



User Manual

All-in-One Mobile Companion

DIR-505

Preface

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

Manual Revisions

Revision	Date	Description
1.0	April 24, 2012	• Initial release
1.1	July 03,2012	• Initial release

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This purpose of this product is to create a constant network connection for your devices. As such, it does not have a standby mode or use a power management mode. If you wish to power down this product, please simply unplug it from the power outlet.

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Package Contents



DIR-505 All-in-One Mobile Companion



Quick Install Guide



Companion Card

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

System Requirements

Network Requirements	<ul style="list-style-type: none">• An Ethernet-based Cable or DSL modem• IEEE 802.11n or 802.11g wireless clients• 10/100 Ethernet
Web-based Configuration Utility Requirements	<p>Computer with the following:</p> <ul style="list-style-type: none">• Windows®, Macintosh, or Linux-based operating system• An installed Ethernet adapter <p>Browser Requirements:</p> <ul style="list-style-type: none">• Internet Explorer 8 or higher• Firefox 8.0 or higher• Safari 4.0 or higher• Google Chrome (16.0.9.12.75) <p>Windows® Users: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.</p>
CD Installation Wizard Requirements	<p>Computer with the following:</p> <ul style="list-style-type: none">• Windows® 7, Vista®, or XP (Service Pack 2 or higher), Mac OS X (v10.7)• An installed Ethernet adapter• CD-ROM drive

Introduction

TOTAL PERFORMANCE

Combines award winning router features and Wireless N 150 technology to provide the best wireless performance.

TOTAL SECURITY

The most complete set of security features including Active Firewall and WPA/WPA2 to protect your network against outside intruders.

TOTAL COVERAGE

Provides greater wireless signal rates even at farther distances for best-in-class Whole Home Coverage.

ULTIMATE PERFORMANCE

The D-Link All-in-One Mobile Companion (DIR-505) lets you create a secure wireless network to share photos, files, music, video, printers, and network storage throughout your home. Connect the DIR-505 router to a cable or DSL modem and share your high-speed Internet access with everyone on the network. In addition, this Router includes a Quality of Service (QoS) engine that keeps digital phone calls (VoIP) and online gaming smooth and responsive, providing a better Internet experience.

TOTAL NETWORK SECURITY

The DIR-505 router supports all of the latest wireless security features to prevent unauthorized access, be it from over the wireless network or from the Internet. Support for WPA/WPA2 standards ensure that you'll be able to use the best possible encryption method, regardless of your client devices. In addition, this router utilizes dual active firewalls (SPI and NAT) to prevent potential attacks from across the Internet.

* Maximum wireless signal rate derived from IEEE Standard 802.11n and 802.11g 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.

Features

- **Faster Wireless Networking** - The DIR-505 provides an up to 150 Mbps* 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.
- **Compatible with 802.11g Devices** - The DIR-505 is still fully compatible with the IEEE 802.11g standards, so it can connect with existing 802.11g devices.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
 - **Content Filtering** - Easily applied content filtering based on MAC address and website address.
 - **Filter Scheduling** - These filters can be scheduled to be active on certain days or for a duration of hours or minutes.
 - **Secure Multiple/Concurrent Sessions** - The DIR-505 can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-505 can securely access corporate networks.
- **User-friendly Setup Wizard** - Through its easy-to-use Web-based user interface, the DIR-505 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 router to your specific settings within minutes.

* Maximum wireless signal rate derived from IEEE Standard 802.11n and 802.11g 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

Front/Top

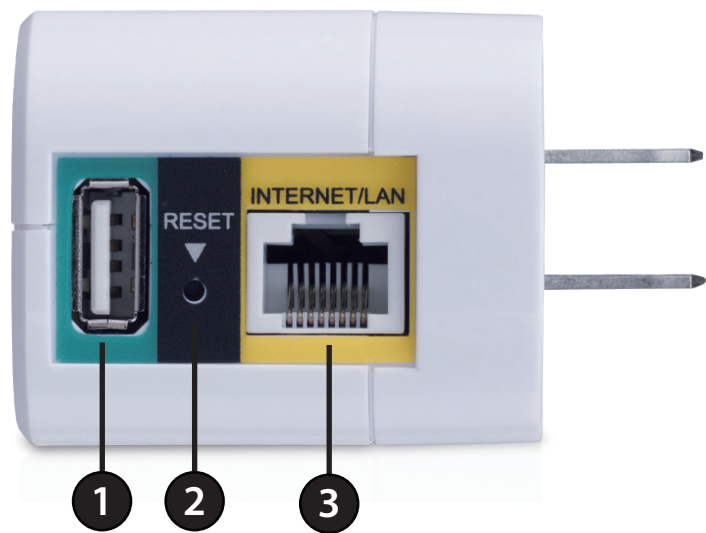


1	Mode Selector Switch	Slide this switch to select the Router/AP, Repeater, and Wi-Fi Hotspot modes.
2	LED Indicator	This indicates the current status of the DIR-505, as detailed in the table below.

LED Indicator	Color	Status	Description
Power/Status	Green	Solid Green	The device is powered ON and operating properly
		Blinking Green	The device is processing WPS
		Light off	The device is off
	Red	Solid Red	During Power ON or system is defective
		Light off	The device is powered off

Hardware Overview

Bottom



1	USB Port	Connect a USB 1.1 or 2.0 flash drive to configure the wireless settings using SharePort™ Mobile and SharePort™ Web File Access. Both allows you to share a USB or a storage device with your local network.
2	Reset Button	Pressing the Reset button restores the router to its original factory default settings.
3	Ethernet Port	The auto MDI/MDIX Internet port is the connection for the Ethernet cable to the cable or DSL modem.

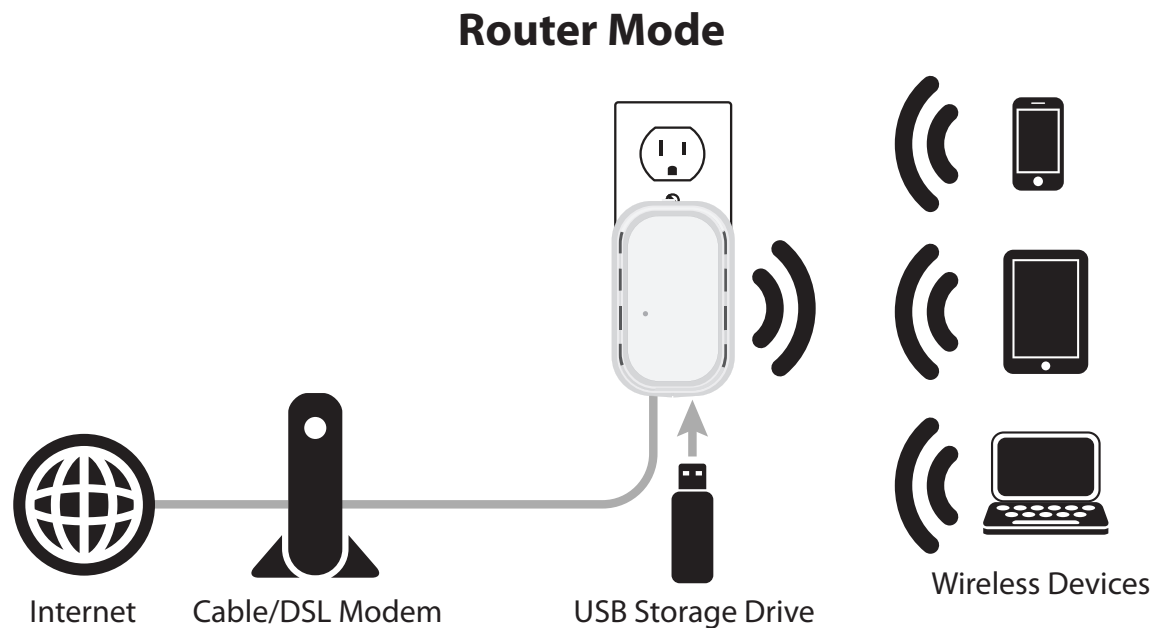
Operation Modes

Depending on how you want to use your DIR-505 will determine which mode you use. The following pages describe each mode to help you figure out which one to use.

- Router Mode
- Access Point Mode
- Repeater Mode
- Wi-Fi Hotspot Mode

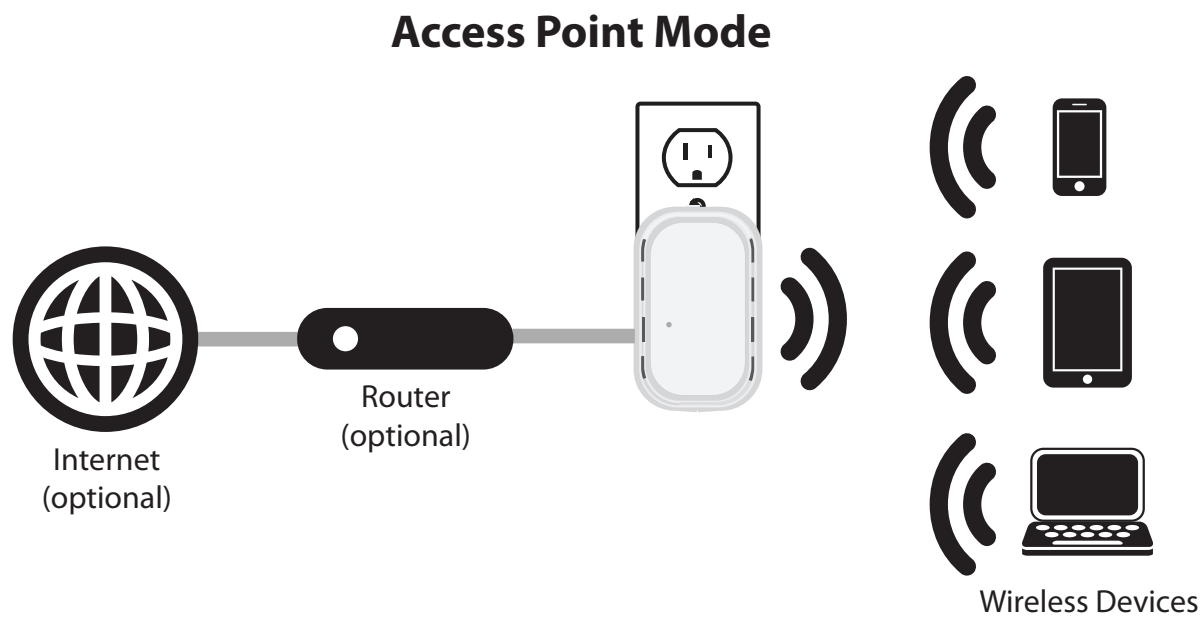
Router Mode

In Router Mode, the DIR-505 connects to your cable modem, DSL modem, or other Internet source and shares your Internet connection with your devices wirelessly, providing Internet access for an entire home or office. You can also share files with other computers or devices on your wireless network by using the SharePort Mobile feature.



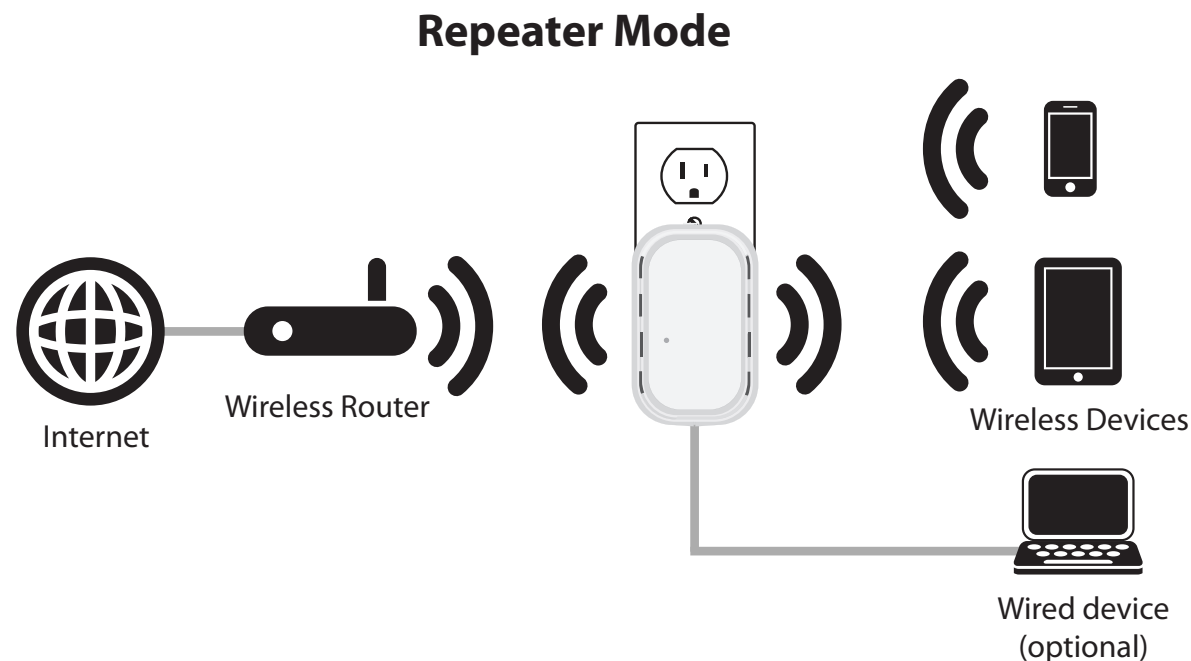
Access Point Mode

In Access Point Mode, the DIR-505 connects your wireless devices together, but does not provide routing functionality. It also allows a connected wired device to connect to your other devices wirelessly. This can be useful if you already have an existing Internet router that does not have built-in wireless capabilities. You can also use this to create a private wireless network without Internet access so that your devices can securely connect to one another without being exposed to the Internet or other computers.



Repeater Mode

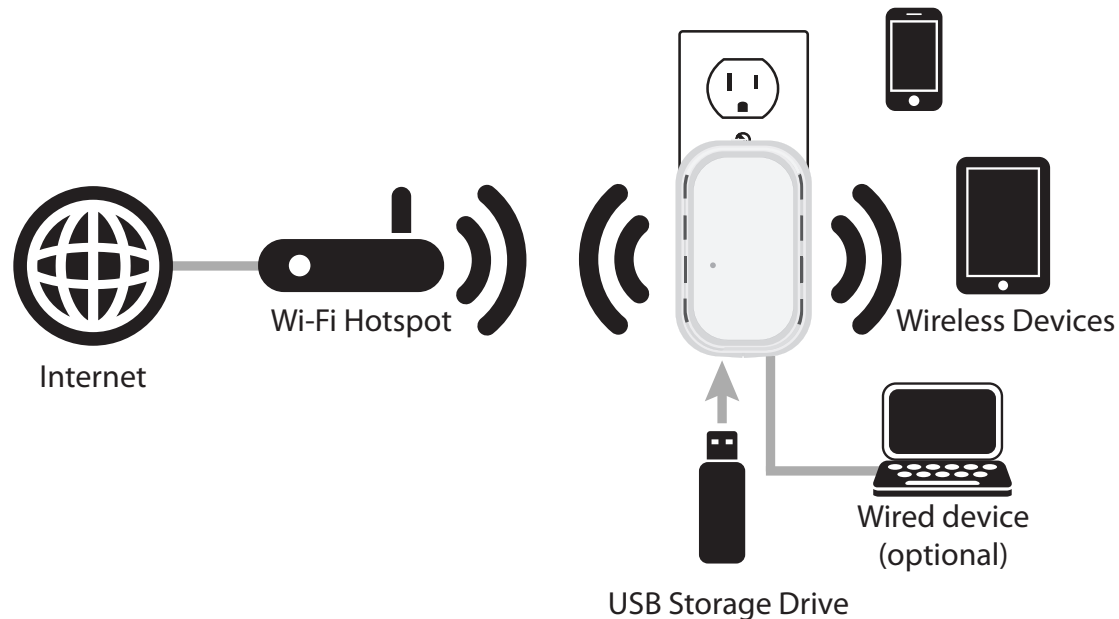
In Repeater Mode, the DIR-505 extends the range of an existing wireless network. You can use this to extend the coverage of an existing wireless router to provide better signal for parts of your home or office that may have poor reception. Additionally, you can use this mode to connect a wired device to a wireless network, which can be useful for devices that do not have a built-in wireless card, such as some smart TVs, game consoles, or DVRs.



Wi-Fi Hotspot Mode

In Wi-Fi Hotspot Mode, the DIR-505 connects to a wireless hotspot or existing wireless network and lets you share access to that network with your devices. This mode is similar to Router mode, but instead of connecting to a cable or DSL modem as your Internet source, the DIR-505 connects to a Wi-Fi hotspot and shares that connection with your devices. This can be useful in places such as a hotel, airport, or café to use a single connection to a hotspot to provide an Internet connection for all your devices. Additionally, it can provide an added layer of security when connecting to public hotspots by hiding your computers and devices from other devices on the network, and keeping them in your own private network. You can also share files with other computers or devices on your wireless network by using the SharePort Mobile feature.

Wi-Fi Hot Spot Mode



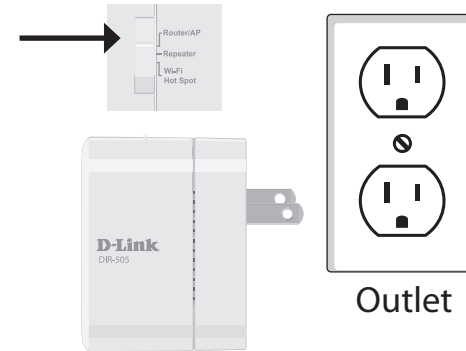
Wireless Installation Considerations

The D-Link wireless router 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 router 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 (.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 routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4GHz 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.

Setting Up Your DIR-505

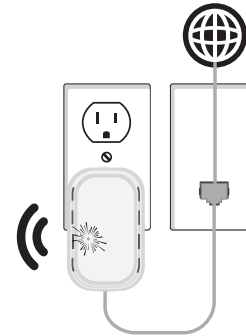
1. Move the switch on the top of the DIR-505 to the mode you wish to use, then plug it in. Verify that the power LED has turned green before continuing.



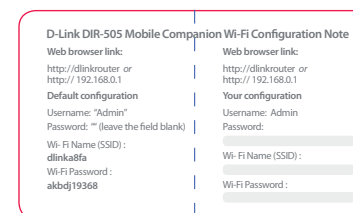
If you are using Router/AP Mode:

Move the switch on the top of the DIR-505 to **Router/AP** and plug it into a wall outlet near your cable/DSL modem or router.

Connect one end of the Ethernet cable into the Ethernet port of your cable/DSL modem or router and then plug the other end of the cable into the Ethernet port of the DIR-505. Verify that the power LED has turned green before continuing.

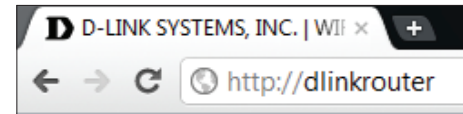


2. From your laptop or mobile device, go to your Wireless Utility to display the available wireless networks and select the Wi-Fi name that is printed on the Wi-Fi Configuration Note included in your package (ex: **dlink-a8fa**). Then, enter the Wi-Fi password also printed on the Wi-Fi Configuration Note (**akbdj1936**).



3. Open a web browser. First time users will automatically be directed to the appropriate Setup Wizard for the selected operation mode. Please follow the on-screen instructions to complete setup.

If the Setup Wizard does not appear, type **http://dlinkrouter** in the address bar.



For detailed information on configuring your device, refer to the following sections of the manual:

- "Router Mode" on page 25
- "Access Point Mode" on page 75
- "Repeater Mode" on page 97
- "Wi-Fi Hot Spot Mode" on page 114

Initial Setup Wizard (Router/AP Mode)

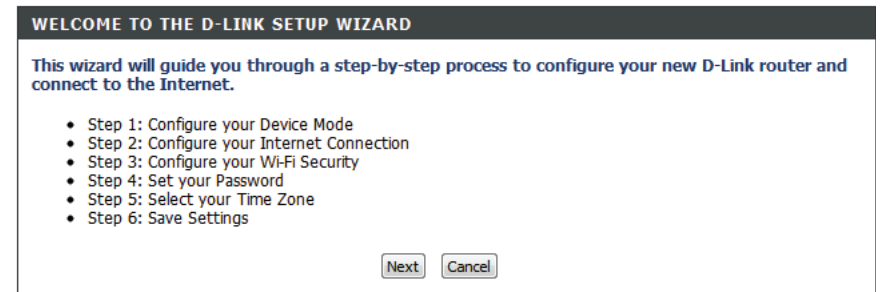
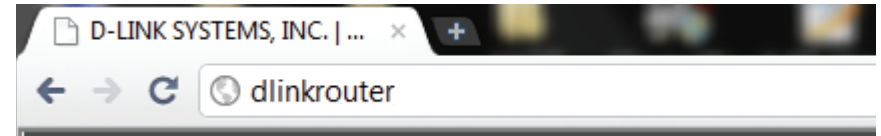
If this is your first time setting up the DIR-505, open your web browser. You will automatically be directed to the **Wizard Setup Screen**.

If the Setup Wizard does not appear, type **http://dlinkrouter** in the address bar.

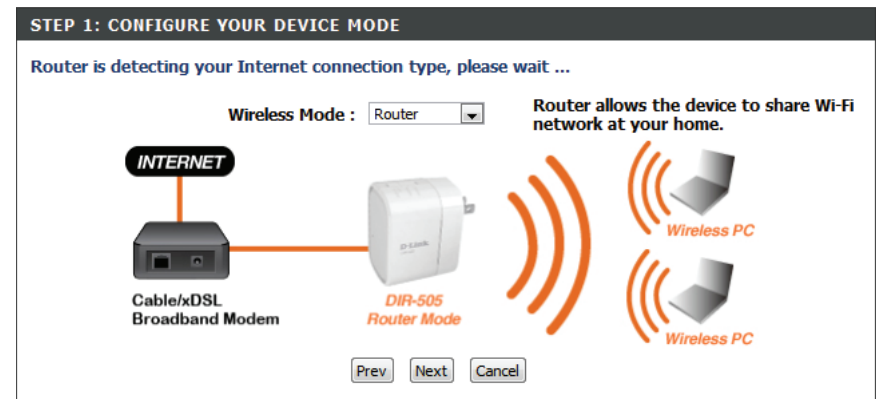
If you have already configured your settings and you would like to access the configuration utility, please refer to “Web-based Configuration” on page 18.

This wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

Click **Next** to continue.



Select whether you want to use **Router** mode or **Access Point** mode for your DIR-505 and click **Next**. In most situations, Router mode should be used.

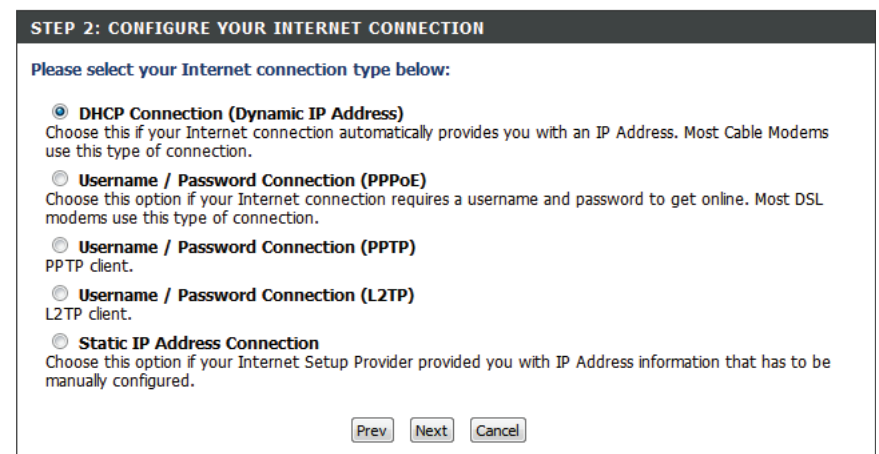


If you chose Router mode, the DIR-505 will try to detect what type of Internet connection you have and will ask you for the related settings. Enter the settings for your connection and click **Next**.



If your Internet connection cannot be detected (or if you click the **Prev** button after the previous step), you will need to select which type of Internet connection you have. Select your Internet connection type, then click the **Next** button and enter the related settings.

Note: Most cable modem connections use DHCP, and most DSL modem connections use **PPPoE**. If you are not sure which connection type you use or what settings to enter, contact your Internet service provider.



Create a wireless security passphrase or key (between 8-63 characters). Your wireless clients will need to have this passphrase or key entered to be able to connect to your wireless network.

Click **Next** to continue.

Enter a password to secure configuration access to your router. Please note that this password will be used to log in to the configuration interface, but is not the same as the password used for your wireless network. Check the **Enable Graphical Authentication** box to enable CAPTCHA authentication for added security. Click **Next** to continue.

Select your time zone from the drop-down menu and click **Next** to continue.

Setup is complete, and your wireless network name and password will be displayed. It is recommended that you write this information down for future reference. Click **Save** to save your settings and reboot the router.

STEP 3: CONFIGURE YOUR WI-FI SECURITY

Give your Wi-Fi network a name.

Wi-Fi Network Name (SSID) :

MyDLinkNetwork

(Using up to 32 characters)

Give your Wi-Fi network a password.

Wi-Fi Password :

MyPassword

(Between 8 and 63 characters)

Prev

Next

Cancel

STEP 4: SET YOUR PASSWORD

By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below, and enabling CAPTCHA Graphical Authentication provides added security protection to prevent unauthorized online users and hacker software from accessing your network settings.

Password :

Verify Password :

Enable Graphical Authentication : ☐

Prev

Next

Cancel

STEP 5: SELECT YOUR TIME ZONE

Select the appropriate time zone for your location. This information is required to configure the time-based options for the router.

(GMT +08:00) Taipei

▼

Prev

Next

Cancel

SETUP COMPLETE!

Below is a detailed summary of your Wi-Fi security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your Wi-Fi devices.

Wi-Fi Network Name (SSID): MyDLinkNetwork

Wi-Fi Password : MyPassword

The Setup Wizard has completed. Click the Save button to save your settings and restart the router.

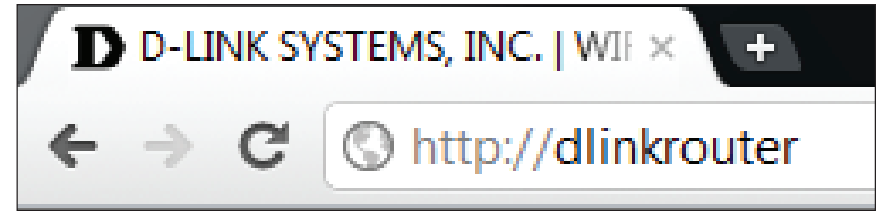
Prev

Save

Cancel

Web-based Configuration

To access the configuration utility in any of the modes of the DIR-505, open a web-browser and enter **http://dlinkrouter** in the address bar.



Select **Admin** from the drop-down menu and then enter your password. By default, the password is blank.

 A screenshot of the 'LOGIN' page. It has an orange header with the word 'LOGIN'. Below it, the text 'Log in to the router:' is followed by a 'User Name' dropdown menu set to 'Admin' and a 'Password' text input field. A 'Log In' button is at the bottom right.

The configuration interface will open, and you can configure the different settings of the DIR-505.

For detailed information on configuring your device, refer to the following sections of the manual:

- “Router Mode” on page 25
- “Access Point Mode” on page 75
- “Repeater Mode” on page 97
- “Wi-Fi Hot Spot Mode” on page 114

A screenshot of the D-Link DIR-505 Router configuration interface. The top has a D-Link logo and a navigation bar with tabs: SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists settings categories: INTERNET SETTINGS, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER, and STORAGE. The main content area is titled 'INTERNET CONNECTION' and contains the 'INTERNET CONNECTION SETUP WIZARD'. It explains that there are two ways to set up the Internet connection: using the Web-based Internet Connection Setup Wizard or manually configuring the connection. It includes a 'Note' about following the Quick Installation Guide. At the bottom, there are buttons for 'Internet Connection Setup Wizard' and 'Manual Internet Connection Setup'. A 'WIRELESS' section is visible at the very bottom. On the right, there is a 'Helpful Hints...' section with additional instructions for new and advanced users.

QRS Mobile App Setup (iOS)

1. Use your iOS mobile device to scan the QR code to the right to download the **QRS Mobile** app from the App Store.



2. From your mobile device, go to **Settings**, and then go to **Wi-Fi**.

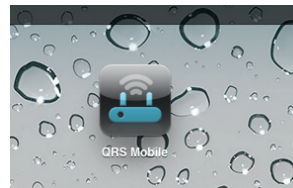


Settings

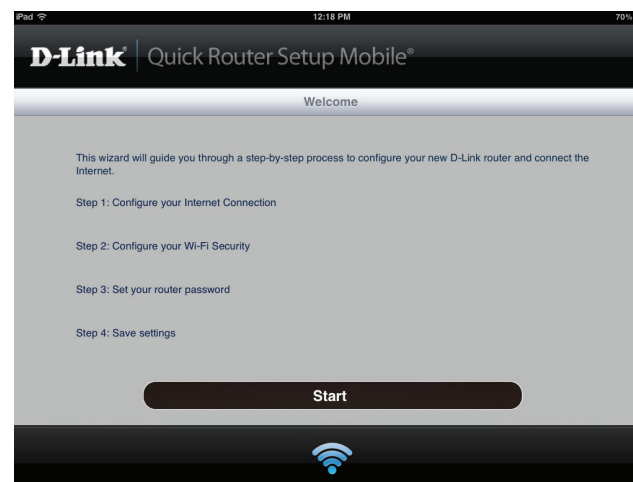
3. Select the network that is displayed on the Wi-Fi Configuration Note included in your package (ex: **dlink-a8fa**). Then, enter the Wi-Fi password also printed on the Wi-Fi Configuration Note (**akbdj1936**).



4. Once your mobile device is connected, click on the **QRS Mobile** icon.



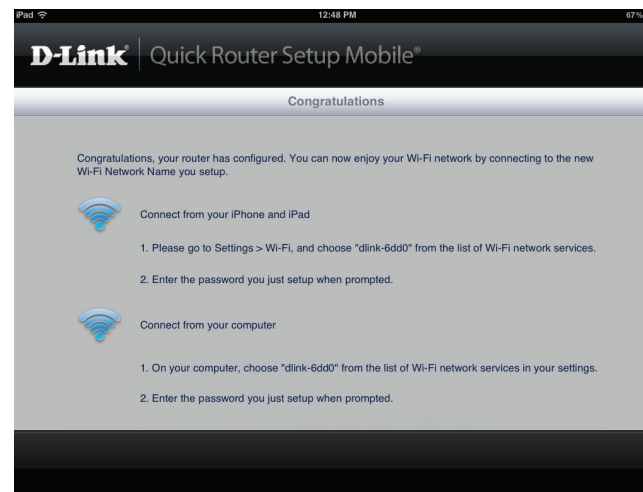
5. Click **Start** to continue.



6. Follow the instructions and click **Next** to continue.



7. After the Setup Wizard is complete, the following screen will appear. You can now change your mobile device and laptop Wi-Fi settings to the wireless network name and password you just created.

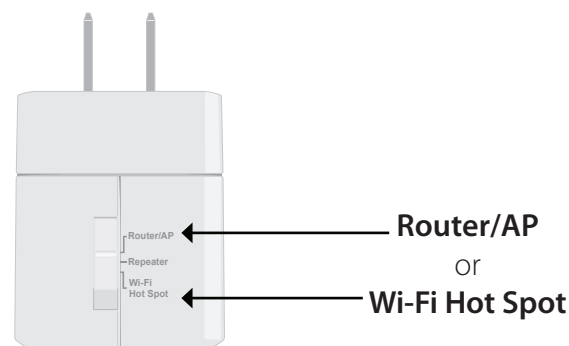


SharePort Mobile App (iOS, Android)

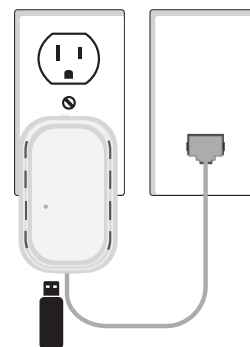
The SharePort Mobile app allows you to remotely access files stored on a USB flash drive or USB external hard drive connected to the DIR-505. For more information on using this feature, please refer to “Storage” on page 50.

Note: The SharePort Web/SharePort Mobile feature of the DIR-505 can only be used when the device is in **Router** or **Wi-Fi Hot Spot** mode; it will not work in **Repeater** mode.

1. Make sure that the switch on top of the DIR-505 is set to **Router/AP** or **Wi-Fi Hotspot**.



2. Plug your USB flash drive into the USB port on the bottom of the DIR-505, and then plug the DIR-505 into a power outlet.



3. Use your iOS or Android mobile device to scan the QR code to the right to download the **SharePort Mobile** app.

You can also search for the **SharePort Mobile** app directly in the iOS App Store or the Android Market/Google Play.



iOS

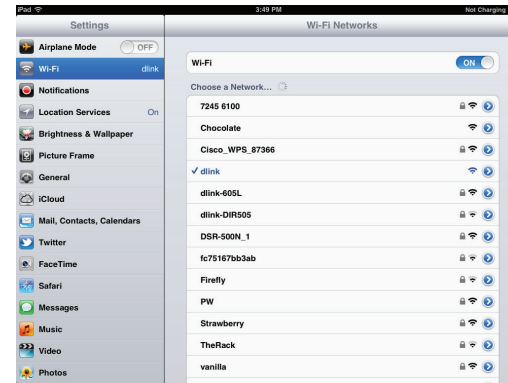


Android

4. From your iOS mobile device, tap **Settings**.



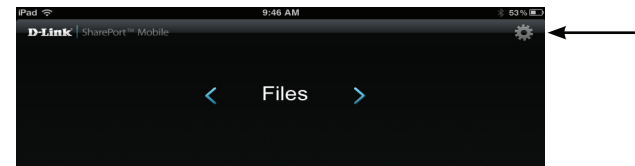
5. Click **Wi-Fi** and select the network (SSID) that you assigned during initial setup. Then, enter your Wi-Fi password.



6. Once connected, tap the **SharePort** icon, and the SharePort app will load.

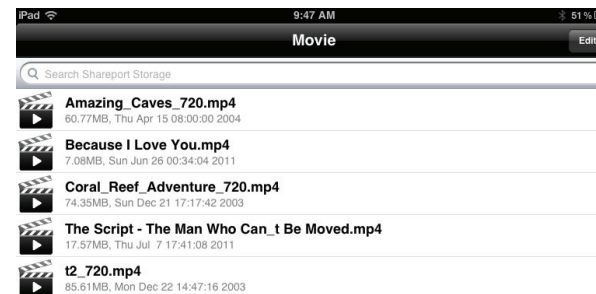


7. Tap on the **Settings** gear icon located on the right top corner of the screen. Then, click **Edit** to enter your User Name and Password. Once you finish, click **Done** to continue.



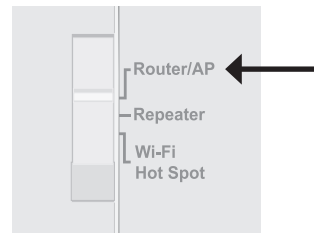
8. You can now use the SharePort Mobile app to access the files on your USB storage drive.

Note: If you connect a USB storage drive with many files or with a large capacity, it may take a while for the DIR-505 to scan and catalog your files.



Router Mode

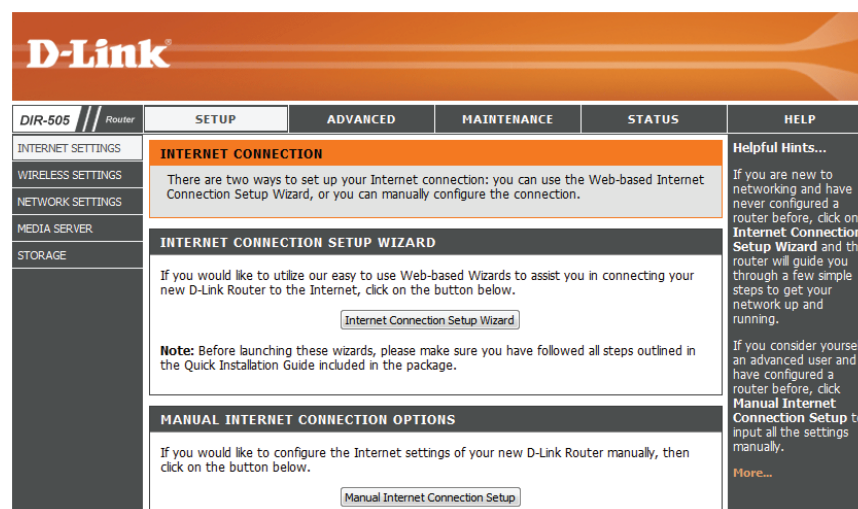
This section describes the configuration interface for Router mode. Make sure that the mode selector switch is in the Router/AP position on your DIR-505.



If this is your first time configuring the DIR-505, open your web browser and type **http://dlinkrouter** in the address bar. You will automatically be directed to the **Wizard Setup Screen**. For more information, refer to “Initial Setup Wizard (Router/AP Mode)” on page 15.

If the Setup Wizard does not appear, type **http://dlinkrouter** in the address bar.

Otherwise, the main configuration screen will appear. You will still be able to use the different setup wizards to configure your DIR-505.

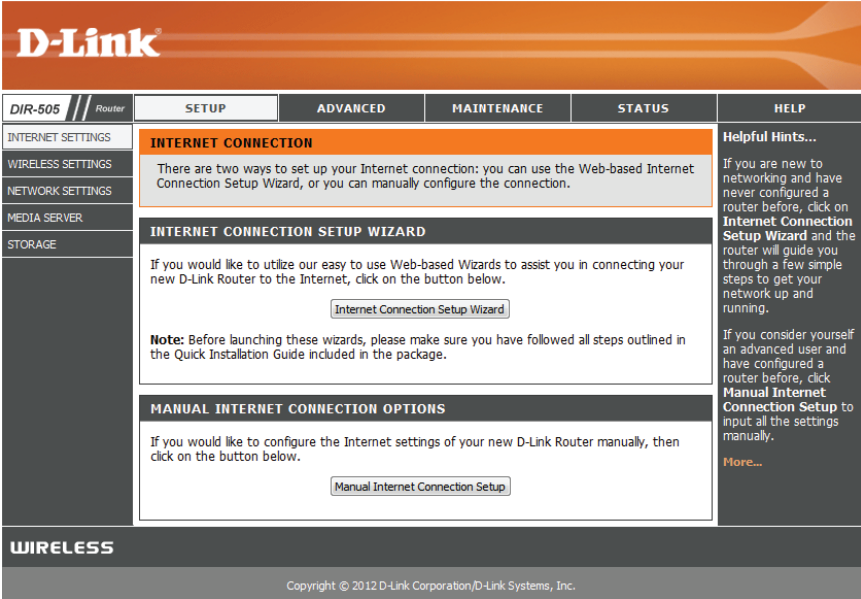


Setup

Internet Settings

If you want to configure your router to connect to the Internet using a setup wizard, click **Internet Connection Setup Wizard**, and continue to the next page.

To configure your Internet settings manually, click the **Manual Internet Connection Setup** button and go to “Manual Internet Setup” on page 31.



Internet Connection Setup Wizard

The Internet Connection Setup Wizard is designed to guide you through a step-by-step process to configure your DIR-505 and connect to the Internet.

Click **Next** to continue.

WELCOME TO THE D-LINK INTERNET CONNECTION SETUP WIZARD

This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

- Step 1: Set your Password
- Step 2: Select your Time Zone
- Step 3: Configure your Internet Connection
- Step 4: Save Settings and Connect

Prev Next Cancel Connect

In order to secure your router, please enter a new password. Click **Next** to continue.

STEP 1: SET YOUR PASSWORD

By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below:

Password :

Verify Password :

Prev Next Cancel Connect

Select your time zone from the drop-down menu and click **Next** to continue.

STEP 2: SELECT YOUR TIME ZONE

Select the appropriate time zone for your location. This information is required to configure the time-based options for the router.

(GMT+08:00) Taipei ▼

Prev Next Cancel Connect

Select your Internet connection type and click **Next** to continue.

STEP 3: CONFIGURE YOUR INTERNET CONNECTION

Your Internet Connection could not be detected, please select your Internet Service Provider (ISP) from the list below. If your ISP is not listed; select the "Not Listed or Don't Know" option to manually configure your connection.

Adelphia Power Link ▼

If your Internet Service Provider was not listed or you don't know who it is, please select the Internet connection type below

☒ **DHCP Connection (Dynamic IP Address)**
Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Modems use this type of connection.

☐ **Username / Password Connection (PPPoE)**
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this type of connection.

☐ **Username / Password Connection (PPTP)**
PPTP client.

☐ **Username / Password Connection (L2TP)**
L2TP client.

☐ **Static IP Address Connection**
Choose this option if your Internet Setup Provider provided you with IP Address information that has to be manually configured.

Prev Next Cancel Connect

If you selected **DHCP Connection**, you will see the following screen. If your ISP requires you to enter a MAC address and Host Name, fill them in here. You can click the **Clone MAC button** to enter your current computer's MAC address.

Click **Next** to continue.

DHCP CONNECTION (DYNAMIC IP ADDRESS)

To set up this connection, please make sure that you are connected to the D-Link Router with the PC that was originally connected to your broadband connection. If you are, then click the Clone MAC button to copy your computer's MAC Address to the D-Link Router.

MAC Address : 00:00:00:00:00:00 (optional)
Clone Your PC's MAC address

Host Name :

You may also need to provide a Host Name. If you do not have or know this information, please contact your ISP.

Prev Next Cancel Connect

If you selected **PPPoE Connection**, you will see the following screen. Enter your PPPoE username, password and verify password, then click **Next** to continue.

Note: Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

SET USERNAME / PASSWORD CONNECTION (PPPOE)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. If you do not have this information, please contact your ISP.

Address Mode : ☒ Dynamic IP ☐ Static IP

IP Address :

User Name :

Password :

Verify Password :

Service Name : (optional)

Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

Prev Next Cancel Connect

If you selected **PPTP Connection**, you will see the following screen. Enter your PPTP username, password, and other information supplied by your ISP. Click **Next** to continue.

SET USERNAME / PASSWORD CONNECTION (PPTP)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need PPTP IP address. If you do not have this information, please contact your ISP.

Address Mode : ☒ Dynamic IP ☐ Static IP

PPTP IP Address :

PPTP Subnet Mask :

PPTP Gateway IP Address :

PPTP Server IP Address :

User Name :

Password :

Verify Password :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

Prev Next Cancel Connect

If you selected **L2TP Connection**, you will see the following screen. Enter your L2TP username, password, and other information supplied by your ISP. Click **Next** to continue.

SET USERNAME / PASSWORD CONNECTION (L2TP)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need L2TP IP address. If you do not have this information, please contact your ISP.

Address Mode : ☐ Dynamic IP ☒ Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

L2TP Server IP Address :

User Name :

Password :

Verify Password :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

If the router detected or you selected **Static**, enter the IP and DNS settings supplied by your ISP. Click **Next** to continue.

SET STATIC IP ADDRESS CONNECTION

To set up this connection you will need to have a complete list of IP information provided by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.

IP Address :

Subnet Mask :

Gateway Address :

Primary DNS Address :

Secondary DNS Address :

Your setup is complete. Click **Connect** to save your settings and reboot your router.

SETUP COMPLETE!

The Internet Connection Setup Wizard has completed. Click the Connect button to save your settings and reboot the router.

Manual Internet Setup

If you clicked **Manual Internet Connection Setup** on the **Internet Settings** page, you will see this screen. Here, you can configure the Internet connection for your DIR-505. After making your changes, click the **Save Settings** button.

Operation Mode: This should be set to Router mode. If you want to use Access Point mode, select Access Point mode and click the Save Settings button to switch to the Access Point configuration interface. For more information, refer to “Access Point Mode” on page 75.

Host Name: Select the connection mode to use: **Dynamic IP (DHCP)**, **PPPoE**, **PPTP**, or **L2TP**. The remaining settings will change depending on which connection mode you use.

Note: Most cable modem connections use DHCP, and most DSL connections use PPPoE. If you are not sure which connection mode to use, contact your Internet service provider.

The screenshot displays the D-Link DIR-505 Router Web Interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration sections: INTERNET SETTINGS, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER, and STORAGE. The main content area is titled 'WAN' and provides instructions for configuring the Internet Connection type. It includes a 'Note' about PPPoE settings and buttons for 'Save Settings' and 'Don't Save Settings'. Below this, the 'OPERATION MODE SETTING' shows 'Operation Mode' set to 'Router'. The 'INTERNET CONNECTION TYPE' section prompts the user to choose a mode, with 'Dynamic IP (DHCP)' selected. The 'DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE' section contains fields for Host Name, Primary DNS Server, Secondary DNS Server, MTU (set to 1500), and MAC Address, along with a checkbox for 'Use Unicasting' and a 'Clone Your PC's MAC address' button. A 'WIRELESS' section is visible at the bottom. On the right side, a 'Helpful Hints...' sidebar provides additional guidance on configuring the router and accessing the Internet.

If you selected **Dynamic IP (DHCP)**, you will see the following settings.

Host Name: Entering a host name is optional but may be required by some ISPs. Leave this blank if you are not sure.

Use Check the box if you are having problems obtaining an IP
Unicasting: address from your ISP.

Primary/ Enter the Primary and secondary DNS server IP addresses
Secondary assigned by your ISP. These addresses are usually obtained
DNS Server: automatically from your ISP. Leave this setting at 0.0.0.0 if you did not specifically receive these from your ISP.

MTU: If you experience connection issues, you may need to change the MTU setting for optimal performance with your specific ISP. 1492 is the default MTU.

MAC Address: If your ISP requires you to enter a MAC address, fill it in here. You can click the **Clone MAC button** to enter your current computer's MAC address.

INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is :

DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE :
Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.
Host Name :
Use Unicasting : ☒ (compatibility for some DHCP Servers)
Primary DNS Server :
Secondary DNS Server :
MTU : (bytes) MTU default = 1500
MAC Address :

If you selected **PPPoE**, you will see the following settings. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

Address Mode: Select **Static IP** if your ISP assigned you an IP address, subnet mask, gateway, and DNS server address. In most cases, select **Dynamic IP**.

IP Address: Enter the IP address (for static PPPoE only).

User Name: Enter your PPPoE user name.

Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP service name (optional).

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, set the **Reconnect Mode** to **Always on**.

Primary/Secondary DNS Server: Enter the primary and secondary DNS server addresses (Static PPPoE only).

MTU: If you experience connection issues, you may need to change the MTU setting for optimal performance with your specific ISP. 1492 is the default MTU.

INTERNET CONNECTION TYPE

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

My Internet Connection is : PPPoE (Username / Password)

PPPOE INTERNET CONNECTION TYPE :

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

Address Mode : ☒ Dynamic IP ☐ Static IP

IP Address :

Username :

Password :

Verify Password :

Service Name : (optional)

Reconnect Mode : ☐ Always on ☒ On demand ☐ Manual

Maximum Idle Time : (minutes, 0=infinite)

Primary DNS Server : (optional)

Secondary DNS Server : (optional)

MTU : (bytes) MTU default = 1492

MAC Address :

[Clone Your PC's MAC address](#)

MAC Address: If your ISP requires you to enter a MAC address, fill it in here. You can click the **Clone MAC button** to enter your current computer's MAC address.

INTERNET CONNECTION TYPE

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

My Internet Connection is :

PPPOE INTERNET CONNECTION TYPE :

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

Address Mode : ☒ Dynamic IP ☐ Static IP

IP Address :

Username :

Password :

Verify Password :

Service Name : (optional)

Reconnect Mode : ☐ Always on ☒ On demand ☐ Manual

Maximum Idle Time : (minutes, 0=infinite)

Primary DNS Server : (optional)

Secondary DNS Server : (optional)

MTU : (bytes) MTU default = 1492

MAC Address :

If you selected **PPTP**, you will see the following settings. Your ISP will provide you with a username and password. This option is typically used for DSL services.

Address Mode: Select **Static** if your ISP assigned you an IP address, subnet mask, gateway, and DNS server address. In most cases, select **Dynamic**.

PPTP IP Address: Enter the IP address (Static PPTP only).

PPTP Subnet Mask: Enter the primary and secondary DNS server addresses (for static PPTP only).

PPTP Gateway IP Address: Enter the gateway IP address provided by your ISP.

PPTP Server IP Address: Enter the server IP provided by your ISP (optional).

Username: Enter your PPTP username.

Password: Enter your PPTP password and then retype the password in the next box.

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, set the **Reconnect Mode** to **Always on**.

INTERNET CONNECTION TYPE

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

My Internet Connection is : PPTP (Username / Password) ▼

PPTP INTERNET CONNECTION TYPE :

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

Address Mode : ☐ Dynamic IP ☒ Static IP

PPTP IP Address : 0.0.0.0

PPTP Subnet Mask : 255.255.255.0

PPTP Gateway IP Address : 0.0.0.0

PPTP Server IP Address : 0.0.0.0

Username :

Password :

Verify Password :

Reconnect Mode : ☐ Always on ☒ On demand ☐ Manual

Maximum Idle Time : 5 (minutes, 0=infinite)

Primary DNS Server : 0.0.0.0

Secondary DNS Server : 0.0.0.0

MTU : 1400 (bytes) MTU default = 1492

MAC Address : 00:00:00:00:00:00

Clone Your PC's MAC address

Primary/ The DNS server information will be supplied by your ISP
Secondary (Internet Service Provider.)
DNS Server:

MTU: If you experience connection issues, you may need to change the MTU setting for optimal performance with your specific ISP. 1492 is the default MTU.

MAC Address: If your ISP requires you to enter a MAC address, fill it in here. You can click the **Clone MAC button** to enter your current computer's MAC address.

INTERNET CONNECTION TYPE

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

My Internet Connection is : PPTP (Username / Password) ▼

PPTP INTERNET CONNECTION TYPE :

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

Address Mode : ☐ Dynamic IP ☒ Static IP

PPTP IP Address :

PPTP Subnet Mask :

PPTP Gateway IP Address :

PPTP Server IP Address :

Username :

Password :

Verify Password :

Reconnect Mode : ☐ Always on ☒ On demand ☐ Manual

Maximum Idle Time : (minutes, 0=infinite)

Primary DNS Server :

Secondary DNS Server :

MTU : (bytes) MTU default = 1492

MAC Address :

Clone Your PC's MAC address

If you selected **L2TP**, you will see the following settings. Your ISP will provide you with a username and password. This option is typically used for DSL services.

My Internet Connection: Select **L2TP (Username/Password)** from the drop-down menu.

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

L2TP IP Address: Enter the L2TP IP address supplied by your ISP (for static IP only).

L2TP Subnet Mask: Enter the subnet mask supplied by your ISP (for static IP only).

L2TP Gateway IP Address: Enter the gateway IP Address provided by your ISP.

L2TP Server IP Address: Enter the server IP provided by your ISP (optional).

Username: Enter your L2TP username.

Password: Enter your L2TP password and then retype the password in the next box.

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, set the **Reconnect Mode** to **Always on**.

INTERNET CONNECTION TYPE

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

My Internet Connection is : L2TP (Username / Password)

L2TP INTERNET CONNECTION TYPE :

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

Address Mode : ☐ Dynamic IP ☒ Static IP

L2TP IP Address : 0.0.0.0

L2TP Subnet Mask : 255.255.255.0

L2TP Gateway IP Address : 0.0.0.0

L2TP Server IP Address : 0.0.0.0

Username :

Password :

Verify Password :

Reconnect Mode : ☐ Always on ☒ On demand ☐ Manual

Maximum Idle Time : 5 (minutes, 0=infinite)

Primary DNS Server : 0.0.0.0

Secondary DNS Server : 0.0.0.0

MTU : 1400 (bytes) MTU default = 1492

MAC Address : 00:00:00:00:00:00

Clone Your PC's MAC address

Primary/Secondary DNS Server: Enter the primary and secondary DNS server addresses (for static L2TP only).

MTU: If you experience connection issues, you may need to change the MTU setting for optimal performance with your specific ISP. 1492 is the default MTU.

MAC Address: If your ISP requires you to enter a MAC address, fill it in here. You can click the **Clone MAC button** to enter your current computer's MAC address.

INTERNET CONNECTION TYPE

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

My Internet Connection is : L2TP (Username / Password) ▼

L2TP INTERNET CONNECTION TYPE :

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

Address Mode : ☐ Dynamic IP ☒ Static IP

L2TP IP Address : 0.0.0.0

L2TP Subnet Mask : 255.255.255.0

L2TP Gateway IP Address : 0.0.0.0

L2TP Server IP Address : 0.0.0.0

Username :

Password :

Verify Password :

Reconnect Mode : ☐ Always on ☒ On demand ☐ Manual

Maximum Idle Time : 5 (minutes, 0=infinite)

Primary DNS Server : 0.0.0.0

Secondary DNS Server : 0.0.0.0

MTU : 1400 (bytes) MTU default = 1492

MAC Address : 00:00:00:00:00:00

Clone Your PC's MAC address

Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Security Setup Wizard** and refer to the next page.

If you want to manually configure the wireless settings on your router click **Manual Wireless Network Setup** and refer to “Manual Wireless Network Configuration” on page 42.

The screenshot displays the D-Link DIR-505 Router Web Interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various settings categories: INTERNET SETTINGS, WIRELESS SETTINGS (highlighted), NETWORK SETTINGS, MEDIA SERVER, and STORAGE. The main content area is titled 'WIRELESS SETTINGS' and contains the following sections:

- WIRELESS SETTINGS**: A text box stating, "The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection. Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package."
- WIRELESS NETWORK SETUP WIZARD**: A section describing the wizard's purpose: "This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure." Below this text is a button labeled "Wireless Network Setup Wizard". A **Note** states: "Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router."
- MANUAL WIRELESS NETWORK SETUP**: A section explaining manual configuration: "If your wireless network is already set up with Wi-Fi Protected Setup, manual configuration of the wireless network will destroy the existing wireless network. If you would like to configure the wireless settings of your new D-Link Router manually, then click on the Manual Wireless Network Setup button below." Below this text is a button labeled "Manual Wireless Network Setup".

On the right side of the interface, there is a 'Helpful Hints...' section with text: "If you are new to wireless networking and have never configured a wireless router before, click on **Wireless Network Setup Wizard** and the router will guide you through a few simple steps to get your wireless network up and running. If you consider yourself an advanced user and have configured a wireless router before, click **Manual Wireless Network Setup** to input all the settings manually." Below this is a link labeled "More...".

The footer of the interface shows the word "WIRELESS" in large letters and the copyright notice: "Copyright © 2012 D-Link Corporation/D-Link Systems, Inc."

Wireless Network Setup Wizard

The Internet Connection Setup Wizard is designed to guide you through a step-by-step process to configure your wireless network.

Type your desired wireless network name (SSID) and choose from the following options:

Automatically assign a network key (Recommended):

Select this option to automatically generate the router's network key and click **Next**.

Manually assign a network key: Select this option to manually enter your network key and click **Next**.

It is also recommended that you tick the **Use WPA encryption instead of WEP** checkbox in order to give your wireless network the highest level of security.

WIRELESS NETWORK SETUP WIZARD

This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure.

Wireless Network Setup Wizard

Note: Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.

STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD

Give your network a name, using up to 32 characters.

Network Name (SSID): DIR505

☒ Automatically assign a network key (Recommended)
To prevent outsiders from accessing your network, the router will automatically assign a security to your network.

☐ Manually assign a network key
Use this options if you prefer to create our own key.

☐ Use WPA encryption instead of WEP (WPA is stronger than WEP and all D-Link wireless client adapters support WPA)

Note: All D-Link wireless adapters currently support WPA.

Prev Next Cancel Save

If you selected **Manually assign a network key**, you will need to manually enter a password (network key) for your wireless network, and then click **Next**.

STEP 2: SET YOUR WIRELESS SECURITY PASSWORD

You have selected your security level - you will need to set a wireless security password.

The WPA (Wi-Fi Protected Access) key must meet one of following guidelines:

- Between 8 and 63 characters (A longer WPA key is more secure than a short one)

Wireless Security Password :

Note: You will need to enter the same password as keys in this step into your wireless clients in order to enable proper wireless communication.

Wireless setup is now complete. Click **Save** to save your settings and complete the setup process.

SETUP COMPLETE!

Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

Network Name (SSID): DIR505
Security Mode : Auto (WPA or WPA2) - Personal
Cipher Type TKIP and AES
Pre-Shared Key : 12345678

Manual Wireless Network Configuration

If you clicked **Manual Wireless Network Setup** on the **Wireless Settings** page, you will see this screen. Here, you can configure the wireless network settings of the DIR-505. After making your changes, click the **Save Settings** button.

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions. You may also set up a specific time range (schedule). Select a schedule from the drop-down menu or click **Add New** to create a new schedule.

Wireless Network Name: When you are browsing for available wireless networks, this is the name that will appear in the list (unless Visibility Status is set to Invisible, see below). This name is also referred to as the SSID. For security purposes, it is highly recommended to change from the default network name.

802.11 Mode: Select one of the following based on your needs:

- **802.11b Only:** Select this if you are only using 802.11b wireless clients.
- **802.11g Only:** Select this if you are only using 802.11g wireless clients.
- **802.11n Only:** Select this if you are only using 802.11n wireless clients.
- **Mixed 802.11g and 802.11b:** Select this if you are using a mix of 802.11g and 11b wireless clients.
- **Mixed 802.11n and 802.11g:** Select this if you are using a mix of 802.11n and 11g wireless clients.
- **Mixed 802.11n, 802.11g and 802.11b:** Select this if you are using a mix of 802.11n, 11g, and 11b wireless clients.

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-505 to choose the channel with the least amount of interference.

The screenshot shows the D-Link DIR-505 Router Web Interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various settings categories: INTERNET SETTINGS, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER, and STORAGE. The main content area is titled 'WIRELESS' and contains the following sections:

- WIRELESS NETWORK SETTINGS:**
 - Enable Wireless:** A checkbox that is checked, with a dropdown menu set to 'Always' and an 'Add New' button.
 - Wireless Network Name:** A text field containing 'MobileCompanion-Claire' (Also called the SSID).
 - Wireless Band:** A dropdown menu set to '2.4GHz'.
 - 802.11 Mode:** A dropdown menu set to 'Mixed 802.11n, 802.11g and 802.11b'.
 - Enable Auto Channel Scan:** A checkbox that is checked.
 - Wireless Channel:** A dropdown menu set to '2.412 GHz - CH 1' (Domain: United States).
 - Channel Width:** A dropdown menu set to 'Auto 20/40 MHz'.
 - Visibility Status:** Radio buttons for 'Visible' (selected) and 'Invisible'.
- WIRELESS SECURITY MODE:**
 - Security Mode:** A dropdown menu set to 'WPA-Personal'.
- WPA:**
 - Text explaining WPA and WPA2 modes for security and compatibility.
 - WPA Mode:** A dropdown menu set to 'Auto (WPA or WPA2)'.
 - Cipher Type:** A dropdown menu set to 'TKIP and AES'.
- PRE-SHARED KEY:**
 - Text explaining the requirement for an 8 to 63 character alphanumeric pass-phrase.
 - Pre-Shared Key:** A text field with masked characters (dots).

On the right side of the interface, there is a 'Helpful Hints...' section with additional information about changing the network name, enabling auto channel scan, and visibility status.

Wireless Channel: Indicates the channel setting for the DIR-505. 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.

Channel Width: Select whether to use **Auto 20/40 MHz** or **20 MHz** for the channel width. Normally, this should be left on **Auto 20/40 MHz**. If you are not using any 802.11n wireless clients, you can set this to **20 MHz**.

Visibility Status: This setting controls whether the router's wireless network name (SSID) will be broadcast so that wireless devices can scan for it. If you set it to **Invisible**, all wireless clients will need to enter the network name and security settings of your wireless network manually.

Wireless Security Mode: Here, you can select between **None**, **WEP**, **WPA-Personal**, and **WPA-Enterprise**. Refer to the following pages for details on configuring the different security modes.

WIRELESS NETWORK SETTINGS

Enable Wireless : ☒ Always

Wireless Network Name : MobileCompanion-Claire (Also called the SSID)

Wireless Band : 2.4GHz

802.11 Mode : Mixed 802.11n, 802.11g and 802.11b

Enable Auto Channel Scan : ☒

Wireless Channel : 2.412 GHz - CH 1 (Domain:United States)

Channel Width : Auto 20/40 MHz

Visibility Status : ☒ Visible ☐ Invisible

WIRELESS SECURITY MODE

Security Mode : WPA-Personal

If you select **WEP** as your Security Mode:

WEP Key Select an encryption level and key length to use. This will
Length: also set the type and length of the key you will need to enter.

WEP Key: Enter the password(key) for your wireless network. It will
 need to match the requirements for the WEP Key Length
 selected above.

Authentication: Choose what Authentication type to use.

WIRELESS SECURITY MODE

Security Mode : WEP

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.

If you choose the WEP security option this device will **ONLY** operate in **Legacy Wireless mode (802.11B/G)**. This means you will **NOT** get 11N performance due to the fact that WEP is not supported by the Draft 11N specification.

WEP Key Length : 64 bit (10 hex digits) (length applies to all keys)

WEP Key 1 :

Authentication : Both

If you select **WPA-Personal** as your Security Mode:

WPA Mode: Select whether to use **WPA**, **WPA2**, or both **WPA and WPA2**
 for your wireless network..

Cipher Type: Choose whether to use **TKIP**, **AES**, or both **TKIP and AES**
 ciphers for your wireless network.

Pre-Shared Key: Enter the password(key) for your wireless network.

WIRELESS SECURITY MODE

Security Mode : WPA-Personal

WPA

Use **WPA** or **WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2 Only** mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use **WPA Only**. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).

WPA Mode : Auto (WPA or WPA2)

Cipher Type : TKIP and AES

PRE-SHARED KEY

Enter an 8 to 63 character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key :

If you select **WPA-Enterprise** as your Security Mode:

WPA Mode: Select whether to use **WPA**, **WPA2**, or both **WPA and WPA2** for your wireless network..

Cipher Type: Choose whether to use **TKIP**, **AES**, or both **TKIP and AES** ciphers for your wireless network.

Pre-Shared Key: Enter the password(key) for your wireless network.

RADIUS Server IP Address: Enter your RADIUS server IP address.

RADIUS Server Port: Enter your RADIUS server port.

RADIUS Server Shared Secret: Enter your RADIUS server shared secret.

WIRELESS SECURITY MODE

Security Mode : WPA-Enterprise ▼

WPA

Use **WPA** or **WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2 Only** mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use **WPA Only**. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).

WPA Mode : Auto (WPA or WPA2) ▼

Cipher Type : TKIP and AES ▼

EAP (802.1X)

When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server.

RADIUS Server IP Address : 0.0.0.0

RADIUS Server Port : 1812

RADIUS Server Shared Secret :

Advanced

Network Settings

This section will allow you to change the local network settings of the router and to configure the DHCP settings. After making your changes, click the **Save Settings** button.

Router Settings

Router IP Address: Enter the IP address of the router. The default IP address is 192.168.0.1.

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.

Device Name: Enter a name for the DIR-505.

Local Domain: Enter the Domain name (Optional).

Enable DNS Relay: Uncheck the box to transfer the DNS server information from your ISP to your computers. If checked, your computers will use the router for a DNS server.

The screenshot shows the D-Link DIR-505 Router Web Interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various settings categories: INTERNET SETTINGS, WIRELESS SETTINGS, NETWORK SETTINGS (selected), MEDIA SERVER, and STORAGE. The main content area is titled 'NETWORK SETTINGS' and contains several sections:

- ROUTER SETTINGS:** This section allows configuring the internal network settings. It includes fields for Router IP Address (192.168.0.1), Subnet Mask (255.255.255.0), Device Name (dlinkrouter), Local Domain Name, and an Enable DNS Relay checkbox (checked).
- DHCP SERVER SETTINGS:** This section allows configuring the built-in DHCP Server. It includes an Enable DHCP Server checkbox (checked), a DHCP IP Address Range (192.168.0.100 to 192.168.0.199), and a DHCP Lease Time (1440 minutes).
- ADD DHCP RESERVATION:** This section allows adding a new reservation. It includes an Enable checkbox, fields for Computer Name, IP Address, and MAC Address, and a 'Clone Your PC's MAC address' button.
- DHCP RESERVATIONS LIST:** This section displays a table of existing reservations.
- NUMBER OF DYNAMIC DHCP CLIENTS:** This section displays a table of dynamic DHCP clients.

Helpful Hints are provided on the right side of the interface, explaining the importance of the Router IP Address and the DHCP Server settings.

Enable	Computer Name	MAC Address	IP Address
<input checked="" type="checkbox"/>	DOCNBWINXPE	00:19:d2:8f:a0:2e	192.168.0.100

Hardware Address	Assigned IP	Hostname	Expires
00:19:d2:8f:a0:2e	192.168.0.100	DOCNBWINXPE	Sun Jan 2 00:01:12 2011
28:e0:2c:dc:0a:be	192.168.0.101	UNKNOWN	Sun Jan 2 00:05:07 2011

DHCP Reservation

If you want a computer or device to always have the same IP address assigned, you can create a DHCP reservation. The router will assign the IP address only to that computer or device.

Note: This IP address must be within the DHCP IP Address Range.

Enable: Check this box to enable the reservation.

Computer Name: Enter a name for your computer. You can also use the dropdown box to the right to select a currently connected computer, and then click the << button to automatically fill in the text boxes with your computer's information.

IP Address: Enter the IP address you want to assign to the computer or device. This IP Address must be within the **DHCP IP Address Range**.

MAC Address: Enter the MAC address of the computer or device.

Clone Your PC's MAC Address: You can click this button to automatically add the MAC address of the computer that you are currently using.

Save: Click **Save** to save your DHCP reservation. You will still need to click **Save Settings** at the top of the screen to activate your DHCP reservations.

DHCP SERVER SETTINGS

Use this section to configure the built-in DHCP Server to assign IP addresses to the computers on your network.

Enable DHCP Server : ☒

DHCP IP Address Range : to

DHCP Lease Time : (minutes)

ADD DHCP RESERVATION

Enable : ☐

Computer Name : <<

IP Address :

MAC Address :

DHCP Reservations This section shows your DHCP reservations. The list shows Computer Name, MAC Address, and IP address for each reservation.

Enable: Check to enable the reservation.

Edit: Click the edit icon (✎) to make changes to the reservation entry.

Delete: Click to remove the reservation from the list.

Number of Dynamic DHCP Clients: This section shows you all devices that have been assigned an IP address. You can click the **Revoke** link for a device to revoke its IP address, which will cut off the device's access to your network. You can also click the **Reserve** link to automatically fill in the **Add DHCP Reservation** form with that computer's information.

DHCP RESERVATIONS LIST					
Enable	Computer Name	MAC Address	IP Address		
<input checked="" type="checkbox"/>	DOCNBWINXPE	00:19:d2:8f:a0:2e	192.168.0.100		

NUMBER OF DYNAMIC DHCP CLIENTS:					
Hardware Address	Assigned IP	Hostname	Expires		
00:19:d2:8f:a0:2e	192.168.0.100	DOCNBWINXPE	Sun Jan 2 00:01:12 2011	Revoke	Reserve
28:e0:2c:dc:0a:be	192.168.0.101	UNKNOWN	Sun Jan 2 00:05:07 2011	Revoke	Reserve

Media Server

This feature allows you to share music, pictures and videos with any devices connected to your network. After making your changes, click the **Save Settings** button.

Enable Media Server: Check this box to enable the media server feature.

Computer Name: Enter the media server's name.

The screenshot shows the D-Link DIR-505 Router Web Interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various settings categories: INTERNET SETTINGS, WIRELESS SETTINGS, NETWORK SETTINGS, MEDIA SERVER (highlighted), and STORAGE. The main content area is titled 'MEDIA SERVER' and contains the following text: 'Enable DLNA Media Server allows you to share media with DLNA certified devices. Any DLNA certified devices that connect to your network can play your shared music, pictures, and videos.' Below this is a note: 'Note: The shared media may not be secure. Allowing any devices to stream is recommended only on secure networks.' There are two buttons: 'Save Settings' and 'Don't Save Settings'. Further down, under the 'DLNA MEDIA SERVER' section, there is a checkbox for 'Enable DLNA Media Server' which is checked, and a text field for 'Media Server Name' with the value 'DIR-505'. The bottom of the page features a 'WIRELESS' section header and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Storage

This page will allow you to access files from a USB external hard drive or thumb drive that is plugged into the DIR-505 from your local network or from the Internet using either a web browser or the SharePort Mobile app for your smartphone or tablet. You can create users to customize access rights to the files stored on the USB drive. After making your changes, click the **Save Settings** button.

Enable Shareport Web Access: Tick this checkbox to enable sharing files stored on a USB storage drive connected to the DIR-505.

HTTP Access Port: Enter a port to use for HTTP web access to your files (8181 is the default). You will have to add this port to the IP address of the DIR-505 when connecting. For example: `http://192.168.0.1:8181`

HTTPS Access Port: Enter a port to use for HTTPS secure access to your files (4433 is the default). You will have to add this port to the IP address of the DIR-505 when connecting. For example: `https://192.168.0.1:4433`

Allow Remote Access: Check to enable remote access to your router's storage.

User Name: To create a new user, enter a user name. To edit an existing user, use the dropdown box to the right.

Password/Verify Password: Enter a password you want to use for the account, re-enter the password in the **Verify Password** text box, then click **Add/Edit** to save your changes.

User List: This section shows existing user accounts. There are **admin** and **guest** accounts by default.

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DIR-505 Router

SETUP ADVANCED MAINTENANCE STATUS HELP

INTERNET SETTINGS WIRELESS SETTINGS NETWORK SETTINGS MEDIA SERVER STORAGE

STORAGE

Share Port Web Access allows you to use a web browser to access files stored on an USB storage drive plugged into the router. To use this feature, check the **Enable SharePort Web Access** checkbox, then create user accounts to manage access to your storage devices or use the Guest account(guest/guest) to access the Guest Folder. After plugging in an USB storage drive, the new device will appear in the list with a link to it. You can then use this link to connect to the drive and log in with a user account.

Save Settings Don't Save Settings

SHAREPORT WEB ACCESS

Enable SharePort Web Access : ☒

HTTP Access Port : 8181

HTTPS Access Port : 4433

Allow Remote Access : ☐

10 -- USER CREATION

User Name : << User Name

Password :

Verify Password : Add/Edit Delete

USER LIST

:Modify :Delete

No.	User Name	Access Path	Permission
1	admin	/	Read/Write
2	guest	(1) /usb_A1	Read Only
3	wrpd	(1) /usb_A1/IPhone4	Read Only
4	test	(1) /usb_A1/Music	Read/Write

NUMBER OF DEVICES : 0

Device	Total Space	Free Space

SHAREPORT WEB ACCESS LINK

You can use this link to connect to the drive remotely after logging in with a user account.

WIRELESS

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Number of Devices: This section shows you information about the USB storage device plugged into the router.

SharePort Web Access Link This will give you a direct link to the web access interface that you can click on or copy and paste.

DIR-505

Router

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

INTERNET SETTINGS

WIRELESS SETTINGS

NETWORK SETTINGS

MEDIA SERVER

STORAGE

STORAGE

Share Port Web Access allows you to use a web browser to access files stored on an USB storage drive plugged into the router. To use this feature, check the **Enable SharePort Web Access** checkbox, then create user accounts to manage access to your storage devices or use the Guest account(guest/guest) to access the Guest Folder, After plugging in an USB storage drive, the new device will appear in the list with a link to it. You can then use this link to connect to the drive and log in with a user account.

Save Settings

Don't Save Settings

SHAREPORT WEB ACCESS

Enable SharePort Web Access : ☒

HTTP Access Port : 8181

HTTPS Access Port : 4433

Allow Remote Access : ☐

10 -- USER CREATION

User Name :

Password :

Verify Password :

<< User Name

Add/Edit

Delete

USER LIST

Modify

Delete

No.	User Name	Access Path	Permission
1	admin	/	Read/Write
2	guest	(1) /usb_A1	Read Only
3	wrpd	(1) /usb_A1/IPhone4	Read Only
4	test	(1) /usb_A1/Music	Read/Write

NUMBER OF DEVICES : 0

Device

Total Space

Free Space

SHAREPORT WEB ACCESS LINK

You can use this link to connect to the drive remotely after logging in with a user account.

Helpful Hints...

The Storage page contains information about the USB storage drivers currently plugged in to the device.

More...

WIRELESS

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Advanced Virtual Server

This will allow you to open a single port. If you would like to open a range of ports, refer to “Application Rules” on page 53. After making your changes, click the **Save Settings** button.

Name: Enter a name for the rule or select an application from the drop-down menu and click << to automatically fill in the rule with the default settings for that application.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), your computer will be listed in the **Computer Name** drop-down menu. Select your computer and click the << button to automatically fill in the IP address.

Private Port/ Public Port: Enter the port that you want to open next to Private Port and Public Port. The private and public ports are usually the same. The public port is the port seen from the Internet side, and the private port is the port being used by the application on the computer within your local network.

Protocol Type: Select **TCP**, **UDP**, or **Both** from the drop-down menu.

D-Link

DIR-505 // Router

SETUP ADVANCED MAINTENANCE STATUS HELP

VIRTUAL SERVER

The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.

Save Settings Don't Save Settings

8--VIRTUAL SERVERS LIST

	Name	IP Address	Port	Traffic Type
<input type="checkbox"/>	<< Application Name	<< Computer Name	Public 0	Protocol TCP
<input type="checkbox"/>	<< Application Name	<< Computer Name	Private 0	6
<input type="checkbox"/>	<< Application Name	<< Computer Name	Public 0	Protocol TCP
<input type="checkbox"/>	<< Application Name	<< Computer Name	Private 0	6
<input type="checkbox"/>	<< Application Name	<< Computer Name	Public 0	Protocol TCP
<input type="checkbox"/>	<< Application Name	<< Computer Name	Private 0	6
<input type="checkbox"/>	<< Application Name	<< Computer Name	Public 0	Protocol TCP
<input type="checkbox"/>	<< Application Name	<< Computer Name	Private 0	6

WIRELESS

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Helpful Hints...

Check the **Application Name** drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop down menu, or you can manually enter the IP address of the computer at which you

Application Rules

Some applications may require multiple connections, such as Internet gaming, video conferencing, and VoIP calls over the Internet. These applications may have difficulty working through NAT (Network Address Translation). Application Rules allow some of these applications work with the DIR-505. If you need to run applications that require multiple connections, specify the port normally associated with the application in the **Trigger Port** setting, select the protocol type as **TCP** or **UDP**, then enter the **Firewall** (public) ports associated with the trigger port to open them for inbound traffic. After making your changes, click the **Save Settings** button.

Name: Enter a name for the rule or select an application from the drop-down menu and click << to automatically fill in the rule with the default settings for that application.

Trigger: This is the port used to trigger the application. It can be either a single port or a range of ports.

Traffic Type: Select the protocol of the trigger port (TCP, UDP, or Both).

Firewall: This is the port number on the Internet side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

Traffic Type: Select the protocol of the firewall port (TCP, UDP, or Both).

The screenshot shows the D-Link DIR-505 Router Web Interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options: VIRTUAL SERVER, APPLICATION RULES (selected), MAC ADDRESS FILTER, WEBSITE FILTER, FIREWALL SETTINGS, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, UPNP SETTINGS, GUEST ZONE, and DMZ. The main content area is titled "APPLICATION RULES" and contains a description: "This option is used to open single or multiple ports on your router when the router senses data sent to the Internet on a 'trigger' port or port range. Special Applications rules apply to all computers on your internal network." Below the description are "Save Settings" and "Don't Save Settings" buttons. A table titled "8 -- APPLICATION RULES" displays the configuration for multiple rules. Each rule row includes a checkbox, a "Name" field, an "Application" dropdown menu with a "<<" button, "Trigger" and "Firewall" port fields, and a "Traffic Type" dropdown menu. The "Traffic Type" dropdown is set to "TCP" for all visible rules. On the right side of the interface, there is a "Helpful Hints..." section with instructions on how to use the Application Name dropdown menu and a "More..." link.

MAC Address Filter

Use MAC (Media Access Control) Filters to control access to your network based on the MAC addresses of connected clients. You can set MAC address filtering to only allow the listed MAC addresses to connect, or block access to all listed MAC addresses. After making your changes, click the **Save Settings** button.

Wireless Access Settings: Configure how MAC filtering works by using the dropdown box to select an option:

Turn MAC Filtering OFF: This disables MAC filtering.

Turn MAC Filtering ON and ALLOW computers listed to access the network: When this option is selected, only PCs and devices with MAC addresses in the MAC Address List are granted network access. All other devices will be blocked.

Turn MAC Filtering ON and DENY computers listed to access the network: When this option is selected, all PCs and devices with MAC addresses in the MAC Address List will be refused access to your network. All other devices will be allowed access.

MAC Address: Enter the MAC addresses you would like to filter. You can select a client currently connected to your access point from the **Wireless Client List** drop-down menu and then click the corresponding << button fill in the MAC address automatically. Click the Clear button to remove any entered MAC address.

The screenshot shows the D-Link DIR-505 Router Web Interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options: VIRTUAL SERVER, APPLICATION RULES, MAC ADDRESS FILTER (selected), WEBSITE FILTER, FIREWALL SETTINGS, ADVANCED WIRELESS, WIRELESS PROTECTED SETUP, UPNP SETTINGS, GUEST ZONE, and DMZ.

The main content area is titled "MAC ADDRESS FILTER". It contains a description: "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." Below this description are two buttons: "Save Settings" and "Don't Save Settings".

Below the description is the "WIRELESS ACCESS SETTINGS" section. It includes a dropdown menu labeled "Configure MAC Filtering below:" with the option "Turn MAC Filtering OFF" selected. Below this is a table with two columns: "MAC Address" and "Wireless Client List". The table contains eight rows, each with a MAC address field (pre-filled with "00:00:00:00:00:00"), a "<<" button, a "Wireless Client List" dropdown menu, and a "Clear" button.

On the right side of the interface, there is a "Helpful Hints..." section. It contains two paragraphs: "Create a list of MAC address that you would either like to allow or deny access to your network." and "Select a MAC address from the drop down menu, then click the arrow to add that MAC address to the list." Below these paragraphs is a note: "Click the Clear button to remove the MAC address from the MAC Filtering list."

The bottom of the interface shows the "WIRELESS" section and a copyright notice: "Copyright © 2012 D-Link Corporation/D-Link Systems, Inc."

Website Filters

Website Filters are used to allow you to set up a list of websites to either allow or block access to. After making your changes, click the **Save Settings** button.

Website Filtering Rules: Configure how website filtering works by using the dropdown box to select an option:

DENY computers access to ONLY these sites: When this option is selected, all PCs and devices on your network will be blocked access to the websites specified. All other websites will be allowed access.

ALLOW computers access to ONLY these sites: When this option is selected, all PCs and devices on your network will only be allowed to access to the websites specified. All other websites will be blocked.

Website URL/Domain: Enter the websites you want to block or allow in the text boxes. Any website address that contains the text entered will be blocked.

The screenshot shows the D-Link DIR-505 Router Web Interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options: VIRTUAL SERVER, APPLICATION RULES, MAC ADDRESS FILTER, WEBSITE FILTER (selected), FIREWALL SETTINGS, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, UPNP SETTINGS, GUEST ZONE, and DMZ. The main content area is titled 'WEBSITE FILTER' and contains the following text: 'The Website Filter option allows you to set up a list of Web sites you would like to allow or deny through your network. To use this feature, you must also select the "Apply Web Filter" checkbox in the Access Control section.' Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'. A section titled '8 -- WEBSITE FILTERING RULES' contains the instruction 'Configure Website Filter below:' followed by a dropdown menu set to 'ALLOW computers access to ONLY these sites' and a 'Clear the list below...' button. Below the dropdown is a table with the header 'Website URL/Domain' and four rows of text input fields. On the right side of the interface, there is a 'Helpful Hints...' section with the text 'Create a list of Web Sites to which you would like to deny or allow through the network.' and a 'More...' link. The bottom of the page features a 'WIRELESS' section header and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Firewall Settings

Enabling the SPI firewall and anti-spoof checking helps protect against attacks over the Internet. In some cases, you may want to disable them if you are having problems getting certain applications to work. After making your changes, click the **Save Settings** button.

Enable SPI: SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.

Anti-Spoof Check: Enable this feature to protect your network from certain kinds of “spoofing” attacks.

The screenshot shows the D-Link DIR-505 Router's web interface. The top navigation bar includes 'D-Link', 'DIR-505 // Router', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The left sidebar lists various settings categories: VIRTUAL SERVER, APPLICATION RULES, MAC ADDRESS FILTER, WEBSITE FILTER, FIREWALL SETTINGS (selected), ADVANCED WIRELESS, WI-FI PROTECTED SETUP, UPnP SETTINGS, GUEST ZONE, and DMZ. The main content area is titled 'FIREWALL SETTINGS' and contains two sections: 'FIREWALL SETTINGS' and 'ANTI-SPOOF CHECKING'. In the 'FIREWALL SETTINGS' section, there is a description: 'The Firewall Settings allow you to set a single computer on your network outside of the router.' Below this is a 'Save Settings' button and a 'Don't Save Settings' button. In the 'ANTI-SPOOF CHECKING' section, there is a checkbox for 'Enable SPI' which is checked, and a checkbox for 'Enable anti-spoof checking' which is unchecked. On the right side of the page, there is a 'Helpful Hints...' section with text about ALGs and a 'More...' link. The footer of the page includes the 'WIRELESS' section and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Advanced Wireless

This screen allows you to set various advanced wireless settings of your DIR-505. Unless you are experiencing specific problems, it is recommended that you leave these settings at their default values. After making your changes, click the **Save Settings** button.

Transmit Power: Use the dropdown box to set the transmit power of the antennas.

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

Short GI: Check this box to reduce the guard interval time therefore increasing the data capacity. However, this may create a less reliable connection and may create higher data loss.

IGMP Snooping: Tick this checkbox to enable this feature.

WLAN Partition: This enables 802.11d operation. 802.11d is a wireless specification developed to allow implementation of wireless networks in countries that cannot use the 802.11 standard. This feature should only be enabled if you are in a country that requires it.

HT 20/40 Coexistence: Tick this checkbox to enable this feature.

D-Link

DIR-505 Router

SETUP ADVANCED MAINTENANCE STATUS HELP

ADVANCED WIRELESS

If you are not familiar with these Advanced Wireless settings, please read the help section before attempting to modify these settings.

Save Settings Don't Save Settings

ADVANCED WIRELESS SETTINGS

Transmit Power : 100%

WMM Enable : ☒

Short GI : ☒

IGMP Snooping : ☒

WLAN Partition : ☐

HT20/40 Coexistence : ☒ Enable ☐ Disable

Helpful Hints...

Advanced Wireless: It is recommended that you leave these options at their default values. Adjusting them could negatively impact the performance of your wireless network. The options on this page should be changed by advanced users or if you are instructed to by one of our support personnel, as they can negatively affect the performance of your Access Point if configured improperly.

Transmit Power: You can lower the output power of the DIR-505 by selecting lower percentage Transmit Power values from the drop down. Your choices are: 100%, 75%, 50%, and 25%.

WIRELESS

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Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) System is a simplified way to set up the basic settings of the DIR-505. It can also be used to automatically create a secure wireless connection to a wireless client. After making your changes, click the **Save Settings** button.

Enable: Check this box to enable the WPS functions of the DIR-505.

Disable WPS PIN Method: Disabling this will disable the WPS PIN method of connection and configuration. If you want to reconfigure the router using the WPS PIN method, click on the **Reset to Unconfigured** button. You will still be able to add wireless clients through WPS.

PIN Settings: Shows the router's current PIN. You can reset it to the default value by clicking on the **Reset PIN to Default** button, or you can create a new PIN number by clicking on the **Generate New PIN** button.

Add Wireless Station: Here, you can click on the **Add Wireless Device With WPS** button to go through a wizard that helps you connect other devices through WPS.

The screenshot displays the D-Link DIR-505 Router Web Interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options: VIRTUAL SERVER, APPLICATION RULES, MAC ADDRESS FILTER, WEBSITE FILTER, FIREWALL SETTINGS, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, UPNP SETTINGS, GUEST ZONE, and DMZ. The main content area is titled "WI-FI PROTECTED SETUP" and contains the following sections:

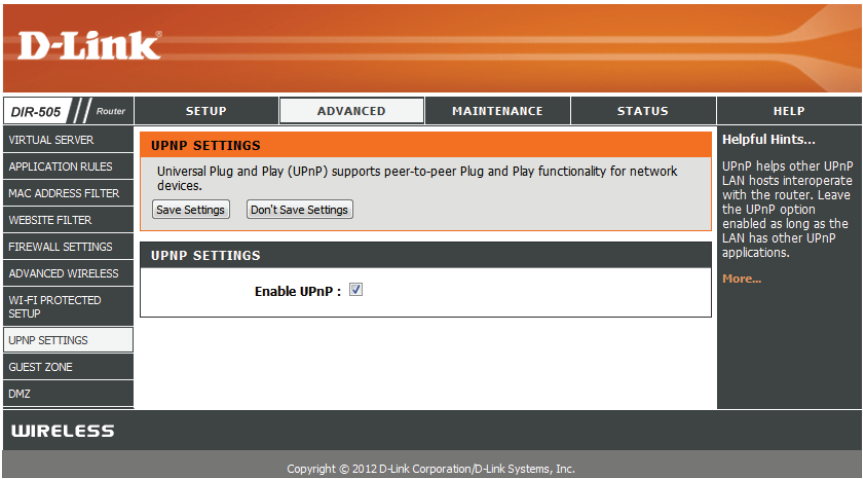
- WI-FI PROTECTED SETUP**: A section with a description of WPS and two buttons: "Save Settings" and "Don't Save Settings".
- WI-FI PROTECTED SETUP**: A section with checkboxes for "Enable" and "Disable WPS-PIN Method", both of which are checked. A "Reset to Unconfigured" button is located below these checkboxes.
- PIN SETTINGS**: A section showing the "Current PIN: 57893402" and two buttons: "Reset PIN to Default" and "Generate New PIN".
- ADD WIRELESS STATION**: A section with a button labeled "Add Wireless Device With WPS".

On the right side of the interface, there is a "Helpful Hints..." section with additional information and a "More..." link.

UPnP Settings

This page allows you to enable UPnP, which can help provide compatibility with some networking equipment, software, and peripherals. After making your changes, click the **Save Settings** button.

Enable UPnP: To use the Universal Plug and Play (UPnP™) feature tick the **Enabled** checkbox.



Guest Zone

The Guest Zone feature will allow you to create a separate wireless network that can be used by guests to access the Internet. These zones will be separate from your main wireless network, allowing you to share Internet access without allowing them to connect to your own devices. After making your changes, click the **Save Settings** button.

Enable Guest Zone: Tick this checkbox to enable the Guest Zone feature.

Add New Schedule: Select when the Guest Zone will be active. The schedule may be set to **Always**, which will allow the Guest Zone to be on at all times. You can select a schedule you created, or you can click the **Add New Schedule** button to create a schedule.

Wireless Network Name: Enter a wireless network name (SSID) for your guest zone. It should be different than the network name of your main wireless network.

Enable Routing Between Zones: Check to allow network connectivity between the Guest Zone and your main network.

Security Mode: Here, you can select between **None**, **WEP**, **WPA-Personal**, and **WPA-Enterprise**. Refer to "Wireless Settings" on page 39 for information on how to configure the different security modes.

The screenshot shows the D-Link DIR-505 Router web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options, with 'GUEST ZONE' highlighted. The main content area is titled 'GUEST ZONE' and contains the following settings:

- Enable Guest Zone:** A checkbox that is checked, with a dropdown menu set to 'Always' and an 'Add New Schedule' button.
- Wireless Band:** A dropdown menu set to '2.4GHz Band'.
- Wireless Network Name:** A text field containing 'dlink_guest' with a note '(Also called the SSID)'.
- Enable Routing Between Zones:** A checkbox that is unchecked.
- Security Mode:** A dropdown menu set to 'None'.

At the bottom of the interface, there is a 'WIRELESS' section and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'.

DMZ

Enabling DMZ allows you to set a single PC or network device to “be exposed” outside of the router and have unrestricted Internet access. It is not recommended for normal use, and should only be used if you need this feature for a specific reason. After making your changes, click the **Save Settings** button.

Enable DMZ: Check the box to enable DMZ.

DMZ IP Address: Enter the IP address of the device on your network you want to place in the DMZ. You can use the dropdown box to select a device, then click the << button to automatically fill in the IP address of that device.

The screenshot shows the D-Link DIR-505 Router web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options: VIRTUAL SERVER, APPLICATION RULES, MAC ADDRESS FILTER, WEBSITE FILTER, FIREWALL SETTINGS, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, UPNP SETTINGS, GUEST ZONE, and DMZ. The main content area is titled 'DMZ SETTINGS' and contains the following information:

- DMZ SETTINGS:** The DMZ (Demilitarized Zone) option lets you set a single computer on your network outside of the router. If you have a computer that cannot run Internet applications successfully from behind the router, then you can place the computer into the DMZ for unrestricted Internet access.
- Note:** Putting a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.
- Buttons:** Save Settings, Don't Save Settings
- DMZ HOST:**
 - Enable DMZ:** ☐
 - DMZ IP Address:** 0.0.0.0 << Computer Name

On the right side, there is a 'Helpful Hints...' section with the text: 'Enable the DMZ option only as a last resort. If you are having trouble using an application from a computer behind the router, first try opening ports associated with the application in the Virtual Server sections. More...'

At the bottom, there is a 'WIRELESS' section and a copyright notice: Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.

Maintenance Admin

This page will allow you to change the password for the administrator account for configuring the settings of the DIR-505. You can also turn on graphical authentication(CAPTCHA) on this page. After making your changes, click the **Save Settings** button.

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

Verify Enter the same password that you entered in the previous **Password:** textbox in order to confirm its accuracy.

Enable Graphical Authentication: Check to enable Graphical Authentication, or CAPTCHAs when logging in to the web UI of the DIR-505. This provides an extra layer of security by requiring you to enter a code that is displayed on-screen.

Enable HTTPS Server: Check to enable HTTPS when connecting to the router for configuration. When enabled, you will need to enter **https://** to connect to the DIR-505. For example: **https://dlinkrouter**

Enable Remote Management: Remote management allows the DIR-505 to be configured over the Internet through a web browser. A username/password is still required to access the configuration interface.

Remote Admin Port: This is the port that will be used to access the DIR-505 configuration interface when using remote management. You will need to add this port number after the IP address.

Example: **http://x.x.x.x:8080** where x.x.x.x is the IP address of the DIR-505 and 8080 is the remote admin port.

D-Link

DIR-505 // Router

SETUP ADVANCED MAINTENANCE STATUS HELP

ADMINISTRATOR SETTINGS

The 'admin' account can access the management interface. The admin has read/write access and can change passwords.

By default there is no password configured. It is highly recommended that you create a password to keep your router secure.

Save Settings Don't Save Settings

ADMIN PASSWORD

Please enter the same password into both boxes, for confirmation.

Password :

Verify Password :

ADMINISTRATION

Enable Graphical Authentication : ☐

Enable HTTPS Server : ☐

Enable Remote Management : ☐

Remote Admin Port : 8080

Helpful Hints...

For security reasons, it is recommended that you change the password for the Admin account. Be sure to write down the new passwords to avoid having to reset the router in case they are forgotten.

Enabling Remote Management, allows you or others to change the router configuration from a computer on the Internet.

Choose a port to open for remote management.

[More...](#)

WIRELESS

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Time

The Time page 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. Daylight Saving can also be configured to automatically adjust the time when needed. After making your changes, click the **Save Settings** button.

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

Enable Daylight Saving: To select Daylight Saving time manually, click the **Enable Daylight Saving** check box. Next use the drop-down menu to select a **Daylight Saving Offset** and then enter a start date and an end date for daylight saving time.

Enable NTP Server: NTP is short for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. Check this box to use a NTP server. This will only connect to a server on the Internet, not a local server.

NTP Server Used: Enter the NTP server or select one from the drop-down menu.

Date and Time: To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second and then click **Save Settings**. You can also click the **Copy Your Computer's Time Settings** button at the bottom of the screen.

The screenshot shows the D-Link DIR-505 Router Web Interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration sections: ADMIN, TIME, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'TIME' and contains the following sections:

- TIME**: A brief description of the Time Configuration option and buttons for 'Save Settings' and 'Don't Save Settings'.
- TIME CONFIGURATION**:
 - Current Router Time**: Jan/01/2011 16:18:28
 - Time Zone**: (GMT+08:00) Taipei (dropdown menu)
 - Enable Daylight Saving**: ☐
 - Daylight Saving Dates**:

	Month	Week	Day of Week	Time
DST start	Mar	3rd	Sun	1 am
DST End	Nov	2nd	Sun	1 am
- AUTOMATIC TIME CONFIGURATION**:
 - Enable NTP Server**: ☐
 - NTP Server Used**: [Text Field] << [Select NTP Server (dropdown)]
- SET THE DATE AND TIME MANUALLY**:
 - Date And Time**:

Year	Month	Day	Hour	Minute	Second
2011	Jan	01	00	00	00
 - Copy Your Computer's Time Settings** (button)

The bottom of the page features a 'WIRELESS' section and a copyright notice: Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.

System

This page allows you to save and restore your configuration, reset and reboot the DIR-505, and remove any added language packs.

Save Settings To Local Hard Drive: Clicking the **Save** button will allow you to save the current repeater configuration settings to a file on the hard disk of the computer you are using. You will then see a file dialog where you can select a location and file name for the settings.

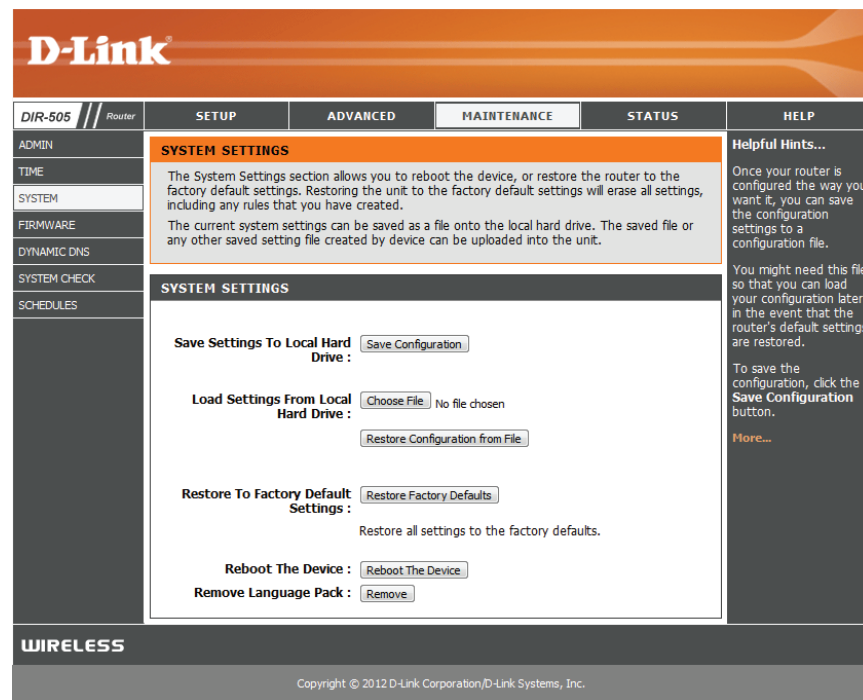
Load Settings From Local Hard Drive: Use this option to load previously saved configuration settings. Click **Browse** to find a previously saved configuration file. Then, click the **Upload Settings** button to transfer those settings to the DIR-505.

Restore to Factory Default Settings: This option will restore all configuration settings back to the factory default settings. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save your current configuration settings, use the **Save** button above.

Note: Restoring the factory default settings will not reset the Wi-Fi Protected Status to Not Configured.

Reboot the Device: Click the **Reboot** button to reboot the repeater.

Remove Language Pack: If you have previously installed a Language Pack, you can remove it by clicking the Remove button.



Firmware

You can upgrade the firmware of the DIR-505 here. 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. Please check the D-Link support website for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from this site.

Firmware Upgrade: Click on **Check Now** to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade. Do not disconnect from the DIR-505 or power your computer or DIR-505 off during the upgrade process.

You can change the language of the web UI by uploading available language packs.

Browse: Download a language pack from the D-Link website. After you have downloaded the new language pack, click **Browse** to locate the language pack file on your hard drive. Click **Upload** to complete the language pack upgrade.

The screenshot shows the D-Link DIR-505 Router web interface. The top navigation bar includes 'DIR-505 // Router', 'SETUP', 'ADVANCED', 'MAINTENANCE' (selected), 'STATUS', and 'HELP'. The left sidebar lists 'ADMIN', 'TIME', 'SYSTEM', 'FIRMWARE' (selected), 'DYNAMIC DNS', 'SYSTEM CHECK', and 'SCHEDULES'. The main content area is titled 'FIRMWARE' and contains the following sections:

- FIRMWARE**: A message stating 'There may be new firmware for your DIR-505 to improve functionality and performance. Click here to check for an upgrade on our support site.' It also includes instructions to download the file from the support site and click 'Browse' to upload it. A warning states: 'Do not update firmware through wireless network!!'.
- FIRMWARE AND LANGUAGE PACK INFORMATION**: Displays 'Current Firmware Version : 1.00', 'Date : 2012/2/29', 'Current Language Pack Version : No Language pack', and a 'Check Online Now for Latest Firmware and Language pack Version : [Check Now]' button.
- FIRMWARE UPGRADE**: Includes a note that some upgrades reset configuration to factory defaults, advising users to save settings from the 'Maintenance -> System' screen. It also states that the PC must have a wired connection. The 'Upload' section shows a 'Choose File' button and 'No file chosen' text, with an 'Upload' button below.
- LANGUAGE PACK UPGRADE**: Similar to the firmware section, it shows a 'Choose File' button, 'No file chosen' text, and an 'Upload' button.

The bottom of the page features a 'WIRELESS' section header and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Dynamic DNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc...) behind your DIR-505 using a domain name that you have purchased (**www.whateveryournameis.com**) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter in your domain name to connect to your server no matter what your IP address is. After making your changes, click the **Save Settings** button.

Enable Dynamic DNS: Tick the checkbox to enable DDNS.

Server Address: Enter the DDNS server address, or select your DDNS service from the drop-down menu and click the << button to automatically fill in the address for the DDNS service.

Host Name: Enter the Host Name that you registered with your DDNS service provider.

Username or Key: Enter the Username or key for your DDNS account.

Password or Key: Enter the Password or key for your DDNS account.

Timeout: Enter a timeout time (in hours).

Status: This displays the DDNS server update status.

The screenshot shows the D-Link DIR-505 Router Setup interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options: ADMIN, TIME, SYSTEM, FIRMWARE, DYNAMIC DNS (selected), SYSTEM CHECK, and SCHEDULES. The main content area is titled 'DYNAMIC DNS' and contains the following information:

- Enable Dynamic DNS:** A checkbox that is checked.
- Server Address:** A text field containing 'dlinkddns.com' and a '<<' button next to a 'Select Dynamic DNS Server' dropdown menu.
- Host Name:** An empty text field.
- Username or Key:** An empty text field.
- Password or Key:** An empty text field.
- Verify Password or Key:** An empty text field.
- Timeout:** A text field containing '576' followed by '(hours)'.
- Status:** A label indicating 'Disconnected'.

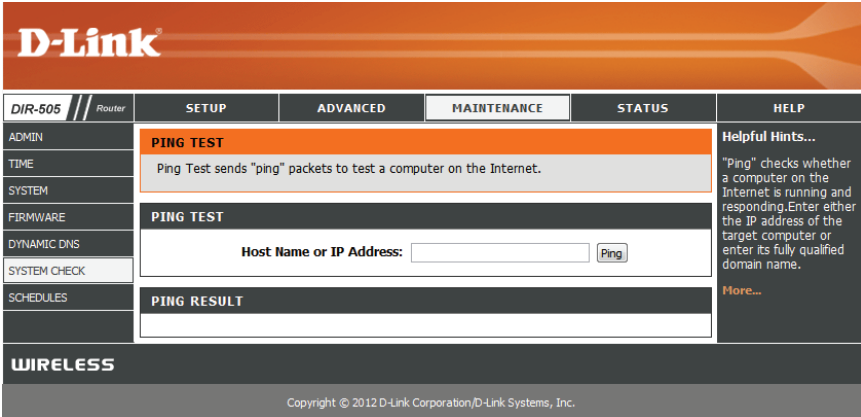
At the bottom of the main content area, there are two buttons: 'Save Settings' and 'Don't Save Settings'. Below the main content area, there is a 'WIRELESS' section header. The footer of the page displays the copyright information: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

System Check

This page allows you to run a ping test to check your Internet connectivity.

Ping Test: The Ping Test is used to send ping packets to test if your DIR-505 is connected to the Internet. Enter the IP address that you wish to ping and click the **Ping** button.

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



Schedules

You can create schedules for use with some of the features of the DIR-505, which will allow those features to be active during certain times of the day or week.

Name: Enter a name for your new schedule.

Days: Select a day, a range of days, or All Week to include every day of the week.

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

Save: After entering the details of your schedule, click the **Save** button to save your changes.

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

D-Link

DIR-505 // Router

SETUP ADVANCED MAINTENANCE STATUS HELP

SCHEDULES

The Schedule configuration option is used to manage schedule rules for various firewall and parental control features.

ADD SCHEDULE RULE

Name :

Day(s) : ☐ All Week ☒ Select Day(s) :

☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat

All Day - 24 hrs : ☐

Time format : 24-hour

Start Time : : : AM (hour:minute)

End Time : : : AM (hour:minute)

SCHEDULE RULES LIST

Name	Day(s)	Time Frame

WIRELESS

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Helpful Hints...

Schedules are used with a number of other features to define when those features are in effect.

Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 3:00pm to 9:00pm, might be called "After School".

Click **Save** to add a completed schedule to the list below.

Click the **Edit** icon to change an existing schedule.

Click the **Delete** icon to permanently delete a schedule.

[More...](#)

Status

Device Info

This page displays the current information for the DIR-505. It will display the LAN and wireless LAN information.

General: Displays the time and firmware version.

WAN Displays information about the connection to your modem or Internet connection.

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.

LAN Computers: Displays information about the devices on your local network.

The screenshot shows the D-Link DIR-505 Router web interface. The top navigation bar includes links for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various status pages: DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, and WIRELESS. The main content area is titled 'DEVICE INFORMATION' and contains several sections:

- GENERAL:** Displays the Time (Jan/01/2011 03:43:50), System Up Time (0 Day, 03:44:06), and Firmware Version (1.00, Wed, 29 Feb 2012).
- WAN:** Shows Connection Type (DHCP client), Cable Status (Disconnected), Network Status (Disconnected), and buttons for DHCP Renew and DHCP Release. It also lists Connection Up Time (N/A), MAC Address (00:18:e7:95:6d:c9), IP Address (0.0.0.0), Subnet Mask (0.0.0.0), Default Gateway (0.0.0.0), Primary DNS Server (0.0.0.0), and Secondary DNS Server (0.0.0.0).
- LAN:** Displays MAC Address (00:18:e7:95:6d:c8), IP Address (192.168.0.1), Subnet Mask (255.255.255.0), and DHCP Server (Enabled).
- WIRELESS LAN:** Shows Wireless Radio (Enable), Wireless Mode (Mixed 802.11n, 802.11g and 802.11b), Channel Width (Auto 20/40 MHz), Channel (1), and Wi-Fi Protected Setup (Enable / Configured).
- SSID List:** A table showing the SSID 'MobileCompanion-Claire' with Guest status 'No', MAC Address '00:18:e7:95:6d:c8', and Security Mode 'WPA/WPA2 - Personal'.
- LAN COMPUTERS:** A section at the bottom for displaying local network devices.

Helpful Hints... All of your WAN and LAN connection details are displayed here. More...

Logs

The DIR-505 keeps a running log of events and activities occurring on the DIR-505. If the DIR-505 is rebooted, the logs are automatically cleared.

Log Options: There are several types of logs that can be viewed: **System Activity, Debug Information, Attacks, Dropped Packets** and **Notice**.

First Page: This button directs you to the first page of the log.

Last Page: This button directs you to the last page of the log.

Previous: This button directs you to the previous page of the log.

Next: This button directs you to the next page of the log.

Clear: This button clears all current log content.

Save Log: This button opens dialog where you can save the current log to your hard drive.

Refresh: This button refreshes the log.

The screenshot displays the D-Link DIR-505 Router Web Interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar shows a menu with options: DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, and WIRELESS. The main content area is titled "LOGS" and contains a "LOG OPTIONS" section with checkboxes for "System Activity", "Debug Information", "Attacks", "Dropped Packets", and "Notice". Below this is a "LOG DETAILS" section with buttons for "First Page", "Last Page", "Previous", "Next", "Save Log", "Refresh", and "Clear". A table of log entries is shown, with columns for "Time" and "Message". The log entries include timestamps and messages related to WPA group key handshakes and DHCPD operations. The bottom of the interface shows the "WIRELESS" section and a copyright notice for 2012 D-Link Corporation.

Time	Message
Jan 1 16:20:15	ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake c completed (RSN)
Jan 1 16:20:15	ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake c completed (RSN)
Jan 1 16:17:59	UDHCPD Inform: add_lease 192.168.0.101
Jan 1 16:10:15	ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake c completed (RSN)
Jan 1 16:10:15	ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake c completed (RSN)
Jan 1 16:10:05	UDHCPD Inform: add_lease 192.168.0.101
Jan 1 16:09:59	UDHCPD sending OFFER of 192.168.0.101
Jan 1 16:09:59	UDHCPD sendOffer: device_lan_ip=192.168.0.1, device_lan_subnet_mask=255.255.255.0
Jan 1 16:09:42	UDHCPD sending OFFER of 192.168.0.101
Jan 1 16:09:42	UDHCPD sendOffer: device_lan_ip=192.168.0.1, device_lan_subnet_mask=255.255.255.0

Statistics

The DIR-505 keeps statistics of the traffic that passes through it. You can view the amount of packets that pass through the LAN and wireless portions of the network. Click the **Refresh Statistics** button to update the information, or click the **Clear Statistics** button to reset all statistics. The traffic counter will reset if the DIR-505 is rebooted.

D-Link

DIR-505 // Router

SETUP ADVANCED MAINTENANCE STATUS HELP

DEVICE INFO
LOGS
STATISTICS
INTERNET SESSIONS
WIRELESS

TRAFFIC STATISTICS

Traffic Statistics display Receive and Transmit packets passing through your router.

[Refresh Statistics](#) [Clear Statistics](#)

LAN STATISTICS

Sent : 36024	Received : 10247
TX Packets Dropped : 0	RX Packets Dropped : 0
Collisions : 0	Errors : 0

WAN STATISTICS

Sent : 0	Received : 0
TX Packets Dropped : 0	RX Packets Dropped : 0
Collisions : 0	Errors : 0

WIRELESS STATISTICS

Sent : 23499	Received : 10250
TX Packets Dropped : 17703	RX Packets Dropped : 0
Collisions : 0	Errors : 0

Helpful Hints...

This is a summary of the number of packets that have passed between the WAN and the LAN since the router was last initialized.

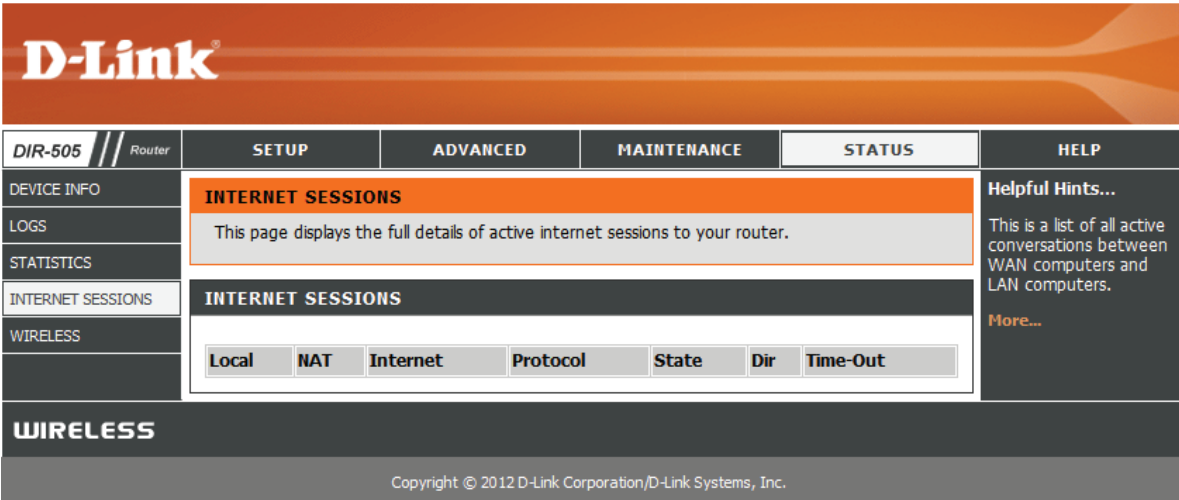
[More...](#)

WIRELESS

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Internet Sessions

The Internet Sessions page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.



Wireless

The wireless client table displays a list of current connected wireless clients. This table also displays the connection time and MAC address of the connected wireless clients.

DIR-505

Router

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

DEVICE INFO

LOGS

STATISTICS

INTERNET SESSIONS

WIRELESS

WIRELESS

Use this option to view the wireless clients that are connected to your wireless router.

NUMBER OF WIRELESS CLIENTS : 2

MAC Address	IP Address	Mode	Rate (Mbps)	Signal (%)
28:e0:2c:dc:0a:be	192.168.0.100	802.11n (2.4GHz)	25M	100
00:24:2c:2b:a7:dc	192.168.0.101	802.11g	52M	100

Helpful Hints...

This is a list of all wireless clients that are currently connected to your wireless router.

More...

WIRELESS

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Help

This screen gives you more information about the various parts of the configuration interface. Click on a link to learn more about that topic.

DIR-505

Router

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

MENU

SETUP

ADVANCED

MAINTENANCE

STATUS

SUPPORT MENU

- Setup
- Advanced
- Maintenance
- Status

SETUP HELP

- Internet Connection
- Internet Settings
- Wireless Settings
- Network Settings

ADVANCED HELP

- Virtual Server
- Application Rules
- MAC Address Filter
- Website Filter
- Firewall Settings
- Advanced Wireless
- Wi-Fi Protected Setup
- UPnP Settings
- Guest Zone
- DMZ

MAINTENANCE HELP

- Admin
- Time
- System
- Firmware
- Dynamic DNS
- System Check
- Schedules

STATUS HELP

- Device Info
- Logs
- Statistics
- Internet Sessions
- Wireless

Helpful Hints...

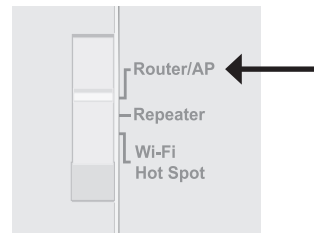
Click on the links for more informations of each section in the GUI.

WIRELESS

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Access Point Mode

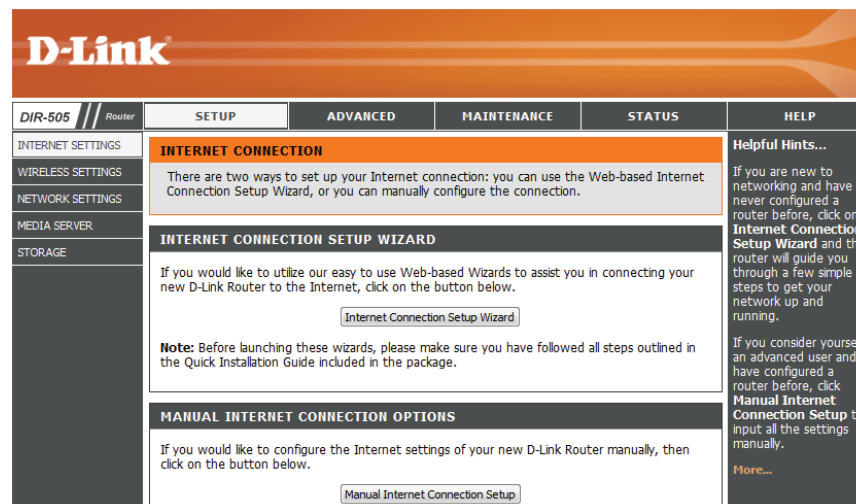
This section describes the configuration interface for Access Point mode. Make sure that the mode selector switch is in the Router/AP position on your DIR-505.



If this is your first time configuring the DIR-505, open your web browser and type **http://dlinkrouter** in the address bar. You will automatically be directed to the **Wizard Setup Screen**. For more information, refer to “Initial Setup Wizard (Router/AP Mode)” on page 15.

If the Setup Wizard does not appear, type **http://dlinkrouter** in the address bar.

Otherwise, the main configuration screen will appear. If the DIR-505 is in Router mode, you will need to click on **Manual Internet Connection Setup**, select **Access Point** for your **Operation Mode**, then click the **Save Settings** button to switch to Access Point mode.

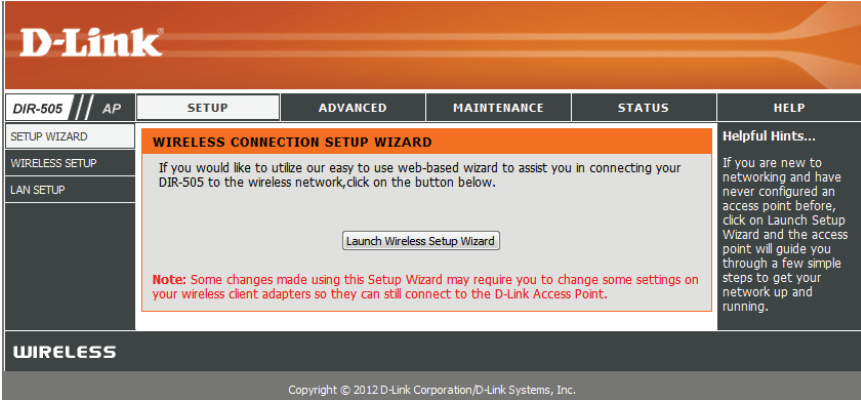


Setup

Setup Wizard

If you want to configure the Access Point Mode of the DIR-505 using a wizard, click **Launch Wireless Setup Wizard**.

To configure your DIR-505 manually, click **Wireless Setup** to configure your wireless connection or click **LAN Setup** to configure the LAN options. Each section is detailed in the following pages.



Wireless Setup

Here, you can configure the wireless network settings of the DIR-505. After making your changes, click the **Save Settings** button.

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions. You may also set up a specific time range (schedule). Select a schedule from the drop-down menu or click **Add New** to create a new schedule.

Wireless Network Name: When you are browsing for available wireless networks, this is the name that will appear in the list (unless Visibility Status is set to Invisible, see below). This name is also referred to as the SSID. For security purposes, it is highly recommended to change from the default network name.

Wireless Mode: Select one of the following based on your needs:

- **802.11b Only:** Select this if you are only using 802.11b wireless clients.
- **802.11g Only:** Select this if you are only using 802.11g wireless clients.
- **802.11n Only:** Select this if you are only using 802.11n wireless clients.
- **Mixed 802.11g and 802.11b:** Select this if you are using a mix of 802.11g and 11b wireless clients.
- **Mixed 802.11n and 802.11g:** Select this if you are using a mix of 802.11n and 11g wireless clients.
- **Mixed 802.11n, 802.11g and 802.11b:** Select this if you are using a mix of 802.11n, 11g, and 11b wireless clients.

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-505 to choose the channel with the least amount of interference.

D-Link

DIR-505 // AP

SETUP ADVANCED MAINTENANCE STATUS HELP

SETUP WIZARD

WIRELESS SETUP

LAN SETUP

WIRELESS

Use this section to configure the wireless settings for your D-Link Access Point. Please note that changes made on this section will also need to be duplicated to your wireless clients and PC.

Save Settings Don't Save Settings

WIRELESS NETWORK SETTINGS

Enable Wireless : ☒ Always Add New

Wireless Network Name : MobileCompanion-Claire (Also called the SSID)

Wireless Band : 2.4GHz

Wireless Mode : Mixed 802.11n, 802.11g and 802.11b

Enable Auto Channel Scan : ☒

Wireless Channel : 2.412 GHz - CH 1

Channel Width : Auto 20/40 MHz

Visibility Status : ☒ Visible ☐ Invisible

WIRELESS SECURITY MODE

Security Mode : WPA-Personal

WPA

Use WPA or WPA2 mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use WPA2 Only mode. This mode uses AES (CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use WPA Only. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).

WPA Mode : Auto (WPA or WPA2)

Cipher Type : TKIP and AES

PRE-SHARED KEY

Enter an 8 to 63 character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key :

WIRELESS

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Helpful Hints...

Changing your Wireless Network Name is the first step in securing your wireless network. Change it to a familiar name that does not contain any personal information.

Enable Auto Channel Scan so that the Access Point can select the best possible channel for your wireless network to operate on.

Visibility Status is another way to secure your network. With invisible option enabled, no wireless clients will be able to see your wireless network when they perform scan to see what's available. In order for your wireless devices to connect to your AP, you will need to manually enter the Wireless Network Name on each device.

If you have enabled Wireless Security, make sure you write down the Key or Passphrase that you have configured. You will need to enter this information on any wireless device that you connect to your wireless network.

Wireless Channel: Indicates the channel setting for the DIR-505. 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.

Channel Width: Select whether to use **Auto 20/40 MHz** or **20 MHz** for the channel width. Normally, this should be left on **Auto 20/40 MHz**. If you are not using any 802.11n wireless clients, you can set this to **20 MHz**.

Visibility Status: This setting controls whether the router's wireless network name(SSID) will be broadcast so that wireless devices can scan for it. If you set it to **Invisible**, all wireless clients will need to enter the network name and security settings of your wireless network manually.

Wireless Security Mode: Here, you can select between **None**, **WEP**, **WPA-Personal**, and **WPA-Enterprise**. Refer to the following pages for details on configuring the different security modes.

WIRELESS NETWORK SETTINGS

Enable Wireless : ☒ Always

Wireless Network Name : MobileCompanion-Claire (Also called the SSID)

Wireless Band : 2.4GHz

802.11 Mode : Mixed 802.11n, 802.11g and 802.11b

Enable Auto Channel Scan : ☒

Wireless Channel : 2.412 GHz - CH 1 (Domain:United States)

Channel Width : Auto 20/40 MHz

Visibility Status : ☒ Visible ☐ Invisible

WIRELESS SECURITY MODE

Security Mode : WPA-Personal

If you select **WEP** as your Security Mode:

WEP Key Select an encryption level and key length to use. This will
Length: also set the type and length of the key you will need to enter.

WEP Key: Enter the password(key) for your wireless network. It will
 need to match the requirements for the WEP Key Length
 selected above.

Authentication: Choose what Authentication type to use.

WIRELESS SECURITY MODE

Security Mode : WEP

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.

If you choose the WEP security option this device will **ONLY** operate in **Legacy Wireless mode (802.11B/G)**. This means you will **NOT** get 11N performance due to the fact that WEP is not supported by the Draft 11N specification.

WEP Key Length : 64 bit (10 hex digits) (length applies to all keys)

WEP Key 1 :

Authentication : Both

If you select **WPA-Personal** as your Security Mode:

WPA Mode: Select whether to use **WPA**, **WPA2**, or both **WPA and WPA2**
 for your wireless network..

Cipher Type: Choose whether to use **TKIP**, **AES**, or both **TKIP and AES**
 ciphers for your wireless network.

Pre-Shared Key: Enter the password(key) for your wireless network.

WIRELESS SECURITY MODE

Security Mode : WPA-Personal

WPA

Use **WPA** or **WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2 Only** mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use **WPA Only**. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).

WPA Mode : Auto (WPA or WPA2)

Cipher Type : TKIP and AES

PRE-SHARED KEY

Enter an 8 to 63 character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key :

If you select **WPA-Enterprise** as your Security Mode:

WPA Mode: Select whether to use **WPA**, **WPA2**, or both **WPA and WPA2** for your wireless network..

Cipher Type: Choose whether to use **TKIP**, **AES**, or both **TKIP and AES** ciphers for your wireless network.

Pre-Shared Key: Enter the password(key) for your wireless network.

RADIUS Server IP Address: Enter your RADIUS server IP address.

RADIUS Server Port: Enter your RADIUS server port.

RADIUS Server Shared Secret: Enter your RADIUS server shared secret.

WIRELESS SECURITY MODE

Security Mode :

WPA

Use **WPA** or **WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2 Only** mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use **WPA Only**. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).

WPA Mode :

Cipher Type :

EAP (802.1X)

When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server.

RADIUS Server IP Address :

RADIUS Server Port :

RADIUS Server Shared Secret :

Advanced

LAN Setup

Here, you can configure the network settings of the DIR-505. After making your changes, click the **Save Settings** button.

Operation Mode: This should be set to **Access Point** mode. If you want to use Router mode, select **Router** mode and click the **Save Settings** button to switch to the Router configuration interface. For more information, refer to "Router Mode" on page 25.

Device Name: Enter a name for the DIR-505.

My LAN Connection is: Select whether you want to connect your DIR-505 to your network through **Dynamic IP (DHCP)** or **Static IP**.

If you selected **Static IP**, fill in the **IP Address**, **Subnet Mask**, **Gateway Address**, and **Primary** and **Secondary DNS Server** addresses. If you are not sure what settings to use, please contact your network administrator or Internet service provider.

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DIR-505 // AP SETUP ADVANCED MAINTENANCE STATUS HELP

SETUP WIZARD WIRELESS SETUP LAN SETUP

NETWORK SETTINGS

Use this section to configure the internal network settings of your AP.

Device Name allows you to configure this device more easily when your network using TCP/IP protocol. You can enter the device name of the AP into your web browser to access the instead of IP address for configuration. Recommend to change the device name if there're more than one D-Link devices within the subnet.

Save Settings Don't Save Settings

OPERATION MODE SETTING

Operation Mode : Access Point

DEVICE NAME

Device Name allows you to configure this device more easily. You can enter "http://device name" into your web browser instead of IP address for configuration. (Default: http://dlinkrouter)

Device Name : dlinkrouter

LAN IPV4 CONNECTION TYPE

Choose the IPv4 mode to be used by the Access Point.

My LAN Connection is : Dynamic IP (DHCP)

DYNAMIC IP(DHCP) LAN CONNECTION TYPE

Enter the IPv4 Address Information.

IP Address : 192.168.0.1

Subnet Mask : 255.255.255.0

Gateway Address : 0.0.0.0

Primary DNS Server : 0.0.0.0

Secondary DNS Server : 0.0.0.0

WIRELESS

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Helpful Hints...

Device Name: Device Name allows you to configure this device more easily when your network using TCP/IP protocol. You can enter the device name of the AP into your web browser to access the device configuration. Recommend to change the device name if there're more than one D-Link devices within the network.

LAN Settings: Also referred as private settings. LAN settings allow you to configure LAN interface of DIR-505. LAN IP address is private to your internal network and is not visible to Internet. The factory default setting is Dynamic IP(DHCP).

Advanced MAC Address Filter

Use MAC (Media Access Control) Filters to control access to your network based on the MAC addresses of connected clients. You can set MAC address filtering to only allow the listed MAC addresses to connect, or block access to all listed MAC addresses. After making your changes, click the **Save Settings** button.

Wireless Access Settings: Configure how MAC filtering works by using the dropdown box to select an option:

Turn MAC Filtering OFF: This disables MAC filtering.

Turn MAC Filtering ON and ALLOW computers listed to access the network: When this option is selected, only PCs and devices with MAC addresses in the MAC Address List are granted network access. All other devices will be blocked.

Turn MAC Filtering ON and DENY computers listed to access the network: When this option is selected, all PCs and devices with MAC addresses in the MAC Address List will be refused access to your network. All other devices will be allowed access.

MAC Address: Enter the MAC addresses you would like to filter. You can select a client currently connected to your access point from the **Wireless Client List** drop-down menu and then click the corresponding << button fill in the MAC address automatically. Click the Clear button to remove any entered MAC address.

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DIR-505 // AP

SETUP ADVANCED MAINTENANCE STATUS HELP

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

WIRELESS ACCESS SETTINGS

Configure MAC Filtering below:

Turn MAC Filtering OFF

MAC Address		Wireless Client List	
00:00:00:00:00:00	<<	MAC Address	Clear
00:00:00:00:00:00	<<	MAC Address	Clear
00:00:00:00:00:00	<<	MAC Address	Clear
00:00:00:00:00:00	<<	MAC Address	Clear
00:00:00:00:00:00	<<	MAC Address	Clear
00:00:00:00:00:00	<<	MAC Address	Clear

WIRELESS

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Helpful Hints...

Create a list of MAC address that you would either like to allow or deny access to your network.

Select a MAC address from the drop down menu, then click the arrow to add that MAC address to the list.

Click the **Clear** button to remove the MAC address from the MAC Filtering list.

Advanced Wireless

This screen allows you to set various advanced wireless settings of your DIR-505. Unless you are experiencing specific problems, it is recommended that you leave these settings at their default values. After making your changes, click the **Save Settings** button.

Transmit Power: Use the dropdown box to set the transmit power of the antennas.

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

Short GI: Check this box to reduce the guard interval time therefore increasing the data capacity. However, this may create a less reliable connection and may create higher data loss.

IGMP Snooping: Tick this checkbox to enable this feature.

WLAN Partition: This enables 802.11d operation. 802.11d is a wireless specification developed to allow implementation of wireless networks in countries that cannot use the 802.11 standard. This feature should only be enabled if you are in a country that requires it.

HT 20/40 Coexistence: Tick this checkbox to enable this feature.

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DIR-505 // AP

SETUP ADVANCED MAINTENANCE STATUS HELP

MAC ADDRESS FILTER

ADVANCED WIRELESS

WI-FI PROTECTED SETUP

USER LIMIT

ADVANCED WIRELESS

These options are for users that wish to change the behaviour of their 802.11n wireless radio from the standard setting. D-Link does not recommend changing these settings from the factory default. Incorrect settings may impair the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.

Save Settings Don't Save Settings

ADVANCED WIRELESS SETTINGS

Transmit Power : 100%

WMM Enable : ☒

Short GI : ☒

IGMP Snooping : ☒

WLAN Partition : ☐

HT20/40 Coexistence : ☒ Enable ☐ Disable

WIRELESS

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Helpful Hints...

Advanced Wireless: It is recommended that you leave these options at their default values. Adjusting them could negatively impact the performance of your wireless network. The options on this page should be changed by advanced users or if you are instructed to by one of our support personnel, as they can negatively affect the performance of your Access Point if configured improperly.

Transmit Power: You can lower the output power of the DIR-505 by selecting lower percentage Transmit Power values from the drop down. Your choices are: 100%, 75%, 50%, and 25%.

Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) System is a simplified way to set up the basic settings of the DIR-505. It can also be used to automatically create a secure wireless connection to a wireless client. After making your changes, click the **Save Settings** button.

Enable: Check this box to enable the WPS functions of the DIR-505.

Disable WPS PIN Method: Disabling this will disable the WPS PIN method of connection and configuration. If you want to reconfigure the router using the WPS PIN method, click on the **Reset to Unconfigured** button. You will still be able to add wireless clients through WPS.

PIN Settings: Shows the router's current PIN. You can reset it to the default value by clicking on the **Reset PIN to Default** button, or you can create a new PIN number by clicking on the **Generate New PIN** button.

Add Wireless Station: Here, you can click on the **Add Wireless Device With WPS** button to go through a wizard that helps you connect other devices through WPS.

The screenshot shows the D-Link DIR-505 Advanced Setup page. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains links for MAC ADDRESS FILTER, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, and USER LIMIT. The main content area is titled 'WI-FI PROTECTED SETUP' and contains the following sections:

- WI-FI PROTECTED SETUP**: A text box explaining that WPS is used to easily add devices to a network using a PIN or button press. It states that devices must support WPS and that the PIN will be used in the following process. It also notes that clicking 'Don't Save Settings' will not reset the PIN. Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'.
- WI-FI PROTECTED SETUP**: A section with two checkboxes: 'Enable' (checked) and 'Disable WPS-PIN Method' (checked). Below these checkboxes is a 'Reset to Unconfigured' button.
- PIN SETTINGS**: A section showing the 'Current PIN: 57893402'. Below this are two buttons: 'Reset PIN to Default' and 'Generate New PIN'.
- ADD WIRELESS STATION**: A section with a single button: 'Add Wireless Device With WPS'.

On the right side of the page, there is a 'Helpful Hints...' section with the following text: 'Enable if other wireless devices you wish to include in the local network support Wi-Fi Protected Setup. Click Add Wireless Device Wizard to use Wi-Fi Protected Setup to add wireless devices to the wireless network.'

The footer of the page displays 'WIRELESS' and 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

User Limit

You can limit the number of wireless clients that can connect to your wireless network. Doing so can help prevent the DIR-505 from being overloaded trying to provide service to too many clients, and helps ensure your wireless network runs smoothly. After making your changes, click the **Save Settings** button.

Enable User Limit: Check this box to enable the User Limit feature.

User Limit (1-32): After enabling User Limits, enter the maximum number of wireless clients that can be connected to your wireless network. You can enter a number from 1 to 32.

The screenshot shows the D-Link DIR-505 AP web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists navigation options: DIR-505 // AP, MAC ADDRESS FILTER, ADVANCED WIRELESS, WIRELESS PROTECTED SETUP, and USER LIMIT. The main content area is titled 'USER LIMIT SETTINGS' and contains the following text: 'Please Apply the settings to limit how many wireless stations connecting to AP.' Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'. Further down, there is a section titled 'USER LIMIT SETTINGS' with two fields: 'Enable User Limit' with a checkbox and 'User Limit(1 - 32)' with a text input field containing the value '0'. A 'WIRELESS' section is visible at the bottom of the main content area. On the right side, there is a 'Helpful Hints...' section with text explaining the purpose of the User Limit feature.

DIR-505 // AP	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
MAC ADDRESS FILTER	USER LIMIT SETTINGS Please Apply the settings to limit how many wireless stations connecting to AP. Save Settings Don't Save Settings				Helpful Hints... User Limit can set a limit upon the number of wireless clients. Using user limit, you can prevent scenarios where the DIR-505 in your network shows performance degradation because it is handling heavy wireless traffic.
ADVANCED WIRELESS					
WIRELESS PROTECTED SETUP					
USER LIMIT	USER LIMIT SETTINGS Enable User Limit : <input type="checkbox"/> User Limit(1 - 32) : 0				
WIRELESS					

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Maintenance Admin

This page will allow you to change the password for the administrator account for configuring the settings of the DIR-505. You can also turn on graphical authentication(CAPTCHA) on this page. After making your changes, click the **Save Settings** button.

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

Verify Password: Enter the same password that you entered in the previous textbox in order to confirm its accuracy.

Enable Graphical Authentication: Check to enable Graphical Authentication, or CAPTCHAs when logging in to the web UI of the DIR-505. This provides an extra layer of security by requiring you to enter a code that is displayed on-screen.

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DIR-505 // AP SETUP ADVANCED **MAINTENANCE** STATUS HELP

ADMINISTRATOR SETTINGS

Enter the new password in the "New Password" field and again in the next field to confirm. Click on "Save Settings" to execute the password change. The Password is case-sensitive, and can be made up of any keyboard characters. The new password must be between 0 and 15 characters in length.

Save Settings Don't Save Settings

PASSWORD

Please enter the same password into both boxes, for confirmation.

New Password :

Verify Password :

ADMINISTRATION

Enable Graphical Authentication : ☐

WIRELESS

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Helpful Hints...

Passwords:
For security reasons, it is recommended that you change the Password for the Administrator accounts. Be sure to write down the Passwords to avoid having to reset the AP in the event that they are forgotten.

System

This page allows you to save and restore your configuration, reset and reboot the DIR-505, and remove any added language packs.

Save Settings To Local Hard Drive: Clicking the **Save** button will allow you to save the current repeater configuration settings to a file on the hard disk of the computer you are using. 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 configuration settings. Click **Browse** to find a previously saved configuration file. Then, click the **Upload Settings** button to transfer those settings to the DIR-505.

Restore to Factory Default Settings: This option will restore all configuration settings back to the factory default settings. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save your current configuration settings, use the **Save** button above.

Note: Restoring the factory default settings will not reset the Wi-Fi Protected Status to Not Configured.

Reboot the Device: Click the **Reboot** button to reboot the repeater.

Remove Language Pack: If you have previously installed a Language Pack, you can remove it by clicking the Remove button.



Firmware

You can upgrade the firmware of the DIR-505 here. 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. Please check the D-Link support website for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from this site.

Firmware Upgrade: Click on **Check Now** to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade. Do not disconnect from the DIR-505 or power your computer or DIR-505 off during the upgrade process.

You can change the language of the web UI by uploading available language packs.

Browse: Download a language pack from the D-Link website. After you have downloaded the new language pack, click **Browse** to locate the language pack file on your hard drive. Click **Upload** to complete the language pack upgrade.

The screenshot displays the D-Link DIR-505 web interface. The top navigation bar includes 'DIR-505', 'AP', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The left sidebar lists 'ADMIN', 'SYSTEM', 'FIRMWARE', 'TIME', 'SYSTEM CHECK', and 'SCHEDULES'. The main content area is titled 'FIRMWARE' and contains the following sections:

- FIRMWARE**: A message stating 'There may be new firmware for your DIR-505 to improve functionality and performance. Click here to check for an upgrade on our support site.' It instructs users to click 'Browse' to find the firmware file on their local hard drive and 'Upload' to update it. A warning states: 'Do not update firmware through wireless network!!'
- FIRMWARE AND LANGUAGE PACK INFORMATION**: Displays 'Current Firmware Version : 1.00', 'Date : 2012/2/29', and 'Current Language Pack Version : No Language pack'. It includes a 'Check Online Now for Latest Firmware and Language pack Version : Check Now' button.
- FIRMWARE UPGRADE**: Contains a note: 'Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration from the Maintenance -> System screen.' It also states: 'To upgrade the firmware, your PC must have a wired connection to the access point. Enter the name of the firmware upgrade file, and click on the Upload button.' Below this is an 'Upload' section with a 'Choose File' button (labeled 'No file chosen') and an 'Upload' button.
- LANGUAGE PACK UPGRADE**: Similar to the firmware section, it has a 'Choose File' button (labeled 'No file chosen') and an 'Upload' button.

On the right side, there is a 'Helpful Hints...' section titled 'Firmware Updates:' which explains that updates are released periodically to improve functionality and add features, and advises users to check the support site for updates.

The bottom of the interface shows a 'WIRELESS' section and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Time

The Time page 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. Daylight Saving can also be configured to automatically adjust the time when needed. After making your changes, click the **Save Settings** button.

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

Enable Daylight Saving: To select Daylight Saving time manually, click the **Enable Daylight Saving** check box. Next use the drop-down menu to select a **Daylight Saving Offset** and then enter a start date and an end date for daylight saving time.

Enable NTP Server: NTP is short for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. Check this box to use a NTP server. This will only connect to a server on the Internet, not a local server.

NTP Server Used: Enter the NTP server or select one from the drop-down menu.

Date and Time: To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second and then click **Save Settings**. You can also click the **Copy Your Computer's Time Settings** button at the bottom of the screen.

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DIR-505 // AP

SETUP ADVANCED MAINTENANCE STATUS HELP

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 NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.

Save Settings Don't Save Settings

TIME CONFIGURATION

Current Time : Jan/01/2011 03:30:55

Time Zone : (GMT-08:00) Pacific Time (US/Canada), Tijuana

Enable Daylight Saving : ☐

Daylight Saving Offset : +1:00

Daylight Saving Dates :

	Month	Week	Day of Week	Time
DST start	Mar	3rd	Sun	1 am
DST End	Nov	2nd	Sun	1 am

AUTOMATIC TIME CONFIGURATION

Enable NTP Server : ☐

NTP Server Used : << Select NTP Server

SET THE DATE AND TIME MANUALLY

Date And Time : Year 2011 Month Jan Day 01

Hour 00 Minute 00 Second 00

Copy Your Computer's Time Settings

WIRELESS

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Helpful Hints...

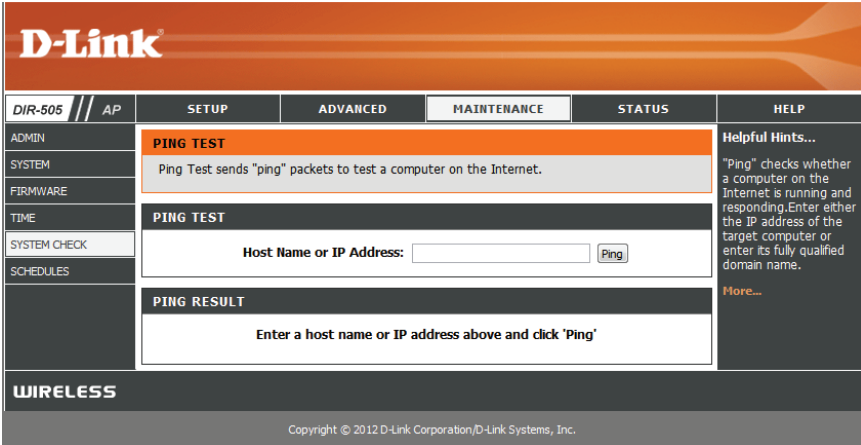
System Time Settings:
This section allows admins to configure, update, and maintain the correct time on the Access Point's internal system clock.

System Check

This page allows you to run a ping test to check your Internet connectivity.

The Ping Test is used to send ping packets to test if your DIR-505 is connected to the Internet. Enter the IP address that you wish to ping and click the **Ping** button.

The results of your ping attempts will be displayed here.



Schedules

You can create schedules for use with some of the features of the DIR-505, which will allow those features to be active during certain times of the day or week.

Name: Enter a name for your new schedule.

Days: Select a day, a range of days, or All Week to include every day of the week.

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

Save: After entering the details of your schedule, click the **Save** button to save your changes.

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

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DIR-505 // AP

SETUP ADVANCED MAINTENANCE STATUS HELP

SCHEDULES

The Schedule configuration option is used to manage schedule rules for wireless Lan control features.

ADD SCHEDULE RULE

Name :

Day(s) : ☐ All Week ☒ Select Day(s) :

☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat

All Day - 24 hrs : ☐

Time format :

Start Time : : (hour:minute)

End Time : : (hour:minute)

SCHEDULE RULES LIST

Name	Day(s)	Time Frame

Helpful Hints...

Schedules are used with a number of other features to define when those features are in effect.

Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 3:00pm to 9:00pm, might be called "After School".

Click **Save** to add a completed schedule to the list below.

Click the **Edit** icon to change an existing schedule.

Click the **Delete** icon to permanently delete a schedule.

WIRELESS

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Status

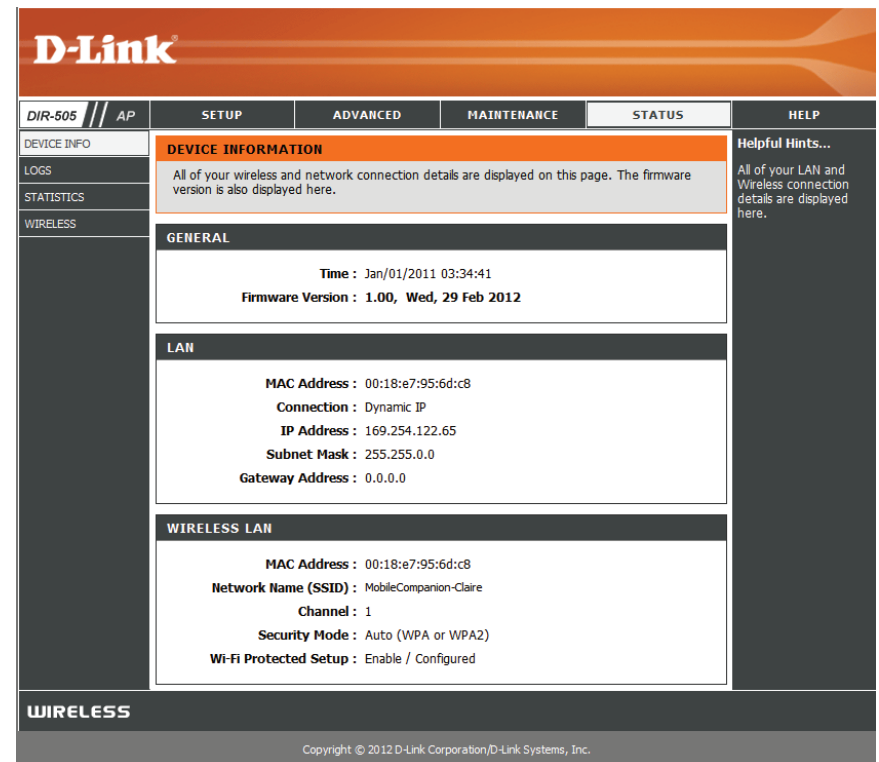
Device Info

This page displays the current information for the DIR-505. It will display the LAN and wireless LAN information.

General: Displays the 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.



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DIR-505 // AP	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
DEVICE INFO	DEVICE INFORMATION				Helpful Hints... All of your LAN and Wireless connection details are displayed here.
LOGS	All of your wireless and network connection details are displayed on this page. The firmware version is also displayed here.				
STATISTICS	GENERAL				
WIRELESS	<p>Time : Jan/01/2011 03:34:41</p> <p>Firmware Version : 1.00, Wed, 29 Feb 2012</p>				
	LAN				
	<p>MAC Address : 00:18:e7:95:6d:c8</p> <p>Connection : Dynamic IP</p> <p>IP Address : 169.254.122.65</p> <p>Subnet Mask : 255.255.0.0</p> <p>Gateway Address : 0.0.0.0</p>				
	WIRELESS LAN				
	<p>MAC Address : 00:18:e7:95:6d:c8</p> <p>Network Name (SSID) : MobileCompanion-Claire</p> <p>Channel : 1</p> <p>Security Mode : Auto (WPA or WPA2)</p> <p>Wi-Fi Protected Setup : Enable / Configured</p>				
WIRELESS					

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Logs

The DIR-505 keeps a running log of events and activities occurring on the DIR-505. If the DIR-505 is rebooted, the logs are automatically cleared.

Log Options: There are several types of logs that can be viewed: **System Activity**, **Debug Information**, **Attacks**, **Dropped Packets** and **Notice**.

First Page: This button directs you to the first page of the log.

Last Page: This button directs you to the last page of the log.

Previous: This button directs you to the previous page of the log.

Next: This button directs you to the next page of the log.

Clear: This button clears all current log content.

Save Log: This button opens dialog where you can save the current log to your hard drive.

Refresh: This button refreshes the log.

D-Link

DIR-505 // AP SETUP ADVANCED MAINTENANCE STATUS HELP

LOGS

Use this option to view the device logs. You can define what types of events you want to view and the event levels to view.

LOG OPTIONS

Log Type : ☒ System Activity ☐ Debug Information ☒ Attacks
☐ Dropped Packets ☒ Notice

[Apply Log Settings Now](#)

LOG DETAILS

[First Page](#) [Last Page](#) [Previous](#) [Next](#) [Clear](#) [Save Log](#)

[Refresh](#)

1/4

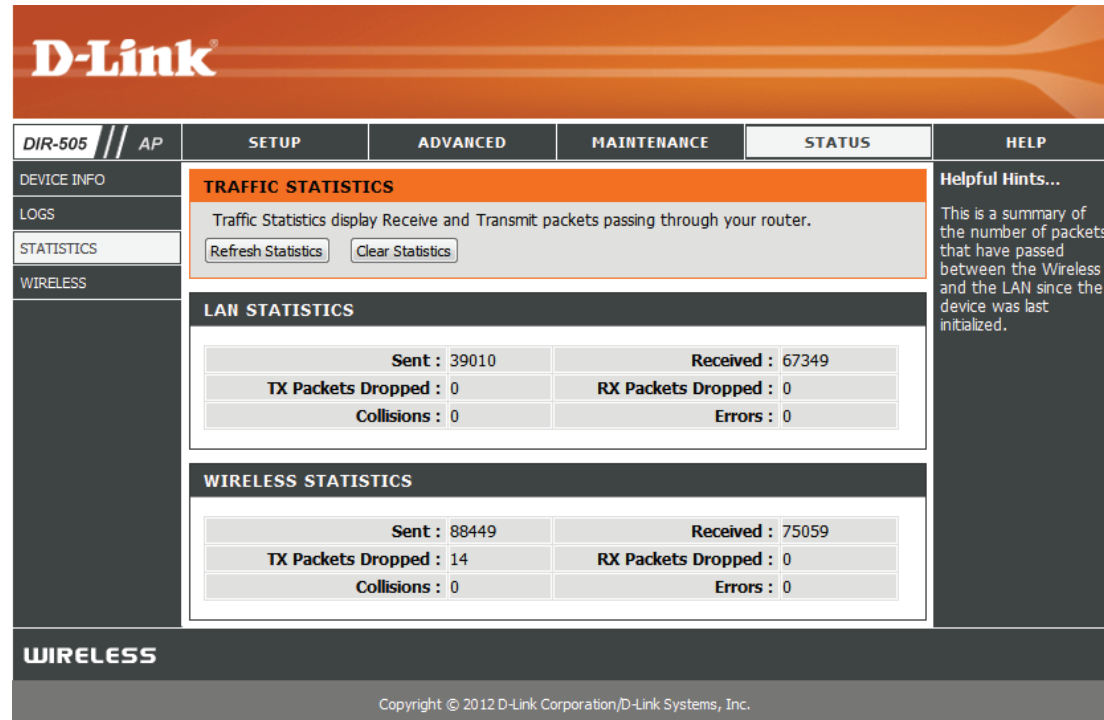
Time	Message
Jan 1 03:30:08	ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake c completed (RSN)
Jan 1 03:30:08	ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake c completed (RSN)
Jan 1 03:20:08	ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake c completed (RSN)
Jan 1 03:20:08	ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake c completed (RSN)
Jan 1 03:10:08	ath0: STA 28:e0:2c:dc:0a:be WPA: received EAPOL-Key 2/2 Group with unexpected replay counter
Jan 1 03:10:08	ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake c completed (RSN)
Jan 1 03:10:07	ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake c completed (RSN)
Jan 1 03:00:08	ath0: STA 28:e0:2c:dc:0a:be WPA: received EAPOL-Key 2/2 Group with unexpected replay counter
Jan 1 03:00:08	ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake c completed (RSN)
Jan 1 03:00:07	ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake c completed (RSN)

WIRELESS

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Statistics

The DIR-505 keeps statistics of the traffic that passes through it. You can view the amount of packets that pass through the LAN and wireless portions of the network. Click the **Refresh Statistics** button to update the information, or click the **Clear Statistics** button to reset all statistics. The traffic counter will reset if the DIR-505 is rebooted.



The screenshot shows the D-Link DIR-505 web interface. The top navigation bar includes the D-Link logo and tabs for DIR-505, AP, SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains links for DEVICE INFO, LOGS, STATISTICS (selected), and WIRELESS. The main content area is titled 'TRAFFIC STATISTICS' and includes a description: 'Traffic Statistics display Receive and Transmit packets passing through your router.' Below this are two buttons: 'Refresh Statistics' and 'Clear Statistics'. The 'LAN STATISTICS' section shows a table with the following data:

LAN STATISTICS	
Sent : 39010	Received : 67349
TX Packets Dropped : 0	RX Packets Dropped : 0
Collisions : 0	Errors : 0

The 'WIRELESS STATISTICS' section shows a table with the following data:

WIRELESS STATISTICS	
Sent : 88449	Received : 75059
TX Packets Dropped : 14	RX Packets Dropped : 0
Collisions : 0	Errors : 0

On the right side of the main content area, there is a 'Helpful Hints...' section with the text: 'This is a summary of the number of packets that have passed between the Wireless and the LAN since the device was last initialized.'

At the bottom of the page, there is a 'WIRELESS' section header and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Wireless

The wireless client table displays a list of current connected wireless clients. This table also displays the connection time and MAC address of the connected wireless clients.

DIR-505

AP

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

DEVICE INFO

LOGS

STATISTICS

WIRELESS

WIRELESS

The Wireless Client table below displays Wireless clients connected to the AP (Access Point). In Wireless Client mode it displays the connected AP's MAC address and connected Time.

NUMBER OF WIRELESS CLIENTS : 2

Connected Time	MAC Address
03:35:50	00:24:2c:2b:a7:dc
02:01:38	28:e0:2c:dc:0a:be

Helpful Hints...

Wireless
Displays connected client station main parameters, such as Connect Time and station MAC address. In AP Client mode it displays the connected AP's MAC address and connected Time.

WIRELESS

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Help

This screen gives you more information about the various parts of the configuration interface. Click on a link to learn more about that topic.

DIR-505

AP

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

MENU

HELP MENU

Setup

- Wizard
- Wireless Setup
- Lan Setup

Advanced

- MAC Address Filter
- Advanced Wireless
- Wi-Fi Protected Setup
- User limit

Maintenance

- Admin
- System
- Firmware
- Time
- System Check
- Schedules

Status

- Device Info
- Logs
- Statistics
- Wireless

Helpful Hints...

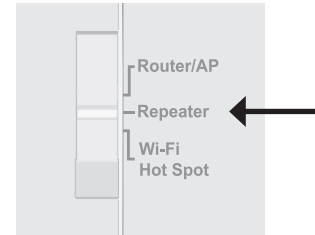
Click on the links for more informations of each section in the GUI.

WIRELESS

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Repeater Mode

This section describes the configuration interface for Repeater mode. Make sure that the mode selector switch is in the Repeater position on your DIR-505.



Setup

If you want to configure the Repeater Mode of the DIR-505 using a wizard, click **Setup Wizard**.

To configure your DIR-505 manually, click **Wireless Setup** to configure your wireless connection or click **LAN Setup** to configure the LAN options.

D-Link

DIR-505 Repeater

SETUP WIZARD

WIRELESS SETUP

LAN SETUP

WIRELESS

Use this section to configure the wireless settings for your D-Link Repeater. Please note that changes made on this section will also need to be duplicated to your wireless clients and PC.

Save Settings Don't Save Settings

WIRELESS NETWORK SETTINGS

Enable Wireless : ☒

Wireless Mode : Repeater Mode Site Survey

Wireless Network Name : dlink (Also called the SSID)

Channel Width : Auto 20/40 MHz

WIRELESS SECURITY MODE

Security Mode : None

WIFI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)

Enable : ☒

Process WPS

Helpful Hints...

Changing your Wireless Network Name is the first step in securing your wireless network. Change it to a familiar name that does not contain any personal information.

Enable Auto Channel Scan so that the Repeater can select the best possible channel for your wireless network to operate on.

Visibility Status is another way to secure your network. With invisible option enabled, no wireless clients will be able to see your wireless network when they perform scan to see what's available. In order for your wireless devices to connect to your Repeater, you will need to manually enter the Wireless Network Name on each device.

If you have enabled Wireless Security, make sure you write down the Key or Passphrase that you have configured. You will need to enter this information on any wireless device that you connect to your wireless network.

WIRELESS

Setup Wizard

This Wizard is designed to assist you in configuring your DIR-505 as an repeater.

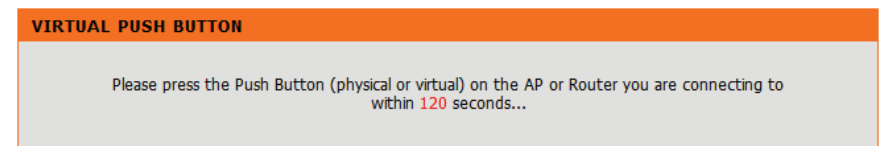
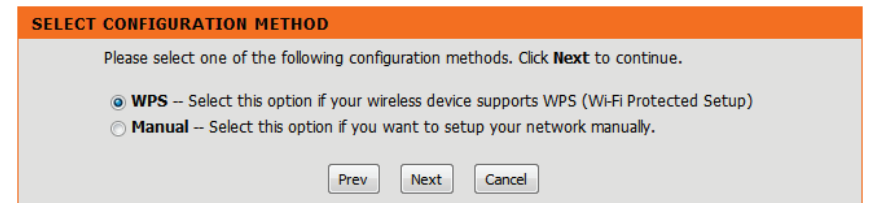
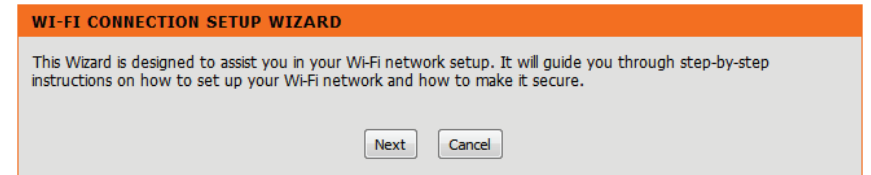
If this is the first time configuring your DIR-505, click **Next** to start the Setup Wizard.

Otherwise, click **Launch Wireless Setup Wizard** from the main menu.

Select **WPS** as the configuration method only if your wireless device supports Wi-Fi Protected Setup (WPS). For **Manual** setup, skip to the next page.

Click **Next** to continue.

Press the **WPS button** on the wireless device you are adding to your wireless network.



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

Click **Next** to continue.

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

Select the network you would like your device to connect to and click **Connect** to continue.

SELECT CONFIGURATION METHOD

Please select one of the following configuration methods. 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

SELECT WI-FI NETWORK

Scanning for available Wi-Fi network...

Prev

Next

Cancel

SELECT WI-FI NETWORK					
ID	Wi-Fi Network Name	Encrypt	Channel	Signal(%)	Select
1	Linksys Staples	WPA2-PSK	3	94	<input type="radio"/>
2	00265a493e08	WPA2-PSK	1	94	<input type="radio"/>
3	Cisco Staples	WPA/WPA2-PSK(auto)	1	94	<input type="radio"/>
4	CAMERA432	WPA/WPA2-PSK(auto)	3	94	<input type="radio"/>
5	DSR-500N_1	WPA2-PSK	6	94	<input type="radio"/>
6	mywirelessnetwork	WPA/WPA2-PSK(auto)	11	94	<input type="radio"/>
7	00265a493e1e	WPA2-PSK	11	94	<input type="radio"/>

Wireless Setup

Use this section to manually configure the wireless settings for your D-Link Repeater. After making your changes, click the **Save Settings** button.

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions. You may also set up a specific time range (schedule). Select a schedule from the drop-down menu or click **Add New** to create a new schedule.

Wireless Mode: Select **Repeater Mode** from the drop-down menu.

Site Survey: Scans for available Wi-Fi networks.

Wireless Network Name: When you are browsing for available wireless networks, this is the name that will appear in the list (unless Visibility Status is set to Invisible, see below). This name is also referred to as the SSID. For security purposes, it is highly recommended to change from the default network name.

Channel Width: Select the appropriate channel width between **20MHz** or **Auto 20/40MHz** from the drop-down menu.

Security Mode: Select **None**, **WEP**, or **WPA-Personal**. For security purposes, it is highly recommended that you set this to WPA-Personal.

D-Link

DIR-505 Repeater

SETUP ADVANCED MAINTENANCE STATUS HELP

SETUP WIZARD

WIRELESS SETUP

LAN SETUP

WIRELESS

Use this section to configure the wireless settings for your D-Link Repeater. Please note that changes made on this section will also need to be duplicated to your wireless clients and PC.

Save Settings Don't Save Settings

WIRELESS NETWORK SETTINGS

Enable Wireless : ☒

Wireless Mode : Repeater Mode Site Survey

Wireless Network Name : dlink (Also called the SSID)

Channel Width : Auto 20/40 MHz

WIRELESS SECURITY MODE

Security Mode : None

WIFI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)

Enable : ☒ Process WPS

Helpful Hints...

Changing your Wireless Network Name is the first step in securing your wireless network. Change it to a familiar name that does not contain any personal information.

Enable Auto Channel Scan so that the Repeater can select the best possible channel for your wireless network to operate on.

Visibility Status is another way to secure your network. With invisible option enabled, no wireless clients will be able to see your wireless network when they perform scan to see what's available. In order for your wireless devices to connect to your Repeater, you will need to manually enter the Wireless Network Name on each device.

If you have enabled Wireless Security, make sure you write down the Key or Passphrase that you have configured. You will need to enter this information on any wireless device that you connect to your wireless network.

WIRELESS

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If you select **WEP** as your Security Mode:

WEP Key Select an encryption level and key length to use. This will
Length: also set the type and length of the key you will need to enter.

WEP Key: Enter the password(key) for your wireless network. It will
 need to match the requirements for the WEP Key Length
 selected above.

Authentication: Choose what Authentication type to use.

WIRELESS SECURITY MODE

Security Mode : WEP

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.

If you choose the WEP security option this device will **ONLY** operate in **Legacy Wireless mode (802.11B/G)**. This means you will **NOT** get 11N performance due to the fact that WEP is not supported by the Draft 11N specification.

WEP Key Length : 64 bit (10 hex digits) (length applies to all keys)

WEP Key 1 :

Authentication : Both

If you select **WPA-Personal** as your Security Mode:

WPA Mode: Select whether to use **WPA**, **WPA2**, or both **WPA and WPA2**
 for your wireless network..

Cipher Type: Choose whether to use **TKIP**, **AES**, or both **TKIP and AES**
 ciphers for your wireless network.

Pre-Shared Key: Enter the password(key) for your wireless network.

WIRELESS SECURITY MODE

Security Mode : WPA-Personal

WPA

Use **WPA or WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2 Only** mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use **WPA Only**. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).

WPA Mode : Auto (WPA or WPA2)

Cipher Type : TKIP and AES

PRE-SHARED KEY

Enter an 8 to 63 character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key :

LAN Setup

This section will allow you to change the local network settings of the DIR-505. After making your changes, click the **Save Settings** button.

Device Name: Enter the Device Name of the DIR-505. It is recommended that you change the Device Name if there is more than one D-Link device in your subnet.

LAN Connection Type: Use the drop-down menu to select the LAN Connection Type to use.

Select Dynamic IP (DHCP) to automatically obtain an IP address on the LAN/private network.

Select Static IP Address if all the Internet port's IP information is provided to you by your ISP.

If you choose DHCP as your connection type:

IP Address: Enter the IP address of the access point. The default IP address is 192.168.0.1. If you change the IP address, once you click **Apply**, 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 assigned by your ISP.

Gateway Address: Enter the Gateway assigned by your ISP.

The screenshot shows the D-Link DIR-505 Repeater Setup Wizard. The 'NETWORK SETTINGS' tab is selected. The page includes a sidebar with navigation options: SETUP WIZARD, WIRELESS SETUP, and LAN SETUP. The main content area is titled 'NETWORK SETTINGS' and contains instructions for configuring internal network settings. It includes a 'DEVICE NAME' section with a text input field containing 'dlinkrouter'. Below that is the 'LAN IPV4 CONNECTION TYPE' section, which has a dropdown menu set to 'Dynamic IP (DHCP)'. The 'DYNAMIC IP(DHCP) LAN IPV4 CONNECTION TYPE' section is expanded, showing fields for 'IP Address' (192.168.0.1), 'Subnet Mask' (255.255.255.0), 'Gateway Address' (0.0.0.0), 'Primary DNS Server' (0.0.0.0), and 'Secondary DNS Server' (0.0.0.0). A 'Save Settings' button is visible at the top of the main content area. On the right side, there is a 'Helpful Hints...' section with additional information about device naming and LAN settings.

If you choose Static IP as your connection type:

IP Address: Enter the IP address the DIR-505 should use. The default IP address is 192.168.0.1. If you change the IP address, once you click **Apply**, 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 assigned by your ISP.

Gateway Address: Enter the Gateway assigned by your ISP.

Primary DNS Server: Enter the Primary DNS Server's IP address assigned by your ISP.

Secondary DNS Server: Enter the Secondary DNS Server's IP address assigned by your ISP.

LAN IPV4 CONNECTION TYPE

Choose the IPv4 mode to be used by the Repeater.

My LAN Connection is :

STATIC IP ADDRESS LAN IPV4 CONNECTION TYPE

Enter the static address Information.

IP Address :	<input type="text" value="192.168.0.1"/>
Subnet Mask :	<input type="text" value="255.255.255.0"/>
Gateway Address :	<input type="text" value="0.0.0.0"/>
Primary DNS Server :	<input type="text" value="0.0.0.0"/>
Secondary DNS Server :	<input type="text" value="0.0.0.0"/>

Advanced Advanced Wireless

This screen allows you to set various advanced wireless settings of your DIR-505. Unless you are experiencing specific problems, it is recommended that you leave these settings at their default values. After making your changes, click the **Save Settings** button.

Transmit Power: Sets the transmit power of the antennas.

HT 20/40 Coexistence: Check to enable or disable this feature.

D-Link

DIR-505 Repeater

SETUP ADVANCED MAINTENANCE STATUS HELP

ADVANCED WIRELESS

ADVANCED WIRELESS

These options are for users that wish to change the behaviour of their 802.11n wireless radio from the standard setting. D-Link does not recommend changing these settings from the factory default. Incorrect settings may impair the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.

Save Settings Don't Save Settings

ADVANCED WIRELESS SETTINGS

Transmit Power : 100% ▼

HT20/40 Coexistence : ☒ Enable ☐ Disable

Helpful Hints...

Advanced Wireless:
It is recommended that you leave these options at their default values. Adjusting them could negatively impact the performance of your wireless network. The options on this page should be changed by advanced users or if you are instructed to by one of our support personnel, as they can negatively affect the performance of your Repeater if configured improperly.

Transmit Power:
You can lower the output power of the DIR-505 by selecting lower percentage Transmit Power values from the drop down. Your choices are: 100%, 75%, 50%, and 25%.

WIRELESS

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Wi-Fi Protected Setup

Wi-Fi Protected Setup (WPS) System is a simplified way to set up the basic settings of the DIR-505. It can also be used to automatically create a secure wireless connection to a wireless client. After making your changes, click the **Save Settings** button.

Enable: Check this box to enable the WPS functions of the DIR-505.

Disable WPS PIN Method: Disabling this will disable the WPS PIN method of connection and configuration. If you want to reconfigure the router using the WPS PIN method, click on the **Reset to Unconfigured** button. You will still be able to add wireless clients through WPS.

PIN Settings: Shows the router's current PIN. You can reset it to the default value by clicking on the **Reset PIN to Default** button, or you can create a new PIN number by clicking on the **Generate New PIN** button.

Add Wireless Station: Here, you can click on the **Add Wireless Device With WPS** button to go through a wizard that helps you connect other devices through WPS.

The screenshot shows the D-Link DIR-505 Repeater web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar shows 'ADVANCED WIRELESS' and 'WI-FI PROTECTED SETUP'. The main content area is titled 'WI-FI PROTECTED SETUP' and contains the following sections:

- WI-FI Protected Setup**: A text box explaining the WPS process, including instructions on PIN changes and saving settings. It includes 'Save Settings' and 'Don't Save Settings' buttons.
- WI-FI PROTECTED SETUP**: A section with 'Enable' (checked) and 'Disable WPS-PIN Method' (unchecked) checkboxes. A 'Reset to Unconfigured' button is present.
- PIN SETTINGS**: Displays the 'Current PIN' as 30280304. It includes 'Reset PIN to Default' and 'Generate New PIN' buttons.
- ADD WIRELESS STATION**: Contains an 'Add Wireless Device With WPS' button.

On the right side, there is a 'Helpful Hints...' section with additional instructions on enabling WPS and using the Add Wireless Device Wizard.

Maintenance Admin

This page will allow you to change the password for the administrator account for configuring the settings of the DIR-505. You can also turn on graphical authentication(CAPTCHA) on this page. After making your changes, click the **Save Settings** button.

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

Verify Password: Enter the same password that you entered in the previous textbox in order to confirm its accuracy.

Enable Graphical Authentication: Check to enable Graphical Authentication, or CAPTCHA when logging in to the web UI of the DIR-505. This provides an extra layer of security by requiring you to enter a code that is displayed on-screen.

D-Link

DIR-505 // Repeater

SETUP ADVANCED **MAINTENANCE** STATUS HELP

ADMIN
SYSTEM
FIRMWARE
TIME

ADMINISTRATOR SETTINGS

Enter the new password in the "New Password" field and again in the next field to confirm. Click on "Save Settings" to execute the password change. The Password is case-sensitive, and can be made up of any keyboard characters. The new password must be between 0 and 15 characters in length.

Save Settings Don't Save Settings

PASSWORD

Please enter the same password into both boxes, for confirmation.

New Password :

Verify Password :

ADMINISTRATION

Enable Graphical Authentication : ☐

WIRELESS

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Helpful Hints...

Passwords:
For security reasons, it is recommended that you change the Password for the Administrator accounts. Be sure to write down the Passwords to avoid having to reset the Repeater in the event that they are forgotten.

System

This page allows you to save and restore your configuration, reset and reboot the DIR-505, and remove any added language packs.

Save Settings To Local Hard Drive: Clicking the **Save** button will allow you to save the current repeater configuration settings to a file on the hard disk of the computer you are using. You will then see a file dialog where you can select a location and file name for the settings.

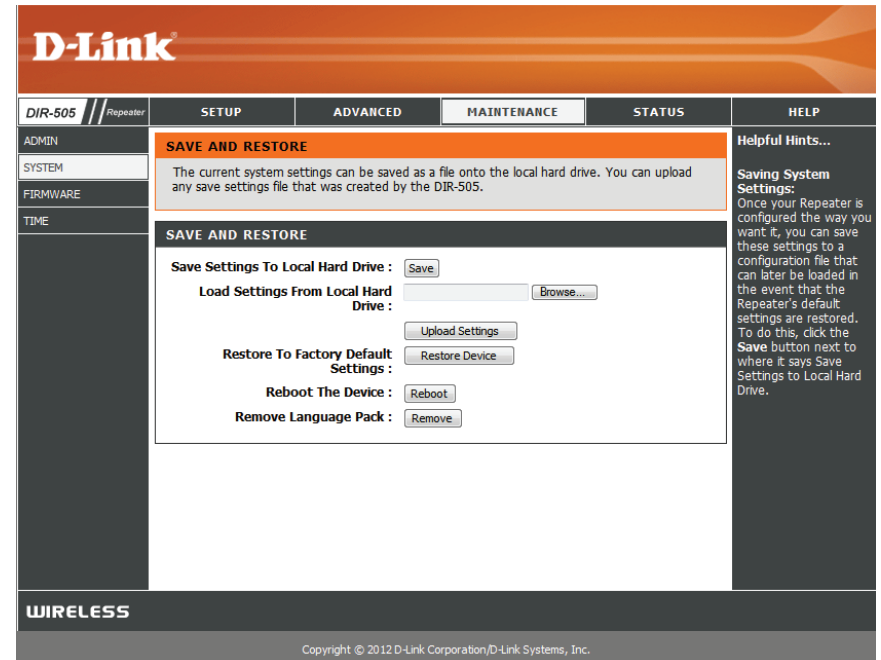
Load Settings From Local Hard Drive: Use this option to load previously saved configuration settings. Click **Browse** to find a previously saved configuration file. Then, click the **Upload Settings** button to transfer those settings to the DIR-505.

Restore to Factory Default Settings: This option will restore all configuration settings back to the factory default settings. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save your current configuration settings, use the **Save** button above.

Note: Restoring the factory default settings will not reset the Wi-Fi Protected Status to Not Configured.

Reboot the Device: Click the **Reboot** button to reboot the repeater.

Remove Language Pack: If you have previously installed a Language Pack, you can remove it by clicking the Remove button.



Firmware

You can upgrade the firmware of the DIR-505 here. 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. Please check the D-Link support website for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from this site.

Firmware Upgrade: Click on **Check Now** to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade. Do not disconnect from the DIR-505 or power your computer or DIR-505 off during the upgrade process.

You can change the language of the web UI by uploading available language packs.

Browse: Download a language pack from the D-Link website. After you have downloaded the new language pack, click **Browse** to locate the language pack file on your hard drive. Click **Upload** to complete the language pack upgrade.

The screenshot shows the D-Link DIR-505 Repeater web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists ADMIN, SYSTEM, FIRMWARE, and TIME. The main content area is titled 'FIRMWARE' and contains the following sections:

- FIRMWARE:** A message stating there may be new firmware for the DIR-505 to improve functionality and performance. It includes a link to check for updates on the support site and instructions to click 'Browse' to find the firmware file on the local hard drive. A warning states: 'Do not update firmware through wireless network!!'.
- FIRMWARE AND LANGUAGE PACK INFORMATION:** Displays the current firmware version (1.00) and date (2012/2/16), and the current language pack version (No Language pack). It includes a 'Check Now' button and a link to check for the latest versions.
- FIRMWARE UPGRADE:** Contains a note that some firmware upgrades reset configuration options to factory defaults, advising users to save the current configuration from the Maintenance -> System screen. It also states that the PC must have a wired connection to the Repeater. The section includes an 'Upload' field with a 'Browse...' button and an 'Upload' button.
- LANGUAGE PACK UPGRADE:** Similar to the firmware upgrade section, it includes an 'Upload' field with a 'Browse...' button and an 'Upload' button.

The bottom of the interface shows the 'WIRELESS' section and a copyright notice: Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.

Time

The Time page 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. Daylight Saving can also be configured to automatically adjust the time when needed. After making your changes, click the **Save Settings** button.

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

Enable Daylight Saving: To select Daylight Saving time manually, click the **Enable Daylight Saving** check box. Next use the drop-down menu to select a **Daylight Saving Offset** and then enter a start date and an end date for daylight saving time.

Enable NTP Server: NTP is short for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. Check this box to use a NTP server. This will only connect to a server on the Internet, not a local server.

NTP Server Used: Enter the NTP server or select one from the drop-down menu.

Date and Time: To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second and then click **Save Settings**. You can also click the **Copy Your Computer's Time Settings** button at the bottom of the screen.

The screenshot displays the D-Link DIR-505 Repeater's web interface, specifically the 'TIME' configuration page. The interface is divided into several sections:

- Header:** D-Link logo and navigation tabs: SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP.
- Left Sidebar:** A menu with options: ADMIN, SYSTEM, FIRMWARE, and TIME (which is currently selected).
- Main Content Area:**
 - TIME:** A section with a description of the Time Configuration option and two buttons: 'Save Settings' and 'Don't Save Settings'.
 - TIME CONFIGURATION:** A section containing:
 - Current Time:** Jan/01/2011 00:05:29
 - Time Zone:** A dropdown menu showing '(GMT-08:00) Pacific Time (US/Canada), Tijuana'.
 - Enable Daylight Saving:** A checkbox that is currently unchecked.
 - Daylight Saving Offset:** A dropdown menu showing '+1:00'.
 - Daylight Saving Dates:** A section with two rows of settings:
 - DST start:** Month (Mar), Week (3rd), Day of Week Time (Sun, 1 am).
 - DST End:** Month (Nov), Week (2nd), Day of Week Time (Sun, 1 am).
 - AUTOMATIC TIME CONFIGURATION:** A section with:
 - Enable NTP Server:** A checkbox that is currently unchecked.
 - NTP Server Used:** A text input field followed by a dropdown menu labeled '<< Select NTP Server'.
 - SET THE DATE AND TIME MANUALLY:** A section with:
 - Date And Time:** Fields for Year (2011), Month (Jan), Day (01), Hour (00), Minute (00), and Second (00).
 - Copy Your Computer's Time Settings:** A button at the bottom of this section.
- Right Sidebar:** A section titled 'Helpful Hints...' with a sub-section 'System Time Settings' explaining that this section allows administrators to configure, update, and maintain the correct time on the Repeater's internal system clock.

Status

Device Info

This page displays the current information for the DIR-505. It will display the LAN and wireless LAN information.

General: Displays the 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.

Logs

The DIR-505 keeps a running log of events and activities occurring on the DIR-505. If the DIR-505 is rebooted, the logs are automatically cleared.

Log Options: There are several types of logs that can be viewed: **System Activity, Debug Information, Attacks, Dropped Packets** and **Notice**.

First Page: This button directs you to the first page of the log.

Last Page: This button directs you to the last page of the log.

Previous: This button directs you to the previous page of the log.

Next: This button directs you to the next page of the log.

Clear: This button clears all current log content.

Save Log: This button opens dialog where you can save the current log to your hard drive.

Refresh: This button refreshes the log.

The screenshot displays the D-Link DIR-505 Repeater web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar shows options for DEVICE INFO, LOGS, and STATISTICS. The main content area is titled 'LOGS' and contains a description: 'Use this option to view the device logs. You can define what types of events you want to view and the event levels to view.'

Below this is the 'LOG OPTIONS' section, which allows users to select log types using checkboxes:

- Log Type:**
 - ☒ System Activity
 - ☐ Debug Information
 - ☒ Attacks
 - ☐ Dropped Packets
 - ☒ Notice

 An 'Apply Log Settings Now' button is located below these options.

The 'LOG DETAILS' section shows a table of log entries. Navigation buttons (First Page, Last Page, Previous, Next, Clear, Save Log, Refresh) are provided above the table. The table has two columns: 'Time' and 'Message'. The log shows several entries related to IPv4 address registration and mDNS interface changes on Jan 1 00:05:07 and Jan 1 00:04:59.

At the bottom of the interface, there is a 'WIRELESS' section and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Statistics

The DIR-505 keeps statistics of the traffic that passes through it. You can view the amount of packets that pass through the LAN and wireless portions of the network. Click the **Refresh Statistics** button to update the information, or click the **Clear Statistics** button to reset all statistics. The traffic counter will reset if the DIR-505 is rebooted.

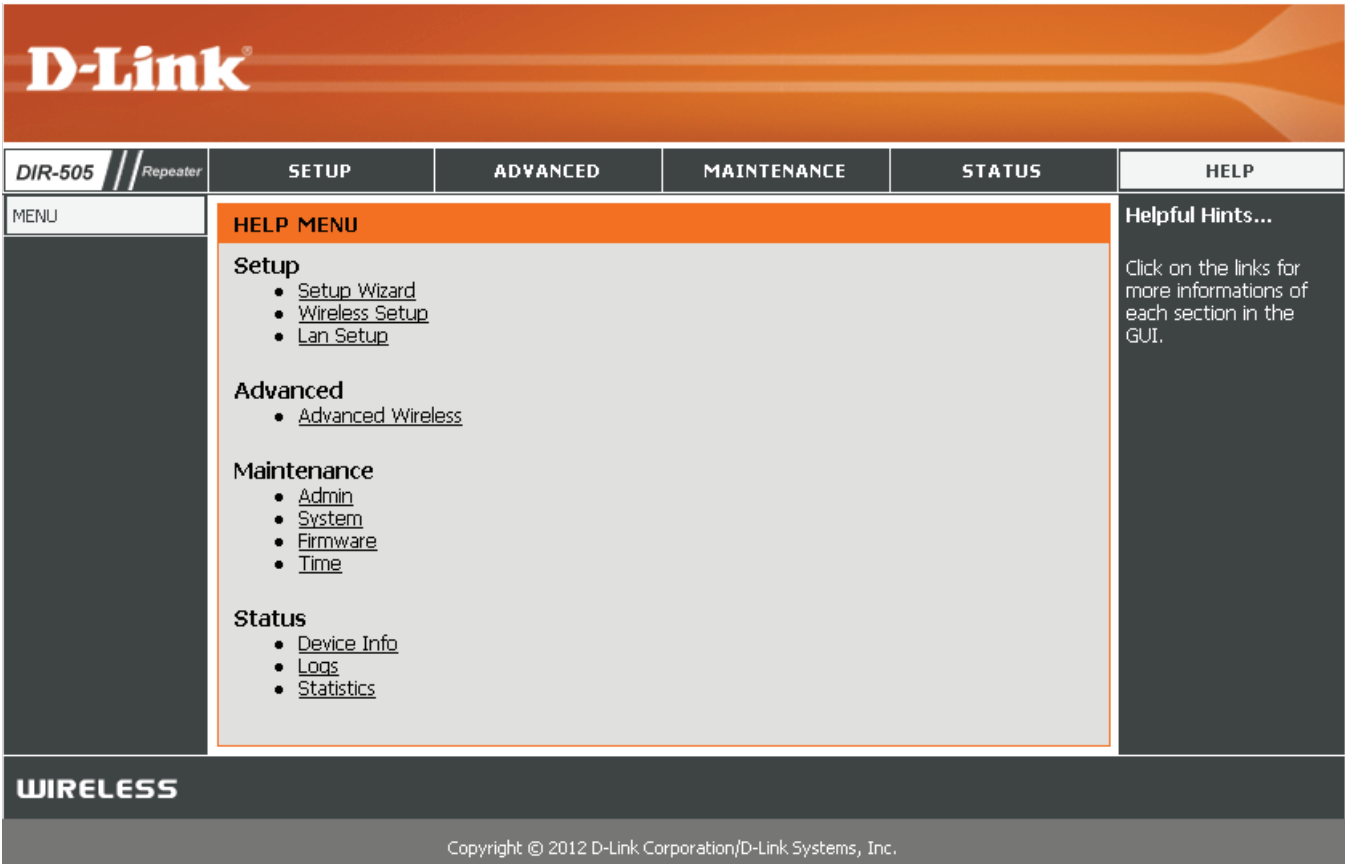
The screenshot displays the D-Link DIR-505 Repeater web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar shows a menu with DEVICE INFO, LOGS, and STATISTICS. The main content area is titled 'TRAFFIC STATISTICS' and contains a description: 'Traffic Statistics display Receive and Transmit packets passing through your router.' Below this are two buttons: 'Refresh Statistics' and 'Clear Statistics'. The interface also shows 'LAN STATISTICS' and 'WIRELESS STATISTICS' sections, each with a table of metrics. A 'Helpful Hints...' section on the right provides additional context. The footer includes the 'WIRELESS' label and a copyright notice.

LAN STATISTICS	
Sent : 5707	Received : 3433
TX Packets Dropped : 0	RX Packets Dropped : 0
Collisions : 0	Errors : 0

WIRELESS STATISTICS	
Sent : 290	Received : 0
TX Packets Dropped : 620	RX Packets Dropped : 0
Collisions : 0	Errors : 0

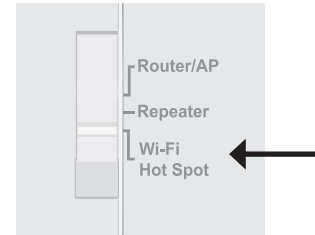
Help

This screen gives you more information about the various parts of the configuration interface. Click on a link to learn more about that topic.



Wi-Fi Hot Spot Mode

This section describes the configuration interface for Wi-Fi Hot Spot mode. Make sure that the mode selector switch is in the Wi-Fi Hot Spot position on your DIR-505.



Setup Quick Setup Wizard

If this is your first time using this device, you will be directed to the Pre-Setup Wizard. If you have already completed the Pre-Setup Wizard, please continue to page 116.

Enter **Admin** in the User Name field. Leave the password blank by default.

Click **Next** to continue.

Please wait while your device scans for an available Wi-Fi Network.

LOGIN

Log in to the HotSpot:

User Name :

Password :

WI-FI CONNECTION SETUP WIZARD

This Wizard is designed to assist you in your Wi-Fi network setup. It will guide you through step-by-step instructions on how to set up your Wi-Fi network and how to make it secure.

SELECT WI-FI NETWORK

Scanning for available Wi-Fi network...

Select the Network you would like your device to connect to and click **Connect**.

SELECT WI-FI HOTSPOT

ID	Wi-Fi Network Name	Encrypt	Channel	Signal(%)	Select
1	DHP-W306AV	WPA/WPA2-PSK(auto)	8	94	<input type="radio"/>
2	dlink_DHP-1565	WPA/WPA2-PSK(auto)	6	94	<input type="radio"/>
3	LoudFish	WPA/WPA2-PSK(auto)	11	94	<input type="radio"/>
4	LoudFish-guest	None	11	94	<input type="radio"/>
5	irvine2	WPA/WPA2-PSK(auto)	6	82	<input type="radio"/>
6	ATT720	WPA/WPA2-PSK(auto)	1	3	<input type="radio"/>

Enter the Wi-Fi password and click **Next** to continue.

ENTER WI-FI PASSWORD

Please enter Wi-Fi Password to establish wireless connection

Wi-Fi Password:

Select **Use the same Wi-Fi Network name for the extended Network** and click **Next**.

If you want to use a different wireless network name and password, untick the checkbox and enter the network name and password you want to use.

PLEASE ENTER THE SETTINGS FOR THE EXTENDER NETWORK

☒ Use the same Wi-Fi Network Name for the Extended Network

Give your Extended Wi-Fi network a name.

Extended Wi-Fi Network Name (SSID):
 (Using up to 32 characters)

Give your Extended Wi-Fi network a password.

Wi-Fi Password:
 (Between 8 and 63 characters)

Your setup is now complete. Click **Save** to finish.

SETUP COMPLETE!

Please take a note of the following summary of your Wi-Fi Security settings for future reference.

Wi-Fi Network Name (SSID) : D-Link

Extended Wi-Fi Network Name (SSID) : MobileCompanion-Claire

Wi-Fi Password : 0509duck

The Setup Wizard has completed. Click the Save button to save your settings and reboot the device.

Wi-Fi Hotspot Setup

The Wi-Fi Hotspot Setup page allows you to enter the settings of the Wi-Fi hotspot that the DIR-505 will connect to and share access to. Please note that this is different from the wireless network created by the DIR-505 that you will connect your devices to. After making your changes, click the **Save Settings** button.

Enable Wireless: Check the box to enable the Wi-Fi hotspot wireless connection. If this is disabled, the DIR-505 will not connect to an external hotspot, and will have no Internet connection source to share.

Wireless Mode: This will state **Wi-Fi Hot Spot Mode** when in Wi-Fi Hot Spot Mode. You can click the **Site Survey** button to look for available hotspots to connect to. Selecting a wireless network from the list that appears will automatically fill in the settings below.

Wi-Fi HotSpot Network Name: Enter the name of the Wi-Fi hotspot wireless network you want to connect the DIR-505 to. You can use the **Site Survey** button to fill this in automatically.

Channel Width: Select the appropriate channel width to use from the dropdown box. If you are not sure what to use, leave the setting on **Auto**.

Security Mode: Select the wireless encryption used by the Wi-Fi hotspot you are connecting to. You can use the **Site Survey** button to fill in most of the information automatically; you can then just enter the password(WEP Key or Pre-Shared Key) for the Wi-Fi hotspot.

D-Link

DIR-505 // HotSpot

SETUP ADVANCED MAINTENANCE STATUS HELP

SETUP WIZARD

WI-FI HOTSPOT SETUP

WIRELESS LAN SETUP

LAN SETUP

MEDIA SERVER

STORAGE

WI-FI HOTSPOT

Use this section to configure the Wi-Fi HotSpot settings for your D-Link Wi-Fi HotSpot. Please select a Wi-Fi HotSpot to join by click the Site Survey button and enter the password of the Wi-Fi HotSpot Network.

Save Settings Don't Save Settings

WI-FI HOTSPOT NETWORK SETTINGS

Enable Wireless : ☒

Wireless Mode : Wi-Fi HotSpot Mode Site Survey

Wi-Fi HotSpot Network Name : dlink (Also called the SSID)

Channel Width : Auto 20/40 MHz

WI-FI HOTSPOT SECURITY MODE

Security Mode : WEP

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.

If you choose the WEP security option this device will **ONLY** operate in **Legacy Wireless mode (802.11B/G)**. This means you will **NOT** get 11N performance due to the fact that WEP is not supported by the Draft 11N specification.

WEP Key Length : 64 bit (10 hex digits) (length applies to all keys)

WEP Key 1 :

Authentication : Both

INTERNET SETTINGS

This page is used to configure the parameters for Internet network which connects through the Wi-Fi HotSpot wirelessly. Here you may select the access method of DHCP in My Internet Connection Type.

My Internet Connection is : Dynamic IP (DHCP)

Host Name : DIR-505

MTU : 1500

Helpful Hints...

Changing your Wireless Network Name is the first step in securing your wireless network. Change it to a familiar name that does not contain any personal information.

Enable Auto Channel Scan so that the Access Point can select the best possible channel for your wireless network to operate on.

Visibility Status is another way to secure your network. With invisible option enabled, no wireless clients will be able to see your wireless network when they perform scan to see what's available. In order for your wireless devices to connect to your AP, you will need to manually enter the Wireless Network Name on each device.

If you have enabled Wireless Security, make sure you write down the Key or Passphrase that you have configured. You will need to enter this information on any wireless device that you connect to your wireless network.

Internet Settings Here, you can set the connection settings for the Wi-Fi hotspot. In most cases, you should not need to change any of the values from their default settings.

Wi-Fi Protected Setup: Tick this checkbox to enable connecting to a Wi-Fi hotspot through WPS. To use WPS to connect, click the **Process WPS** button, then press the WPS button on the Wi-Fi hotspot's router.

INTERNET SETTINGS

This page is used to configure the parameters for Internet network which connects through the Wi-Fi HotSpot wirelessly. Here you may select the access method of DHCP and PPPoE in My Internet Connection Type.

My Internet Connection is :

Host Name :

MTU :

☒ **Attain DNS Automatically**
☐ **Set DNS Manually**

MAC Address :

WIFI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)

Enable :
☒

Wireless LAN Setup

Use this section to configure the Wireless LAN settings for your D-Link router. This will configure the wireless network you will connect to with your PCs and devices. You can create a new Wi-Fi network name (SSID) for your local Wi-Fi network (WLAN), or use the same wireless network name (SSID) as the Wi-Fi hotspot the router is connecting to. After making your changes, click the **Save Settings** button.

Local Wi-Fi Network Set whether you want to use the same network name as the Wi-Fi hotspot the router is connected to (**Same as Wi-Fi Network Name: HotSpot Network Name**), or if you want to create a new network name to use (**Create a new Wi-Fi Network Name**).

Channel Width: Select whether to use **Auto 20/40 MHz** or **20 MHz** for the channel width. Normally, this should be left on **Auto 20/40 MHz**. If you are not using any 802.11n wireless clients, you can set this to **20 MHz**.

Visibility Status: This setting controls whether the router's wireless network name (SSID) will be broadcast so that wireless devices can scan for it. If you set it to **Invisible**, all wireless clients will need to enter the network name and security settings of your wireless network manually.

Security Mode: Select from the drop-down menu the type of security mode you would like to use.

WPA Mode: Select **Auto**, **WPA2 Only**, or **WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.

Cipher Type: Select **TKIP** and **AES**, **TKIP**, or **AES**.

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DIR-505 // HotSpot

SETUP WIZARD

WIRELESS LAN

Use this section to configure the wireless LAN settings for your D-Link Router. You can create a new Wi-Fi Network Name (SSID) for your Local Wi-Fi Network (WLAN) or use the same Wi-Fi Network Name (SSID) as the joined Wi-Fi HotSpot for your local Wi-Fi Network (WLAN). Please note that changes made on this section will also need to be duplicated to your wireless clients and PC.

Save Settings Don't Save Settings

LOCAL WI-FI NETWORK SETTINGS

Wi-Fi HotSpot Network Name : dlink

Local Wi-Fi Network Name : ☐ Same as Wi-Fi HotSpot Network Name ☒ Create a new Wi-Fi Network Name

dlink-708a

Channel Width : Auto 20/40 MHz

Visibility Status : ☒ Visible ☐ Invisible

LOCAL WI-FI SECURITY MODE

Security Mode : WPA-Personal

WPA

Use WPA or WPA2 mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use WPA2 Only mode. This mode uses AES (CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use WPA Only. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).

WPA Mode : Auto (WPA or WPA2)

Cipher Type : TKIP and AES

PRE-SHARED KEY

Enter an 8 to 63 character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key :

Helpful Hints...

Changing your Wireless Network Name is the first step in securing your wireless network. Change it to a familiar name that does not contain any personal information.

Enable Auto Channel Scan so that the Access Point can select the best possible channel for your wireless network to operate on.

Visibility Status is another way to secure your network. With invisible option enabled, no wireless clients will be able to see your wireless network when they perform scan to see what's available. In order for your wireless devices to connect to your AP, you will need to manually enter the Wireless Network Name on each device.

If you have enabled Wireless Security, make sure you write down the Key or Passphrase that you have configured. You will need to enter this information on any wireless device that you connect to your wireless network.

Pre-Shared Key: Enter a password to use for your wireless network.

Wi-Fi Protected Setup: Tick the Enable checkbox to enable use of WPS for wireless clients. You can then click the **Process WPS** button and the press the WPS button on your client to set up a connection.

PRE-SHARED KEY

Enter an 8 to 63 character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key :

WIFI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)

Enable : ☒

LAN Setup

This section will allow you to change the local network settings of the DIR-505 and to configure the DHCP settings. After making your changes, click the **Save Settings** button.

Device Name: Enter the Device Name of the DIR-505. It is recommended that you change the Device Name if there is more than one D-Link device in your subnet.

Dynamic IP (DHCP) LAN Connection Type: Here, you can edit the **IP Address**, **Subnet Mask**, and **Local Domain Name** for the DIR-505 to use.

DHCP Server Settings: Ticking the **Enable DHCP Server** checkbox allows the DIR-505 to assign IP addresses to the devices on your network. by using DHCP. You can set the range of allowable IP addresses using the **DHCP IP Address Range** text boxes, and you can set the **DHCP Lease Time** with the corresponding text box.

DIR-505 // HotSpot

SETUPADVANCEDMAINTENANCESTATUSHELP

SETUP WIZARDWI-FI HOTSPOT SETUPWIRELESS LAN SETUPLAN SETUPMEDIA SERVERSTORAGE

NETWORK SETTINGS

Use this section to configure the internal network settings of your AP.
Device Name allows you to configure this device more easily when your network using TCP/IP protocol. You can enter the device name of the AP into your web browser to access the instead of IP address for configuration. Recommend to change the device name if there're more than one D-Link devices within the subnet.
Save SettingsDon't Save Settings

DEVICE NAME

Device Name allows you to configure this device more easily. You can enter "http://"device name" into your web browser instead of IP address for configuration. (Default: http://dlinkrouter)
Device Name : dlinkrouter

DYNAMIC IP (DHCP) LAN CONNECTION TYPE

Enter the IPv4 Address Information.
IP Address : 192.168.0.1
Subnet Mask : 255.255.255.0
Local Domain Name :

DHCP SERVER SETTINGS

Use this section to configure the built-in DHCP Server to assign IP addresses to the computers on your network.
Enable DHCP Server : ☒
DHCP IP Address Range : 192.168.0.100 to 192.168.0.199
DHCP Lease Time : 1440 (minutes)

Helpful Hints...

Device Name:
Device Name allows you to configure this device more easily when your network using TCP/IP protocol. You can enter the device name of the AP into your web browser to access the device configuration. Recommend to change the device name if there're more than one D-Link devices within the network.

LAN Settings:
Also referred as private settings. LAN settings allow you to configure LAN interface of DIR-505. LAN IP address is private to your internal network and is not visible to Internet. The factory default setting is Dynamic IP (DHCP).

WIRELESS

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Media Server

This feature allows you to share music, pictures and videos with any devices connected to your network. After making your changes, click the **Save Settings** button.

Enable Media Server: Check this box to enable the media server feature.

Computer Name: Enter the media server's name.

The screenshot shows the D-Link DIR-505 web interface. The top navigation bar includes 'DIR-505 // HotSpot', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The left sidebar lists 'SETUP WIZARD', 'WI-FI HOTSPOT SETUP', 'WIRELESS LAN SETUP', 'LAN SETUP', 'MEDIA SERVER', and 'STORAGE'. The main content area is titled 'MEDIA SERVER' and contains the following text: 'Enable DLNA Media Server allows you to share media with DLNA certified devices. Any DLNA certified devices that connect to your network can play your shared music, pictures, and videos.' Below this is a note: 'Note: The shared media may not be secure. Allowing any devices to stream is recommended only on secure networks.' There are two buttons: 'Save Settings' and 'Don't Save Settings'. Further down, under the 'DLNA MEDIA SERVER' section, there is a checkbox for 'Enable DLNA Media Server' which is checked, and a text field for 'Media Server Name' with the value 'DIR-505'. The bottom of the page has a 'WIRELESS' section header and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Storage

This page will allow you to access files from a USB external hard drive or thumb drive that is plugged into the DIR-505 from your local network or from the Internet using either a web browser or the SharePort Mobile app for your smartphone or tablet. You can create users to customize access rights to the files stored on the USB drive. After making your changes, click the **Save Settings** button.

Enable Shareport Web Access: Tick this checkbox to enable sharing files stored on a USB storage drive connected to the DIR-505.

HTTP Access Port: Enter a port to use for HTTP web access to your files (8181 is the default). You will have to add this port to the IP address of the DIR-505 when connecting. For example: `http://192.168.0.1:8181`

HTTPS Access Port: Enter a port to use for HTTPS secure access to your files (4433 is the default). You will have to add this port to the IP address of the DIR-505 when connecting. For example: `https://192.168.0.1:4433`

Allow Remote Access: Check to enable remote access to your router's storage.

User Name: To create a new user, enter a user name. To edit an existing user, use the dropdown box to the right.

Password/Verify Password: Enter a password you want to use for the account, re-enter the password in the **Verify Password** text box, then click **Add/Edit** to save your changes.

User List: This section shows existing user accounts. There are **admin** and **guest** accounts by default.

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DIR-505 // HotSpot

SETUP ADVANCED MAINTENANCE STATUS HELP

SETUP WIZARD

WI-FI HOTSPOT SETUP

WIRELESS LAN SETUP

LAN SETUP

MEDIA SERVER

STORAGE

STORAGE

Share Port Web Access allows you to use a web browser to access files stored on a USB storage drive plugged into the router. To use this feature, check the **Enable SharePort Web Access** checkbox, then create user accounts to manage access to your storage devices or use the Guest account(guest/guest) to access the Guest Folder. After plugging in a USB storage drive, the new device will appear in the list with a link to it. You can then use this link to connect to the drive and log in with a user account.

Save Settings Don't Save Settings

SHAREPORT WEB ACCESS

Enable SharePort Web Access: ☒

HTTP Access Port: 8181

HTTPS Access Port: 4433

Allow Remote Access: ☐

10 -- USER CREATION

User Name: << User Name

Password:

Verify Password: Add/Edit Delete

USER LIST

No.	User Name	Access Path	Permission
1	admin	/	Read/Write
2	guest	None	Read Only

NUMBER OF DEVICES : 0

Device	Total Space	Free Space

SHAREPORT WEB ACCESS LINK

You can use this link to connect to the drive remotely after logging in with a user account.

WIRELESS

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Number of Devices: This section shows you information about the USB storage device plugged into the router.

SharePort Web Access Link This will give you a direct link to the web access interface that you can click on or copy and paste.

NUMBER OF DEVICES : 0

Device	Total Space	Free Space
--------	-------------	------------

SHAREPORT WEB ACCESS LINK

You can use this link to connect to the drive remotely after logging in with a user account.

Advanced MAC Address Filter

Use MAC (Media Access Control) Filters to control access to your network based on the MAC addresses of connected clients. You can set MAC address filtering to only allow the listed MAC addresses to connect, or block access to all listed MAC addresses. After making your changes, click the **Save Settings** button.

Note: Any wired devices connected to the Ethernet port on the DIR-505 will always have access to the network.

Wireless Access Settings: Configure how MAC filtering works by using the dropdown box to select an option:

Turn MAC Filtering OFF: This disables MAC filtering.

Turn MAC Filtering ON and ALLOW computers listed to access the network: When this option is selected, only PCs and devices with MAC addresses in the MAC Address List are granted network access. All other devices will be blocked.

Turn MAC Filtering ON and DENY computers listed to access the network: When this option is selected, all PCs and devices with MAC addresses in the MAC Address List will be refused access to your network. All other devices will be allowed access.

MAC Address: Enter the MAC addresses you would like to filter. You can select a client currently connected to your access point from the **Wireless Client List** drop-down menu and then click the corresponding << button fill in the MAC address automatically. Click the Clear button to remove any entered MAC address.

D-Link

DIR-505 HotSpot

SETUP ADVANCED MAINTENANCE STATUS HELP

MAC ADDRESS FILTER

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

WIRELESS ACCESS SETTINGS

Configure MAC Filtering below:

Turn MAC Filtering OFF

MAC Address	Wireless Client List	
00:00:00:00:00:00	<< MAC Address	Clear
00:00:00:00:00:00	<< MAC Address	Clear
00:00:00:00:00:00	<< MAC Address	Clear
00:00:00:00:00:00	<< MAC Address	Clear
00:00:00:00:00:00	<< MAC Address	Clear
00:00:00:00:00:00	<< MAC Address	Clear
00:00:00:00:00:00	<< MAC Address	Clear
00:00:00:00:00:00	<< MAC Address	Clear

WIRELESS

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Helpful Hints...

Create a list of MAC address that you would either like to allow or deny access to your network.

Select a MAC address from the drop down menu, then click the arrow to add that MAC address to the list.

Click the **Clear** button to remove the MAC address from the MAC Filtering list.

Advanced Wireless

This screen allows you to set various advanced wireless settings of your DIR-505. Unless you are experiencing specific problems, it is recommended that you leave these settings at their default values. After making your changes, click the **Save Settings** button.

Transmit Power: Sets the transmit power of the antennas.

HT 20/40 Coexistence: Check to enable or disable this feature.

D-Link

DIR-505 // HotSpot

SETUP ADVANCED MAINTENANCE STATUS HELP

MAC ADDRESS FILTER

ADVANCED WIRELESS

ADVANCED WIRELESS

These options are for users that wish to change the behaviour of their 802.11n wireless radio from the standard setting. D-Link does not recommend changing these settings from the factory default. Incorrect settings may impair the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.

Save Settings Don't Save Settings

ADVANCED WIRELESS SETTINGS

Transmit Power : 100% ▼

HT20/40 Coexistence : ☒ Enable ☐ Disable

Helpful Hints...

Advanced Wireless:
It is recommended that you leave these options at their default values. Adjusting them could negatively impact the performance of your wireless network. The options on this page should be changed by advanced users or if you are instructed to by one of our support personnel, as they can negatively affect the performance of your Access Point if configured improperly.

Transmit Power:
You can lower the output power of the DIR-505 by selecting lower percentage Transmit Power values from the drop down. Your choices are: 100%, 75%, 50%, and 25%.

WIRELESS

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Maintenance Admin

This page will allow you to change the password for the administrator account for configuring the settings of the DIR-505. You can also turn on graphical authentication(CAPTCHA) on this page. After making your changes, click the **Save Settings** button.

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

Verify Password: Enter the same password that you entered in the previous textbox in order to confirm its accuracy.

Enable Graphical Authentication: Check to enable Graphical Authentication, or CAPTCHA when logging in to the web UI of the DIR-505. This provides an extra layer of security by requiring you to enter a code that is displayed on-screen.

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DIR-505 // HotSpot

SETUP ADVANCED **MAINTENANCE** STATUS HELP

ADMIN
SYSTEM
FIRMWARE
TIME

ADMINISTRATOR SETTINGS

Enter the new password in the "New Password" field and again in the next field to confirm. Click on "Save Settings" to execute the password change. The Password is case-sensitive, and can be made up of any keyboard characters. The new password must be between 0 and 15 characters in length.

Save Settings Don't Save Settings

PASSWORD

Please enter the same password into both boxes, for confirmation.

New Password :

Verify Password :

ADMINISTRATION

Enable Graphical Authentication : ☐

Helpful Hints...

Passwords: For security reasons, it is recommended that you change the Password for the Administrator accounts. Be sure to write down the Passwords to avoid having to reset the AP in the event that they are forgotten.

WIRELESS

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System

This page allows you to save and restore your configuration, reset and reboot the DIR-505, and remove any added language packs.

Save Settings To Local Hard Drive: Clicking the **Save** button will allow you to save the current repeater configuration settings to a file on the hard disk of the computer you are using. You will then see a file dialog where you can select a location and file name for the settings.

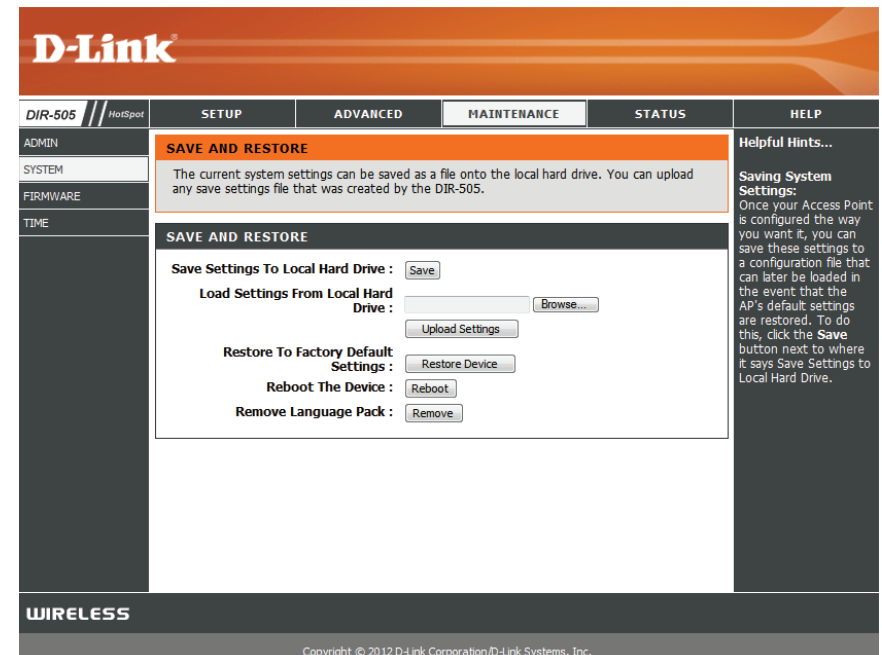
Load Settings From Local Hard Drive: Use this option to load previously saved configuration settings. Click **Browse** to find a previously saved configuration file. Then, click the **Upload Settings** button to transfer those settings to the DIR-505.

Restore to Factory Default Settings: This option will restore all configuration settings back to the factory default settings. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save your current configuration settings, use the **Save** button above.

Note: Restoring the factory default settings will not reset the Wi-Fi Protected Status to Not Configured.

Reboot the Device: Click the **Reboot** button to reboot the repeater.

Remove Language Pack: If you have previously installed a Language Pack, you can remove it by clicking the Remove button.



Firmware

You can upgrade the firmware of the DIR-505 here. 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. Please check the D-Link support website for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from this site.

Firmware Upgrade: Click on **Check Now** to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade. Do not disconnect from the DIR-505 or power your computer or DIR-505 off during the upgrade process.

You can change the language of the web UI by uploading available language packs.

Browse: Download a language pack from the D-Link website. After you have downloaded the new language pack, click **Browse** to locate the language pack file on your hard drive. Click **Upload** to complete the language pack upgrade.

The screenshot shows the D-Link DIR-505 web interface. The top navigation bar includes the D-Link logo and tabs for DIR-505, HotSpot, SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains links for ADMIN, SYSTEM, FIRMWARE, and TIME. The main content area is titled 'FIRMWARE' and contains the following sections:

- FIRMWARE:** A message stating 'There may be new firmware for your DIR-505 to improve functionality and performance. Click here to check for an upgrade on our support site.' It also includes instructions to download the firmware file from the support site and click the 'Upload' button to update the firmware on the DIR-505. A warning states: 'Do not update firmware through wireless network!!'
- FIRMWARE AND LANGUAGE PACK INFORMATION:** Displays 'Current Firmware Version : 1.00', 'Date : 2012/2/9', and 'Current Language Pack Version : No Language pack'. It includes a 'Check Now' button and a link to 'Check Online Now for Latest Firmware and Language pack Version'.
- FIRMWARE UPGRADE:** Contains a note: 'Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration from the Maintenance -> System screen.' It also states: 'To upgrade the firmware, your PC must have a wired connection to the access point. Enter the name of the firmware upgrade file, and click on the Upload button.' Below this is an 'Upload' section with a text input field, a 'Browse...' button, and an 'Upload' button.
- LANGUAGE PACK UPGRADE:** Similar to the firmware upgrade section, it has an 'Upload' section with a text input field, a 'Browse...' button, and an 'Upload' button.

The bottom of the page features a 'WIRELESS' section and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

Time

The Time page 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. Daylight Saving can also be configured to automatically adjust the time when needed. After making your changes, click the **Save Settings** button.

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

Enable Daylight Saving: To select Daylight Saving time manually, click the **Enable Daylight Saving** check box. Next use the drop-down menu to select a **Daylight Saving Offset** and then enter a start date and an end date for daylight saving time.

Enable NTP Server: NTP is short for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. Check this box to use a NTP server. This will only connect to a server on the Internet, not a local server.

NTP Server Used: Enter the NTP server or select one from the drop-down menu.

Date and Time: To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second and then click **Save Settings**. You can also click the **Copy Your Computer's Time Settings** button at the bottom of the screen.

D-Link

DIR-505 // HotSpot

SETUP ADVANCED MAINTENANCE STATUS HELP

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 NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.

Save Settings Don't Save Settings

TIME CONFIGURATION

Current Time : Jan/01/2011 00:16:11

Time Zone : (GMT-08:00) Pacific Time (US/Canada), Tijuana

Enable Daylight Saving : ☐

Daylight Saving Offset : +1:00

Daylight Saving Dates :

	Month	Week	Day of Week	Time
DST start	Mar	3rd	Sun	1 am
DST End	Nov	2nd	Sun	1 am

AUTOMATIC TIME CONFIGURATION

Enable NTP Server : ☐

NTP Server Used : << Select NTP Server

SET THE DATE AND TIME MANUALLY

Date And Time : Year 2011 Month Jan Day 01

Hour 00 Minute 00 Second 00

Copy Your Computer's Time Settings

WIRELESS

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Helpful Hints...

System Time Settings:
This section allows admins to configure, update, and maintain the correct time on the Access Point's internal system clock.

Status

Device Info

This page displays the current information for the DIR-505. It will display the LAN and wireless LAN information.

General: Displays the time and firmware version.

Wi-Fi Hotspot Displays information about the connection to the Wi-Fi hotspot.

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.

The screenshot shows the D-Link DIR-505 Web UI. The top navigation bar includes links for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar shows options for DEVICE INFO, LOGS, and STATISTICS. The main content area is titled 'DEVICE INFORMATION' and contains the following sections:

- GENERAL:**
 - Time : Jan/01/2011 00:17:49
 - Firmware Version : 1.00, Thu, 9 Feb 2012
- WI-FI HOTSPOT:**
 - MAC Address : 00:18:e7:95:70:8b
 - Wi-Fi Hotspot Network Name (SSID) : dlink
 - Connection : DHCP
 - IP Address : 192.168.0.101
 - Subnet Mask : 255.255.255.0
 - Default Gateway : 0.0.0.0
 - Primary DNS Server : 192.168.0.1
 - Secondary DNS Server : 0.0.0.0
- LAN:**
 - MAC Address : 00:18:e7:95:70:8a
 - IP Address : 192.168.0.1
 - Subnet Mask : 255.255.255.0
 - DHCP Server : Enabled
- WIRELESS LAN:**
 - MAC Address : 02:18:e7:95:70:8b
 - Local Wi-Fi Network Name : dlink-708a
 - Local Wi-Fi Security Mode : Auto (WPA or WPA2) - Personal
 - Channel Width : Auto 20/40 MHz
 - Channel : 4
 - Wi-Fi Protected Setup : Enable / Configured

The bottom of the page shows the 'WIRELESS' section and a copyright notice: Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.

Logs

The DIR-505 keeps a running log of events and activities occurring on the DIR-505. If the DIR-505 is rebooted, the logs are automatically cleared.

Log Options: There are several types of logs that can be viewed: **System Activity, Debug Information, Attacks, Dropped Packets** and **Notice**.

First Page: This button directs you to the first page of the log.

Last Page: This button directs you to the last page of the log.

Previous: This button directs you to the previous page of the log.

Next: This button directs you to the next page of the log.

Clear: This button clears all current log content.

Save Log: This button opens dialog where you can save the current log to your hard drive.

Refresh: This button refreshes the log.

D-Link

DIR-505 // HotSpot

SETUP ADVANCED MAINTENANCE STATUS HELP

DEVICE INFO LOGS STATISTICS

LOGS

Use this option to view the device logs. You can define what types of events you want to view and the event levels to view.

LOG OPTIONS

Log Type : ☒ System Activity ☐ Debug Information ☒ Attacks
☐ Dropped Packets ☒ Notice

Apply Log Settings Now

LOG DETAILS

First Page Last Page Previous Next Clear Save Log

Refresh

1/7

Time	Message
Jan 1 00:17:51	UDHCPD Inform: add_lease 192.168.0.100
Jan 1 00:16:45	UDHCPD Inform: add_lease 192.168.0.100
Jan 1 00:15:37	UDHCPD Inform: add_lease 192.168.0.100
Jan 1 00:14:26	UDHCPD Inform: add_lease 192.168.0.100
Jan 1 00:13:57	reading /etc/resolv.conf
Jan 1 00:13:46	Lease of 192.168.0.101 obtained, lease time 604800
Jan 1 00:13:41	Sending discover...
Jan 1 00:13:39	Sending discover...
Jan 1 00:13:25	Sending discover...
Jan 1 00:13:24	UDHCPD Inform: add_lease 192.168.0.100

WIRELESS

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Helpful Hints...
Check the log frequently to detect unauthorized network usage.

Statistics

The DIR-505 keeps statistics of the traffic that passes through it. You can view the amount of packets that pass through the LAN and wireless portions of the network. The traffic counter will reset if the DIR-505 is rebooted.

The screenshot shows the D-Link DIR-505 HotSpot web interface. The top navigation bar includes links for **DIR-505**, **HotSpot**, **SETUP**, **ADVANCED**, **MAINTENANCE**, **STATUS**, and **HELP**. The left sidebar contains **DEVICE INFO**, **LOGS**, and **STATISTICS**. The main content area is titled **TRAFFIC STATISTICS** and includes a description: "Traffic Statistics display Receive and Transmit packets passing through your router." Below this are buttons for **Refresh Statistics** and **Clear Statistics**.

The **LAN STATISTICS** section displays the following data:

LAN STATISTICS	
Sent : 8395	Received : 8755
TX Packets Dropped : 0	RX Packets Dropped : 0
Collisions : 0	Errors : 0

The **WIRELESS STATISTICS** section displays the following data:

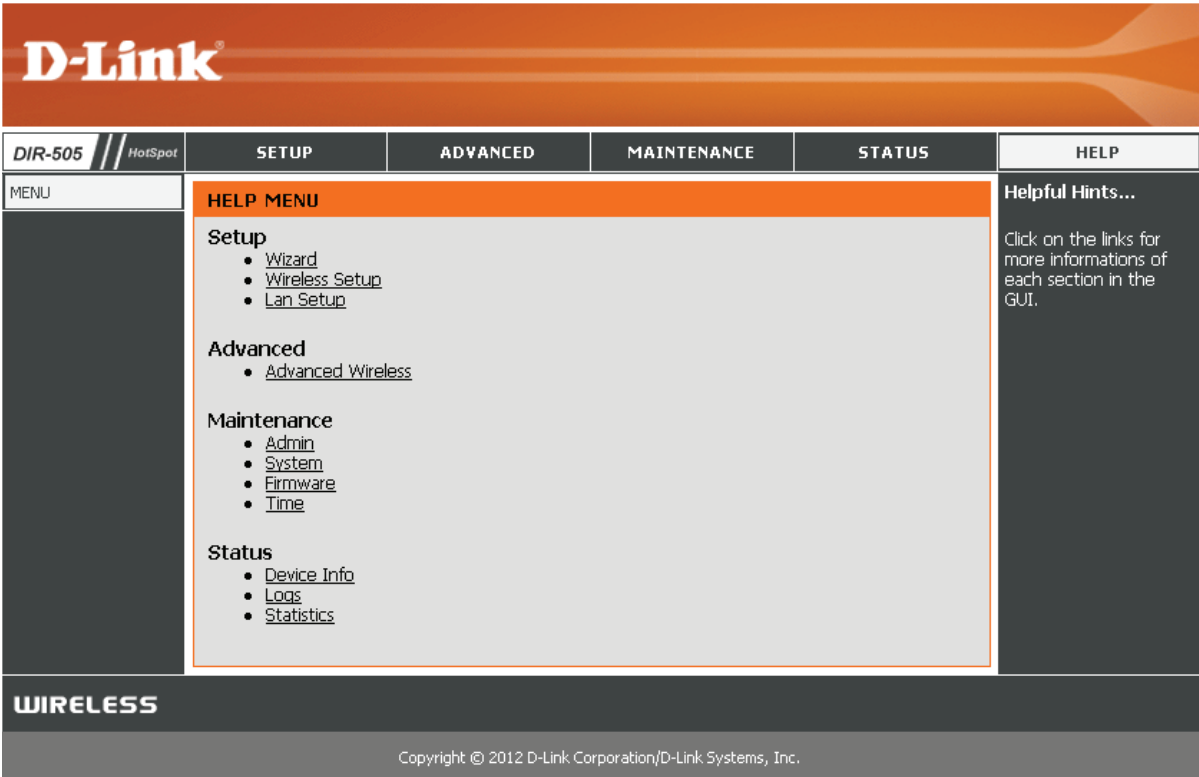
WIRELESS STATISTICS	
Sent : 912	Received : 15
TX Packets Dropped : 0	RX Packets Dropped : 0
Collisions : 0	Errors : 0

The **Helpful Hints...** section on the right states: "This is a summary of the number of packets that have passed between the Wireless and the LAN since the device was last initialized."

The footer of the interface shows **WIRELESS** and the copyright notice: "Copyright © 2012 D-Link Corporation/D-Link Systems, Inc."

Help

This screen gives you more information about the various parts of the configuration interface. Click on a link to learn more about that topic.



Connecting a Wireless Client

WPS Button

The easiest and most secure way to connect your wireless devices to the router is WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-505 router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

Step 1 - Press the WPS button on the DIR-505 for about 1 second. The WPS button will start to blink.

Step 2 - Within 2 minutes, press the WPS button on your wireless client (or launch the software utility and start the WPS process).

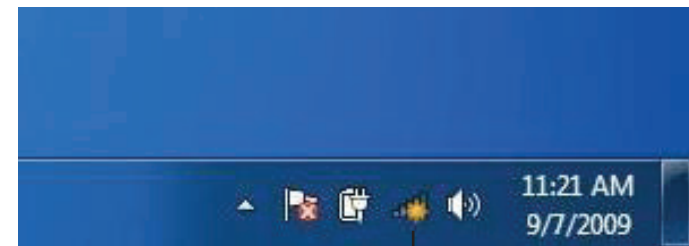
Step 3 - Allow up to 1 minute to configure. Once the WPS light stops blinking, you will be connected and your wireless connection will be secure with WPA2.

Windows® 7

WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router 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. Click on the wireless icon in your system tray (lower-right corner).



Wireless Icon

2. The utility will display any available wireless networks in your area.

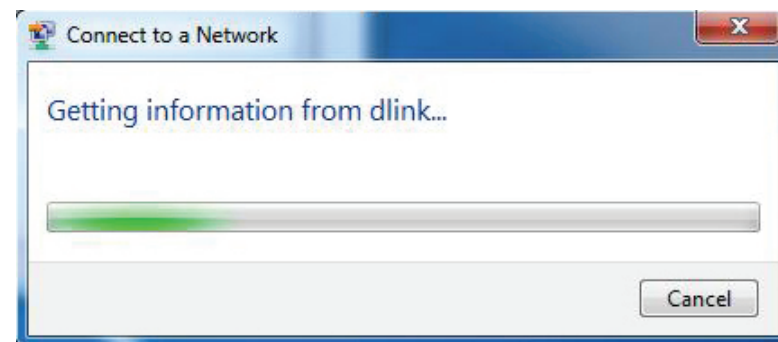


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

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

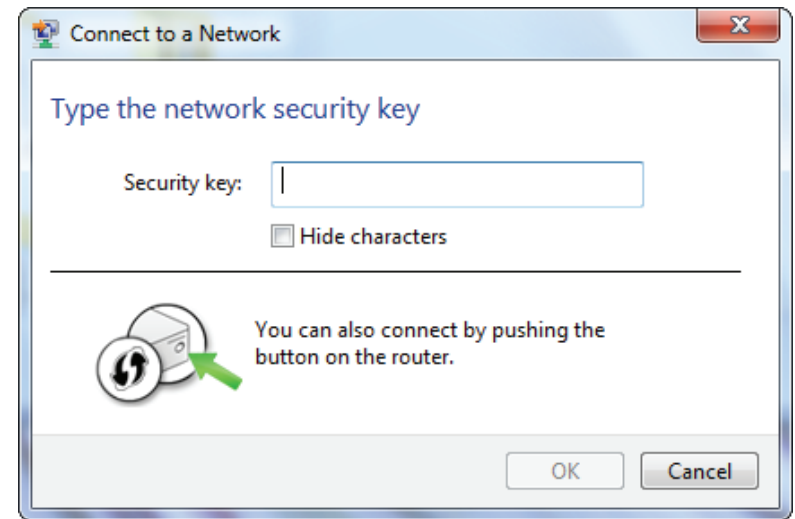


4. The following window appears while your computer tries to connect to the router.



5. Enter the same security key or passphrase that is on your router and click **Connect**. You can also connect by pushing the WPS button on the router.

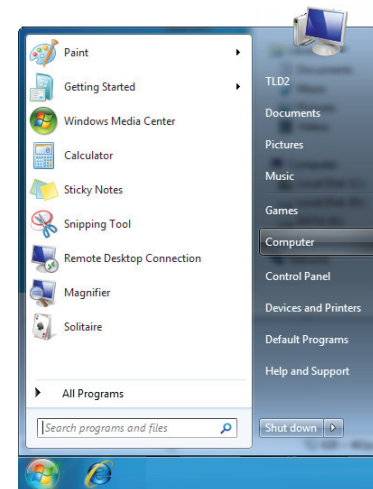
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



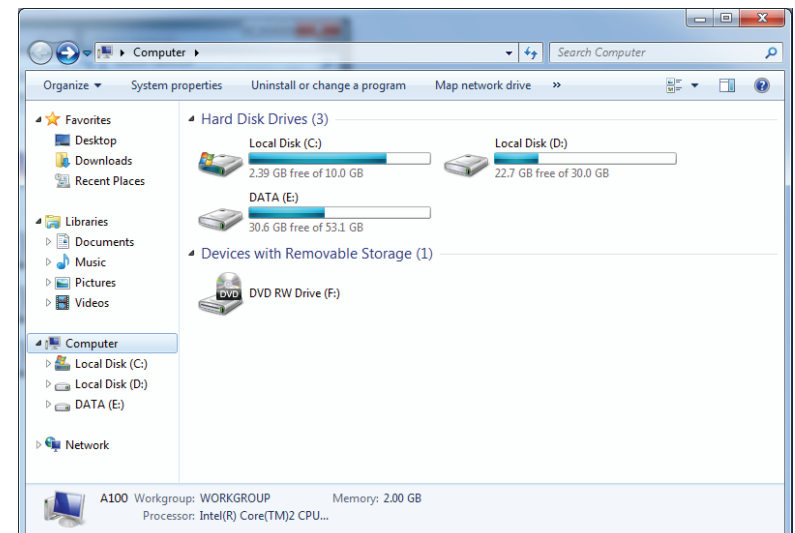
WPS

The WPS feature of the DIR-505 can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature:

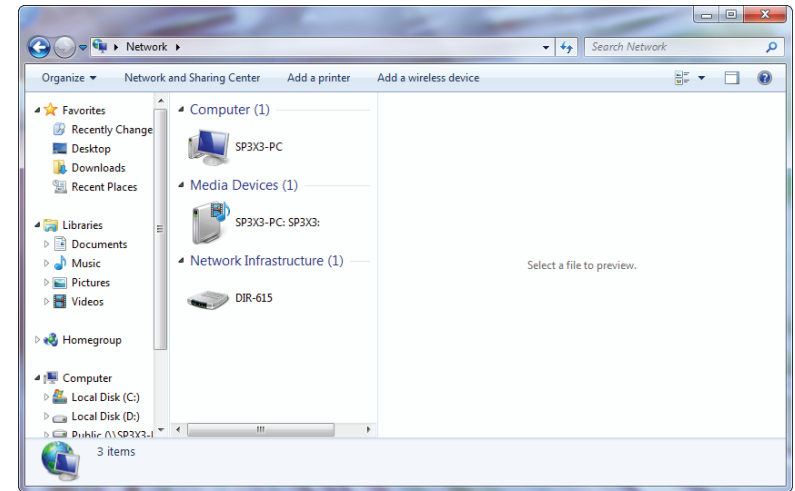
1. Click the **Start** button and select **Computer** from the Start menu.



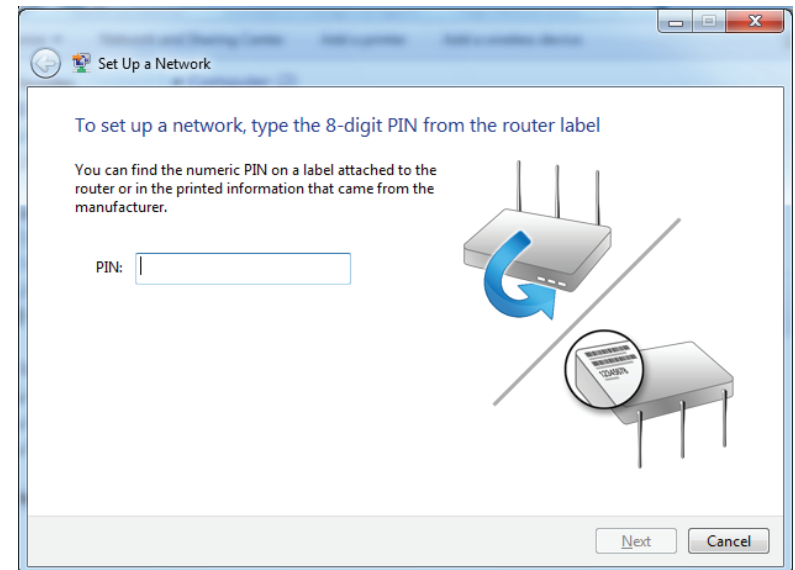
2. Click **Network** on the left side.



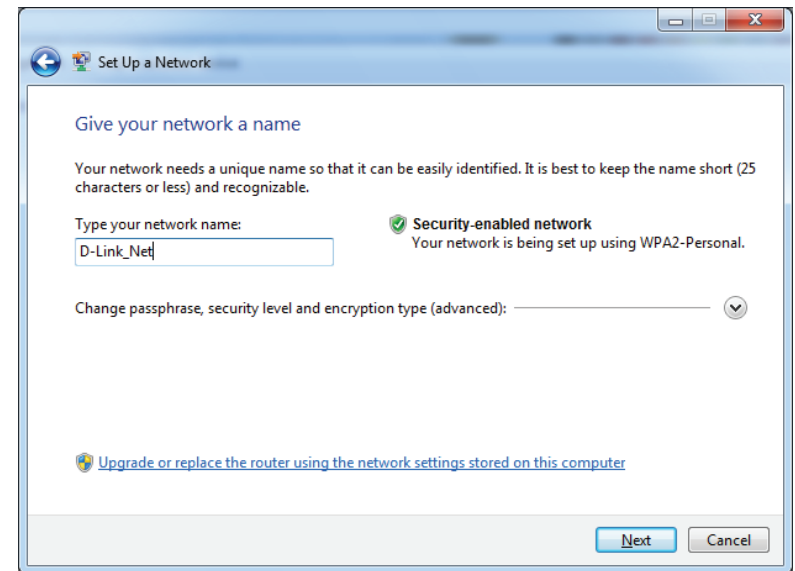
3. Double-click the DIR-505.



4. Input the WPS PIN number (displayed in the WPS window on the Router's LCD screen or in the **Setup** > **Wireless Setup** menu in the Router's Web UI) and click **Next**.

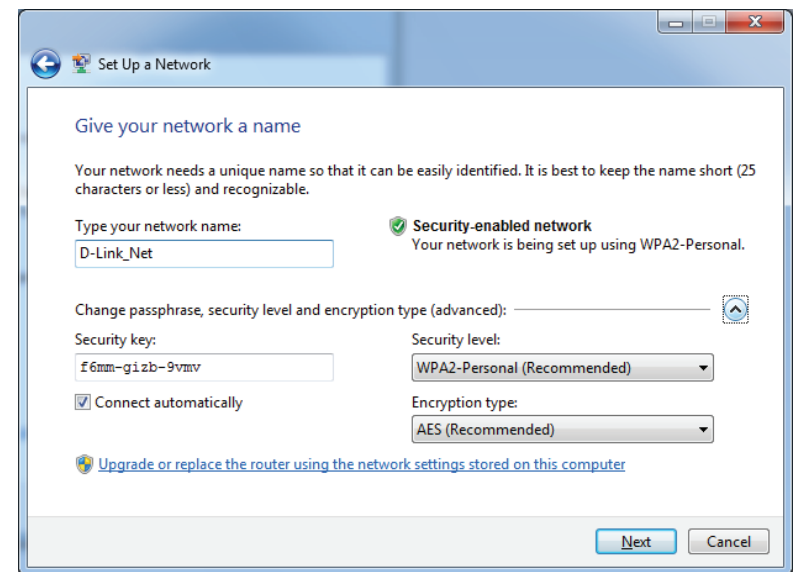


5. Type a name to identify the network.



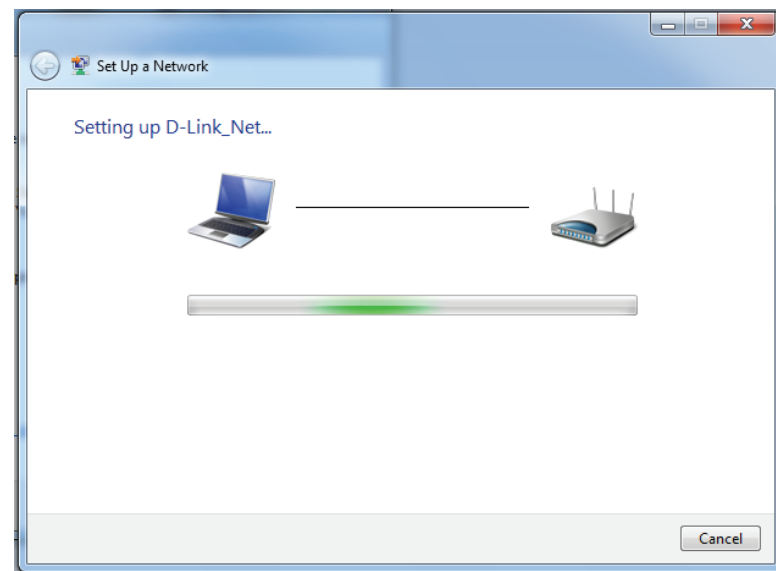
6. To configure advanced settings, click the  icon.

Click **Next** to continue.



7. The following window appears while the Router is being configured.

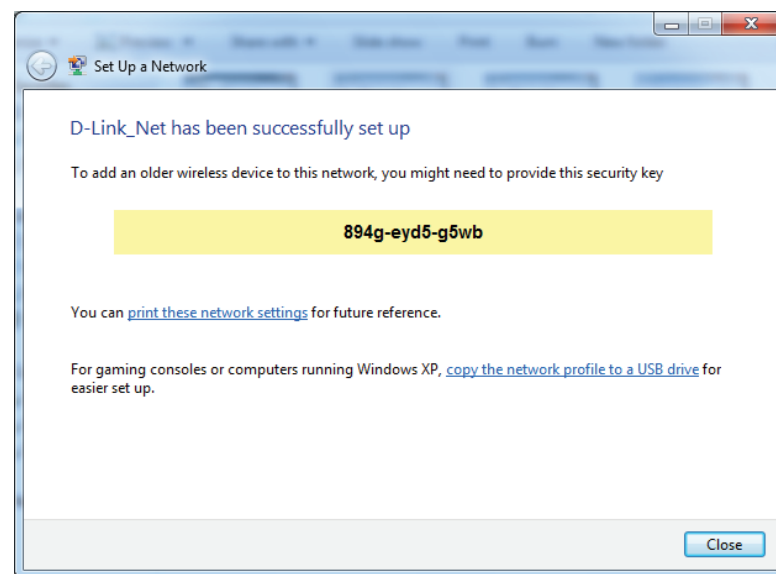
Wait for the configuration to complete.



8. The following window informs you that WPS on the router has been setup successfully.

Make a note of the security key as you may need to provide this security key if adding an older wireless device to the network in the future.

9. Click **Close** to complete WPS setup.



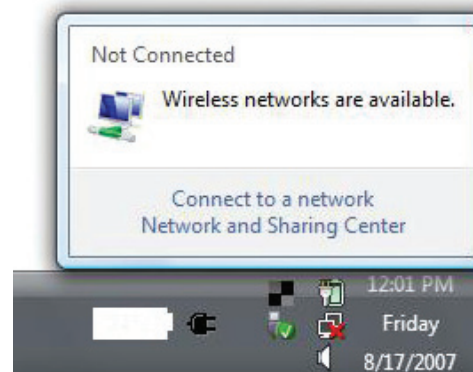
Windows Vista®

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.

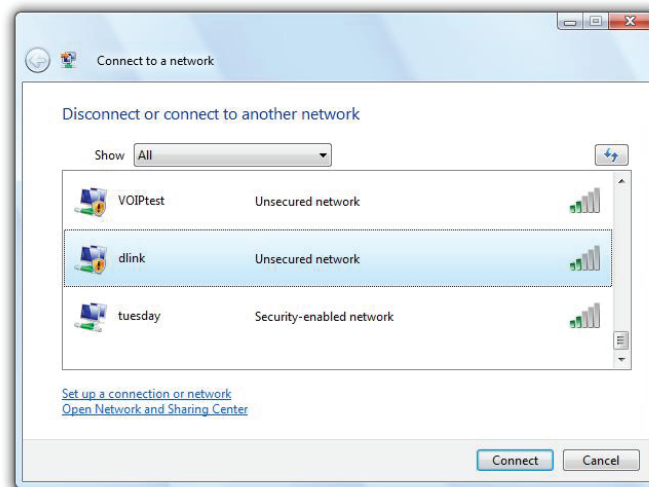
or

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.

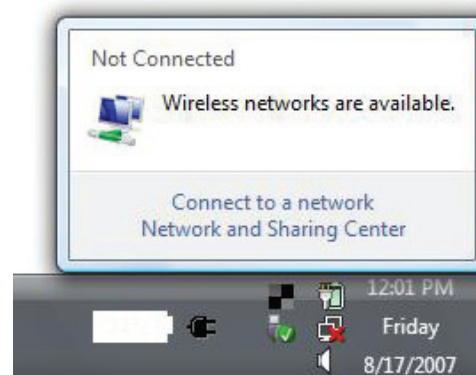
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



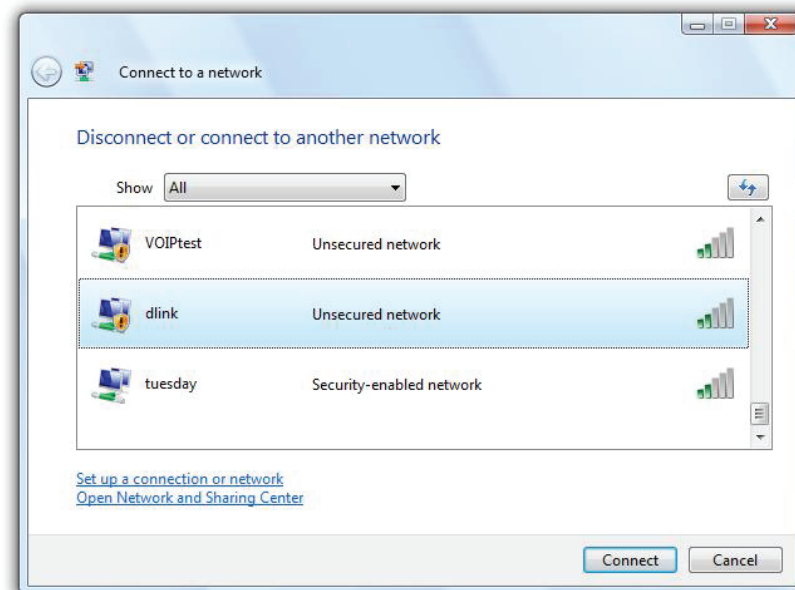
WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router 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**.

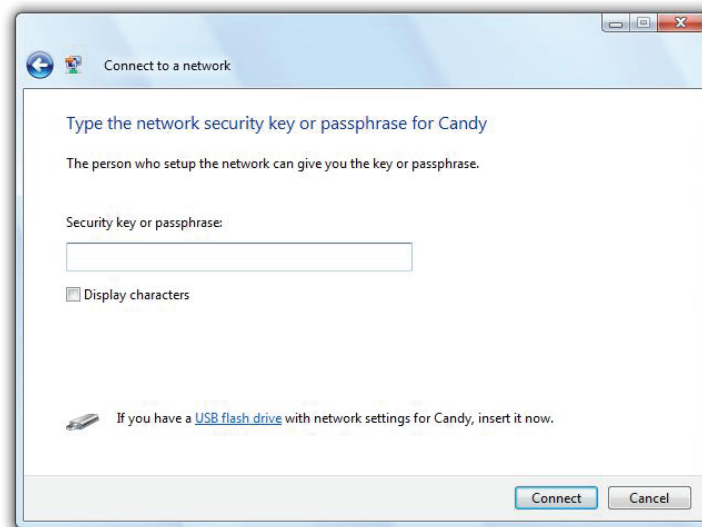


2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase that is on your router 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 router.

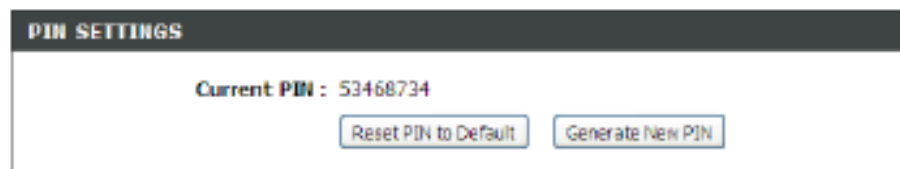


WPS/WCN 2.0

The router 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 router or third party software.

When you first set up the router, Wi-Fi protection is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the router 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 router and click the **Enable** checkbox in the **Basic > Wireless** section. Use the Current PIN that is displayed on the **Advanced > Wi-Fi Protected Setup** section 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 router.

Windows® XP

Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility, 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.

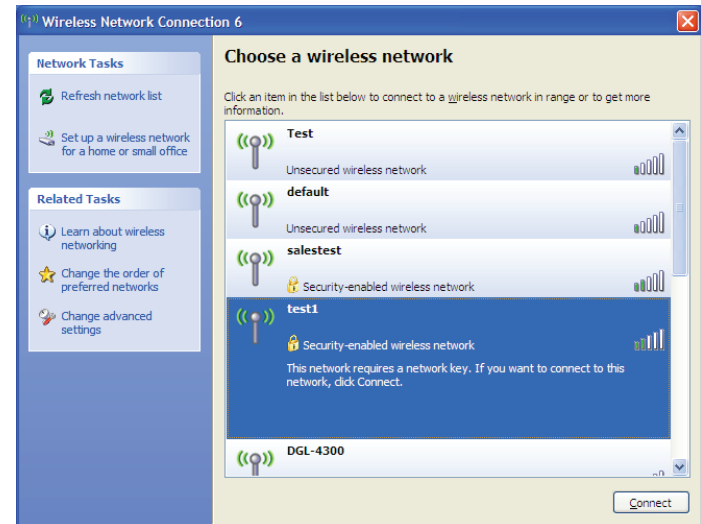
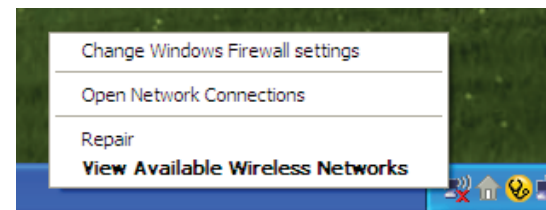
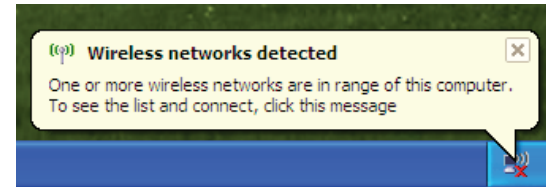
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

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.

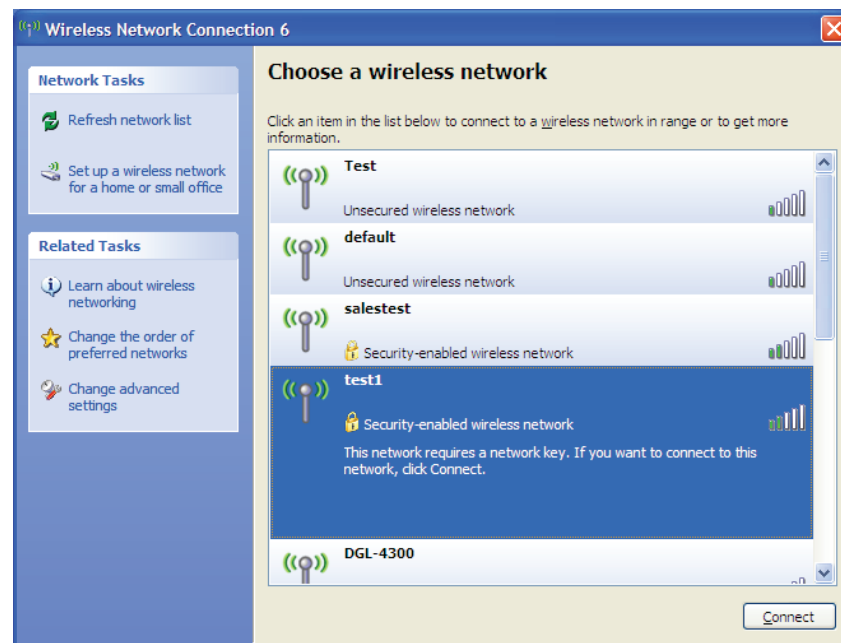
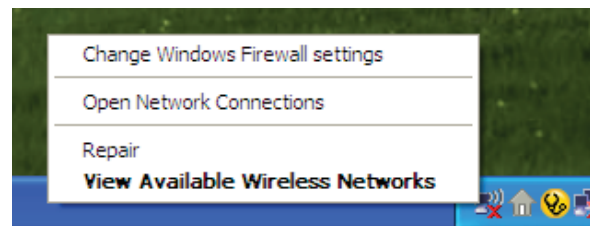
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



WPA/WPA2

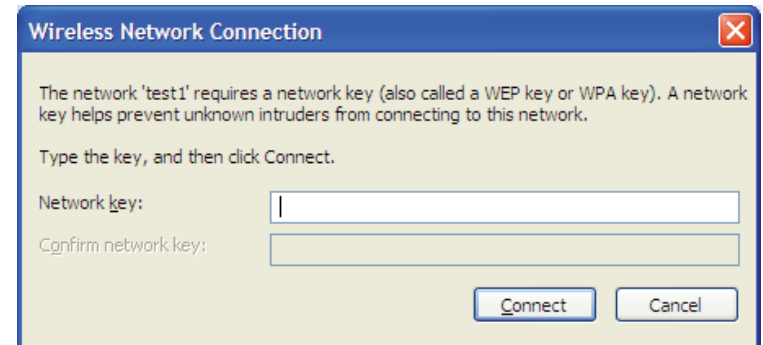
It is recommended to enable WPA on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

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 WPA-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 router.



Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-505. 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 screenshots 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 router (192.168.0.1 for example), you are not connecting to a website nor do you have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
 - Microsoft Internet Explorer® 6.0 and higher
 - Mozilla Firefox 3.0 and higher
 - Google™ Chrome 2.0 and higher
 - Apple Safari 3.0 and 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 router in the address bar. This should open the login page for your web management.
- If you still cannot access the configuration, unplug the power to the router 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 router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.0.1. When logging in, the username is **admin** and leave the password box empty.

3. Why can't I connect to certain sites or send and receive emails when connecting through my router?

If you are having a problem sending or receiving email, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, XP, Vista®, and 7 users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

ping [url] [-f] [-l] [MTU value]

Example: **ping yahoo.com -f -l 1472**

```
C:\>ping yahoo.com -f -l 1482
Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping yahoo.com -f -l 1472
Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:
Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52
Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 93ms, Maximum = 203ms, Average = 132ms
C:\>
```


You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, let's say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with ($1452+28=1480$).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.0.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your email. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

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 Router 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 email, instant message, 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 router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/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 router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let you 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 router. Refer to product manual for detail information on how to set it up.

Networking Basics

Check your IP address

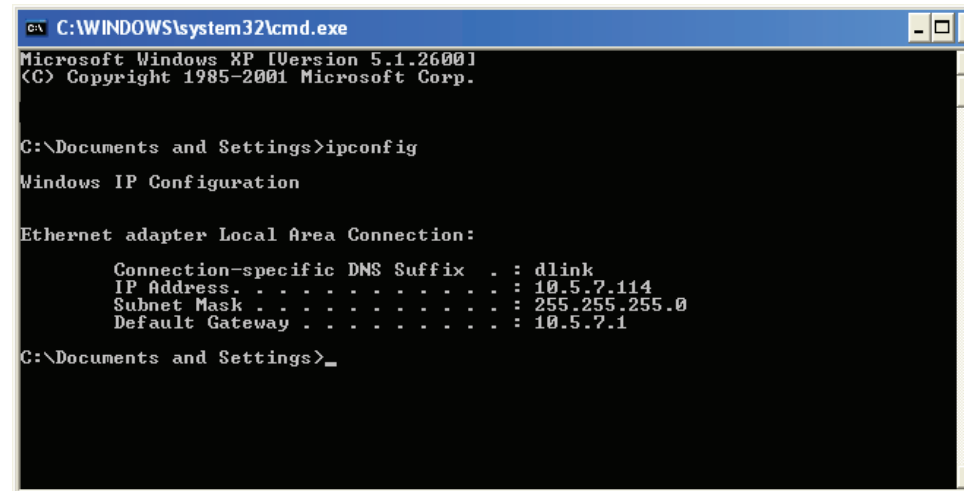
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start > Run**. In the run box type **cmd** and click **OK**. (Windows® 7/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 router. Some firewall software programs may block a DHCP request on newly installed adapters.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600.1
(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/router, or you need to assign a static IP address, please follow the steps below:

Step 1

- Windows® 7 - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center**.
- 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

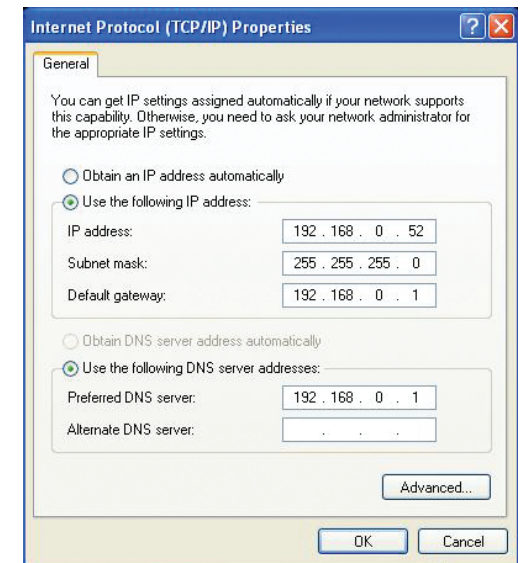
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set the Default Gateway the same as the LAN IP address of your router (I.E. 192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). 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.



Technical Specifications

Standards

- IEEE 802.11g, compatible with 802.11n devices
- IEEE 802.3
- IEEE 802.3u

Wireless Modes

- Router/AP Mode
- Repeater Mode
- Wi-Fi Hot Spot Mode

Wireless Frequency Range ¹

- 2.4 GHz to 2.4835 GHz

Antennas

- Internal Antenna

Security

- Wi-Fi Protected Access (WPA/WPA2)
- WPS™ (PBC)

Advanced Features

- SharePort™ Mobile app for iOS ²
- QRS Mobile setup app for iOS ³
- VPN pass-through
- Guest Zone Support
- UPnP™ Support
- Web File Access Support
- Wi-Fi WMM Quality of Service

Advanced Firewall Features

- Network Address Translation (NAT)
- Stateful Packet Inspection (SPI)
- MAC Address Filtering
- DMZ Support

Device Management

- Web UI

Diagnostic LEDs

- Power/WPS

Operating Temperature

- 0 to 40 °C (32 to 104 °F)

Operating Humidity

- 0% to 90% non-condensing

Certifications

- CE
- Wi-Fi Certified
- FCC
- IC

Dimensions

- 68 x 42 x 51 mm (2.68 x 1.65 x 2 inches)

Weight

- 113.4 grams (0.25 lb)

¹ Frequency Range varies depending on local regulations

² SharePort Mobile app functionality only available when in Router or Wi-Fi Hotspot mode.

³ QRS Mobile app is for Router mode setup only.

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Snail Mail:
Attn: GPLSOURCE REQUEST
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Fountain Valley, CA 92708

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If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

Safety Statements

CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC 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.

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.

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.

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

IMPORTANT NOTICE:

FCC 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. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

If this device is going to be operated in 5.15 ~ 5.25GHz frequency range, then it is restricted in indoor environment only. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

ICC Notice:

Operation is subject to the following two conditions:

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

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. 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.

- (i) The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems;
- (ii) The maximum antenna gain (2dBi) permitted (for devices in the band 5725-5825 MHz) to comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate, as stated in section A9.2(3).

In addition, users should also be cautioned to take note that high-power radars are allocated as primary users (meaning they have priority) of the bands 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices.

Règlement d'Industry Canada

Les conditions de fonctionnement sont sujettes à deux conditions:

- (1) Ce périphérique ne doit pas causer d'interférence et.
- (2) Ce périphérique doit accepter toute interférence, y compris les interférences pouvant perturber le bon fonctionnement de ce périphérique.