

# USER MANUAL

DAP-1525, DAP-1525A1

WiFi Booster smart beam AP

Wireless N 智慧型天線無線基地台



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# Preface

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# Table of Contents

<b>Preface</b> .....	<b>i</b>	Auto-configuration .....	20
Trademarks .....	i	MAC Address Filter.....	21
<b>Product Overview</b> .....	<b>1</b>	Advanced Network.....	22
Package Contents .....	1	Guest Zone .....	23
System Requirements .....	1	Schedule.....	24
Introduction.....	2	Admin.....	25
Features .....	3	Time .....	26
Hardware Overview .....	4	System.....	27
Back View .....	4	Firmware.....	28
Front View.....	5	System Check.....	29
Hardware Overview .....	6	Device Info.....	30
Bottom View.....	6	Wireless .....	31
<b>Installation</b> .....	<b>7</b>	Logs .....	32
Wireless Installation considerations .....	7	Statistics .....	33
Connection - AP Mode .....	8	IPv6.....	34
Connection - Bridge Mode.....	9	Support .....	35
One Touch AP Configuration.....	10	<b>Configuration</b> .....	<b>36</b>
<b>Configuration</b> .....	<b>11</b>	Web-based Configuration Utility for Bridge Mode ..	36
Web-based Configuration Utility for AP Mode .....	11	Setup Wizard .....	37
Setup Wizard .....	12	Wireless Settings .....	41
Wireless Settings .....	16	Wireless Mac Cloning .....	41
LAN Setup .....	18	LAN Setup .....	42
LAN Setup .....	19	LAN Setup .....	43
Static IPv6 .....	19	Static IPv6 .....	43
LAN Setup .....	20	LAN Setup .....	44
		Auto-configuration .....	44

Schedule .....	45	Tips .....	74
Admin .....	46	Wireless Modes .....	75
Time .....	47	<b>Networking Basics .....</b>	<b>76</b>
System .....	48	Check your IP address .....	76
Firmware .....	49	Statically Assign an IP address .....	77
System Check.....	50	<b>Technical Specifications.....</b>	<b>78</b>
Device Info .....	51		
Logs .....	52		
IPv6.....	53		
Support .....	54		
<b>Wireless Security.....</b>	<b>55</b>		
What is WEP? .....	55		
What is WPA? .....	56		
Configure WEP (AP Mode).....	57		
Configure WPA-Personal (AP Mode) .....	58		
Configure WPA-Enterprise (AP Mode) .....	59		
Configure WEP (Bridge Mode) .....	60		
Configure WPA-Personal (Bridge Mode).....	61		
<b>Connect to a Wireless Network.....</b>	<b>62</b>		
Using Windows Vista®.....	62		
Configure WPA/WPA2.....	63		
Connect Using WCN 2.0.....	65		
Using Windows® XP.....	66		
Configure WPA2-PSK.....	67		
<b>Troubleshooting .....</b>	<b>69</b>		
<b>Wireless Basics .....</b>	<b>71</b>		
What is Wireless? .....	72		

# Product Overview

## Package Contents

- DAP-1525 Wireless N Smart Beam Access Point
- Power Adapter
- CAT5E Ethernet Cable
- CD-ROM with User Manual

**Note:** Using a power supply with a different voltage rating than the one included with the DAP-1525 will cause damage and void the warranty for this product.



## System Requirements

- Computers with Windows®, Macintosh®, or Linux-based operating systems with an installed Ethernet adapter
- Internet Explorer Version 6.0 or higher, Firefox 3.0 or higher, or Safari 3.0 or higher (for configuration)

# Introduction

The DAP-1525 is designed with SmartBeam Technology that can be added to any existing Access Point to instantly boost a Wi-Fi signal. The device is with switchable 802.11n 2.4GHz/5GHz wireless operation bands, six-element directional antennas, 4 Gigabit ports, Bridge and Access Point mode support, and multiple SSID support for different applications.

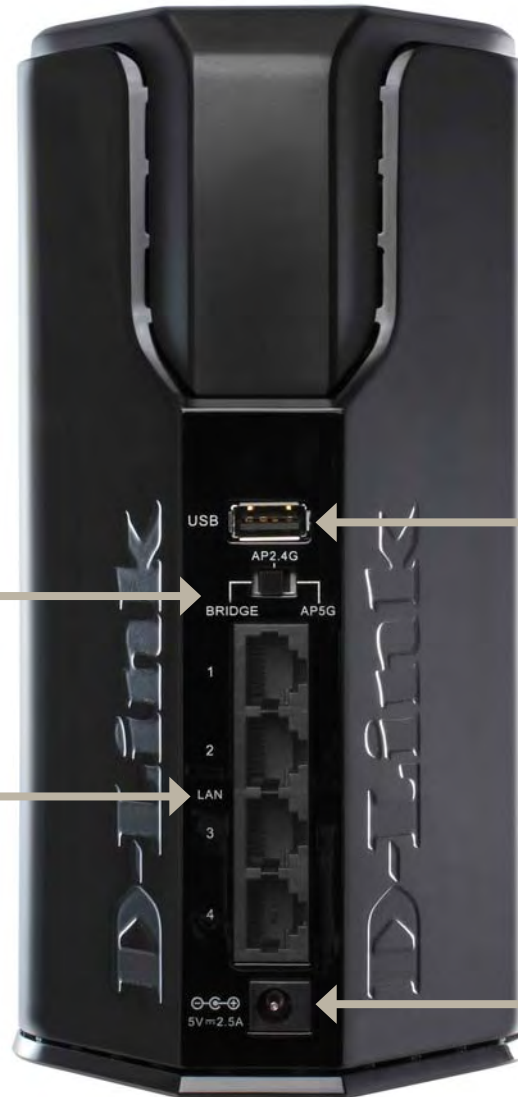
# Features

- **Faster Wireless Networking** - The DAP-1525 provides up to 300Mbps\* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio. The performance of this 802.11n wireless access point gives you the freedom of wireless networking at speeds 650% faster than 802.11g.
- **Compatible with 802.11a, 802.11b, and 802.11g Devices** - The DAP-1525 is still fully compatible with the IEEE 802.11a/b/g standard, so it can connect with existing 802.11a/b/g PCI, USB, and CardBus adapters.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including Content Filtering, which allows easily applied content filtering based on MAC address.
- **WPS PBC** - Wi-Fi Protected Setup Push Button Configuration is a button that can be pressed to add the device to an existing network or to create a new network.
- **One Touch AP Configuration** - support to exchange or learn the wireless profile from another access point.
- **WPS PIN** - (Wi-Fi Protected Setup Personal Identification Number ) A PIN is a unique number that can be used to add the access point to an existing network or to create a new network. The default PIN may be printed on the bottom of the access point. For extra security, a new PIN can be generated. You can restore the default PIN at any time. Only the Administrator (“admin” account) can change or reset the PIN.
- **User-friendly Setup Wizard** - Through its easy-to-use Web-based user interface, the DAP-1525 lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company’s server. Configure your Access Point to your specific settings within minutes.

\* Maximum wireless signal rate derived from IEEE Standard 802.11g and Final 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

# Hardware Overview

## Back View



### Mode Switch

Use to switch among 2.4GHz AP, 5GHz AP, and Bridge mode.

### Ethernet Ports

In AP mode, the Ethernet port is used to connect to your switch/router. In Client mode, the Ethernet port is used to connect your computer to a wireless network.

### USB Port

Use to connect to USB 2.0 printer sharing application.

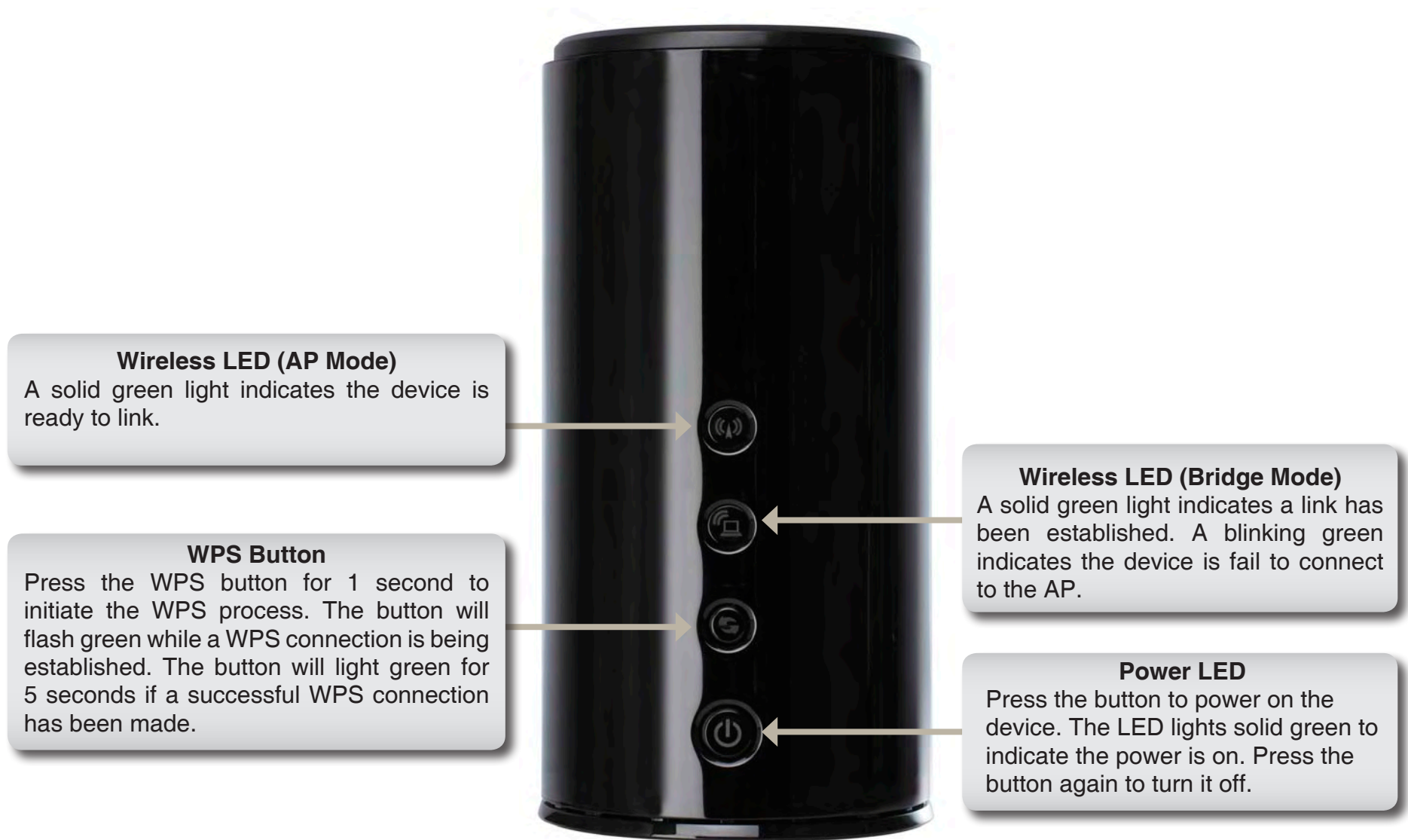
### Power Receptor

Receptor for the supplied power adapter.



# Hardware Overview

## Front View



# Hardware Overview

## Bottom View



### Reset Button

Press the button to restore the device to its original factory default settings.

# Installation

This section will walk you through the installation process. Placement of the DAP-1525 is very important. Do not place the Access Point in an enclosed area such as a closet, cabinet, or in the attic or garage.

## Wireless Installation considerations

The D-Link wireless access point lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. 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 access point 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 access points, wireless Access Points, 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 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz 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.

# Connection - AP Mode

To use the DAP-1525 in AP Mode, follow the steps below:

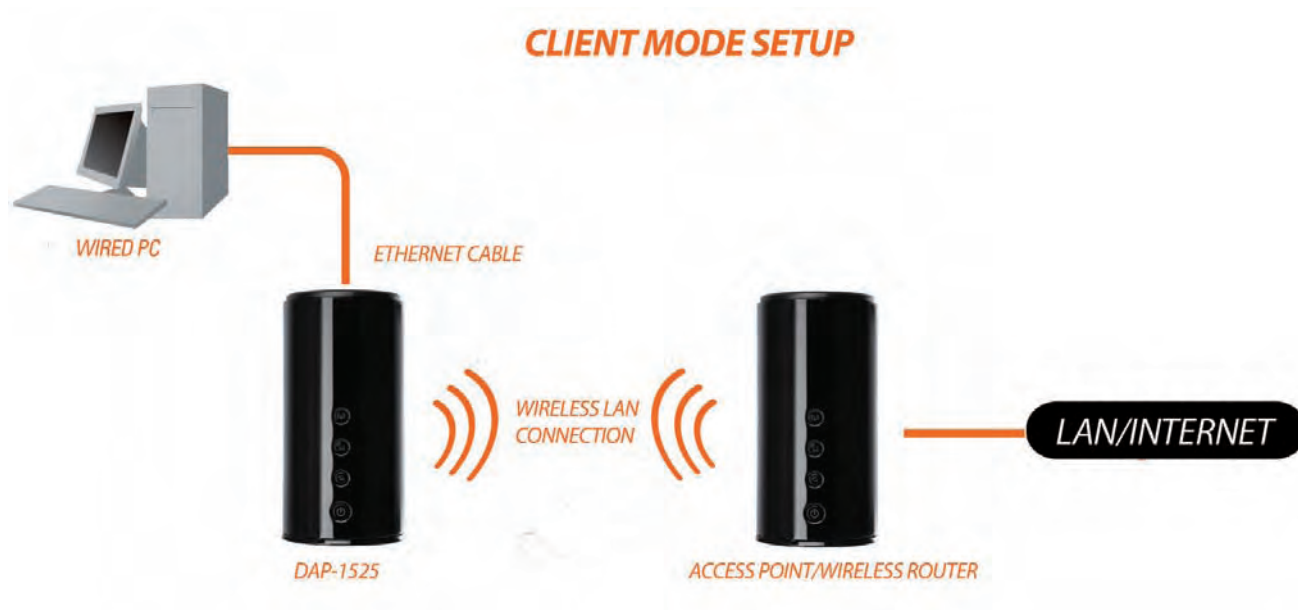
1. Ensure you have a broadband Internet connector, such as a cable or DSL client line that connects the Internet to your home or office.
2. Connect the cable properly or install the modem.
3. Connect the cable or modem with the broadband Access Point.
4. Connect the DAP-1525's Ethernet port to your LAN.
5. Move the switch to wireless 2.4GHz AP, or 5GHz AP Mode.
6. Connect your PC or notebook to the DAP-1525 using the PC or notebook's wireless adapter.



# Connection - Bridge Mode

To use the DAP-1525 in Bridge Mode, follow the steps below:

1. Ensure you have a broadband Internet connector, such as a cable or DSL client line that connects the Internet to your home or office.
2. Connect the cable properly or install the modem.
3. Connect the cable or modem with the broadband Access Point.
4. Move the switch to Bridge Mode.
5. Connect your PC or notebook to the DAP-1525 using the PC or notebook's wired adapter.



# One Touch AP Configuration

DAP-1525 supports One Touch AP Configuration. This feature makes DAP-1525 to have the ability to exchange or learn the wireless profile from another wireless router or access point.

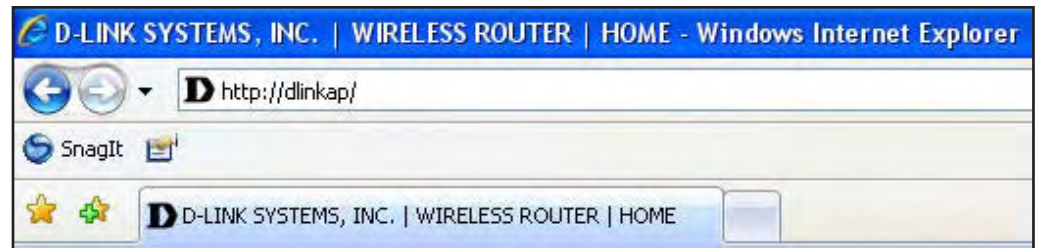
1. Press the WPS button on your existing router or access point. WPS LED will flash.
2. Press the WPS button on the DAP-1525 and hold it for 5 seconds to start One Touch AP Configuration.
3. When One Touch AP Configuration is complete, the DAP-1525 will have the same wireless settings as the existing router or access point.

# Configuration

This section will show you how to configure your new D-Link wireless Access Point using the Web-based configuration utility.

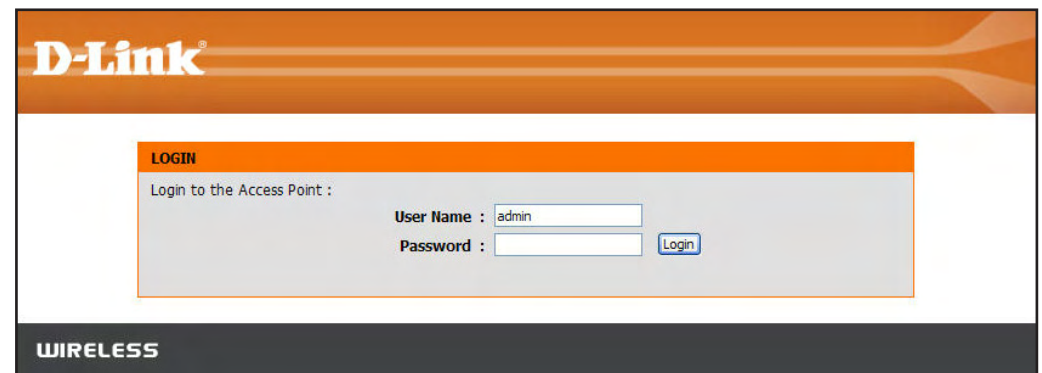
## Web-based Configuration Utility for AP Mode

To access the configuration utility, open a web browser such as Internet Explorer and enter **http://dlinkap** or **http://192.168.0.50** in the address field.



Type **Admin** in the **User Name** field and then enter your password. Leave the password blank by default.

Click the **Login** button to log in to the Access Point.

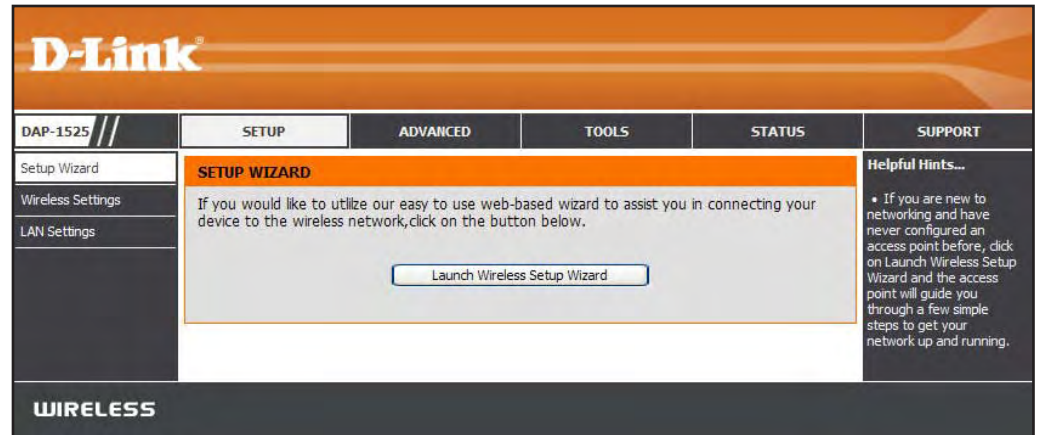


If you get a **Page Cannot be Displayed** error, please refer to the **Troubleshooting** section for assistance.



# Setup Wizard

Click **Launch Wireless Setup Wizard** to quickly configure your access point.



A welcome window appears. Click the **Next** button to continue.





Click the **WPS** radio button if your wireless device supports Wi-Fi Protected Setup. Click the **Manual** radio button if you want to configure the network manually. For **Manual** configuration, skip to page 15.

Click the Next button to continue.

Select **PIN** to enter the PIN number from other wireless device to connect to your network.

For **PBC** configuration, skip to page 14.

Click **Connect** to continue.

Start WPS on the wireless device that you are adding to your wireless network to complete the setup.

**SELECT CONFIGURATION METHOD**

Please select one of the following configuration methods and click **next** to continue.

**WPS** -- Select this option if your wireless device supports WPS (Wi-Fi Protected Setup)

**Manual** -- Select this option if you want to setup your network manually

Prev Next Cancel

**CONNECT TO WIRELESS DEVICE WITH WPS**

There are two ways to add wireless device to your wireless network:

-PIN (Personal Identification Number)

-PBC (Push Button Configuration)

**PIN** :

Please Enter the above PIN information into your Acces Point and click the below "Connect" button.

**PBC**

Please press the push button on your wireless device and press the "Connect" button below within 120 seconds.

Prev Connect Exit

**USING PIN NUMBER**

Please start WPS on the wireless device you are adding to your wireless network within 117 second...

Select **PBC** to use the Push Button Configuration in order to connect to your network.

Click **Connect** to continue.

Press the Push Button on the wireless device that you are adding to your network to complete the setup.

**CONNECT TO WIRELESS DEVICE WITH WPS**

There are two ways to add wireless device to your wireless network:

- PIN (Personal Identification Number)
- PBC (Push Button Configuration)

**PIN** :

Please Enter the above PIN information into your Acces Point and click the below "Connect" button.

**PBC**

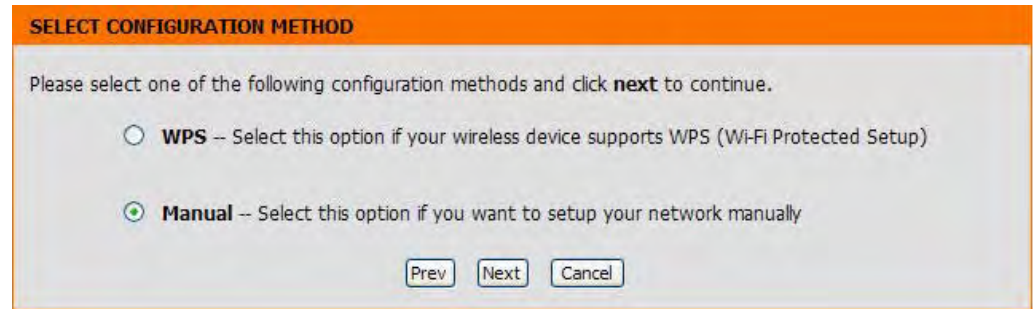
Please press the push button on your wireless device and press the "Connect" button below within 120 seconds.

**VIRTUAL PUSH BUTTON**

Please press down the Push Button (physical or virtual) on the wireless device you are adding to your wireless network within 119 second...

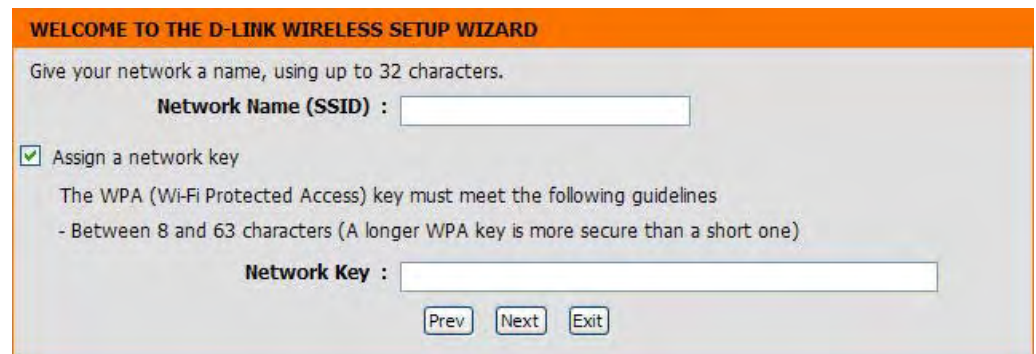
Select **Manual** as the configuration method to set up your network manually.

Click Next to continue



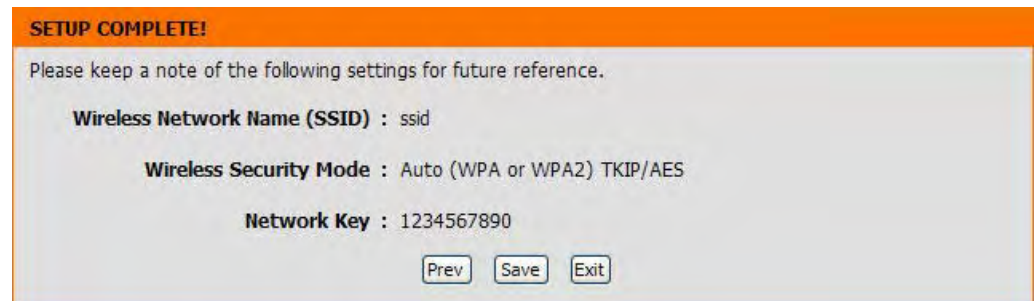
Enter a network name (SSID). Tick the **Assign a network key** check box to manually enter a WPA key between 8 and 63 characters. Deselect the **Assign a network key** check box to automatically assign a network key.

Click **Next** to continue.



This window displays the settings.

Click the **Save** button to save the settings.



# Wireless Settings

**Enable Wireless:** Tick the check box to enable the wireless function. If you do not want to use wireless, de-select the check box to disable all the wireless functions. Use the drop-down menu to select the time to enable the wireless function, or click the **New Schedule** button to create a new time period.

**Wireless Network Name:** Service Set Identifier (SSID) is the name of your wireless network. Create a name using up to 32 characters. The SSID is case-sensitive.

**Enable Auto Channel Selection:** The **Auto Channel Scan** setting can be selected to allow the DAP-1525 to choose the channel with the least amount of interference.

**Wireless Channel:** Indicates the channel setting for the DAP-1525. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be grayed out.

**Transmission Rate:** Select the transmit rate. It is strongly suggested to select **Best (automatic)** for best performance.

**Wireless Mode:** Use the drop-down menu to select the wireless mode among 802.11n only, 802.11 Mixed (b/g) only and 802.11 Mixed (b/g/n) in 2.4GHz Band, or 802.11a only, 802.11n only and 802.11 Mixed (a/n) in 5 GHz Band.

**WIRELESS NETWORK**

Use this section to configure the wireless settings for your D-Link router. Please note that changes made in this section may also need to be duplicated on your wireless client.

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: WEP, WPA and WPA2.

---

**WIRELESS NETWORK SETTINGS**

**Wireless Band :** 5 GHz Band

**Enable Wireless :**  Always

**Wireless Network Name :**  (Also called the SSID)

**Enable Auto Channel Selection :**

**Wireless Channel :**

**Transmission Rate :**  (Mbit/s)

**Wireless Mode :**

**Band Width :**

**WMM Enable :**  (Wireless QoS)

**Enable Hidden Wireless :**  (Also called the SSID Broadcast)

---

**WIRELESS SECURITY MODE**

**Security Mode :**

---

**WI-FI PROTECTED SETUP**

**Enable :**

**WiFi Protected Setup :** Enabled / Not configured

**PIN :** 76204418

**Bandwidth:** Use the drop-down menu to select the Operating frequency band.

**WMM Enable:** WMM (Wi-Fi Multimedia) is QoS for your wireless network. Tick this box to improve the quality of video and voice applications for your wireless clients. This feature is not available in 802.11n configurations.

**Enable Hidden Wireless:** Enabling Hidden Mode is another way to secure your network. With this option enabled, no wireless clients will be able to see your wireless network when they perform a scan to see what's available. In order for your wireless devices to connect to your Access Point, you will need to manually enter the Wireless Network Name on each device. This function is not available when WPS enabled.

**Security Mode:**

Refer to **Section 4 - Wireless Security** for more information regarding wireless security.

**Enable:**

Enable the Wi-Fi Protected Setup feature.



# LAN Setup

This section will allow you to change the internal network settings of the Access Point and to configure the Static settings.

**Device Name:** Enter the Device Name of the AP. It is recommended to change the Device Name if there is more than one D-Link device within the subnet.

**LAN Connection type:** Use the drop-down menu to select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. Select **Dynamic IP (DHCP)** to automatically assign an IP address to the computers on the LAN/private network.

**IPv4 Address:** Enter the IP address of the Access Point. The default IP address is **192.168.0.50**. If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

**Subnet Mask:** Enter the subnet mask. The default subnet mask is **255.255.255.0**.

**Default Gateway:** Enter the default gateway IP address.

**Primary DNS Server:** Enter the primary DNS server IP address.

**Secondary DNS Server:** Enter the secondary DNS server IP address.

**My IPv6 Connection is:** Use the drop-down menu to select the IPv6 mode connected to the IPv6 Internet.

**NETWORK SETTINGS**

Use this section to configure the internal network settings of your router and also to configure the built-in DHCP server to assign IP addresses to computers on your network. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address in this section, you may need to adjust your PC's network settings to access the network again.

---

**DEVICE NAME**

Device Name :

---

**LAN SETTINGS**

Use this section to configure the internal network settings of your router. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address here, you may need to adjust your PC's network settings to access the network again.

LAN Connection Type :

---

**STATIC IP LAN CONNECTION TYPE**

Enter the IPv4 address information.

IPv4 Address :   
 Subnet Mask :   
 Default Gateway :   
 Primary DNS Server :   
 Secondary DNS Server :

---

**IPv6 CONNECTION TYPE**

Choose the mode to be used by the router to connect to the IPv6 Internet.

My IPv6 Connection is :

---

**LAN IPv6 ADDRESS SETTINGS**

Use the section to configure the internal network settings of your router. 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::f27d:68ff:fe78:930c/64

## LAN Setup

### Static IPv6

When using the **My IPv6 Connection is** drop-down menu to select the IPv6 mode, the LAN IPv6 Address Settings section will vary based on the selected mode. Select **Static IPv6** to see the following configuration.

**IPv6 Address:** Enter the static IPv6 address provided by your Internet Service Provider.

**Subnet Prefix**

**Length:** Enter the IPv6 subnet prefix length.

**Default Gateway:** Enter the default gateway IP address.

**Primary DNS**

**Server:** Enter the primary DNS server IP address.

**Secondary DNS**

**Server:** Enter the secondary DNS server IP address.

#### IPv6 CONNECTION TYPE

Choose the mode to be used by the router to connect to the IPv6 Internet.

My IPv6 Connection is :

#### LAN IPV6 ADDRESS SETTINGS

Enter the IPv6 address information provided by your Internet Service Provider (ISP).

IPv6 Address :

Subnet Prefix Length :

Default Gateway :

Primary DNS Server :

Secondary DNS Server :

## LAN Setup

### Auto-configuration

When using the **My IPv6 Connection is** drop-down menu to select the IPv6 mode, the LAN IPv6 Address Settings section will vary based on the selected mode. Select **Autoconfiguration (Stateless/DHCPv6)** to see the following configuration.

**Obtain IPv6 DNS Servers automatically:** Click the radio button to directly obtain IPv6 DNS server automatically.

**Use the following IPv6 DNS Servers:** Click the radio button the enter IPv6 DNS server manually.

**Primary DNS Server:** Enter the primary DNS server IP address.

**Secondary DNS Server:** Enter the secondary DNS server IP address.

The screenshot displays the LAN IPv6 Address Settings configuration interface. It is divided into two main sections: 'IPv6 CONNECTION TYPE' and 'IPv6 DNS SETTINGS'. In the 'IPv6 CONNECTION TYPE' section, a dropdown menu labeled 'My IPv6 Connection is :' is set to 'Autoconfiguration(Stateless/DHCPv6)'. The 'IPv6 DNS SETTINGS' section contains the instruction 'Obtain DNS server address automatically or enter a specific DNS server address.' and two radio button options: 'Obtain IPv6 DNS Servers automatically' (which is selected) and 'Use the following IPv6 DNS Servers'. Below these options are two input fields for 'Primary DNS Server :' and 'Secondary DNS Server :'. At the bottom of the form are two buttons: 'Save Settings' and 'Don't Save Settings'.



# MAC Address Filter

The MAC address filter section can be used to filter network access by machines based on the unique MAC addresses of their network adapter(s). It is most useful to prevent unauthorized wireless devices from connecting to your network. A MAC address is a unique ID assigned by the manufacturer of the network adapter.

**Configure MAC Filtering below:** When **Turn MAC Filtering OFF** is selected, MAC addresses are not used to control network access. When **Turn MAC Filtering ON and ALLOW computers listed to access the network** is selected, only computers with MAC addresses listed in the MAC Address List are granted network access. When **Turn MAC Filtering ON and DENY computers listed to access the network** is selected, any computer with a MAC address listed in the MAC Address List is refused access to the network.

**Rules:** Enter a description of the filtering rule in the Description field and enter the MAC address to add the rule. Click the corresponding **clear** button to delete the rule.

**D-Link**

DAP-1525 // SETUP ADVANCED TOOLS STATUS SUPPORT

**MAC ADDRESS FILTER**

The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.

Save Settings Don't Save Settings

**25 -- MAC FILTERING RULES**

Configure MAC Filtering below:  
Turn MAC Filtering OFF

Remaining number of rules that can be created: 25

	Description	MAC Address	
1	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
2	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
3	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
4	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
5	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
6	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
7	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
8	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
9	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
10	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>
11	<input type="text"/>	<input type="text"/>	<input type="button" value="clear"/>

**Helpful Hints...**

- Create a list of MAC addresses and choose whether to allow or deny them access to your network.
- Computers that have obtained an IP address from the router's DHCP server will be in the DHCP Client List. Select a device from the drop down menu and click the arrow to add that device's MAC to the list.
- Use the check box on the left to either enable or disable a particular entry.
- Use the **Always** drop down menu if you have previously defined a schedule in the router. If not, click on the **New Schedule** button to add one.

# Advanced Network

This window is used to change the advanced LAN settings.

**Transmit Power:** User the drop-down menu to select the transmit power of the antennas.

**WMM Enable:** WMM is QoS for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

**IGMP Snooping:** This enables IGMP snooping for the wireless connection. We recommend enabling this if you often use multicast services such as video conference and streaming audio/video.

### ADVANCED NETWORK SETTINGS

These options are for users that wish to change the LAN settings. We do not recommend changing these settings from factory default. Changing these settings may affect the behavior of your network.

### TRANSMIT POWER

Normally the wireless transmitter operates at 100% power. In some circumstances, there might be a need to isolate specific frequencies to a smaller area.

**Transmit Power :**

### WMM ENABLE

Enabling WMM can help control latency and jitter when transmitting multimedia content over a wireless connection.

**WMM Enable :**

### MULTICAST STREAMS

This section is to allow to enable or disable the Ethernet multicast function.

**IGMP Snooping :**

# Guest Zone

The guest zone provide a separate network zone for guest to access the Internet.

**Enable Guest Zone:** Tick the check box to enable guest zone. Use the drop-down menu to select the time for enabling the function. Click **New Schedule** to configure the schedule that can apply to this function.

**Wireless Band:** Display the wireless band status.

**Wireless Network Name:** Enter a name using up to 32 characters for the wireless network. This is case-sensitive.

**Security Mode:** Refer to **Section 4 - Wireless Security** for more information regarding wireless security.

**Enable Guest Zones Clients Isolation:** Tick the check box to prevent the guest clients from accessing other guests in the guest zone.

**Enable Routing Between Zones:** Tick the check box to enable routing between the host and guest zone.

**GUEST ZONE SELECTION**

Use this section to configure the guest zone settings of your router. The guest zone provide a separate network zone for guest to access Internet.

**GUEST ZONE**

**Enable Guest Zone :**  Always Always ▼

**Wireless Band :** 5GHz Band

**Wireless Network Name :**  (Also called the SSID)

**Security Mode :** Disable Wireless Security (not recommended) ▼

**GUEST ZONES CLIENTS ISOLATION**

Enable this function to prevent guest clients accessing other guest clients in the Guest Zone.

**Enable Guest Zones Clients Isolation :**

**ROUTING BETWEEN HOST ZONE AND GUEST ZONE**

Use this section to enable routing between the Host zone and Guest Zone. Guest clients cannot access Host clients' without enabling this function.

**Enable Routing Between Zones :**

# Schedule

**Name:** Enter a name for your new schedule.

**Day(s):** Select a day, a range of days, or All Week to include every day.

**Time:** Check **All Day - 24 hrs** or enter a start and end time for your schedule.

**Schedule Rules** The list of schedules will be listed here. Click the **List:** Edit icon to make changes or click the Delete icon to remove the schedule.

**SCHEDULES**

The Schedule configuration option is used to manage schedule rules for "Wireless Settings" and "Guest Zone".

**10 -- ADD SCHEDULE RULE**

**Name :**

**Day(s) :**  All Week  Select Day(s)

Sun  Mon  Tue  Wed  Thu  Fri  Sat

**All Day - 24 hrs :**

**Start Time :**  :   (hour:minute, 12 hour time)

**End Time :**  :   (hour:minute, 12 hour time)

**SCHEDULE RULES LIST**

Name	Day(s)	Time Frame	



# Admin

The “admin” account has the read and write access right. You can also enable Remote Management.

**Password:** Enter a new password for the Administrator Login Name. The administrator can make changes to the settings.

**Verify Password:** Retype the new password for the Administrator Login Name.

**Enable Graphical Authentication:** Tick the check box to enable Graphical Authentication.

The screenshot shows the D-Link web interface for the DAP-1525 device. The top navigation bar includes 'D-Link' logo and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'ADMINISTRATOR SETTINGS' section is highlighted in orange and contains the following text: 'The 'admin' account can access the management interface. The admin has read/write access and can change password. By default there is no password configured. It is highly recommended that you create a password to keep your router secure.' Below this text are 'Save Settings' and 'Don't Save Settings' buttons. The 'ADMIN PASSWORD' section prompts the user to enter a password and verify it. The 'ADMINISTRATION' section includes an 'Enable Graphical Authentication' checkbox, which is currently unchecked. A 'Helpful Hints...' sidebar on the right provides security advice: 'For security reasons, it is recommended that you change the password for the Admin account. Be sure to write down the new password to avoid having to reset the router in case they are forgotten.'

# Time

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the Time Server. Daylight Saving can also be configured to automatically adjust the time when needed.

**Time Zone:** Select the Time Zone from the drop-down menu.

**Enable Daylight Saving:** Tick the check box to enable Daylight Saving Time.

**Sync your computer's time settings:** Click this button to set the device's time the same to local PC.

**Automatically synchronize with D-Link's Internet time server:** Tick the check box to enable the device to automatically synchronize with a D-Link NTP Server. NTP stands for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. This will only connect to a server on the Internet, not a local server.

**NTP Server Used:** Select one of the D-Link NTP Servers from the drop-down menu. The DAP-1525 will then synchronize its clock to be the same time as the D-Link Internet time server. Click the **Update Now** button to synchronize with the D-Link Internet time server immediately.

**Set the Time and Date Manually:** To manually input the time, use the drop-down menus to enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second.

Click the **Save Settings** button to save any changes made.

**TIME AND DATE**

The Time and Date Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to adjust the time when needed.

---

**TIME AND DATE CONFIGURATION**

Time : 2000/01/01 05:18:25

Time Zone : (GMT+09:00) Osaka, Sapporo, Tokyo ▼

Enable Daylight Saving :

---

**AUTOMATIC TIME AND DATE CONFIGURATION**

Automatically synchronize with D-Link's Internet time server

NTP Server Used : Select NTP Server ▼

---

**SET THE TIME AND DATE MANUALLY**

Year	<span style="border: 1px solid #ccc; padding: 2px;">2011</span> ▼	Month	<span style="border: 1px solid #ccc; padding: 2px;">Jan</span> ▼	Day	<span style="border: 1px solid #ccc; padding: 2px;">27</span> ▼
Hour	<span style="border: 1px solid #ccc; padding: 2px;">15</span> ▼	Minute	<span style="border: 1px solid #ccc; padding: 2px;">0</span> ▼	Second	<span style="border: 1px solid #ccc; padding: 2px;">48</span> ▼

# System

**Save Settings To Local Hard Drive:** Use this option to save the current Access Point configuration settings to a file on the hard disk of the computer you are using. First, click the **Save** button. You will then see a file dialog, where you can select a location and file name for the settings.

**Load Settings From Local Hard Drive:** Use this option to load previously saved Access Point configuration settings. First, use the **Browse** control to find a previously save file of configuration settings. Then, click the **Upload Settings** button to transfer those settings to the Access Point.

**Restore To Factory Default Settings:** Click the **Restore Device** button to restore all configuration settings back to the settings that were in effect at the time the Access Point was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current Access Point configuration settings, use the **Save** button above.

**Reboot The Device:** Click to reboot the access point.

**Clear Language Pack:** Click the **Clear** button to restore the device back to the English interface version and remove other languages installed for the system web pages.

## SAVE AND RESTORE SETTINGS

Once the AP or wireless stations is configured you can save the configuration settings to a configuration file on your hard drive. You also have the option to load configuration settings, or restore the factory default settings.

## SAVE AND RESTORE SETTINGS

Save Settings To Local Hard Drive :

Load Settings From Local Hard Drive :

Restore To Factory Default Settings :

Reboot The Device :

Clear Language Pack :

# Firmware

You can upgrade the firmware of the access point here. Please check the D-Link support site for firmware updates at <http://support.dlink.com> or simply click the **Check Now** button located in the Firmware Information section. You can download firmware upgrades to your hard drive from the D-Link support site. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update.

## Current Firmware

**Version:** Displays the current firmware version.

## Current Firmware

**Date:** Displays the current firmware date.

**Firmware Upgrade:** After you have downloaded the new firmware, click the **Browse** control to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade.

**Language Pack Upgrade:** This function allows the user to transfer the language of web user interface from English to their own language by upgrading the language pack. Click the **Browse** button to locate the desired language pack on your hard drive. Click **Upload** to complete the language pack upgrade.

### FIRMWARE UPDATE

There may be new firmware for your AP or wireless stations to improve functionality and performance.

[Click here to check for an upgrade on our support site.](#)

To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the firmware upgrade.

The language pack allows you to change the language of the user interface on the AP or wireless stations. We suggest that you upgrade your current language pack if you upgrade the firmware. This ensures that any changes in the firmware are displayed correctly.

To upgrade the language pack, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the language pack upgrade.

### FIRMWARE INFORMATION

**Current Firmware Version :** 1.00

**Current Firmware Date :** Fri 04 Mar 2011

### FIRMWARE UPGRADE

**Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.**

To upgrade the firmware, your PC must have a wired connection to the AP or wireless stations. Enter the name of the firmware upgrade file, and click on the Upload button.

Upload :

### LANGUAGE PACK UPGRADE

Upload :



# System Check

The System Check feature allows you to verify the physical connectivity on both the LAN and Internet interface.

**Ping Test / IPv6 Ping Test:** The Ping Test / IPv6 Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the host name or IP/IPv6 address that you wish to Ping, and click **Ping**.

**Ping Result:** The results of your ping attempts will be displayed here.

The screenshot displays a web interface for system checks. It features three main sections: 1. A header 'PING TEST' in an orange bar, followed by a grey box containing the text 'Ping Test sends "ping" packets to test a computer on the Internet.' 2. A 'PING TEST' section with a dark grey header and a white body containing the label 'Host Name or IP Address :', an input field, and a 'Ping' button. 3. An 'IPv6 PING TEST' section with a dark grey header and a white body containing the label 'Host Name or IPv6 Address :', an input field, and a 'Ping' button. 4. A 'PING RESULT' section with a dark grey header and a white body containing the instruction 'Enter a host name or IP address above and click 'Ping''.

## Device Info

This page displays the current information for the DAP-1525. It will display the LAN and Wireless information, in addition to the firmware version and date the firmware was last updated.

**General:** Displays the access point's time and firmware version.

**LAN:** Displays the MAC address and the private (local) IP settings for the access point.

**Wireless LAN:** Displays the wireless MAC address and your wireless settings such as SSID and Channel.

D-Link	
DAP-1525 //	SETUP    ADVANCED    TOOLS    STATUS    SUPPORT
Device Info	<b>DEVICE INFORMATION</b>
Wireless	All of your network connection details are displayed on this page. The firmware version is also displayed here.
Logs	
Statistics	
IPv6	
	<b>GENERAL</b>
	Time : 2000/01/01 00:43:18 Firmware Version : 1.00 Fri 14 Jan 2011
	<b>LAN</b>
	Connection Type : Static IP MAC Address : f0:7d:68:78:93:0c IP Address : 192.168.0.50 Subnet Mask : 255.255.255.0 Default Gateway :
	<b>WIRELESS LAN</b>
	Wireless Radio : Enabled MAC Address : f0:7d:68:78:93:0c 802.11 Mode : Mixed 802.11n and 802.11a Channel Width : 20MHz Channel : 40 Network Name (SSID) : dlink Wi-Fi Protected Setup : Enabled/Unconfigured Security : Disabled
	<b>Helpful Hints...</b> • All of your LAN, Internet and WIRELESS 802.11 N connection details are displayed here.

# Wireless

The wireless section allows you to view the wireless clients that are connected to your wireless access point.

**SSID:** Displays the wireless network name.

**MAC Address:** The Ethernet ID (MAC address) of the wireless client.

**Uptime:** Displays the amount of time the wireless client has been connected to the access point.

**Mode:** The transmission standard being used by the client. Values are 11a, 11b, 11g, 11ng or 11na for 802.11a, 802.11b, 802.11g or 802.11n respectively.

**RSSI:** This is a relative measure of signal quality. The value is expressed as a percentage of theoretical best quality. Signal quality can be reduced by distance, by interference from other radio-frequency sources (such as cordless telephones or neighboring wireless networks), and by obstacles between the access point and the wireless device.

CONNECTED WIRELESS CLIENT LIST				
View the wireless clients that are connected to the access point. (A client might linger in the list for a few minutes after an unexpected disconnect.)				
NUMBER OF WIRELESS CLIENTS: 0				
SSID	MAC Address	Uptime	Mode	Rssi (%)

# Logs

The access point automatically logs (records) events of possible interest in its internal memory. If there isn't enough internal memory for all events, logs of older events are deleted, but logs of the latest events are retained. The Logs option allows you to view the access point logs. You can define what types of events you want to view and the level of the events to view. This access point also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

**Save Log File To Local Hard Drive:** Click the **Save** button to save the access point to a log file on your computer.

**Log Type & Level:** Use the radio buttons to select Log type and level.

**Log Files:** Displays log events. Click the **Clear** button to delete all the records.

**VIEW LOG**

The View Log displays the activities occurring on the DAP-1525.
 

Save Settings
Don't Save Settings

**SAVE LOG FILE**

Save Log File To Local Hard Drive. Save

**LOG TYPE & LEVEL**

Log Type:  System Activity     Wireless Activity  
 Log Level:  Critical     Warning     Information

**LOG FILES**

First Page Last Page Previous Next Clear

Page 1 of 2

Time	Message
Sat Jan 1 02:54:58 2000	Web login success from ::ffff:192.168.0.1
Sat Jan 1 01:00:03 2000	Web logout from ::ffff:192.168.0.1
Sat Jan 1 00:43:15 2000	Web login success from ::ffff:192.168.0.1
Sat Jan 1 00:36:19 2000	Web logout from ::ffff:192.168.0.1
Sat Jan 1 00:25:43 2000	Web login success from ::ffff:192.168.0.1
Sat Jan 1 00:00:40 2000	Switch Port 4 LINK UP
Sat Jan 1 00:00:38 2000	Switch Port 4 LINK DOWN
Sat Jan 1 00:00:09 2000	Switch Port 4 LINK UP
Sat Jan 1 00:00:09 2000	Switch Port 3 LINK DOWN
Sat Jan 1 00:00:09 2000	Switch Port 2 LINK DOWN

# Statistics

The Statistics page displays all of the LAN and Wireless packets transmit and receive statistics.

**TX Packet Numbers:** The total number of packets sent from the access point.

**RX Packet Numbers:** The total number of packets received by the access point.

**TX Packets Dropped:** Displays the number of packets that were dropped while sending, due to errors, collisions, or access point resource limitations.

**RX Packets Dropped:** Displays the number of packets that were dropped while receiving, due to errors, collisions, or access point resource limitations.

**TX Packets Bytes:** Displays the number of bytes that were sent from the access point.

**RX Packets Bytes:** Displays the number of bytes that were received by the access point.

TRAFFIC STATISTICS	
Traffic Statistics displays Receive and Transmit packets passing through the device.	
<input type="button" value="Refresh"/>	<input type="button" value="Reset"/>
LAN STATISTICS	
<b>TX Packet Numbers:</b> 736	<b>RX Packet Numbers:</b> 905
<b>TX Packets Dropped:</b> 0	<b>RX Packets Dropped:</b> 0
<b>TX Packets Bytes:</b> 518631	<b>RX Packets Bytes:</b> 98151
WIRELESS STATISTICS	
<b>TX Packet Numbers:</b> 82173	<b>RX Packet Numbers:</b> 157757
<b>TX Packets Dropped:</b> 0	<b>RX Packets Dropped:</b> 0
<b>TX Packets Bytes:</b> 0	<b>RX Packets Bytes:</b> 38695710

# IPv6

The IPv6 page displays the detailed IPv6 network connection.

## IPv6 Connection

**Type:** Displays IPv6 connection type.

**LAN IPv6 Address:** Displays LAN IPv6 address.

**IPv6 Default Gateway:** Displays the IPv6 address of the default gateway.

**LAN IPv6 Link-Local Address:** Displays the LAN IPv6 link-local address.

**Primary DNS Server:** Displays the IPv6 address of the primary DNS server.

**Secondary DNS Server:** Displays the IPv6 address of the secondary DNS server.

The screenshot displays two sections of network configuration information. The top section, titled 'IPv6 NETWORK INFORMATION', has an orange header and contains the text: 'All of your network connection details are displayed on this page.' The bottom section, titled 'IPv6 CONNECTION INFORMATION', has a dark grey header and lists the following details:

- IPv6 Connection Type : Link-Local Only
- LAN IPv6 Address :
- IPv6 Default Gateway :
- LAN IPv6 Link-Local Address : fe80::f27d:68ff:fe78:930c/64
- Primary DNS Server :
- Secondary DNS Server :



# Support

This page provides all the helpful support information of the Access Point.

The screenshot displays the D-Link web interface for the DAP-1525. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains a MENU section with links to SETUP, ADVANCED, TOOLS, and STATUS. The main content area is titled 'SUPPORT MENU' and lists several help categories:

- SUPPORT MENU**
  - [Setup](#)
  - [Advanced](#)
  - [Tools](#)
  - [Status](#)
- SETUP HELP**
  - [Setup Wizard](#)
  - [Wireless Settings](#)
  - [LAN Settings](#)
- ADVANCED HELP**
  - [MAC address Filter](#)
  - [Advanced Network](#)
  - [Guest Zone](#)
  - [Schedules](#)
- TOOLS HELP**
  - [Device Administration](#)
  - [Time and Date](#)
  - [System](#)
  - [Firmware](#)
  - [System Check](#)
- STATUS HELP**
  - [Device Info](#)
  - [Wireless](#)
  - [Logs](#)
  - [Statistics](#)
  - [IPv6](#)

# Configuration

This section will show you how to configure your new D-Link wireless Access Point using the Web-based configuration utility.

## Web-based Configuration Utility for Bridge Mode

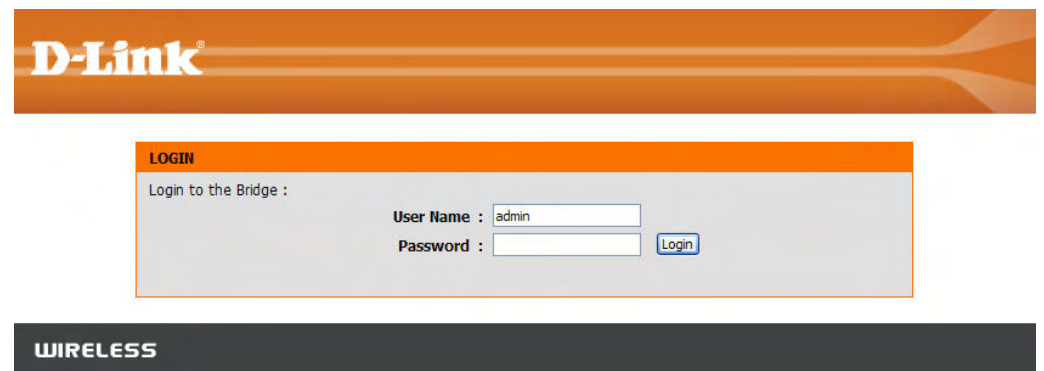
To access the configuration utility, open a web browser such as Internet Explorer and enter **http://dlinkap** or **http://192.168.0.50** in the address field.



Type **Admin** in the **User Name** field and then enter your password. Leave the password blank by default.

Click the **Login** button to log in to the Access Point.

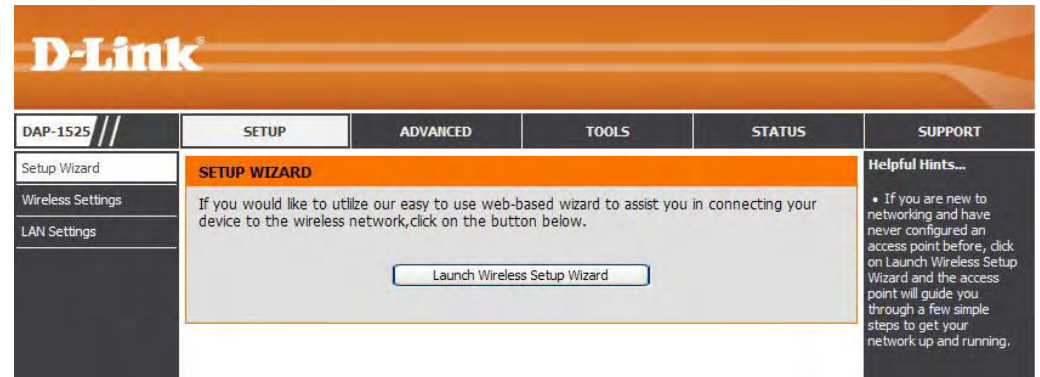
If you get a **Page Cannot be Displayed** error, please refer to the **Troubleshooting** section for assistance.





# Setup Wizard

Click **Launch Wireless Setup Wizard** to quickly configure your access point.



A welcome window appears. Click the **Next** button to continue.



Click the **WPS** radio button if your wireless device supports Wi-Fi Protected Setup. Click the **Manual** radio button if you want to configure the network manually. For **Manual** configuration, skip to page 38.

Click the Next button to continue.

Press the Push Button on the wireless device that you are adding to your network to complete the setup.

Select **Manual** as the configuration method to set up your network manually.

Click Next to continue

**SELECT CONFIGURATION METHOD**

Please select one of the following configuration methods and click **next** to continue.

- WPS** -- Select this option if your wireless device supports WPS (Wi-Fi Protected Setup)
- Manual** -- Select this option if you want to setup your network manually

Prev Next Cancel

**VIRTUAL PUSH BUTTON**

Please press down the Push Button (physical or virtual) on the wireless device you are adding to your wireless network within 119 second...

**SELECT CONFIGURATION METHOD**

Please select one of the following configuration methods and click **next** to continue.

- WPS** -- Select this option if your wireless device supports WPS (Wi-Fi Protected Setup)
- Manual** -- Select this option if you want to setup your network manually

Prev Next Cancel

Enter the **Wireless Network Name (SSID)** of the AP or click the **Site Survey** button to find the AP.

Click **Next** to continue.

If clicking **Site Survey**, the following screen will be displayed.

Find your access point from the list and click **Next** to complete the Setup Wizard.

**SET WIRELESS NETWORK NAME(SSID)**

You can enter the Wireless Network Name of AP or use site survey to find the AP.

Wireless Network Name (SSID) :

**D-Link**

SSID	BSSID	Channel	Type	Encrypt	Signal	Select
646C696E6B2079797900000000000000	00:62:35:25:55:01	1(b/g/n)	AP	NONE/OPEN	70	<input type="radio"/>
SWR1100	f0:7d:68:78:92:70	3(b/g)	AP	WEP/WEPAUTO	76	<input type="radio"/>
jim1200_8021x	00:12:da:f6:28:d0	3(b/g)	AP	WEP/WEPAUTO	60	<input type="radio"/>
17253	1c:bd:b9:c0:02:b6	4(b/g/n)	AP	NONE/OPEN	60	<input type="radio"/>
dlink4	00:22:b0:3d:93:d3	6(b/g/n)	AP	NONE/OPEN	60	<input type="radio"/>

**WIRELESS**

Choose which Security Mode you want to use and click **Next** to continue.

**SELECT WIRELESS SECURITY MODE**

Please select the wireless security mode.

None  
 WEP  
 WPA  
 WPA2

If you choose **WEP**, enter the wireless security password and click **Next** to complete the Setup Wizard.



**SET YOUR WIRELESS SECURITY PASSWORD**

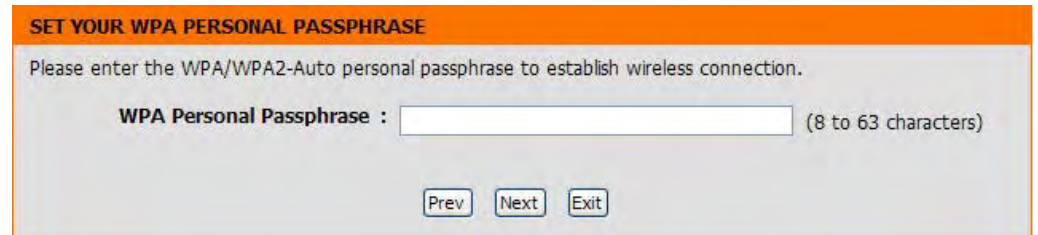
Please enter the wireless security password to establish wireless connection.

Key Size : 64Bit(10 hex digits)

WEP Key 1 :

Prev Next Exit

If you choose **WPA** or **WPA2**, enter the **WPA/WPA2 Personal Passphrase** and click **Next** to complete the Setup Wizard.



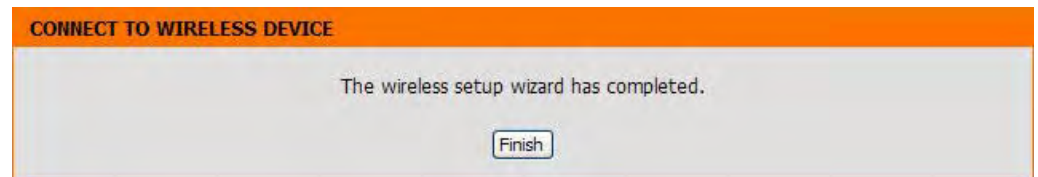
**SET YOUR WPA PERSONAL PASSPHRASE**

Please enter the WPA/WPA2-Auto personal passphrase to establish wireless connection.

WPA Personal Passphrase :  (8 to 63 characters)

Prev Next Exit

The following screen opens to indicate that you have successfully saved your new settings.



**CONNECT TO WIRELESS DEVICE**

The wireless setup wizard has completed.

Finish

# Wireless Settings

**Enable Wireless:** Tick the check box to enable the wireless function. If you do not want to use wireless, de-select the check box to disable all the wireless functions. Use the drop-down menu to select the time to enable the wireless function, or click the **New Schedule** button to create a new time period.

**Wireless Network Name:** Enter the Wireless Network Name (SSID) of the AP, or click the **Site Survey** button to find the AP.

**Band Width:** Select the Band Width:  
**20/40 MHz (Auto)** - Select if you are using both 802.11n and non-802.11n wireless devices.  
**20MHz** - Select if you are not using any 802.11n wireless clients.

**Security Mode:** Refer to **Section 4 - Wireless Security** for more information regarding wireless security.

## Wireless Mac Cloning

Enabling this option allows the user to manually assign the source MAC address to packets forwarded by the DAP-1525. If not manually assigned, the packet's source MAC address field will be automatically selected as the DAP-1525's MAC address.

**MAC Address:** Enter the desired MAC address connected to your DAP-1525 to enable the clone function.

**Scan:** Click the **Scan** button to search for all available devices connected to your DAP-1525's Ethernet ports.

**WIRELESS NETWORK**

Use this section to configure the wireless settings for your D-Link router. Please note that changes made in this section may also need to be duplicated on your wireless client.

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: WEP, WPA and WPA2.

**WIRELESS NETWORK SETTINGS**

**Wireless Band :** Station (2.4Ghz/5GHz)

**Enable Wireless :**  Always

**Wireless Network Name :** dlink (Also called the SSID)

**Band Width :** 20 MHz

**WIRELESS SECURITY MODE**

**Security Mode :** Disable Wireless Security (not recommended)

**WIRELESS MAC CLONING**

**Enable :**

**MAC Address :**  :  :  :  :  :

Port	MAC Address
------	-------------



# LAN Setup

This section will allow you to change the local network settings of the bridge and to configure the Static settings.

**Device Name:** Enter the Device Name of the AP. It is recommended to change the Device Name if there is more than one D-Link device within the subnet.

**LAN Connection type:** Use the drop-down menu to select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. Select **Dynamic IP (DHCP)** to automatically assign an IP address to the computers on the LAN/private network.

**IPv4 Address:** Enter the IP address of the Access Point. The default IP address is **192.168.0.50**. If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

**Subnet Mask:** Enter the subnet mask. The default subnet mask is **255.255.255.0**.

**Default Gateway:** Enter the default gateway IP address.

**Primary DNS Server:** Enter the primary DNS server IP address.

**Secondary DNS Server:** Enter the secondary DNS server IP address.

**My IPv6 Connection is:** Use the drop-down menu to select the IPv6 mode connected to the IPv6 Internet.

**NETWORK SETTINGS**

Use this section to configure the internal network settings of your router and also to configure the built-in DHCP server to assign IP addresses to computers on your network. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address in this section, you may need to adjust your PC's network settings to access the network again.

**DEVICE NAME**

**Device Name :**

**LAN SETTINGS**

Use this section to configure the internal network settings of your router. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address here, you may need to adjust your PC's network settings to access the network again.

**LAN Connection Type :**

**STATIC IP LAN CONNECTION TYPE**

Enter the IPv4 address information.

**IPv4 Address :**

**Subnet Mask :**

**Default Gateway :**

**Primary DNS Server :**

**Secondary DNS Server :**

**IPv6 CONNECTION TYPE**

Choose the mode to be used by the router to connect to the IPv6 Internet.

**My IPv6 Connection is :**

**LAN IPv6 ADDRESS SETTINGS**

Use the section to configure the internal network settings of your router. 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 :**



## LAN Setup

### Static IPv6

When using the **My IPv6 Connection is** drop-down menu to select the IPv6 mode, the LAN IPv6 Address Settings section will vary based on the selected mode. Select **Static IPv6** to see the following configuration.

**IPv6 Address:** Enter the static IPv6 address provided by your Internet Service Provider.

**Subnet Prefix**

**Length:** Enter the IPv6 subnet prefix length.

**Default Gateway:** Enter the default gateway IP address.

**Primary DNS**

**Server:** Enter the primary DNS server IP address.

**Secondary DNS**

**Server:** Enter the secondary DNS server IP address.

#### IPv6 CONNECTION TYPE

Choose the mode to be used by the router to connect to the IPv6 Internet.

My IPv6 Connection is :

#### LAN IPV6 ADDRESS SETTINGS

Enter the IPv6 address information provided by your Internet Service Provider (ISP).

IPv6 Address :

Subnet Prefix Length :

Default Gateway :

Primary DNS Server :

Secondary DNS Server :

## LAN Setup

### Auto-configuration

When using the **My IPv6 Connection is** drop-down menu to select the IPv6 mode, the LAN IPv6 Address Settings section will vary based on the selected mode. Select **Autoconfiguration (Stateless/DHCPv6)** to see the following configuration.

**Obtain IPv6 DNS Servers automatically:** Click the radio button to directly obtain IPv6 DNS server automatically.

**Use the following IPv6 DNS Servers:** Click the radio button the enter IPv6 DNS server manually.

**Primary DNS Server:** Enter the primary DNS server IP address.

**Secondary DNS Server:** Enter the secondary DNS server IP address.

The screenshot displays the LAN IPv6 Address Settings configuration interface. It is divided into two main sections: 'IPv6 CONNECTION TYPE' and 'IPv6 DNS SETTINGS'. In the 'IPv6 CONNECTION TYPE' section, the instruction 'Choose the mode to be used by the router to connect to the IPv6 Internet.' is followed by a dropdown menu labeled 'My IPv6 Connection is :', which is currently set to 'Autoconfiguration(Stateless/DHCPv6)'. The 'IPv6 DNS SETTINGS' section contains the instruction 'Obtain DNS server address automatically or enter a specific DNS server address.' and two radio button options: 'Obtain IPv6 DNS Servers automatically' (which is selected) and 'Use the following IPv6 DNS Servers'. Below these options are two input fields: 'Primary DNS Server :' and 'Secondary DNS Server :'. At the bottom of the form are two buttons: 'Save Settings' and 'Don't Save Settings'.

# Schedule

**Name:** Enter a name for your new schedule.

**Day(s):** Select a day, a range of days, or All Week to include every day.

**Time:** Check **All Day - 24 hrs** or enter a start and end time for your schedule.

**Schedule Rules** The list of schedules will be listed here. Click the **List:** Edit icon to make changes or click the Delete icon to remove the schedule.

**SCHEDULES**

The Schedule configuration option is used to manage schedule rules for "Wireless Settings" and "Guest Zone".

**10 -- ADD SCHEDULE RULE**

**Name :**

**Day(s) :**  All Week  Select Day(s)

Sun  Mon  Tue  Wed  Thu  Fri  Sat

**All Day - 24 hrs :**

**Start Time :**  :  AM  (hour:minute, 12 hour time)

**End Time :**  :  PM  (hour:minute, 12 hour time)

**SCHEDULE RULES LIST**

Name	Day(s)	Time Frame	

# Admin

The “admin” account has the read and write access right. You can also enable Remote Management.

**Password:** Enter a new password for the Administrator Login Name. The administrator can make changes to the settings.

**Verify Password:** Retype the new password for the Administrator Login Name.

**Enable Graphical Authentication:** Tick the check box to enable Graphical Authentication.

The screenshot shows the D-Link Web Management Interface for the DAP-1525. The interface has a top navigation bar with the D-Link logo and a menu with tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The main content area is divided into a left sidebar with links for Admin, Time, System, Firmware, and System check. The central panel is titled 'ADMINISTRATOR SETTINGS' and contains the following sections:

- ADMINISTRATOR SETTINGS:** A text box explaining that the 'admin' account has read/write access and can change its password. It notes that by default, no password is configured and recommends creating one for security. Below this text are 'Save Settings' and 'Don't Save Settings' buttons.
- ADMIN PASSWORD:** A section with the instruction 'Please enter the same password into both boxes, for confirmation.' It contains two input fields: 'Password :' and 'Verify Password :'.
- ADMINISTRATION:** A section with a checkbox labeled 'Enable Graphical Authentication'. Below it are 'Save Settings' and 'Don't Save Settings' buttons.

On the right side of the interface, there is a 'Helpful Hints...' section with a bullet point: '• For security reasons, it is recommended that you change the password for the Admin account. Be sure to write down the new password to avoid having to reset the router in case they are forgotten.'

The bottom of the interface features a dark blue bar with the word 'WIRELESS' in white capital letters.

# Time

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the Time Server. Daylight Saving can also be configured to automatically adjust the time when needed.

**Time Zone:** Select the Time Zone from the drop-down menu.

**Enable Daylight Saving:** Tick the check box to enable Daylight Saving Time.

**Sync your computer's time settings:** Click this button to set the device's time the same to local PC.

**Automatically synchronize with D-Link's Internet time server:** Tick the check box to enable the device to automatically synchronize with a D-Link NTP Server. NTP stands for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. This will only connect to a server on the Internet, not a local server.

**NTP Server Used:** Select one of the D-Link NTP Servers from the drop-down menu. The DAP-1525 will then synchronize its clock to be the same time as the D-Link Internet time server. Click the **Update Now** button to synchronize with the D-Link Internet time server immediately.

**Set the Time and Date Manually:** To manually input the time, use the drop-down menus to enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second.

**TIME AND DATE**

The Time and Date Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to adjust the time when needed.

---

**TIME AND DATE CONFIGURATION**

Time : 2000/01/01 05:18:25

Time Zone : (GMT+09:00) Osaka, Sapporo, Tokyo ▼

Enable Daylight Saving :

---

**AUTOMATIC TIME AND DATE CONFIGURATION**

Automatically synchronize with D-Link's Internet time server

NTP Server Used : Select NTP Server ▼

---

**SET THE TIME AND DATE MANUALLY**

Year	<span style="border: 1px solid #ccc; padding: 2px;">2011</span> ▼	Month	<span style="border: 1px solid #ccc; padding: 2px;">Jan</span> ▼	Day	<span style="border: 1px solid #ccc; padding: 2px;">27</span> ▼
Hour	<span style="border: 1px solid #ccc; padding: 2px;">15</span> ▼	Minute	<span style="border: 1px solid #ccc; padding: 2px;">0</span> ▼	Second	<span style="border: 1px solid #ccc; padding: 2px;">48</span> ▼

Click the **Save Settings** button to save any changes made.



# System

**Save Settings To Local Hard Drive:** Use this option to save the current Access Point configuration settings to a file on the hard disk of the computer you are using. First, click the **Save** button. You will then see a file dialog, where you can select a location and file name for the settings.

**Load Settings From Local Hard Drive:** Use this option to load previously saved Access Point configuration settings. First, use the **Browse** control to find a previously save file of configuration settings. Then, click the **Upload Settings** button to transfer those settings to the Access Point.

**Restore To Factory Default Settings:** Click the **Restore Device** button to restore all configuration settings back to the settings that were in effect at the time the Access Point was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current Access Point configuration settings, use the **Save** button above.

**Reboot The Device:** Click to reboot the access point.

**Clear Language Pack:** Click the **Clear** button to restore the device back to the English interface version and remove other languages installed for the system web pages.

## SAVE AND RESTORE SETTINGS

Once the AP or wireless stations is configured you can save the configuration settings to a configuration file on your hard drive. You also have the option to load configuration settings, or restore the factory default settings.

## SAVE AND RESTORE SETTINGS

Save Settings To Local Hard Drive :

Load Settings From Local Hard Drive :

Restore To Factory Default Settings :

Reboot The Device :

Clear Language Pack :



# Firmware

You can upgrade the firmware of the access point here. Please check the D-Link support site for firmware updates at <http://support.dlink.com> or simply click the **Check Now** button located in the Firmware Information section. You can download firmware upgrades to your hard drive from the D-Link support site. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update.

## Current Firmware

**Version:** Displays the current firmware version.

## Current Firmware

**Date:** Displays the current firmware date.

**Firmware Upgrade:** After you have downloaded the new firmware, click the **Browse** control to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade.

**Language Pack Upgrade:** This function allows the user to transfer the language of web user interface from English to their own language by upgrading the language pack. Click the **Browse** button to locate the desired language pack on your hard drive. Click **Upload** to complete the language pack upgrade.

**FIRMWARE UPDATE**

There may be new firmware for your AP or wireless stations to improve functionality and performance.  
[Click here to check for an upgrade on our support site.](#)

To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the firmware upgrade.

The language pack allows you to change the language of the user interface on the AP or wireless stations. We suggest that you upgrade your current language pack if you upgrade the firmware. This ensures that any changes in the firmware are displayed correctly.

To upgrade the language pack, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the language pack upgrade.

**FIRMWARE INFORMATION**

**Current Firmware Version** : 1.00

**Current Firmware Date** : Fri 04 Mar 2011

**FIRMWARE UPGRADE**

**Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.**

To upgrade the firmware, your PC must have a wired connection to the AP or wireless stations. Enter the name of the firmware upgrade file, and click on the Upload button.

Upload :

**LANGUAGE PACK UPGRADE**

Upload :

# System Check

The System Check feature allows you to verify the physical connectivity on both the LAN and Internet interface.

**Ping Test / IPv6 Ping Test:** The Ping Test / IPv6 Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the host name or IP/IPv6 address that you wish to Ping, and click **Ping**.

**Ping Result:** The results of your ping attempts will be displayed here.

The screenshot displays a web interface for system checks. It features three main sections: 1. A header 'PING TEST' in an orange bar, followed by a grey box containing the text 'Ping Test sends "ping" packets to test a computer on the Internet.' 2. A dark grey bar labeled 'PING TEST' containing a form with the text 'Host Name or IP Address :', an input field, and a 'Ping' button. 3. A dark grey bar labeled 'IPv6 PING TEST' containing a form with the text 'Host Name or IPv6 Address :', an input field, and a 'Ping' button. 4. A dark grey bar labeled 'PING RESULT' containing the text 'Enter a host name or IP address above and click 'Ping''.

## Device Info

This page displays the current information for the DAP-1525. It will display the LAN and Wireless information, in addition to the firmware version and date the firmware was last updated.

**General:** Displays the access point's time and firmware version.

**LAN:** Displays the MAC address and the private (local) IP settings for the access point.

**Wireless LAN:** Displays the wireless MAC address and your wireless settings such as SSID and Channel.

DAP-1525	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
Device Info	<b>DEVICE INFORMATION</b>				<b>Helpful Hints...</b> • All of your LAN, Internet and WIRELESS 802.11 N connection details are displayed here.
Logs	All of your network connection details are displayed on this page. The firmware version is also displayed here.				
IPv6	<b>GENERAL</b>				
	Time : 2000/01/01 00:26:05 Firmware Version : 1.00 Fri 04 Mar 2011				
	<b>LAN</b>				
	Connection Type : Static IP MAC Address : f0:7d:68:78:93:0c IP Address : 192.168.0.50 Subnet Mask : 255.255.255.0 Default Gateway :				
	<b>WIRELESS LAN</b>				
	Wireless Radio : Enabled Bridge State : Connected MAC Address : f0:7d:68:78:93:0c Channel : 6 Network Name (SSID) : dlink Wi-Fi Protected Setup : Enabled Security : Disabled				

# Logs

The access point automatically logs (records) events of possible interest in its internal memory. If there isn't enough internal memory for all events, logs of older events are deleted, but logs of the latest events are retained. The Logs option allows you to view the access point logs. You can define what types of events you want to view and the level of the events to view. This access point also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

**Save Log File To Local Hard Drive:** Click the **Save** button to save the access point to a log file on your computer.

**Log Type & Level:** Use the radio buttons to select Log type and level.

**Log Files:** Displays log events. Click the **Clear** button to delete all the records.

**VIEW LOG**

The View Log displays the activities occurring on the DAP-1525.

**SAVE LOG FILE**

Save Log File To Local Hard Drive.

**LOG TYPE & LEVEL**

Log Type:  System Activity       Wireless Activity

Log Level:  Critical       Warning       Information

**LOG FILES**

Page 1 of 1

Time	Message
Sat Jan 1 00:11:00 2000	Web login success from ::ffff:192.168.0.10
Sat Jan 1 00:00:26 2000	WLAN:Association: associated with SSID:link
Sat Jan 1 00:00:10 2000	Switch Port 4 LINK UP
Sat Jan 1 00:00:10 2000	Switch Port 3 LINK DOWN
Sat Jan 1 00:00:10 2000	Switch Port 2 LINK DOWN
Sat Jan 1 00:00:10 2000	Switch Port 1 LINK DOWN

# IPv6

The IPv6 page displays the detailed IPv6 network connection.

## IPv6 Connection

**Type:** Displays IPv6 connection type.

**LAN IPv6 Address:** Displays LAN IPv6 address.

**IPv6 Default Gateway:** Displays the IPv6 address of the default gateway.

**LAN IPv6 Link-Local Address:** Displays the LAN IPv6 link-local address.

**Primary DNS Server:** Displays the IPv6 address of the primary DNS server.

**Secondary DNS Server:** Displays the IPv6 address of the secondary DNS server.

The screenshot displays the IPv6 configuration page. It features two main sections: 'IPv6 NETWORK INFORMATION' and 'IPv6 CONNECTION INFORMATION'. The 'IPv6 NETWORK INFORMATION' section has an orange header and contains the text: 'All of your network connection details are displayed on this page.' The 'IPv6 CONNECTION INFORMATION' section has a dark grey header and lists the following details: IPv6 Connection Type : Link-Local Only, LAN IPv6 Address : (blank), IPv6 Default Gateway : (blank), LAN IPv6 Link-Local Address : fe80::f27d:68ff:fe78:930c/64, Primary DNS Server : (blank), and Secondary DNS Server : (blank).

IPv6 NETWORK INFORMATION	
All of your network connection details are displayed on this page.	
IPv6 CONNECTION INFORMATION	
IPv6 Connection Type :	Link-Local Only
LAN IPv6 Address :	
IPv6 Default Gateway :	
LAN IPv6 Link-Local Address :	fe80::f27d:68ff:fe78:930c/64
Primary DNS Server :	
Secondary DNS Server :	



# Support

This page provides all the helpful support information of the Access Point.

The screenshot displays the D-Link web interface for the DAP-1525. At the top, the D-Link logo is visible on an orange background. Below the logo is a navigation bar with tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The SUPPORT tab is currently selected. On the left side, there is a 'Menu' sidebar. The main content area is titled 'SUPPORT MENU' and contains several sections of help links:

- SUPPORT MENU**
  - [Setup](#)
  - [Advanced](#)
  - [Tools](#)
  - [Status](#)
- SETUP HELP**
  - [Setup Wizard](#)
  - [Wireless Settings](#)
  - [LAN Settings](#)
- ADVANCED HELP**
  - [Schedule](#)
- TOOLS HELP**
  - [Admin](#)
  - [Time](#)
  - [System](#)
  - [Firmware](#)
  - [System Check](#)
- STATUS HELP**
  - [Device Info](#)
  - [Wireless](#)
  - [Logs](#)
  - [Statistics](#)
  - [IPv6](#)



# Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DAP-1525 offers the following types of security:

- WEP (Wired Equivalent Privacy)
- WPA (Wi-Fi Protected Access)
- WPA2 (Wi-Fi Protected Access 2)
- WPA-PSK (Pre-Shared Key)
- WPA2-PSK(Pre-Shared Key)

## What is WEP?

WEP stands for Wired Equivalent Privacy. It is based on the IEEE 802.11 standard and uses the RC4 encryption algorithm. WEP provides security by encrypting data over your wireless network so that it is protected as it is transmitted from one wireless device to another.

To gain access to a WEP network, you must know the key. The key is a string of characters that you create. When using WEP, you must determine the level of encryption. The type of encryption determines the key length. 128-bit encryption requires a longer key than 64-bit encryption. Keys are defined by entering in a string in HEX (hexadecimal - using characters 0-9, A-F) or ASCII (American Standard Code for Information Interchange – alphanumeric characters) format. ASCII format is provided so you can enter a string that is easier to remember. The ASCII string is converted to HEX for use over the network. Four keys can be defined so that you can change keys easily.

## What is WPA?

WPA, or Wi-Fi Protected Access, is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.
- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?\*&\_) and spaces. This key must be the exact same key entered on your wireless Access Point or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

# Configure WEP (AP Mode)

It is recommended to enable encryption on your wireless access point before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the access point (192.168.0.50). Click **Setup** and then **Wireless Settings** on the left side.
2. Select **Enable WEP Wireless Security (basic)** in the **Security Mode** drop-down menu in the Wireless Security Mode section.
3. Next to **WEP Encryption** in the WEP section, select the level of encryption (64-bit or 128-bit). Hex - (recommended) Letters A-F and numbers 0-9 are valid.
4. Next to Default WEP Key and the first selection in the drop-down menu, WEP Key 1. Enter a WEP key that you create in the WEP Key value and Verify WEP Key value fields. Make sure you enter this key exactly on all your wireless devices. You may enter up to 4 different keys using the Default WEP Key drop-down menu.
5. Select **Open** or **Shared Key** from the **Authentication** drop-down menu.
6. Click **Save Settings** to save your settings. If you are configuring the access point with a wireless adapter, you will lose connectivity until you enable WEP on your adapter and enter the same WEP key as you did on the access point.

**WIRELESS SECURITY MODE**

**Security Mode :** Enable WEP Wireless Security (basic) ▼

**WEP**

WEP is the wireless encryption standard. To use it you must enter the same key(s) into the router and the wireless stations. For 64-bit keys you must enter 10 hex digits into each key box. For 128-bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. For the most secure use of WEP set the authentication type to "Shared Key" when WEP is enabled.

You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64-bit keys, and a maximum of 13 characters for 128-bit keys.

**Authentication :** Open ▼

**WEP Encryption :** 64Bit ▼

**Default WEP Key :** WEP Key 1 ▼

**WEP Key :**  (5 ASCII or 10 HEX)

# Configure WPA-Personal (AP Mode)

It is recommended to enable encryption on your wireless access point before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the access point (192.168.0.50). Click **Setup** and then **Wireless Settings** on the left side.
2. Select **Enable WPA/WPA2 Wireless Security (enhanced)** from the **Security Mode** drop-down menu.
3. Select **Auto(TKIP/AES)**, **TKIP**, or **AES** from the **Cipher Type** drop-down menu. If you have wireless clients that use both types, use **TKIP/AES**.
4. Select **PSK** from the **PSK / EAP** drop-down menu.
5. Enter a key (passphrase) in the **Network Key** field. The key is entered as a pass-phrase in either ASCII or HEX format. If using ASCII format the pass-phrase must be between 8-63 characters. If using HEX format the pass-phrase must be 64 characters. The ASCII or HEX pass-phrase must be the same at both ends of the wireless connection.
6. Click **Save Settings** to save your settings. If you are configuring the Access Point with a wireless adapter, you will lose connectivity until you enable WPA-PSK on your adapter and enter the same passphrase as you did on the Access Point.

The screenshot shows the configuration interface for WPA2 security. At the top, there is a section titled "ESS SECURITY MODE" with a dark background. Below it, the "Security Mode" is set to "Enable WPA/WPA2 Wireless Security (enhanced)" in a dropdown menu. Below this is another section titled "WPA2" with a dark background. Underneath, there is a note: "WPA2 requires stations to use high grade encryption and authentication." Below the note, there are three fields: "Cipher Type" set to "TKIP", "PSK / EAP" set to "PSK", and "Network Key" which is an empty text input field.

# Configure WPA-Enterprise (AP Mode)

It is recommended to enable encryption on your wireless access point before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the access point (192.168.0.50). Click **Setup** and then **Wireless Settings** on the left side.
2. Select **Enable WPA/WPA2 Wireless Security (enhanced)** from the **Security Mode** drop-down menu.
3. Select **Auto(TKIP/AES)**, **TKIP**, or **AES** from the **Cipher Type** drop-down menu. If you have wireless clients that use both types, use **TKIP/AES**.
4. Select **EAP** from the **PSK / EAP** drop-down menu.
5. Enter the IP Address of your RADIUS server in the **RADIUS Server IP Address** field.
6. Enter the port you are using with your RADIUS server in the **Port** field.
7. Enter the security key in the **Shared Secret** field.
8. Click **Save Settings** to save your settings. If you are configuring the Access Point with a wireless adapter, you will lose connectivity until you enable WPA-Enterprise (RADIUS) on your adapter and enter the same passphrase as you did on the Access Point.

The screenshot shows a web-based configuration interface for WPA/WPA2. The top section is titled "WIRELESS SECURITY MODE" and contains a "Security Mode" dropdown menu set to "Enable WPA/WPA2 Wireless Security (enhanced)". The bottom section is titled "WPA/WPA2" and contains a note: "WPA/WPA2 requires stations to use high grade encryption and authentication." Below the note are several fields: "Cipher Type" dropdown set to "AUTO(TKIP/AES)", "PSK / EAP" dropdown set to "EAP", "RADIUS Server IP Address" text input field, "Port" text input field, and "Shared Secret" text input field. At the bottom of the form are two buttons: "Save Settings" and "Don't Save Settings".



# Configure WEP (Bridge Mode)

It is recommended to enable encryption on your wireless access point before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the access point (192.168.0.50). Click **Setup** and then **Wireless Settings** on the left side.
2. Select **Enable WEP Wireless Security (basic)** in the **Security Mode** drop-down menu in the Wireless Security Mode section.
3. Next to **WEP Encryption** in the WEP section, select the level of encryption (64-bit or 128-bit). Hex - (recommended) Letters A-F and numbers 0-9 are valid.
4. Next to Default WEP Key and the first selection in the drop-down menu, WEP Key 1. Enter a WEP key that you create in the WEP Key value and Verify WEP Key value fields. Make sure you enter this key exactly on all your wireless devices. You may enter up to 4 different keys using the Default WEP Key drop-down menu.
5. Click **Save Settings** to save your settings. If you are configuring the access point with a wireless adapter, you will lose connectivity until you enable WEP on your adapter and enter the same WEP key as you did on the access point.

**WIRELESS SECURITY MODE**

**Security Mode :** Enable WEP Wireless Security (basic) ▼

**WEP**

WEP is the wireless encryption standard. To use it you must enter the same key(s) into the router and the wireless stations. For 64-bit keys you must enter 10 hex digits into each key box. For 128-bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. For the most secure use of WEP set the authentication type to "Shared Key" when WEP is enabled.

You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64-bit keys, and a maximum of 13 characters for 128-bit keys.

**Authentication :** Open ▼

**WEP Encryption :** 64Bit ▼

**Default WEP Key :** WEP Key 1 ▼

**WEP Key :**  (5 ASCII or 10 HEX)

# Configure WPA-Personal (Bridge Mode)

It is recommended to enable encryption on your wireless Access Point before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the access point (192.168.0.50). Click **Setup** and then **Wireless Settings** on the left side.
2. Select **Enable WPA Wireless Security**, or **Enable WPA2 Wireless Security** from the **Security Mode** drop-down menu.
3. Select **TKIP**, or **AES** from the **Cipher Type** drop-down menu.
4. Select **PSK** from the **PSK** drop-down menu.
5. Enter a key (passphrase) in the **Network Key** field. The key is entered as a pass-phrase in either ASCII or HEX format. If using ASCII format the pass-phrase must be between 8-63 characters. If using HEX format the pass-phrase must be 64 characters. The ASCII or HEX pass-phrase must be the same at both ends of the wireless connection.
6. Click **Save Settings** to save your settings. If you are configuring the Access Point with a wireless adapter, you will lose connectivity until you enable WPA-PSK on your adapter and enter the same passphrase as you did on the Access Point.

The screenshot displays the configuration interface for wireless security. It is divided into two main sections: 'WIRELESS SECURITY MODE' and 'WPA/WPA2'. In the 'WIRELESS SECURITY MODE' section, the 'Security Mode' is set to 'Enable WPA Wireless Security'. The 'WPA/WPA2' section contains a note: 'WPA/WPA2 requires stations to use high grade encryption and authentication.' Below this note, there are three configuration fields: 'Cipher Type' is set to 'AES', 'PSK' is set to 'PSK', and 'Network Key' is an empty text input field. A note below the 'Network Key' field specifies '(8~63 ASCII or 64 HEX)'.

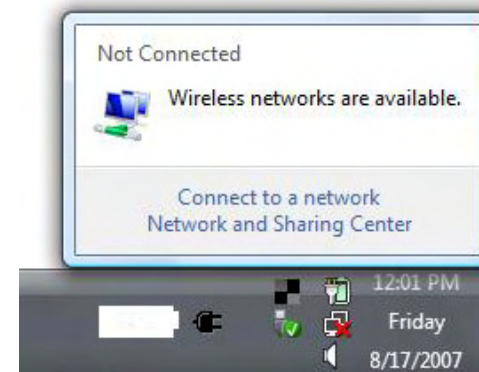
# Connect to a Wireless Network Using Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows Vista® utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

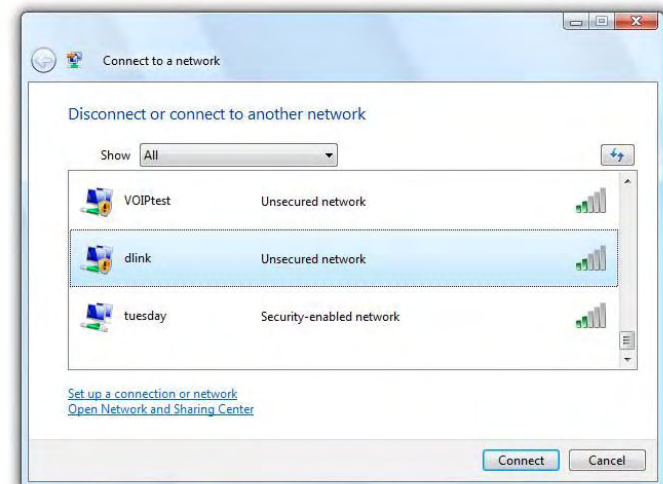
or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.



The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



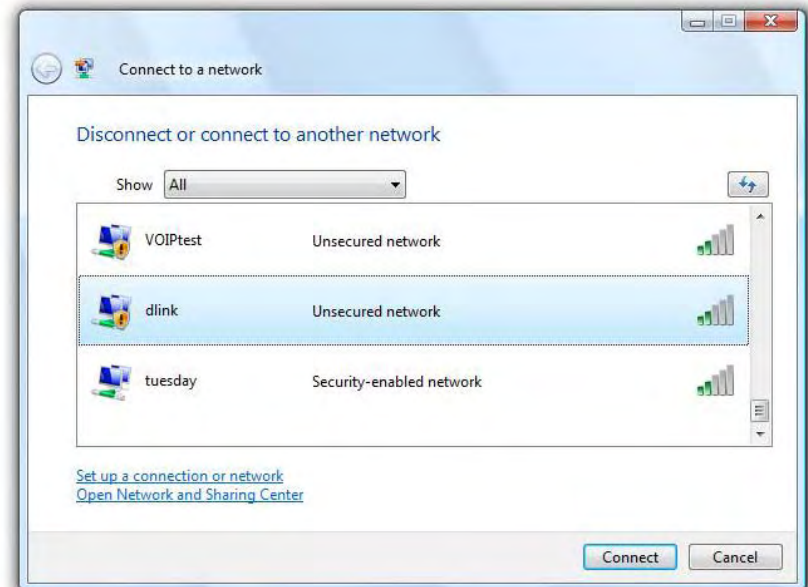
## Configure WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless Access Point or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista® Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.



2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase that is on your Access Point and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless Access Point.





## Connect Using WCN 2.0

The Access Point supports Wi-Fi protection, referred to as WCN 2.0 in Windows Vista®. The following instructions for setting this up depends on whether you are using Windows Vista® to configure the Access Point or third party software. When you first set up the Access Point, Wi-Fi protection is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the Access Point must be both enabled and configured. There are three basic methods to accomplish this: use Windows Vista's built-in support for WCN 2.0, use software provided by a third party, or manually configure.

If you are running Windows Vista®, log into the Access Point and click the **Enable** checkbox in the **Advanced > Wi-Fi Protected Setup** window. Use the Current PIN that is displayed in the **PIN Settings** section of **Advanced > Wi-Fi Protected Setup** window or choose to click the **Generate New PIN** button or **Reset PIN to Default** button.



If you are using third party software to set up Wi-Fi Protection, carefully follow the directions. When you are finished, proceed to the next section to set up the newly-configured Access Point.

# Using Windows® XP

Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 3 users. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

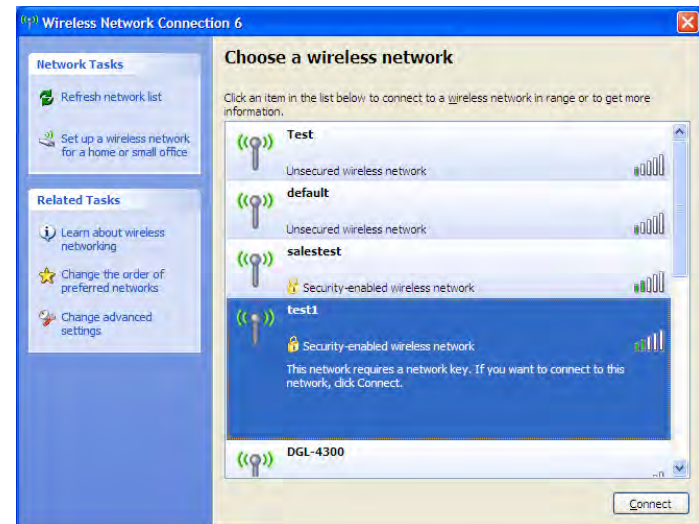
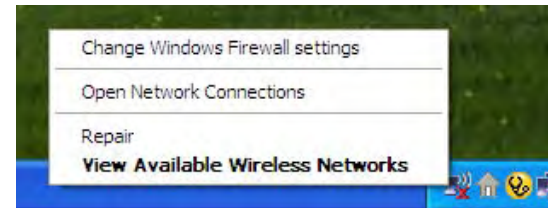
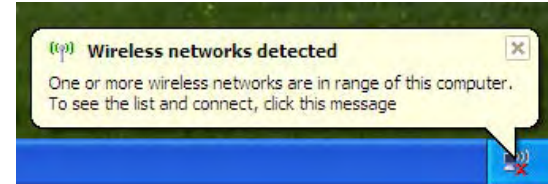
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

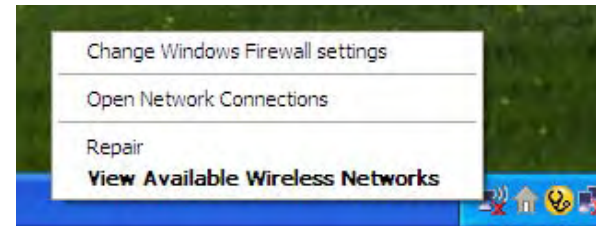
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



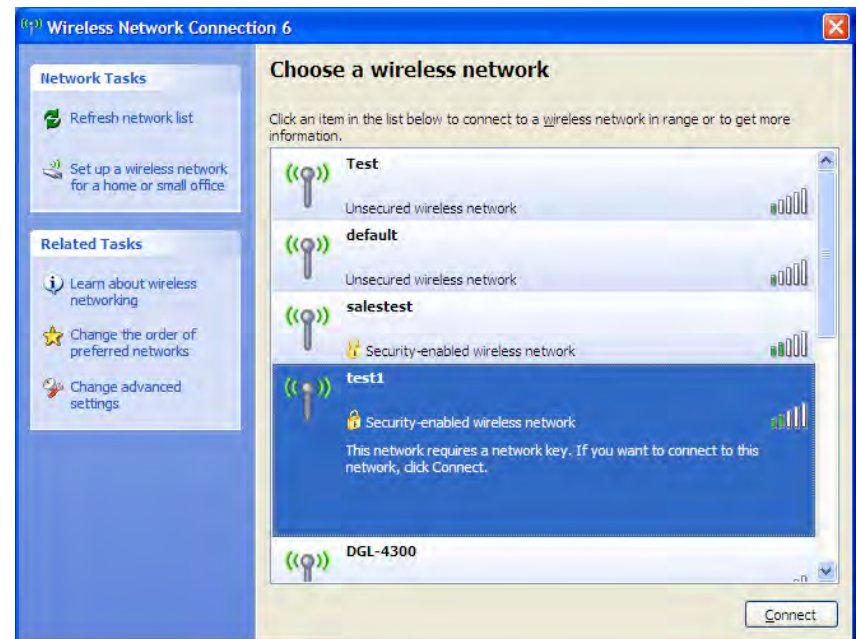
## Configure WPA2-PSK

It is recommended to enable WPA2-PSK on your wireless Access Point or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA2-PSK key being used.

1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.

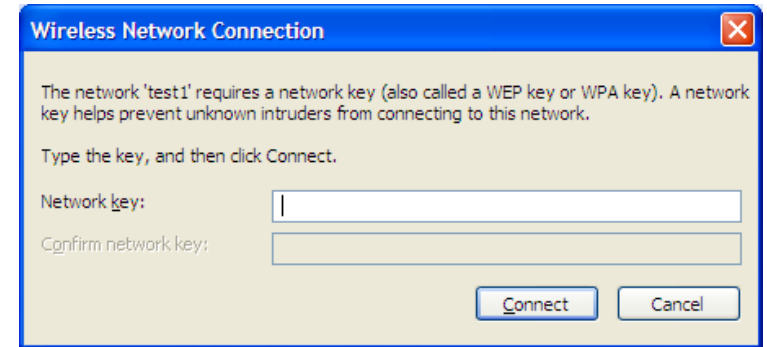


2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. The **Wireless Network Connection** box will appear. Enter the WPA2-PSK passphrase and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless Access Point.



# Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DAP-1525. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screen shots on your computer will look similar to the following examples.)

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

When entering the IP address of the D-Link Access Point (192.168.0.50 for example), you are not connecting to a Website on the Internet or 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 Java-enabled Web browser. We recommend the following:
  - Internet Explorer 6.0 or higher
  - Mozilla 3.0 or higher
  - Google Chrome 2.0 or higher
  - Apple Safari 3.0 or higher (with Java 1.3.1 or higher)
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP 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 **Start > Settings > Control Panel**. Double-click the **Internet Options** icon. 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.** Open your Web browser and enter the IP address of your D-Link Access Point in the address bar. This should open the login page for your the Web management.
  - If you still cannot access the configuration, unplug the power to the Access Point for 10 seconds and plug 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 Access Point. Unfortunately this process will change all your settings back to the factory defaults.

To reset the Access Point, locate the reset button (hole) on the rear panel of the unit. With the Access Point powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the Access Point will go through its reboot process. Wait about 30 seconds to access the Access Point. The default IP address is 192.168.0.50. When logging in, the username is **admin** and leave the password box empty.

# 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 access the data you want, when and where you want it. 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 adapter cards 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 Access Point is a device used to provide this link.

## **What is Wireless?**

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

## **Why D-Link Wireless?**

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

## **How does wireless work?**

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

## **Wireless Local Area Network (WLAN)**

In a wireless local area network, a device called an access point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

## **Wireless Personal Area Network (WPAN)**

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

## **Who uses wireless?**

Wireless technology has become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

### **Home**

- Gives everyone at home broadband access
- Surf the Web, check e-mail, instant message, and etc.
- Gets rid of the cables around the house
- Simple and easy to use

### **Small Office and Home Office**

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

## **Where is wireless used?**

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link CardBus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

## **Tips**

Here are a few things to keep in mind, when you install a wireless network.

### **Centralize your Access Point or access point**

Make sure you place the Access Point/access point in a centralized location within your network for the best performance. Try to place the Access Point/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

### **Eliminate Interference**

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the Access Point/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.



## Security

Don't let your next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the Access Point. Refer to product manual for detail information on how to set it up.

# Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless Access Point.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more wireless network CardBus adapters.

An Infrastructure network contains an access point or wireless Access Point. All the wireless devices, or clients, will connect to the wireless Access Point or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless CardBus adapters. All the adapters must be in Ad-Hoc mode to communicate.

# Networking Basics

## Check your IP address

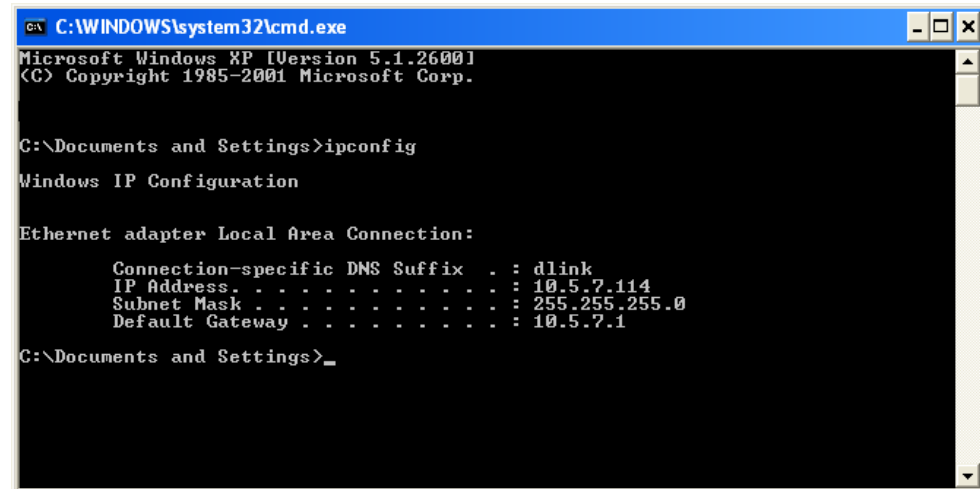
After you install your adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless Access Point) automatically. To verify your IP address, please follow the steps below.

Click on **Start > Run**. In the run box type *cmd* and click **OK**. (Windows Vista® users type *cmd* in the **Start Search** box.)

At the prompt, type *ipconfig* and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your Access Point. Some firewall software programs may block a DHCP request on newly installed adapters.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : dlink
    IP Address . . . . . : 10.5.7.114
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.5.7.1

C:\Documents and Settings>_
```

## Statically Assign an IP address

If you are not using a DHCP capable gateway/Access Point, or you need to assign a static IP address, please follow the steps below:

### Step 1

Windows Vista® - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage Network Connections**.

Windows® XP - Click on **Start > Control Panel > Network Connections**.

Windows® 2000 - From the desktop, right-click **My Network Places > Properties**.

### Step 2

Right-click on the **Local Area Connection** which represents your network adapter and select **Properties**.

### Step 3

Highlight **Internet Protocol (TCP/IP)** and click **Properties**.

### Step 4

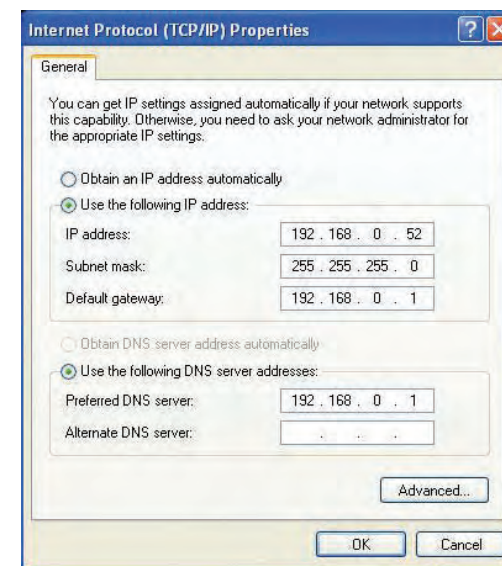
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your Access Point.

**Example:** If the Access Point's LAN IP address is 192.168.0.50, make your IP address 192.168.0.X where X is a number between 1 and 99, except 50. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your Access Point (192.168.0.50).

Set Primary DNS the same as the LAN IP address of your Access Point (192.168.0.50). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

### Step 5

Click **OK** twice to save your settings.



## **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.

For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.

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.

## **Industry Canada statement**

This device complies with RSS-210 of the Industry Canada 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 IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Caution:

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

(ii) the maximum antenna gain permitted for devices in the bands 5250–5350 MHz and 5470–5725 MHz shall comply with the e.i.r.p. limit; and

(iii) the maximum antenna gain permitted for devices in the band 5725–5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

**IMPORTANT NOTE:**

**Radiation Exposure Statement:**

The product comply with the US/Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

**NOTE IMPORTANTE:**

Déclaration d'exposition aux radiations:

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

Avertissement:

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

(i) les dispositifs fonctionnant dans la bande 5 150–5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725–5 825 MHz) doit se conformer à la

limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

**NOTE IMPORTANTE:** (Pour l'utilisation des appareils portables)

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

**Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.**

#### **以下警語適用台灣地區**

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

在5.25-5.35 GHz 頻帶內操作之無線資訊傳輸設備，限於室內使用。