



# User Manual

## AC1200 Mesh Wi-Fi Range Extender

DAP-1610

---

# Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

## Manual Revisions

Hardware	Revision	Date	Description
B1	v1.00	20 November, 2020	Initial release

## Trademarks

D-Link and the D-Link logo are trademarks or registered trademarks of D-Link Corporation or its subsidiaries in the United States or other countries. All other company or product names mentioned herein are trademarks or registered trademarks of their respective companies.

Apple®, Apple logo®, Safari®, iPhone®, and Macintosh® are trademarks of Apple Inc., registered in the U.S. and other countries. App Store<sup>SM</sup> is a service mark of Apple Inc.

Chrome™ browser, Google Play™ and Android™ are trademarks of Google Inc.

Internet Explorer®, Windows® and the Windows logo are trademarks of the Microsoft group of companies.

Copyright © 2021 by D-Link Corporation. All rights reserved. This publication may not be reproduced, in whole or in part, without prior expressed written permission from D-Link Corporation.

## Power Usage

### ErP Power Usage

This device is an Energy Related Product (ErP) with High Network Availability (HiNA), and automatically switches to a power-saving Network Standby mode within 1 minute of no packets being transmitted. If it is not needed during certain periods of time, it can be unplugged to save energy.

Network Standby: 3.7072 watts

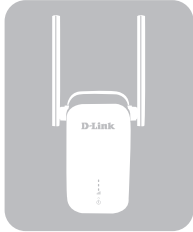
---

# Table of Contents

<b>Preface .....</b>	<b>i</b>	Existing Network .....	28
<b>Product Overview .....</b>	<b>1</b>	Smart Connect .....	29
Package Contents .....	1	Network Settings .....	31
System Requirements .....	2	Management .....	33
Introduction .....	3	Time .....	33
Features .....	3	Admin .....	34
What is a Wireless Extender? .....	4	System .....	35
Hardware Overview .....	5	Upgrade .....	36
Front .....	5	Statistics .....	37
Status/WPS LED Indicator .....	6	<b>Connecting Wireless Clients to the Extender .....</b>	<b>38</b>
Bottom .....	7	WPS Button .....	38
Back .....	8	Windows® 10 .....	39
<b>Installation .....</b>	<b>9</b>	Windows® 8 - WPA/WPA2 .....	40
Wireless Installation Considerations .....	9	<b>Troubleshooting .....</b>	<b>42</b>
Hardware Setup .....	10	<b>Wireless Basics .....</b>	<b>44</b>
<b>Getting Started .....</b>	<b>11</b>	Tips .....	45
WPS-PBC Configuration .....	12	<b>Technical Specifications .....</b>	<b>46</b>
Assessing Uplink Signal Strength .....	13		
D-Link Wi-Fi App .....	14		
Wireless Setup Wizard .....	16		
Access Point Mode Settings .....	23		
<b>Configuration .....</b>	<b>24</b>		
Home .....	24		
Settings .....	27		
Extender Settings .....	27		

# Product Overview

## Package Contents



DAP-1610  
AC1200 Mesh Wi-Fi Range Extender



Simple Setup Guide



Quick Installation Card

If any of the above items are missing, please contact your reseller.

# System Requirements

<b>Network Requirements</b>	<ul style="list-style-type: none"><li>• A wireless router with an active Internet connection.</li><li>• IEEE 802.11ac, 802.11n, 802.11g, 802.11b, or 802.11a wireless clients/devices</li></ul>
<b>Web-based Configuration Utility Requirements</b>	<p><b>A Computer or Mobile Device with the following:</b></p> <ul style="list-style-type: none"><li>• Windows®, Apple® Mac OS®, or Linux-based operating system</li><li>• Wireless adapter or Wi-Fi functionality</li><li>• An Apple® iOS® or Android™ device</li></ul> <p><b>Browser Requirements:</b></p> <ul style="list-style-type: none"><li>• Internet Explorer® 10 or later</li><li>• Firefox® 28 or later</li><li>• Safari® 6.0 or later</li><li>• Google Chrome™ 28 or later</li></ul>
<b>D-Link Wi-Fi App Requirements</b>	<ul style="list-style-type: none"><li>• iOS® or Android™ device (Please refer to the app's store page to check whether your device is compatible.)</li></ul>

# Introduction

## Features

### **High-speed Wireless Performance With Wireless 802.11ac Technology**

Thanks to the latest wireless AC technology, the DAP-1610 provides a wireless connection at up to 1200 Mbps\* with other 802.11ac wireless devices. This feature lets you participate in real-time activities online, such as video streaming, online gaming, and real-time audio with smooth performance.

### **Compatibility**

The DAP-1610 is fully compatible with the latest 802.11ac standard, but is also backwards compatible with IEEE 802.11n/g/b/a wireless devices, so you can use your existing devices without sacrificing performance.

### **Compact, Convenient Design**

The DAP-1610 is a compact device that is ideal for use at home or a small office, as it does not take up much space and is ready to use by simply plugging it in. The bright Signal Indicator LED makes finding a suitable location a cinch. Its diminutive wall-plug design easily saves you the hassle of dealing with a power cord.

### **Latest Wireless Network Security and Encryption**

The DAP-1610 supports wireless security features to prevent unauthorized access from the wireless network. Support for WPA/WPA2/WPA3 standards ensure that you'll be able to use the best possible encryption methods with your compatible wireless devices.

### **Easy to Set Up, Easy to Use**

Setting up the AC1200 Mesh Wi-Fi Range Extender is simple. You can use the supported D-Link Wi-Fi app on your compatible iOS or Android device to utilize the built in set up wizard. The DAP-1610 can also receive automatic over-the-air firmware updates, which ensures the best protection and the latest features for your device.

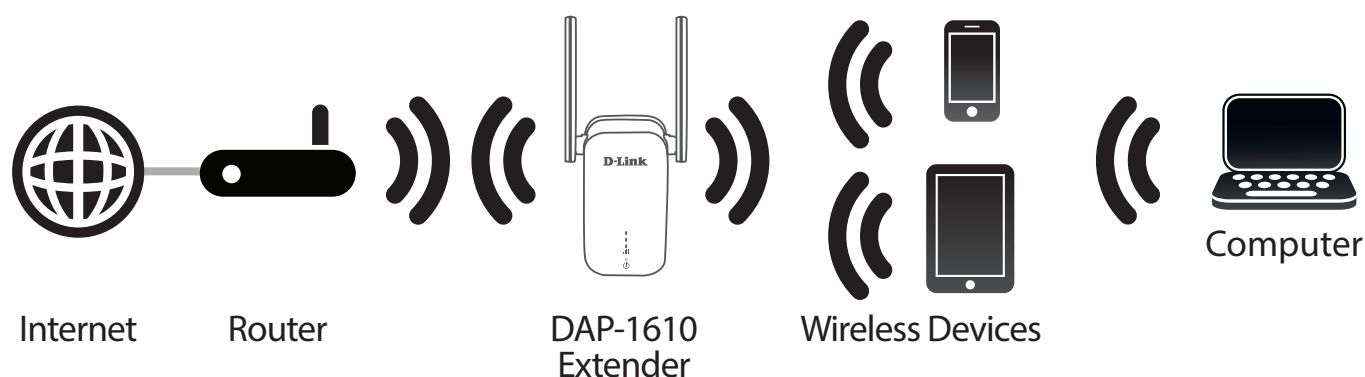
---

\* Maximum wireless signal rate derived from standard IEEE specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead may lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

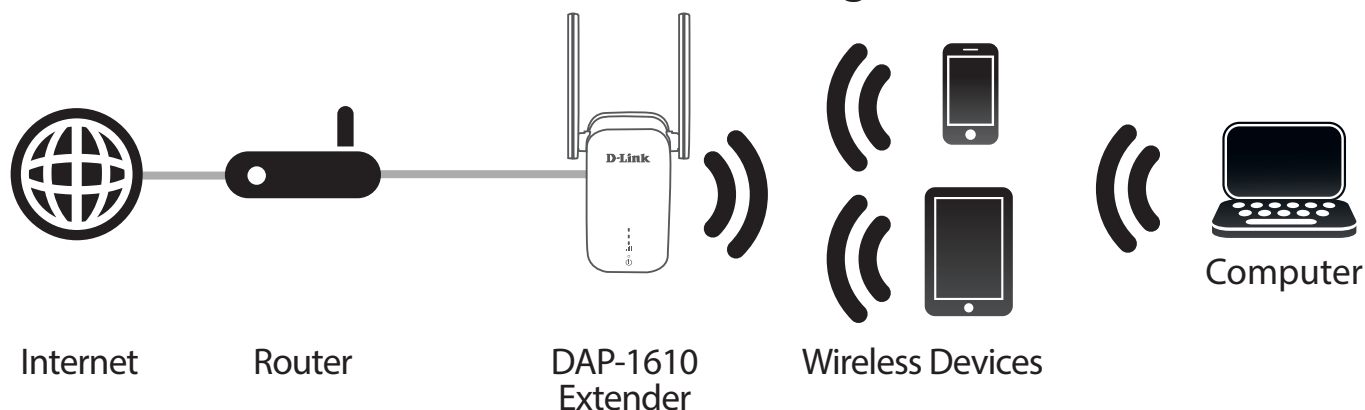
## What is a Wireless Extender?

The DAP-1610 acts as a repeater to extend the range of an existing wireless network to provide a better signal for parts of your home or office that may have poor or no reception. Your existing wireless signal will be re-broadcast by the DAP-1610, allowing you to reach the farthest corners of your home or office. The extended network can simply use the same network credentials as the existing network, or you can specify a different network name and password, giving you the flexibility to control network access. You may also use the DAP-1610 as a wireless access point by connecting an Ethernet cable.

### Extend Your Wireless Network using Wi-Fi

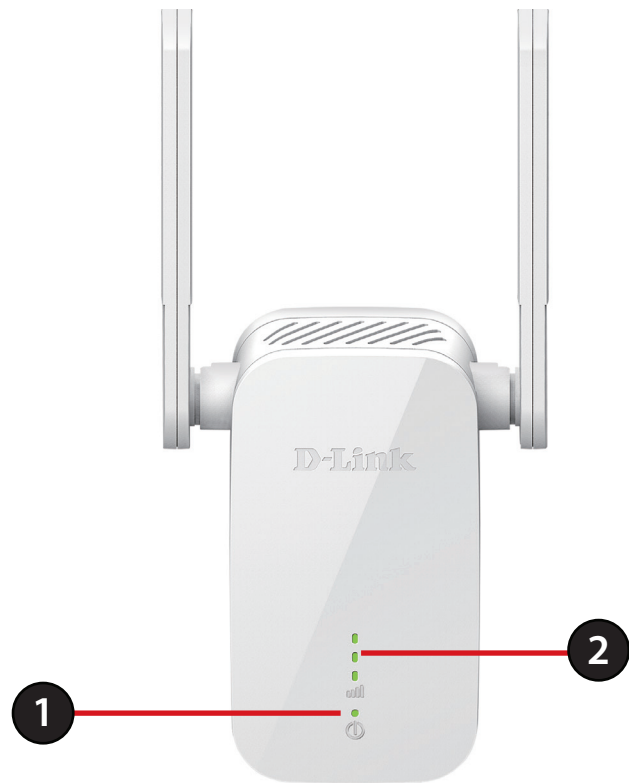


### Create a Wireless Network using Ethernet



# Hardware Overview

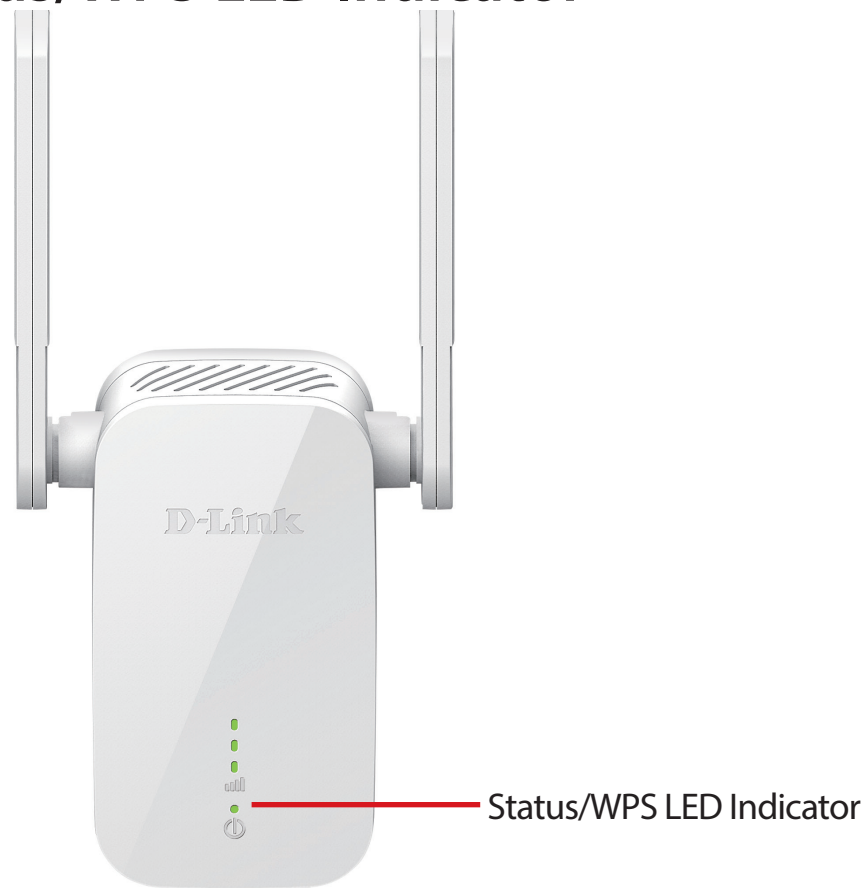
## Front



1	Status/WPS LED	This LED indicates the current status of the DAP-1610, as detailed on the next page.
2	Signal Indicator LED	The more lit green bars on the Signal Indicator LED, the better the wireless signal to the host network. A single solid orange LED indicates a weak Wi-Fi signal.

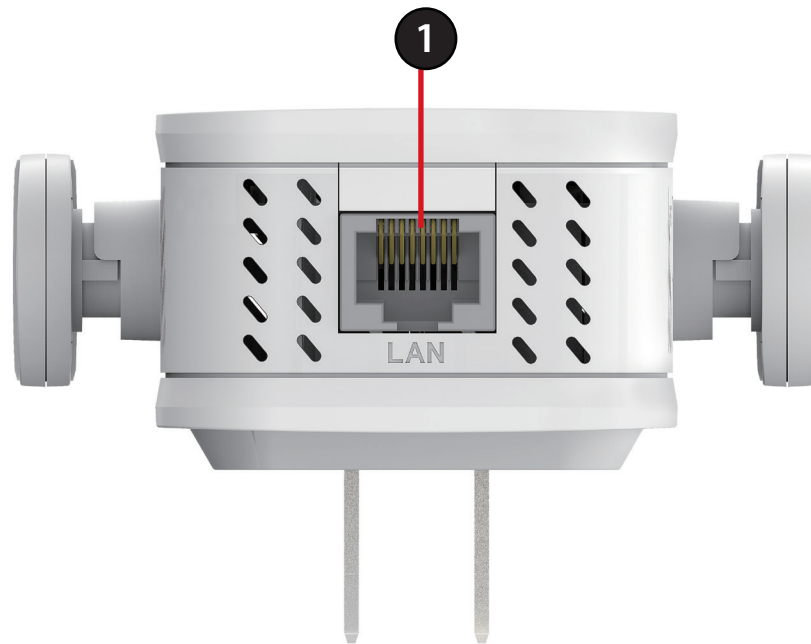


# Status/WPS LED Indicator



LED Indicator	Color	Status	Description
Power/Status	Green	Solid	The DAP-1610 is receiving power and connected to a host network.
		Blinking	WPS mode is active and is searching for another WPS device.
	Red	Solid	The DAP-1610 is booting or an error has occurred.
	Orange	Blinking	The DAP-1610 is not connected to a host network.
	None	Off	Device is not receiving power. Check the power outlet.

## Bottom



1	<b>LAN</b>	The LAN port can be used to either connect an Ethernet enabled device to the wireless extender or connect to an existing network allowing it to function as an Access Point (AP).
---	------------	---

## Back

You may locate the Wi-Fi name (SSID) and password for your DAP-1610. This information is printed on the specification sticker on the back of the device. You will need this information to connect your computer or mobile device to the default network (SSID) of your DAP-1610. This information is also provided on the Quick Installation Card.



# Installation

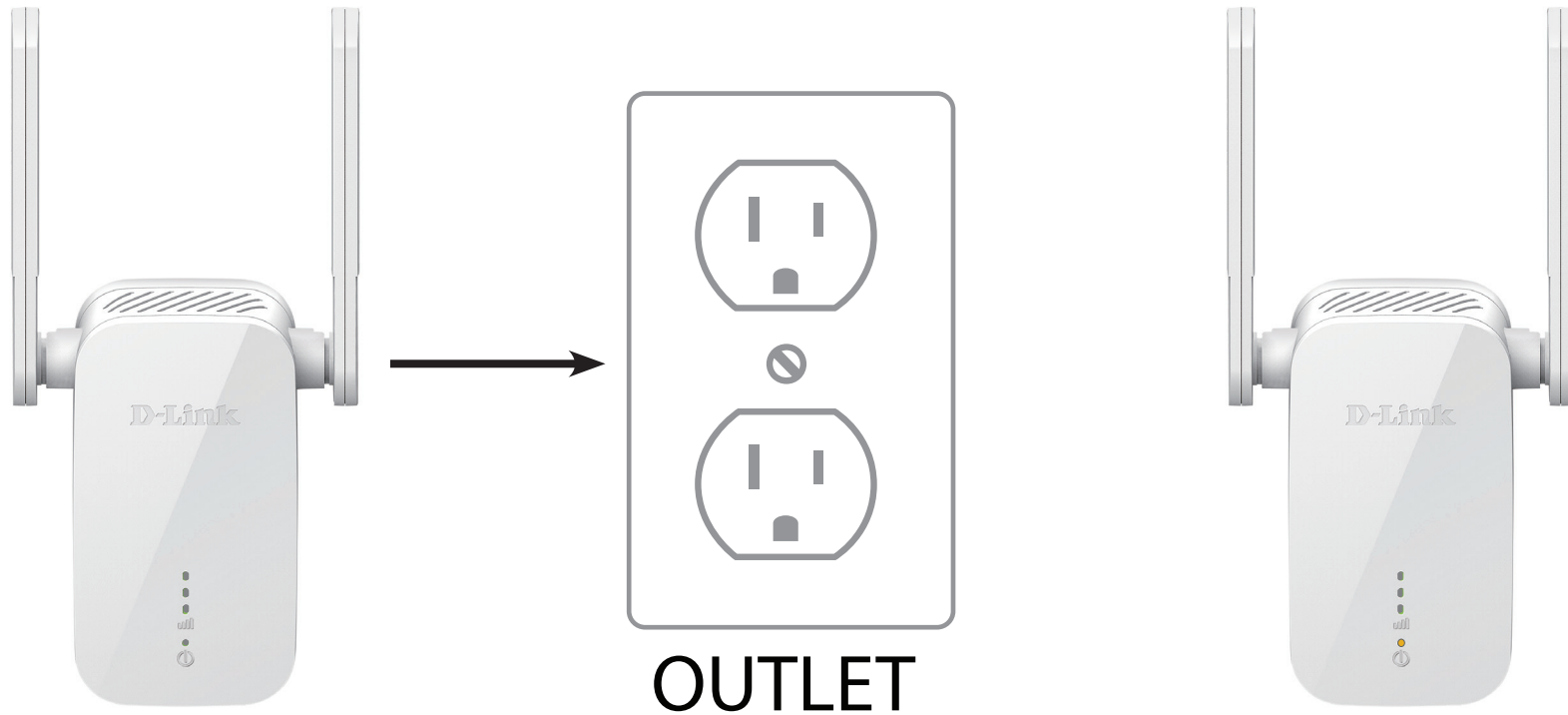
## Wireless Installation Considerations

The DAP-1610 lets you extend your existing wireless network's coverage as long as it is within range of the uplink network. Keep in mind that the DAP-1610's extension network's range may be limited by the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the D-Link extender and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (0.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position extenders, access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4 GHz cordless phones or Bluetooth (speaker, headset, printer, mice, keyboards), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

# Hardware Setup

Plug in the DAP-1610 to a power outlet. Verify that the power LED is blinking orange before continuing with configuration.



# Getting Started

There are several configuration tools you can use to set up your DAP-1610.

- **WPS PBC** - To easily extend an existing wireless network refer to “WPS-PBC Configuration” on page 12 for setup instructions.
- **D-Link Wi-Fi App** - Use your Android device, iPhone or iPad to configure your extender. Refer to “D-Link Wi-Fi App” on page 14 for setup instructions.
- **Web-based Wireless Setup Wizard** - This wizard will launch when you log into the extender’s web configuration utility for the first time. Refer to “Wireless Setup Wizard” on page 16 for setup instructions.
- **Access Point Mode Settings**- This section will go through how to setup your extender as an access point. Refer to “Access Point Mode Settings” on page 23.

# WPS-PBC Configuration

Wireless Protected Setup (WPS) makes connecting your DAP-1610 easy. To use WPS, first make sure the source router or access point features a WPS Button or has a virtual WPS Button.

## Step 1 - Initiate WPS Mode

While the Status/WPS LED is blinking orange, push the WPS button on the source wireless router or AP, and then push the WPS button on the DAP-1610. The Status/WPS LED will start to flash green. Please allow up to two minutes for the process to finish. The Status/WPS LED will turn solid green when the DAP-1610 has connected successfully to the source wireless router or access point.

## Step 2 - Connecting Devices to the DAP-1610

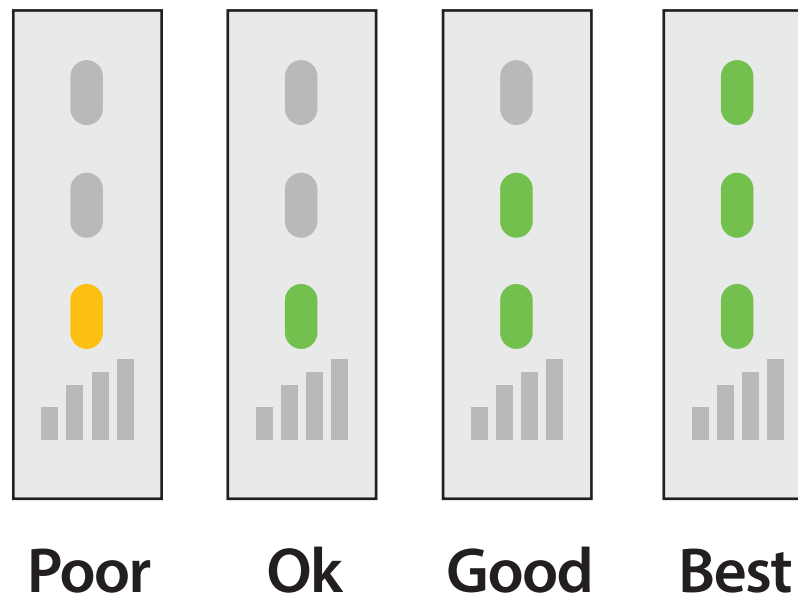
The DAP-1610 is now ready to share the extended Wi-Fi network with your PCs and mobile devices. The network name (SSID) and password will be the same as your source wireless router or AP.

The Smart Connect feature will present a single wireless network. When connecting clients to the extended network, they will be automatically added to the best band, either 2.4 GHz or 5 GHz. To disable the Smart Connect feature and individually configure 2.4 GHz and 5 GHz SSIDs, refer to “Extender Settings” on page 27.



# Assessing Uplink Signal Strength

The Status/WPS LED will turn solid green when the DAP-1610 has connected successfully to a wireless network and is extending that network. If the Smart Signal LED has a single orange bar after the connection process has finished, the DAP-1610 has established a poor quality connection. The more lit bars on the Signal Indicator LED, the better the wireless signal. To improve the connection quality, the DAP-1610 should be relocated closer to the source wireless router. Using the 5 GHz extension network is recommended in order to achieve the fastest wireless speeds. If the extender has been configured as an Access Point and is connected via Ethernet cable to an uplink network, the Smart Signal LED will not be lit.





# D-Link Wi-Fi App

The DAP-1610 can be set up from your iPhone, iPad, or Android smartphone or tablet device using the D-Link Wi-Fi app.

**Note:** The screenshots may be different depending on your mobile device's OS version.

## Step 1

Search for the free **D-Link Wi-Fi App** on the Apple App Store or Google Play and install. You can also scan the QR code on the right, which will take you to the respective D-Link Wi-Fi app store page directly.



## Step 2

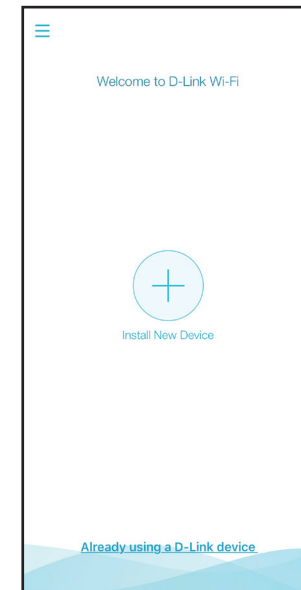
Launch the D-Link Wi-Fi App from the Home screen of your device.



D-Link Wi-Fi

## Step 3

Click on the **Install New Device** button at the middle of the screen (or click on the Menu button on the top left corner of the app to do the same).



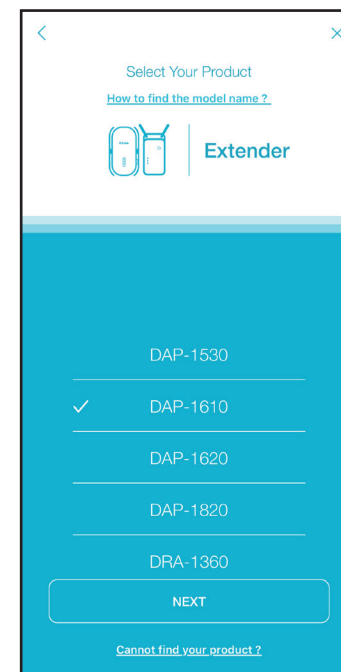
#### Step 4

Click **Yes** if you have the setup QR code with you to scan the QR code and proceed to step 6. If not, click **No** and proceed to step 5.



#### Step 5

Slide the product options to **Extender** and select **DAP-1610** from the list of available devices. Click **Next** to continue.



#### Step 6

You will now be guided through a step-by-step process for setting up your device. Simply follow the on-screen instructions to complete the installation and DAP-1610 configuration process.

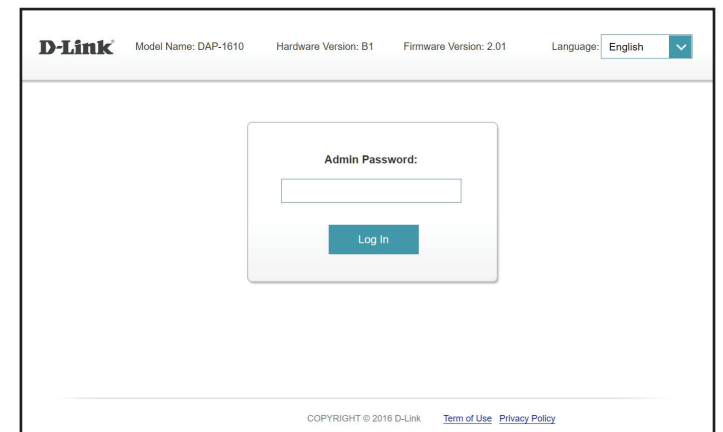
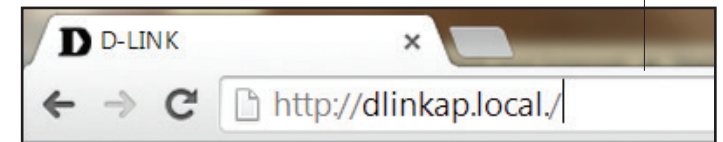
# Wireless Setup Wizard

The setup wizard is designed to guide you through a step-by-step process to configure your new DAP-1610 AC1200 Mesh Wi-Fi Range Extender to extend your wireless network and connect to the Internet via a wireless setup process. To set your DAP-1610 using an ethernet cable, please refer to “Access Point Mode Settings” on page 23.

To access the setup utility for the DAP-1610 AC1200 Mesh Wi-Fi Range Extender on your PC, first connect to the DAP-1610 wirelessly using the Wi-Fi name (SSID) and password located on the back of your DAP-1610. Then open a web browser and enter **http://dlinkap.local./** in your browser's URL field. You may also enter the IP address\* of the DAP-1610.

\* The default IP address is 192.168.0.50. Once your DAP-1610 connects to the host network, it will be assigned a new IP address based on your network's DHCP settings. You will need to log in to your router to see what IP address is assigned to your DAP-1610. For multiple DAP-1610s, go to **http://dlinkapxxxx.local.** as shown on the included Quick Installation Card, with “xxxx” being the last four digits of the DAP-1610's MAC address.

If this is your first time logging into the extender, you will be asked to enter a password, the default password is “password”. If you have previously set up the extender, enter the password you have created.



Agree to the Terms of Use and Privacy Policy to continue.

Terms Of Use And Privacy Policy

D-Link Corporation and its family of companies (alternatively referred to herein as "D-Link", "we" or "us") intend to provide access to certain site, app and related services (collectively "Services") to a user (alternatively referred to as "you", "user" or "customer") subject to the terms and conditions set forth below, including all documents, policies, and guidelines incorporated herein by reference. Please read this agreement carefully and refer to these terms and conditions ("Terms of Use") as necessary as you explore and make use of the Services. The Terms of Use provide the conditions upon which D-Link agrees to provide you access to the Services. If you disagree with any provision contained herein, or do not wish to accept these conditions, please do not use or intend to use the Services. By using the Services, you are agreeing to the Terms of Use.

[1. Registration Obligations.](#)


Language: English


Agree


This wizard will guide you through configuring your new DAP-1610 by wireless means.


Click **Next** to begin.

Welcome

 Internet

 Existing Router

 DAP-1610

 Wi-Fi Client

This wizard will guide you through configuring your new DAP-1610

Step 1: Connecting your device

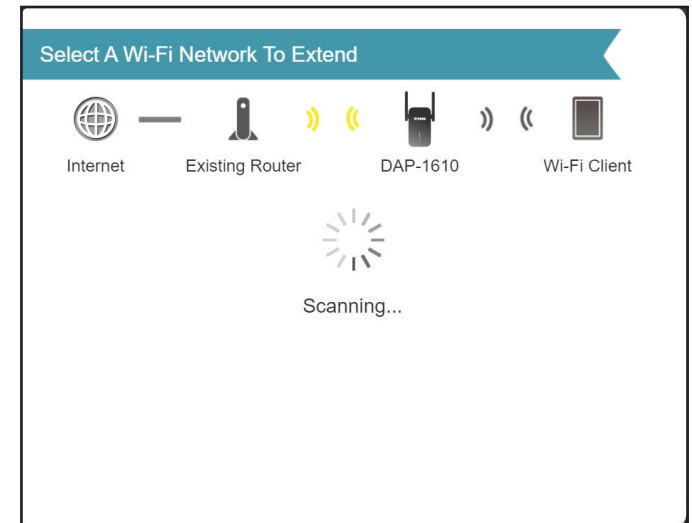
Step 2: Configuring your settings

Step 3: Setting a password for your device

Language: English

Next

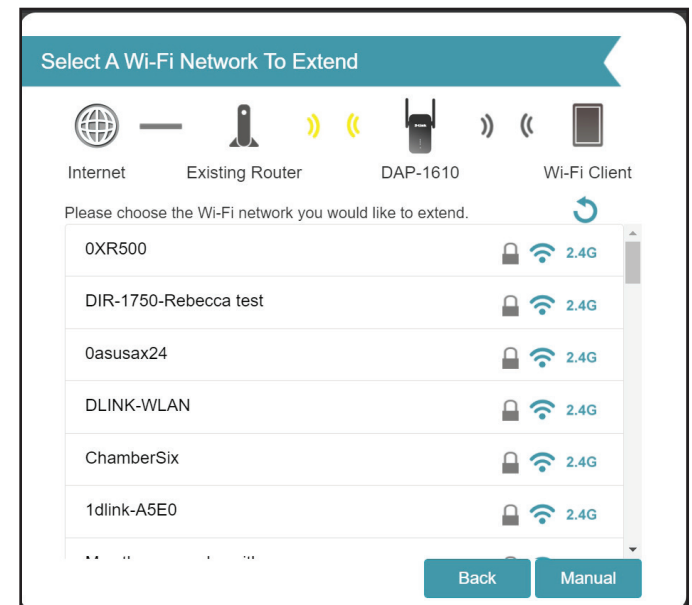
Please wait while your DAP-1610 scans for available Wi-Fi networks.



The DAP-1610 will scan for available wireless networks and display a list of results. You may choose one of the following options to proceed:

- If the wireless network you wish to extend was detected by the scan, click on the network to select it. The extender will automatically forward you to the next step.
- If the network you would like to extend was not detected by the scan, click the **Manual** button.

**Note:** If the wireless network you would like to extend was not detected by the scan, your DAP-1610 might be out of range and you may need to reposition the extender closer to the host network device.



If the wireless network you wish to extend was detected by the scan, enter the password to your router now.

Click **Next** to continue on to configure your extension network settings, or click **Back** to return to the previous step.

The screenshot shows a configuration screen titled "Select A Wi-Fi Network To Extend". At the top, there are four icons representing different connection methods: Internet (globe), Existing Router (router), DAP-1610 (DAP device), and Wi-Fi Client (phone). The "Existing Router" option is selected, indicated by a yellow double arrow. Below the icons, the text reads "Please enter the Wi-Fi password for your existing Wi-Fi network". There are two input fields: "Wi-Fi Name:" with the value "R15-25C5" and "Password:" with an empty field. At the bottom right, there are two buttons: "Back" and "Next".

If you chose **Manual**, enter the Wireless Network Name (SSID) and Password of the existing Wi-Fi network you wish to connect to.

Click **Next** to continue on to configure your extension network settings, or click **Back** to return to the previous step.

The screenshot shows a configuration screen titled "Select A Wi-Fi Network To Extend". At the top, there are four icons representing different connection methods: Internet (globe), Existing Router (router), DAP-1610 (DAP device), and Wi-Fi Client (phone). The "Manual" option is selected, indicated by a yellow double arrow. Below the icons, the text reads "Please enter Wireless Network Name, Security and Password of the existing Wi-Fi network". There are two input fields: "Wi-Fi Name:" and "Password:". At the bottom right, there are two buttons: "Back" and "Next".

Enter the Wireless Network Name (SSID) and Password for your extended Wi-Fi network. This is the Wi-Fi network you will connect your wireless devices to.

Click **Next** to continue.


In order to secure the extender's web configuration utility, please enter an admin password. You will be prompted for this password each time you want to use the extender's web configuration utility.

Click **Next** to continue.

Select your time zone from the drop-down menu.

Click **Next** to continue.

### Extended Network



Internet Existing Router DAP-1610 Wi-Fi Client

Enter a name (SSID) and password for your extended Wi-Fi network. This is the Wi-Fi network you will connect your wireless devices to.


☒ Clone my existing Wi-Fi name and password

Wi-Fi Network Name:

Password:

Back Next

### Admin Password




Internet Existing Router DAP-1610 Wi-Fi Client

Please enter an admin password to secure access to the web-based configuration page of your DAP-1610.

Password:

Back Next

### Time Zone



Internet Existing Router DAP-1610 Wi-Fi Client

Some essential features require you to set a time zone to work properly. Please select your time zone from the drop-down menu.


Time Zone:

Back Next

Keeping your DAP-1610 firmware up to date provides you with the latest protection and new features over the air. Choose whether to keep your device up to date automatically or to manage the device updates by yourself.

Click **Next** to continue.

Install Updates Automatically



Allow your device to automatically update to make sure you are always enjoying the latest features and improvements.

☒

Keep my device up to date automatically.

☐

I want to manage the device updates myself.


Back


Next


At the end of the wizard, you will be presented with a final summary of your settings. It is recommended that you record this information for future reference.


Click **Finish** to close the wizard.

Configuration









InternetExisting RouterDAP-1610Wi-Fi Client

Congratulations, the setup is complete. Below is a summary of your Wi-Fi security and device password.

Existing Wi-Fi Network

Wi-Fi Network Name:

R15-25C5

Password:

chhqr77364

Extended Network

Wi-Fi Network Name:

R15-25C5

Password:

chhqr77364

Extender Status

Device Admin Password:

admin1234

Back

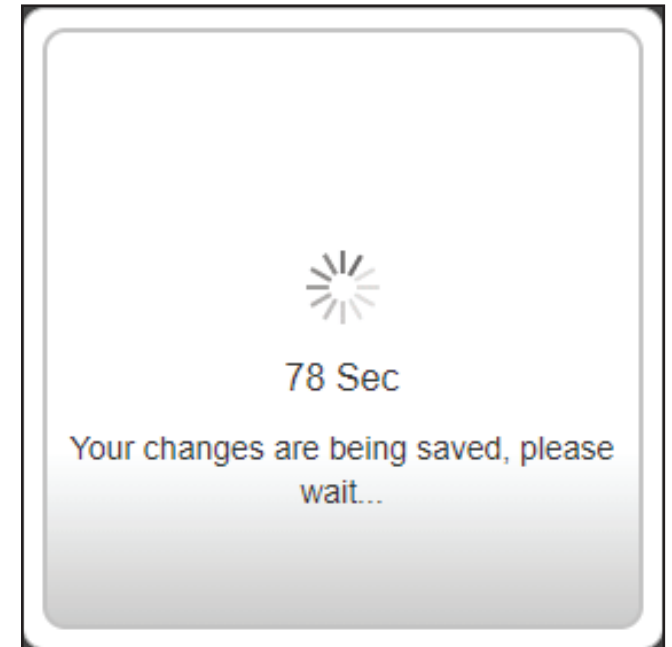
Finish

\*\Wireless network names and passwords are shown for example only.



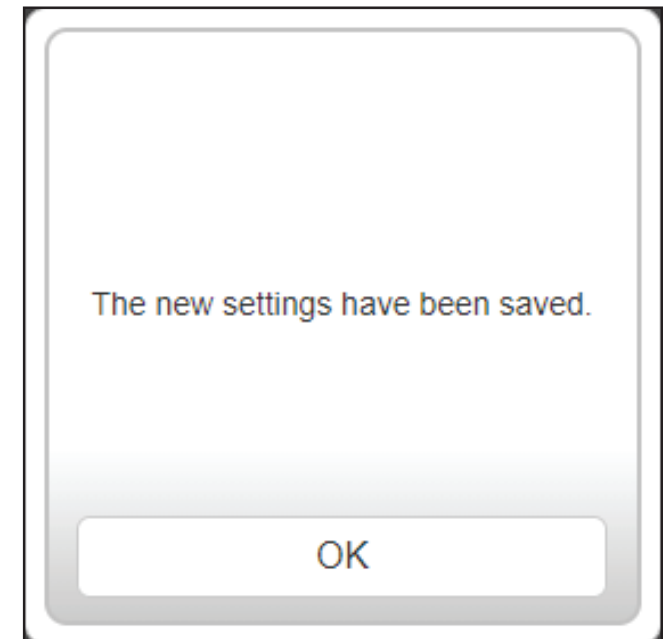
Your changes will be saved and the extender will reboot.

Devices may be connected to the new wireless extension network(s) once the extender successfully reboots.



Click **OK** to exit the Setup Wizard. You will be redirected to the log in page.

You can now place the DAP-1610 in a location in between your router and where you need a stronger signal.

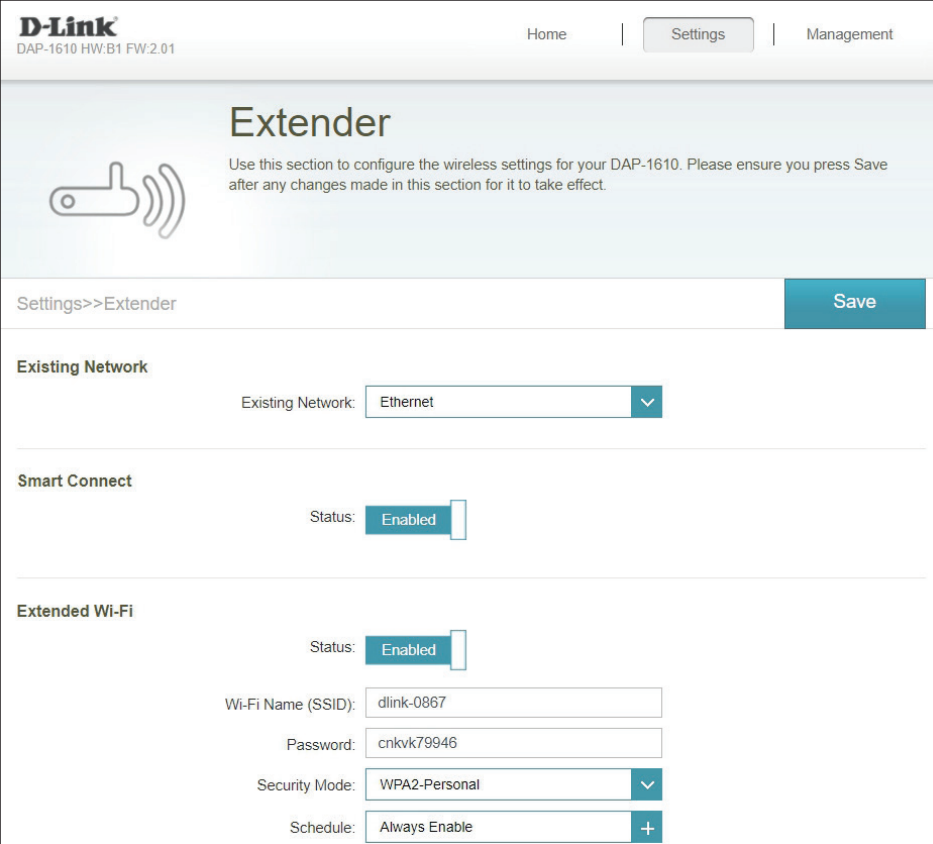


# Access Point Mode Settings

This page lets you configure the settings to use the DAP-1610 as an access point. Connect an Ethernet cable from a LAN port in your router to the LAN port at the bottom of the DAP-1610.

To access this page, click the **Settings** drop-down menu at the top of the page, and select **Extender**. Under Existing Network, choose **Ethernet** to utilize the DAP-1610 as an access point. Click **Save** to apply the settings and return to the home page.

Refer to “Extender Settings” on page 28 for more information regarding configuration options.



**D-Link**  
DAP-1610 HW:B1 FW:2.01

Home | Settings | Management

## Extender

Use this section to configure the wireless settings for your DAP-1610. Please ensure you press Save after any changes made in this section for it to take effect.

Settings>>Extender Save

**Existing Network**

Existing Network: Ethernet ▼

**Smart Connect**

Status: Enabled

**Extended Wi-Fi**

Status: Enabled

Wi-Fi Name (SSID): dlink-0867

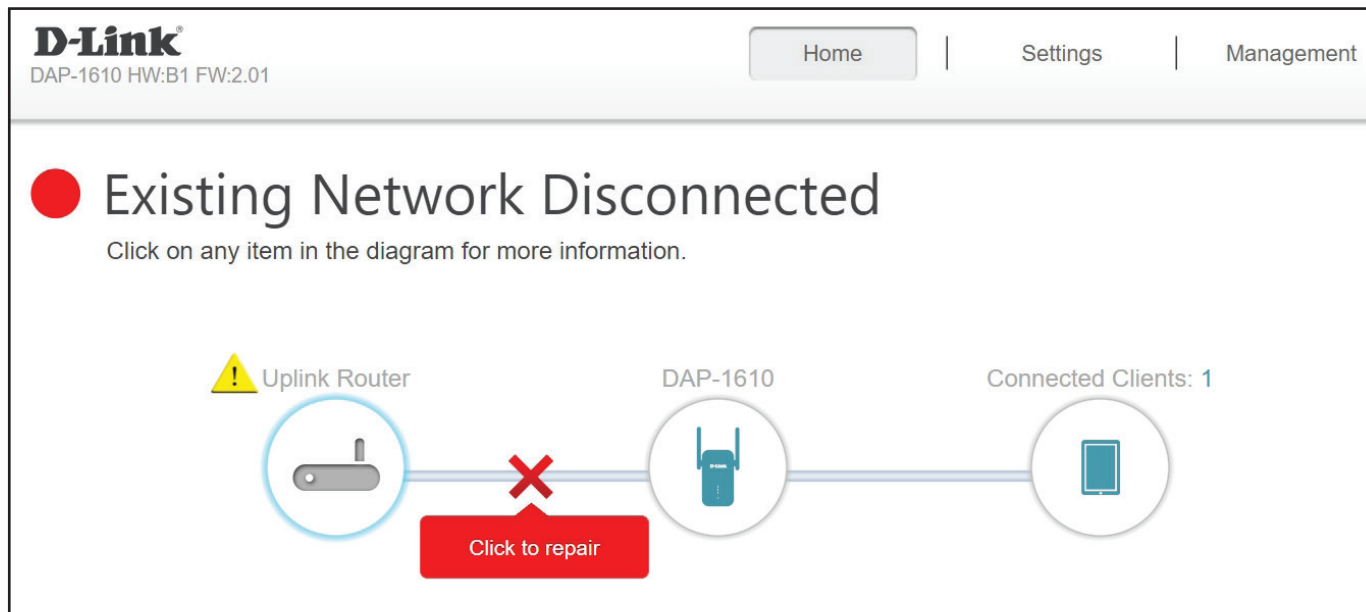
Password: cnkvk79946

Security Mode: WPA2-Personal ▼

Schedule: Always Enable +

# Configuration Home

The home screen gives a summary of the current status of devices connected to the DAP-1610. A green check between the device and the uplink router indicates that there is an active connection. A red cross indicates that there is no connection present, or there is a connection error. If there's no active uplink connection, click on the **Click to Repair** button to start the setup wizard.

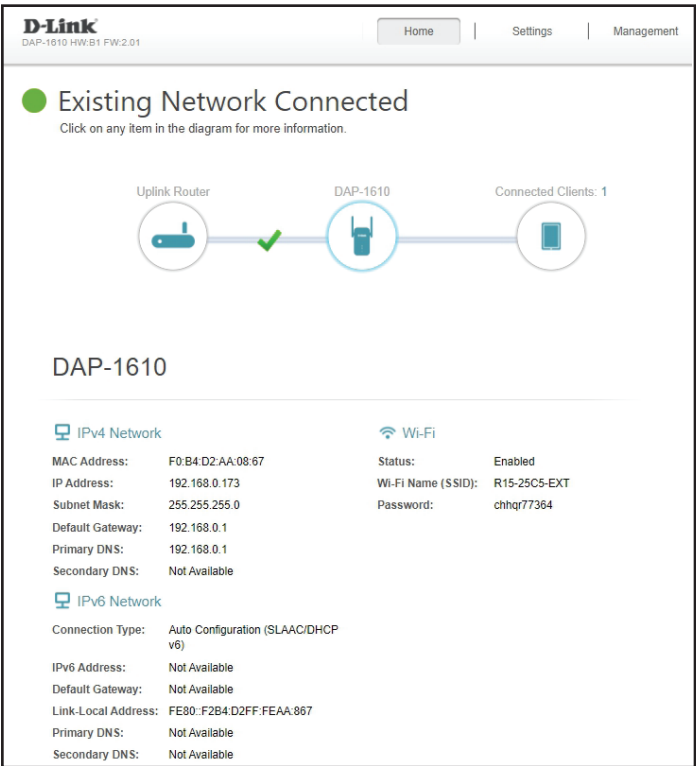


**Uplink Router** This icon shows the status of the Internet connection to the uplink router. It is grey if the DAP-1610 is not connected to an uplink router. Once connected, click on it to see its connection details.

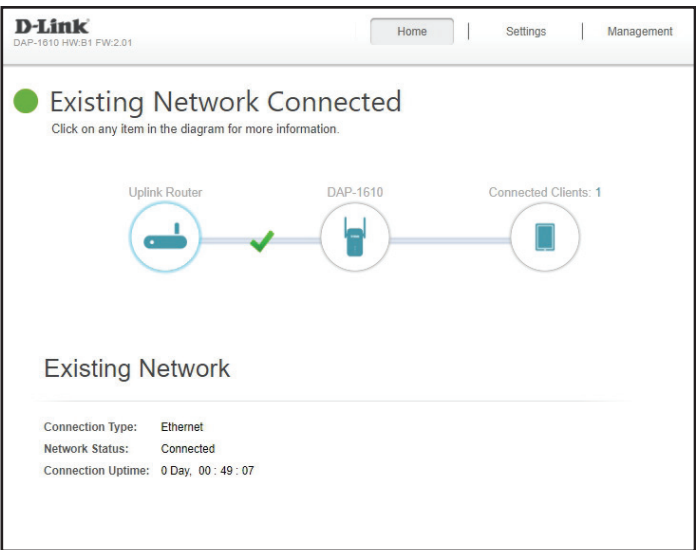
**DAP-1610** Click on this icon to see details of the uplink network the DAP-1610 is connected to or connect to another uplink router.

**Connected Clients** Click on the Connected Clients icon to see client details.

Once your Internet connection is set up, you can view the details of the IPv4 Network, the IPv6 Network and the Wi-Fi network by clicking on the DAP-1610 icon.



Upon clicking the Uplink Router icon, you will see the details of the Existing Network. This contains information regarding the Connection Type, Network Status, Connection Uptime, Wi-Fi name (SSID), and Password.

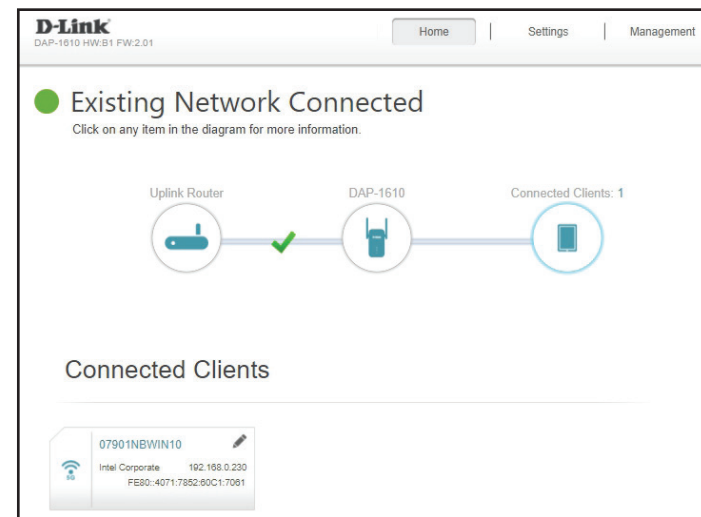


Clicking the Connected Clients icon will show you the devices that are currently connected to the DAP-1610, the network they are connected to, and their IP addresses.

To edit each client's settings, click the pencil icon on the client you want to edit.

- Name** Enter a custom name for this client.
- Vendor** Displays the vendor of the device.
- MAC Address** Displays the MAC address of the device.
- IP Address** Displays the current IP address of this client.

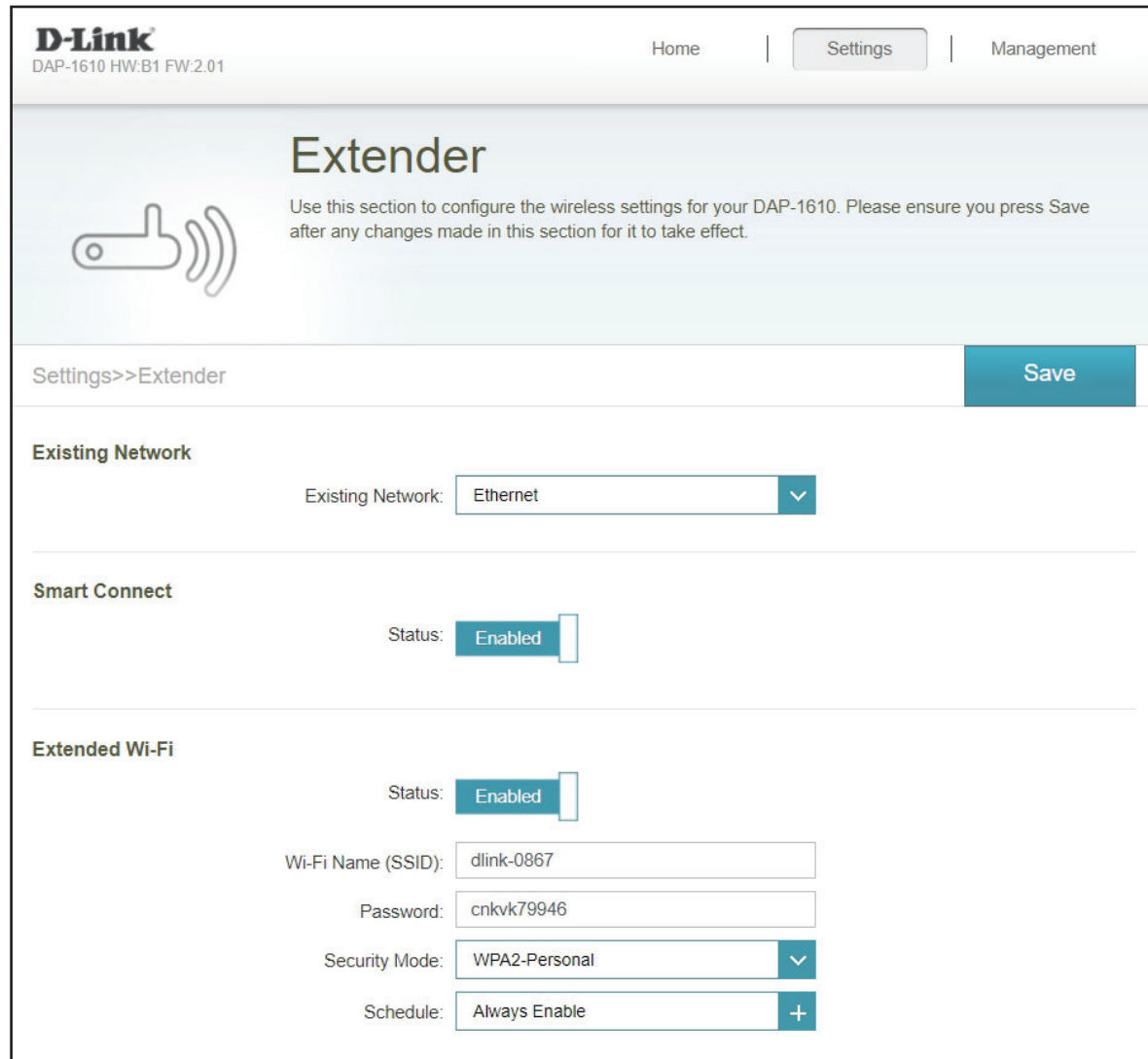
Click **Save** when you are done.



# Settings

## Extender Settings

This page lets you configure the settings for the DAP-1610's extended wireless network. To access this page, click the **Settings** drop-down menu at the top of the page, and select Extender. Click **Save** to apply the settings and return to the home page.



**D-Link**  
DAP-1610 HW:B1 FW:2.01

Home | Settings | Management

### Extender

Use this section to configure the wireless settings for your DAP-1610. Please ensure you press Save after any changes made in this section for it to take effect.

Settings>>Extender Save

**Existing Network**

Existing Network:

**Smart Connect**

Status: ☒ Enabled

**Extended Wi-Fi**

Status: ☒ Enabled

Wi-Fi Name (SSID):

Password:

Security Mode:

Schedule:

# Existing Network

**Existing Network** Select the type of existing network, either **Ethernet** or **Wi-Fi** you want the DAP-1610 to connect to. Select **Ethernet** if you are connecting to your network via an Ethernet cable. Select **Wi-Fi** if you are connecting to your network by wireless means.

## Wi-Fi - Existing Network

If **Wi-Fi** is selected, the following Wi-Fi Existing Network options will appear.

**Wi-Fi Name (SSID)** Type in the Wi-Fi Name of the network you would like to extend.

**Password** Type in the password of the network you would like to extend.

**Scan** If **Scan** is pressed, a window will pop up showing you available Wi-Fi networks. You can choose the network you would like to extend. After selecting the network option, press **Select** and you will be prompted to enter a password if required. Press **OK** to confirm your selection.

Existing Network

Existing Network: Ethernet

Existing Network

Existing Network: Wi-Fi

Wi-Fi Name (SSID):

Scan

Password:

Please choose the Wi-Fi network you would like to extend.

dlink-7F06

DCS-H100-94A5

D-Link\_DIR-816\_5G

dlink-7F06

D-Link\_Guest\_2.4G

D-Link\_2G

Karl-Fi

D-Link\_2G

D-Link\_VIP

D-Link\_5G

D-Link\_Guest\_5G

D-Link\_Guest\_2.4G

D-Link\_2G

Select

A password is required to join "D-Link\_DIR-816\_5G"

Password

Back

OK

# Smart Connect

**Smart Connect** Enable or disable the Smart Connect Feature. When enabled, only a few configuration options are available to simplify configuration.

## Extended Wi-Fi - Smart Connect Enabled

- Status** Enable or disable the Extended Wi-Fi wireless network.
- Wi-Fi Name (SSID)** This is the name of the DAP-1610's extended network. If using **Wi-Fi**, the DAP-1610 will rebroadcast the uplink router's Internet connection under this SSID. You may also manually set the SSID of the extended network.
- Password** Enter the password or network key that you wish to use for the extended network.
- Security Mode** Choose None, WPA3-Personal, WPA2/WPA3-Personal, WPA2-Personal or WPA/WPA2-Personal.
- Schedule** Use the drop-down menu to select the time schedule that the rule will be enabled for. The schedule may be set to Always Enable (default) or a custom can be created by clicking the + button then selecting "add" and specifying the times the radio will be active.

Settings>>Extender

Save

Existing Network

Existing Network: Wi-Fi

Wi-Fi Name (SSID): dlink-axhv

Scan

Password: 435BF3HLOT

Smart Connect

Status: Enabled

## Wireless - Smart Connect Disabled

### 2.4 GHz Extended Wi-Fi

- Status** Enable or disable the 2.4 GHz network by toggling this slider.
- Wi-Fi Name (SSID)** This is the name of the DAP-1610's extended 2.4 GHz network. If using Wi-Fi, the DAP-1610 will rebroadcast the uplink router's Internet connection under this SSID. You may also manually set the SSID of the extended network.
- Password** Enter the password or network key that you wish to use for the extended 2.4 GHz network.
- Security Mode** Choose None, WPA3-Personal, WPA2/WPA3-Personal, WPA2-Personal or WPA/WPA2-Personal.
- 802.11 Mode** Select the desired wireless networking standards to use. The available options for the 2.4 GHz wireless network are Mixed 802.11b/g/n, Mixed 802.11b/g, mixed g/n, 802.11b only or 802.11n only.
- Schedule** Use the drop-down menu to select the time schedule that the rule will be enabled for. The schedule may be set to Always Enable (default) or a custom can be created by clicking the + button then selecting "add" and specifying the times the radio will be active.

Smart Connect

Status: Disabled

2.4GHz Extended Wi-Fi

Status: Enabled

Wi-Fi Name (SSID): dlink-axhv

Password: 8trvrq95355

Security Mode: WPA2-Personal

802.11 Mode: Mixed 802.11b/g/n

Schedule: Always Enable

+div>

5GHz Extended Wi-Fi

Status: Enabled

Wi-Fi Name (SSID): dlink-axhv

Password: 8trvrq95355

Security Mode: WPA2-Personal

802.11 Mode: Mixed 802.11a/n/ac

Schedule: Always Enable

+div>

D-Link DAP-1610 User Manual

29



Wireless - Smart Connect Disabled (Continued)

5 GHz Extended Wi-Fi

- Status

Enable or disable the 5 GHz network by toggling this slider.
- Wi-Fi Name (SSID)

This is the name of the DAP-1610’s extended network. If using **Wi-Fi**, the DAP-1610 will rebroadcast the uplink router’s Internet connection under this SSID. You may also manually set the SSID of the extended network.
- Password

Enter the password or network key that you wish to use for the extended 5 GHz network.
- Security Mode

Choose None, WPA3-Personal, WPA2/WPA3-Personal, WPA2-Personal or WPA/WPA2-Personal.
- 802.11 Mode

Select the desired wireless networking standards to use. The available options for the 5 GHz wireless network are Mixed 802.11a/n/ac, Mixed 802.11a/n, 802.11ac only, 802.11 only, 802.11n only.
- Schedule

Use the drop-down menu to select the time schedule that the rule will be enabled for. The schedule may be set to Always Enable (default) or a custom can be created by clicking the + button then selecting “add” and specifying the times the radio will be active.

Smart Connect

Status: 

Disabled

2.4GHz Extended Wi-Fi

Status: 

Enabled

Wi-Fi Name (SSID):

Password:

Security Mode: 

WPA2-Personal

802.11 Mode: 

Mixed 802.11b/g/n

Schedule: 

Always Enable

5GHz Extended Wi-Fi

Status: 

Enabled

Wi-Fi Name (SSID):

Password:

Security Mode: 

WPA2-Personal

802.11 Mode: 

Mixed 802.11a/n/ac

Schedule: 

Always Enable

# Network Settings

This page lets you configure the network settings for the DAP-1610. To access this page, click the **Settings** drop-down menu at the top of the page, then select **Network**. Click **Save** at any time to save the changes you have made on this page.

**Management Link** You can change the URL name of the device by editing the text in the text box. If you change the name of the device, you will need to enter "http://xxxx.local." (where "xxxx" corresponds to the name of the device) in the address bar of your web browser in order to access the configuration utility.

Settings >> Network

Save

Network Settings

Device Name: http://  .local

Advanced Settings

## Advanced Settings

The Advanced Settings section of the Network Settings page allows you to configure both IPv4 and IPv6 settings that will be used by the DAP-1610's extended network.

### IPv4

- My Internet Connection is:** Here you can select whether you want the IP to have a **Dynamic IP** or **Static IP** address. If you select Dynamic IP, the options below will not be available.
- IP Address** Enter the Static IP address that you want to assign to the extended network AP. This address should be outside of the uplink router's DHCP address pool.
- Subnet Mask** Enter the subnet mask.
- Gateway Address** Enter the gateway address. This is usually the IP address of the uplink router.
- Primary DNS Server** Enter the address of the primary DNS server.
- Secondary DNS Server** Enter the address of the secondary DNS server. This is optional but will provide backup if the primary server fails.

IPv4

Choose an IPv4 provisioning mechanism to be used by the device.

My Internet Connection is:

IP Address:

Subnet Mask:

Gateway Address:

Primary DNS:

Secondary DNS:

## IPv6 - Autoconfiguration (SLAAC/DHCPv6)

- My Internet Connection is** Select **Autoconfiguration (SLAAC/DHCPv6)** to have the DAP-1610 automatically receive an IPv6 address from the uplink router.
- Obtain a DNS server address automatically** You can select to obtain IPv6 DNS server information automatically, or you can select to configure DNS servers manually by selecting next to the option **Use the following DNS address**.
- Primary DNS Server** For manual settings, enter the primary IPv6 DNS server address.
- Secondary DNS Server** For manual settings, enter the secondary IPv6 DNS server address. This is optional but will provide backup if the primary server fails.

**IPv6**  
Choose an IPv6 provisioning mechanism to be used by the device.

My Internet Connection is: Auto Configuration (SLAAC/DHCPv6) ▼

Obtain a DNS server address automatically or enter a specific DNS server address.

☒ Obtain a DNS server address automatically

☐ Use the following DNS address

## IPv6 - Static IPv6

- My Internet Connection is** Select **Static IPv6** to manually assign an IP address to the DAP-1610.
- IPv6 Address** Enter the IPv6 address that you want to assign to the extended network AP. This address should be outside of the uplink router's DHCP address pool.
- Subnet Prefix Length** Enter the length of the IPv6 subnet prefix.
- Default Gateway** Enter the default gateway.
- Primary DNS Server** Enter the primary IPv6 DNS server address.
- Secondary DNS Server** Enter the secondary IPv6 DNS server address. This is optional but will provide backup if the primary server fails.

**IPv6**  
Choose an IPv6 provisioning mechanism to be used by the device.

My Internet Connection is: Static IPv6 ▼

Enter the IPv6 address information that you would like to use to access the Web-based management interface.

IPv6 Address:

Subnet Prefix Length:

Default Gateway:

Primary DNS:

Secondary DNS:

## IPv6 - Local Connectivity Only

- My Internet Connection is** Select **Local Connectivity Only** to set an IPv6 address only for the local network.
- LAN IPv6 Link-Local Address** The link-local address of the DAP-1610.

**IPv6**  
Choose an IPv6 provisioning mechanism to be used by the device.

My Internet Connection is: Local Connectivity Only ▼

The LAN IPv6 Link-Local Address is the IPv6 Address that you use to access the Web-based management interface.

LAN IPv6 Link-Local Address: FE80::5AD5:6EFF:FE36:71A8/64

# Management Time

The **Time** page allows you to configure, update, and maintain the correct time on the internal system clock. From here you can set the time zone and the Network Time Protocol (NTP) server.

In the Management menu on the bar on the top of the page, click **Time & Schedule**. Click **Save** at any time to save the changes you have made on this page.

## Time Configuration

**Time Zone** Select your time zone from the drop-down menu.

**Time** Displays the current date and time of the extender.

## Automatic Time Configuration

**NTP Server** Select from the drop-down menu to either use the **D-Link NTP Server** to synchronize the time and date for your extender, or choose **Manual** to set the NTP server's IP address.

D-Link  
DAP-1610 HW:B1 FW:2.01

Home | Settings | Management

### Time

Your device's internal clock is used for time sensitive applications, such as firmware online checking, data logging and schedules for features. The date and time can be synchronized with a public time server through the Internet.

Management>>Time Save

#### Time Configuration

Time Zone: Asia/Taipei

Time: 2021/03/24 11:59:56 AM

#### Automatic Time Configuration

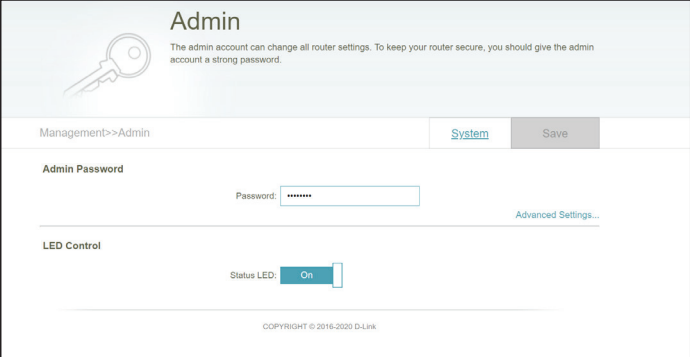
NTP Server: D-Link NTP Server ▼

# Admin

This page will allow you to set a new password for the administrator account used to configure the DAP-1610. To access this page, click the **Management** drop down menu at the top of the page, and select **Admin**. Click **Save** at any time to save the changes you have made on this page.

**Password** Enter the Admin password.

**LED Control** Enables and disables the LED's on your extender.



The screenshot shows the 'Admin' configuration page of a D-Link DAP-1610. At the top, there is a key icon and the title 'Admin'. Below the title, a message states: 'The admin account can change all router settings. To keep your router secure, you should give the admin account a strong password.' The page has a breadcrumb trail 'Management > Admin' and two buttons: 'System' and 'Save'. The 'Admin Password' section contains a 'Password' field with masked characters and a link for 'Advanced Settings...'. The 'LED Control' section features a 'Status LED' toggle switch currently set to 'On'. At the bottom, a copyright notice reads 'COPYRIGHT © 2016-2020 D-LINK'.

# System

This page allows you to save or restore your system configuration, reset, or reboot the DAP-1610. To access this page, click the **Management** drop down menu at the top of the page, and select **System**.

Save Settings To Local Hard Drive

Save the system settings onto a file to the local hard drive.

Load Settings From Local Hard Drive

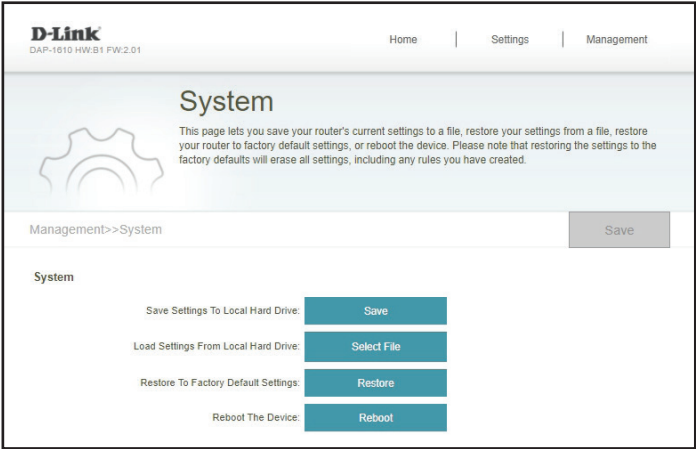
Load the system settings from a previously saved file on the local hard drive. Click the **Restore** button that appears after loading the system settings file to load the settings.

Restore to Factory Default Settings

Restore the system settings to factory default settings. This will erase all currently stored settings.

Reboot the Device

Click **Reboot** to reboot the DAP-1610.



# Upgrade

Firmware upgrades may be provided for the DAP-1610 in the future. This page will allow you to upgrade the router's firmware, either automatically or manually. To manually upgrade the firmware, you must first download the relevant file from **<http://support.dlink.com>**. To access this page, click the **Management** drop down menu at the top of the page, and select **Upgrade**. Click **Save** at any time to save the changes you have made on this page.

## Firmware

### Current Firmware Version

The current firmware's version will be displayed.

### Check for New Firmware

Click this button to prompt the router to automatically check for a new firmware version. If a newer version is found, it will prompt you to install it.

## Automatic Firmware Upgrade

### Automatic Upgrade

If enabled, the router will automatically check for and upgrade to the newest firmware.

### Choose Upgrade Time

You may set the DAP-1610 to automatically upgrade its firmware at a set time by enabling the function. Set the hour and minute to automatically upgrade by using the drop-down menus.

## Upgrade Manually

### Upgrade Firmware

If you wish to upgrade manually, first download the firmware file you wish to upgrade to. Next, click the **Select File** button to browse to the file and click **Upload** to install the new firmware.

**D-Link**  
DAP-1610 HW:B1 FW:2.01

Home | Settings | Management

## Upgrade

Your device can automatically detect firmware updates, but requires your authorization to install them. You can also check for new firmware manually, and upgrade it from a local file. Firmware may use code that is subject to the GPL licenses. For more information, visit <http://tsd.dlink.com.tw/GPL.asp>.

Management>>Upgrade Save

### Firmware

Current Firmware Version: 2.01

Check for New Firmware

### Automatic Firmware Upgrade

Automatic Upgrade: Enabled

Update my device automatically every day at 3:30-4:00 AM to always enjoy the latest improvements and features.

Choose Upgrade Time: Disabled

Upgrade Time: 3 AM : 30

### Upgrade Manually

Upgrade Firmware: Select File

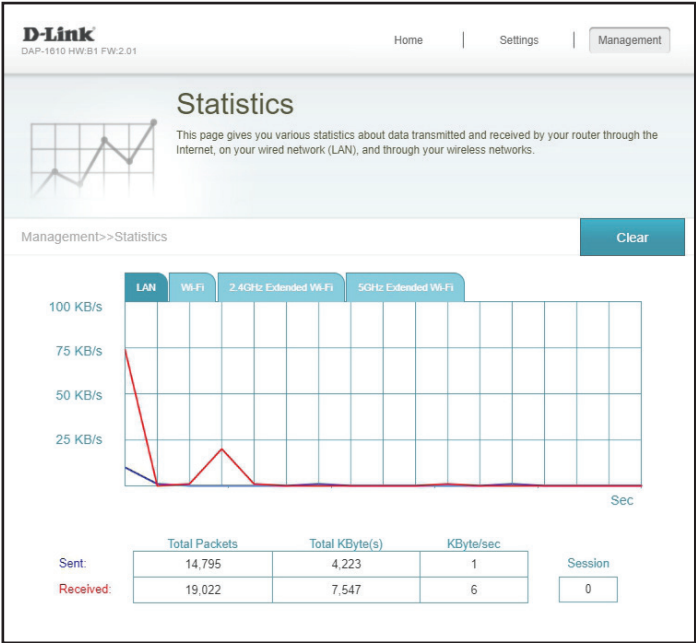
# Statistics

This page displays details about your wireless and network connections. To access this page, click the **Management** drop-down menu at the top of the page, and select **Statistics**. Click **Clear** to reset the statistics.

On the **Statistics** page you can view the amount of packets that pass through the extender LAN, Wi-Fi, 2.4 GHz Extended Wi-Fi and 5 GHz Extended Wi-Fi segments.

You can view the **LAN**, **Wi-Fi**, **2.4 GHz Extended Wi-Fi**, or **5 GHz Extended Wi-Fi** by clicking on the respective tabs at the top. The graph will update in real time. To clear the information on the graph, click **Clear**.

The traffic counter will reset if the device is rebooted.





# Connecting Wireless Clients to the Extender

## WPS Button

Once an uplink network has been established, you may use the DAP-1610's WPS function to add additional wireless clients to your extender's network. Many wireless devices such as wireless routers, media players, printers, and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DAP-1610. Please refer to the user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you are certain, follow the steps below:

**Step 1** - Press the WPS button on the DAP-1610 for about 1 second. The LED on the device will start to blink.

**Step 2** - Within 120 seconds, press the WPS button on your wireless device.

**Step 3** - Allow up to 1 minute to configure. Once the LED light stops blinking and turns solid green, you will be connected and your wireless connection will be secured with WPA2.

# Windows® 10

To join an existing network, locate the wireless network icon in the taskbar, next to the time display and click on it.

Clicking on this icon will display a list of wireless networks which are within range of your computer. Select the desired network by clicking on the SSID.

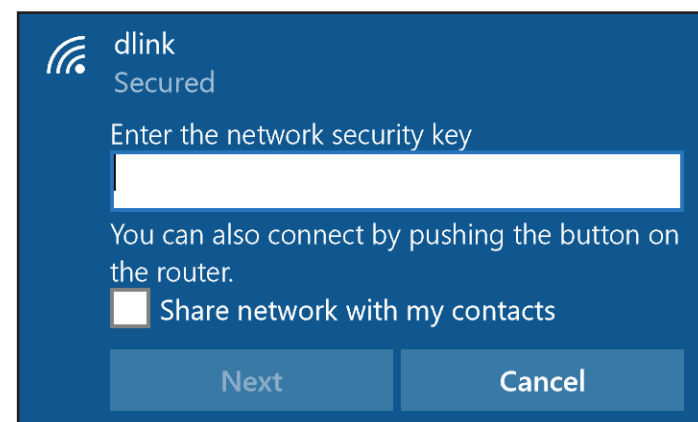
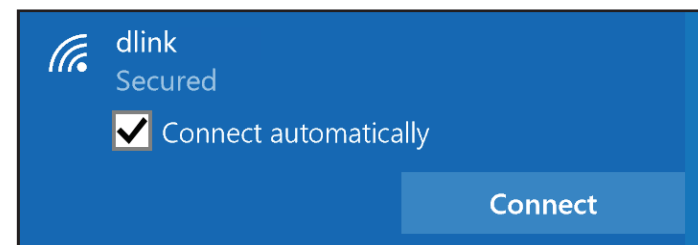
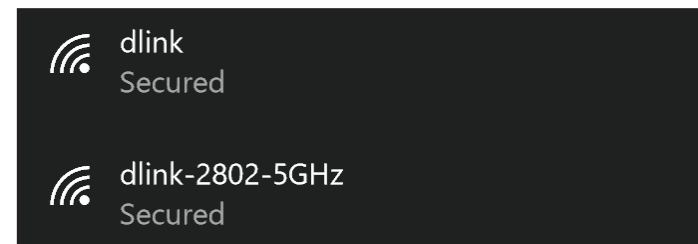
To connect to the SSID, click **Connect**.

To automatically connect with the router when your device next detects the SSID, check the **Connect Automatically** check box.

You will then be prompted to enter the Wi-Fi password (network security key) for the wireless network. Enter the password into the box and click **Next** to connect to the network. Your computer will now automatically connect to this wireless network when it is detected.



Wireless Icon



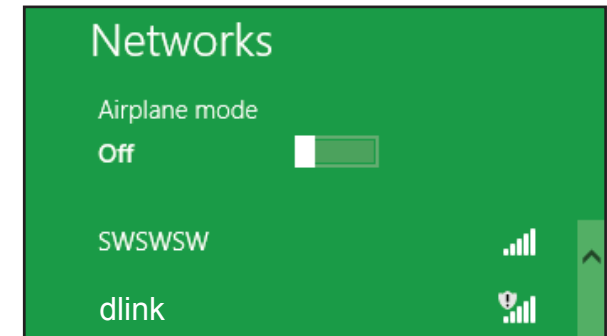
## Windows® 8 - WPA/WPA2

To join an existing network, locate the wireless network icon in the taskbar, next to the time display.



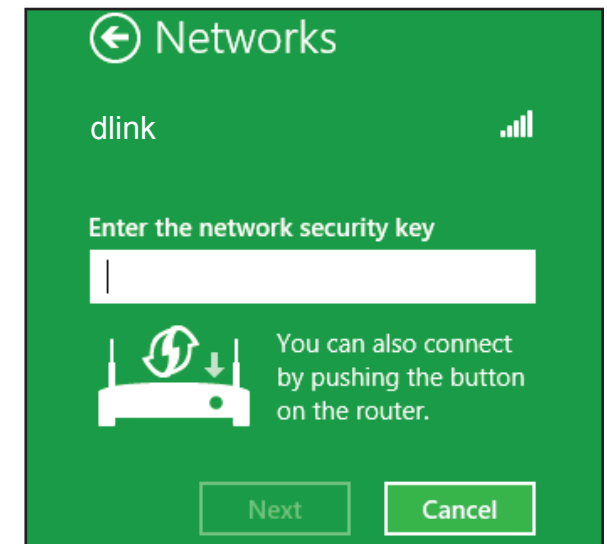
Wireless Icon

Clicking on this icon will display a list of wireless networks which are within connecting proximity of your computer. Select the extender's network by clicking on the network name.

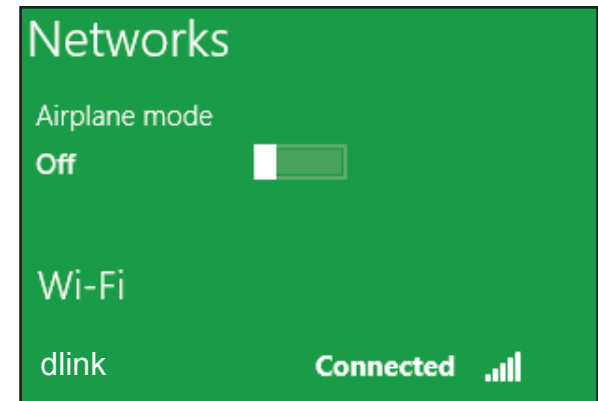


You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

If you wish to use Wi-Fi Protected Setup (WPS) to connect to the router, you can also press the WPS button on your router at this point to enable the WPS function.



When you have established a successful connection with a wireless network, the word **Connected** will appear next to the name of the network to which you are connected.



# Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DAP-1610. Read the following descriptions if you are having problems.

## 1. Why can't I access the web-based configuration utility?

When entering the IP address of the AC1200 Mesh Wi-Fi Range Extender (dlinkap.local./), you are not connecting to a website nor do you have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated web browser. We recommend the following:
  - Internet Explorer® 10 or later
  - Firefox® 28 or later
  - Safari® 6.0 or later
  - Google Chrome™ 28 or later
- Make sure that you are connected to the same wireless network which is listed on the base of the DAP-1610. If you have an active wired LAN Ethernet connection, try temporarily unplugging the Ethernet cable from the computer you are using, as this may eliminate possible conflicts from having two simultaneous connections on the same computer.
- Disable any Internet security software running on the computer. Software firewalls such as Bitdefender, Avast, Norton, Webroot, ZoneAlarm and Windows Defender Firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:
  - Go to the **Control Panel**. Search for **Internet Options**. From the **Security** tab, click the button to restore the settings to their defaults.
  - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
  - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
  - Close your web browser (if open) and open it.
- Access the web management interface. Open your web browser and enter the address of your extender (**http://dlinkap.local**) in the address bar. This should open the login page for your web management. If the DAP-1610 is not connected to an uplink router, you can try accessing the web interface using the default IP address **http://192.168.0.50**.
- If you still cannot access the configuration, unplug the extender from the power outlet for at least 10 seconds and plug it back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

## 2. What can I do if I forgot my password?

If you forgot your password, you must reset your extender. Unfortunately this process will change all your settings back to the factory defaults.

To reset the extender, locate the reset button (hole) on the side panel of the unit. With the extender powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the extender will go through its reboot process (indicated by the LED turning red). Wait about 30 seconds to access the extender. The default address is **http://dlinkap.local**. When logging in, the admin password is "password"

# Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely and conveniently access your network. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapters used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A wireless router is a device used to provide this link.

## Tips

Here are a few things to keep in mind when you are installing your AC1200 Mesh Wi-Fi Range Extender.

### **Centralize the extender's location**

For best performance, make sure you place the extender in a centralized location within your desired usage area. Try to place the extender so that there are minimal obstructions between it and the uplink router. If possible, use an elevated power outlet, so the signal can be dispersed more easily. If you have a large home or usage area, you may need several extenders in order to achieve optimal coverage.

### **Eliminate Interference**

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the extender. This can significantly reduce any interference that the appliances might cause since they operate on same frequency.

### **Security**

Don't let your neighbors or intruders connect to your wireless network. Secure your wireless network by utilizing the WPA2 or WPA3 security feature on the extender and uplink router. Refer to the relevant sections of this manual for further details.



# Technical Specifications

## Standards

- IEEE 802.11ac
- IEEE 802.11a
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b

## Wireless Frequency Range <sup>1</sup>

- 2.4 GHz to 2.4835 GHz
- 5.18 MHz to 5.85 MHz

## Device Interfaces

- 802.11ac/n/g/b/a Wireless LAN
- 10/100 Fast Ethernet Port
- Reset Button
- WPS Button

## Antenna

- Two external antennas

## Wireless Security

- Wi-Fi Protected Access (WPA/WPA2/WPA3)
- Wi-Fi Protected Setup (WPS)

## Advanced Features

- D-Link Wi-Fi setup app
- Compatible with D-Link Wi-Fi Mesh routers

## Device Management

- Web UI
- D-Link Wi-Fi App

## Diagnostic LEDs

- Status/WPS
- 3 Segment Wi-Fi Signal Strength Indicator

## Operating Temperature

- 0 to 40 °C (32 to 104 °F)

## Storage Temperature

- Storage: -20 to 65 °C (-4 to 149 °F)

## Operating Humidity

- 10% to 90% non-condensing

## Storage Humidity

- 5% to 95% non-condensing

## Power Input

- 110 to 240 V AC, 50/60 Hz

## Maximum Power Consumption

- 5.6 W

## Dimensions

- 50 x 50 x 92 mm  
(2.0 x 2.0 x 3.6 in)

## Weight

- 124 grams (4.4 oz)

<sup>1</sup> Frequency range varies depending on local regulations