

# USER MANUAL

DIR-457/457U

VERSION 1.2



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# Preface

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

## Manual Revisions

Revision	Date	Description
1.0	December 10, 2009	First Draft
1.1	February 10, 2010	2 <sup>nd</sup> Revision
1.2	August 9, 2010	Added DDNS, MAC Address Filter, and Schedules

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# Package Contents

<b>D-Link DIR-457/DIR-457U</b>	
<b>Battery</b>	
<b>Power Adapter</b>	
<b>USB Cable</b>	
<b>Travel Case</b>	

**Note:** Using a power supply with a different voltage rating than the one included with the DIR-457/DIR-457U will cause damage and void the warranty for this product.

# System Requirements

<b>Network Requirements</b>	<ul style="list-style-type: none"><li>• IEEE 802.11g/b wireless clients</li><li>• 3G SIM card for 3G Wireless Internet</li></ul>
<b>Web-based Configuration Utility Requirements</b>	<p><b>Computer with the following:</b></p> <ul style="list-style-type: none"><li>• Windows®, Macintosh, or Linux-based operating system</li><li>• MicroSD card</li></ul> <p><b>Browser Requirements:</b></p> <ul style="list-style-type: none"><li>• Internet Explorer 6.0 or higher</li><li>• Mozilla 1.7.12 or higher</li><li>• Firefox 1.5 or higher</li><li>• Safari 1.0 or higher (with Java 1.3.1 or higher)</li><li>• Flock 0.7.14 or higher</li><li>• Opera 6.0 or higher</li></ul> <p><b>Windows® Users:</b> Make sure you have the latest version of Java installed. Visit <a href="http://www.java.com">www.java.com</a> to download the latest version.</p>

# Features

- **Wireless Access Point** - The DIR-457/DIR-457U provides up to 54 Mbps\* wireless connection with other 802.11g wireless clients.
- **Compatible with 802.11b Devices** - The DIR-457/DIR-457U is still fully compatible with the IEEE 802.11g standard, so it can connect with existing 802.11g or 802.11b devices.
- **3G Internet Connection Support** - HSDPA/HSUPA modem built-in to access 3G Internet Services. Download throughput up to 3.6/7.2 Mbps, upload up to 384 Kbps/5.76 Mbps.
- **SMS Support** - SMS stored in SIM card (not included), SMS management, SMS notification.
- **VPN Support** - Passthrough support for PPTP, L2TP and IPSec.
- **Advanced Network Filter and Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
  - **MAC Address Filtering** - Easily applied content filtering based on MAC Address.
  - **Firewall** - Configurable options used to prevent common methods of attack from the WAN.
- **User-friendly Setup Wizard** - Through its easy-to-use Web-based user interface for 3G Internet and Wireless LAN.

\* Maximum wireless signal rate derived from IEEE Standard 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

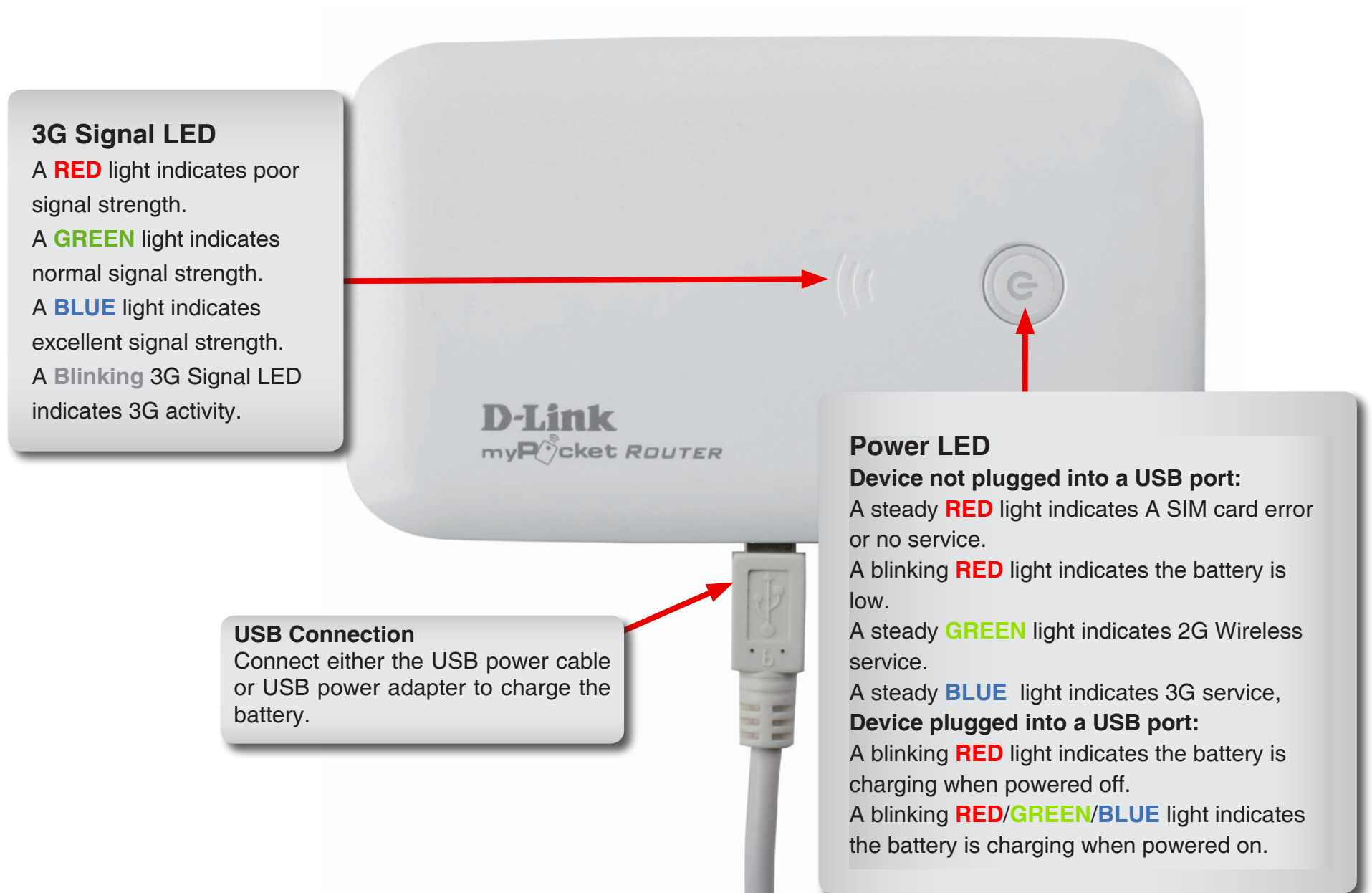
## Connections



**Power Receptor**  
USB receptor for the supplied power adapter and power cable.

# Hardware Overview

## Top View



### 3G Signal LED

A **RED** light indicates poor signal strength.  
A **GREEN** light indicates normal signal strength.  
A **BLUE** light indicates excellent signal strength.  
A **Blinking** 3G Signal LED indicates 3G activity.

### USB Connection

Connect either the USB power cable or USB power adapter to charge the battery.

### Power LED

#### Device not plugged into a USB port:

A steady **RED** light indicates A SIM card error or no service.  
A blinking **RED** light indicates the battery is low.  
A steady **GREEN** light indicates 2G Wireless service.

#### A steady **BLUE** light indicates 3G service,

#### Device plugged into a USB port:

A blinking **RED** light indicates the battery is charging when powered off.  
A blinking **RED/GREEN/BLUE** light indicates the battery is charging when powered on.

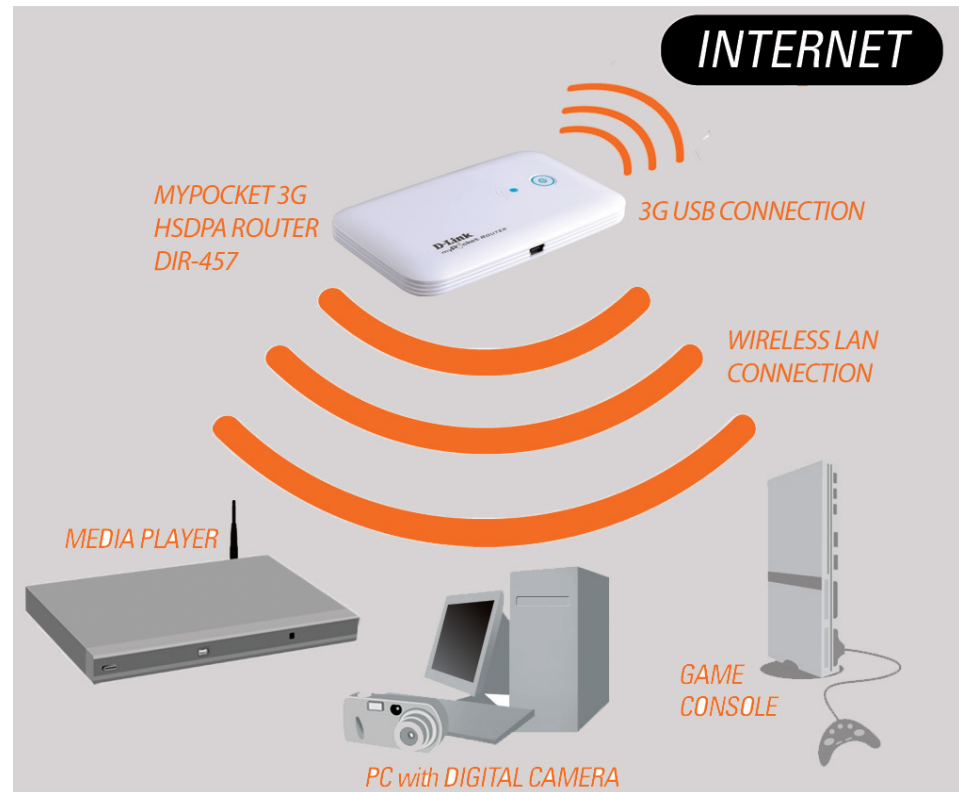
# Hardware Overview

## Switching Between 3G Modem Mode and Wi-Fi Router Mode

The DIR-457/DIR-457U features a hardware switch that enables users to switch between 3G Modem mode and Wi-Fi Router mode.

When the DIR-457/DIR-457U is in 3G modem mode, the device connected via the included USB cable maintains a direct 3G Internet connection. Use the Connection Manager to configure the 3G connection sharing for additional wireless devices when the DIR-457/DIR-457U is changed to Wi-Fi Router mode.

In Wi-Fi Router mode, the DIR-457/DIR-457U can share the 3G Internet connection with multiple Wi-Fi clients. Use myPocket to connect notebooks, game consoles, smart phones and other wireless clients.



# Battery Facts

- It usually takes a minimum of 3 hours to fully charge the battery.
- Battery power lasts up to 4 hours in standby status.
- Battery life depends on network, signal strength, temperature, features, and accessories.
- New batteries or batteries not used for an extended period may take longer to fully charge.
- Always charge the battery at room temperature.
- The battery may perform best after several full cycles of charging and discharging.
- Store the battery uncharged in a cool, dark, dry place.
- Never expose batteries to temperatures below  $-10\text{ }^{\circ}\text{C}$  ( $14\text{ }^{\circ}\text{F}$ ) or above  $45\text{ }^{\circ}\text{C}$  ( $113\text{ }^{\circ}\text{F}$ ).
- Leaving the battery in a hot vehicle may degrade long-term performance of Li-Ion batteries..
- It is normal for batteries to gradually wear down and require longer charging times.

# Installation

When using the DIR-457/DIR-457U in Wi-Fi router mode, placement of the device is very important. Do not place the device in an enclosed area such as a closet, cabinet, or in the attic or garage. Please install the device considering the following points:

The D-Link DIR-457/DIR-457U in Wi-Fi router mode lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

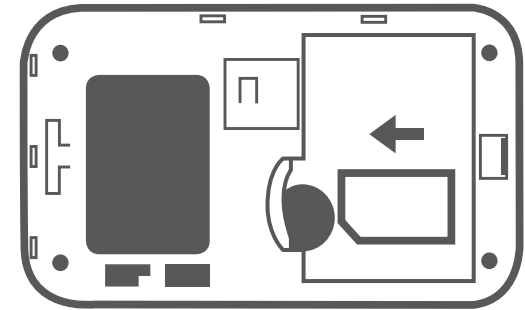
1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between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

# Product Setup

## Hardware Setup

### Installing the SIM Card

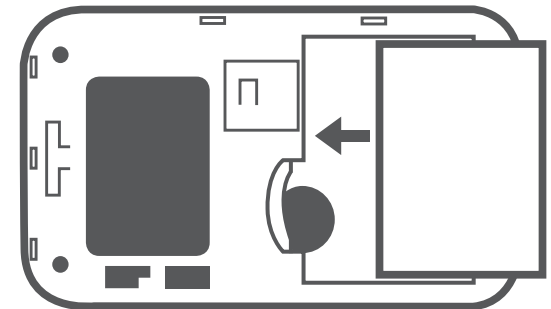
Open the SIM card and battery compartment, located on the bottom of the device. Insert the SIM card by lining up the contact points on the SIM card with the contact points in the SIM card compartment.



### Installing the Battery

Insert the battery by lining up the contact points on the battery with the contact points in the battery compartment. The included battery lasts up to four hours.

**Note:** The battery is required to power the DIR-457/DIR-457U myPocket Router in either Wi-Fi router or USB modem mode.



# Power Management

## Charging with the Power Adapter

To charge the battery insert one end of the USB cable into the USB port of the power adapter and the other end into the Mini-USB port of the DIR-457/DIR-457U myPocket Router, then plug the power adapter into a wall socket. While charging, the Power/3G network LED will flash. When battery power is low, the LED will flash red.



## Charging with the USB Cable

To charge the battery insert the USB cable into the Mini-USB port of the DIR-457/DIR-457U myPocket Router and the other end into a free USB port of your computer. While charging, the Power/3G network LED will flash. When battery power is low, the LED will flash red.

**Note:** Both USB modem mode and Wi-Fi router mode support above two charging methods.

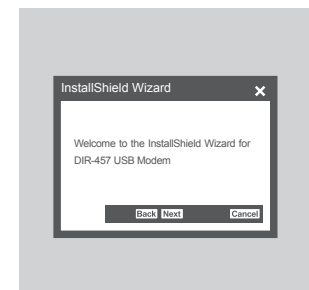
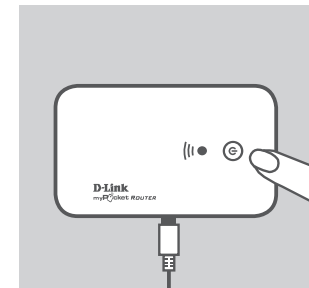
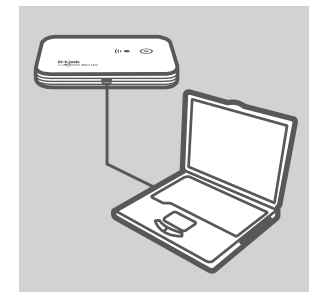
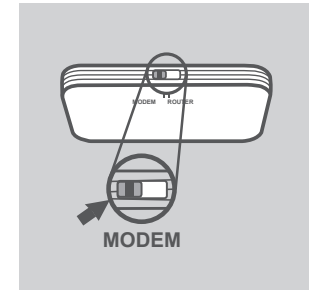


# Connection Setup

## USB Modem Mode Connection

1. Move the router/modem selection switch to USB modem mode.
2. Connect the DIR-457/DIR-457U myPocket Router to your computer with the included USB cable. To do this, insert the USB cable into the Mini-USB port of the DIR-457/DIR-457U myPocket Router and the other end into a free USB port of your computer.
3. Press the power button on the DIR-457/DIR-457U.
4. The Connection Manager software will automatically start up.
5. Configure your router/modem settings using the Connection Manager.
6. You can now use the DIR-457/DIR-457U myPocket Router as a USB modem.

**Note:** You have to install the Connection Manager software when using the DIR-457/DIR-457U for the first time. After successful installation, you can configure USB modem and Wi-Fi router basic settings. When the DIR-457/DIR-457U is used in USB modem mode, you can manage your 3G connection using the D-Link Mobile Connection Manager (please refer to session 2 - Managing 3G connection).

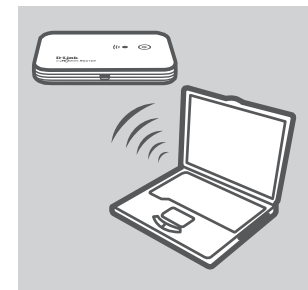
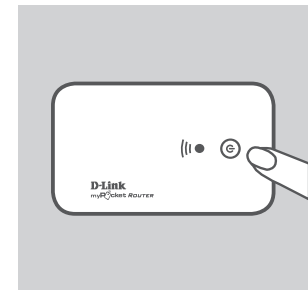
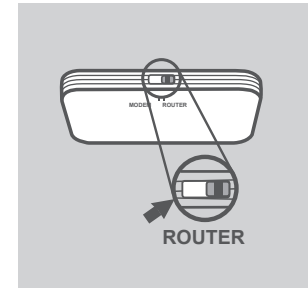




# Connection Setup

## Wi-Fi Router Mode

1. Move the router/modem selection switch to Wi-Fi router mode.
2. Press the power button on the DIR-457/DIR-457U.
3. You can now use the DIR-457/DIR-457U myPocket Router as a wireless access point and connect to the router with any Wi-Fi capable devices.



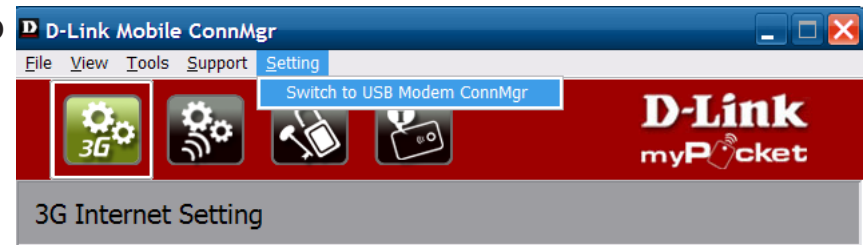
# Device Setup using D-Link Connection Manager (Windows) Manager or Web-based Tool

The DIR-457/DIR-457U provides two different ways of device setup. For changing settings, you can choose either the D-Link Mobile Connection Manager or the Web-based Configuration Utility (please refer to Section 5 - WEB Configuration). The D-Link Mobile Connection Manager offers an easier and simpler way, and allows for both 3G and Wi-Fi settings to be adjusted. The following instructions will show you how to configure the 3G connection.

**Note:** These settings will only take effect when you use the DIR-457/DIR-457U as a 3G USB modem.

## Managing the 3G Connection

To configure the 3G connection of your DIR-457/DIR-457U go to **Settings > Switch to USB Modem ConnMgr**.



## New Profile

Before starting, if the mobile service provider associated with your SIM card is listed in the preset profile list, you can directly connect to the desired network using its pre-defined profile.

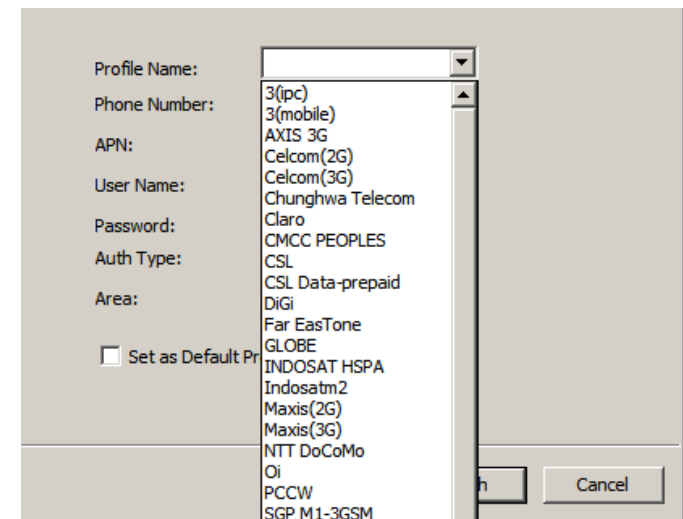
You also can create your own profile by following the steps below:

1. Click the **Profile** button.
2. Click the **New** button to activate the wizard which will help you create a new profile.
3. Select the profile type, **Preconfigured Profile** or **User Defined Profile**. Click **Next** to continue.



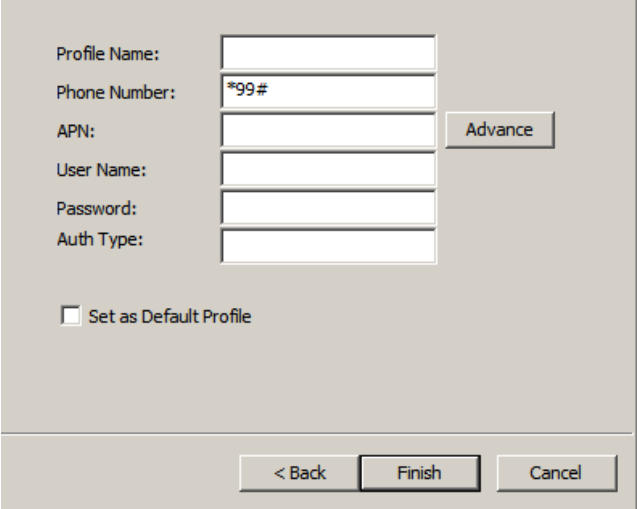
## Use Default Profile (Preset)

1. Select a Profile Name from the drop-down menu. Most of the required information will be populated into the fields automatically.
2. If needed, fill in the Phone Number, APN (Access Point Network), User Name, and Password.
3. If desired, click the check box to set this as the default profile.
4. Click **Next** to continue.



## User-Defined Profile

1. Fill in the Profile Name, Phone Number, APN, User Name, Password, and Authorization Type.
2. Click **Finish** to complete.
3. Click the **Advanced** button to display APN details.
4. Highlight an APN and click OK.
5. Click **Next** to continue.



Profile Name:

Phone Number:

APN:

User Name:

Password:

Auth Type:

Set as Default Profile

## Establishing a Connection

The Connect/Disconnect button will be black when you are offline. You can click the Connect button to connect to the network via the default profile. After you are connected, the button will turn green with a checkmark. Once connected, you can use the mobile service network to browse the Internet, send e-mail, send text messages, and perform other tasks online.



Connect

## Ending a Connection

If you wish to disconnect, click the button again, and the button will turn black to indicate you have successfully disconnected and are offline.



Disconnect

# Profile Management

Under the Profiles icon, users can create, edit and delete profiles as well as preset profiles.

## Editing

1. Click the **Profile** button.
2. Select a profile and click the **Edit** button.
3. Click the appropriate tab and enter the information in the fields.
4. Click the **Advanced** button to display a list of operators and their areas in the window below.
5. Click **OK** to close the APN window.
6. Click **OK** to close the Edit Profile window.



Profile

**Note:** Profiles may only be edited when you are disconnected.

## Deleting a Profile

Click the **Profile** button.

Select a user-defined profile and click the **Delete** button.

Click **Yes** to confirm the deletion.

## Deleting All Profiles

Click the **Profile** button.

Click the **Delete All** button.

## Setting the Default Profile

Click the **Profile** button.

Highlight the profile to use when the DIR-457/DIR-457U is started.

Click **Set as Default** profile.

## Reset to Factory Default

Click the **Profile** button.

Click **Set as Factory Default** to return the DIR-457/DIR-457U to the factory settings.

# Connection Management

The Connection Information window allows users to manage not only the current connection (if connected), but also their connection history. Click the Connection Info button to open the Connection Information window.

## Current Connection

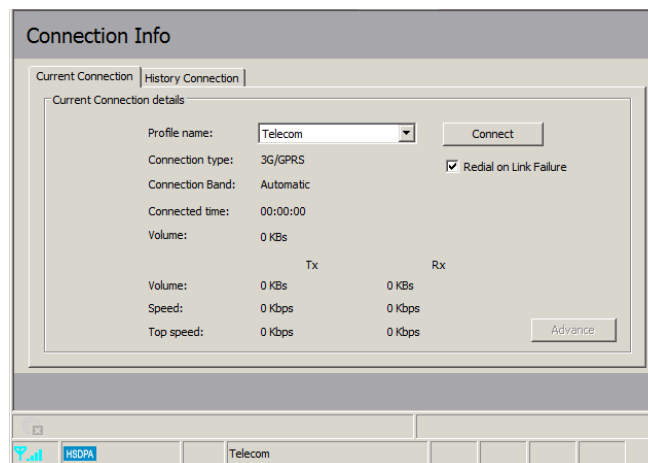
The Current Connection tab displays the following information:

- Profile Name** - Displays the current profile. Select other profiles from the drop down menu.
- Connection Type** - Displays the mobile service technology that the service network uses.
- Connection Band** - Displays the band of the current connection.
- Connected Time** - Displays how long the current session has been active for.
- Volume** - Displays the total amount of data received (Rx) and transmitted (Tx).
- Speed** - Displays the speeds for both transmitted and received data.
- Top Speed** - Displays the maximum transmitted and received speeds attained.
- Redial on Link Failure** - Redial if the connection is somehow disconnected.



Connection Information

**Note:** Windows Vista requires your confirmation to redial on link failure.



## Connection History

The History Connection tab displays the following information:

**Type** - The type of connections made.

**Profile** - The names of the profiles used.

**Date & Time** - The date and time of the connection.

**Duration** - The duration of the connection in hours, minutes, and seconds.

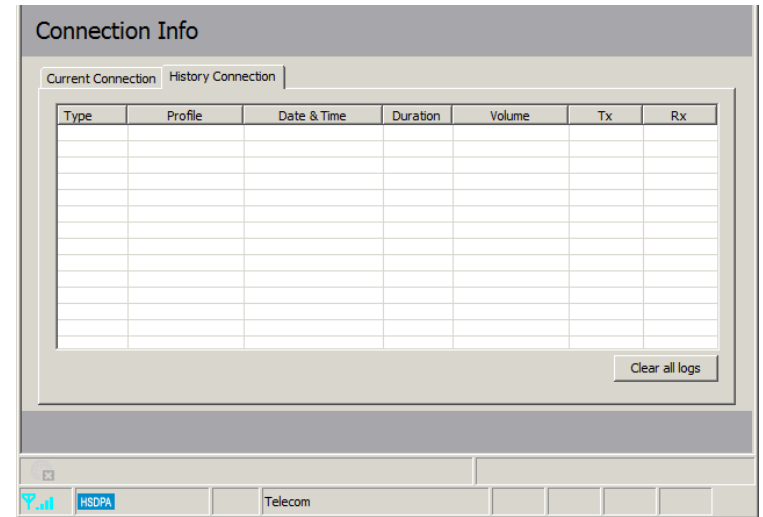
**Volume** - The total amount of data transmitted and received.

**Tx** - The total number of bytes transmitted.

**Rx** - The total number of bytes received.

Follow the steps below to clear the Connection History:

1. Click **Clear All Logs** to clear the logs.
2. Click **Yes** to confirm.

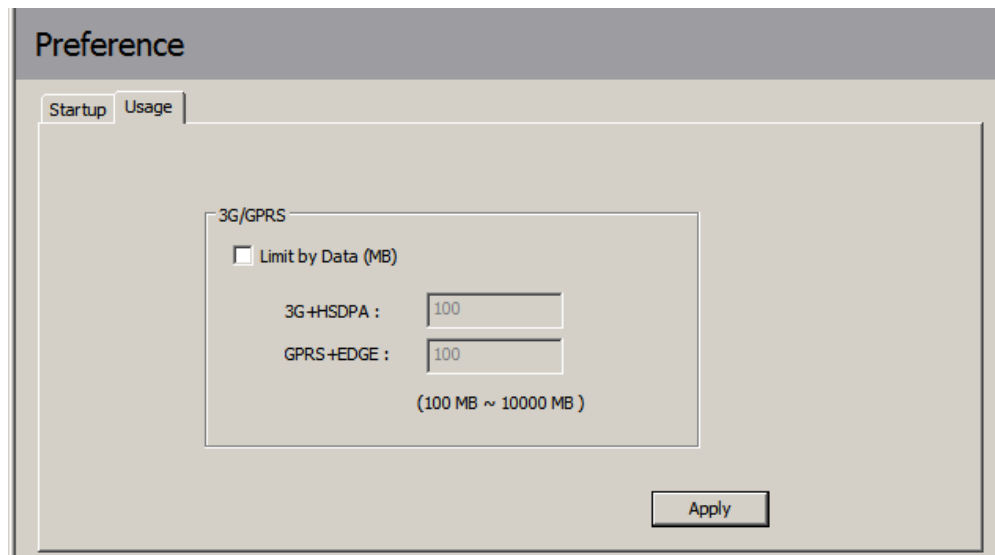
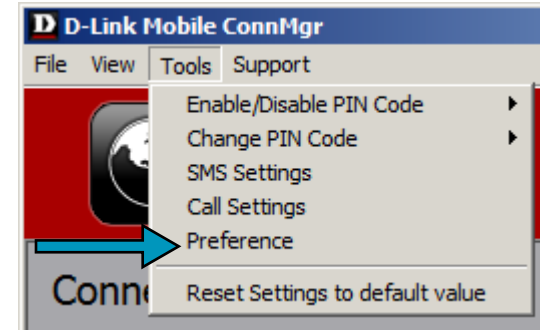


# Usage Management

Limits can be set on how long a connection will last. These limits can either be set by usage (3G/GPRS connections) or by time (Dialup connections).

## Usage

1. Select **Tools > Preference**.
2. Select the **Usage** tab.
3. Check the **Limit by Data** checkbox.
4. Enter the desired value between 100 MB and 10,000 MB.
5. Click **Apply** to save the settings.





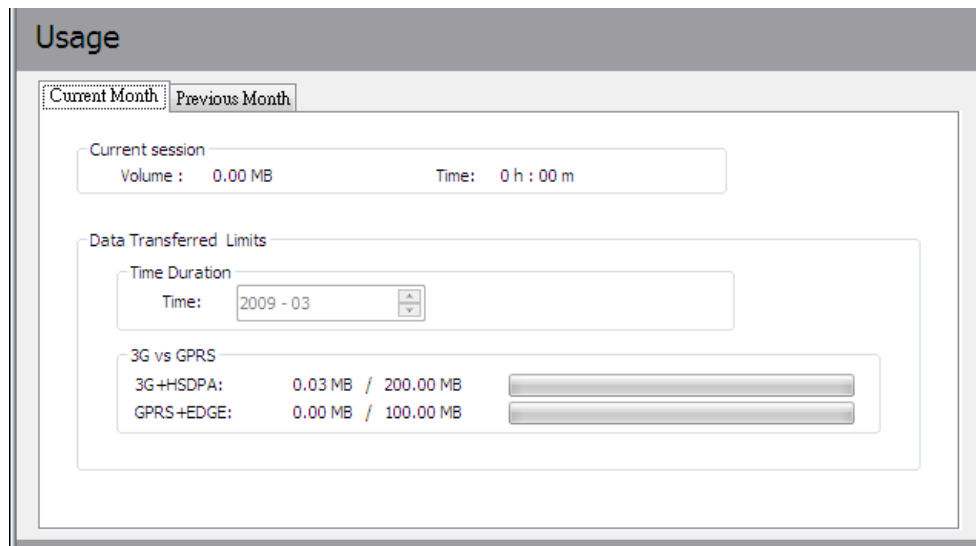
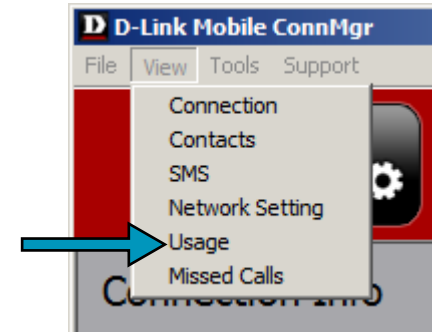
## Usage Statistics

Statistics for both usage and time can be viewed from the usage menu.

1. Select **View > Usage**.
2. Select either the **Current Month** or **Previous Month** tab.

Follow the steps below to clear the Previous month's logs:

1. Select **View > Usage**.
2. Select **Previous Month** tab.
3. Click **Clear all logs**.
4. Click **Yes** to confirm.



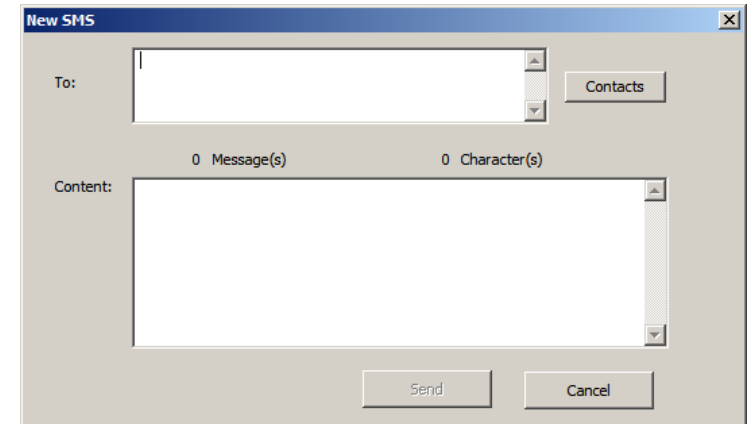
# Text Messaging (SMS)

The DIR-457/DIR-457U can be used to perform all the text messaging functions that can be done on a mobile phone such as sending, receiving, replying, forwarding and deleting.



## New/Reply/Forward Text Message

1. Click the **SMS** button.
2. Click **New**, **Reply**, or **Forward**.
3. Enter the recipient's phone number or click **Contacts** to see the contacts stored to the SIM card. In the contacts window, click the box next to the recipients name and click **Add** to return to the New SMS window.
4. Enter a message to send.
5. Click **Send** to send the message.



## Deleting a Message

1. Click the **SMS** button.
2. Select the messages you want to delete. If you would like to delete all messages, click **Select All**.
3. Click **Delete** to delete the selected messages.
4. Click **Yes** to confirm.

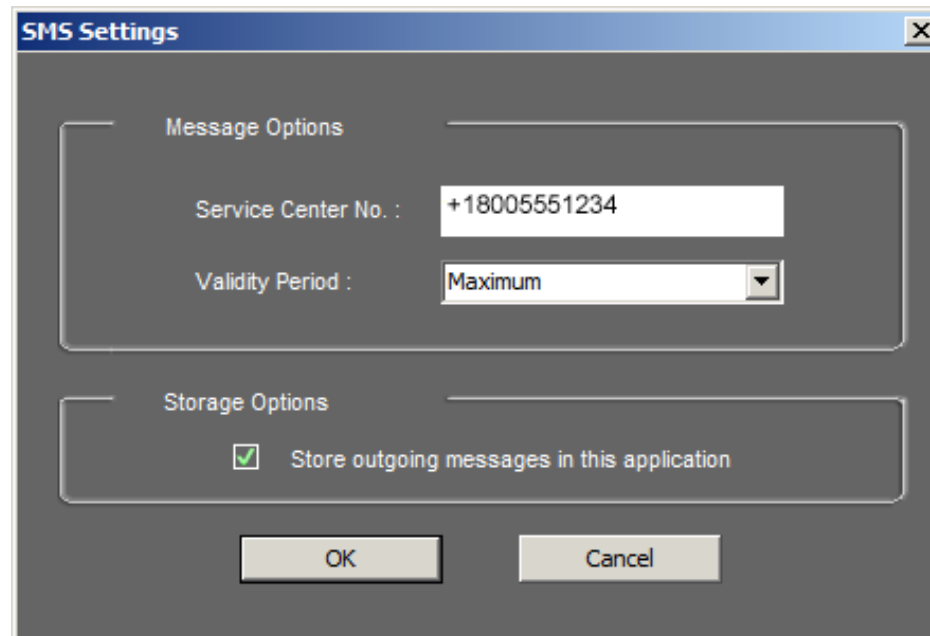
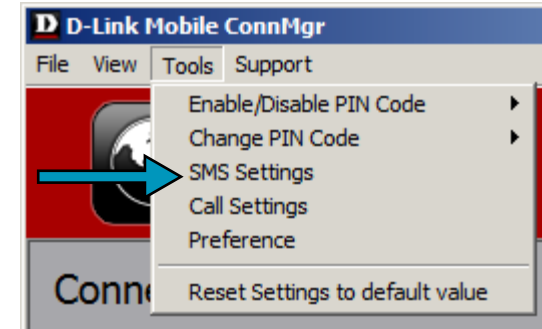
## Saving a Sender to Contacts

1. Click the **SMS** button.
2. Select a message.
3. Right click on the selected message and click **Save to Contacts**.
4. In the **Add Contact** window enter the contact name.
5. Click **OK** to save the contact.
6. Once the contact has been saved, a confirmation window will be displayed. Click **OK** to close it.

## SMS Settings

This menu allows you to change the service center number, its validity period, and whether to store outgoing messages within the DIR-457/DIR-457U Mobile Connection Manager.

1. Click **Tools > SMS Settings**.
2. If needed, enter the new Service Center number. Choose the Validity Period from the drop-down list.
3. Check the box to store outgoing messages in the application.
4. Click **OK** to save the details.

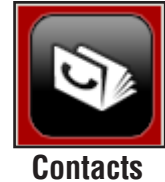


# Contact Management

The DIR-457/DIR-457U contacts manager displays all the contacts on the SIM Card. Contacts can be added, edited, deleted and imported.

## Adding Contacts

1. Click the **Contacts** button.
2. Click the **Add** button.
3. In the Add Contact window, enter the contact name and telephone number.
4. Click **OK** to add the contact.



## Editing Contacts

1. Click the **Contacts** button.
2. Select the contact to edit.
3. Click the **Edit** button.
4. Modify the contacts details.
5. Click **OK** to save the changes.

## Deleting Contacts

1. Click the **Contacts** button.
2. Select the contact to delete. If you would like to delete all contacts, click Select All.
3. Click the **Delete** button.
4. Click **Yes** to confirm the deletion.

## Importing vCards to Contacts

1. Click the **Contacts** button.
2. Click the **Import** button.
3. Select the source of the vCard(s).
4. Click **Open** to import the card(s).
5. After the import, a message will display the import information. Click OK to close.

## Exporting Contacts to vCards

1. Click the **Contacts** button.
2. Click the **Export** button.
3. Select the destination to save the vCard(s).
4. Click **OK** to export the card(s).
5. After the export, a message will be displayed. Click OK to close.

# SIM Management

SIM Management includes functions such as enabling/disabling a PIN, changing the PIN1/PIN2 codes, checking SIM information, adjusting the phone number, viewing contacts usage, and viewing SMS usage.

## SIM Information

SIM details regarding the IMEI, Phone Number, Contact Usage, and SMS Usage can be found by clicking **Support > About D-Link Mobile Connection Manager**.



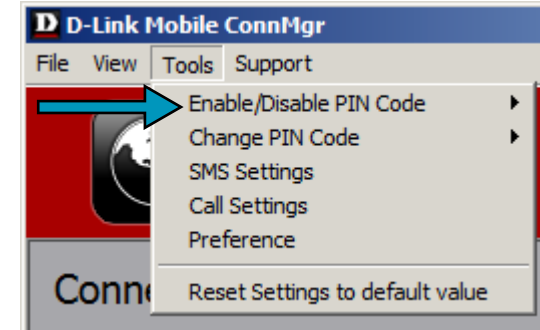
## Enabling or Disabling a PIN Code

### Enable PIN Code

To prevent unauthorized use of the SIM card a PIN code can be enabled.

1. Select **Tools > Enable/Disable PIN code > Enabled.**
2. Enter the correct PIN code to enable.
3. Click **OK** to enable PIN code protection.

If a PIN number has been enabled, you will always be asked to enter it before accessing the D-Link Mobile Connection Manager software.



### Disable

If a PIN code is no longer required, you may disable it via the following steps.

1. Click **Tools > Enable/Disable PIN code > Disabled.**
2. Enter the correct PIN code.
3. Click **OK** to disable the PIN.

**Note:** The PIN is provided by your network service provider.

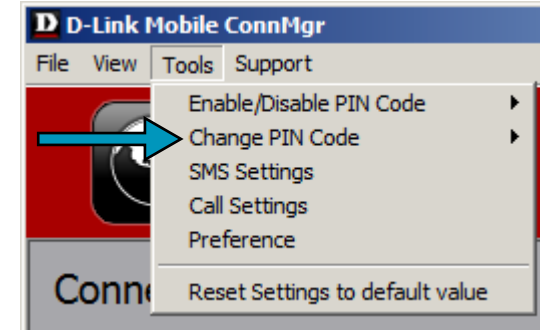
**Warning:** The PIN code must be entered correctly within three tries. Failure to do so will cause the SIM card to become locked.



## Changing a PIN Code

SIM cards often contain two PIN codes that can be changed.

1. Click **Tools > Change PIN Code > PIN1 or PIN2**.
2. Enter the details in the following fields: Current PIN Code, Enter New PIN Code and Confirm New PIN Code.
3. Click **OK** to change.
4. Once complete, a confirmation window will be displayed. Click OK to close the window.



**Warning:** The PIN code must be entered correctly within three tries. Failure to do so will cause the SIM card to become locked.

**Note:** The PIN codes cannot be changed while the DIR-457/DIR-457U is connected to a mobile network.

## Unlocking a PIN Code

If the PIN code has been entered incorrectly three times and the SIM card has been locked, follow the steps below to unlock it:

1. If a PIN is blocked, the unblock window will be displayed.
2. Enter the **PUK** code. Enter the new PIN Code, and confirm the new code.
3. Click **OK** to confirm the new PIN code.

**Note:** The PUK number is provided by your mobile service provider.

# Profile Settings

The Profile Settings page allows you to manually change your Band and Network setting in case your DIR-457 can not automatically connect to your network provider.

## Band Settings

The DIR-457/DIR-457U supports two band selection options:

**Automatic** - The DIR-457/DIR-457U automatically selects the band based on the networks available in current area.

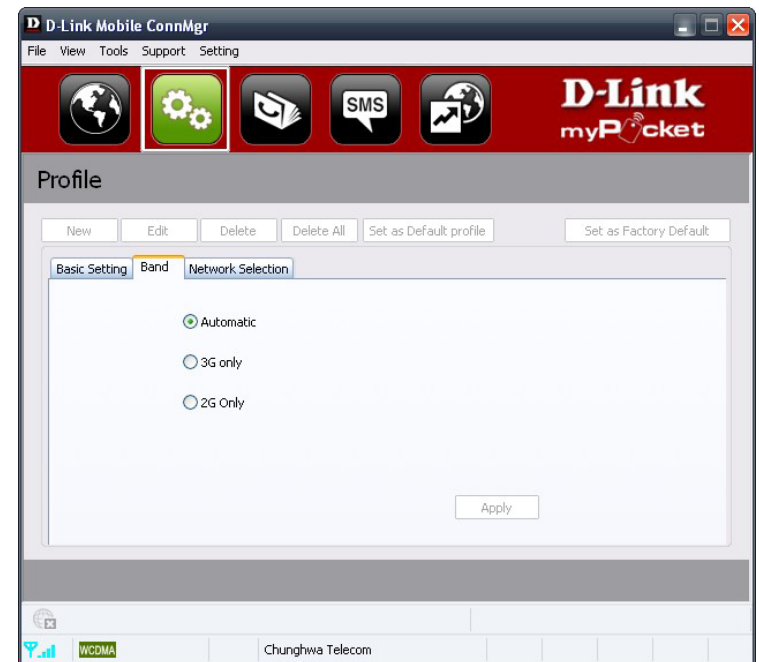
**3G Only** - Restricts the DIR-457/DIR-457U to using 3G service on WCDMA 850/1900/2100 bands.

**2G Only** - Restricts the DIR-457/DIR-457U to using 2G service on GPRS 850/900/1800/1900 bands.

**Note:** If you accidentally configure the wrong settings, go to **Tools > Reset Settings to Default Value**.

To adjust the band settings follow the instructions below:

1. Click the **Profile** button.
2. Select **Band** tab.
3. Select Automatic, 3G only, or 2G only.
4. Click **Apply** and **OK**.



## Network Selection

The current location of the DIR-457/DIR-457U may be covered by more than one network. The DIR-457/DIR-457U supports two network selection options:

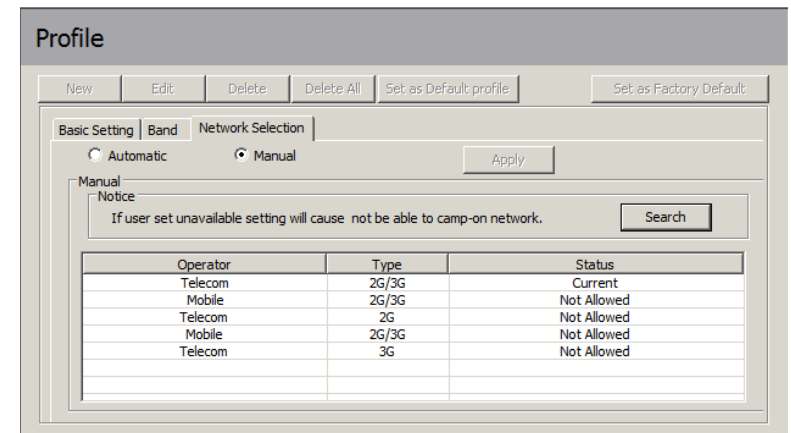
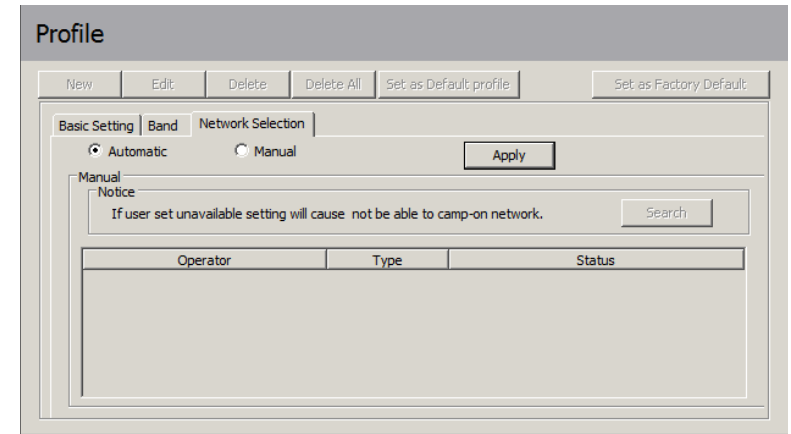
**Automatic** - By default the DIR-457/DIR-457U will automatically select the network based on the user's account and network availability.

**Manual** - Users can also use DIR-457/DIR-457U to get the network list, and select an available network to use.

To manually set the network, follow the steps below:

1. Click the **Profile** button.
2. Select the **Network Selection** tab.
3. Select **Manual**.
4. Click **Search** to see all available networks.
5. Select a network operator and click **Apply**.
6. Click **OK** to finish.

**Note:** When the band is set to **3G Only**, manual selection will only list 3G networks.



## Call Settings

Select **Tools > Call Setting**.

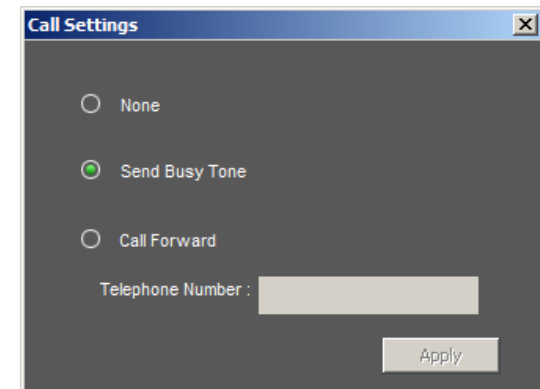
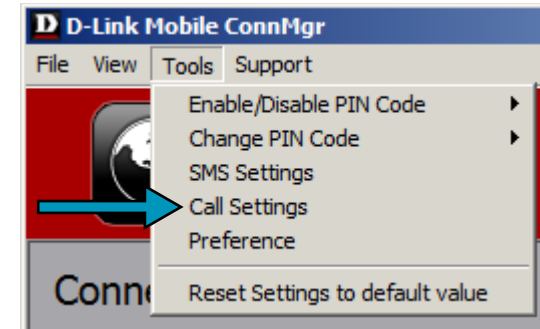
You may select from one of the following options:

**None** - No answer.

**Send Busy Tone** - The caller will hear a busy tone, or will be transferred to voice mail.

**Call Forward** - The incoming call will be forwarded to the phone number you enter into the **Telephone Number** text box.

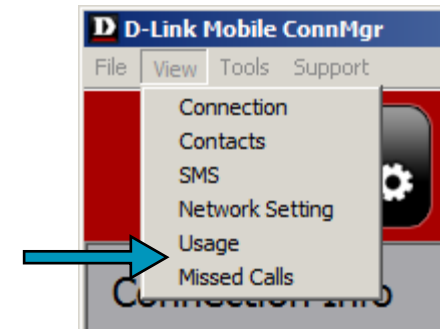
**Note:** The call settings query may fail if the network is busy; in this case please try again later.



## Missed Calls

1. Select **View > Missed Calls**.

2. If the call setting is None or Send Busy Tone, D-Link Mobile Connection Manager AP will register the incoming call in the missed calls list.

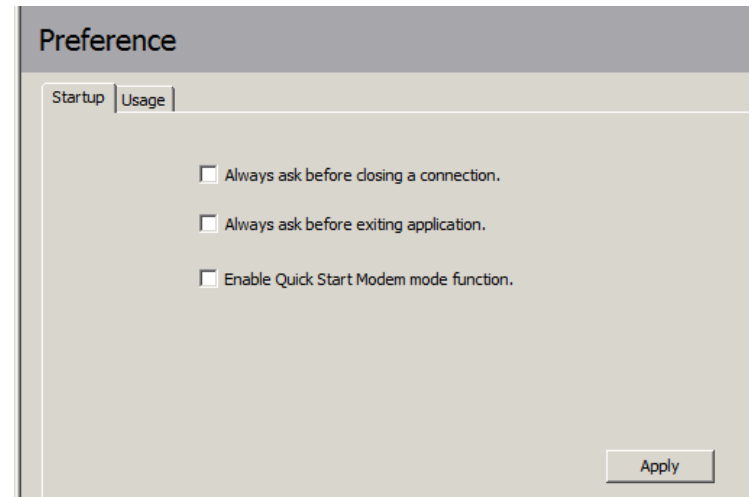


# Startup Options

Users can specify how the application should start up.

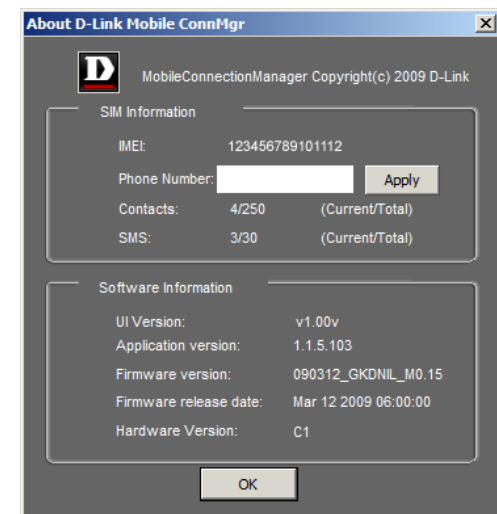
1. Click **Tools > Preferences > Startup**.
2. Check the box next to the desired options.
  - Always ask before closing a connection.
  - Always ask before exiting application.
  - Enable Quick Start. (This mode runs a program in the background to help the D-Link Mobile Connection Manager launch quickly.)
3. Click **Apply** to save the settings and finish.

**Note:** Please reset these settings when you want to install on another PC or remove the driver.



# Version Information

The application version, firmware version and firmware release date can be found by selecting **Support > About D-Link Mobile Connection Manager**.



# Wi-Fi and Basic Settings

The following steps will show you how to adjust the settings for both Wi-Fi and 3G connections. When you use this device as a 3G router, the Wi-Fi and 3G functionalities will both be enabled. You can adjust both of them under “Wi-Fi and Basic Settings”.

**Note:** These settings will only take effect when you use the DIR-457/DIR-457U as a 3G router.

To configure the Wi-Fi and basic settings of your DIR-457/DIR-457U go to **Settings > Switch to Wi-Fi & Basic Settings**.

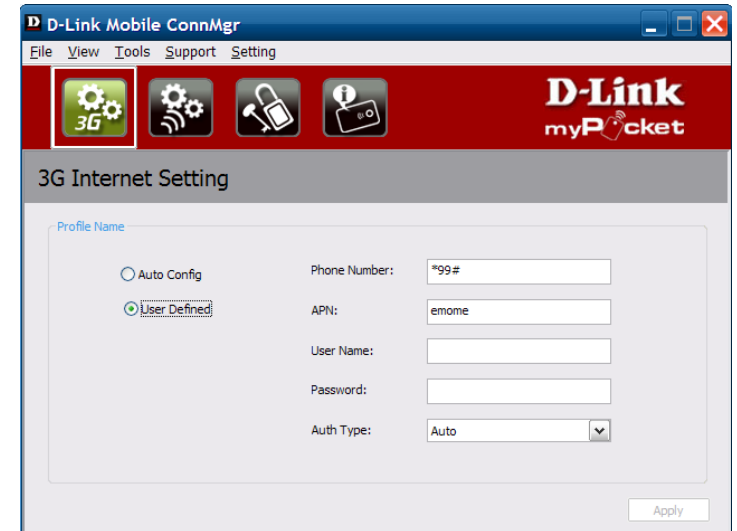
To change the 3G Internet settings, click the corresponding symbol.



**3G Settings**

## Changing the Profile Information

You can either set the Profile Information to Auto Configure or manually choose a Phone Number, APN, User Name, Password, and Authentication Type.



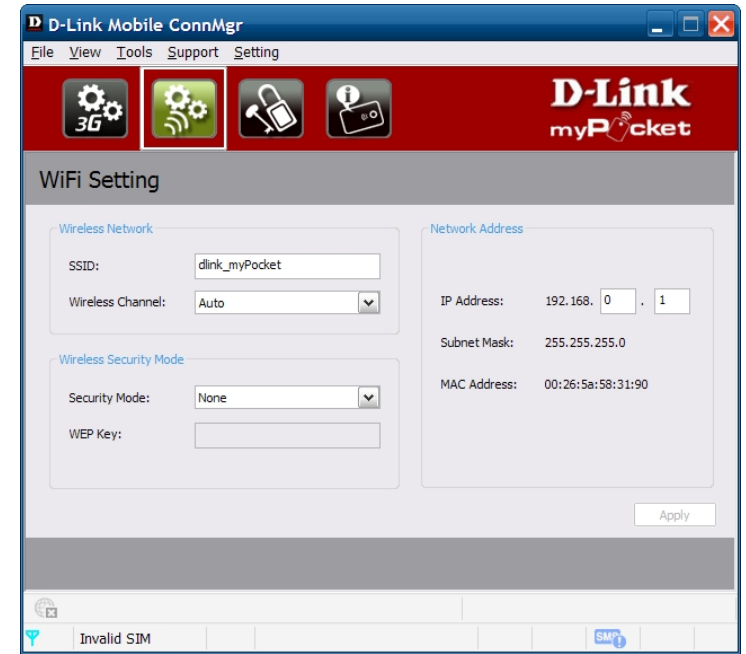
In the Wi-Fi settings screen you can set the SSID, Wireless Channel, and Security Mode for the DIR-457/DIR-457U.



**Wi-Fi Settings**

## Changing the SSID

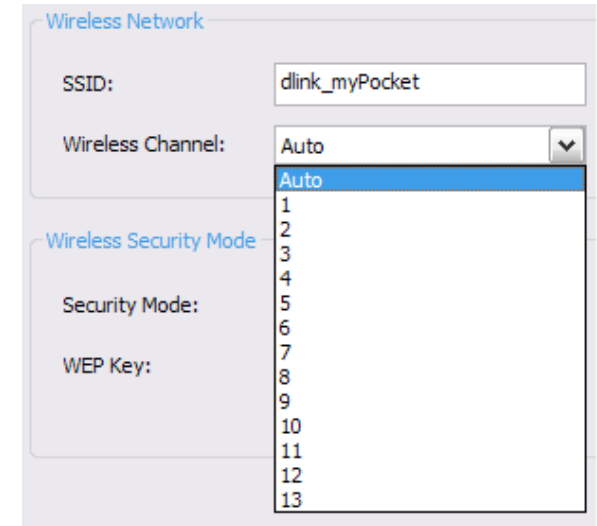
To manually choose an SSID, type a new name for the network in the SSID text field.





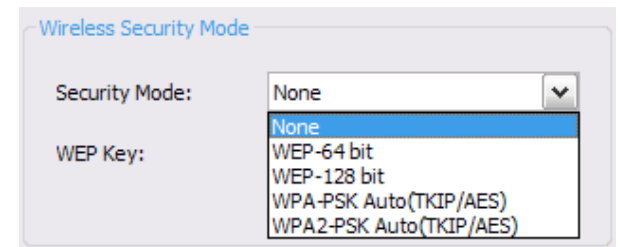
## Configuring the Wireless Channel

The Wireless Channel can be manually chosen (1 to 13) or set to Auto.



## Configuring the Security Mode

The Security Mode can be set to WEP-64bit, WEP-128bit, WPA-PSK, and WPA2-SPK.



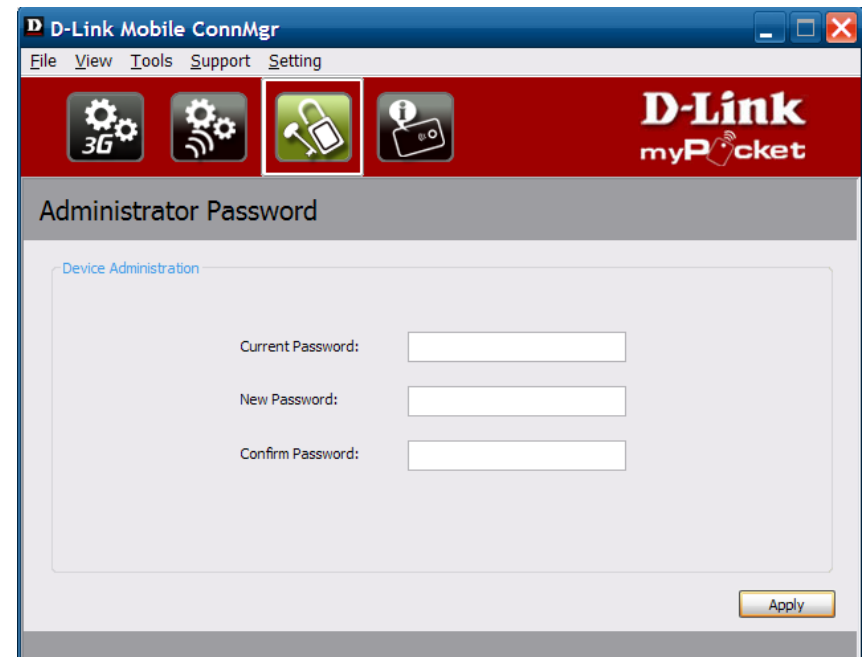
## Setting the Administrator Password

To change the Administrator Password, click the corresponding symbol.



**Administrator  
Password**

1. For security reasons, please repeat the current password.
2. Next, choose a new password.
3. Confirm the new password.



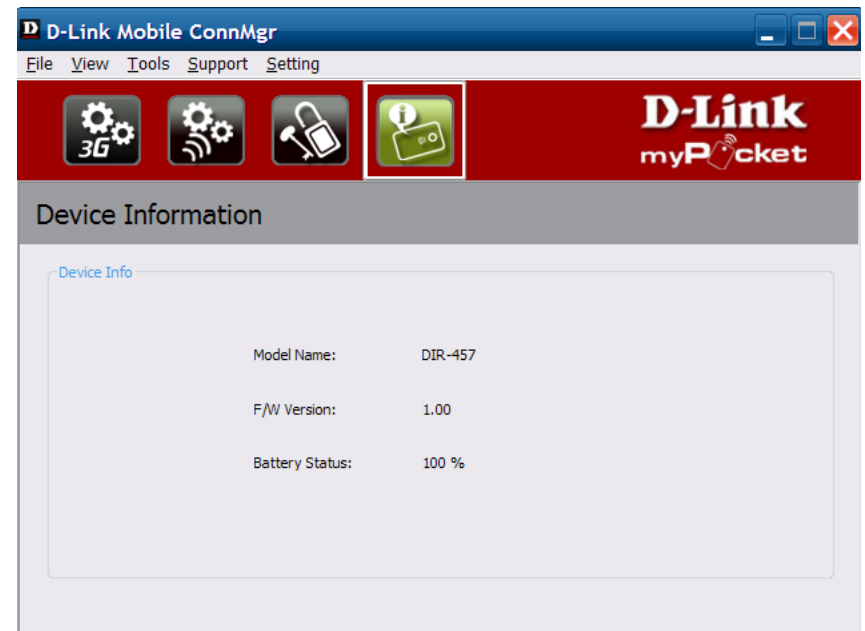
## Device Information

To display information about your device, click the corresponding symbol.



**Device Information**

This screen displays the Model Name, the Firmware Version, and the Battery status of your device.



# Device Setup using D-Link Connection Manager (MAC OS)

## New Profile

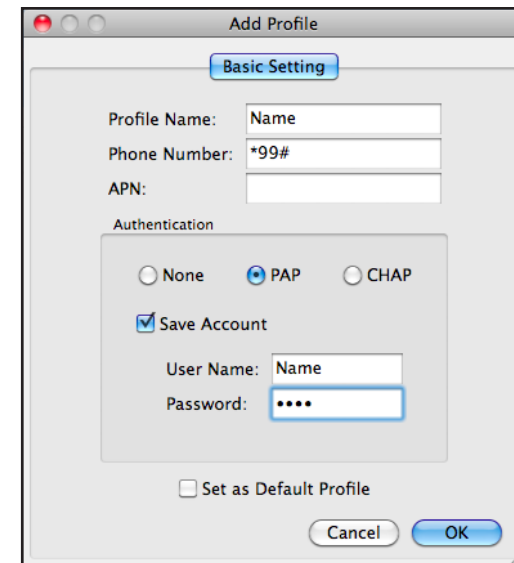
1. Click the **Profile** button.
2. Click the **New** button to open the New Profile window.



Profile

## Create Profile

1. Enter the Profile Name, Phone Number, and APN (Access Point Network)
2. Select the Authentication Type.
3. Click **Save Account** if you would like to save the username and password between login sessions.
4. If desired, click the check box to set this as the default profile.
5. Click **Next** to continue.



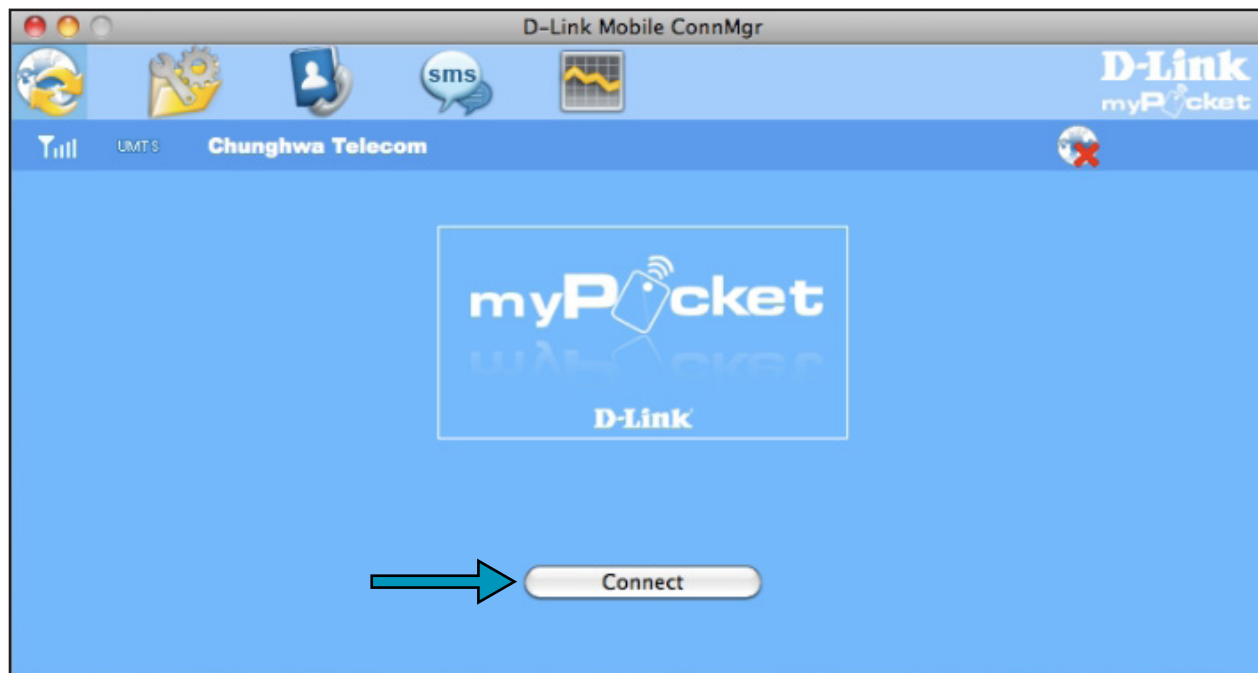
## Establishing a Connection

You can click the Connect button to connect to the network via the default profile. Once connected, the icon on the right side of the window will display a green checkmark instead of a red X. Once connected, you can use the mobile service network to browse the Internet, send e-mail, send text messages, and perform other tasks online.



Connect

**Note:** The Connect/Disconnect button will be grayed-out when no SIM card is present.



## Ending a Connection

If you wish to disconnect, click the **Disconnect** button.

Disconnect

# Profile Management

Under the Profiles icon, users can create, edit and delete profiles as well as preset profiles.

## Editing a Profile

1. Click the **Profile** button.
2. Select a profile and click the **Edit** button.
3. Click the appropriate tab and enter the information in the fields.
4. Click **OK** to close the Edit Profile window.



Profile

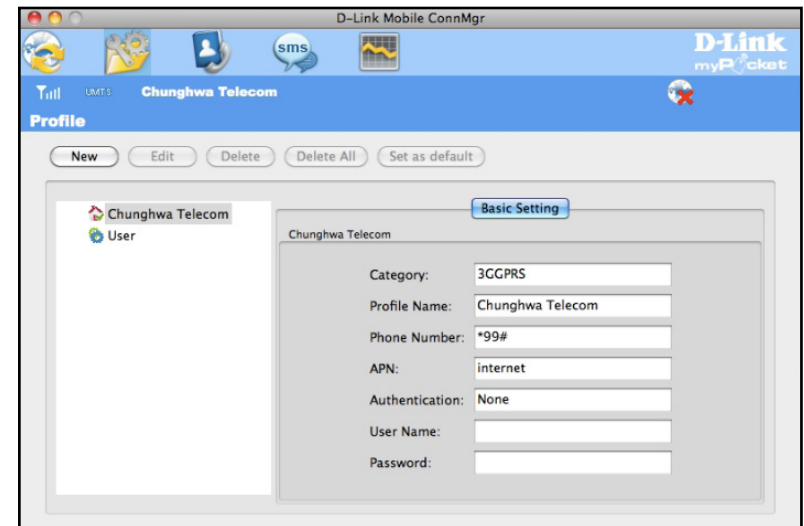
**Note:** Profiles may only be edited when you are disconnected.

## Deleting a Profile

1. Click the **Profile** button.
2. Select a user-defined profile and click the **Delete** button.
3. Click **Yes** to confirm the deletion.

## Setting the Default Profile

1. Click the **Profile** button.
2. Highlight the profile to use when the DIR457/DIR/457U is started.
3. Click **Set as Default** profile.



# Connection Management

The Connection Information window allows users to manage not only the current connection (if connected), but also their connection history. Click the Connection Info button to open the Connection Information window.

## Current Connection

The Current Connection tab displays the following information:

**Profile Name** - Displays the current profile.

**Connection Type** - Displays the mobile service technology that the service network uses.

**Connected Time** - Displays how long the current session has been active for.

**Volume** - Displays the total amount of data received (Rx) and transmitted (Tx).

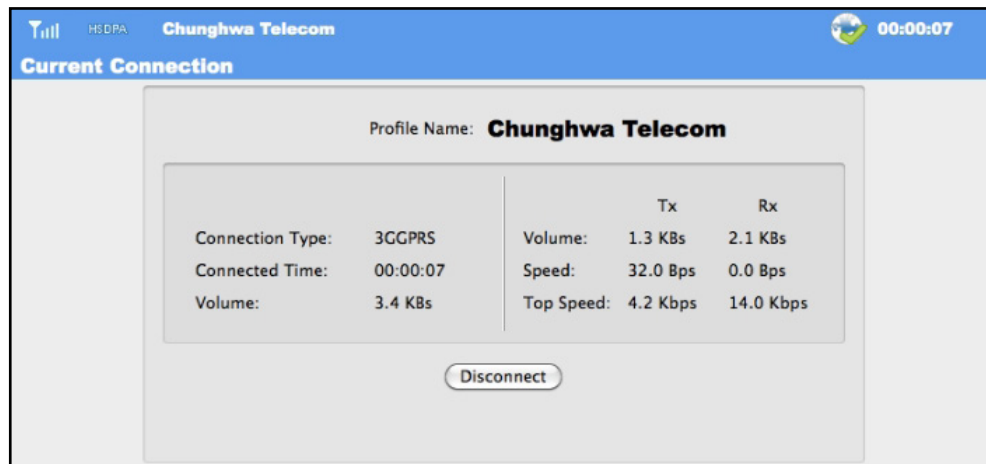
**Speed** - Displays the speeds for both transmitted and received data.

**Top Speed** - Displays the maximum transmitted and received speeds attained.

**Disconnect** - Click this button to disconnect.



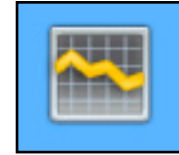
**Connection Information**



# Connection History

The History Connection tab displays the following information:

- Profile** - The name of the profile
- APN** - The access point name
- Time Start** - The time the connection was initiated
- Time End** - The time that the connection ended
- Data Sent** - The total amount of data sent
- Data Received** - The total amount of data received
- Max Speed Up/Down** - The highest recorded upload/download speed for the session
- Average Speed Up/Down** - The average upload/download speed for the session



Usage

To clear the Connection History:

1. Click **Clear All Logs** to clear the logs.
2. Click **Yes** to confirm.

Profile	APN	Time start	Time end	Data sent	Data received	Max speed up/down	Average speed up/down
Chungh...	internet	2010-01..	2010-01..	3.7 KBs	2.3 KBs	4.2 Kbps/14.0 Kbps	0.4 Kbps/0.2 Kbps
Chungh...	internet	2010-01..	2010-01..	1.7 KBs	2.4 KBs	9.9 Kbps/19.0 Kbps	0.4 Kbps/0.6 Kbps

Clear all logs



# Usage Management

The Usage window allows users to manage not only the current connection (if connected), but also their connection history. Click the Connection Info button to open the Connection Information window.



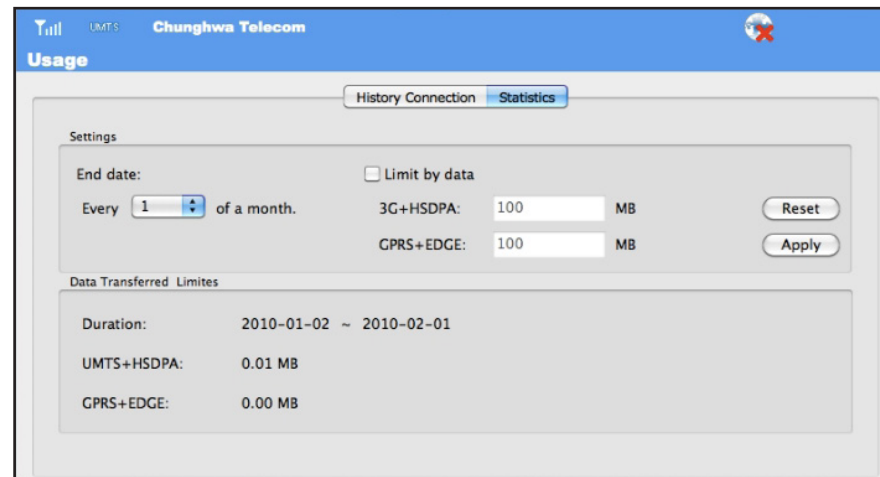
Usage

## Statistics

The Statistics tab displays the following information:

**Settings** - You may choose to limit data collection by data or by a specified number of days in a month. Click **Reset** to restart the data collection. Click **Apply** to apply any changes to the settings.

**Data Transferred and Limits:** Displays the total amount of data transferred within the specified period.

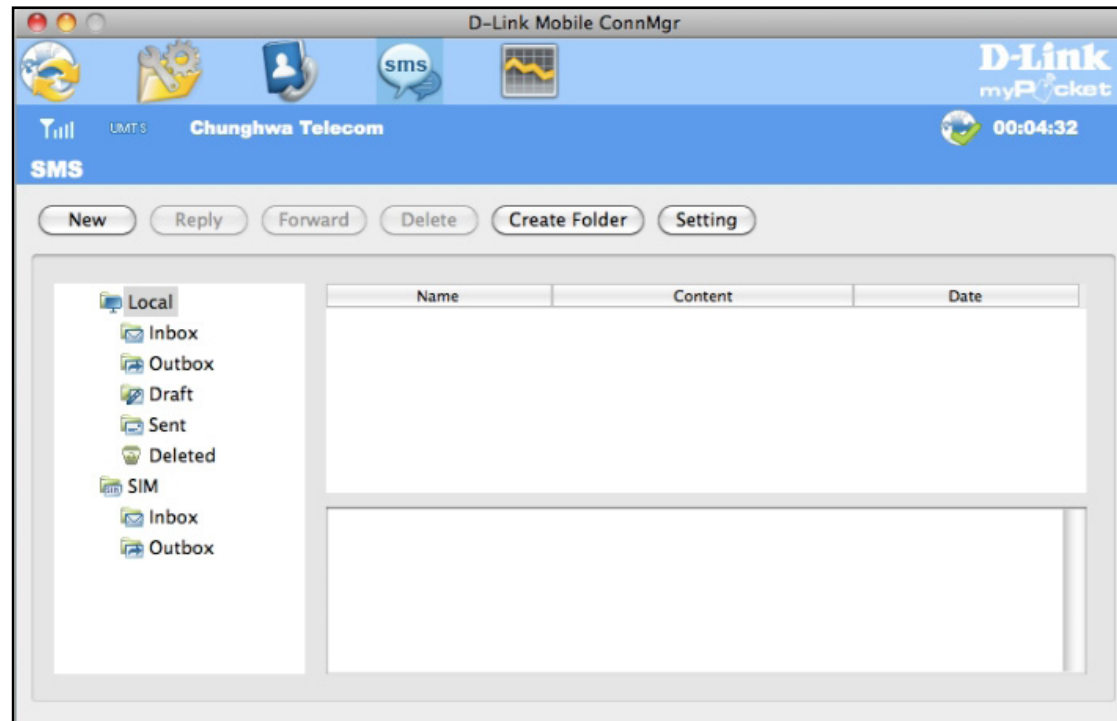


# Text Messaging (SMS)

The DIR-457/DIR-457U can be used to perform the text messaging functions that can be done on a mobile phone such as sending, replying, forwarding and deleting.

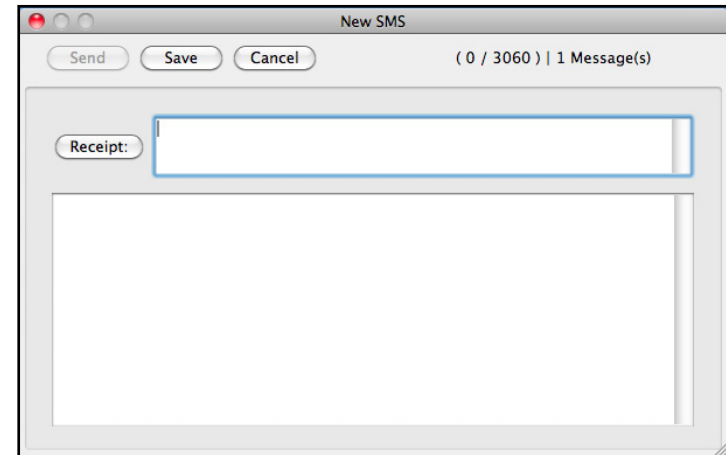


SMS



## New/Reply/Forward Text Message

1. Click the **SMS** button.
2. Click **New**, **Reply**, or **Forward**.
3. Enter the recipient's phone number or click **Contacts** to see the contacts stored to the SIM card. In the contacts window, click the box next to the recipients name and click **Save** to return to the New SMS window.
4. Enter a message to send.
5. Click **Send** to send the message.



## Deleting a Message

1. Click the **SMS** button.
2. Select the messages you want to delete.
3. Click **Delete** to delete the selected messages.
4. Click **Yes** to confirm.

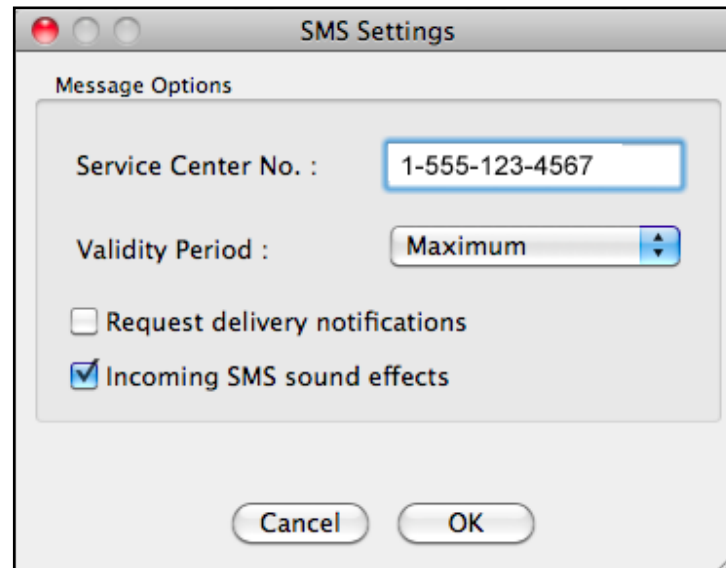
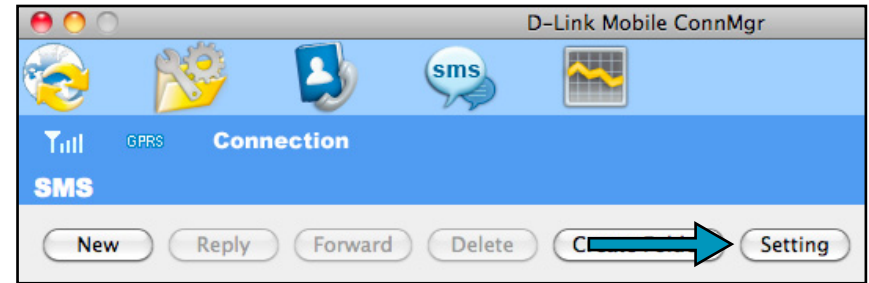
## Saving a Sender to Contacts

1. Click the **SMS** button.
2. Select a message.
3. Shift click on the selected message and click **Save as Contact**.
4. In the **Add Contact** window enter the contact name.
5. Click **OK** to save the contact.
6. Once the contact has been saved, a confirmation window will be displayed. Click **OK** to close it.

## SMS Settings

This menu allows you to change the service center number, its validity period, and whether to store outgoing messages within the DIR-457/DIR-457U Mobile Connection Manager.

1. Click **SMS > Settings**.
2. If needed, enter the new Service Center number. Choose a Validity Period from the drop-down list.
3. Check the box to request delivery notifications or play sound effects if desired.
4. Click **OK** to save the details.



# Contact Management

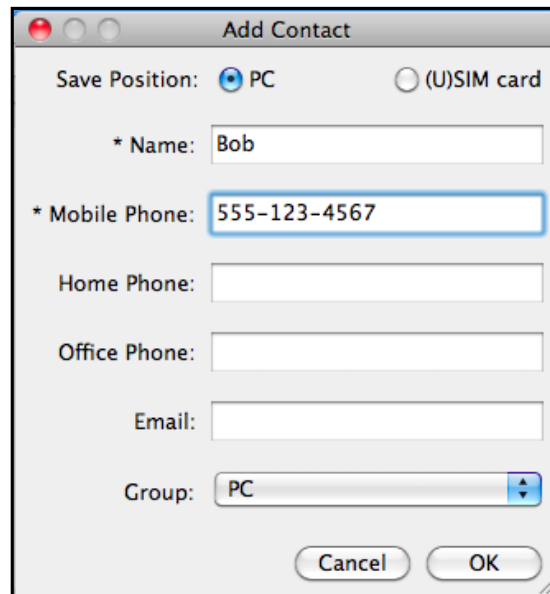
The DIR-457/DIR-457U contacts manager displays all the contacts on the SIM Card. Contacts can be added, edited, deleted and imported.



Contacts

## Adding Contacts

1. Click the **Contacts** button.
2. Click the **Add** button.
3. Click **OK** to add the contact.

A screenshot of a Mac OS dialog box titled "Add Contact". The dialog has a title bar with standard Mac OS window controls (red, yellow, green buttons). Below the title bar, there are two radio buttons for "Save Position": "PC" (selected) and "(U)SIM card". Below that are several text input fields: "\* Name:" with the text "Bob", "\* Mobile Phone:" with the text "555-123-4567", "Home Phone:", "Office Phone:", and "Email:". At the bottom, there is a "Group:" dropdown menu currently showing "PC". At the very bottom of the dialog are two buttons: "Cancel" and "OK".

## Editing Contacts

1. Click the **Contacts** button.
2. Select the contact to edit.
3. Click the **Edit** button.
4. Modify the contacts details.
5. Click **OK** to save the changes.

## Deleting Contacts

1. Click the **Contacts** button.
2. Select the contact to delete.
3. Click the **Delete** button.
4. Click **Yes** to confirm the deletion.

# SIM Management

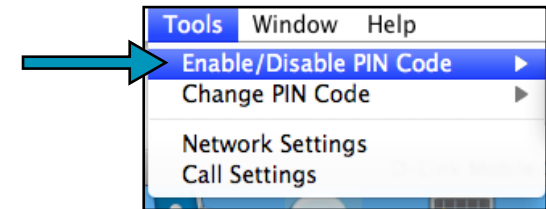
SIM Management includes functions such as enabling/disabling a PIN, changing the PIN1/PIN2 codes, adjusting the phone number, viewing contacts usage, and viewing SMS usage.

## Enabling or Disabling a PIN Code

### Enable PIN Code

To prevent unauthorized use of the SIM card a PIN code can be enabled.

1. Select **Tools > Enable/Disable PIN code > Enabled**.
2. Enter the correct PIN code to enable.
3. Click **OK** to enable PIN code protection.

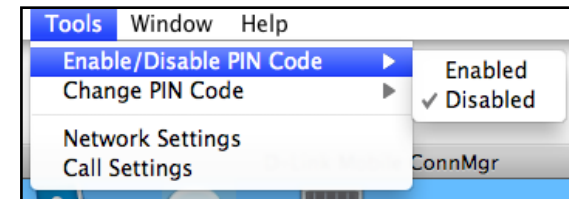


If a PIN number has been enabled, you will always be asked to enter it before accessing the D-Link Mobile Connection Manager software.

### Disable

If a PIN code is no longer required, you may disable it via the following steps.

1. Click **Tools > Enable/Disable PIN code > Disabled**.
2. Enter the correct PIN code.
3. Click **OK** to disable the PIN.



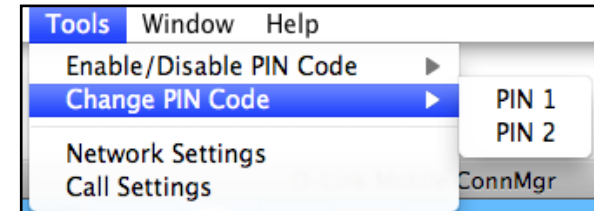
**Note:** The PIN is provided by your network service provider.

**Warning:** The PIN code must be entered correctly within three tries. Failure to do so will cause the SIM card to become locked.

## Changing a PIN Code

SIM cards often contain two PIN codes that can be changed.

1. Click **Tools > Change PIN Code > PIN1 or PIN2**.
2. Enter the details in the following fields: Current PIN Code, Enter New PIN Code and Confirm New PIN Code.
3. Click **OK** to change.
4. Once complete, a confirmation window will be displayed. Click **OK** to close the window.



**Warning:** The PIN code must be entered correctly within three tries. Failure to do so will cause the SIM card to become locked.

**Note:** The PIN codes cannot be changed while the DIR-457/DIR-457U is connected to a mobile network.

## Unlocking a PIN Code

If the PIN code has been entered incorrectly three times and the SIM card has been locked, follow the steps below to unlock it:

1. If a PIN is blocked, the unblock window will be displayed.
2. Enter the PUK code. Enter the new PIN Code, and confirm the new code.
3. Click **OK** to confirm the new PIN code.

**Note:** The PUK number is provided by your mobile service provider.



# Profile Settings

The Profile Settings page allows you to manually change your Band and Network setting in case your DIR-457/DIR-457U can not automatically connect to your network provider.

## Band Settings

The DIR-457/DIR-457U supports two band selection options:

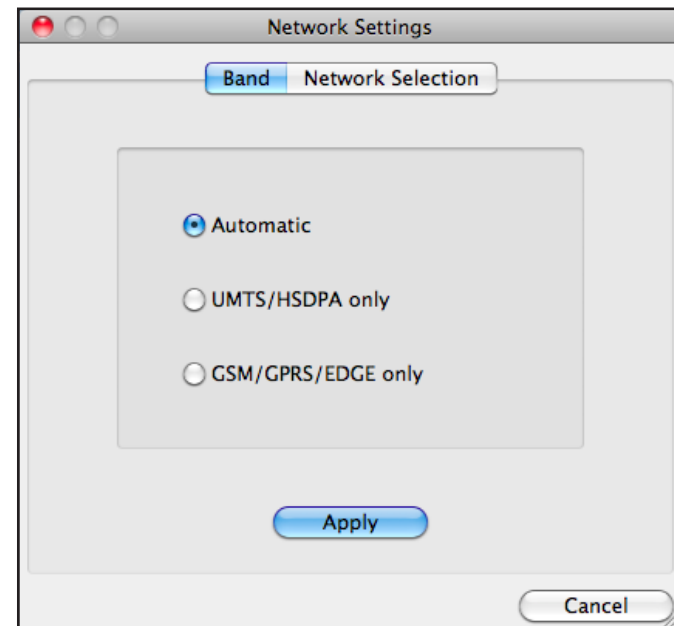
**Automatic** - The DIR-457/DIR-457U automatically selects the band based on the networks available in current area and those supported by the DIR-457/DIR-457U.

**UMTS/HSDPA Only** - Restricts the DIR-457/DIR-457U to using 3G service on UMTS/HSDPA bands.

**GSM/GPRS/EDGE Only** - Restricts the DIR-457/DIR-457U to using 2G service on GSM/GPRS/EDGE bands.

To adjust the band settings follow the instructions below:

1. Click the **Profile** button.
2. Select **Band** tab.
3. Select Automatic, UMTS/HSDPA only, or GSM/GPRS/EDGE only.
4. Click **Apply** and **OK**.



## Network Selection

The current location of the DIR-457/DIR-457U may be covered by more than one network. The DWM-156 supports two network selection options:

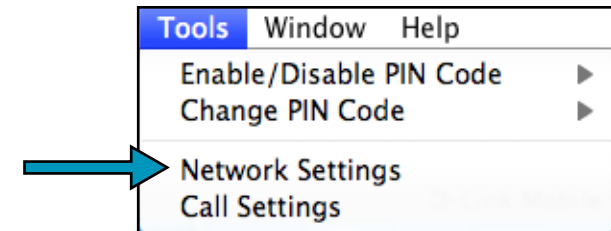
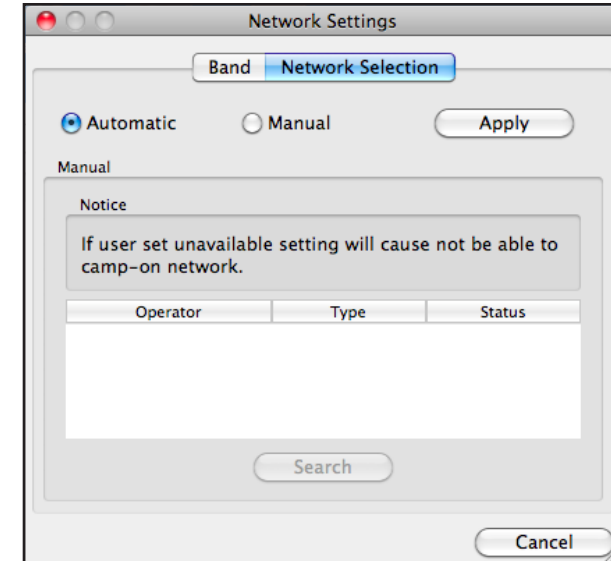
**Automatic** - By default the DIR-457/DIR-457U will automatically select the network based on the user account and network availability.

**Manual** - You may choose from the list of operators.

To manually set the network, follow the steps below:

1. Click on the **Tools** menu.
2. Click on **Network Settings**.
3. Select **Manual**.
4. Click **Search** to see all available networks.
5. Select a network operator and click **Apply**.
6. Click **OK** to finish.

**Note:** When the band is set to **UMTS/HSUPA Only**, manual selection will only list 3G networks.



## Call Settings

Select **Tools > Call Setting**.

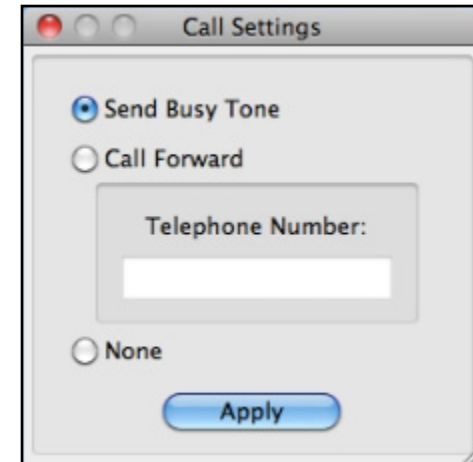
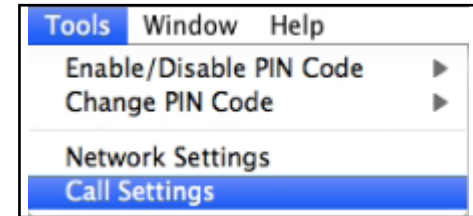
You may select from one of the following options:

**None** - No answer.

**Send Busy Tone** - The caller will hear a busy tone, or will be transferred to voice mail.

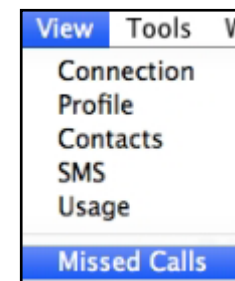
**Call Forward** - The incoming call will be forwarded to the phone number you enter into the **Telephone Number** text box.

**Note:** The call settings query may fail if the network is busy; in this case please try again later.



## Missed Calls

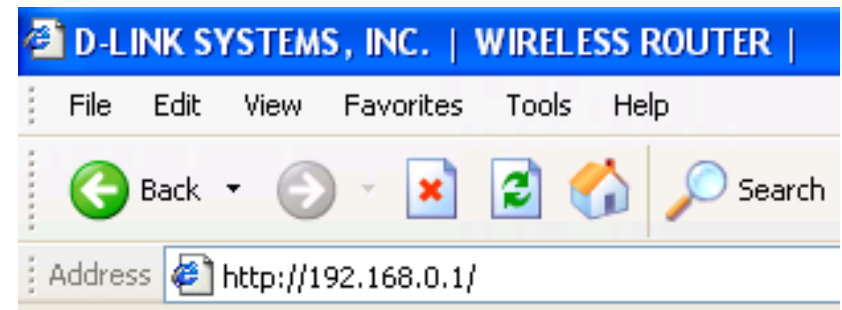
1. Select **View > Missed Calls**.
2. If the call setting is None or Send Busy Tone, D-Link Mobile Connection Manager AP will register the incoming call in the missed calls list.



# WEB Configuration

In order to configure basic and advanced settings for myPocket, first establish a connection through the 802.11g wireless interface, then launch a web browser and direct it to the IP address of the DIR-457/DIR-457U. Once the connection is made, options for quick setup include using the Internet Connection Wizard to configure the 3G interface, or the Wireless Connection Wizard to configure the 802.11g Wireless interface. Alternatively, the Internet and Wireless network settings can be configured manually without using the connection wizards. The myPocket web interface is used for configuration of basic device settings, advanced network settings, device management and status monitoring. Follow the instructions below to connect to the web-based management interface.

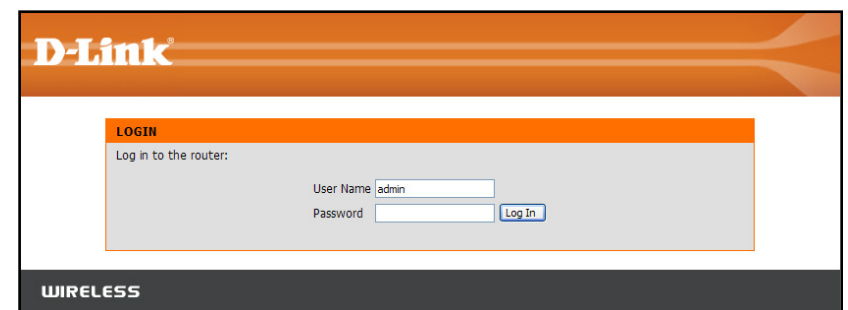
To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.0.1).



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

Click the **Login** button to log in to the router.

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



# Internet Connection Setup Wizard

Once logged into the web interface of the router, the **Setup > Internet** page will appear. Click the **Internet Connection Setup Wizard** button to quickly configure your router using the setup wizard.

If you want to enter your settings without running the wizard, click **Manual Internet Connection Setup** and skip to “Manual Internet Configuration”.

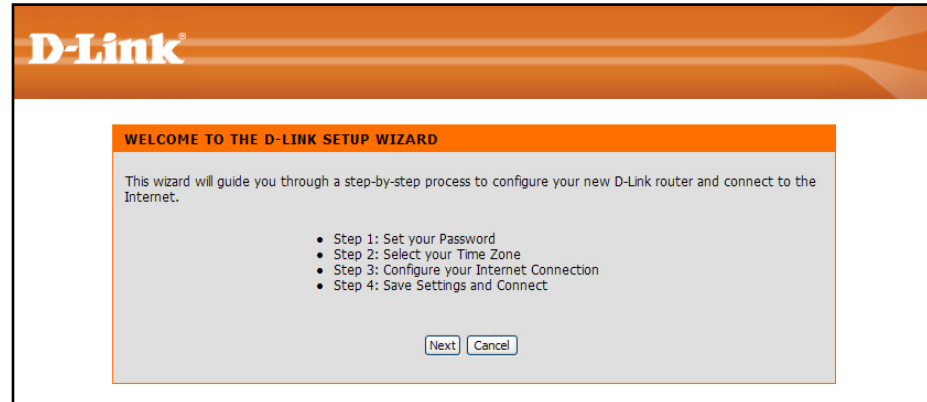
The screenshot displays the D-Link DIR-457 web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains links for Internet Setup, Wireless Setup, LAN Setup, Time and Date, Logout, and a Reboot button. The main content area is titled "INTERNET CONNECTION" and contains the following sections:

- INTERNET CONNECTION**: A message recommending the Internet Connection Setup Wizard for first-time users and manual setup for those who wish to modify settings.
- INTERNET CONNECTION SETUP WIZARD**: A section with a button labeled "Internet Connection Setup Wizard" and a note advising users to follow the Quick Installation Guide before launching the wizard.
- MANUAL INTERNET CONNECTION OPTIONS**: A section with a button labeled "Manual Internet Connection Setup" for manual configuration.

On the right side, under "Helpful Hints..", there are two bullet points:

- If you are new to networking and have never configured a router before, click on **Internet Connection Setup Wizard** and the router will guide you through a few simple steps to get your network up and running.
- If you consider yourself an advanced user and have configured a router before, click **Manual Internet Connection Setup** to input all the settings manually.

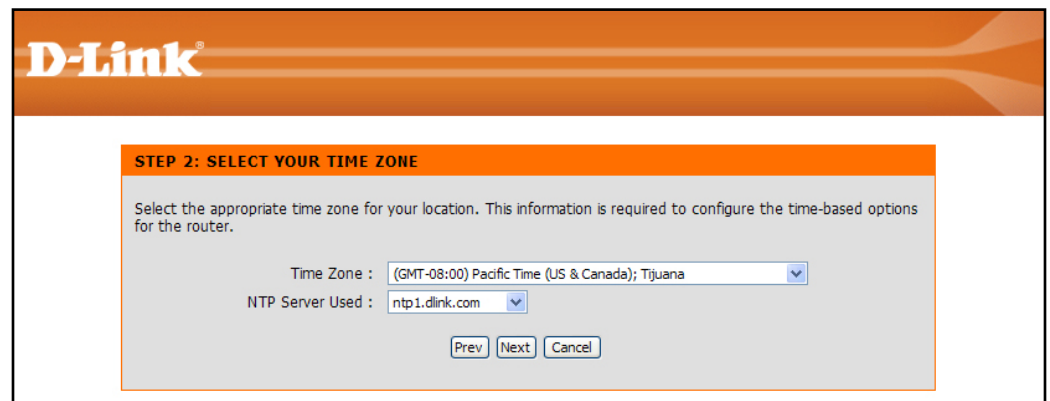
Click **Next** to continue.




Create a new password and then click **Next** to continue.



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



Configure your 3G Internet Connection settings and then click **Next** to continue.



**STEP 3: CONFIGURE YOUR INTERNET CONNECTION**

To set up this connection, please make sure that you are connected with 3G USB Adapter.

Mode : Auto ▾

Country :

ISP :

User Name :

Password :

Dial Number :

Authentication Protocol : Auto (PAP + CHAP) ▾


API :

Reconnect Mode :  Always-on  Connect-on demand  Manual

Maximum Idle Time :  (minutes,0=infinite)

MTU :  (bytes)(128-1492)

Click **Connect** to save your settings. Once the router has finished rebooting, click **Continue**. Please allow 1-2 minutes to connect.



**SETUP COMPLETE!**

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

# Manual Configuration 3G Internet Connection

If you opt to set up your Internet connection manually, you will be redirected to a Internet Connection menu that allows you to configure your 3G configuration parameters.

**Mode:** Choose Auto mode for automatic configuration of the 3G connection. If you choose this mode, no other configuration is required; simply click on the Save Settings button to save the configuration and the device begins to negotiate the 3G connection. If you opt to use the Manual setup mode, configure the parameters remaining according to the requirements of your 3G account.

**Country:** This displays the country after the 3G setup is done.

**ISP:** This displays the Internet Service Provider (ISP) after 3G setup is done.

**PIN:** If you have a Personal Identification Number (PIN) for your 3G account, enter that number here.

**User Name:** Enter the user name for your 3G Internet connection.

**Password:** Enter the password for your 3G Internet connection.

**Dial Number:** Enter the dial number for your 3G service provider.

## Authentication

**Protocol:** Choose the Authentication Protocol used.

**APN:** Enter the Access Point Name (APN) for your 3G service provider.

**Reconnect Mode:** Click a radio button to choose a reconnection mode. The options are **Always-on**, **Connect on demand**, or **Manual**.

**Maximum Idle Time:** Enter the maximum amount of time the Internet connection should be maintained during inactivity. To disable this feature, enable the **Always-on** reconnect mode.

Click the **Save Settings** button when you have finished configuring the 3G connection.

The screenshot shows the D-Link DIR-457 web configuration interface. The top navigation bar includes 'D-Link', 'DIR-457', and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'SETUP' tab is active, and the 'INTERNET CONNECTION' section is highlighted. Below this, there is a 'WWAN INTERNET SERVICE PROVIDER SETUP' section. The form contains the following fields and options:

- Mode:** A dropdown menu set to 'Auto'.
- Country:** A text input field.
- ISP:** A text input field.
- PIN:** A text input field with '(optional)' next to it.
- User Name:** A text input field with '(optional)' next to it.
- Password:** A text input field with '(optional)' next to it.
- Dial Number:** A text input field with '\*99#' pre-filled.
- Authentication Protocol:** A dropdown menu set to 'Auto (PAP + CHAP)'.
- APN:** A text input field with 'internet' pre-filled and '(optional)' next to it.
- Reconnect Mode:** Three radio buttons: 'Always-on' (selected), 'Connect-on demand', and 'Manual'.
- Maximum Idle Time:** A text input field with '2' pre-filled and '(minutes,0=infinite)' next to it.

At the bottom of the form are two buttons: 'Save Settings' and 'Do Not Save Settings'. On the right side of the interface, there is a 'Helpful Hints...' section with two bullet points: one about choosing the correct Internet Connection Type and another about double-checking settings if having trouble accessing the Internet.



# Wireless Settings

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

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

The screenshot shows the D-Link DIR-457 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains links for Internet Setup, Wireless Setup, LAN Setup, Time and Date, and Logout, with a Reboot button below. The main content area is titled "WIRELESS CONNECTION" and contains the following sections:

- WIRELESS CONNECTION**: A text box explaining that there are two ways to setup the wireless connection: using the Wireless Connection Setup Wizard or manually configuring the connection. A note states that changes made in this section will also need to be duplicated on wireless clients and PCs.
- WIRELESS CONNECTION SETUP WIZARD**: A section with a button labeled "Wireless Connection Setup Wizard". A note below the button states: "Note: Before launching the wizard, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package."
- MANUAL WIRELESS CONNECTION OPTIONS**: A section with a button labeled "Manual Wireless Connection Setup".

On the right side, there is a "Helpful Hints.." section with two bullet points:

- If you are new to wireless networking and have never configured a wireless router before, click on **Wireless Connection Setup Wizard** and the router will guide you through a few simple steps to get your wireless network up and running.
- If you consider yourself an advanced user and have configured a wireless router before, click **Manual Wireless Connection Setup** to input all the settings manually.

Click the **Wireless Connection Setup Wizard** button to view the **Wireless Security Setup Wizard** menu. The Welcome menu lists the steps used for setup. Click on the **Next** button to continue.

The screenshot shows the D-Link DIR-457 web interface displaying the "WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD" screen. The main content area contains the following text:

This wizard will guide you through a step-by-step process to setup your wireless network and make it secure.

- Step 1: Setup your Wireless Network.
- Step 2: Set your Wireless Security Password

At the bottom of the screen, there are two buttons: "Next" and "Cancel".

# Wireless Connection Setup Wizard

Enter the SSID (Service Set Identifier). The SSID is the name of your wireless network. Create a name using up to 20 characters. The SSID is case-sensitive.

If you would like the router to automatically assign a network key to your network, click the **Automatically assign a network key** radio button.

Click **Next** to continue.

Alternatively, click the **Manually assign a network key** radio button to create your own network key; or, click to check the **Use WPA encryption...** box.

Click **Next** to continue.

The following window appears if you selected the option to manually create your own network key.

Type a password that you would like to use for wireless security in the **Network Key:** entry field.

Click **Next** to continue.

**D-Link**

**STEP 1: SETUP YOUR WIRELESS NETWORK**

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

Wireless Network Name (SSID)

Automatically assign a network key (Recommended)  
To prevent intruders from accessing your network, the router will automatically assign a security key (also called WEP or WPA key) to your network.

Manually assign a network key  
Use this option if you prefer to create your own key.

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

**D-Link**

**STEP 2: SET YOUR WIRELESS SECURITY PASSWORD**

You have selected your wireless security level - you will need to set a wireless security password. The WEP (Wired Equivalent Privacy) key must meet one of following guidelines:

- Exactly 5 or 13 characters
- Exactly 10 or 26 characters: using 0-9 and A-F

A longer WEP key is more secure than a short one

Network Key :

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

If you choose the WPA encryption option, a new menu appears. Enter the **Network Key** of 64 hexadecimal characters in the entry field. This will be the WPA password required to use the DIR-457/DIR-457U.

Click **Next** to continue.



The final menu appears to indicate that the setup is completed.

If you selected the option that automatically generated a network key, the automatically generated key will display next to the **Network Key** field.

If you manually specified a network key, the **Wireless Security Password** that you specified will display next to the **Network Key** field.



Click **Save** to finish the Security Wizard.

## Manual Wireless Connection Setup

To add a wireless client with WPS, please see the section Add Wireless Device With WPS.

**Wireless Network Name:** Service Set Identifier (SSID) is the name of your wireless network. Create a name using up to 20 characters. The SSID is case-sensitive.

**Enable Auto Channel Selection:** The **Auto Channel Scan** setting can be selected to allow the DIR-457/DIR-457U to choose the channel with the least amount of interference.

**Wireless Channel:** Indicates the channel setting for the DIR-457/DIR-457U. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

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

**WMM Enable:** WMM (Wi-Fi Multimedia) is QoS for your wireless network. Check this box to improve the quality of video and voice applications for your wireless clients.

**Enable Hidden Wireless:** Enabling Hidden Mode is another way to secure your network. With this option enabled, no wireless clients will be able to see your wireless network when they perform a scan to see what's available. In order for your wireless devices to connect to your router, you will need to manually enter the Wireless Network Name on each device.

**Wireless Security:** Choose the wireless security method used for your network and configure the settings according to the requirements of the selected security mode. Wireless security options include WEP, WPA, and WPA2.

The screenshot shows the D-Link web configuration interface for a DIR-457 router. The page is titled "WIRELESS NETWORK" and is part of the "SETUP" menu. It contains several sections:

- WIRELESS NETWORK:** A section with instructions and two buttons: "Save Settings" and "Do Not Save Settings".
- WI-FI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA):** A section with an "Enable" checkbox (unchecked), a "Current PIN" field showing "12345670", and buttons for "Generate New PIN", "Reset PIN to Default", "Reset to Unconfigured", and "Add Wireless Device with WPS".
- WIRELESS NETWORK SETTINGS:** A section with fields for "Wireless Network Name" (set to "dlink\_myPocket"), "Enable Auto Channel Selection" (checked), "Wireless Channel" (set to 6), "Transmission Rate" (set to "Best (automatic)"), "WMM Enable" (unchecked), and "Enable Hidden Wireless" (unchecked).
- WIRELESS SECURITY MODE:** A section with a "Security Mode" dropdown menu set to "Disable Wireless Security (not recommended)".

On the right side of the interface, there is a "Helpful Hints..." section with several bullet points providing additional information and warnings.

# LAN Setup

This section will allow you to change the local network settings of the router and to configure the DHCP settings.

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

If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

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

**Local Domain Name:** Enter the Domain name (Optional).

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

The screenshot shows the D-Link DIR-457 web configuration utility. The main navigation menu includes SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The current page is 'LAN Setup', which is part of the 'NETWORK SETTING' section. The page contains the following sections:

- NETWORK SETTING:** A warning message states: "Please note that this section is optional and you do not need to change any of the settings here to get your network up and running." Below this are two buttons: "Save Settings" and "Do Not Save Settings".
- ROUTER SETTINGS:** A section for configuring internal network settings. It includes input fields for:
  - Router IP Address: 192.168.0.1
  - Default Subnet Mask: 255.255.255.0
  - Local Domain Name: (empty field)
  - Enable DNS Relay:
- DHCP CLIENT LIST:** A table showing the current DHCP client list.
 

Host Name	IP Address	MAC Address	Expired Time
04144p1win2k	192.168.0.2	00:26:5A:07:9C:30	6 day(s) 23 hr(s) 13 min(s) 50 sec(s)
- 16 - DHCP RESERVATION:** A section for reserving IP addresses. It shows "Remaining number of clients that can be configured : 16". Below this is a table with columns for Computer Name, IP Address, and MAC Address. Each row has a checkbox and a dropdown menu for the Computer Name.





# Time and Date

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

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

**Enable Daylight Saving:** Check the box to enable Daylight Saving time.

**Sync your Computer's Time Settings:** Click this button to set the device's time the same to local PC.

**Automatic Time and Date Configuration:** Check the box to enable the device to automatically synchronize with a D-Link NTP Server. NTP stands for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. This will only connect to a server on the Internet, not a local server.

**NTP Server Used:** Select one of the D-Link NTP Servers from the drop-down menu. The DIR-457/DIR-457U will then synchronize its clock to be the same time as the D-Link Internet time server. Click the **Update Now** button to synchronize with the D-Link Internet time server immediately.

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

The screenshot shows the D-Link DIR-457 web configuration interface. The top navigation bar includes 'D-Link' and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The left sidebar contains a menu with 'Internet Setup', 'Wireless Setup', 'LAN Setup', 'Time and Date', and 'Logout'. A 'Reboot' button is located below the 'Logout' option. The main content area is titled 'TIME AND DATE' and contains the following sections:

- TIME AND DATE CONFIGURATION:** Displays the current time as '01/01/2000 00:52:16'. The Time Zone is set to '(GMT-08:00) Pacific Time (US & Canada); Tijuana'. There is a checkbox for 'Enable Daylight Saving' and a 'Sync. your computer's time settings' button.
- AUTOMATIC TIME AND DATE CONFIGURATION:** Includes a checkbox for 'Automatically synchronize with D-Link's Internet time server'. Below it, the 'NTP Server Used' is set to 'ntp1.dlink.com' with an 'Update Now' button.
- SET THE TIME AND DATE MANUALLY:** Features six dropdown menus for 'Year' (2009), 'Month' (Oct), 'Day' (29), 'Hour' (12), 'Minute' (21), and 'Second' (47). 'Save Settings' and 'Do Not Save Settings' buttons are at the bottom.

A 'Helpful Hints..' section on the right side of the page provides additional instructions: 'Either enter the time manually by clicking the **Sync. Your Computers Time Settings** button, or use the **Automatic Time Configuration** option to have your router synchronize with a time server on the Internet.'

Click the **Save Settings** button at the top or bottom of the window to save the Time and Date settings.

# Port Forwarding

Port Forwarding is a feature that allows you to open a single port or a range of ports and redirect the data received through those ports to a single PC on your network.

**Name:** Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

**IP Address:** Enter the IP address of the computer on your local network that you want to allow the incoming service to in the **Private IP** field. You have the option of specifying a **Public IP** address for the incoming connection.

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

**Traffic Type:** Use the drop-down menu to select whether **TCP**, **UDP**, or **Any** types of traffic are being used for the port forwarding rule.

**Schedule:** Select a schedule for when the Port Forwarding Rule will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled.

When you have finished configuring the above settings, click to check the boxes next to the Forwarding Rules entries you want to be active and click the **Save Settings** button at the top or bottom of the window to save the settings. .

The screenshot displays the 'ADVANCED PORT FORWARDING RULES' configuration page on a D-Link router. The page has a navigation menu with 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, showing the 'ADVANCED PORT FORWARDING RULES' section. Below this, there is a description of the feature and two buttons: 'Save Settings' and 'Do Not Save Settings'. A table titled '20 - ADVANCED PORT FORWARDING RULES' shows the remaining number of rules that can be created (20). The table has columns for Name, Private IP, Public Port, Private Port, and Traffic Type. There are two rule entries visible, each with a checkbox, a name field, an application name dropdown, and port range fields. A 'Helpful Hints..' section on the right provides additional instructions.

**Helpful Hints..**

- Check the **Application Name** drop-down menu for a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.
- Enter the IP address manually of the computer you would like to open the specified port to.
- This feature allows you to open a range of ports to a computer on your network. To do so, enter the first port in the range you would like to open on the router in the first box under **Public Port** and last port of the range in the second one. After that you enter the first port in the range that the internal



# MAC Address Filter

Use MAC (Media Access Control) Filters to allow or deny LAN (Local Area Network) computers by manually entering their MAC addresses from accessing the Network.

**MAC Address Filter:** Select **Accept**, **Reject**, or **Disable** from the drop-down menu

**MAC Address:** Enter the MAC address you would like to filter.

The screenshot displays the D-Link DIR-457 web configuration interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options, with 'MAC Address Filter' selected. The main content area is divided into two sections: 'MAC ADDRESS FILTER' and 'WIRELESS ACCESS SETTING'.

**MAC ADDRESS FILTER**

The DIR-457 can be setup to deny or only allow access to wireless clients with the listed MAC addresses.

Save Settings    Do Not Save Settings

**WIRELESS ACCESS SETTING**

MAC Address Filter :

The input format of MAC address must be  
xx:xx:xx:xx:xx:xx

MAC Address :

**Helpful Hints..**

- **Wireless Access Setting:** Create a list of MAC addresses that you would either like to accept or reject access to your network

# Filter Rules

Use MAC (Media Access Control) Filters to allow or deny LAN (Local Area Network) computers by their MAC addresses from accessing the Network. You can add a MAC address of any clients and allow or deny access.

Enter the MAC address you would like to filter.

(Optional) Enter a port or range of ports used for the filter rule.

Select the protocol of the firewall port (**TCP**, **UDP**, or **Any**).

Choose to **Allow** or **Deny** the traffic.

Select a schedule for when the Network Filter from the drop-down menu or click the **New Schedule** button to configure a new schedule.

The screenshot shows the D-Link DIR-457U web configuration interface. The top navigation bar includes 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, and the 'FILTER RULES' sub-tab is active. The interface displays a 'FILTER RULES' section with a description: 'The Filter Rules option is used to control network access based on the MAC/IP Address of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.' Below this are 'Save Settings' and 'Do Not Save Settings' buttons. A table titled '20 - FILTER RULES' shows the remaining number of rules that can be created (20). The table has columns for 'MAC/IP Address', 'Destination Port', 'Traffic Type', 'Action', and 'Schedule'. Two rule entries are visible, each with a checkbox, input fields for MAC and IP addresses, a 'Destination Port' field with a tilde symbol, a 'Traffic Type' dropdown set to 'Any', an 'Action' dropdown set to 'Deny', and a 'Schedule' dropdown set to 'Always' with a 'New Schedule' button. A 'Helpful Hints...' section on the right provides instructions: 'Create a list of MAC addresses and choose whether to allow or deny them access to your network.', 'Use the check box on the left to either enable or disable a particular entry.', and 'Use the Always drop down menu if you have previously defined a schedule in the router. If not, click on the New Schedule button to add one.'

When you have finished configuring the above settings, click to check the boxes next to the Filter Rules entries you want to be active and click the **Save Settings** button at the top or bottom of the window to save the settings.

A firewall protects your network from intrusion and other malicious actions from the public Internet or WAN. The D-Link DIR-457/DIR-457U offers a Firewall type functionality. It might be desirable to disable firewall protection for a LAN client running certain applications that are incompatible with the firewall. If you choose to expose a single system, you can enable DMZ for one IP address on the private network. DMZ is short for Demilitarized Zone. This option will expose the chosen system and make it visible on the Internet.

**Enable WAN to LAN Firewall:** This is enabled by default. To disable the Firewall, click to remove the check mark.

**DMZ Host:** Check the **DMZ Enable** box and specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication in the DMZ IP Address field.

**Schedule:** Select a schedule for when the DMZ will be enabled from the drop-down menu or click the **New Schedule** button to configure a new schedule.

**Firewall Rules:** Use this section to select rules used for the Firewall. The rule options include some of the commonly used methods of attack and port scanning. The service filters for FTP, Telnet and Ping from the WAN are not enabled by default. If these are enabled these services will be unavailable from the WAN.

Click the **Save Settings** button at the top or bottom of the window to save the Firewall settings.

The screenshot displays the web configuration interface for a D-Link DIR-457U router. The top navigation bar includes 'Product Page : DIR-457U' and 'Firmware Version : 1.01'. The main header features the D-Link logo. Below the header, a menu bar contains 'DIR-457U //', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, leading to the 'FIREWALL & DMZ SETTINGS' page. The left sidebar lists navigation options: 'Port Forwarding', 'Filter Rules', 'Firewall & DMZ', 'File Sharing', 'Advanced Network', and 'Logout'. The main content area is titled 'FIREWALL & DMZ SETTINGS' and contains the following information:

- Firewall rules can be used to allow or deny traffic passing through the router.
- DMZ means "Demilitarized Zone". DMZ allows computers behind the router firewall to be accessible to Internet traffic. Typically, your DMZ would contain Web servers, FTP servers and others.
- Buttons: 'Save Settings' and 'Do Not Save Settings'.

Below this is the 'OUTSIDE FIREWALL SETTING' section, which includes:

- Enable WAN to LAN Firewall :
- A table with columns 'Firewall Setting Part Name' and 'Firewall Part Setting Items':
 

Firewall Setting Part Name	Firewall Part Setting Items
DMZ	DMZ Enable : <input type="checkbox"/> IP : <input type="text"/> Always <input type="button" value="New Schedule"/>
DOS ATTACK	Enable DoS ATTACK Prevention : <input checked="" type="checkbox"/> Syn Flooding : <input checked="" type="checkbox"/> Icmp Flooding : <input checked="" type="checkbox"/>
PORT SCAN ATTACK	Enable PORT SCAN ATTACK Prevention : <input checked="" type="checkbox"/> Enable NAMP Xmas Prevention : <input checked="" type="checkbox"/> Enable Xmas Prevention : <input checked="" type="checkbox"/> Enable NULL Scan Prevention : <input checked="" type="checkbox"/> Enable SYN ACK Prevention : <input checked="" type="checkbox"/> Enable SYN RST Prevention : <input checked="" type="checkbox"/> Enable SYN FIN Prevention : <input checked="" type="checkbox"/>
SERVICE FILTER	Enable SERVICE FILTER Blocking : <input type="checkbox"/> PING From WAN Blocking : <input type="checkbox"/> Telnet Blocking : <input type="checkbox"/> FTP Blocking : <input type="checkbox"/>
- Buttons: 'Save Settings' and 'Do Not Save Settings'.

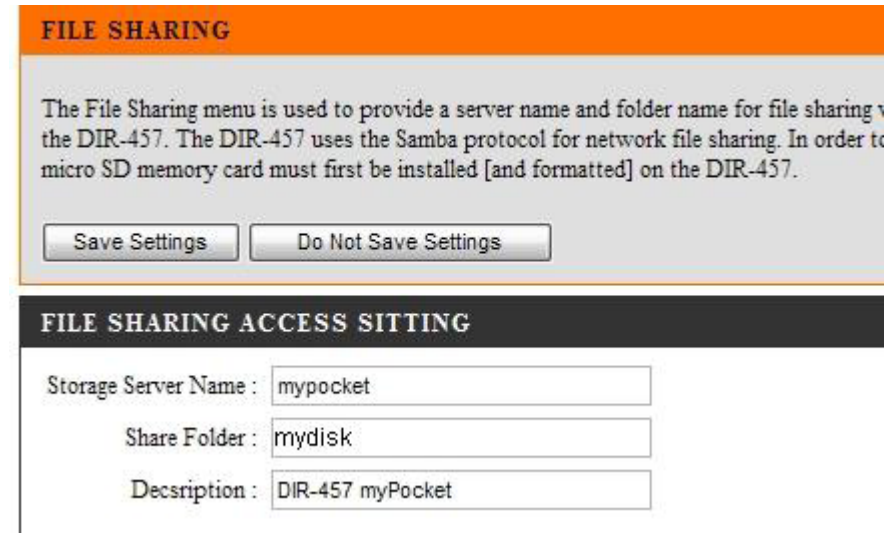
On the right side, there is a 'Helpful Hints..' section with a note: 'DMZ: Only enable the DMZ option as a last resort. If you are having trouble using an application from a computer behind the router, first try opening ports associated with the application in the Advanced Port Forwarding section.'

# File Sharing

The File Sharing menu is used to set up file sharing for clients connected to the DIR-457/DIR-457U. The DIR-457/DIR-457U uses the Samba protocol for network file sharing. In order to use this feature, a micro SD memory card must first be installed and formatted on the DIR-457/DIR-457U. The Share Folder on the DIR-457/DIR-457U functions in a way similar to a shared folder on a Network Attached Storage device or on a Networked Computer in the LAN.

**Storage Server Name:** The default Storage Server Name is **mypocket**.

**Share Folder:** The default name for the Share Folder is **mydisk**.



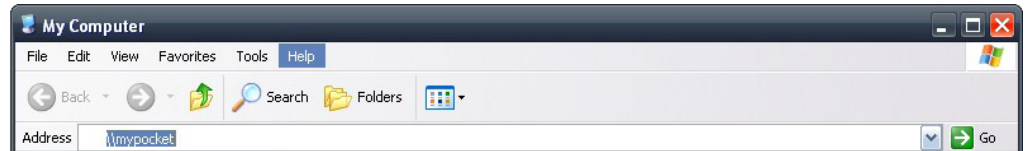
The screenshot shows a web configuration page for File Sharing. The page has an orange header with the text "FILE SHARING". Below the header, there is a grey box containing a paragraph of text: "The File Sharing menu is used to provide a server name and folder name for file sharing on the DIR-457. The DIR-457 uses the Samba protocol for network file sharing. In order to use this feature, a micro SD memory card must first be installed [and formatted] on the DIR-457." Below this text are two buttons: "Save Settings" and "Do Not Save Settings". Below the buttons is a black header with the text "FILE SHARING ACCESS SITTING". Underneath this header are three input fields: "Storage Server Name : mypocket", "Share Folder : mydisk", and "Description : DIR-457 myPocket".

**Note:** Any files in the Share Folder can be read/written by other wireless clients connected to the Access Point. This device does not support hot-plugging for the micro SD memory card.

For accessing the shared folder in the router using Windows XP® or Windows® Vista, you can choose one of following methods to read or write the shared files.

## Windows XP

**Step 1**                    Open a browser window.



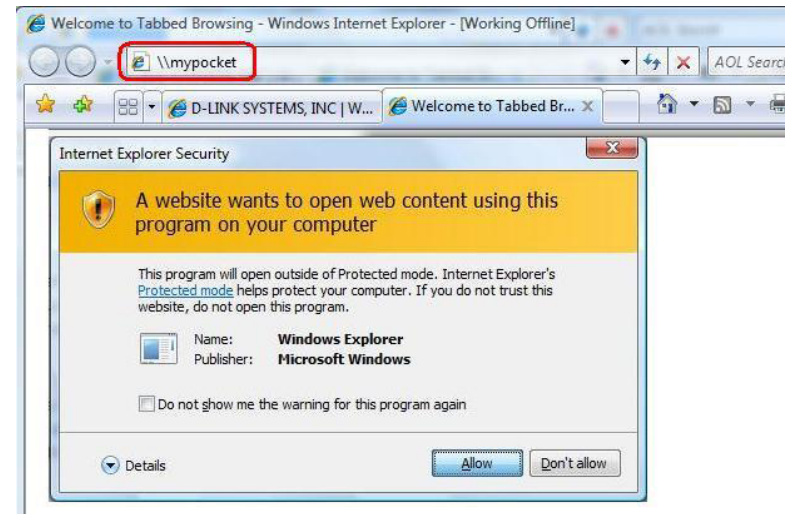
**Step 2**                    Input \\ followed by the Storage Server name or the IP address of the router in the URL input text box (\\mypocket or \\192.168.0.1). (you can enter default Storage Server name or user-configured name ).

**Note:** If prompted for the username and password, please keep the password field blank to log in.

## Windows Vista

**Step 1** Open a browser window.

**Step 2** Input \\ followed by the Storage Server name or the IP address of the router in the URL input text box (\\mypocket or \\192.168.0.1). (you can enter default Storage Server name or user-configured name ).

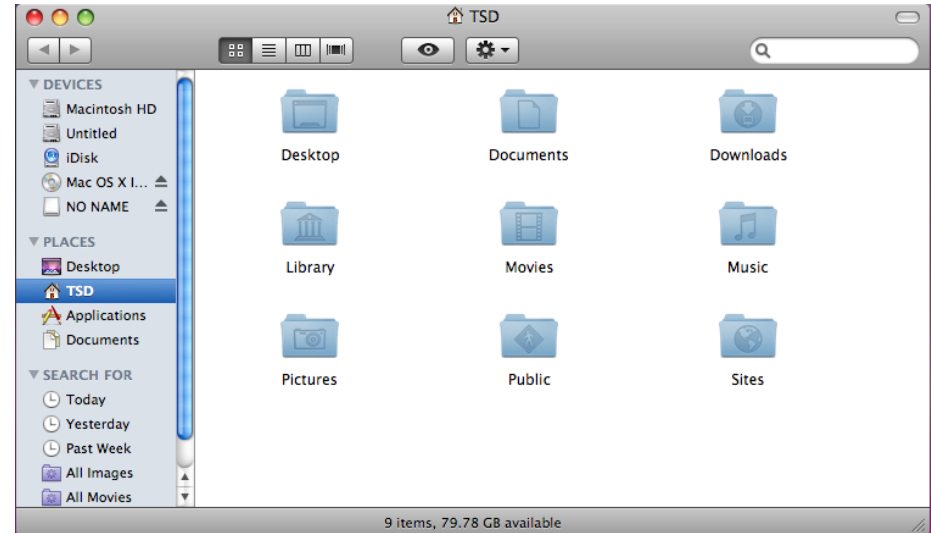


**Note:** If an Internet Security warning pops up, please click **Allow**. If prompted for the username and password, please keep the password field blank to log in.

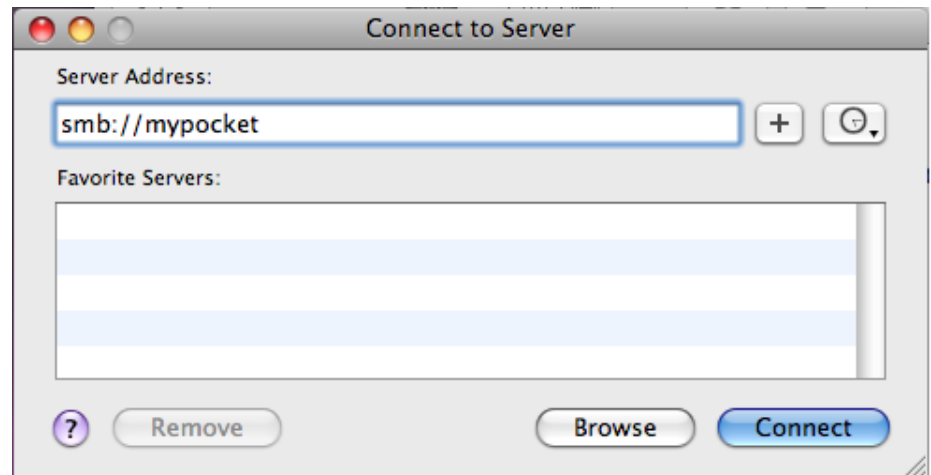
For accessing the shared folder in the router using Mac OS X, follow these steps to read or write the shared files.

## Mac OS

**Step 1** Open the **Finder** window.



**Step 2** To bring up a server connection window, hit the **[Apple]** key and the **[K]** key together. You will then be prompted to enter a server address. Enter **smb://mypocket** (or **smb://192.168.0.1**) and click **Connect**.



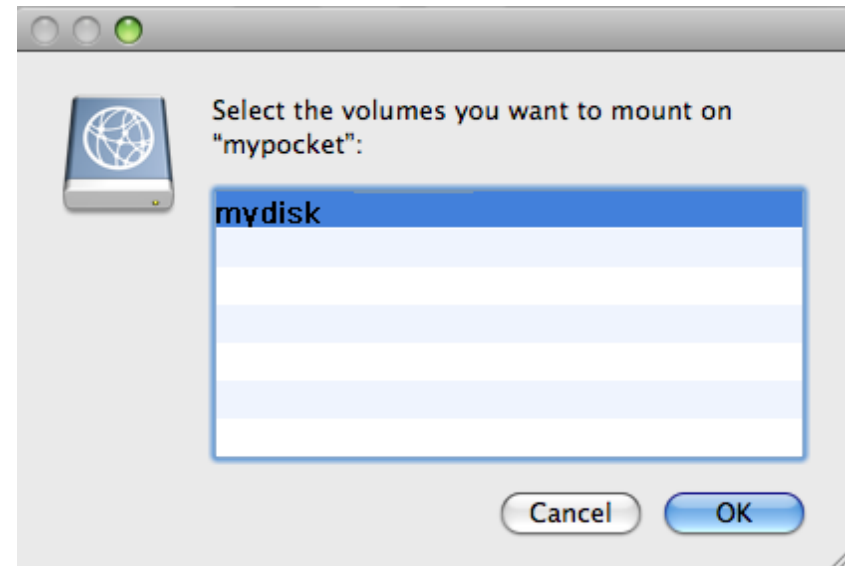
**Step 3**

Next, you will be prompted for the username and password. You can keep the password field blank to log in.



**Step 4**

You will be prompted: "Select the volume you want to mount on mypocket" Select **mydisk**, and then click **OK**.





# Advanced Network

**UPnP:** To use the Universal Plug and Play (UPnP™) feature check the **Enable UPNP** box. UPNP provides compatibility with networking equipment, software and peripherals.

**Multicast Streams:** Check the **Enable Multicast Streams** box to allow multicast traffic to pass through the router from the Internet.

Check the **Wireless Enhance Mode** box to enable the router to forward all multicast streams from the Internet to the wireless station using a unicast stream. This feature helps improve the quality of multimedia applications for wireless users.

Click the **Save Settings** button at the top or bottom of the window to save the Advanced Network settings.

The screenshot shows the D-Link DIR-457U web interface. The top navigation bar includes 'DIR-457U', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The left sidebar lists menu items: Port Forwarding, Filter Rules, Firewall & DMZ, File Sharing, Advanced Network (selected), and Logout. The main content area is titled 'ADVANCED NETWORK SETTINGS' and contains the following text: 'These options are for users that wish to change the LAN settings. We do not recommend changing these settings from factory defaults. Changing these settings may affect the behavior of your network.' Below this text are two buttons: 'Save Settings' and 'Do Not Save Settings'. The 'UPNP' section is expanded, showing 'Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.' and 'Enable UPnP : '. The 'MULTICAST STREAMS' section shows 'Enable Multicast Streams : ' and 'Wireless Enhance Mode : '. At the bottom of the settings area are two more buttons: 'Save Settings' and 'Do Not Save Settings'. On the right side, there is a 'Helpful Hints..' section with two bullet points: '• UPnP is short for Universal Plug and Play which is a networking architecture that provides compatibility among networking equipment, software, and peripherals.' and '• If you are having trouble receiving video on demand type of service from the Internet, make sure the Multicast Stream option is enabled.'

# Device Administration

This page will allow you to change the Administrator password. You can also enable Remote Management.

**Note:** The default User Name (**admin**) for the device cannot be changed.

**Admin Password:** Enter and confirm a new password for the administrator login name. The administrator can change the password but not the login name “admin”.

**Enable Remote Management:** Remote management allows the DIR-457/DIR-457U to be configured from the Internet by a web browser. A username and password is still required to access the Web-Management interface. In general, only a member of your network can browse the built-in web pages to perform Administrator tasks. This feature enables you to perform Administrator tasks from the remote (Internet) host.

**Remote Control IP Address:** Enter the remote IP address from which the administrator logs in when remote management is enabled.

**Port:** The port number used to access the DIR-457/DIR-457U.

**Enable Remote Telnet:** Check this to enable remote device management via Telnet.

**Remoter Control IP Address:** Enter the remote IP address from which the administrator logs in when remote Telnet management is enabled.

Click the **Save Settings** button at the top or bottom of the window to save the Administrator settings.

The screenshot shows the web management interface for a D-Link DIR-457U router. The top navigation bar includes 'Product Page : DIR-457U' and 'Firmware Version : 1.01'. The main header features the D-Link logo. Below the header is a navigation menu with tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'MAINTENANCE' tab is selected, and the 'ADMINISTRATOR SETTINGS' page is displayed. The page contains a 'Reboot' button, a 'Helpful Hints..' section, and a 'REMOTE MANAGEMENT' section. The 'ADMINISTRATOR SETTINGS' section includes a warning about the 'admin' account and two buttons: 'Save Settings' and 'Do Not Save Settings'. The 'REMOTE MANAGEMENT' section includes checkboxes for 'Enable Remote Management' and 'Enable Remote Telnet', along with input fields for 'IP Allowed to Access', 'Port', and 'Remote Control IP Address'.

DIR-457U	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Device Administration Save and Restore Firmware Update DDNS Setting Schedules Log Settings Logout Reboot	<b>ADMINISTRATOR SETTINGS</b> The 'admin' accounts can access the management interface. The admin has read/write access and can change passwords. It is highly recommended that you create a password to keep your router secure. <input type="button" value="Save Settings"/> <input type="button" value="Do Not Save Settings"/>			<b>Helpful Hints..</b> <ul style="list-style-type: none"> <li>For security reasons, it is recommended that you change the Password for the Administrator accounts. Be sure to write down the new Login Names and Passwords to avoid having to reset the router in the event that they are forgotten.</li> <li>When enabling Remote Management, you can specify the IP address of the computer on the Internet that you want to have access to your router, or leave it 0.0.0.0 to allow access to any computer on the Internet.</li> </ul>	
	Please enter the same password into both boxes, for confirmation. New Password: <input type="password"/> Confirm Password: <input type="password"/>				
	<b>REMOTE MANAGEMENT</b> Enable Remote Management: <input type="checkbox"/> IP Allowed to Access: <input type="text" value="0.0.0.0"/> Port: <input type="text" value="8080"/> Enable Remote Telnet: <input type="checkbox"/> Remote Control IP Address: <input type="text" value="0.0.0.0"/>				

## Save and Restore

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

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

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

**Reboot:** Click to **Reboot** button located in the left panel of the menu to restart the router.

The screenshot shows the D-Link web configuration interface for a DIR-457U router. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains a menu with options: Device Administration, Save and Restore, Firmware Update, DDNS Setting, Schedules, Log Settings, and Logout. The main content area is titled 'SAVE AND RESTORE SETTINGS' and contains the following text and controls:

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

**SAVE AND RESTORE SETTINGS**

Save Settings To Local Hard Drive :

Load Settings From Local Hard Drive :

Restore To Factory Default Settings :

Clear Language Pack :

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

• Once your router is configured the way you want it, you can save these settings to a configuration file that can later be loaded in the event that the router's default settings are restored. To do this, click the Save button next to where it says Save Settings to Local Hard Drive.

# Firmware Update

You can upgrade the firmware of the Router here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update. Click on the **Check Now** button or go to the D-Link support site for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from the D-Link support site.

**Current Firmware Information:** Displays the current firmware version and date. You can also check the availability of a new firmware version online. If so, download the new firmware to your hard drive.

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

**Clear Language Pack:** Click the **Clear** button to restore the device to the English interface version and remove all the other languages previously installed.

The screenshot shows the web interface for a D-Link DIR-457U router. At the top, it says 'Product Page : DIR-457U' and 'Firmware Version : 1.02'. The D-Link logo is prominently displayed. Below the logo is a navigation menu with tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'MAINTENANCE' tab is selected, and the 'FIRMWARE UPDATE' sub-tab is active. On the left side, there is a sidebar menu with options: 'Device Administration', 'Save and Restore', 'Firmware Update', 'DDNS Setting', 'Schedules', 'Log Settings', and 'Logout'. A 'Reboot' button is located at the bottom of this sidebar. The main content area is divided into several sections:
 

- FIRMWARE UPDATE:** A message stating 'There may be new firmware for your DIR-457U to improve functionality and performance. Click here to check for an upgrade on our support site.' Below this, instructions state: 'To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the firmware upgrade.'
- FIRMWARE INFORMATION:** Shows 'Current Firmware Version : 1.02' and 'Current Firmware Date : Mon 31 May 2010'.
- FIRMWARE UPGRADE:** A note in red text says: 'Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.' Below this, instructions state: 'To upgrade the firmware, your PC must have a wireless connection to the router. Enter the name of the firmware upgrade file, and click on the Upload button.' There is an 'Upload' field with a '浏览...' (Browse) button and an 'Upload' button.
- LANGUAGE PACK UPGRADE:** Similar to the firmware upgrade section, it has an 'Upload' field with a '浏览...' button and an 'Upload' button.

 On the right side, there is a 'Helpful Hints..' section with a bullet point: 'Firmware Updates are released periodically to improve the functionality of your router and also to add features.'

# Log Settings

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

**Log Type:** Use the selection boxes to choose the types of messages that should be displayed from the log.

The screenshot shows the D-Link DIR-457U web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains a menu with options: Device Administration, Save and Restore, Firmware Update, DDNS Setting, Schedules, Log Settings (highlighted), and Logout. A Reboot button is located below the Logout option.

The main content area is titled "LOG SETTINGS" and contains the following sections:

- LOG SETTINGS:** A message states "Logs can be saved by sending it to an admin email address." Below this are two buttons: "Save Settings" and "Do Not Save Settings".
- SAVE LOG FILE:** A section with a text input field containing "Save Log File To Local Hard Drive" and a "Save" button.
- LOG TYPE:** A table with the following entries:
 

Log Type	Selection
System Activity	<input checked="" type="checkbox"/>
Debug Information	<input type="checkbox"/>
Attacks	<input checked="" type="checkbox"/>
Dropped Packets	<input type="checkbox"/>
Notice	<input checked="" type="checkbox"/>

The right sidebar, titled "Helpful Hints..", contains a bullet point: "Click on the Save button to save the log file to a local hard drive which can later be sent to the network administrator for troubleshooting. You can also select what type of event you would like logged from Log Type."

Click the **Save Settings** button at the top or bottom of the window to save the settings.

# DDNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc...) 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.

**Enable DDNS:** Dynamic Domain Name System is a method of keeping a domain name linked to a changing IP Address. Check the box to enable DDNS.

**Server Address:** Choose your DDNS provider from the drop down menu.

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

**User Account:** Enter the User Name for your DDNS account.

**Password:** Enter the Password for your DDNS account.

**DDNS Account Testing:** This is to test if the DDNS account is valid for use.



DIR-457U	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Device Administration Save and Restore Firmware Update DDNS Setting Schedules Log Settings Logout Reboot	<b>DYNAMIC DNS</b> The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) 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 your host name to connect to your game server no matter what your IP address is. <a href="http://www.DLinkDDNS.com">Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com.</a> <input type="button" value="Save Settings"/> <input type="button" value="Do Not Save Settings"/>				<b>Helpful Hints..</b> <ul style="list-style-type: none"> <li>To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.</li> </ul>
	<b>DYNAMIC DNS SETTINGS</b> Enable DDNS : <input type="checkbox"/> Server Address : dlinkddns.com(Free) <input type="button" value="v"/> Host Name : <input type="text"/> Username : <input type="text"/> Password : <input type="password"/> <input type="button" value="DDNS Account Testing"/>				

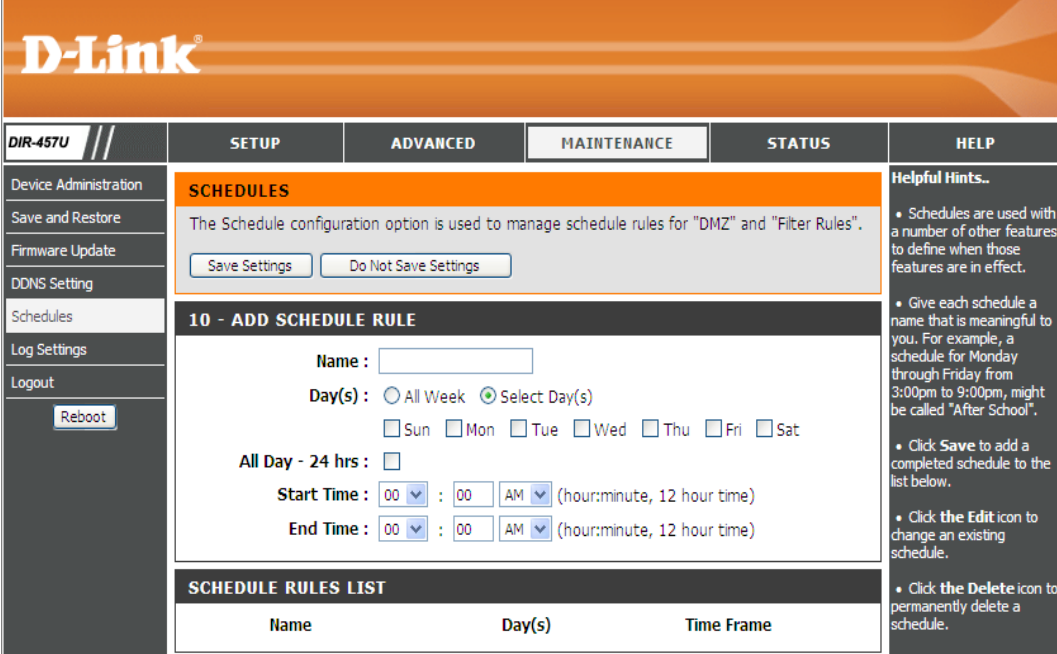
# Schedules

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

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

**Time:** Check **All Day - 24hrs** or use the **Start Time** and **End Time** fields to specify the start and end time for your schedule.

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



**D-Link**

DIR-457U // SETUP ADVANCED MAINTENANCE STATUS HELP

Device Administration  
Save and Restore  
Firmware Update  
DDNS Setting  
Schedules  
Log Settings  
Logout  
Reboot

**SCHEDULES**

The Schedule configuration option is used to manage schedule rules for "DMZ" and "Filter Rules".

Save Settings Do Not Save Settings

**10 - ADD SCHEDULE RULE**

Name :

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

Sun  Mon  Tue  Wed  Thu  Fri  Sat

All Day - 24 hrs :

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

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

**SCHEDULE RULES LIST**

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

**Helpful Hints..**

- Schedules are used with a number of other features to define when those features are in effect.
- Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 3:00pm to 9:00pm, might be called "After School".
- Click **Save** to add a completed schedule to the list below.
- Click the **Edit** icon to change an existing schedule.
- Click the **Delete** icon to permanently delete a schedule.

# Device Information

This page displays the current information about the DIR-457/DIR-457U and the firmware version.

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

**Internet:** Displays the MAC address and the public IP settings for the router. The connection status is displayed along with **Connect** and **Disconnect** buttons used to connect or disconnect the Internet connection.

**Wireless 802.11g:** Displays the wireless MAC address and your wireless settings such as SSID and Channel.

**3G:** Displays the 3G network information, battery status and 3G signal strength.

The screenshot shows the D-Link DIR-457 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains links for Device Info, Log, Statistics, Logout, and a Reboot button. The main content area is titled "DEVICE INFORMATION" and contains the following sections:

- DEVICE INFORMATION:** All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here.
  - Firmware Version : 1.00B07 , Thu 08 Oct 2009
- LAN:**
  - MAC Address : 00:26:5a:58:2f:94
  - IP Address : 192.168.0.1
  - Subnet Mask : 255.255.255.0
  - DHCP Server : Enabled
- INTERNET:**
  - MAC Address : 00:26:5a:58:2f:94
  - WWAN(3g) Disconnected
  - Connection :
  - IP Address : 0.0.0.0
  - Subnet Mask : 0.0.0.0
  - Default Gateway : 0.0.0.0
  - DNS : 0.0.0.0
- WIRELESS 802.11G:**
  - SSID : dlink\_myPocket
  - Channel : 11
  - Encryption : Disabled
- 3G:**
  - ISP Name :
  - Network Service Type : NONE
  - Battery Status : 100%
  - Signal Strength : 16%

On the right side, there is a "Helpful Hints.." section with a note: "All of your LAN, Internet and Wireless 802.11 G connection details are displayed here."



# Logs

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

**First Page:** Click this button to view the first page of the log file.

**Last Page:** Click this button to view the last page of the log file.

**Previous:** Click this button to view the previous page of the log file.

**Next:** Click this button to view the next page of the log file.

**Clear:** Clears all of the log contents.

**Link to Log Settings:** The user can click the button to “link to log settings” and save the logs to a local hard drive or to a Syslog server.

The screenshot shows the D-Link DIR-457 web interface. The top navigation bar includes SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains Device Info, Log, Statistics, Logout, and a Reboot button. The main content area is titled 'VIEW LOG' and contains the following text: 'The Log window displays the activities occurring on the DIR-457.' Below this is a 'LOG FILES' section with navigation buttons: First Page, Last Page, Previous, Next, Clear, and Link To Log Settings. The log entries are displayed in a table with two columns: Time and Message.

Time	Message
Jan 1 05:59:04	DHCP: Server sending ACK to 192.168.0.100. (Lease time = 604800)
Jan 1 05:59:04	DHCP: Server receive REQUEST from 00:26:5a:07:9c:30.
Jan 1 04:21:34	DHCP: Server sending ACK to 192.168.0.100. (Lease time = 604800)
Jan 1 04:21:34	DHCP: Server receive REQUEST from 00:26:5a:07:9c:30.
Jan 1 03:02:42	DHCP: Server sending ACK to 192.168.0.100. (Lease time = 604800)
Jan 1 03:02:42	DHCP: Server receive REQUEST from 00:26:5a:07:9c:30.
Jan 1 03:02:42	DHCP: Server sending OFFER of 192.168.0.100.
Jan 1 03:02:42	DHCP: Server receive DISCOVER from 00:26:5a:07:9c:30.
Jan 1 00:00:39	DHCP: Server sending ACK to 192.168.0.100. (Lease time = 604800)
Jan 1 00:00:39	DHCP: Server receive REQUEST from 00:26:5a:07:9c:30.

# Statistics

The screen below displays the Traffic Statistics. Here you can view the amount of packets that pass through the DIR-457/DIR-457U on the Internet, LAN and Wireless connections. The traffic counter will reset if the device is rebooted.

**D-Link**

**DIR-457** // **SETUP** **ADVANCED** **MAINTENANCE** **STATUS** **HELP**

Device Info  
Log  
Statistics  
Logout  
Reboot

**TRAFFIC STATISTICS**

The Traffic Statistics window displays the receive and transmit packets passing through the DIR-457.

Refresh Reset

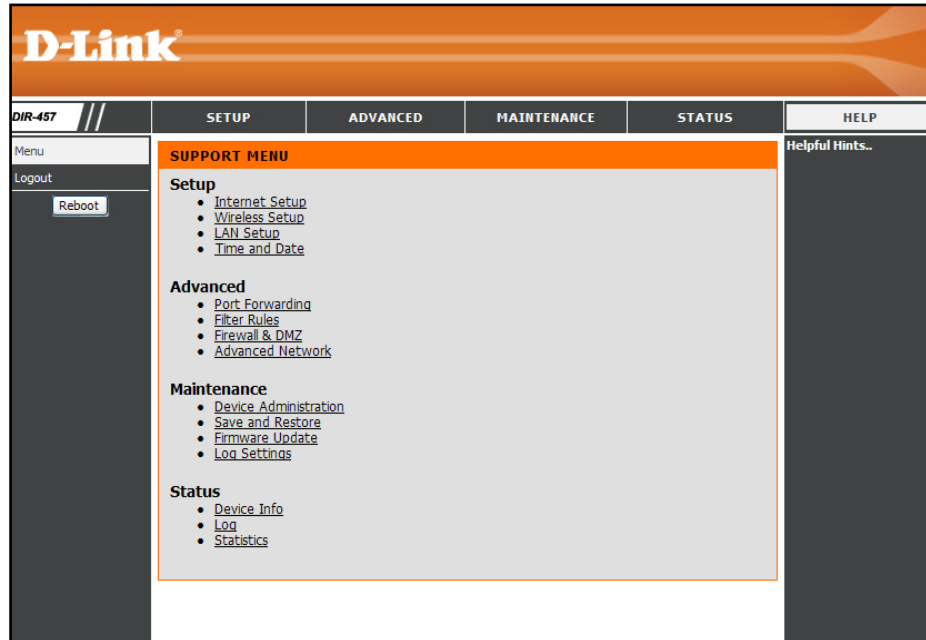
	Receive	Transmit
<b>Internet</b>	0 Packets	0 Packets
<b>WIRELESS (HOST)</b>	780 Packets	1104 Packets

**Helpful Hints..**

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

# Support

Click on the links in the Help menu for a brief description of the of the configuration menus.



## Add Wireless Device with WPS Wizard

From the **Setup > Wireless Setup** menu, click **Manual Wireless Connection Setup** button. Under the heading **Wi-Fi Protected Setup**, click the **Enable** option box and click on the **Save Settings** button to first enable WPS.

Click on the **Add Wireless Device with WPS** button.

There are two options for establishing the WPS connection:

**PIN:** In order to use this method you must know the wireless client's 8 digit PIN and click **Connect**. After the connection is established, the web menu returns to the Manual Wireless Connection Setup page.

**Push Button:** To use the Push Button method, click on the **Virtual Push Button**, then press the WPS connection button on the wireless client that is trying to connect, or follow the instructions included with the WPS client device. After the connection is established, the web menu returns to the Manual Wireless Connection Setup page.

# Connect to the Wireless Network Using Windows Vista®

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

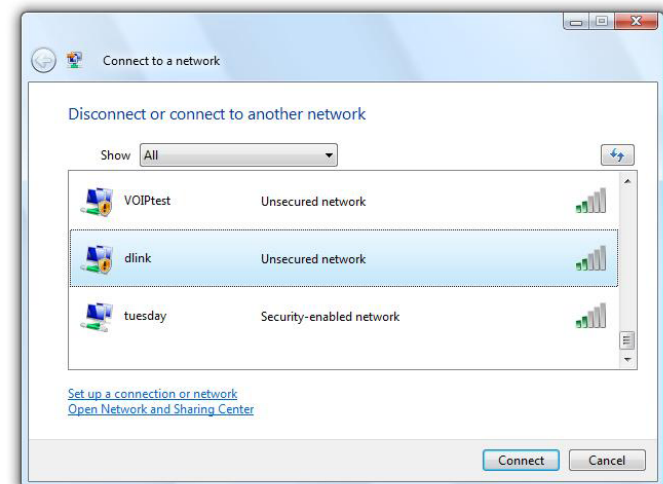
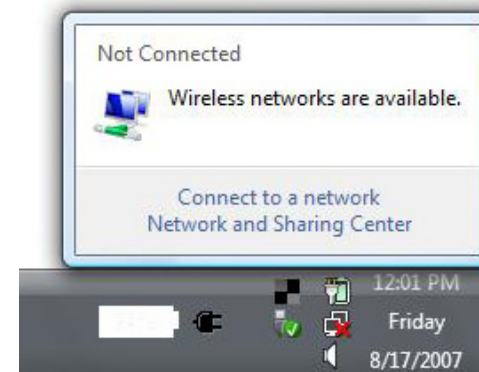
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

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

The utility will display any available wireless networks in your area. Click on a network (dlink\_my-pocket) and click the **Connect** button.

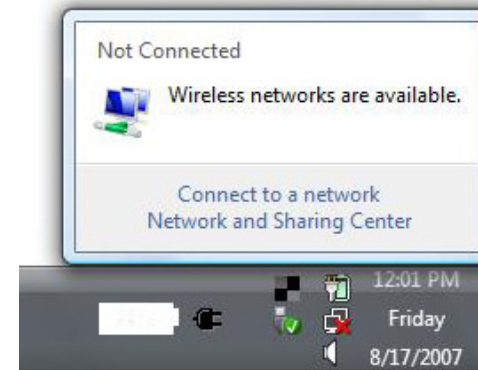
If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



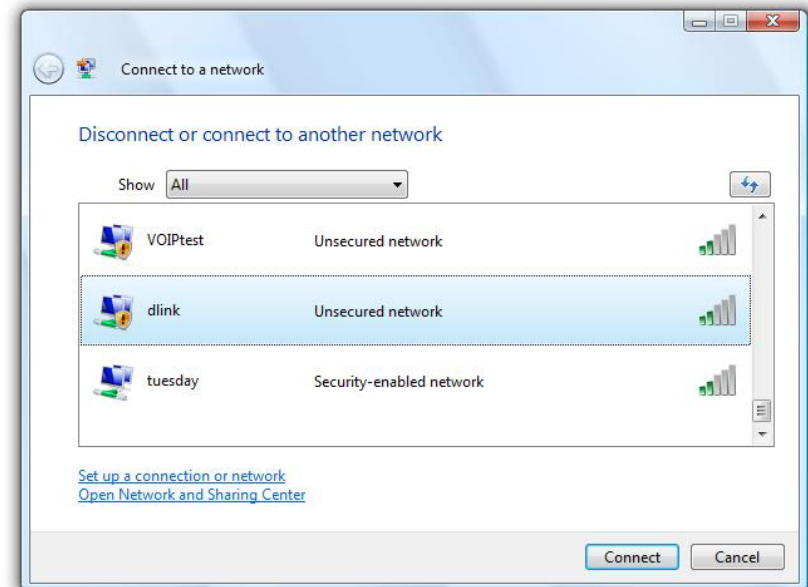
## Configuring WPA-PSK/WPA2-PSK

It is recommended to enable wireless security (WPA-PSK/WPA2-PSK) on my\_pocket router 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**.

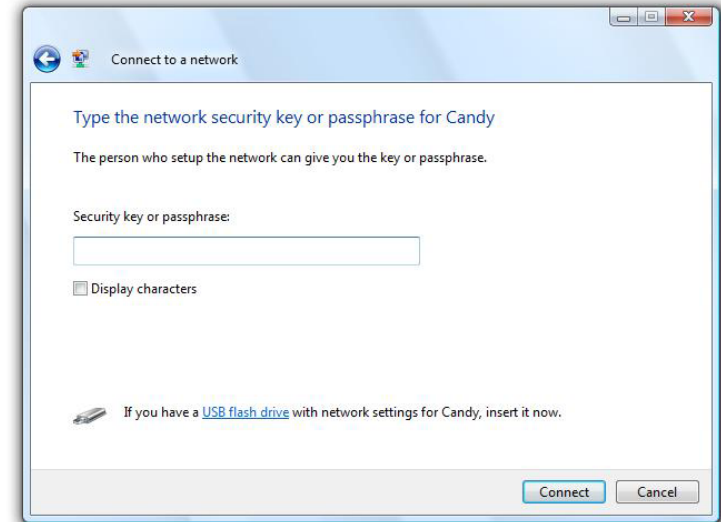


2. Highlight the wireless network **dlinkmypocket** and click **Connect**.



3. Enter the same security key or passphrase that is on your my\_pocket 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.



## Connect Using WCN 2.0

The my\_pocket router supports Wi-Fi protection, referred to as WCN 2.0 in Windows Vista®. The following instructions for setting this up depends on whether you are using Windows Vista® to configure the router or third party software.

When you first set up the router, Wi-Fi protection is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the router must be both enabled and configured. There are three basic methods to accomplish this: use Windows Vista's built-in support for WCN 2.0, use software provided by a third party, or manually configure.

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



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



# Connect to the Wireless Network Using 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 or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

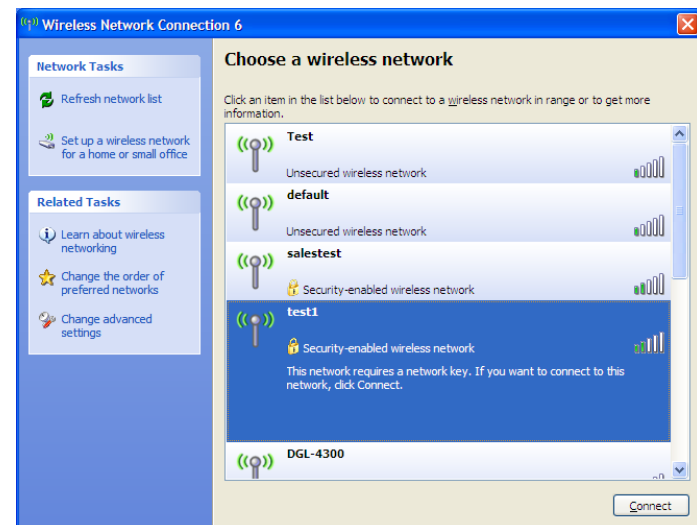
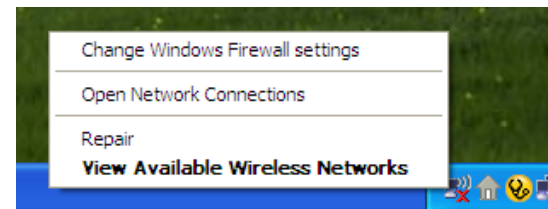
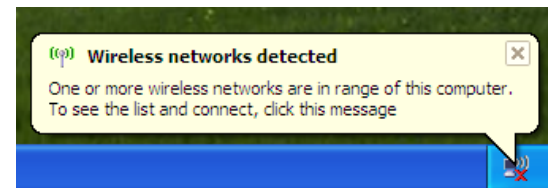
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

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

The utility will display any available wireless networks in your area. Click on a network (dlink\_my-pocket) and click the **Connect** button.

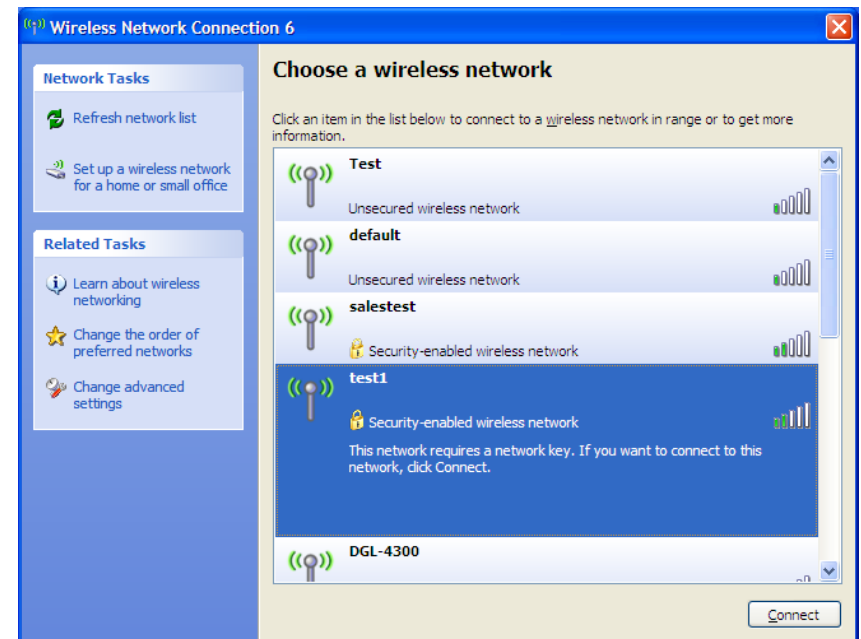
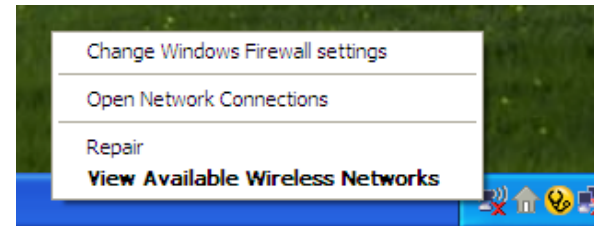
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



# Configuring WPA-PSK/WPA2-PSK

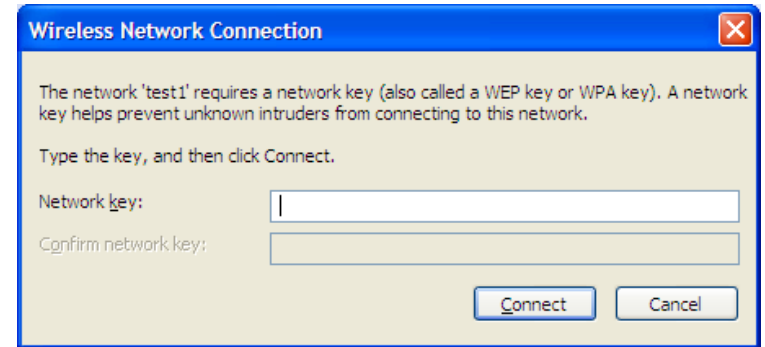
It is recommended to enable wireless security (WPA-PSK/WPA2-PSK) on my\_pocket router before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA-PSK/WPA2-PSK passphrase being used.

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 (dlinkmypocket) and click **Connect**.



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

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK/WPA2-PSK settings are correct. The WPA-PSK/WPA2-PSK passphrase must be exactly the same as on the myPocket router.



# Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-457/DIR-457U. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screen shots on your computer will look similar to the following examples.) Please refer to the Quick Installation Troubleshooting section.

# Wireless Basics

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

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

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

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

## **What is Wireless?**

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

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

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

## **How does wireless work?**

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

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

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

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

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

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

## **Who uses wireless?**

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

### **Home**

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

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

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

## **Where is wireless used?**

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

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

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

## **Tips**

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

### **Centralize your router or Access Point**

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

### **Eliminate Interference**

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

## **Security**

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



# Networking Basics

## Check your IP address

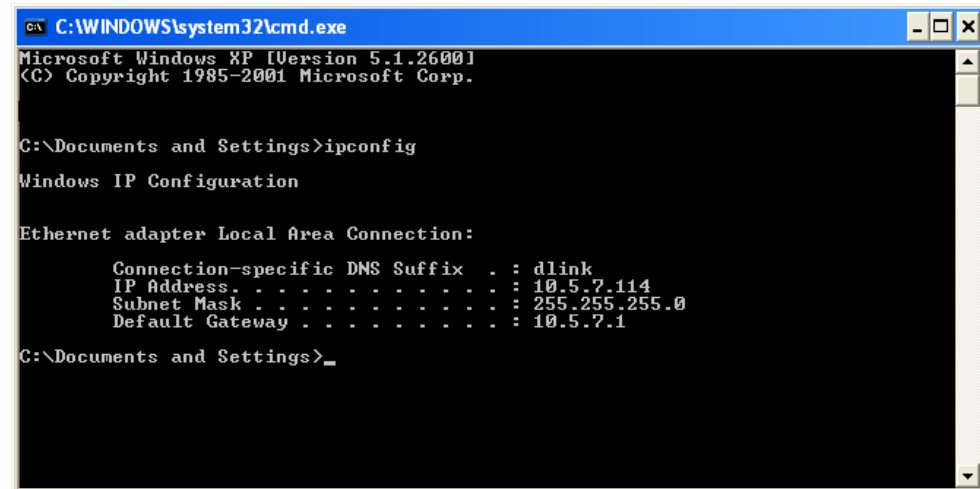
After you install your adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

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

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

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

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



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600.1]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

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

C:\Documents and Settings>_
```

## Statically Assign an IP address

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

### Step 1

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

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

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

### Step 2

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

### Step 3

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

### Step 4

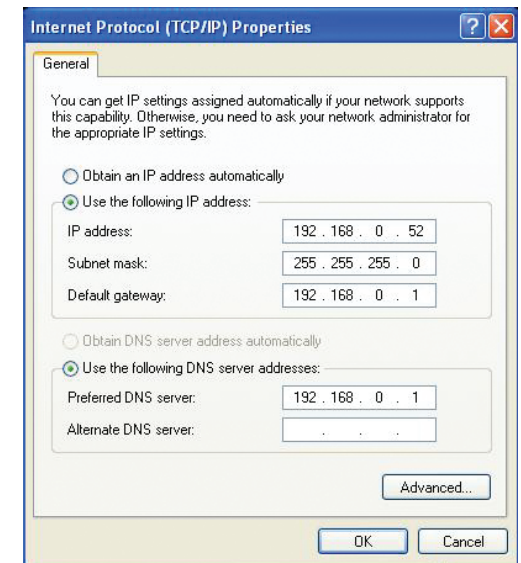
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

**Example:** If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

### Step 5

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



# Technical Specifications

## Standards

- IEEE 802.11b/g

## Security

- WEP (64/128 bit)
- WPA-PSK/WPA2-PSK
- WPS (PIN/PBC)

## Wireless Signal Rates\*

- 54 Mbps
- 48 Mbps
- 36 Mbps
- 24 Mbps
- 18 Mbps
- 12 Mbps
- 11 Mbps
- 9 Mbps
- 6 Mbps
- 5.5 Mbps
- 2 Mbps

## Frequency Range

- 2.4 GHz to 2.483 GHz

## Output Power

- 802.11b (17 dBm)
- 802.11g (14 dBm)

## Sensitivity

- 802.11b (-86 dBm) at 11 Mbps
- 802.11g (-72 dBm) at 54 Mbps

## HSDPA Module (DIR-457)

- Throughput: DL up to 3.6 Mbps UL up to 384 Kbps

## HSUPA Module (DIR-457U)

- Throughput: DL up to 7.2 Mbps UL up to 5.76 Mbps

## LEDs

- Power Status
- Signal Status

## Power Adapter

- DC 5 V / 1 A

## Power Consumption

- 2.5 Watts

## Battery

- Voltage (3.7 V)
- Capacity (1330 mAh)
- Dimension (52 mm x 37 mm x 6.7 mm)

## SIM Card Slot

- Push-Push

## Operating Temperature

- 0 to 40 °C (32 to 104 °F)

## Operating Humidity

- 10% to 90% (Non-condensing)

## Safety & Emissions

- FCC Class B
- CE Class B
- NCC
- GOST

## Dimensions

- 110 mm x 65 mm x 13.6 mm

## Weight

- 75 g (without battery)

## Warranty

- 1 Year Limited

\* Maximum wireless signal rate derived from IEEE Standard 802.11g and 802.11b 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 factors will adversely affect wireless signal range.

**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.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

**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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**IMPORTANT NOTE:**

**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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**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.

**NCC Statement:**

「減少電磁波影響，請妥適使用」

**第十二條**

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

**第十四條**

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