to, then press **Apply**. Please make sure that the selected band is available on your network.

Device Name : TEW-823DAP2.4GHz Operation ModeRepeater5GHz Operation ModeAccess Point

4. Click on the wireless band (Wireless 2.4GHz / Wireless 5GHz) you would like to configure and click **Wireless Network**.



Indoor Wireless Access Points

5. Configure the below settings and click **Save** to save settings.

| Wireless Network | | |
|------------------|----------------|-------------|
| Wireless Mode | 802.11 b/g/n 🗸 | |
| SSID | Target SSID | Site Survey |
| Prefered BSSID | Disabled ~ | |
| Repeater SSID | Repeater SSID | |

- 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 (more on this function in below section).
- **Preferred BSSID:** Click option and enter the MAC address of the preferred wireless network you would like to connect to.
- Repeater SSID: You may specify a new SSID name to use

| Wireless Security | | |
|-------------------|--------------------|---|
| Security Mode | WPA2/WPA3-Personal | ~ |
| WPA | | |
| WPA Cipher | AES | ~ |
| Pre-Shared Key | ••••• | ¥ |

- Security Mode: Select from the pull-down menu the wireless security that is used on the wireless network you would like to connect to.
- WPA Cipher: Select the type of encryption for the selected Security Mode
- Pre-Shared Key: Enter the password for the selected SSID

6. Click **Apply** then click the **Save** button on the top-right when finished.



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 **Repeater** mode is selected.

1. Log into your management page (see "<u>Access the management page</u>" 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.

| Wireless Network | | |
|------------------|---------------|-------------|
| Wireless Mode | 802.11 b/g/n | • |
| SSID | Target SSID | Site Survey |
| 5 (1500)5 | Disabled | • |
| Prefered BSSID | | |
| Repeater SSID | Repeater SSID | |

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.

| SSID | BSSID | Channel | Signal Level | Туре | Security |
|-------------------------|-------------------|---------|--------------|----------------|---------------|
| Spectrum Free Trial | C8:08:73:89:FA:B8 | 6 | -100 dbm | 11NG HT20 | OPEN |
| Staff_2.4G | 00:50:18:21:F6:00 | 7 | -105 dbm | 11NG HT20 | WPA2-PSK |
| 921_2.4GHz | D8:EB:97:34:88:41 | 9 | -45 dbm | 11NG HT20 | WPA3-SAE |
| TRENDnet714_2.4GHz_E4V8 | 00:13:64:00:76:04 | 1 | -77 dbm | 11NG HT40PLUS | WPA-PSK Mixed |
| MDDdisplay | 88:DC:96:45:79:48 | 1 | -104 dbm | 11NG HT20 | WPA2-PSK |
| RMA2018(2.4) | D8:EB:97:EF:39:8A | 4 | -63 dbm | 11NG HT20 | WPA2-PSK |
| Solo | D8:EB:97:32:0C:0A | 5 | -74 dbm | 11NG HT20 | WPA2-PSK |
| GBT-Torrance | 6C:CD:D6:EC:F9:0A | 10 | -89 dbm | 11NG HT20 | WPA2-PSK |
| SankakuConnection_2GEXT | 8C:3B:AD:BD:4E:CB | 1 | -79 dbm | 11NG HT20 | WPA2-PSK |
| RMA2018(2.4) | DA:EB:97:F1:3A:8B | 4 | -62 dbm | 11NG HT20 | WPA-PSK |
| TRENDnet929_2.4GHz_82F0 | 3C:8C:F8:F3:FC:0D | 11 | -41 dbm | 11NG HT40MINUS | WPA2-PSK |
| Kylo Ren | 3C:8C:E8:32:E8:13 | 6 | -67 dbm | 11NG HT20 | WPA2-PSK |

5. Click **Apply** then click the **Save** button on the top-right when finished.



Advanced wireless settings

Wireless (2.4GHz or 5GHz) > Advanced Wireless

- 1. Log into your management page (see "<u>Access the management page</u>" on page 13).
- 2. Click on the wireless band you would like to configure and click **Wireless Advanced Settings**.



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

Advanced Wireless

| Advanced Wireless | | |
|------------------------|---------|--------------------------------|
| Transmit Power | 25 dBm | ~ |
| RTS/CTS Threshold | 2346 | (range 1 - 2346, default 2346) |
| Wi-Fi Multimedia (WMM) | Enabled | ~ |

- **Transmit Power:** The wireless transmit power can be modified to lower the antenna strength setting from 25 dBm to 5 dBm, if necessary. Lowering the wireless transmit power 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: 25 dBm)
- **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: 2346 (range: 256-2346)
- WMM: Select Disabled to disable WMM (Wi-Fi Multimedia)

Client Limit

| Client Limit | | |
|--------------|----------|---|
| Client Limit | Disabled | ~ |
| Max Client | 127 | |

- 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 **Apply** then click the **Save** button on the top-right when finished.



Indoor Wireless Access Points

Maintenance & Monitoring

Administration

Management > Administration

You may want to change your login credentials for logging into your access point. Resetting the access point to factory default settings will also reset the login credentials back to factor default which can be found on the label or on the back of the unit.



1. Log into your management page (see "Access the management page" on page 13).

2. Click on the Management tab and click Administration.

3. Review the settings and click Add to save settings.

| Administrator Settings | |
|------------------------|--------------------------|
| User Name | (Maximum length is 20) |
| Password | 🤟 (Maximum length is 20) |
| Confirm Password | |

- User Name: Change the login user name in this field
- Password: Change the login password in this field
- **Confirm Password**: Re-type the password in this field

<u>Timeout</u>

Management > Timeout

- 1. Log into your management page (see "<u>Access the management page</u>" on page 13).
- 2. Click on the Management tab and click Timeout.
- 3. Set the duration of Idle before a timeout.

| Timeout Settings | | |
|------------------|------|--------------------|
| Web Idle Timeout | 3600 | (120-3600 Seconds) |

4. Click **Apply** then click the **Save** button on the top-right when finished.



Device Name

Management > System Management

- 1. Log into your management page (see "Access the management page" on page 13).
- 2. Click on the Management tab and click System Management.

3. In the Device Name field, change the name of the device (eg: room, office etc)

| System Settings | |
|--------------------------------------------------------|------------------------------------|
| Device Name | TEW-823DAP |
| 4. Click Apply then click the Save butto | on on the top-right when finished. |



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 access point's configuration first.

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

- **Reset Button:** Located on the bottom of the access point, (see "<u>Product Hardware</u> <u>Features</u>" on page 5). Use this method if you are encountering difficulties with accessing your router management page.
 - OR
- Access Point Management Page
- 1. Log into your management page (see "Access the management page" on page 13).
- 2. Click on the Management tab and click Backup/Restore Settings.
- 3. Click Load Default. If prompted, click Yes or Ok.

Reset to Factory Defaults

Load Default

Load Default

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 access point settings instead of simply restoring from a backed up router configuration file.

To back up your configuration:

- 1. Log into your management page (see "<u>Access the management page</u>" on page 13).
- 2. Click on the Management tab and click Backup/Restore Settings.

3. Click Export.



5. 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: *TEW-823DAP_backup.tar.gz* (1).des3)

6. Save the configuration file to location on your computer.

To restore your configuration:

- 1. Log into your management page (see "<u>Access the management page</u>" on page 13).
- 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.

Import Settings

Settings File Location

Choose File No file chosen

- 4. Navigate to the location of the access point configuration file to restore. (Default Filename: *TEW-823DAP_backup.tar.gz (1).des3*).
- 5. Select the access point 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 access point to restore settings.

Restart (Reboot) access point

Management > Backup/Restore Settings

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

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

- **Turn the router off** disconnect the power source or press the power button from the side of your access point (see "<u>Product Hardware Features</u>" on page 5).
 - 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 13).

2. Click on the Management tab and click Backup/Restore Settings.

3. Click **Reboot** under **System Reboot** to restart the access point. If prompted, click **yes** or **OK**.

| System Reboot | | | |
|---------------|--------|---|--|
| System Reboot | Reboot | l | |

Upgrade your firmware

Management > Upload Firmware

TRENDnet may periodically release firmware upgrades that may add features or fix problems associated with your TRENDnet access point 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. <u>http://www.trendnet.com/downloads/</u>

In addition, it is also important to verify if the latest firmware version is newer than the one your access point is currently running. To identify the firmware that is currently loaded on your access point, log in to the router, click on the **Status** tab and select **Main**. 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 management page (see "Access the management page" on page 13).
- 2. Click on Management, and click on Upload Firmware.
- 3. Depending on your web browser, next to **Upgrade Firmware**, click **Browse** or **Choose File**.

Firmware

Location

Choose File No file chosen

- 4. Navigate to the folder on your computer where the unzipped firmware file (*.des3*) is located and select it.
- 5. Click **Apply** 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 13).
- 2. Click on the Management tab and click Log. Click apply to save settings

| System log | | | | |
|--------------------------|---------|---|--|--|
| Enable System Log | Enabled | ~ | | |
| Syslog Server IP Address | | | | |

- Enable System log: Select option to enable system log feature
- Syslog Server IP Address: Enter the IP address of the syslog server
- 3. Click Apply then click the Save button on the top-right when finished.



Diagnostics

Management > Diagnostics

Ping Test

- 1. Log into your management page (see "Access the management page" on page 13).
- 2. Click on the Management tab and click Diagnostics.

| Ping Test Parameter | | | | |
|---------------------|----|--|--|--|
| IP Address | | | | |
| Packet Length | 64 | | | |
| Number of Pings | 4 | | | |

- IP Address: 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 "<u>Access the management page</u>" on page 13).
- 2. Click on the Management tab and click Diagnostic.



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

Check system information

Dashboard > Dashboard

- 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 Information | | |
|--------------------|----------------------------|--|
| Device Name | TEW-823DAP | |
| Firmware Version | 1.0.1.05 | |
| System Time | Tue Jun, 27, 2023 11:04:50 | |
| System Up Time | 3 Day, 23:42:46 | |

- 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 | 3C:8C:F8:FD:6A:CD | |
| IP Address | 192.168.10.199 | |
| Subnet Mask | 255.255.255.0 | |
| Default Gateway | 192.168.10.254 | |
| Primary Domain Name Server | 0.0.0.0 | |
| 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 (Both 2.4GHz and 5 GHz)

| 2.4GHz Wireless | | | | | |
|----------------------------------|-------------------|--------------------|----|--|--|
| Operation Mode | Access Point | | | | |
| Wireless Mode | 802.11 b/g/n | | | | |
| Channel Width | HT20 | | | | |
| Frequency (Channel) | CH1 - 2.412GHz | | | | |
| TX (Packets) | 0.00B (0 PKts.) | | | | |
| RX (Packets) | 0.00B (0 PKts.) | | | | |
| SSID List | | | | | |
| SSID MAC Address Security Mode S | | | | | |
| TRENDnet823_2.4GHz_6ACE | 3C:8C:F8:FD:6A:CE | WPA2/WPA3-Personal | 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

Dashboard > 2.4GHz Wireless / 5GHz Wireless

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

2. Click on the Status tab and click 2.4GHz or 5GHz Wireless.

| Device Name | MAC Address | SSID | Download | Upload | Action |
|---------------------------|-------------------|-----------------------|----------|---------|------------|
| TRENDnet-s-Galaxy-Tab-S5e | 02:EB:FA:4E:16:04 | TRENDnet823_5GHz_6ACF | 19.79KB | 64.79KB | Black List |

- Device Name: Displays the name of the client that is connected to the selected band
- MAC Address: Displays the MAC address of the client that is connected to the access point

- **SSID:** Displays the SSID that the client is connected to
- **Mode:** Displays the 802.11 wireless mode and the channel width that the client device is connected.
- **Download (Bytes):** Displays the amount of data transmitted to the client
- Upload (Bytes): Displays the amount of data received from the client
- Action: Clicking the Black List button will ban the client from the network

System Log

Dashboard > System Log

System log keeps track of changes made to the access point.

1. Log into your management page (see "Access the management page" on page 13).

2. Click on the Dashboard tab and click System Log.

System log

Tue Jun 27 11:23:57 2023 daemon.debug hostapd: ath50: STA 8e:67:1d:35:bf:fe WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:23:57 2023 daemon.debug hostapd: ath50: STA 8e:67:1d:35:bf:fe IEEE 802.11: association OK (aid 2) Tue Jun 27 11:23:26 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:23:26 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 IEEE 802.11: association OK (aid 1) Tue Jun 27 11:23:01 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 IEEE 802.11: association OK (aid 1) Tue Jun 27 11:16:49 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:16:49 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:16:49 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:16:08 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:16:08 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:16:08 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:16:08 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 IEEE 802.11: association OK (aid 1) Tue Jun 27 11:12:32 2023 daemon.debug hostapd: ath50: STA 02:eb:fa:4e:16:04 IEEE 802.11: association OK (aid 1) Tue Jun 27 11:12:32 2023 daemon.debug hostapd: ath50: STA 8e:67:1d:35:bf:fe WPA: pairwise key handshake completed (RSN) Tue Jun 27 11:12:32 2023 daemon.debug hostapd: ath50: STA 8e:67:1d:35:bf:fe IEEE 802.11: association OK (aid 2)

- Refresh: Clicking Refresh allows the access point to update the log with any new data that has not been previously logged yet.
- Clear: Clears all the data saved previously onto the log.

Hardware Features and Specifications

| | TEW-823DAP (v1.0R) | TEW-923DAP (v1.0R) | TEW-925DAP (v1.0R) | | |
|-----------------------|---------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------|--|--|
| | 1 x 802.3af PoE Gigabit LAN Port | 1 x 802.3at PoE+ 2.5GBASE-T LAN port (power input) | | | |
| Hardware Interface | Power Port (12V DC, 1A external power adapter not included) | Power port (12V DC, 1.5A external power adapter not included) | | | |
| | | LED indicator | | | |
| | | Reset button | | | |
| Frequency | | 2.4GHz: 2.412 – 2.472GHz | | | |
| Frequency | 5GHz: 5.180 – 5.825GHz | | | | |
| Wiroloss Channels | 2.4GHz: FCC: 1- | 11, ETSI: 1-13 | 2.4GHz: FCC: 1-11 | | |
| Wireless Chaimeis | 5GHz: FCC: 36, 40, 44, 48, 149, 153, 15 | 5GHz: FCC: 36, 40, 44, 48, 149, 153, 157, 161, and 165 | | | |
| Modulation | DBPSK/DQPSK/CCK for DSSS technique | | | | |
| Woddiation | BPSK/QPSK/16-QAM/64-QAM/256-QAM for OFDM technique | | | | |
| Antonno Goin | 2.4GHz: 2 x 4 dBi internal | 2.4GHz: 2 x 4.5 dBi internal | 2.4GHz: 2 x 4.5 dBi internal | | |
| Antenna Gain | 5GHz: 2 x 5 dBi internal | 5GHz: 2 x 5.5 dBi internal | 5GHz: 2 x 5 dBi internal | | |
| | 802.11a: FCC: 28.5 dBm (max.) / CE: 19 dBm (max.) | 802.11a: FCC: 23 dBm (max.) / CE: 23 dBm (max.) | 802.11a: FCC: 27 dBm (max | | |
| | 802.11b: FCC: 26.5dBm (max.) / CE: 18 dBm (max.) | 802.11b: FCC: 22 dBm (max.) / CE: 22 dBm (max.) | 802.11b: FCC: 21 dBm (max.) | | |
| Window Output Down | 802.11g: FCC: 30 dBm (max.) / CE: 19 dBm (max.) | 802.11g: FCC: 22 dBm (max.) / CE: 22 dBm (max.) | 802.11g: FCC: 21 dBm (max.) | | |
| wireless Output Power | 802.11n (2.4GHz): FCC: 24.5 dBm (max.) / CE: 21 dBm (max.) | 802.11n (2.4GHz): FCC: 22 dBm (max.) / CE: 22 dBm (max.) | 802.11n (2.4GHz): FCC: 21 dBm (max.) | | |
| | 802.11n (5GHz): FCC: 28.5 dBm (max.) / CE: 21dBm (max.) | 802.11n (5GHz.): FCC: 23 dBm (max.) / CE: 23 dBm (max.) | 802.11n (5GHz.): FCC: 27 dBm (max.) | | |
| | 802.11ac: FCC: 28.5 dBm (max.) / CE: 21 dBm (max.) | 802.11ac (5GHz.): FCC: 23 dBm (max.) / CE: 23 dBm (max.) | 802.11ac (5GHz.): FCC: 27 dBm (max.) | | |

| | - | 802.11ax (2.4GHz): FCC: 22 dBm (max.) / CE: 22 dBm (max.) | 802.11ax (2.4GHz): FCC: 21 dBm (max.) | |
|-----------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------|--|
| | - | 802.11ax (5GHz.): FCC: 23 dBm (max.) / CE: 23 dBm (max.) | 802.11ax (5GHz.): FCC: 27 dBm (max.) | |
| | 802.11a: -73 dBm (typical) @ 54Mbps | 802.11a: -72 dBm (typical) @ 54Mbps | 802.11a: -69 dBm (typical) @ 54Mbps | |
| | 802.11b: -87 dBm (typical) @ 11Mbps | 802.11b: -92 dBm (typical) @ 11Mbps | 802.11b: -84 dBm (typical) @ 11Mbps | |
| | 802.11g: -73 dBm (typical) @ 54Mbps | 802.11g: -78 dBm (typical) @ 54Mbps | 802.11g: -71 dBm (typical) @ 54Mbps | |
| | 802.11n (2.4GHz): -68 dBm (typical) @ 400Mbps | 802.11n (2.4GHz): -66 dBm (typical) @ 300Mbps | 802.11n (2.4GHz): -67 dBm (typical) @ 300Mbps | |
| Receiving Sensitivity | 802.11n (5GHz): -67 dBm (typical) @ 400Mbps | 802.11n (5GHz): -64 dBm (typical) @ 300Mbps | 802.11n (5GHz): -58 dBm (typical) @ 300Mbps | |
| | 802.11ac: -57 dBm (typical) @ 867Mbps | 802.11ac: -60 dBm (typical) @ 867Mbps | 802.11ac: -57 dBm (typical) @ 1733Mbps | |
| | - | 802.11ax (2.4GHz): -64 dBm (typical) @ 573Mbps | 802.11ax (2.4GHz): -54 dBm (typical) @ 573Mbps | |
| | - | 802.11ax (5GHz): -63 dBm (typical) @ 2402Mbps | 802.11ax (5GHz): -52 dBm (typical) @ 4804Mbps | |
| | IEEE 802.3af Type 1 PoE PD Class 3 | IEEE 802.3at Type 2 PoE+ PD Class 4 | | |
| Power | Input: 100 – 240 V AC, 50/60Hz, Output: 12V DC, 1A external power adapter (not included) | Input: 100 – 240V AC, 50/60Hz, Output: 12V DC, 1.5A external power adapter (not included) | | |
| | Max. consumption: 11.9W | Max. consumption: 17.4W | Max. Consumption: 18W | |
| Operating Temperature | | 0° - 40° C (32° - 104° F) | | |
| Operating Humidity | Max. 90% non-condensing | | | |
| | CE | - | | |
| Certifications | FCC | | | |
| | IC | | | |
| Dimensions | 130 x 130 x 46mm (5.12 x 5.12 x 1.8 in.) | 160 x 160 x 30mm (6.3 x 6.3 x 1.18 in.) | 160 x 160 x 30mm (6.3 x 6.3 x 1.18in.) | |
| Weight | 188g (6.7 oz.) | 380g (13.4 oz.) | 600g (21.16 oz.) | |
| Warranty 3 year | | | | |

| | TEW-823DAP TEW-923DAP TEW-925DAP | | | | |
|-----------------|----------------------------------|-----------------|--|--|--|
| Dackage Content | Quick Installation Guide | | | | |
| Package Content | Network cable (0.5m / 1.64 ft.) | | | | |
| | | Mounting plates | | | |

Indoor Access Point Software Specifications

| Standards | IEEE 802.3 IEEE 802.3u IEEE 802.3x IEEE 802.3ab IEEE 802.3af IEEE 802.3at (TEW-923DAP / TEW-925DAP) | IEEE 802.3bz (TEW-923DAP / TEW-925DAP) IEEE 802.1Q IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11k IEEE 802.11n (up to 400Mbps)* | IEEE 802.11r IEEE 802.11v IEEE 802.11ac (up to 867Mbps / TEW- 925DAP: up to 1733Mbps)* IEEE 802.11ax (TEW-923DAP: 5GHz up to 2402Mbps / 2.4GHz up to 573Mbps TEW-925DAP: 5GHz up to 4804Mbps / 2.4GHz up to 573Mbps)* |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Features | MU-MIMO IPv4 static/DHCP address assignment Access Point | Band steering UPnP Bonjour Beneater | 802.1Q GLAN assignment per SSID |
| Management/Monitoring | Web based management (HTTP/HTTPS) Command Line Interface (Telnet/SSH) SNMP v2c/v3 Spanning Tree Protocol (STP) | Event logging Ping test Traceroute Schedule WiFi radio enable/disable | Ping watchdog/gateway connection monitor Reboot & schedule automatic reboot Channel utilization scan |
| Access Control | Wireless encryption: WPA2/WPA3- RADIUS (Enterprise), WPA2/WPA3-PSK (Personal) | MAC filter with schedulingMaximum client limit | Client isolation |
| QoS | Bandwidth control per SSID | | |
| SSID | Up to 8 SSIDs per wireless band (16 total) | | |

Disclaimer

*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. For maximum performance of up to 867Mbps use with an 867Mbps 802.11ac wireless adapter. For maximum performance of up to 300Mbps, use with a 300Mbps 802.11n wireless adapter. Multi-User MIMO (MU-MIMO) requires the use of multiple MU-MIMO enabled wireless adapters.

**Due to regulatory requirements, the wireless channels specified cannot be statically assigned, but will be available within the available wireless channels when set to auto.

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 access point management page?

Answer:

- 1. Check your hardware settings again. See "<u>Getting Started</u>" on page 7.
- 2. Make sure the LAN and WLAN lights are lit.
- 3. Make sure your network adapter TCP/IP settings are set to <u>Obtain an IP address</u> <u>automatically</u> or <u>DHCP</u> (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 11/10/8.1/8/7

- 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 access point. 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 access point. What should I do? Answer:

1. Double check that the LAN light on the access point 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 "<u>Steps to improve wireless connectivity</u>" on page 8 if you continue to have wireless connectivity problems.

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/7/8/8.1/10/11

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 - 10.12

- 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 and up

- 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.

Indoor Wireless Access Points

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 **Save** button.

In MAC 10.6, from the **Configure** drop-down list, select **Using DHCP** and click the **Save** 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/7/8/8.1/10,

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 7/8/8.1/10/11

- 1. Open Connect to a Network by clicking the network icon (and 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**. 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

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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

EN IEC 62368-1:2020 + A11: 2020

EMC

EN 55032: 2015 / AC: 2016 EN 55035: 2017 EN 301 489-1 V2.2.1 (2017-03) EN 301 489-17 V3.2.0 (2017-03)

Radio Spectrum & Health

EN 300 328 V2.2.2 (2019-07) EN 301 893 V2.1.1 (2017-05) EN IEC 62311:2020 EN 50385: 2017 / EN 50665: 2017

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

EMC Directive 2014/30/EU RoHS 2011/65/EU WEEE Directive 2012/19/EU REACH Regulation (EC) No.1907/2006 Low Voltage Directive 2014/35/EU Radio Equipment Directive 2014/53/EU Ecodesign Directive 2009/125/EC

Operations in the 5.15-5.25GHz / $5.470 \sim 5.725$ GHz 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.



Industry Canada Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference

(2) This device must accept any interference, including interference that may cause undesired operation of the device

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) L'appareil ne doit pas produire de brouillage;

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:

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:

les dispositifs fonctionnant dans la bande de 5150 à 5250MHz 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 Canada 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 Canada limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à distance minimum de 20cm entre le radiateur et votre corps.

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 Operation of this device is restricted to indoor use only

Limited Warranty

TRENDnet warrants only to the original purchaser of this product from a TRENDnet authorized reseller or distributor that this product will be free from defects in material and workmanship under normal use and service. This limited warranty is nontransferable and does not apply to any purchaser who bought the product from a reseller or distributor not authorized by TRENDnet, including but not limited to purchases from Internet auction sites.

Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service. Specific warranty periods are listed on each of the respective product pages on the TRENDnet website.

• AC/DC Power Adapter, Cooling Fan, and Power Supply carry a one-year warranty.

Limited Lifetime Warranty

TRENDnet offers a limited lifetime warranty for all of its metal-enclosed network switches that have been purchased in the United States/Canada on or after 1/1/2015.

• Cooling fan and internal power supply carry a one-year warranty

To obtain an RMA, the ORIGINAL PURCHASER must show Proof of Purchase and return the unit to the address provided. The customer is responsible for any shipping-related costs that may occur. Replacement goods will be shipped back to the customer at TRENDnet's expense.

Upon receiving the RMA unit, TRENDnet may repair the unit using refurbished parts. In the event that the RMA unit needs to be replaced, TRENDnet may replace it with a refurbished product of the same or comparable model.

In the event that, after evaluation, TRENDnet cannot replace the defective product or there is no comparable model available, we will refund the depreciated value of the product.

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, or (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. International customers

Limited Warranty

TRENDnet User's Guide

shipping from outside of the USA and Canada are responsible for any return shipping and/or customs charges, including but not limited to, duty, tax, and other fees.

Refurbished product: Refurbished products carry a 90-day warranty after date of purchase. Please retain the dated sales receipt with purchase price clearly visible as evidence of the original purchaser's date of purchase. Replacement products may be refurbished or contain refurbished materials. If TRENDnet, by its sole determination, is unable to replace the defective product, we will offer a refund for the depreciated value of the product.

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.

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LIMITATION OF LIABILITY: TO THE FULL EXTENT ALLOWED BY LAW, TRENDNET ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN

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

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TRENDNET

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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