Preface

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Manual Revisions

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<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1.0</td>
<td>September 26, 2012</td>
<td>• Initial release</td>
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Product Overview

Package Contents

- DIR-506L SharePort™ Go Mobile Companion
- USB Cable
- Rechargeable Battery
- Quick Install Guide

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

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<th>Network Requirements</th>
<th>Web-based Configuration Utility Requirements</th>
</tr>
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<tbody>
<tr>
<td>• An Ethernet-based Cable or DSL modem&lt;br&gt;• IEEE 802.11n or 802.11g wireless clients&lt;br&gt;• 10/100 Ethernet</td>
<td><strong>Computer with the following:</strong>&lt;br&gt;• Windows®, Macintosh, or Linux-based operating system&lt;br&gt;• An installed Ethernet adapter</td>
</tr>
</tbody>
</table>

**Browser Requirements:**<br>• Internet Explorer 7 or higher<br>• Safari 4 or higher<br>• Firefox<br>• Chrome

**Windows® Users:** Make sure you have the latest version of Java installed. Visit [www.java.com](http://www.java.com) to download the latest version.
Introduction

TOTAL PERFORMANCE
Combines award winning router features and Wireless N150 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 DIR-506L will let you create a secure wireless network to share photos, files, music, video, printers and network storage throughout your home. Connect the DIR-506L 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-506L 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.
Section 1 - Product Overview

Features

• **Faster Wireless Networking** - The DIR-506L 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-506L is 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 Media Access Control (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-506L can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-506L can securely access corporate networks.

* 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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Charging</th>
<th>Not Charging</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power LED</td>
<td>Flashing green</td>
<td>High Battery Capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solid Green</td>
<td>Battery full charged when device on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solid Amber</td>
<td>Battery in charging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solid Red</td>
<td>Low Battery Capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flashing Red</td>
<td>Need to charge device as soon as possible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Off</td>
<td>Battery full charged when device off</td>
</tr>
</tbody>
</table>

Pressing the WPS button allows additional devices to connect securely and automatically.

Pressing the Reset button restores the DIR-506L to its original factory default settings.

Connect a USB flash drive to configure the wireless settings using SharePort™ Mobile and SharePort™ Web File Access. Both allow you to share a USB or a storage device with your local network.

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<tbody>
<tr>
<td>2</td>
<td>WPS Button</td>
<td>Pressing the WPS button allows additional devices to connect securely and automatically.</td>
</tr>
<tr>
<td>3</td>
<td>Reset Button</td>
<td>Pressing the Reset button restores the DIR-506L to its original factory default settings.</td>
</tr>
<tr>
<td>4</td>
<td>USB Port</td>
<td>Connect a USB flash drive to configure the wireless settings using SharePort™ Mobile and SharePort™ Web File Access. Both allow you to share a USB or a storage device with your local network.</td>
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<tbody>
<tr>
<td>5</td>
<td>USB LED Indicator</td>
<td>Flashing Green</td>
<td>Connect to USB (SharePort is not ready)</td>
</tr>
<tr>
<td></td>
<td>Solid Green</td>
<td>Connect to USB (SharePort is ready)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Remove USB</td>
<td></td>
</tr>
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<tbody>
<tr>
<td>6</td>
<td>Ethernet LED Indicator</td>
<td>Solid Green</td>
<td>Normal use: Ethernet connection is established</td>
</tr>
<tr>
<td></td>
<td>Flashing Green</td>
<td>Normal use: data packet transferred via Ethernet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Ethernet is not connected</td>
<td></td>
</tr>
</tbody>
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<td>Wi-Fi LED Indicator</td>
<td>Solid Green</td>
<td>Wi-Fi on</td>
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<td></td>
<td>Flashing Green</td>
<td>Data packet transferred via WiFi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fast Flashing Green</td>
<td>WPS mode for WiFi Client</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Wi-Fi off</td>
<td></td>
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Hardware Overview
Side/Left

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
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<td>Ethernet LAN/WAN Port</td>
</tr>
<tr>
<td>2</td>
<td>Power Switch</td>
</tr>
<tr>
<td>3</td>
<td>Mini USB Port</td>
</tr>
</tbody>
</table>
Battery Cover

Slide the battery cover to remove it and access the battery compartment.

Battery Compartment

Insert the rechargeable battery into the compartment, making sure the contact points on the battery are properly aligned with the contact points of the device. After proper insertion, replace the battery cover.

**Note:** Using a rechargeable battery other than the one that came with your package may cause damage to your device and will void its warranty.
Router Mode Diagram

The DIR-506L 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.

*Note:* For best quality, we suggest this application be used by up to five users simultaneously.
Hotspot Diagram

The DIR-506L can connect to an existing wireless network with an Internet connection, such as a hotspot at a hotel, airport, or coffee shop. This will allow you to share that single connection to multiple wireless devices. You can also share files with other computers or devices on your wireless network by using the SharePort™ Mobile app.

*Note: For best quality, we suggest this application be used by up to five users simultaneously.*
The DIR-506L can connect to an existing network and allow wireless devices to connect to the network. Plug the DIR-506L into your network (via switch or router) using an Ethernet cable. Wireless devices can now connect to the DIR-506L and access your network. Note that AP mode does not support sharing files from a USB storage drive or the SharePort Mobile app.

Below are two examples of how to use the DIR-506L in AP mode:
Repeater Mode Diagram

Use Repeater mode to increase the range of your current wireless router or access point. The DIR-506L will connect wirelessly to your wireless router or access point and will broadcast its signal to your wireless clients. Note that Repeater mode does not support sharing files from a USB storage drive or the SharePort Mobile app.

**Note:** For best results, place the DIR-506L equal distance between the router/AP and your wireless clients.
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 radio frequency (RF) 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 in not in use.
Installation
First Time Setup

1. Make sure the battery is installed properly (see page 7). Connect the USB cable to the DIR-506L and then connect to a USB port on your computer. It is strongly recommended to charge the battery at least four hours before using.

2. Push the power button to the on position and wait until the power LED turns green.

3. By default the DIR-506L is in Router mode and must be connected wirelessly with a computer or mobile device to set up.

4. Using a wireless computer or mobile device, launch your wireless utility and connect to the DIR-506L. The default Wi-Fi Network Name (SSID) is **dlink_DIR-506L** and the Wi-Fi Password is left blank (no security).
5. To access the DIR-506L to configure, open your web browser. If you are using an Android or iOS device (iPad, mobile phone, etc) and want to use Router mode, skip to the next page and use the QRS Mobile app, otherwise use a web browser and continue with the following steps.


7. At the login screen, enter `admin` for the user name and leave the password field empty. By default, the password is blank.

8. Click the **Setup** tab. Here you may either run the **Internet Connection Setup Wizard** or manually configure your DIR-506L.

   If you clicked **Internet Connection Setup Wizard**, skip to page 20 and continue with the setup.

   If you want to manually configure your settings, skip to page 25.

   **Once you have completed configuring your DIR-506L, you may install the SharePort Mobile app to your mobile device and share files from a USB storage device (USB thumb drive, flash drive, or USB external hard drive). Refer to pages 43-46 for more information.**
QRS Mobile App Setup

1. You may download the QRS (Quick Router Setup) Mobile app to use your mobile device to set up your DIR-506L. Scan the code below using the barcode scanner App (e.g. Bakodo or RedLaser) from your iOS or Android device.

If you do not have the app, search QRS Mobile from the App Store or Google Play. You will be directed to the App store or Play store so that you may begin the Installation process. Please make sure you have an Internet connection before download the app.

2. **iOS** - Press **Settings > Wi-Fi** and select the wireless network (SSID) that you created in the setup, and then enter your Wi-Fi password.

   **Android** - Press **Wireless & Networks > Wi-Fi Settings** and then select the wireless network (SSID) that you created in the setup. Enter your Wi-Fi password.

3. Use the following information to connect to your DIR-506L wirelessly:
   - Default WiFi SSID: `dlink_DIR-506L`
   - Default Password: *(leave this blank)*
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.
Section 2 - Installation

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.
Configuration

1. To access the configuration utility of the DIR-506L, open a web browser and enter http://192.168.0.1 or http://dlinkrouter.local in the address bar.

2. Enter admin for the user name and leave the password field empty. By default, the password is blank.

3. The configuration interface will open and you can configure your DIR-506L.
Setup
Internet Settings

If you want to configure your router to connect to the Internet using the 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 25.
Internet Connection Setup Wizard

The Internet Connection Setup Wizard is designed to guide you through a step-by-step process to configure your DIR-506L and connect to the Internet.

1. Click Next to continue.

2. In order to secure your router, please enter a new password and verify the password. Click Next to continue.

   **Note:** This password is used only to log into your DIR-506L, not your Wi-Fi Password.

3. Select your time zone from the drop-down menu and click Next to continue.
4. 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.

*If you are connecting to a wireless hotspot such as a hotel, select Wi-Fi HotSpot.*

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** to copy your current computer’s MAC address.

Click **Next** to continue.

Setup is complete. 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 automatically reboot the router.
Section 3 - Configuration

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.

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.
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.

If you selected **Wi-Fi HotSpot**, a list of available wireless networks will appear. Select the wireless network supplying an Internet connection and click **Select** at the bottom.

If the network you are connecting to has encryption/security enabled, you must enter the Wi-Fi Password. Click **Next** to continue.
If you selected **Static**, enter the IP and DNS settings supplied by your ISP. Click **Next** to continue.

Your setup is complete. Click **Connect** to save your settings and automatically reboot your router.
Manual Internet Setup

If you clicked **Manual Internet Connection Setup** on the **Internet** page, you will see this screen, allowing you to configure the Internet connection for your DIR-506L. After making your changes, click the **Save Settings** button.

**My Internet**  Select the connection mode to use: **Dynamic IP (DHCP), PPPoE, PPTP L2TP, Wi-Fi HotSpot** or **Static**. 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.

If you are connecting to a wireless hotspot such as a hotel, select **Wi-Fi HotSpot**. Refer to page 32.
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, enter it here. You can click the **Clone Your PC’s MAC Address** button to copy your current computer’s MAC address.
If you selected **PPPoE**, you will see the following settings. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

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

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

**Username:** 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.

**MAC Address:** If your ISP requires you to enter a MAC address, enter it here. You can click the **Clone Your PC's MAC Address** button to copy your current computer's MAC address.
If you selected **PPTP**, you will see the following settings. Your ISP will provide you with a username and password.

**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:** (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.

**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**.

**Primary/Secondary DNS Server:** The DNS server information will be supplied by 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, enter it here. You can click the **Clone Your PC’s MAC Address** button to copy your current computer’s MAC address.
If you selected L2TP, you will see the following settings. Your ISP will provide you with a username and password. This option is typically used for DSL services.

**My Internet** 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** 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.

**Primary/Secondary DNS** 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, enter it here. You can click the **Clone Your PC’s MAC Address** button to copy your current computer’s MAC address.
If you selected **Wi-Fi Hotspot**, the DIR-506L will scan for an available Wi-Fi hotspot to connect to. If one or more is found, they will appear in a list along with details of the signal.

- **My Internet Connection**: Select **Wi-Fi Hotspot** from the drop-down menu.

- **Wireless AP List**: The router will automatically scan for potential hotspot connections and add them to the **Wireless AP List**.

  - **Refresh**: The router will rescan for available hotspots.

  - **Select**: When you have chosen a hotspot from the list, click **Select** to enter your credentials and connect.

**Note:** In **Wi-Fi HotSpot** mode, if a hotspot is assigning 192.168.0.x IP addresses to clients, there will be an IP conflict with the DIR-506L default IP 192.168.0.x. Please change the DIR-506L LAN IP to 192.168.y.1 with y avoiding 0 (e.g. 192.168.5.1). Refer to page 45 to change your LAN IP address.
Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Connection 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 page 36.

You can also connect using **Wi-Fi Protected Setup** (WPS). Refer to page 73.
Wireless Network Setup Wizard

The Wireless Network 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 click **Next**.

Choose your wireless security level from the following options:

**BEST (Recommended):** Select this option to create a network key using either AES or TKIP, and click **Next**.

**BETTER:** Select this option to create a network key using TKIP, and click **Next**.

**GOOD:** Select this option to create a network key using either ASCII or HEX, and click **Next**.

**NONE (Not Recommended):** Select this option if you do not want to use a network key, and click **Next**. If you select this option, wireless setup will be completed. Click **Save** to save your settings and complete the setup process.
If you selected **BEST** for your wireless security option, you will need to choose either **AES** or **TKIP** and manually enter a password for your wireless network. When you are finished, click **Next**.

![Wireless Security Password](image1)

If you selected **BETTER** for your wireless security option, you will need to manually enter a password for your wireless network using TKIP. When you are finished, click **Next**.

![Wireless Security Password](image2)

If you selected **GOOD** for your wireless security option, you will need to choose either **ASCII** or **HEX** and manually enter a password for your wireless network. When you are finished, click **Next**.

![Wireless Security Password](image3)

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

![Setup Complete](image4)
Manual Wireless Configuration

If you clicked *Manual Wireless Network Setup* you can choose what mode the DIR-506L will operate in and configure the wireless network settings. After making your changes, click the **Save Settings** button.

**Wireless Mode:** Choose from either **Router Mode**, **AP (Access Point) Mode** or **Repeater Mode** from the drop down menu.

*Note:* For HotSpot mode, select **Router mode** and configure your Internet connection to **Wi-Fi HotSpot**.
Router Mode

If you select Router Mode you can configure the DIR-506L as a router. After making changes to the wireless network settings, click the Save Settings button.

Enable Wireless: Check Enable Wireless to enable the wireless function. If you want to disable wireless functions, uncheck the box.

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:
- **B/G Mixed**: Select this if you are using a mix of 802.11g and 802.11b wireless clients.
- **N Mode**: Select this for 802.11n wireless clients.
- **B/G/N Mixed**: Select this if you are using a mix of 802.11n, g and b wireless clients.

Auto Channel Scan: When this box is checked, the DIR-506L will automatically select the channel with the least amount of interference.

Wireless Channel: If Auto Channel Scan is unchecked, select the channel you want to use for wireless communication.

Channel Width: Select the Channel Width:
- **Auto 20/40**: This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
- **20MHz**: Select if you are not using any 802.11n wireless clients.

Visibility Status: If you want to broadcast the name of your wireless network (SSID) select Visible, or select Invisible to hide it.

For wireless security, refer to page 40.
Access Point (AP) Mode

If you chose AP Only Mode you can configure the DIR-506L as an access point within an existing network. After making changes to the wireless network settings, click the Save Settings button.

**Enable Wireless:** Check Enable Wireless to enable the wireless function. If you want to disable wireless functions, uncheck the box.

**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:
- **B/G Mixed:** Select this if you are using a mix of 802.11g and 802.11b wireless clients.
- **N Mode:** Select this for 802.11n wireless clients.
- **B/G/N Mixed:** Select this if you are using a mix of 802.11n, g and b wireless clients.

**Auto Channel Scan:** When this box is checked, the DIR-506L will automatically select the channel with the least amount of interference.

**Wireless Channel:** If Auto Channel Scan is unchecked, select the channel you want to use for wireless communication.

**Channel Width:** Select the Channel Width:
- **Auto 20/40** - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
- **20MHz** - Select if you are not using any 802.11n wireless clients.

**Visibility Status:** If you want to broadcast the name of your wireless network (SSID) select Visible, or select Invisible to hide it.

For wireless security, refer to page 40.
Repeater Mode

If you chose Repeater Mode you can configure the DIR-506L as a repeater for another wireless device. After making changes to the wireless network settings, click the Save Settings button.

Enable Wireless: Check Enable Wireless to enable the wireless function. If you want to disable wireless functions, uncheck the box.

Wireless Network: When you are browsing for available wireless networks, this Name: 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:
- **B/G Mixed**: Select this if you are using a mix of 802.11g and 802.11b wireless clients.
- **N Mode**: Select this for 802.11n wireless clients.
- **B/G/N Mixed**: Select this if you are using a mix of 802.11n, g and b wireless clients.

Auto Channel Scan: When this box is checked, the DIR-506L will automatically select the channel with the least amount of interference.

Wireless Channel: If Auto Channel Scan is unchecked, select the channel you want to use for wireless communication.

Channel Width: Select the Channel Width:
- **Auto 20/40**: This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
- **20MHz**: Select if you are not using any 802.11n wireless clients.

Visibility Status: If you want to broadcast the name of your wireless network (SSID) select Visible, or select Invisible to hide it.

Site Survey: Click Site Survey to display a list of available wireless networks. Click the network you want to “repeat”. If the network is encrypted/secure, you will need to enter the Wi-Fi password. Click Save Settings.

For wireless security, refer to page 40.
Section 3 - Configuration

WPA-Personal

**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 Wi-Fi password (pre-shared key) for your wireless network. You will need to enter this on your wireless devices when connecting to the DIR-506L.

WPA-Enterprise

**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.

**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.
Network Settings

This section will allow you to change the local network settings of the DIR-506L and to configure the DHCP settings. After making your changes, click the **Save Settings** button.

**Router IP Address:** Enter the IP address of the DIR-506L. 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.

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

**Local Domain Name:** Enter a name for the DIR-506L.

**Enable DHCP Server:** Check this box to enable the DHCP server on your router. Uncheck to disable this function.

**DHCP Lease Time:** The length of time for the IP address lease. Enter the Lease time in minutes.

**Primary DNS IP Address:** Configure the IP address of the preferred DNS server.

**Secondary DNS IP Address:** Configure the IP address of the backup DNS server, if any.

**Primary WINS IP Address:** Configure the IP address of the preferred WINS server.

**Secondary WINS IP Address:** Configure the IP address of the backup WINS server, if any.
Media Server

*Media Server* allows you to share music, pictures and videos with any devices connected to your network. After making your changes, click the *Save Settings* button. Note this option is only available in Router mode.

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

**Media Server Name:** Enter your media server’s name.
Storage

Storage will allow you to access files from a USB external hard drive or flash drive that is plugged into the DIR-506L from your local network or the Internet, using either a web browser or the SharePort™ Mobile app on a smartphone or tablet. You can create users to customize access rights to the files stored on the USB drive. After making changes, click the Save Settings button. Note this option is only available in Router mode.

Enable Shareport  Check to enable sharing files stored on a USB storage drive connected to the DIR-506L.

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-506L when connecting. (For example: http://192.168.0.1 or http://dlinkrouter.local:8181).

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

User Name: Create a user name. To edit an existing user, use the drop-down 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. Click Add/Edit to save your changes.

User List: This section shows existing user accounts. Admin and guest are default accounts.

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.
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-506L. For more information on using this feature, please refer to Storage on page 43.

**Note:** The SharePort™ Web/SharePort™ Mobile feature of the DIR-506L can only be used when the device is configured for Router mode in the wireless settings.

1. Plug your USB flash drive into the USB port on top of the DIR-506L.

   **Note:** To avoid USB crash, do not unplug the drive while the USB LED is flashing. Also, allow 3-4 minutes before using. Wait until the USB light stops flashing.

2. Scan this code using a barcode scanner app (e.g. Bakodo or RedLaser) from your iOS or Android device. If you do not have the app, search for D-link SharePort Mobile from the App Store or Google play. You will be directed to the App Store or the Google play store to begin the Installation process. Please make sure you have Internet connection before downloading the app.
3. From your iOS mobile device, press Settings.

4. **iOS** - Press **Wi-Fi**, select the wireless network (SSID) that you created in the setup, and then enter your Wi-Fi password.
   
   **Android** - Press **Wireless & Networks > Wi-Fi Settings** and then select the wireless network (SSID) that you created in the setup. Enter your Wi-Fi password.

5. Once connected, press the **SharePort** icon and the SharePort app will launch.
Section 3 - Configuration

6. Press the **Settings** gear icon located on the top right-hand corner of the screen. Click **Edit** to enter your User Name and Password. Click **Done** to continue. Refer to page 43 to create user accounts.

7. 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-506L to scan and catalog your files.
Advanced Virtual Server

*Virtual Server* will allow you to open a single port. If you would like to open a range of ports, refer to *Application Rules* on the next page. After making your changes, click the **Save Settings** button. Note this option is only available in Router mode.

**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.

**Traffic Type:** Select **TCP**, **UDP**, or **Both** from the drop-down menu.
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 Network Address Translation (NAT). Application Rules allows some of these applications to work with the DIR-506L. If you need to run applications that require multiple connections, specify the port normally associated with the application in the Trigger Port setting and the ports associated with the trigger port to open them for inbound traffic. After making your changes, click the Save Settings button. Note this option is only available in Router mode.

**Popular** Enter a name for the rule or select an application from Applications: 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.

**Incoming Ports:** Enter the ports you want to allow incoming traffic when the trigger port is activated.

**Enable:** Check to enable this rule or leave unchecked to ignore it.
MAC Address Filter

Use *Media Access Control (MAC) Filter* 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.

**MAC Address Control:** Click **Enable** to allow MAC filtering.

**Connection Control:** When this option is selected, only PCs and devices with MAC addresses listed below with the ‘C’ option checked can connect to the router. The drop-down menu will allow you to choose whether all other MAC addresses that are not in the list will be blocked or allowed to connect.

**Association Control:** When this option is selected, only PCs and devices with MAC addresses listed below with the ‘A’ option checked can associate themselves with the wireless LAN. The drop-down menu will allow you to choose whether all other MAC addresses that are not in the list will be blocked or allowed to associate.

**MAC Address:** Enter the MAC addresses you would like to filter and then select whether you want them in the ‘C’ (Connection Control) group, the ‘A’ (Association Control) group, or both. If the control groups are not enabled, these designations will be ignored.
**URL Filter**

*URL Filter* 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. Note this option is only available in Router mode.

**URL Filtering:** Check the **Enable** box to allow website filter rules.

**URL Filtering Rules:** Enter the websites you want to block or allow in the text boxes. Any website address that contains the text entered will be blocked once you click **Enable** and then save your settings.

![URL Filter Setup](image-url)
Outbound Filter

The Outbound Filter option is an advanced method of controlling data sent from the DIR-506L. With this feature you can configure outbound data filtering rules that control data based on an IP address range. Outbound Filters can be used on outbound packets. You must click Save Settings at the top to save the settings. Note this option is only available in Router mode.

**Outbound Filter**: Check the Enable box to allow outbound filtering rules.

**Use schedule**: Click the drop-down menu to select how you want the rule to be scheduled.

**Outbound Filter** This section will list any rules that are created. You may click the Edit icon to change the settings or enable/disable the rule, or click the Delete icon to remove the rule.

**Allow/Deny all** Allow or Deny passage of addresses and ports that match the filter rules you set.

**Source IP and Ports**: Enter the source IP address and port. Enter 0.0.0.0 if you do not want to specify an IP range.

**Destination IP and Ports**: Enter the destination IP address and port. Enter 0.0.0.0 if you do not want to specify an IP range.

**Enable**: Check this box to enable the rule you are creating.

**Schedule Rule #**: Provide an identification number for the rule.

**Add New Rule**: Click the Add button to apply your settings.
Inbound Filter

The **Inbound Filter** option is an advanced method of controlling data received from the Internet. With this feature, you can configure inbound data filtering rules that control data based on an IP address range. Inbound Filters can be used with Virtual Server, Port Forwarding or Remote Administration features. You must click **Save Settings** at the top to save the settings. Note this option is only available in Router mode.

**Inbound Filter**: Check the **Enable** box to allow inbound filtering rules.

**Use schedule** Click the drop-down menu to select how you want the rule to be scheduled.

**Inbound Filter** This section will list any rules that are created. You may **Rules List**: click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule.

 Allow/Deny all **Allow** or **Deny** passage of addresses and ports that match to pass: the filter rules you set.

**Source IP and** Enter the source IP address and port. Enter 0.0.0.0 if you **Ports**: do not want to specify an IP range.

**Destination IP** Enter the destination IP address and port. Enter 0.0.0.0 if and **Ports**: you do not want to specify an IP range.

**Enable**: Check this box to enable the rule you are creating.

**Schedule Rule #**: Provide an identification number for the rule.

**Add New Rule**: Click the **Add** button to apply your settings.
SNMP

The Simple Network Management Protocol (SNMP) is an application layer protocol to remotely manage network devices so you can find and solve network problems with ease. After making your changes, click the Save Settings button. Note this option is only available in Router mode.

**SNMP Local:** Enable this option to allow local SNMP management.

**SNMP Remote:** Enable this option to allow remote SNMP management.

**Get Community:** Enter a name for the read community of your SNMP server.

**Set Community:** Enter a name for the write community of your SNMP server.

- **IP 1:** Set the first IP address to be managed here.
- **IP 2:** Set a second IP address to be managed here.
- **IP 3:** Set a third IP address to be managed here.
- **IP 4:** Set a fourth IP address to be managed here.

**SNMP Version:** Choose the version of SNMP to be used by your server.

**WAN Access IP Address:** Enter the IP address used for WAN access here.
Routing

The *Routing* option is an advanced method of customizing specific routes of data through your network. After making your changes, click the **Save Settings** button. Note this option is only available in Router mode.

**RIP:** Select **Enable** to turn on routing and auto-select the RIP version, or select **RIPv1** or **RIPv2**.

**Destination IP:** Enter the IP address of packets that will take this route.

**Subnet Mask:** Enter the subnet mask of the route. Please note that the octets must match your destination IP address.

**Gateway:** Enter your next hop gateway to be taken if this route is used.

**Hop:** Enter a number to represent the hop value of this route.

**Enable:** Check to enable this route or leave unchecked to ignore it.
Guest Zone

The *Guest Zone* feature allows you to create a separate wireless network for guests to access the Internet without allowing them to connect to your own devices. After making your changes, click the **Save Settings** button. Note this option is only available in Router mode.

**Enable Guest Zone:** Click this box 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:** Select between **None**, **WEP**, **WPA-Personal**, and **WPA-Enterprise**. Refer to *Wireless Settings* on page 33 for information on how to configure the different security modes.
Advanced Wireless

*Advanced Wireless* allows you to set various advanced wireless settings of your DIR-506L. 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.

**Beacon Interval:** This value determines the frequency in which packets broadcast by the router will synchronize with the wireless network.

**Transmit Power:** Use the drop-down box to set the transmit power of the antennas.

**RTS Threshold:** Enter the size of each Request to Send frame.

**Fragmentation:** Enter a value of the maximum size for a packet before the data is fragmented into multiple packets.

**DTIM Interval:** Set your Delivery Traffic Indication Message rate here.

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

**TX Rates:** Select the TX data rate you would like to use from the drop-down menu.
Advanced Network

*Advanced Network* allows you to set various advanced network settings of your DIR-506L. After making your changes, click the **Save Settings** button. Note this option is only available in Router mode.

**Enable UPnP:** Click on **Enabled** to use the Universal Plug and Play (UPnP™) feature. UPnP provides compatibility with networking equipment, software and peripherals.

**Enable WAN** Check this box to allow the DIR-506L to respond to pings. **Ping Respond:** Unchecking the box may provide some extra security from hackers.

**Enable Power Saving in Battery Mode:** Check this box to allow the router to minimize the power usage when disconnected from a power source and using the battery, while still providing the necessary power for normal operations.
Tools
Admin Settings

*Administrator Settings* will allow you to change the password for the administrator account for configuring the settings of the DIR-506L. You can also turn on *Remote Management*. After making your changes, click the *Save Settings* button.

**New Password:** Enter a new password for the Admin account. The administrator can make changes to the settings.

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

**Enable Remote Management:** Remote Management allows the DIR-506L to be configured over the Internet through a web browser. A username/password is still required to access the configuration interface.

**IP Allowed to Access:** This is the IP that will be used to access the DIR-506L configuration interface when using remote management.

**Port:** This is the port number to be used for remote management.
Time

The *Time and Date* 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:** Click the **Enable Daylight Saving** box to select Daylight Saving time manually. 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.

**Auto Sync:** 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**
- Enter the NTP server or select one from the drop-down menu.
**SysLog**

The DIR-506L keeps a running log of events and activities occurring on the router. You may send these logs to a SysLog server on your network. Note this option is only available in Router mode.

**Enable Logging to SysLog Server:** Check this box to send the router logs to a SysLog server.

**SysLog Server IP Address:** The address of the SysLog server that will be used to send the logs. You may also select your computer from the drop-down menu (only if receiving an IP address from the router via DHCP).
E-mail Settings

The E-mail Settings feature can be used to send system log files, router alert messages and firmware update notification to your e-mail address. Note this option is only available in Router mode.

**Enable E-mail**  When this option is enabled, router activity logs are e-mailed to a designated e-mail address.

**SMTP Server IP and Port:** Enter the SMTP server address and SMTP port used for sending e-mail.

**SMTP Username:** Enter your account username for sending e-mail.

**SMTP Password:** Enter the password associated with the account.

**Send E-mail alert to:** Enter the e-mail address(es) where you would like your e-mail alerts delivered.

**E-mail Subject:** Enter a subject line for the alert e-mails.
### System

*System Settings* allows you to save and restore your configuration, reset and reboot the DIR-506L, and remove any added language packs.

**Save Settings**  Click the **Save** button 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**  Use this option to load previously saved configuration settings. Click **Browse** to find a previously saved configuration file. Click the **Upload Settings** button to transfer those settings to the DIR-506L.

**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.
Firmware Upgrade

_Firmware Upgrade_ allows you to upgrade the firmware of the DIR-506L. Make sure the firmware you want to use is on the local hard drive of the computer. Click on Choose File to locate the firmware file to be used for the upgrade. Please check the D-Link support website for firmware updates at [http://support.dlink.com](http://support.dlink.com).

**Upload:** After you have downloaded the new firmware, click Choose File to locate the firmware update on your hard drive. Click Upgrade to complete the firmware upgrade. Do not disconnect from the DIR-506L or power your computer or DIR-506L off during the upgrade process.

**Accept unofficial firmware:** Check this box to apply a firmware file that is not an official release from D-Link. Using this option is not recommended.
Dynamic DNS

The **DDNS** feature allows you to host a server (Web, FTP, Game Server, etc.) behind your DIR-506L using a domain name that you have purchased (**www.whateveryournameis.com**) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter in your domain name to connect to your server no matter what your IP address is. After making your changes, click the **Save Settings** button.

**Enable Dynamic DNS:** Check this box to enable DDNS.

- **Provider:** Select your DDNS service from the drop-down menu.

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

- **Username / E-mail:** Enter the Username or e-mail for your DDNS account.

- **Password / Key:** Enter the Password or key for your DDNS account.
System Check

This page allows you to run a ping test to check your Internet connectivity. Note this option is only available in Router mode.

**Host Name or IP address:** The Ping Test is used to send ping packets to test if your DIR-506L is connected to the Internet. Enter the host name or IP address that you wish to ping and click the Ping button.
Schedules

You can create schedules for use with some of the features of the DIR-506L, which will allow those features to be active during certain times of the day or week. Note this option is only available in Router mode.

Enable   Allows the DIR-506L to apply schedule rules for the filters you have configured.

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

Schedule Rules The list of created schedules will be listed here. Click the List: Add New Rule button to create a schedule rule.
Status

Device Info

The *Device Information* page displays the general information for the DIR-506L, as well as 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.
Log

The DIR-506L keeps a running log of events and activities. If the DIR-506L 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**.

- **Previous:** Directs you to the previous page of the log.
- **Next:** Directs you to the next page of the log.
- **First Page:** Directs you to the first page of the log.
- **Last Page:** Directs you to the last page of the log.
- **Refresh:** Refreshes the log.
- **Download:** This button opens dialog where you can save the current log to your hard drive.
- **Clear logs:** Clears all current log content.
Statistics

The DIR-506L 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-506L is rebooted.
Wireless

The *Wireless Client List* displays current connected wireless clients. This table also displays the connection time and MAC address of the connected wireless clients.
Section 3 - Configuration

Help

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

WPS Button

The easiest and most secure way to connect your wireless devices to the router is Wi-Fi Protected Setup (WPS). 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-506L router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS, then follow the steps below:

**Step 1** - Press the WPS button on the DIR-506L for about one second. The WPS button will start to blink.

**Step 2** - Within two minutes, press the WPS button on your wireless client (or launch the software utility and start the WPS process).

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

Log into the DIR-506L interface, click the **Setup** tab, and then click **Wireless Settings** on the left. Click the **Wi-Fi Protected Setup** button.

**WPS**: Enable the Wi-Fi Protected Setup feature. Note that if this option is unchecked, the WPS button on the router will be disabled.

**AP Pin**: Displays the current PIN for the DIR-506L. Enter this PIN in your wireless client using PIN method.

**Generate New PIN**: Click to generate a new random PIN.

**Config Mode**: Select **Enrollee** or **Registrar** from the drop-down menu.

**Disable WPS-PIN Method**: Disabling WPS-PIN prevents the settings from being changed by the Wi-Fi Protected Setup feature of the router. Devices can still be added to the network using WPS. However, the settings of the network will not change once this option is checked.

**Config Method**: Select **Push Button** and then click **Trigger** to start the WPS process. You will need to initiate WPS Push button on your wireless client within two minutes.

Select **PIN code** and enter the PIN from the wireless device you want to connect to and click **Trigger**. You will need to initiate WPS PIN method on your wireless client within two minutes.

**WPS Status**: Displays the current WPS status of the DIR-506L.
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).

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-506L can be configured using Windows® 7.

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

2. Click Network on the left side.
3. Double-click the **DIR-506L**.

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.
Section 4 - Connecting a Wireless Client

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, 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 your 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.
Section 4 - Connecting a Wireless Client

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 DIR-506L 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 box 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.
Section 4 - Connecting a Wireless Client

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-506L. Read the following descriptions if you are having problems.

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

When entering the IP address of the D-Link router (for example: http://192.168.0.1 or http://dlinkrouter.local), you are not connecting to a website nor do you have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

• Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Internet Explorer® 7 and higher
  - Firefox
  - Chrome
  - Safari 4 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 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.
Section 5 - Troubleshooting

• 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 DIR-506L, locate the reset button (hole) between the WPS button and the USB port. With the router powered on, use a paperclip to hold the button down for 5 seconds. Release the button and the router will go through its reboot process. Wait about 45 seconds to access the router. The default IP address is 192.168.0.1 or http://dlinkrouter.local. 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 e-mails when connecting through my router?

If you are having a problem sending or receiving e-mail, 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**, in the box type `cmd`, and press **Enter**.

- 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`
You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by two (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, lets 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 and enter the IP address of your router (192.168.0.1 or http://dlinkrouter.local) 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 e-mail. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.
Appendix A - Wireless Basics

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, 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.
Appendix A - Wireless Basics

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 as become so popular in recent years that almost everyone is using it. Whether it’s for home, office or business, D-Link has a wireless solution for it.

Home
• Gives everyone at home broadband access
• Surf the web, check e-mail, 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 the Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants and Convention Centers.

A 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 will 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.
Assign a Static 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 or http://dlinkrouter.local, 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 or http://dlinkrouter.local).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1 or http://dlinkrouter.local). 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 802.11n
• IEEE 802.11g
• IEEE 802.3
• IEEE 802.3u

Wireless Modes
• Router
• Access Point (AP) Mode
• Repeater Mode
• Wi-Fi Hot Spot Mode

Wireless Frequency Range
• 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 Android and iOS
• 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

Device Management
• Web UI

Diagnostic LEDs
• Power
• Wi-Fi
• Ethernet
• USB

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
• 102.9 x 79.8 x 22.3 mm

Weight
• 0.125 kg

1 Frequency Range varies depending on local regulations
2 SharePort™ Mobile app functionality only available when in Router or Wi-Fi Hotspot mode.
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http://tsd.dlink.com.tw/GPL.asp

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An interactive user interface displays “Appropriate Legal Notices” to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

The “source code” for a work means the preferred form of the work for making modifications to it. “Object code” means any non-source form of a work.

A “Standard Interface” means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

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You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

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You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

   a) The work must carry prominent notices stating that you modified it, and giving a relevant date.

   b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to “keep intact all notices”.

   c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.

   d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an “aggregate” if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation’s users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.
6. Conveying Non-Source Forms.
You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- **a)** Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

- **b)** Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

- **c)** Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

- **d)** Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

- **e)** Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.
A “User Product” is either (1) a “consumer product”, which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, “normally used” refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

“Installation Information” for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.
7. Additional Terms.
“Additional permissions” are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

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Appendix D - GPL Code Statement

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17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.
Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:
D-Link warrants that the hardware portion of the D-Link product described below (“Hardware”) will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below (“Warranty Period”), except as otherwise stated herein.

- Hardware: One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware.

Repai​red or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.
Limited Software Warranty:
D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Software Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:
The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.
Submitting A Claim (USA):
The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.

- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.com/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.
Submitting A Claim (Canada):
The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- Customers need to provide their receipt (proof of purchase) even if the product is registered. Without a receipt, no warranty service will be done. The registration is not considered a proof of purchase.

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.

- The customer must obtain a Case ID Number from D-Link Technical Support at 1-800-361-5265, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.ca/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will be rejected by D-Link. Products shall be fully insured by the customer and shipped to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

- RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM – 9:00PM EST
Appendix E - Warranty

**What Is Not Covered:**
The Limited Warranty provided herein by D-Link does not cover:
Products that, in D-Link’s judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

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CE Mark Warning:
This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution:
Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate this equipment.
**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.

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.

**Règlement d’Industry Canada:**
Les conditions de fonctionnement sont sujettes à deux conditions:
1) Ce périphérique ne doit pas causer d’interférence et.
2) Ce périphérique doit accepter toute interférence, y compris les interférences pouvant perturber le bon fonctionnement de ce périphérique.

The Class [B] digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

Cet appareil numérique de la class [B] respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.
Registration

Register your product online at registration.dlink.com

Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.