



# User Manual

**All-in-One Mobile Companion**

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# 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

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

# 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

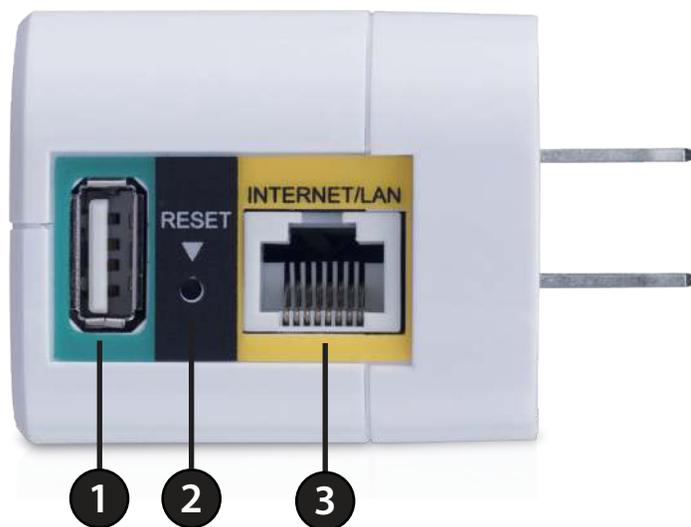


|          |                      |   |
|----------|----------------------|---|
| <b>1</b> | Mode Selector Switch | Slide this switch to select the Router/AP, Repeater, and Wi-Fi Hotspot modes.     |
| <b>2</b> | LED Indicator        | This indicates the current status of the DIR-505, as detailed in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



|          |               |   |
|----------|---------------|---|
| <b>1</b> | 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. |
| <b>2</b> | Reset Button  | Pressing the Reset button restores the router to its original factory default settings.   |
| <b>3</b> | Ethernet Port | The auto MDI/MDIX Internet port is the connection for the Ethernet cable to the cable or DSL modem.   |

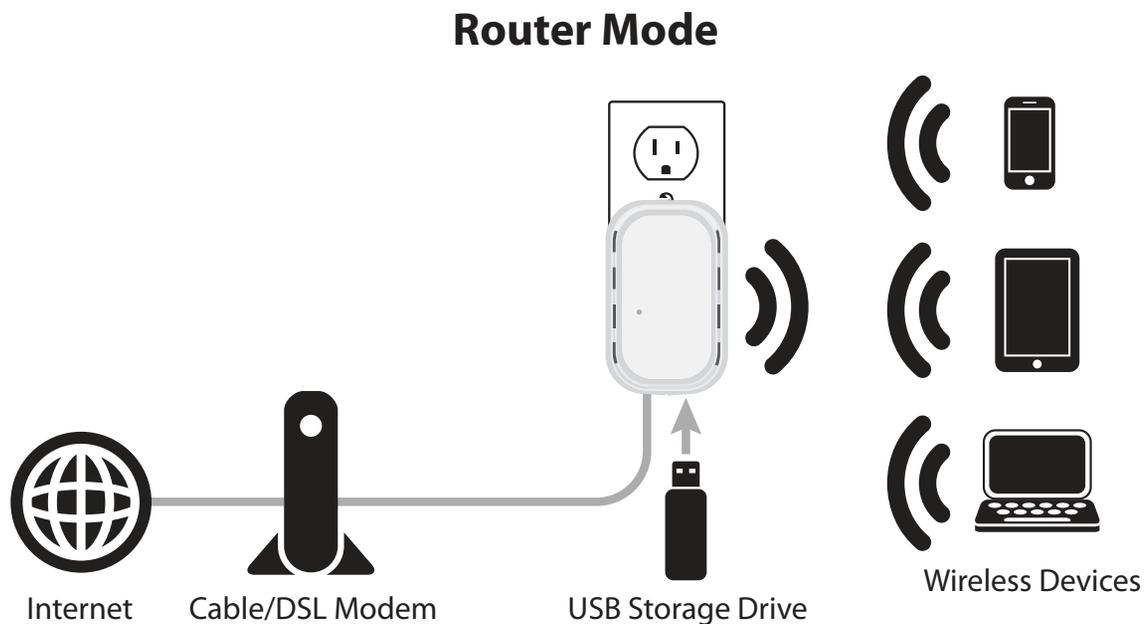
# Operation Modes

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

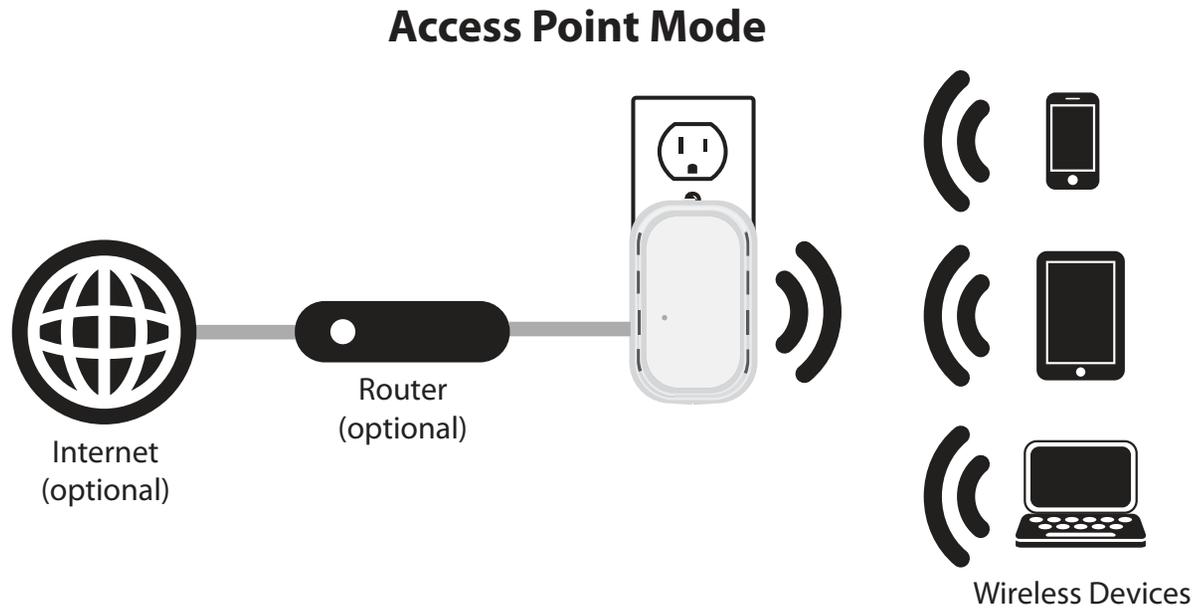
## Router Mode

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.



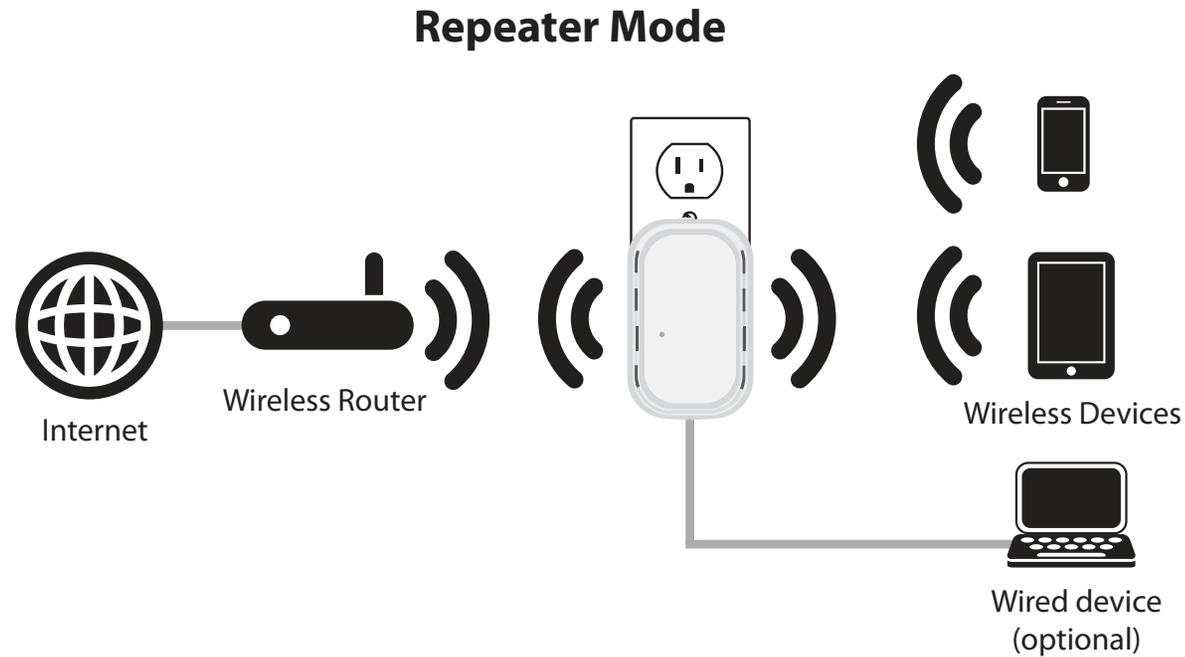
## Access Point Mode

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

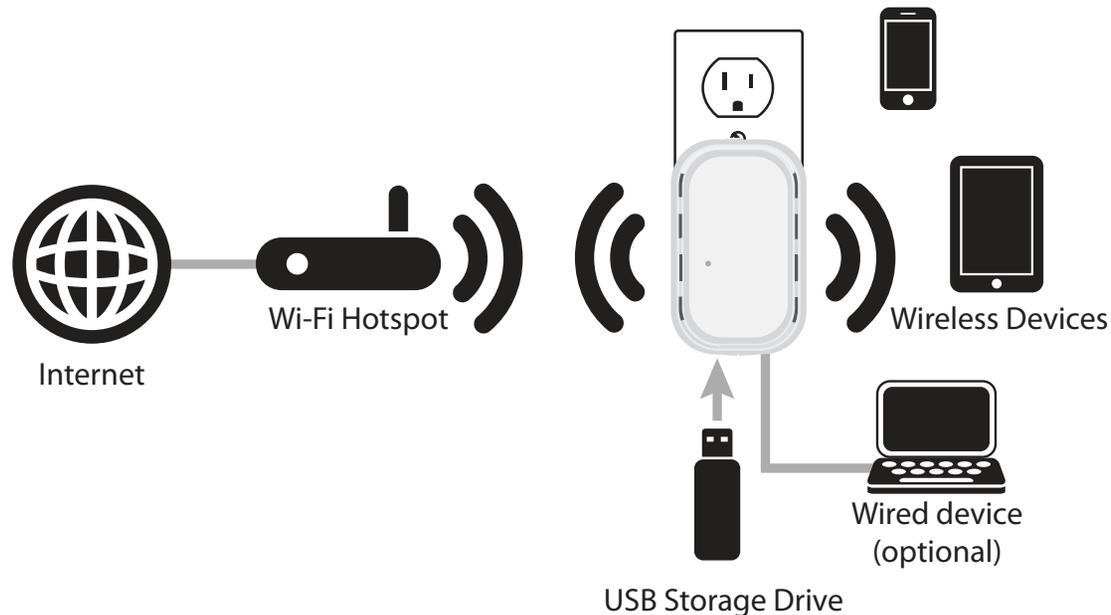
In Repeater Mode, the DIR-505 extends the range of an existing wireless network. You can use this to extend the coverage of an existing wireless router to provide better signal for parts of your home or office that may have poor reception. Additionally, you can use this mode to connect a wired device 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



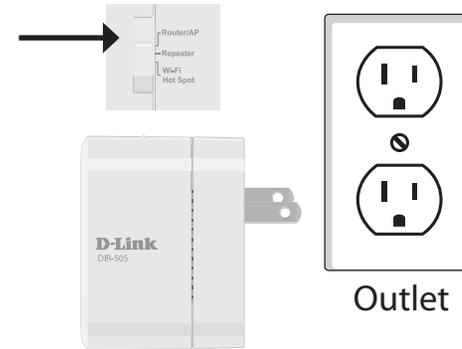
# Wireless Installation Considerations

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

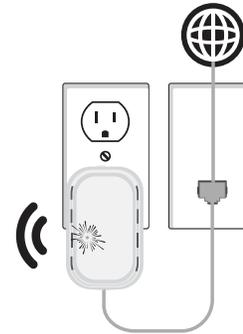
1. Move the switch on the top of the DIR-505 to the mode you wish to use, then plug it in. Verify that the power LED has turned green before continuing.



## 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)

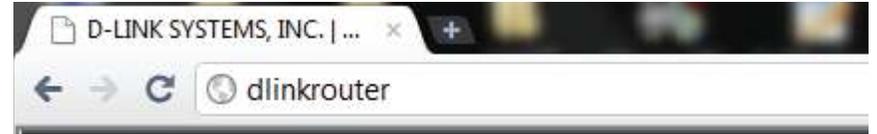
If this is your first time setting up the DIR-505, open your web browser. You will automatically be directed to the **Wizard Setup Screen**.

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

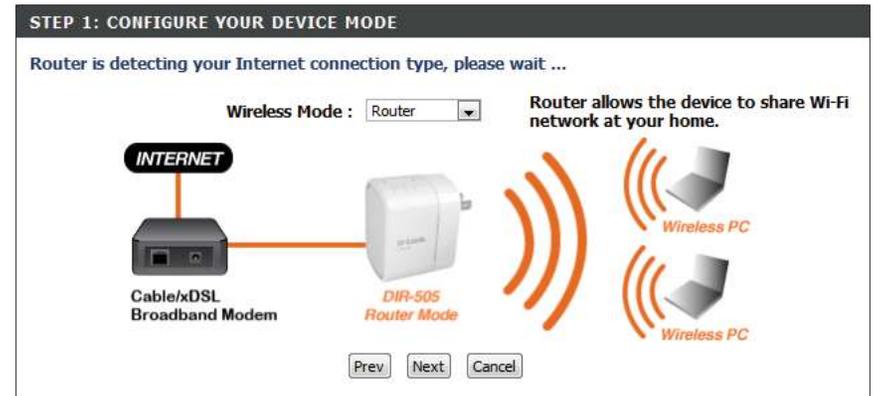
If you have already configured your settings and you would like to access the configuration utility, please refer to “Web-based Configuration” on page 18.

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.

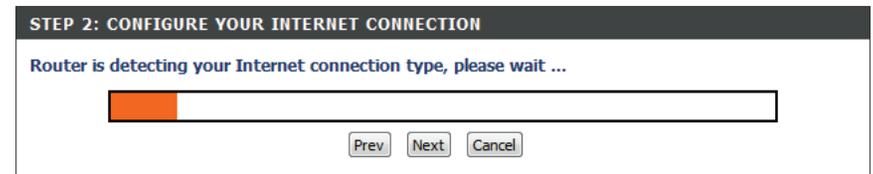
Click **Next** to continue.



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.

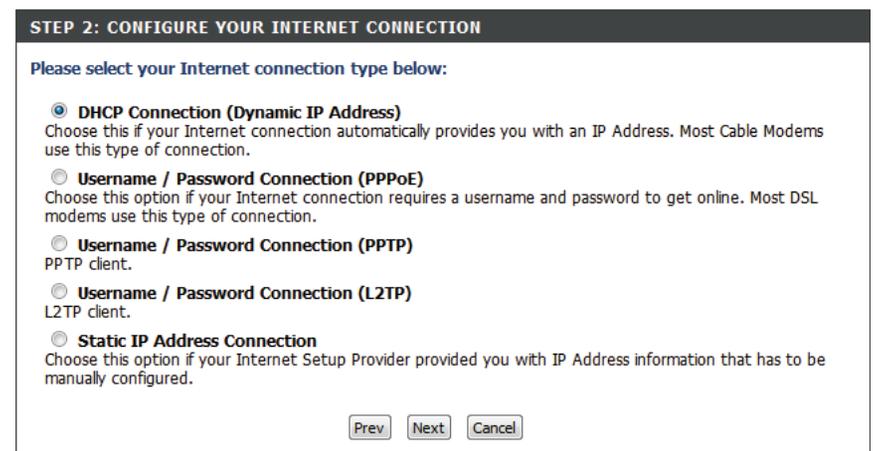


If you chose Router mode, the DIR-505 will try to detect what type of Internet connection you have and will ask you for the related settings. Enter the settings for your connection and click **Next**.



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) :**  
 (Using up to 32 characters)

Give your Wi-Fi network a password.

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

**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 :**

**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.

**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.

# 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. The page has an orange header with the word 'LOGIN' in white. Below the header, it says 'Log in to the router:'. There are two input fields: 'User Name' with a dropdown menu showing 'Admin' and 'Password' with an empty text box. A 'Log In' button is located below the password field.

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

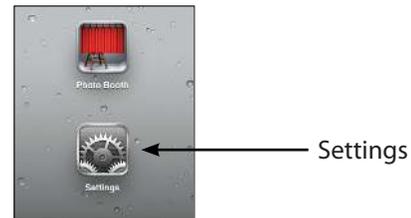
A screenshot of the D-Link DIR-505 Router configuration interface. The top has the D-Link logo. Below it is a navigation menu with tabs for 'DIR-505 Router', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'SETUP' tab is selected. Under 'SETUP', there are sub-sections for 'INTERNET SETTINGS', 'WIRELESS SETTINGS', 'NETWORK SETTINGS', 'MEDIA SERVER', and 'STORAGE'. The 'INTERNET CONNECTION' section is highlighted in orange. It contains text about two ways to set up the Internet connection and a button for 'Internet Connection Setup Wizard'. Below that is a 'Note' about following the Quick Installation Guide. The 'MANUAL INTERNET CONNECTION OPTIONS' section has a button for 'Manual Internet Connection Setup'. On the right side, there is a 'Helpful Hints...' section with instructions for new and advanced users. At the bottom, there is a 'WIRELESS' section and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

# 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**.



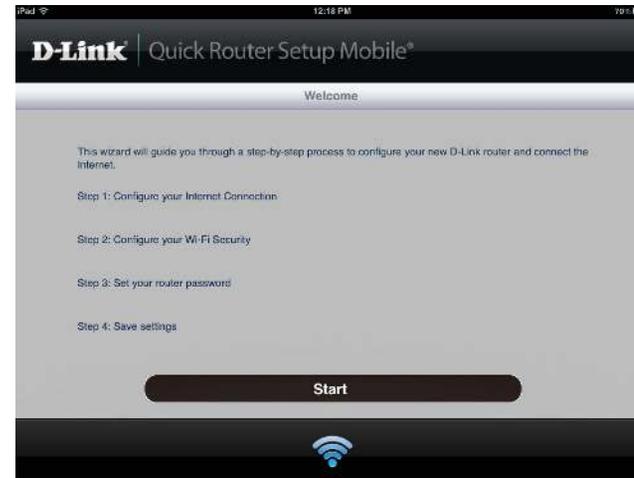
3. Select the network that is displayed on the Wi-Fi Configuration Note included in your package (ex: **dlink-a8fa**). Then, enter the Wi-Fi password also printed on the Wi-Fi Configuration Note (**akbdj1936**).



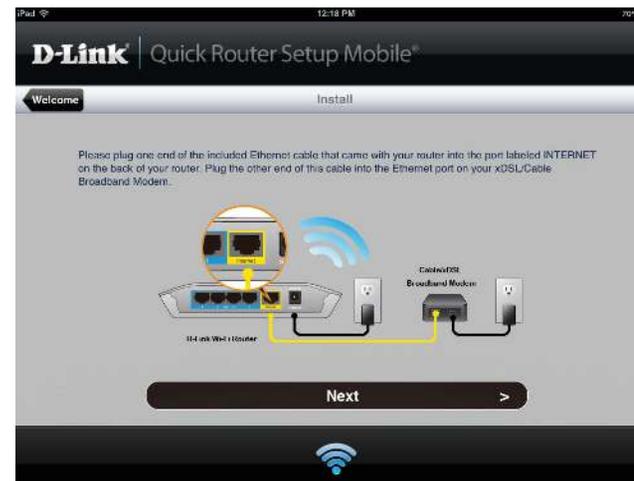
4. Once your mobile device is connected, click on the **QRS Mobile** icon.



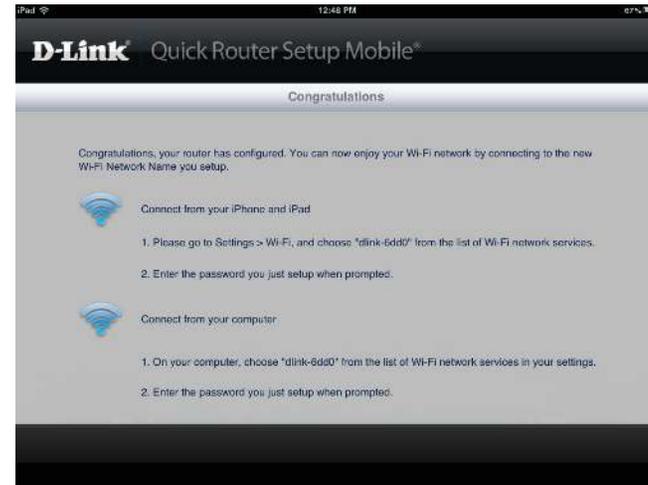
5. Click **Start** to continue.



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.

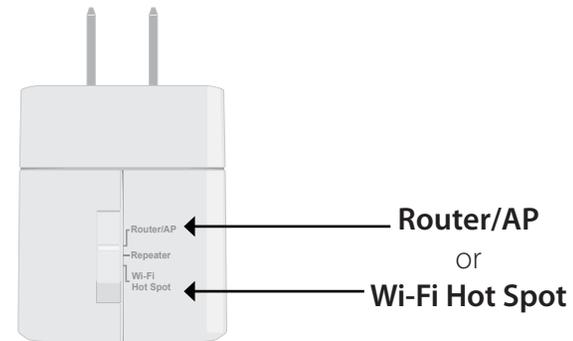


# SharePort Mobile App (iOS, Android)

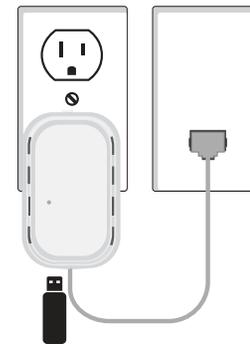
The SharePort Mobile app allows you to remotely access files stored on a USB flash drive or USB external hard drive connected to the DIR-505. For more information on using this feature, please refer to "Storage" on page 50.

**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**.



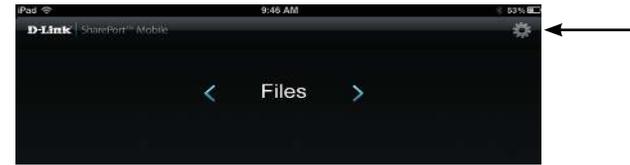
5. Click **Wi-Fi** and select the network (SSID) that you assigned during initial setup. Then, enter your Wi-Fi password.



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

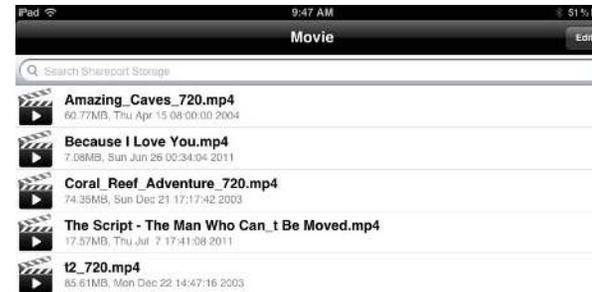


7. Tap on the **Settings** gear icon located on the right top corner of the screen. Then, click **Edit** to enter your User Name and Password. Once you finish, click **Done** to continue.



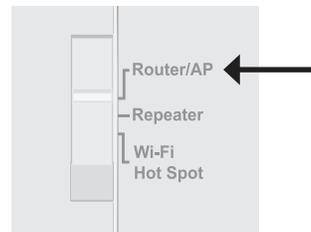
8. You can now use the SharePort Mobile app to access the files on your USB storage drive.

**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

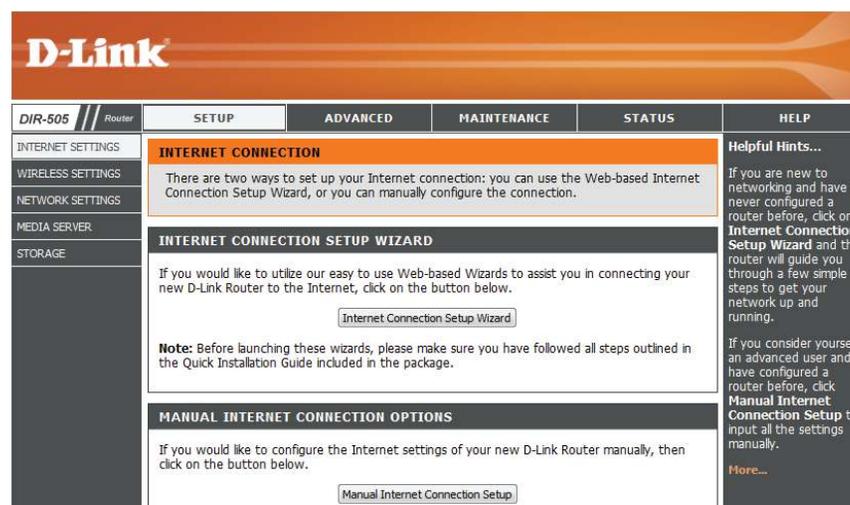
This section describes the configuration interface for Router mode. Make sure that the mode selector switch is in the Router/AP position on your DIR-505.



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.

The screenshot displays the D-Link router's web-based setup interface. At the top, the D-Link logo is visible. Below it, a navigation bar includes 'DIR-505 Router', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The main content area is titled 'INTERNET CONNECTION' and contains the following text:

There are two ways to set up your Internet connection: you can use the Web-based Internet Connection Setup Wizard, or you can manually configure the connection.

**INTERNET CONNECTION SETUP WIZARD**

If you would like to utilize our easy to use Web-based Wizards to assist you in connecting your new D-Link Router to the Internet, click on the button below.

[Internet Connection Setup Wizard](#)

**Note:** Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.

**MANUAL INTERNET CONNECTION OPTIONS**

If you would like to configure the Internet settings of your new D-Link Router manually, then click on the button below.

[Manual Internet Connection Setup](#)

**Helpful Hints...**

If you are new to networking and have never configured a router before, click on **Internet Connection Setup Wizard** and the router will guide you through a few simple steps to get your network up and running.

If you consider yourself an advanced user and have configured a router before, click **Manual Internet Connection Setup** to input all the settings manually.

[More...](#)

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

## 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 :

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 :

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.

**D-Link**

DIR-505 // Router

SETUP ADVANCED MAINTENANCE STATUS HELP

INTERNET SETTINGS **WAN** Helpful Hints...

WIRELESS SETTINGS Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.

NETWORK SETTINGS **Note** : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.

MEDIA SERVER Save Settings Don't Save Settings

STORAGE

**OPERATION MODE SETTING**

Operation Mode : Router

**INTERNET CONNECTION TYPE**

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

My Internet Connection is : Dynamic IP (DHCP)

**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 : 1500 (bytes) MTU default = 1500

MAC Address :

WIRELESS

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When configuring the router to access the Internet, be sure to choose the correct **Internet Connection Type** from the drop down menu. If you are unsure of which option to choose, contact your **Internet Service Provider (ISP)**.

If you are having trouble accessing the Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.

For added security, it is recommended that you disable the WAN Ping Respond option. Ping is often used by malicious Internet users to locate active networks or PCs.

If you are having trouble receiving multicast streams from the Internet, make sure the Multicast Streams option is enabled.

More...

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

**Primary/Secondary DNS Server:** Enter the Primary and secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained 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.

The screenshot shows the 'INTERNET CONNECTION TYPE' configuration page. The top section is titled 'INTERNET CONNECTION TYPE' and contains the instruction: 'Choose the mode to be used by the router to connect to the Internet.' Below this, a dropdown menu labeled 'My Internet Connection is:' is set to 'Dynamic IP (DHCP)'. The second section is titled 'DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE:' and contains the instruction: '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.' This section includes several input fields: 'Host Name' (empty), 'Use UnICASTing' (checked checkbox with text '(compatibility for some DHCP Servers)'), 'Primary DNS Server' (0.0.0.0), 'Secondary DNS Server' (0.0.0.0), 'MTU' (1500 bytes, with text '(bytes) MTU default = 1500'), and 'MAC Address' (00:00:00:00:00:00). A button labeled 'Clone Your PC's MAC address' is located below the MAC Address field.

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 :**

**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 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 :

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

**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 :**

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 INTERNET CONNECTION TYPE :**

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

**Address Mode :**  Dynamic IP  Static IP

**L2TP IP Address :**

**L2TP Subnet Mask :**

**L2TP Gateway IP Address :**

**L2TP 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 :**

**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 INTERNET CONNECTION TYPE :**

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

Address Mode :  Dynamic IP  Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

L2TP 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 :

# 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 Management 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 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 introductory text block stating that Web-based wizards assist in wireless network setup and device connection, and that users should refer to the Quick Installation Guide.
- WIRELESS NETWORK SETUP WIZARD**: A section describing the wizard's purpose and providing a button labeled "Wireless Network Setup Wizard". A note below states that some changes made using this wizard may require changing settings on wireless client adapters.
- MANUAL WIRELESS NETWORK SETUP**: A section explaining that manual configuration will destroy an existing Wi-Fi Protected Setup network and providing a button labeled "Manual Wireless Network Setup".

On the right side, there is a "Helpful Hints..." section with two paragraphs of advice for new and advanced users, and a "More..." link. The footer of the interface shows the word "WIRELESS" 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.

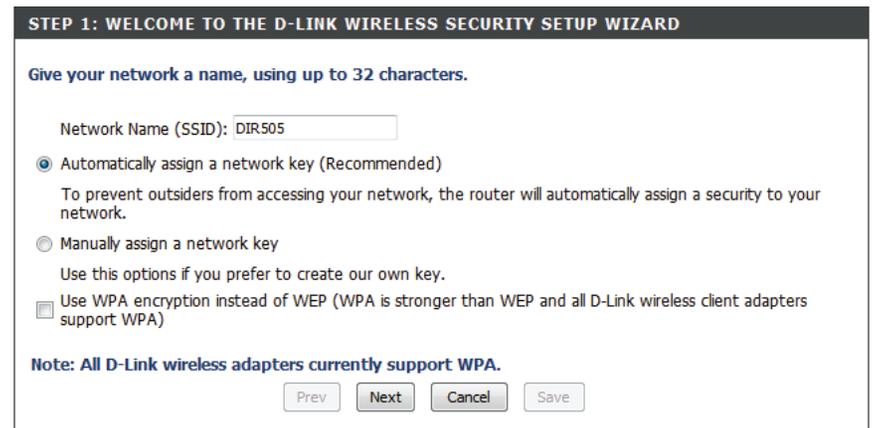
Type your desired wireless network name (SSID) and choose from the following options:

**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.



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.

**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

**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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**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.

The image shows two sections of a web-based configuration interface. The top section is titled "WIRELESS NETWORK SETTINGS" and contains the following fields: "Enable Wireless" (checked, dropdown set to "Always", with an "Add New" button), "Wireless Network Name" (text input "MobileCompanion-Claire" with "(Also called the SSID)" in parentheses), "Wireless Band" (dropdown set to "2.4GHz"), "802.11 Mode" (dropdown set to "Mixed 802.11n, 802.11g and 802.11b"), "Enable Auto Channel Scan" (checked), "Wireless Channel" (dropdown set to "2.412 GHz - CH 1" with "(Domain:United Status)" in parentheses), "Channel Width" (dropdown set to "Auto 20/40 MHz"), and "Visibility Status" (radio buttons for "Visible" and "Invisible", with "Visible" selected). The bottom section is titled "WIRELESS SECURITY MODE" and contains a "Security Mode" dropdown set to "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 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 :**  (length applies to all keys)

**WEP Key 1 :**

**Authentication :**

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**

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 :**

**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 :**

# 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 displays the D-Link DIR-505 Router Web Management Interface. The interface is organized into several sections:

- Navigation:** Includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. A sidebar on the left lists menu items: INTERNET SETTINGS, WIRELESS SETTINGS, NETWORK SETTINGS (selected), MEDIA SERVER, and STORAGE.
- NETWORK SETTINGS:** Contains a description of the section and two buttons: "Save Settings" and "Don't Save Settings".
- ROUTER SETTINGS:** Contains a description and the following fields:
  - Router IP Address: 192.168.0.1
  - Subnet Mask: 255.255.255.0
  - Device Name: dlinkrouter
  - Local Domain Name: (optional)
  - Enable DNS Relay:
- DHCP SERVER SETTINGS:** Contains a description and the following fields:
  - Enable DHCP Server:
  - DHCP IP Address Range: 192.168.0.100 to 192.168.0.199
  - DHCP Lease Time: 1440 (minutes)
- ADD DHCP RESERVATION:** Contains an "Enable" checkbox (unchecked), "Computer Name" field with a dropdown, "IP Address" field, "MAC Address" field, a "Clone Your PC's MAC address" button, and "Save" and "Clear" buttons.
- DHCP RESERVATIONS LIST:** A table listing reserved IP addresses.
 

| 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:** A table listing 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 | <a href="#">Revoke</a> <a href="#">Reserve</a> |
| 28:e0:2c:dc:0a:be | 192.168.0.101 | UNKNOWN     | Sun Jan 2 00:05:07 2011 | <a href="#">Revoke</a> <a href="#">Reserve</a> |
- Helpful Hints...:** A sidebar on the right containing text about DHCP server configuration and a "More..." link.

## 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 | <a href="#">Revoke</a> | <a href="#">Reserve</a> |
| 28:e0:2c:dc:0a:be               | 192.168.0.101 | UNKNOWN     | Sun Jan 2 00:05:07 2011 | <a href="#">Revoke</a> | <a href="#">Reserve</a> |

# 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, and STORAGE. The main content area is titled "MEDIA SERVER" and contains the following information:

- MEDIA SERVER**
- 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.
- Note:** The shared media may not be secure. Allowing any devices to stream is recommended only on secure networks.
- Buttons: Save Settings, Don't Save Settings
- DLNA MEDIA SERVER**
- Enable DLNA Media Server :
- Media Server Name : DIR-505

At the bottom of the interface, there is a "WIRELESS" section 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.

**D-Link**

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**

| No. | User Name | Access Path         | Permission | Modify | Delete |
|-----|-----------|---------------------|------------|--------|--------|
| 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.

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, MEDIA SERVER, and STORAGE. The main content area is titled "STORAGE" and contains the following sections:

- STORAGE:** A text box explaining Share Port Web Access and a "Save Settings" button.
- SHAREPORT WEB ACCESS:** A form with "Enable SharePort Web Access" checked, "HTTP Access Port" set to 8181, "HTTPS Access Port" set to 4433, and "Allow Remote Access" unchecked.
- 10 -- USER CREATION:** A form with "User Name", "Password", and "Verify Password" fields, a "User Name" dropdown, and "Add/Edit" and "Delete" buttons.
- USER LIST:** A table with columns for No., User Name, Access Path, and Permission. It lists four users: admin, guest, wrpd, and test.
- NUMBER OF DEVICES : 0:** A table with columns for Device, Total Space, and Free Space.
- SHAREPORT WEB ACCESS LINK:** A text box stating "You can use this link to connect to the drive remotely after logging in with a user account."

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

# 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<br>0  | Protocol<br>TCP |
| <input type="checkbox"/> | << Application Name | << Computer Name | Private<br>0 | 6               |
| <input type="checkbox"/> | << Application Name | << Computer Name | Public<br>0  | Protocol<br>TCP |
| <input type="checkbox"/> | << Application Name | << Computer Name | Private<br>0 | 6               |
| <input type="checkbox"/> | << Application Name | << Computer Name | Public<br>0  | Protocol<br>TCP |
| <input type="checkbox"/> | << Application Name | << Computer Name | Private<br>0 | 6               |
| <input type="checkbox"/> | << Application Name | << Computer Name | Public<br>0  | Protocol<br>TCP |
| <input type="checkbox"/> | << Application Name | << Computer Name | Private<br>0 | 6               |
| <input type="checkbox"/> | << Application Name | << Computer Name | Public<br>0  | Protocol<br>TCP |
| <input type="checkbox"/> | << Application Name | << Computer Name | Private<br>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).

**D-Link**

DIR-505 Router

SETUP ADVANCED MAINTENANCE STATUS HELP

**APPLICATION RULES**

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.

Save Settings Don't Save Settings

8 -- APPLICATION RULES

|                          | Name | Application         | Port       | Traffic Type |
|--------------------------|------|---------------------|------------|--------------|
| <input type="checkbox"/> |      | << Application Name | Trigger    | TCP          |
|                          |      |                     | Firewall   | TCP          |
| <input type="checkbox"/> |      | << Application Name | Trigger    | TCP          |
|                          |      |                     | Firewall 0 | TCP          |
| <input type="checkbox"/> |      | << Application Name | Trigger    | TCP          |
|                          |      |                     | Firewall 0 | TCP          |
| <input type="checkbox"/> |      | << Application Name | Trigger    | TCP          |
|                          |      |                     | Firewall 0 | TCP          |
| <input type="checkbox"/> |      | << Application Name | Trigger    | TCP          |
|                          |      |                     | Firewall 0 | TCP          |
| <input type="checkbox"/> |      | << Application Name | Trigger    | TCP          |
|                          |      |                     | Firewall 0 | TCP          |

WIRELESS

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**Helpful Hints...**

Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected.

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

More...

# 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 'D-Link', 'DIR-505 // Router', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, and the 'MAC ADDRESS FILTER' option is highlighted in the left sidebar. The main content area is titled 'MAC ADDRESS FILTER' and contains the following text: '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 text are 'Save Settings' and 'Don't Save Settings' buttons. The 'WIRELESS ACCESS SETTINGS' section is expanded, showing a dropdown menu for 'Configure MAC Filtering below:' set to 'Turn MAC Filtering OFF'. Below this is a table with two columns: 'MAC Address' and 'Wireless Client List'. The table contains eight rows, each with a '00:00:00:00:00:00' MAC address, a '<<' button, a 'Wireless Client List' dropdown menu, and a 'Clear' button. The bottom of the page 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 displays the D-Link DIR-505 Router's web management interface. The top navigation bar includes 'D-Link', 'DIR-505 Router', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, showing the 'WEBSITE FILTER' configuration page. The page contains a 'WEBSITE FILTER' section with a 'Save Settings' button and a 'Don't Save Settings' button. Below this is the 'WEBSITE FILTERING RULES' section, which includes a dropdown menu set to 'ALLOW computers access to ONLY these sites' and a 'Clear the list below...' button. A table with the header 'Website URL/Domain' contains four empty text input fields. The interface also features a navigation menu on the left and a 'Helpful Hints...' section on the right.

# 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 'ADVANCED' tab is active, and the 'FIREWALL SETTINGS' section is expanded. The 'FIREWALL SETTINGS' section contains the text: 'The Firewall Settings allow you to set a single computer on your network outside of the router.' Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'. The 'Enable SPI' checkbox is checked. The 'ANTI-SPOOF CHECKING' section contains the text: 'Enable anti-spoof checking :'. Below this text is an unchecked checkbox. The page also includes a 'WIRELESS' section at the bottom and a 'Helpful Hints...' section on the right side.

## 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

**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 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 categories: 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:** Includes explanatory text about the WPS process and buttons for "Save Settings" and "Don't Save Settings".
- WI-FI PROTECTED SETUP:** A configuration section with "Enable" and "Disable WPS-PIN Method" checked, and a "Reset to Unconfigured" button.
- PIN SETTINGS:** Shows the "Current PIN" as 57893402, with buttons for "Reset PIN to Default" and "Generate New PIN".
- ADD WIRELESS STATION:** Features an "Add Wireless Device With WPS" button.

On the right side, there are "Helpful Hints..." and "Click Add Wireless Device Wizard to use Wi-Fi Protected Setup to add wireless devices to the wireless network." sections, along with a "More..." link. The footer of the interface shows "WIRELESS" and "Copyright © 2012 D-Link Corporation/D-Link Systems, Inc."

# 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.

The screenshot shows the D-Link DIR-505 Router's Advanced Settings page. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED (selected), MAINTENANCE, STATUS, and HELP. The left sidebar lists various settings categories: VIRTUAL SERVER, APPLICATION RULES, MAC ADDRESS FILTER, WEBSITE FILTER, FIREWALL SETTINGS, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, UPnP SETTINGS (highlighted), GUEST ZONE, and DMZ. The main content area is titled 'UPnP SETTINGS' and contains the following text: 'Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.' Below this text are two buttons: 'Save Settings' and 'Don't Save Settings'. A checkbox labeled 'Enable UPnP:' is checked. On the right side, there is a 'Helpful Hints...' section with text explaining that UPnP helps other UPnP LAN hosts interoperate with the router and that the option should be enabled as long as the LAN has other UPnP applications. A 'More...' link is also present. The bottom of the page features a 'WIRELESS' section header and a copyright notice: 'Copyright © 2012 D-Link Corporation, D-Link Systems, Inc.'

## 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 'D-Link', 'DIR-505 Router', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, and the 'GUEST ZONE' sub-tab is active. The main content area is titled 'GUEST ZONE' and contains the following configuration options:

- Enable Guest Zone:** A checked checkbox 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 input field containing 'dlink\_guest' with a note '(Also called the SSID)'.
- Enable Routing Between Zones:** An unchecked checkbox.
- Security Mode:** A dropdown menu set to 'None'.

Buttons for 'Save Settings' and 'Don't Save Settings' are located below the introductory text. A 'Helpful Hints...' sidebar is visible on the right side of the page.

# 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 '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, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, UPNP SETTINGS, GUEST ZONE, and DMZ. The main content area is titled 'DMZ SETTINGS' and contains the following text:

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 for 'Save Settings' and 'Don't Save Settings' are visible.

The 'DMZ HOST' section includes:

Enable DMZ :

DMZ IP Address :  <<

At the bottom of the interface, 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 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.

**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.

The screenshot displays the D-Link web management interface for the DIR-505 router, specifically the Maintenance Admin page. The interface is organized into several sections:

- Navigation:** A top menu bar includes 'SETUP', 'ADVANCED', 'MAINTENANCE' (selected), 'STATUS', and 'HELP'. A left sidebar lists various configuration categories like ADMIN, TIME, SYSTEM, etc.
- ADMINISTRATOR SETTINGS:** This section contains a text box explaining that the 'admin' account has full access and a recommendation to create a password. It includes 'Save Settings' and 'Don't Save Settings' buttons.
- ADMIN PASSWORD:** This section prompts the user to enter a password and verify it in two separate fields.
- ADMINISTRATION:** This section contains three checkboxes: 'Enable Graphical Authentication', 'Enable HTTPS Server', and 'Enable Remote Management'. Below these is a text input field for 'Remote Admin Port' with the value '8080'.
- Helpful Hints...:** A sidebar on the right provides security warnings, such as the importance of changing the default password and the risks of enabling remote management.

# 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 Router

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 Router Time : Jan/01/2011 16:18:28

Time Zone : (GMT+08:00) Taipei

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 : << 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...  
Good timekeeping is important for accurate logs and scheduled firewall rules.  
More...

# 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.

The screenshot displays the D-Link DIR-505 Router's System Settings page. The page is organized into a sidebar on the left with menu items: ADMIN, TIME, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'SYSTEM SETTINGS' and contains several sections:

- Save Settings To Local Hard Drive:** Includes a 'Save Configuration' button.
- Load Settings From Local Hard Drive:** Includes a 'Choose File' button (showing 'No file chosen') and a 'Restore Configuration from File' button.
- Restore To Factory Default Settings:** Includes a 'Restore Factory Defaults' button with the text 'Restore all settings to the factory defaults.'
- Reboot The Device:** Includes a 'Reboot The Device' button.
- Remove Language Pack:** Includes a 'Remove' button.

On the right side, there is a 'Helpful Hints...' section with text explaining that once the router is configured, users can save settings to a file for later use, and that restoring factory defaults will also restore these saved settings. A 'More...' link is provided at the bottom of the hints.

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

# 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', 'STATUS', and 'HELP'. The 'FIRMWARE' section is active, displaying the following information:

- FIRMWARE**: 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.](#) After you have downloaded the new firmware file from our support site, click the Browse button below to find the firmware file on your local hard drive. Click the Upload button to update the firmware on the DIR-505. **Do not update firmware through wireless network!!**
- FIRMWARE AND LANGUAGE PACK INFORMATION**:
  - Current Firmware Version : 1.00 Date : 2012/2/29
  - Current Language Pack Version : No Language pack
  - Check Online Now for Latest Firmware and Language pack Version :
- FIRMWARE UPGRADE**:
  - Note:** Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration from the [Maintenance -> System](#) screen.
  - 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.
  - Upload :  No file chosen
- LANGUAGE PACK UPGRADE**:
  - Upload :  No file chosen

The right sidebar contains 'Helpful Hints...' with text about firmware updates and a 'More...' link. The bottom of the page shows 'WIRELESS' 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](http://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's Dynamic DNS configuration page. The page is titled 'D-Link' and 'DIR-505 Router'. The navigation tabs are 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'DYNAMIC DNS' section is active, showing the following configuration:

- Enable Dynamic DNS:**
- Server Address:** dlinkdns.com (with a << button to auto-fill)
- Host Name:** [Empty field]
- Username or Key:** [Empty field]
- Password or Key:** [Empty field]
- Verify Password or Key:** [Empty field]
- Timeout:** 576 (hours)
- Status:** Disconnected

There is also a 'Helpful Hints...' section on the right side of the page.

# 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.

The screenshot displays the D-Link DIR-505 Router web interface. At the top, the D-Link logo is visible. Below it, a navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The MAINTENANCE tab is selected, and the left sidebar shows a menu with options like ADMIN, TIME, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'PING TEST' and contains the following text: 'Ping Test sends "ping" packets to test a computer on the Internet.' Below this is a form with a label 'Host Name or IP Address:' followed by a text input field and a 'Ping' button. To the right of the main content, there is a 'Helpful Hints...' section with text explaining the ping test: 'Ping checks whether a computer on the Internet is running and responding. Enter either the IP address of the target computer or enter its fully qualified domain name.' Below the hints is a 'More...' link. At the bottom of the interface, there is a 'WIRELESS' section and a copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

# 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.

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

- SCHEDULES:** A text box stating, "The Schedule configuration option is used to manage schedule rules for various firewall and parental control features."
- ADD SCHEDULE RULE:** A form with the following fields:
  - Name:** A text input field.
  - Day(s):** Radio buttons for 'All Week' and 'Select Day(s)'. Under 'Select Day(s)', there are checkboxes for Sun, Mon, Tue, Wed, Thu, Fri, and Sat.
  - All Day - 24 hrs:** A checkbox.
  - Time format:** A dropdown menu set to '24-hour'.
  - Start Time:** Two input boxes for hours and minutes, with an AM/PM dropdown.
  - End Time:** Two input boxes for hours and minutes, with an AM/PM dropdown.
  - Buttons:** 'Save' and 'Clear' buttons.
- SCHEDULE RULES LIST:** A table with columns for 'Name', 'Day(s)', and 'Time Frame'. The table is currently empty.

The right sidebar, titled 'Helpful Hints...', contains the following text:

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...](#)

The footer of the page includes the 'WIRELESS' logo and the copyright notice: "Copyright © 2012 D-Link Corporation/D-Link Systems, Inc."

# 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 Status page. The page is divided into several sections:

- DEVICES INFO:** Includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP.
- DEVICE INFORMATION:** A summary section stating that wireless and network connection details are displayed on this page.
- GENERAL:** Displays system information:
  - Time: Jan/01/2011 03:43:50
  - System Up Time: 0 Day, 03:44:06
  - Firmware Version: 1.00, Wed, 29 Feb 2012
- WAN:** Displays WAN connection details:
  - Connection Type: DHCP client
  - Cable Status: Disconnected
  - Network Status: Disconnected (with DHCP Renew and DHCP Release buttons)
  - 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
  - Secondary DNS Server: 0.0.0.0
- LAN:** Displays LAN connection details:
  - MAC Address: 00:18:e7:95:6d:c8
  - IP Address: 192.168.0.1
  - Subnet Mask: 255.255.255.0
  - DHCP Server: Enabled
- WIRELESS LAN:** Displays wireless LAN settings:
  - Wireless Radio: Enable
  - Wireless Mode: Mixed 802.11n, 802.11g and 802.11b
  - Channel Width: Auto 20/40 MHz
  - Channel: 1
  - Wi-Fi Protected Setup: Enable / Configured
- SSID List:** A table showing the SSID configuration:
 

| Network Name (SSID)    | Guest | MAC Address       | Security Mode       |
|------------------------|-------|-------------------|---------------------|
| MobileCompanion-Claire | No    | 00:18:e7:95:6d:c8 | WPA/WPA2 - Personal |
- LAN COMPUTERS:** A section for displaying LAN computer information.

# 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.

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DIR-505 Router

SETUP ADVANCED MAINTENANCE STATUS HELP

DEVICE INFO LOGS STATISTICS INTERNET SESSIONS WIRELESS

**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 Save Log

Refresh Clear

1/4

| Time           | Message   |
|----------------|---|
| Jan 1 16:20:15 | ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake completed (RSN)              |
| Jan 1 16:20:15 | ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake 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 completed (RSN)              |
| Jan 1 16:10:15 | ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake 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 |

WIRELESS

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Helpful Hints...  
Check the log frequently to detect unauthorized network usage.  
More...

# 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.

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 contains links for DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, and WIRELESS. The main content area is titled "INTERNET SESSIONS" and contains a descriptive text box stating: "This page displays the full details of active internet sessions to your router." Below this text is a table header with columns: Local, NAT, Internet, Protocol, State, Dir, and Time-Out. A "WIRELESS" section is visible at the bottom of the interface, and the footer contains the 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.

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 contains menu items: DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, and WIRELESS. The main content area is titled 'WIRELESS' and contains a message: 'Use this option to view the wireless clients that are connected to your wireless router.' Below this, it states 'NUMBER OF WIRELESS CLIENTS : 2'. A table lists the connected clients with columns for MAC Address, IP Address, Mode, Rate (Mbps), and Signal (%).

| 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        |

On the right side, there is a 'Helpful Hints...' section with the text: 'This is a list of all wireless clients that are currently connected to your wireless router.' and a 'More...' link. The footer of the interface includes the text 'WIRELESS' and '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.

**D-Link**

DIR-505 Router

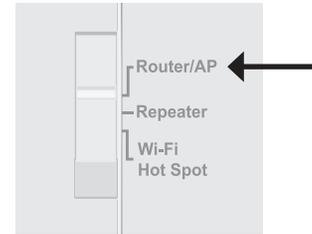
| SETUP       | ADVANCED   | MAINTENANCE | STATUS | HELP  |
|-------------|--|-------------|--------|---|
| MENU        | <b>SUPPORT MENU</b>  |             |        | Helpful Hints...  |
| SETUP       | <ul style="list-style-type: none"> <li>• <a href="#">Setup</a></li> <li>• <a href="#">Advanced</a></li> <li>• <a href="#">Maintenance</a></li> <li>• <a href="#">Status</a></li> </ul>   |             |        | <p>Click on the links for more informations of each section in the GUI.</p> |
| ADVANCED    | <b>SETUP HELP</b>  |             |        |   |
| MAINTENANCE | <ul style="list-style-type: none"> <li>• <a href="#">Internet Connection</a></li> <li>• <a href="#">Internet Settings</a></li> <li>• <a href="#">Wireless Settings</a></li> <li>• <a href="#">Network Settings</a></li> </ul>  |             |        |   |
| STATUS      | <b>ADVANCED HELP</b>   |             |        |   |
|             | <ul style="list-style-type: none"> <li>• <a href="#">Virtual Server</a></li> <li>• <a href="#">Application Rules</a></li> <li>• <a href="#">MAC Address Filter</a></li> <li>• <a href="#">Website Filter</a></li> <li>• <a href="#">Firewall Settings</a></li> <li>• <a href="#">Advanced Wireless</a></li> <li>• <a href="#">Wi-Fi Protected Setup</a></li> <li>• <a href="#">UPnP Settings</a></li> <li>• <a href="#">Guest Zone</a></li> <li>• <a href="#">DMZ</a></li> </ul> |             |        |   |
|             | <b>MAINTENANCE HELP</b>  |             |        |   |
|             | <ul style="list-style-type: none"> <li>• <a href="#">Admin</a></li> <li>• <a href="#">Time</a></li> <li>• <a href="#">System</a></li> <li>• <a href="#">Firmware</a></li> <li>• <a href="#">Dynamic DNS</a></li> <li>• <a href="#">System Check</a></li> <li>• <a href="#">Schedules</a></li> </ul>  |             |        |   |
|             | <b>STATUS HELP</b>   |             |        |   |
|             | <ul style="list-style-type: none"> <li>• <a href="#">Device Info</a></li> <li>• <a href="#">Logs</a></li> <li>• <a href="#">Statistics</a></li> <li>• <a href="#">Internet Sessions</a></li> <li>• <a href="#">Wireless</a></li> </ul>   |             |        |   |

**WIRELESS**

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# Access Point Mode

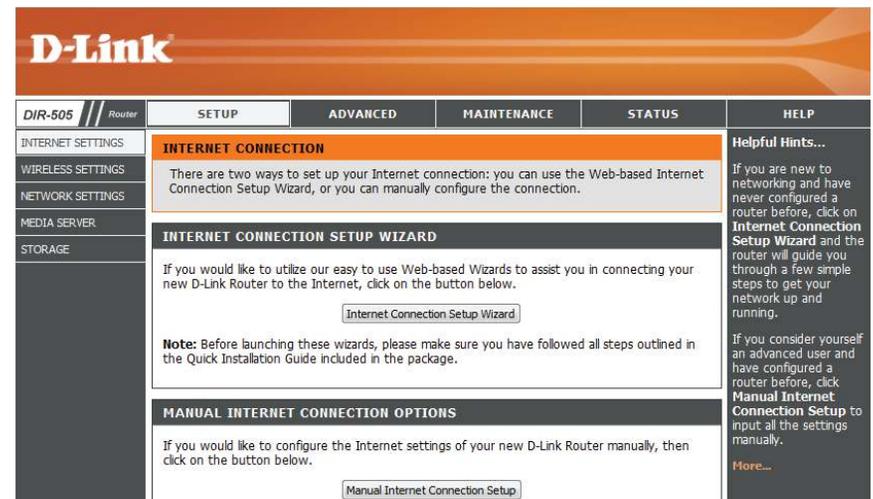
This section describes the configuration interface for Access Point mode. Make sure that the mode selector switch is in the Router/AP position on your DIR-505.



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.

The screenshot shows the D-Link DIR-505 wireless setup interface. The page is titled "D-Link" and "DIR-505 // AP". The navigation tabs are "SETUP", "ADVANCED", "MAINTENANCE", "STATUS", and "HELP". The "WIRELESS" section is active, showing the following 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:** WPA Mode: Auto (WPA or WPA2) Cipher Type: TKIP and AES
- PRE-SHARED KEY:** 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.

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**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.

The image shows two sections of a web-based configuration interface. The top section is titled "WIRELESS NETWORK SETTINGS" and contains the following options: "Enable Wireless" is checked with a dropdown set to "Always" and an "Add New" button; "Wireless Network Name" is "MobileCompanion-Claire" with a note "(Also called the SSID)"; "Wireless Band" is "2.4GHz"; "802.11 Mode" is "Mixed 802.11n, 802.11g and 802.11b"; "Enable Auto Channel Scan" is checked; "Wireless Channel" is "2.412 GHz - CH 1" with a note "(Domain:United Status)"; "Channel Width" is "Auto 20/40 MHz"; and "Visibility Status" has "Visible" selected. The bottom section is titled "WIRELESS SECURITY MODE" and shows "Security Mode" set to "WPA-Personal".

**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 Status)

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 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 :**  (length applies to all keys)

**WEP Key 1 :**

**Authentication :**

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**

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 :**

**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 :**

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

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.

**D-Link**

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

**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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# 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.

The screenshot shows the D-Link DIR-505 AP web interface. The top navigation bar includes 'DIR-505 // AP', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, and the 'MAC ADDRESS FILTER' section is active. The page title is 'MAC ADDRESS FILTER'. A descriptive text explains that the MAC filter option is used to control network access based on the MAC address of the network adapter. Below the text are 'Save Settings' and 'Don't Save Settings' buttons. The 'WIRELESS ACCESS SETTINGS' section shows a dropdown menu set to 'Turn MAC Filtering OFF'. Below this is a table with two columns: 'MAC Address' and 'Wireless Client List'. The table contains six rows, each with a 'MAC Address' field (containing '00:00:00:00:00:00'), a '<<' button, a 'Wireless Client List' dropdown menu, and a 'Clear' button. A 'Helpful Hints...' sidebar on the right provides instructions on how to use the dropdown menu and the Clear button. The footer of the interface shows 'WIRELESS' and '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 // 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

**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 the 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 shows the D-Link DIR-505 web interface. The top navigation bar includes 'D-Link', 'DIR-505 // AP', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, and the 'WI-FI PROTECTED SETUP' section is active. The page contains the following elements:

- WI-FI PROTECTED SETUP** section:
  - Text: "Wi-Fi Protected Setup is used to easily add devices to a network using a PIN or button press. Devices must support Wi-Fi Protected Setup in order to be configured by this method. If the PIN changes, the new PIN will be used in following Wi-Fi Protected Setup process. Clicking on 'Don't Save Settings' button will not reset the PIN. However, if the new PIN is not saved, it will get lost when the device reboots or loses power."
  - Buttons: "Save Settings" and "Don't Save Settings".
- WI-FI PROTECTED SETUP** section:
  - Enable:
  - Disable WPS-PIN Method:
  - Button: "Reset to Unconfigured"
- PIN SETTINGS** section:
  - Current PIN: 57893402
  - Buttons: "Reset PIN to Default" and "Generate New PIN"
- ADD WIRELESS STATION** section:
  - Button: "Add Wireless Device With WPS"

On the right side, there is a "Helpful Hints..." section with 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."

At the bottom, there is a "WIRELESS" section and a copyright notice: "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 main content area is titled 'USER LIMIT SETTINGS' and contains the following elements:

- A message: "Please Apply the settings to limit how many wireless stations connecting to AP."
- Buttons: "Save Settings" and "Don't Save Settings".
- A section titled "USER LIMIT SETTINGS" with the following options:
  - Enable User Limit :**
  - User Limit(1 - 32) :**

On the right side, there is a "Helpful Hints..." section with the following text: "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."

The bottom of the page features a "WIRELESS" section header 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.

**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.

The screenshot displays the D-Link web management interface for the DIR-505. The main content area is titled 'ADMINISTRATOR SETTINGS' and contains the following elements:

- ADMINISTRATOR SETTINGS:** A text box with instructions: "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." Below this are two buttons: 'Save Settings' and 'Don't Save Settings'.
- PASSWORD:** A section with the instruction: "Please enter the same password into both boxes, for confirmation." It contains two password input fields: 'New Password : \*\*\*\*\*' and 'Verify Password : \*\*\*\*\*'.
- ADMINISTRATION:** A section with a checkbox labeled 'Enable Graphical Authentication :

The interface also features a left-hand navigation menu with options like ADMIN, SYSTEM, FIRMWARE, TIME, SYSTEM CHECK, and SCHEDULES. A right-hand sidebar provides 'Helpful Hints...' regarding password security. The footer includes the 'WIRELESS' logo and copyright information: '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.

The screenshot shows the D-Link DIR-505 AP web interface. The top navigation bar includes 'DIR-505 // AP', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'MAINTENANCE' tab is selected, displaying the 'SAVE AND RESTORE' section. The main content area contains the following text and buttons:

**SAVE AND RESTORE**

The current system settings can be saved as a file onto the local hard drive. You can upload any save settings file that was created by the DIR-505.

**SAVE AND RESTORE**

Save Settings To Local Hard Drive :

Load Settings From Local Hard Drive :  No file chosen

Restore To Factory Default Settings :

Reboot The Device :

Remove Language Pack :

On the right side, there is a 'Helpful Hints...' section titled 'Saving System Settings' with the following text: 'Once your Access Point is configured the way you want it, you can save these settings to a configuration file that can later be loaded in the event that the AP's default settings are restored. To do this, click the Save button next to where it says Save Settings to Local Hard Drive.'

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

# 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 web interface for the DIR-505 AP. The top navigation bar includes 'DIR-505 // AP', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'MAINTENANCE' tab is selected, and the 'FIRMWARE' sub-tab is active. The main content area is divided into several 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." Below this, it instructs the user to download the new firmware file from the support site and click the 'Browse' button to find the file on their local hard drive. A warning states, "Do not update firmware through wireless network!!".
- FIRMWARE AND LANGUAGE PACK INFORMATION:** Shows the current firmware version as 1.00, dated 2012/2/29, and the current language pack as 'No Language pack'. A 'Check Now' button is provided to check for the latest version.
- FIRMWARE UPGRADE:** Contains a 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 that the PC must have a wired connection to the access point. An 'Upload' section shows a 'Choose File' button with 'No file chosen' and an 'Upload' button.
- LANGUAGE PACK UPGRADE:** Similar to the firmware upgrade section, it shows a 'Choose File' button with '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 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.

The screenshot displays the D-Link web interface for the DIR-505 AP. The main navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various system settings like ADMIN, SYSTEM, FIRMWARE, TIME, SYSTEM CHECK, and SCHEDULES. The central content area is titled 'TIME' and contains the following configuration options:

- 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:
 

| DST start | Month | Week | Day of Week | Time |
|-----------|-------|------|-------------|------|
| 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

At the bottom of the page, there is a 'WIRELESS' section and a copyright notice: 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.

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.

The screenshot displays 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 menu items: ADMIN, SYSTEM, FIRMWARE, TIME, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'PING TEST' and contains the following text: 'Ping Test sends "ping" packets to test a computer on the Internet.' Below this is a form with the label 'Host Name or IP Address:' followed by a text input field and a 'Ping' button. A 'PING RESULT' section below the form contains the instruction: 'Enter a host name or IP address above and click "Ping"'. On the right side, there is a 'Helpful Hints...' section with a 'More...' link. The footer of the interface includes the 'WIRELESS' logo and the copyright notice: 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

# 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.

The screenshot shows the D-Link DIR-505 AP 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 'SCHEDULES' and contains the following sections:

- SCHEDULES:** The Schedule configuration option is used to manage schedule rules for wireless Lan control features.
- ADD SCHEDULE RULE:**
  - Name:** [Text input field]
  - Day(s):**  All Week  Select Day(s):
    - Sun  Mon  Tue  Wed  Thu  Fri  Sat
  - All Day - 24 hrs:**
  - Time format:** [24-hour dropdown]
  - Start Time:** [00] : [00] [AM/PM dropdown] (hour:minute)
  - End Time:** [00] : [00] [AM/PM dropdown] (hour:minute)
  - Buttons:** [Save] [Clear]
- SCHEDULE RULES LIST:**

| Name | Day(s) | Time Frame |  |  |
|------|--------|------------|--|--|
|      |        |            |  |  |

The right sidebar contains 'Helpful Hints...' with the following text:

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.

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

# 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.

The screenshot shows the D-Link DIR-505 web interface. The top navigation bar includes 'DIR-505 // AP', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'STATUS' page is active, displaying the following information:

| DEVICE INFO | DEVICE INFORMATION   | Helpful Hints...  |
|-------------|--|---|
| LOGS        | All of your wireless and network connection details are displayed on this page. The firmware version is also displayed here.   | All of your LAN and Wireless connection details are displayed here. |
| STATISTICS  | <b>GENERAL</b>   |   |
| WIRELESS    | <p>Time : Jan/01/2011 03:34:41</p> <p>Firmware Version : 1.00, Wed, 29 Feb 2012</p>  |   |
|             | <b>LAN</b>   |   |
|             | <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>                                 |   |
|             | <b>WIRELESS LAN</b>  |   |
|             | <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> |   |

At the bottom of the page, there is a '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 // 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

**LOG DETAILS**

1/4

| Time           | Message  |
|----------------|--|
| Jan 1 03:30:08 | ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake completed (RSN)                         |
| Jan 1 03:30:08 | ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake completed (RSN)                         |
| Jan 1 03:20:08 | ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake completed (RSN)                         |
| Jan 1 03:20:08 | ath0: STA 28:e0:2c:dc:0a:be WPA: group key handshake 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 completed (RSN)                         |
| Jan 1 03:10:07 | ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake 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 completed (RSN)                         |
| Jan 1 03:00:07 | ath0: STA 00:24:2c:2b:a7:dc WPA: group key handshake 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.

**D-Link**

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

DEVICE INFO    **TRAFFIC STATISTICS**    Helpful Hints...

LOGS    Traffic Statistics display Receive and Transmit packets passing through your router.    This is a summary of the number of packets that have passed between the Wireless and the LAN since the device was last initialized.

STATISTICS    Refresh Statistics    Clear Statistics

WIRELESS

**LAN STATISTICS**

|                        |                        |
|------------------------|------------------------|
| Sent : 39010           | Received : 67349       |
| TX Packets Dropped : 0 | RX Packets Dropped : 0 |
| Collisions : 0         | Errors : 0             |

**WIRELESS STATISTICS**

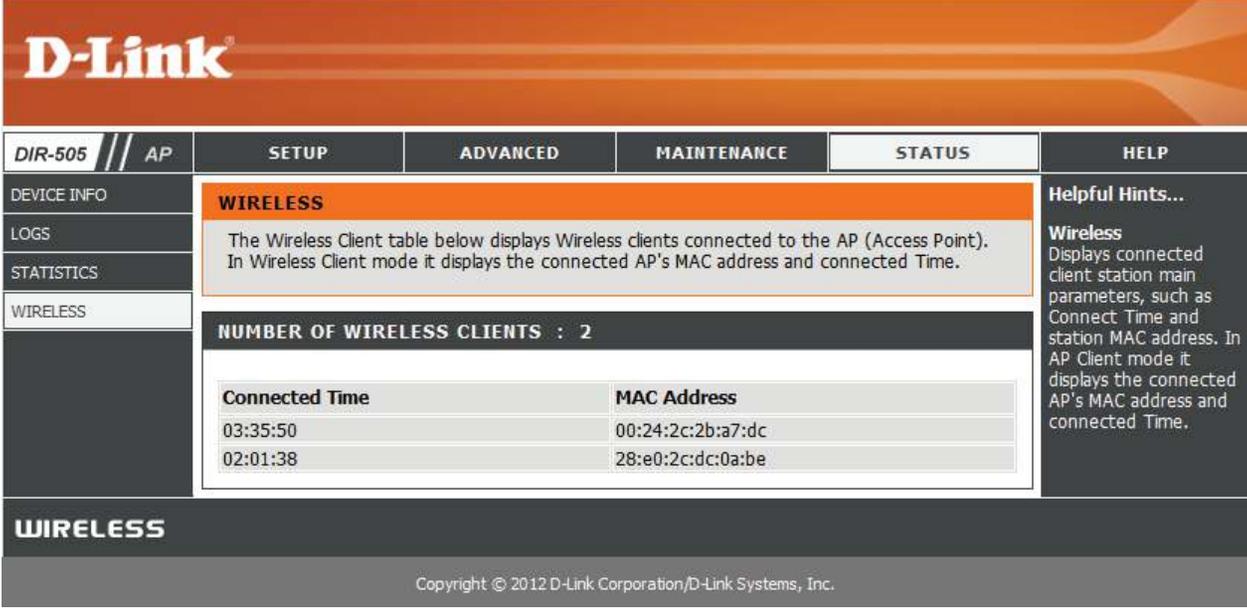
|                         |                        |
|-------------------------|------------------------|
| Sent : 88449            | Received : 75059       |
| TX Packets Dropped : 14 | RX Packets Dropped : 0 |
| Collisions : 0          | Errors : 0             |

**WIRELESS**

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# 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.



The screenshot shows the D-Link DIR-505 AP web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains menu items for DEVICE INFO, LOGS, STATISTICS, and WIRELESS. The main content area is titled "WIRELESS" and contains a descriptive text box, a summary of the number of wireless clients (2), and a table of connected clients. A "Helpful Hints..." sidebar is also visible on the right.

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

**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.

The screenshot shows the D-Link DIR-505 AP configuration interface. At the top, there is an orange header with the D-Link logo. Below the header is a navigation bar with tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The HELP tab is selected. The main content area is titled 'HELP MENU' and contains a list of links organized into sections: 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), and Status (Device Info, Logs, Statistics, Wireless). To the right of the main content area is a 'Helpful Hints...' section with a text box that says 'Click on the links for more informations of each section in the GUI.' 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.'

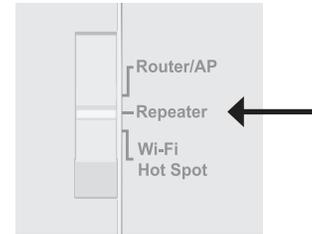
| DIR-505 // AP | SETUP  | ADVANCED | MAINTENANCE | STATUS | HELP  |
|---------------|--|----------|-------------|--------|---|
| MENU          | <b>HELP MENU</b><br><b>Setup</b> <ul style="list-style-type: none"><li>• <a href="#">Wizard</a></li><li>• <a href="#">Wireless Setup</a></li><li>• <a href="#">Lan Setup</a></li></ul> <b>Advanced</b> <ul style="list-style-type: none"><li>• <a href="#">MAC Address Filter</a></li><li>• <a href="#">Advanced Wireless</a></li><li>• <a href="#">Wi-Fi Protected Setup</a></li><li>• <a href="#">User limit</a></li></ul> <b>Maintenance</b> <ul style="list-style-type: none"><li>• <a href="#">Admin</a></li><li>• <a href="#">System</a></li><li>• <a href="#">Firmware</a></li><li>• <a href="#">Time</a></li><li>• <a href="#">System Check</a></li><li>• <a href="#">Schedules</a></li></ul> <b>Status</b> <ul style="list-style-type: none"><li>• <a href="#">Device Info</a></li><li>• <a href="#">Logs</a></li><li>• <a href="#">Statistics</a></li><li>• <a href="#">Wireless</a></li></ul> |          |             |        | <b>Helpful Hints...</b> <p>Click on the links for more informations of each section in the GUI.</p> |

**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 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**

# Setup Wizard

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

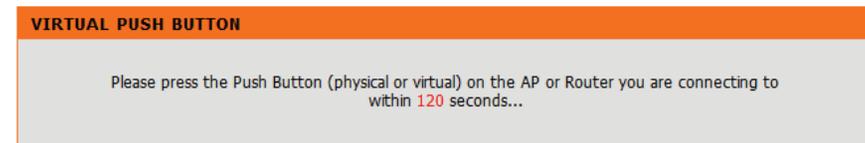
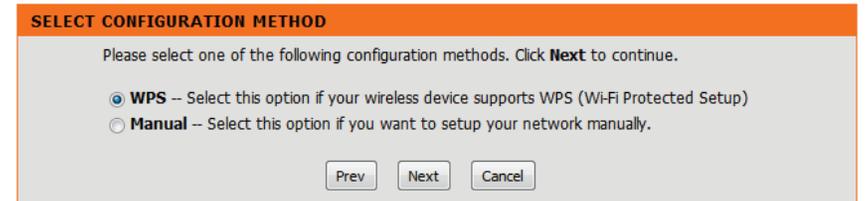
If this is the first time configuring your DIR-505, click **Next** to start the Setup Wizard.

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.

**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.

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

**SELECT WI-FI NETWORK**

Scanning for available Wi-Fi network...

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

**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.

The screenshot shows the D-Link DIR-505 Repeater's web interface for wireless setup. The main navigation bar includes 'D-Link', 'DIR-505 Repeater', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'WIRELESS' section is active, displaying instructions and configuration options. The 'WIRELESS NETWORK SETTINGS' section includes 'Enable Wireless' (checked), 'Wireless Mode' (Repeater Mode), 'Wireless Network Name' (dlink), and 'Channel Width' (Auto 20/40 MHz). The 'WIRELESS SECURITY MODE' section shows 'Security Mode' set to None. The 'WIFI PROTECTED SETUP' section has 'Enable' checked. A 'Site Survey' button is located in the 'Wireless Mode' dropdown. A 'Helpful Hints...' sidebar on the right provides additional guidance on network naming, channel selection, and security.

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 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 :**  (length applies to all keys)

**WEP Key 1 :**

**Authentication :**

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**

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 :**

**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 web interface. The top navigation bar includes 'D-Link', 'DIR-505 Repeater', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'SETUP' tab is active, and the 'LAN SETUP' sub-tab is selected. The main content area is titled 'NETWORK SETTINGS' and contains the following sections:

- NETWORK SETTINGS:** A text box explaining that the Device Name allows for easier configuration using TCP/IP protocol. Below this are 'Save Settings' and 'Don't Save Settings' buttons.
- DEVICE NAME:** A text input field with 'dlinkrouter' entered.
- LAN IPV4 CONNECTION TYPE:** A dropdown menu set to 'Dynamic IP (DHCP)'. Below it is a text box: 'Choose the IPv4 mode to be used by the Repeater.'
- DYNAMIC IP(DHCP) LAN IPV4 CONNECTION TYPE:** A section for entering IPv4 address information with the following fields:
  - 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

On the right side, there is a 'Helpful Hints...' section with additional information about Device Name 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 :**

**Subnet Mask :**

**Gateway Address :**

**Primary DNS Server :**

**Secondary DNS Server :**

# 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.

The screenshot displays the D-Link DIR-505 Repeater's web interface. At the top, the D-Link logo is visible. Below it, a navigation bar includes 'DIR-505 Repeater', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, leading to the 'ADVANCED WIRELESS' settings page. A warning message states: '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.' Below this warning are 'Save Settings' and 'Don't Save Settings' buttons. The 'ADVANCED WIRELESS SETTINGS' section shows 'Transmit Power' set to 100% and 'HT20/40 Coexistence' set to 'Enable'. A 'Helpful Hints...' sidebar on the right provides additional information about the 'Advanced Wireless' settings and the 'Transmit Power' dropdown menu.

**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 displays the D-Link DIR-505 Repeater web interface. The top navigation bar includes 'D-Link', 'DIR-505 Repeater', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED WIRELESS' section is active, showing 'WI-FI PROTECTED SETUP'.

**WI-FI PROTECTED SETUP**

Wi-Fi Protected Setup is used to easily add devices to a network using a PIN or button press. Devices must support Wi-Fi Protected Setup in order to be configured by this method. If the PIN changes, the new PIN will be used in following Wi-Fi Protected Setup process. Clicking on "Don't Save Settings" button will not reset the PIN. However, if the new PIN is not saved, it will get lost when the device reboots or loses power.

Buttons: Save Settings, Don't Save Settings

---

**WI-FI PROTECTED SETUP**

Enable :

Disable WPS-PIN Method :

Reset to Unconfigured

---

**PIN SETTINGS**

Current PIN: 30280304

Buttons: Reset PIN to Default, Generate New PIN

---

**ADD WIRELESS STATION**

Add Wireless Device With WPS

**WIRELESS**

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**Helpful Hints...**

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.

# 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 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.

**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.

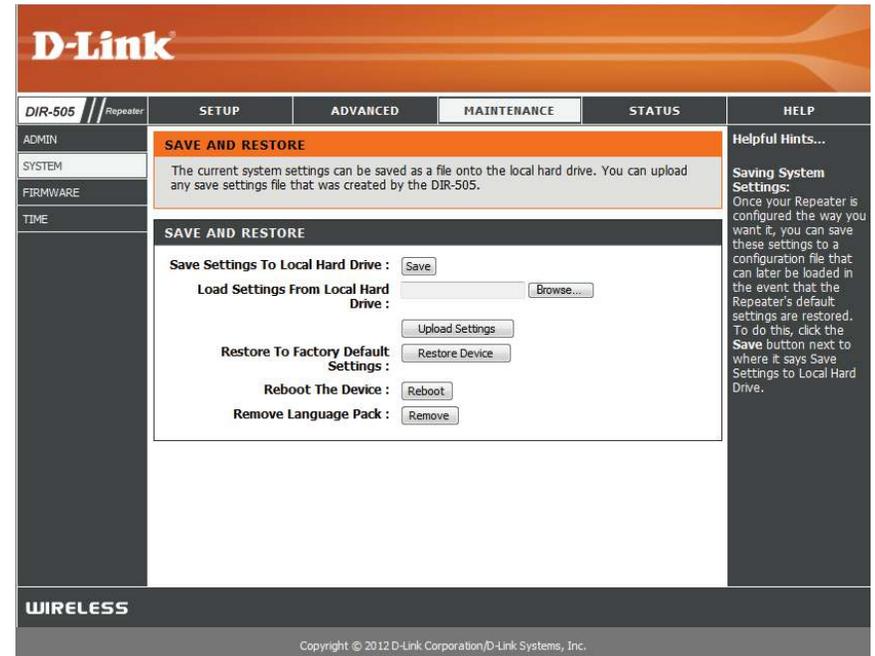
**Load Settings From Local Hard Drive:** Use this option to load previously saved configuration settings. Click **Browse** to find a previously saved configuration file. Then, click the **Upload Settings** button to transfer those settings to the DIR-505.

**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 'DIR-505 // Repeater', '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 information:

- FIRMWARE AND LANGUAGE PACK INFORMATION**
  - Current Firmware Version : 1.00      Date : 2012/2/16
  - Current Language Pack Version : No Language pack
  - Check Online Now for Latest Firmware and Language pack Version :
- FIRMWARE UPGRADE**
  - Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration from the Maintenance -> System screen
  - To upgrade the firmware, your PC must have a wired connection to the Repeater. Enter the name of the firmware upgrade file, and click on the Upload button.
  - Upload :
- LANGUAGE PACK UPGRADE**
  - Upload :

The right sidebar contains 'Helpful Hints...' and 'Firmware Updates: Firmware updates are released periodically to improve the functionality of your Repeater and also to add features. If you run into a problem with a specific feature of the Repeater, check our support site by clicking on the Click here to check for an upgrade on our support site link and see if an updated firmware is available for your Repeater.'

At the bottom of the page, there is 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.

The screenshot shows the D-Link DIR-505 Repeater web interface. The top navigation bar includes 'ADMIN', 'SYSTEM', 'FIRMWARE', and 'TIME'. The 'TIME' page is active, showing the 'TIME CONFIGURATION' section. The 'Current Time' is Jan/01/2011 00:05:29. The 'Time Zone' is set to (GMT-08:00) Pacific Time (US/Canada), Tijuana. The 'Enable Daylight Saving' checkbox is unchecked. The 'Daylight Saving Offset' is set to +1:00. The 'Daylight Saving Dates' section shows DST start on Mar 3rd Sun 1 am and DST end on Nov 2nd Sun 1 am. The 'AUTOMATIC TIME CONFIGURATION' section has 'Enable NTP Server' unchecked and 'NTP Server Used' set to '<< Select NTP Server'. The 'SET THE DATE AND TIME MANUALLY' section shows 'Date And Time' set to Year 2011, Month Jan, Day 01, Hour 00, Minute 00, and Second 00. A 'Copy Your Computer's Time Settings' button is visible at the bottom of this section. The footer of the page reads 'WIRELESS Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

# Status

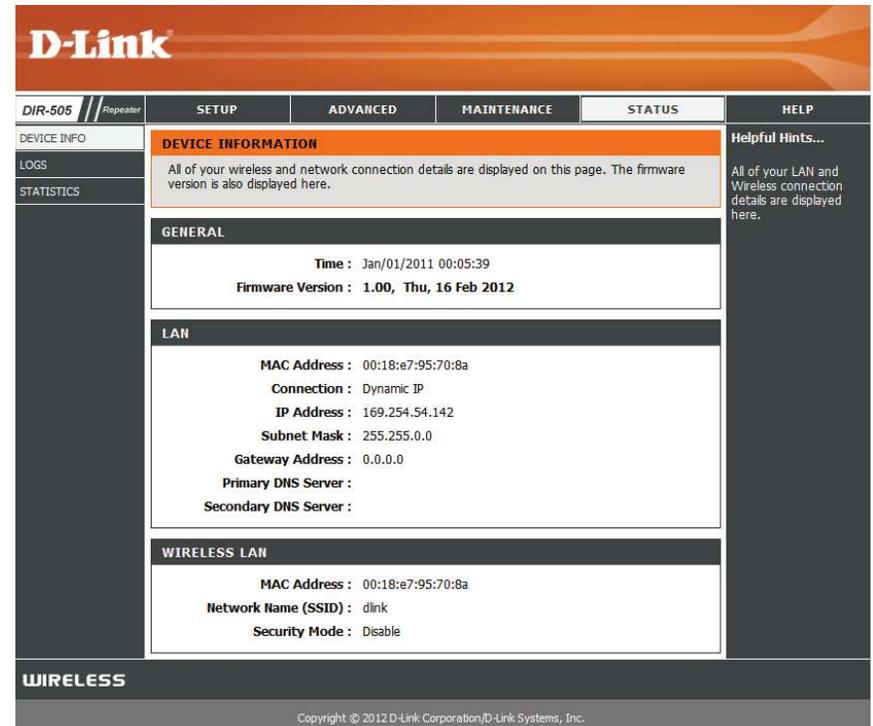
## Device Info

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.



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 main content area is titled "DEVICE INFORMATION" and contains the following sections:

- GENERAL:**
  - Time : Jan/01/2011 00:05:39
  - Firmware Version : 1.00, Thu, 16 Feb 2012
- LAN:**
  - MAC Address : 00:18:e7:95:70:8a
  - Connection : Dynamic IP
  - IP Address : 169.254.54.142
  - Subnet Mask : 255.255.0.0
  - Gateway Address : 0.0.0.0
  - Primary DNS Server :
  - Secondary DNS Server :
- WIRELESS LAN:**
  - MAC Address : 00:18:e7:95:70:8a
  - Network Name (SSID) : dlink
  - Security Mode : Disable

The bottom of the page features a "WIRELESS" section header 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.

The screenshot shows the D-Link DIR-505 Repeater web interface. The top navigation bar includes 'DIR-505 Repeater', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'LOGS' section is active, displaying 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 with the following settings:

- Log Type:  System Activity,  Debug Information,  Attacks,  Dropped Packets,  Notice
- Buttons: Apply Log Settings Now

The 'LOG DETAILS' section shows a table of log entries with columns for Time and Message. The entries are as follows:

| Time           | Message  |
|----------------|--|
| Jan 1 00:05:07 | Registering new address record for 192.168.0.1 on br0. IPv4.                   |
| Jan 1 00:05:07 | Registering new address record for 192.168.0.1 on br0. IPv4.                   |
| Jan 1 00:05:07 | New relevant interface br0.IPv4 for mDNS.                                      |
| Jan 1 00:05:07 | Joining mDNS multicast group on interface br0.IPv4 with address 192.168.0.1.   |
| Jan 1 00:05:01 | Sending discover...  |
| Jan 1 00:05:00 | DHCP client start.   |
| Jan 1 00:04:59 | Interface br0.IPv4 no longer relevant for mDNS.                                |
| Jan 1 00:04:59 | Leaving mDNS multicast group on interface br0.IPv4 with address 192.168.0.101. |
| Jan 1 00:04:59 | Withdrawing address record for 192.168.0.101 on br0.                           |
| Jan 1 00:04:59 | Withdrawing address record for 192.168.0.101 on br0.                           |

Navigation buttons include First Page, Last Page, Previous, Next, Clear, Save Log, and Refresh. The footer shows 'WIRELESS' and '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.

**D-Link**

DIR-505 // Repeater

SETUP    ADVANCED    MAINTENANCE    STATUS    HELP

DEVICE INFO

LOGS

STATISTICS

**TRAFFIC STATISTICS**

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

**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             |

**Helpful Hints...**

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

**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.

The screenshot shows the D-Link DIR-505 Repeater configuration interface. At the top is the D-Link logo. Below it is a navigation bar with tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The HELP tab is selected. The main content area is titled 'HELP MENU' and lists links for Setup, Advanced, Maintenance, and Status. A 'Helpful Hints...' section on the right provides additional information. The footer includes the 'WIRELESS' logo and copyright information.

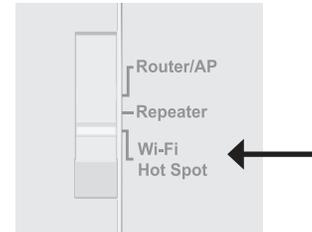
| DIR-505 // Repeater | SETUP   | ADVANCED | MAINTENANCE | STATUS | HELP  |
|---------------------|---|----------|-------------|--------|---|
| MENU                | <b>HELP MENU</b> <ul style="list-style-type: none"><li><b>Setup</b><ul style="list-style-type: none"><li><a href="#">Setup Wizard</a></li><li><a href="#">Wireless Setup</a></li><li><a href="#">Lan Setup</a></li></ul></li><li><b>Advanced</b><ul style="list-style-type: none"><li><a href="#">Advanced Wireless</a></li></ul></li><li><b>Maintenance</b><ul style="list-style-type: none"><li><a href="#">Admin</a></li><li><a href="#">System</a></li><li><a href="#">Firmware</a></li><li><a href="#">Time</a></li></ul></li><li><b>Status</b><ul style="list-style-type: none"><li><a href="#">Device Info</a></li><li><a href="#">Logs</a></li><li><a href="#">Statistics</a></li></ul></li></ul> |          |             |        | <b>Helpful Hints...</b> <p>Click on the links for more informations of each section in the GUI.</p> |

**WIRELESS**

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# 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.

A screenshot of the LOGIN screen. The title bar is orange and says 'LOGIN'. Below it, the text 'Log in to the HotSpot:' is displayed. There are two input fields: 'User Name' with a dropdown menu showing 'Admin' and 'Password' with a text box. A 'Login' button is located below the password field.A screenshot of the WI-FI CONNECTION SETUP WIZARD screen. The title bar is orange and says 'WI-FI CONNECTION SETUP WIZARD'. The main content area contains the text: '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.' At the bottom right, there are 'Next' and 'Cancel' buttons.A screenshot of the SELECT WI-FI NETWORK screen. The title bar is orange and says 'SELECT WI-FI NETWORK'. The main content area shows the status 'Scanning for available Wi-Fi network...'. At the bottom right, there are 'Prev', 'Next', and 'Cancel' buttons.

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

| 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"/> |

Rescan Connect Cancel

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:

Prev Next Cancel

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)

Prev Next Cancel

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.

Prev Save Cancel

# 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.

The image shows two screenshots of a router's web interface. The top screenshot is titled "INTERNET SETTINGS" and contains the following text: "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." Below this text are several configuration fields: "My Internet Connection is :" with a dropdown menu set to "Dynamic IP (DHCP)"; "Host Name :" with a text box containing "DIR-505"; "MTU :" with a text box containing "1500"; "Attain DNS Automatically" (selected with a radio button) and "Set DNS Manually" (unselected with a radio button); "MAC Address :" with a text box containing "00:00:00:00:00:00" and a button labeled "Clone Your PC's MAC address". The bottom screenshot is titled "WIFI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)" and shows an "Enable :" checkbox that is checked, and a button labeled "Process WPS".

# 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**.

The screenshot shows the D-Link DIR-505 HotSpot configuration interface. The main heading is "WIRELESS LAN". Below this, there is a "LOCAL WI-FI NETWORK SETTINGS" section with the following options:

- 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
- Channel Width:** Auto 20/40 MHz
- Visibility Status:**  Visible  Invisible

Below this is the "LOCAL WI-FI SECURITY MODE" section with "Security Mode" set to WPA-Personal.

The "WPA" section includes a detailed explanation of WPA and WPA2 modes and their security features. It also includes a "WPA Mode" dropdown set to "Auto (WPA or WPA2)" and a "Cipher Type" dropdown set to "TKIP and AES".

The "PRE-SHARED KEY" section prompts the user to enter an 8 to 63 character alphanumeric pass-phrase.

On the right side of the interface, there is a "Helpful Hints..." section with the following text:

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.

The screenshot displays two sections of a configuration interface. The top section, titled "PRE-SHARED KEY", contains a text box with the instruction: "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." Below this is a label "Pre-Shared Key:" followed by a text input field containing seven black dots. The bottom section, titled "WIFI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)", features a label "Enable:" next to a checked checkbox. Below the checkbox is a button labeled "Process WPS".

# 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.

The screenshot shows the D-Link DIR-505 HotSpot web interface. The main navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains a menu with options like SETUP WIZARD, WI-FI HOTSPOT SETUP, WIRELESS LAN SETUP, LAN SETUP, MEDIA SERVER, and STORAGE. The main content area is titled 'NETWORK SETTINGS' and contains the following sections:

- NETWORK SETTINGS:** A header section with a description: "Use this section to configure the internal network settings of your AP." Below this are two buttons: "Save Settings" and "Don't Save Settings".
- DEVICE NAME:** A section with a description: "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)". Below this is a text input field labeled "Device Name" with the value "dlinkrouter".
- DYNAMIC IP (DHCP) LAN CONNECTION TYPE:** A section with the instruction "Enter the IPv4 Address Information." Below this are three text input fields: "IP Address" (192.168.0.1), "Subnet Mask" (255.255.255.0), and "Local Domain Name".
- DHCP SERVER SETTINGS:** A section with the instruction "Use this section to configure the built-in DHCP Server to assign IP addresses to the computers on your network." Below this are three controls: "Enable DHCP Server" (checked checkbox), "DHCP IP Address Range" (192.168.0.100 to 192.168.0.199), and "DHCP Lease Time" (1440 minutes).

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

- 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).

The footer of the page includes the text "WIRELESS" and "Copyright © 2012 D-Link Corporation/D-Link Systems, Inc."

# 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 Media Server configuration page. The page has a navigation bar with tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains a menu with options: SETUP WIZARD, WI-FI HOTSPOT SETUP, WIRELESS LAN SETUP, LAN SETUP, MEDIA SERVER (selected), 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'. Below this is a section titled 'DLNA MEDIA SERVER' with a checkbox for 'Enable DLNA Media Server' (checked) and a text input field for 'Media Server Name' containing 'DIR-505'. The footer of the page includes the 'WIRELESS' logo and the 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.

The screenshot shows the D-Link DIR-505 web interface for the Storage section. The main heading is 'STORAGE'. Below it, there is a description of SharePort Web Access and two buttons: 'Save Settings' and 'Don't Save Settings'. The 'SHAREPORT WEB ACCESS' section includes a checked checkbox for 'Enable SharePort Web Access', input fields for 'HTTP Access Port' (8181) and 'HTTPS Access Port' (4433), and an unchecked checkbox for 'Allow Remote Access'. The '10 -- USER CREATION' section has input fields for 'User Name', 'Password', and 'Verify Password', along with a dropdown menu and 'Add/Edit' and 'Delete' buttons. The 'USER LIST' section contains a table with columns for No., User Name, Access Path, and Permission. The table lists two users: 'admin' with Read/Write permissions and 'guest' with Read Only permissions. Below the table, it shows 'NUMBER OF DEVICES : 0' and a table with columns for Device, Total Space, and Free Space. The 'SHAREPORT WEB ACCESS LINK' section provides a link to connect to the drive remotely.

| No. | User Name | Access Path | Permission |
|-----|-----------|-------------|------------|
| 1   | admin     | /           | Read/Write |
| 2   | guest     | None        | Read Only  |

**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 |

**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.

WIRELESS

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# 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 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.

**D-Link**

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 :

**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.

The screenshot shows the D-Link DIR-505 HotSpot web interface. The top navigation bar includes 'DIR-505 // HotSpot', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The left sidebar lists 'ADMIN', 'SYSTEM', 'FIRMWARE', and 'TIME'. The main content area is titled 'SAVE AND RESTORE' and contains the following text and controls:

The current system settings can be saved as a file onto the local hard drive. You can upload any save settings file that was created by the DIR-505.

**SAVE AND RESTORE**

Save Settings To Local Hard Drive :

Load Settings From Local Hard Drive :

**Restore To Factory Default Settings :**

**Reboot The Device :**

**Remove Language Pack :**

Helpful Hints... **Saving System Settings:** Once your Access Point is configured the way you want it, you can save these settings to a configuration file that can later be loaded in the event that the AP's default settings are restored. To do this, click the **Save** button next to where it says Save Settings to Local Hard Drive.

At the bottom of the page, it says 'WIRELESS' and 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

# 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 'DIR-505 // HotSpot', '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 your DIR-505 to improve functionality and performance. Click here to check for an upgrade on our support site.' It instructs users to download the new firmware file from the support site and click the 'Browse' button to find the file on their local hard drive. A warning states: 'Do not update firmware through wireless network!!'
- FIRMWARE AND LANGUAGE PACK INFORMATION:** Shows 'Current Firmware Version : 1.00', 'Date : 2012/2/9', and 'Current Language Pack Version : No Language pack'. A 'Check Now' button is available to check for the latest versions.
- FIRMWARE UPGRADE:** Includes 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.' There is an 'Upload' field with a 'Browse...' button and an 'Upload' button.
- LANGUAGE PACK UPGRADE:** Similar to the firmware upgrade section, it has an 'Upload' field with 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.

The screenshot displays the D-Link DIR-505 HotSpot configuration interface, specifically the Time Configuration page. The page is organized into several sections:

- TIME:** A header section with a brief description of the Time Configuration option and two buttons: "Save Settings" and "Don't Save Settings".
- TIME CONFIGURATION:** This section contains:
  - Current Time:** Jan/01/2011 00:16:11
  - Time Zone:** (GMT-08:00) Pacific Time (US/Canada), Tijuana
  - Enable Daylight Saving:** A checked checkbox.
  - Daylight Saving Offset:** +1:00
  - Daylight Saving Dates:** A table with columns for DST start, DST End, Month, Week, and Day of Week Time.
 

| DST start | DST End | Month | Week | Day of Week | Time |
|-----------|---------|-------|------|-------------|------|
| Mar       | Nov     | 3rd   | 2nd  | Sun         | 1 am |
- AUTOMATIC TIME CONFIGURATION:** This section contains:
  - Enable NTP Server:** A checked checkbox.
  - NTP Server Used:** A text input field followed by a dropdown menu labeled "Select NTP Server".
- SET THE DATE AND TIME MANUALLY:** This section contains:
  - Date And Time:** A series of dropdown menus for Year (2011), Month (Jan), Day (01), Hour (00), Minute (00), and Second (00).
  - Copy Your Computer's Time Settings:** A button.

On the right side of the page, there is a "Helpful Hints..." section titled "System Time Settings" which explains that this section allows administrators 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 'D-Link', 'DIR-505 // HotSpot', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'STATUS' tab is selected. 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 header 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             |

Helpful Hints...  
Check the log frequently to detect unauthorized network usage.

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. The traffic counter will reset if the DIR-505 is rebooted.

**D-Link**

DIR-505 // HotSpot

SETUP    ADVANCED    MAINTENANCE    **STATUS**    HELP

DEVICE INFO

LOGS

**STATISTICS**

**TRAFFIC STATISTICS**

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

Refresh Statistics    Clear Statistics

**LAN STATISTICS**

|                        |                        |
|------------------------|------------------------|
| Sent : 8395            | Received : 8755        |
| TX Packets Dropped : 0 | RX Packets Dropped : 0 |
| Collisions : 0         | Errors : 0             |

**WIRELESS STATISTICS**

|                        |                        |
|------------------------|------------------------|
| Sent : 912             | Received : 15          |
| TX Packets Dropped : 0 | RX Packets Dropped : 0 |
| Collisions : 0         | Errors : 0             |

**Helpful Hints...**

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

**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.

The screenshot shows the D-Link DIR-505 HotSpot configuration interface. At the top is the D-Link logo. Below it is a navigation bar with tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The HELP tab is selected. The main content area is titled 'HELP MENU' and lists links for Setup, Advanced, Maintenance, and Status. A 'Helpful Hints...' section on the right provides instructions on how to use the links. The footer contains the text 'WIRELESS' and 'Copyright © 2012 D-Link Corporation/D-Link Systems, Inc.'

| DIR-505 // HotSpot | SETUP  | ADVANCED | MAINTENANCE | STATUS | HELP  |
|--------------------|--|----------|-------------|--------|---|
| MENU               | <b>HELP MENU</b><br><b>Setup</b> <ul style="list-style-type: none"><li>• <a href="#">Wizard</a></li><li>• <a href="#">Wireless Setup</a></li><li>• <a href="#">Lan Setup</a></li></ul> <b>Advanced</b> <ul style="list-style-type: none"><li>• <a href="#">Advanced Wireless</a></li></ul> <b>Maintenance</b> <ul style="list-style-type: none"><li>• <a href="#">Admin</a></li><li>• <a href="#">System</a></li><li>• <a href="#">Firmware</a></li><li>• <a href="#">Time</a></li></ul> <b>Status</b> <ul style="list-style-type: none"><li>• <a href="#">Device Info</a></li><li>• <a href="#">Logs</a></li><li>• <a href="#">Statistics</a></li></ul> |          |             |        | <b>Helpful Hints...</b><br>Click on the links for more informations of each section in the GUI. |

**WIRELESS**

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# 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).

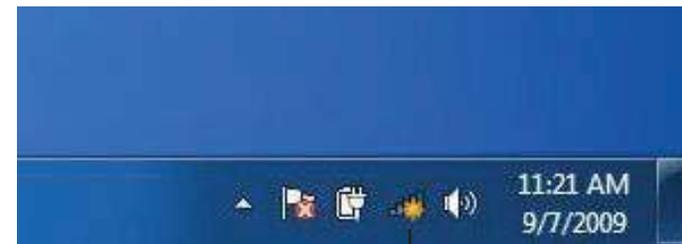
**Step 3** - Allow up to 1 minute to configure. Once the WPS light stops blinking, you will be connected and your wireless connection will be secure with WPA2.

# 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.

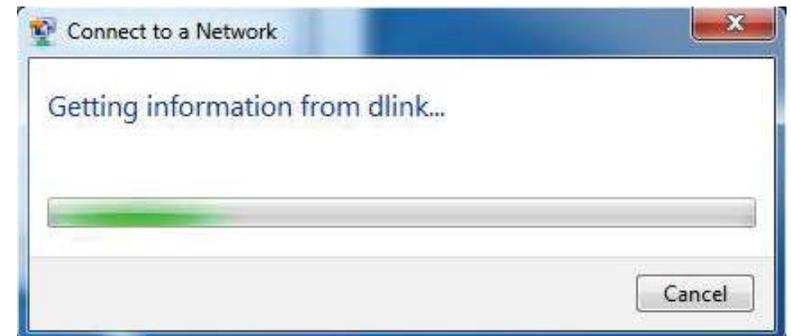


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

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.



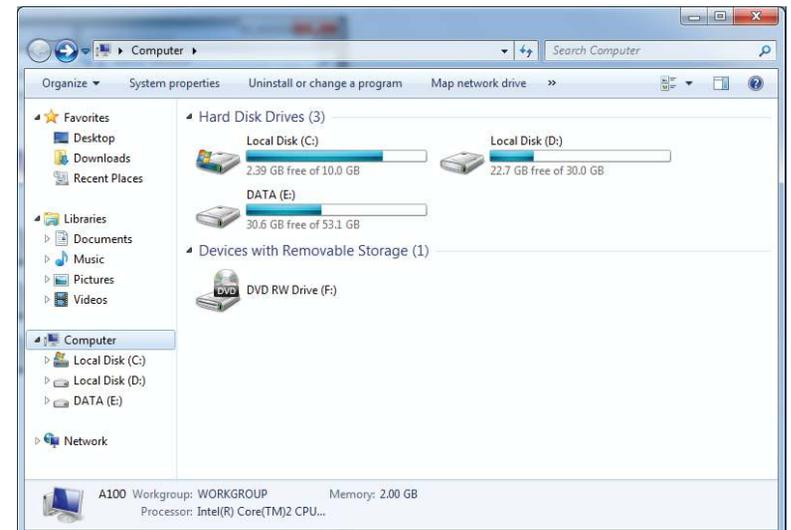
# WPS

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:

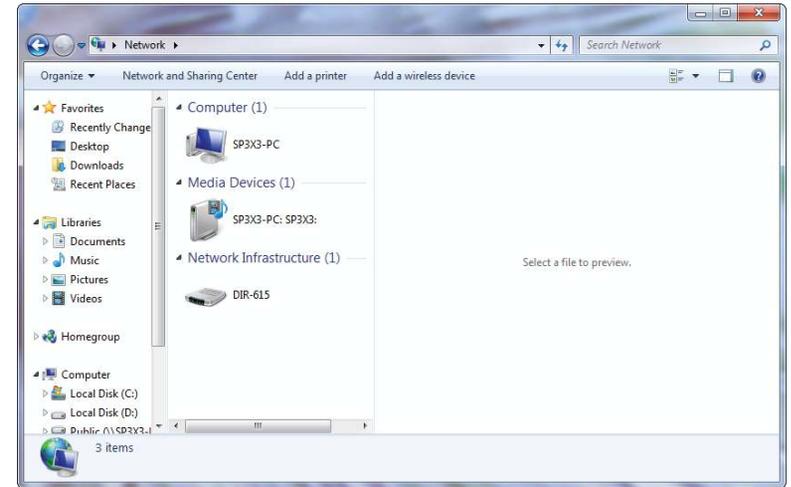
1. Click the **Start** button and select **Computer** from the Start menu.



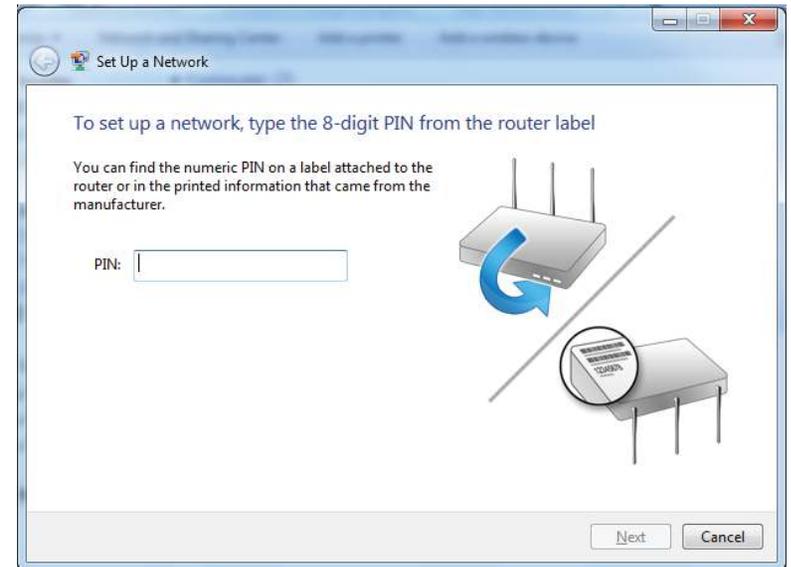
2. Click **Network** on the left side.



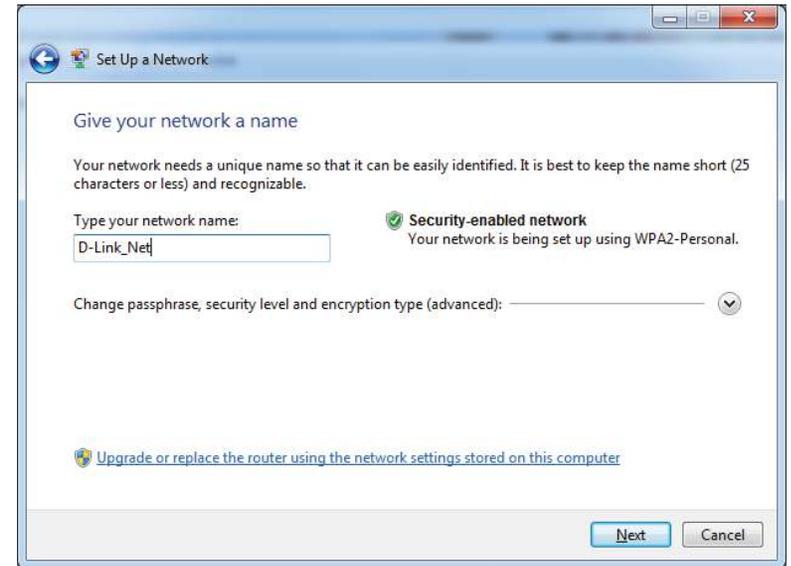
3. Double-click the DIR-505.



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**.

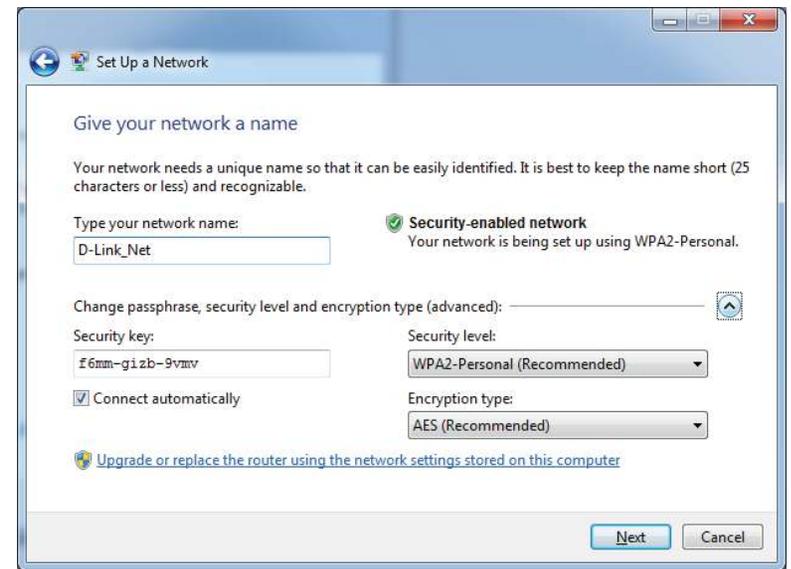


5. Type a name to identify the network.



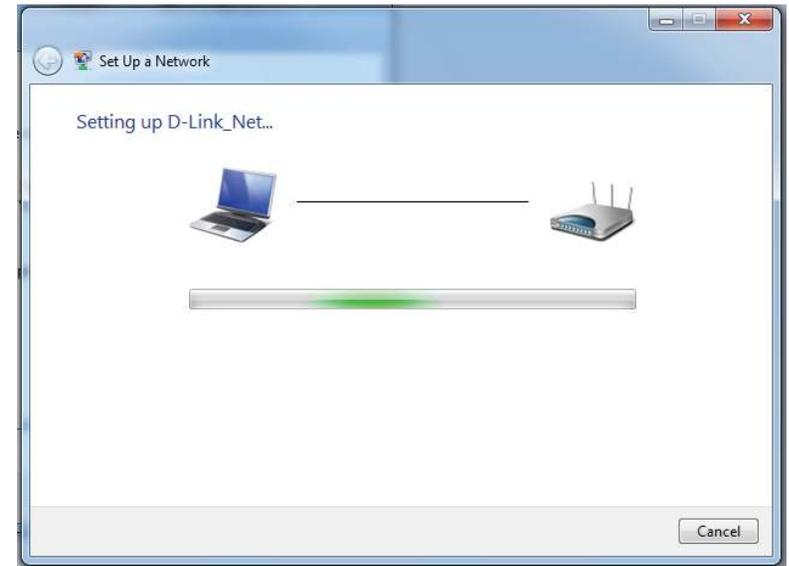
6. To configure advanced settings, click the  icon.

Click **Next** to continue.



7. The following window appears while the Router is being configured.

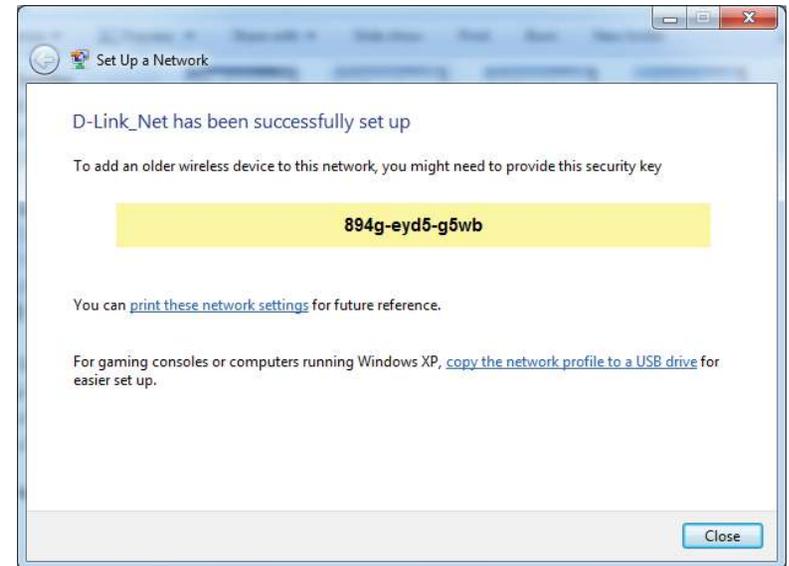
Wait for the configuration to complete.



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.



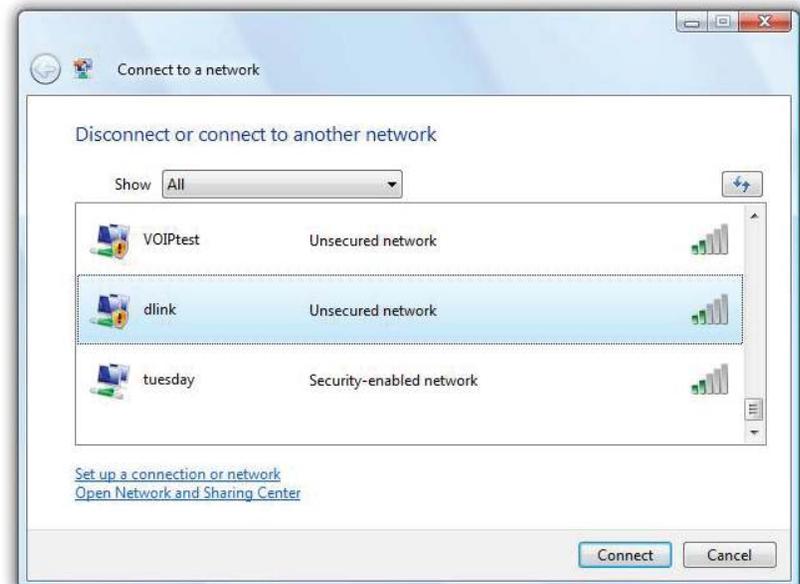
## WPA/WPA2

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.

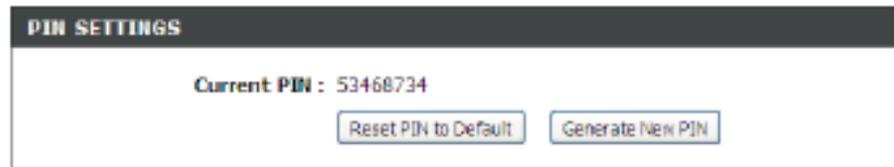


## WPS/WCN 2.0

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.

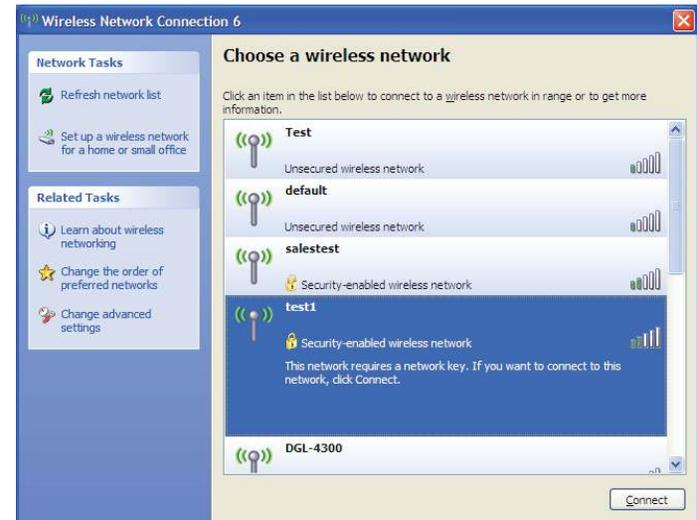
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

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.

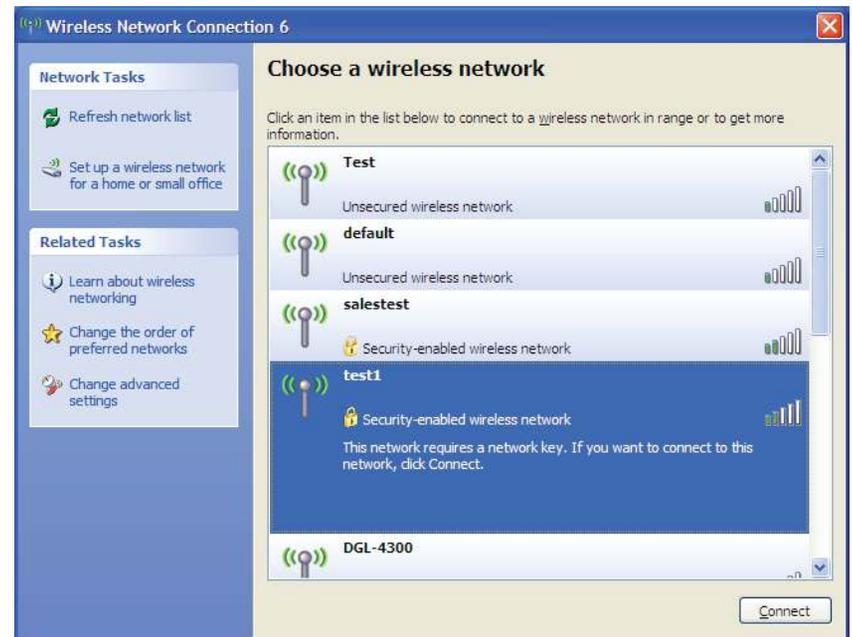
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



## WPA/WPA2

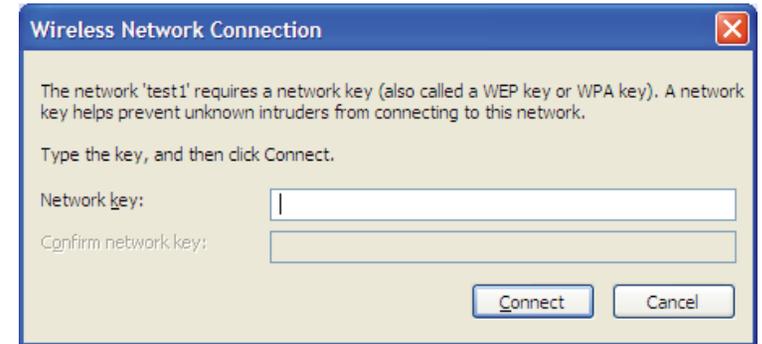
It is recommended to enable WPA on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

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.
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

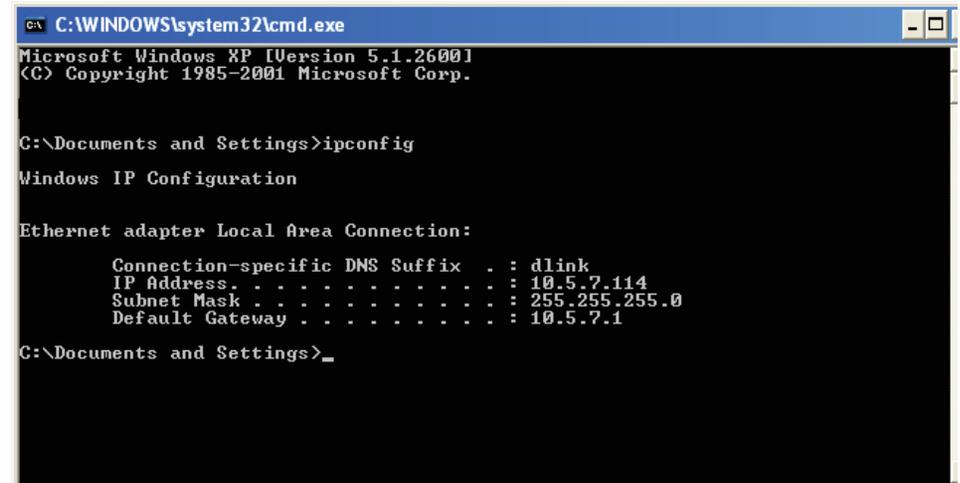
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

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]
(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.**

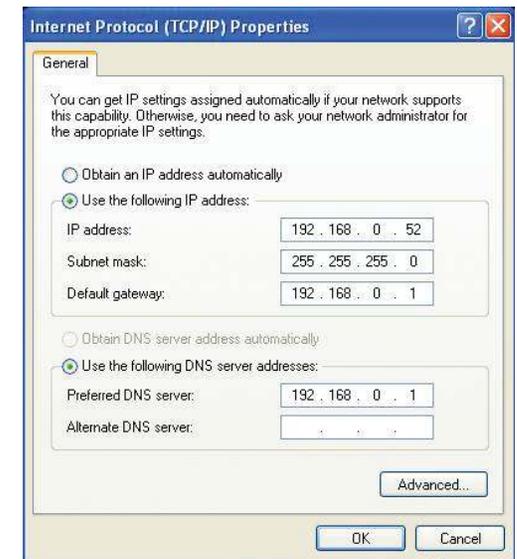
**Step 3**  
Highlight **Internet Protocol (TCP/IP)** and click **Properties.**

**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 <sup>1</sup>

- 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 <sup>2</sup>
- QRS Mobile setup app for iOS <sup>3</sup>
- 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)

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

<sup>2</sup> SharePort Mobile app functionality only available when in Router or Wi-Fi Hotspot mode.

<sup>3</sup> QRS Mobile app is for Router mode setup only.

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## **FCC Statement:**

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- 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.

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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.