



# User Manual

FIBRE Wi-Fi AC1200 Dual Band Router

DIR-822K

# 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
2.2	20 Nov 2023	Final

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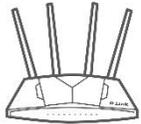
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# Product Overview

## Package Contents



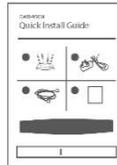
DIR-822K router



Power Adapter



Ethernet Cable



Quick Install Guide

If any of the above items are missing or damaged, please contact your reseller.

**Note:** Using a power supply other than the one included with the DIR-822K may cause damage and void the warranty for this product.

# System Requirements

## Network Requirements

- An active account with an Internet Service Provider using one of the following connection types:
- A broadband device connected using the WAN port

## Web-based Configuration Utility Requirements Computer with the following:

- Windows®, Macintosh, or Linux-based operating system
- An installed Ethernet adapter

## Browser Requirements:

- Internet Explorer 10 or higher
- Microsoft EDGE Browser 20 or higher
- Firefox 11 or higher
- Safari 5 or higher
- Chrome 17 or higher

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

# Introduction

The D-Link DIR-822K FIBRE WI-FI AC1200 DUAL BAND ROUTER, share your internet connection over blazing-fast Wireless AC. Equipped with advanced AC beamforming technology to maximize the speed and range of your wireless signal to significantly outperform 802.11n and other older, non-beamforming capable 802.11ac devices. It also has a WAN port, and three 10/100 LAN ports to connect your wired devices. With the addition of Advanced Quality of Service (QoS), data streams are separated, which helps organize and prioritize your network traffic so your video streaming, gaming run smoother over both your wired and wireless network.

The DIR-822K FIBRE WI-FI AC1200 DUAL BAND ROUTER provides incredible speeds, smart antenna technology, and easy mesh features. It also features a clean design and easy installation options.

## Features

**Faster Wireless Networking** -The DIR-822K is dual-band capable and equipped with four antennas to provide wireless speeds of up to 1200 Mbps\* for your wireless devices. It operates on both the 2.4 GHz and 5GHz bands to allow separation of traffic so users can participate in high-bandwidth activities, such as video streaming, online gaming, and real-time audio, without affecting low-priority traffic like email and web surfing.

- **Compatible with 802.11n/g/b/a devices** - The DIR-822K is still fully compatible with the 802.11n, 802.11g, and 802.11a standards, so it can connect with existing 802.11n, 802.11g, 802.11b, and 802.11a wireless devices.

- **Advanced Firewall Features** - The web-based user interface allows you to configure a number of advanced network management features including:

- **Content Filtering** - Easily apply content filtering based on MAC address, URL, and/or domain name.

- **Scheduling** - The wireless features can be scheduled to be active on a schedule you define.

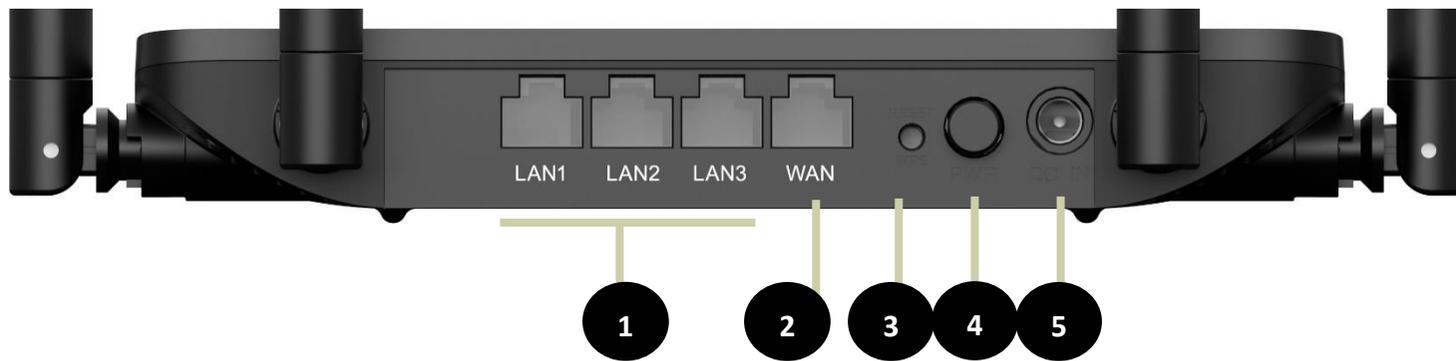
- **Multiple/Concurrent VPN Sessions** - The DIR-822K can pass through VPN sessions. It supports multiple and concurrent L2TP, IPsec and PPTP sessions, so users behind the DIR-822K can access encrypted corporate networks.

- **User-friendly Setup Wizard** - Through its easy-to-use web-based user interface, the DIR-822K lets you control what information is accessible to those on the wireless network, whether from the Internet, or from your company's server. Configure your router to your specific settings within minutes.

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

# Hardware Overview

## Back Panel



1.	Ethernet Ports	Connects to Ethernet devices such as computers.
2.	WAN Port	Connects to Ethernet WAN devices.
3.	Reset button	Hold Reset button down for 15 Seconds to factory default the Router.
4.	Power Button	Press to switch router ON/OFF.
5.	Power Connector	Connector for the supplied power adapter.

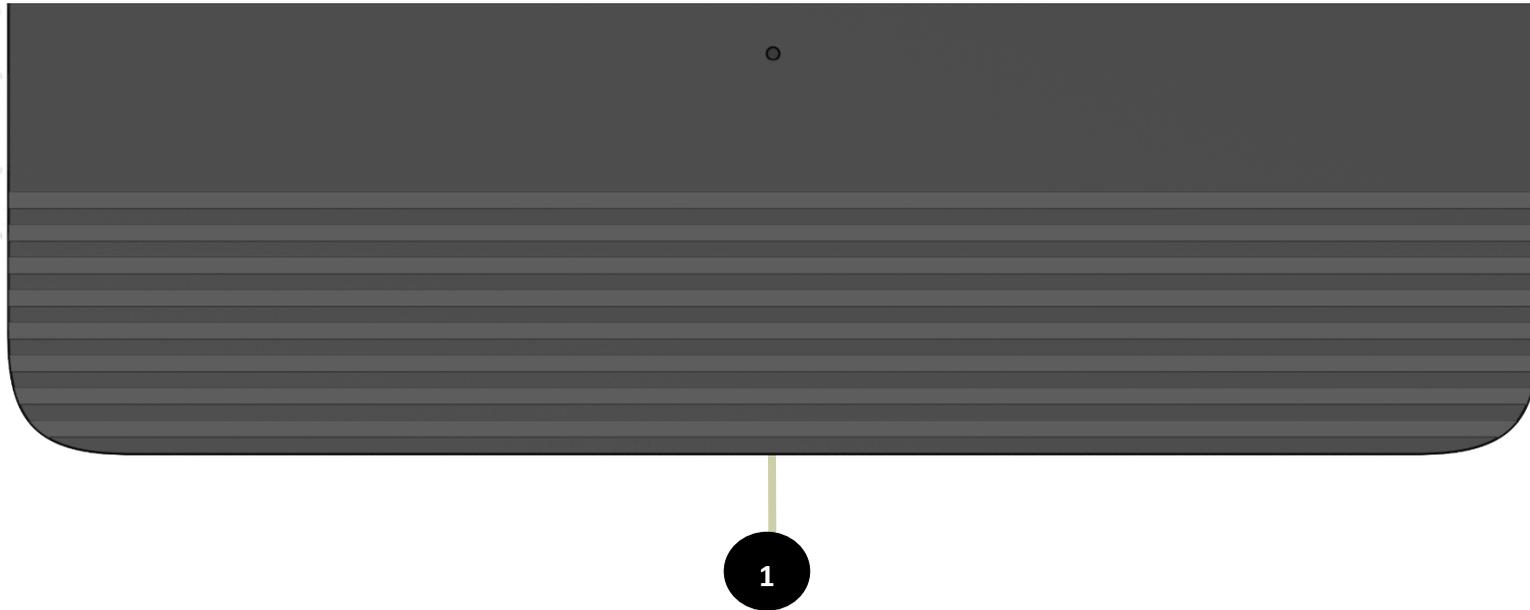
# Hardware Overview

## Side Panel



# Hardware Overview

## LEDs



1.	Power/WAN	Solid Red	Device is powered on.
		Solid Green	The WAN is properly connected.
		OFF	No connection or Cable not connected properly.

# Installation

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

**Note:** This installation section is written for users who are setting up their home Internet service with the DIR-822K FIBRE WI-FI AC1200 DUAL BAND ROUTER with Easy mesh for the first time. If you are replacing an existing modem and/or router, you may need to modify these steps.

## Before you begin

- Make sure to have your Fibre service information provided by your Internet Service Provider handy. This information is likely to include your Fibre account's Username and Password. Your ISP may also supply you with additional WAN configuration settings which are necessary to establish a connection. This information may include the connection type (DHCP IP, Static IP, PPPoE).
- If you are connecting a considerable amount of networking equipment, it may be a good idea to take the time to label each cable or take a picture of your existing setup before making any changes.
- We suggest setting up your DIR-822K from a single device and verifying that it is connected to the Internet before connecting additional devices.

## Wireless Installation Considerations

The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind 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 (0.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building materials make a difference. A solid metal door or aluminium 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.

# Manual Setup

## Hardware Installation

### Start Here

**01**

**If you have a Fibre service**

Connect the Ethernet cable supplied with your Fibre device (ONT) to a LAN port on the ONT. Then connect the other end of the cable to the WAN port on the back of the router.

**02**

Connect the power connector of the power supply to the power socket at the back of the router.

Plug the power supply into the wall outlet. Switch the wall outlet and the router on.

**03**

You can set up your router using Wi-Fi or an Ethernet cable or D-Link Assistant APP.

**Ethernet cable:**  
Connect the grey RJ-45 Ethernet cable to any LAN port at the back of the router and the other end into your PC LAN port.

**Wi-Fi:**  
Use the default Wi-Fi SSID and password (WPA PIN) printed on the bottom of the router to connect your Wi-Fi enabled device to the router.

**04**

**If you are using an Ethernet cable / Wi-Fi to complete the setup:**  
Launch an Internet browser (Google Chrome, Firefox, Internet Explorer, Safari, etc.) on your connected device. In the URL web address field, type **10.0.0.2** and press enter. The Setup wizard will start automatically. Please follow the steps of the wizard to finish the configuration of the router.

### Quick Setup Wizard

**05**

Select Interface Type: **ETH**

*Note: If a red message appears stating "Eth Connection incomplete" please confirm that the cable from the LAN port on the Fibre ONT device has been inserted into the WAN port on the back of the router.*

Cancel
Test
Next
Continue to Step A1 or B1

**Fibre setup**

A. Click **Test** to verify that your Fibre is connected correctly.

B. If a green message confirms "Hardware interface connected properly" click **Next**.

**DHCP test passed!**

**A1**

**Wizard Step 2**  
The router will now run a test to determine which account type you have.

Select Mode: **DHCP**

Back Reset Next

Click Next to Proceed

**Continue to Step 6**

**PPPoE test passed!**

**B1**

**Wizard Step 2**  
The router will now run a test to determine which account type you have.

Select Mode: **PPPoE**

Back Reset Next

Click Next to Proceed

**Continue to Step 6**

**06**

**Wi-Fi name & Password**

**Wi-Fi Details**  
Set a Wi-Fi name (SSID) and Password (WPA Preshare key) for both the 2.4GHz and the 5GHz. It is recommended to have a different name for the 2.4G & 5G band. For the difference between 2.4G & 5.8G please refer to the FAQ.

SSID 2.4GHz: dlink-822K-2.4G-xxxx  
2.4G WPA key: \*\*\*\*\*  
SSID 5GHz: dlink-822K-5.8G-xxxx  
5G WPA key: \*\*\*\*\*

Back Next

**B2**

**Wizard Step 3**  
Your Internet Service Provider (ISP) Account, Username & Password will be supplied to you by your ISP (usually via SMS) and will look something like this: yourname@telkomsa.net

*Note: The Username & Password will never be Admin and Admin*

ISP Account Username & Password

User Name: yourname@telkomsa.net  
Password: account.password  
Confirm Psw: account.password

Back Next

Click Next to Proceed

**07**

**Web login details**

AdminName: admin  
AdminPassword:   
Confirm Password:   
Back Next

**B3**

**Wizard Step 4**  
Once account details test passes, click next to proceed.

Configured account is valid

Back Next

Click Next to Proceed

**Continue to Step 6**

**08**

**Telkom VPN Lite**  
Enter your Telkom VPN Lite details in the provided blocks. If you are not a Telkom VPN Lite customer you can skip the step.

Site Username:   
Site Password:   
Confirm Password:   
LAN IP/Netmask:   
Back Next

**09**

**Settings Summary**  
Please make sure to write down all the details on this page & keep it somewhere safe for you to refer back to later.

Web Login Name:   
Web Login Password:   
SSID 2.4GHz:   
2.4G WPA Preshare key:   
SSID 5GHz:   
5G WPA Preshare key:   
Back Apply

Be sure to Click Apply to Save

# Getting Started

To connect to the web interface of the router and get started setting it up, refer to **Configuration on page**.

## Quick Setup

The Quick Setup menu is used to set up the Internet connection on the DIR-822K. This is the first step in the Quick Setup tool and allows you to choose the connection type.

### Step 1

Select WAN Interface Type:

Select ETH as the interface to use: Your ISP should inform you of what method you use to connect to the Internet.

Click **Test** and then **Next** to continue.

### Quick Setup

**step1** -> step2 -> step3 -> step4 -> step5 -> step6 -> step7 -> step8

Please select which WAN interface to use: Ethernet WAN,

then click the 'test' button to detect if the hardware interface is correctly connected.

Select Interface Type:

Cancel

Test

Next

## Step 2

Auto detecting

With a Fibre connection you will use either:  
PPPoE or DHCP connection.

If PPPoE or DHCP is successful, please click the next button to continue to next step.

If both DHCP and PPPoE test fails,

Please verify that your fibre is active and the cable from the ONT device is plugged into the **WAN** port at the back of the DIR-822K.

## Quick Setup

**step1** -> step2 -> step3 -> step4 -> step5 -> step6 -> step7 -> step8

Auto detecting. This may take a while, please wait patiently...

Back

Reset

## Quick Setup

step1 -> **step2** -> step3 -> step4 -> step5 -> step6 -> step7 -> step8

Auto detect success, PPP account test passed! Suggest you choose PPPoE, Please click 'Next'.

Select Mode:

Back

Reset

Next

## Quick Setup

step1 -> **step2** -> step3 -> step4 -> step5 -> step6 -> step7 -> step8

Auto detect complete. Both DHCP and PPP account test fail! Please click the Reset button to reset to factory defaults, and then restart this wizard after the reset.

Select Mode:

Back

Reset

Next

### Step 3

IF PPPoE Passed then user will need to enter the Username and Password as provided by the Internet Service Provider (ISP). IF DHCP passed device will automatically skip to step 5.

Username: Enter your Username here. (usually looks like an email address like Yourname@telkomsa.net)

Password: Enter your Password here.

Confirm Password: Enter the same password again here.

**Note:** Using admin for the username & password will not work on this step as this is the account details for your Fibre line, which is unique to each client's account.

### Step 4.

If connection is on PPPoE device will now test if the configured account is valid. If the test fails, please click on the back button and double check that the details on step 3 are correct. If the details have been entered correctly and step 4 still fails, please contact your Internet Service Provider and request for them to send you new PPPoE details.

if **successful** click Next to continue to **Step 5.**

### Quick Setup

step1 -> step2 -> **step3** -> step4 -> step5 -> step6 -> step7 -> step8

Please enter your Username and Password as provided by your ISP (Internet Service Provider). Click 'Next' to continue.

Username:

Password:

Confirm Password:

Back

Next

### Quick Setup

step1 -> step2 -> step3 -> **step4** -> step5 -> step6 -> step7 -> step8

This may take a while, please wait patiently...

Back

## Step 5

On Step 5 the user will be able to modify the Wi-Fi SSID and Preshared Key to their requirements.

SSID 2.4GHz: The name of the Wi-Fi network operating on 2.4GHz.

Preshared key: The password for the Wi-Fi network operating on 2.4GHz.

SSID 5GHz: The name of the Wi-Fi network operating on 5GHz.

5G WPA Preshared key: The password for the Wi-Fi network operating on 5GHz.

Click **Back** to go back to the pervious page, click **Skip** to skip this configuration or click **Next** to continue to **Step 6**.

## Step 6

In this step you can enter the change the web UI credentials. (The details used to log into the settings page of your router on 10.0.0.2)

Admin Name: The username to log in to the web UI.

Admin Password: Enter the password here for logging into the web UI.

Admin Password: Enter the password for logging in to the web UI again to confirm.

**Note**: Password cannot contain a space.

Click **Back** to go back to the pervious page, click **Skip** to skip this configuration (not recommended for security purposes) or click **Next** to continue to **Step 7**.

## Quick Setup

step1 -> step2 -> step3 -> step4 -> **step5** -> step6 -> step7 -> step8

SSID 2.4GHz:	<input type="text" value="Dlink2.4Ghz"/>
2.4G WPA Preshare key:	<input type="password" value="....."/>
SSID 5GHz:	<input type="text" value="Dlink5Ghz"/>
5G WPA Preshare key:	<input type="password" value="....."/>

## Quick Setup

step1 -> step2 -> step3 -> step4 -> step5 -> **step6** -> step7 -> step8

Use the fields below to enter up to 15 characters and click "Apply" to change or create passwords.

**Note**: Password cannot contain a space.

AdminName:	<input type="text" value="admin"/>
AdminPassword:	<input type="password" value="....."/>
Confirm AdminPassword:	<input type="password" value="....."/>

## Step 7

In this step you can enter the Site Username, Site Password, Confirm Site Password and Site LAN IP/Netmask to connect to Telkom VPN lite

Site Username: The site username.

Site Password: Enter the site password here.

Confirm Site Password: Enter the site password again to confirm.

Site LAN IP/ Netmask: Enter the LAN IP or Netmask for the site here.

**Note:** Password cannot contain a space.

Click **Back** to go back to the pervious page or click **Next** to continue to **Step 8**.

## Step 8

In this step you can you can review everything for accuracy.

Click **Back** to go back to the pervious page or click **Apply** to apply all of the configuration settings.

## Quick Setup

step1 -> step2 -> step3 -> step4 -> step5 -> step6 -> **step7** -> step8

If you are a Telkom VPN Lite Customer, you can configure it here. Your PC's IP address needs to renew after the wizard is done - please disconnect your PC and then reconnect it.

If you're not a Telkom VPN Lite customer you can click \"Skip\" to continue.

Site Username:	<input type="text"/>
Site Password:	<input type="password"/>
Confirm Site Password:	<input type="password"/>
Site LAN IP/Netmask:	<input type="text"/> (Format: A.A.A.A/B(A:0-255,B:1-32))

Back

Skip

Next

## Quick Setup

step1 -> step2 -> step3 -> step4 -> step5 -> step6 -> step7 -> **step8**

Setup complete.

Click \"Back\" to review or modify settings.

Click \"Apply\" to apply the current settings.

If your Internet connection does not work after you pressed apply, you can try the Setup Wizard again with alternative settings or use Manual Setup instead if you have your Internet connection details as provided by your ISP.

Site Username:	
Site Password:	
Site LAN IP/Netmask:	/
Web Login Name:	admin
Web Login Password:	admin1234
SSID 2.4GHz:	Dlink2.4Ghz
2.4G WPA Preshare key:	123456789
SSID 5GHz:	Dlink5Ghz
5G WPA Preshare key:	123456789

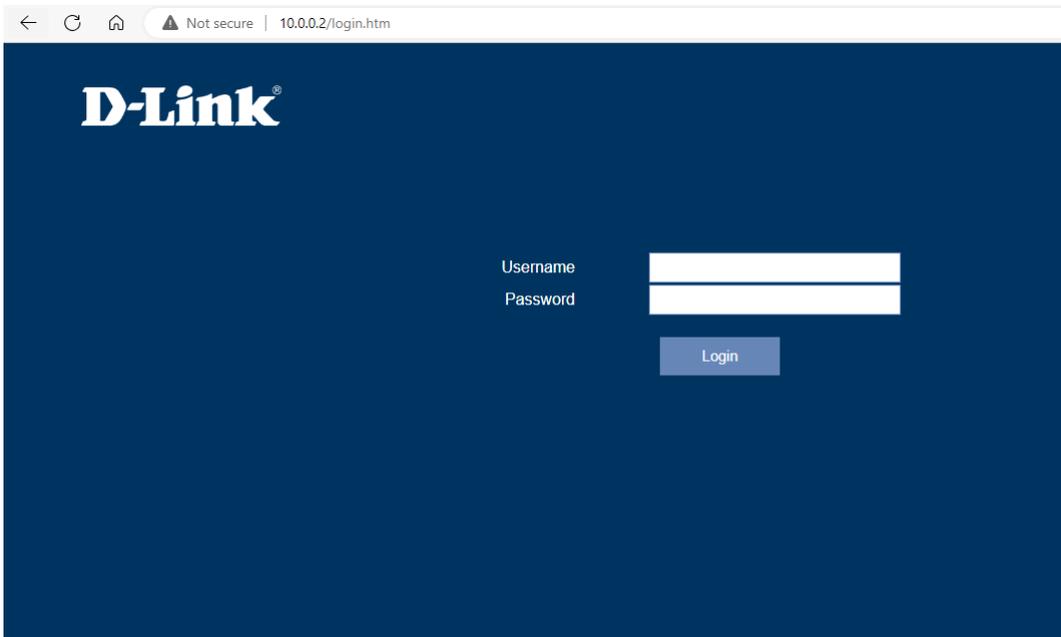
Back

Apply

# Configuration

## Log in

To access the web interface, open a web browser and enter the IP address of the router (by default this is **10.0.0.2**) into the address bar. When the login page of the DIR-822K is displayed, enter the username and password you set on step 6 of the setup wizard. By default, the login details are **admin** for the username and **admin** for the password if you chose to not change the details on the wizard. Click **Log In** to proceed or **cancel** to clear your input.



The screenshot shows a web browser window with the address bar containing "10.0.0.2/login.htm". The page features the D-Link logo in the top left corner. Below the logo, there are two input fields: "Username" and "Password". A "Login" button is located below the password field.

**Note:** If you cannot remember your password or cannot log in, follow the factory reset procedure to restore the router to its default settings. The web interface is used to set up and change settings on the DIR-822K. Follow the steps below to access the web interface and start setting up the DIR-822K.

# Status

## Device Information

The Status menu is used to display statistics from different functions from the router. This displays basic system information and the uptime of the router.

### Device Information

- Product Type: The model number of the router.
- Default Gateway: The Default gateway assigned by the ISP to access the Router.
- Primary DNS: The Primary DNS of the Router.
- Secondary DNS: The Secondary DNS of the Router.
- Hardware Version: The hardware version of the router.
- Software Version: The Current software version of the router.
- MAC Address: The MAC address of the router.
- Connection Type: Indicates your Fibre connection type.
- Network Status: Indicates if Internet is Connected or Disconnected.
- Connected Clients: Indicates the number of connected devices.
- Connection up Time: The amount of time that the router has been online and in use.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management																				
<h3>Internet</h3> <table border="1"> <thead> <tr> <th colspan="2">IPv4</th> <th colspan="2">IPv6</th> </tr> </thead> <tbody> <tr> <td>MAC Address</td> <td>Connection Type</td> <td>Network Status</td> <td>Connection Uptime</td> </tr> <tr> <td>a0:ab:1b:aa:70:b5</td> <td>DHCP Client</td> <td>Connected</td> <td>0 Day 0:18:31</td> </tr> <tr> <td>IP Address</td> <td>Default Gateway</td> <td>Primary DNS Server</td> <td>Secondary DNS Server</td> </tr> <tr> <td>192.168.100.53</td> <td>192.168.100.1</td> <td>192.168.100.2</td> <td>192.168.100.1</td> </tr> </tbody> </table>								IPv4		IPv6		MAC Address	Connection Type	Network Status	Connection Uptime	a0:ab:1b:aa:70:b5	DHCP Client	Connected	0 Day 0:18:31	IP Address	Default Gateway	Primary DNS Server	Secondary DNS Server	192.168.100.53	192.168.100.1	192.168.100.2	192.168.100.1
IPv4		IPv6																									
MAC Address	Connection Type	Network Status	Connection Uptime																								
a0:ab:1b:aa:70:b5	DHCP Client	Connected	0 Day 0:18:31																								
IP Address	Default Gateway	Primary DNS Server	Secondary DNS Server																								
192.168.100.53	192.168.100.1	192.168.100.2	192.168.100.1																								

## WAN Status

### Network

This displays Network status information.

#### IPv4 / IPv6 WAN Connection Status

Connection Name: The name of the WAN connection.

Enable: The state of the WAN connection.

Type: The WAN connection type.

VLAN ID: The ID indicating what VLAN the WAN connection is assigned to.

Status: The status of the WAN connection.

NAT: Indicates if the Network Translation address in Enable/Disabled.

IP Address: The IP address of the WAN connection.

Gateway: The default gateway of the WAN connection.

DNS: The primary and Secondary DNS of the WAN connection is displayed.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Status							
WAN Status							
VPN Status							
User Traffic							
Statistics							

This page shows the status information for all wan.

Connect name	Enable	Type	Vlan ID	Status	Nat	IP Address	Gateway	DNS
WAN1	Enabled	pppoe	---	Disconnected	Enabled			
WAN2	Enabled	dhcp	---	Connected	Enabled	192.168.100.53	192.168.100.1	192.168.100.2 192.168.100.1
WAN3	Disabled							
WAN4	Disabled							

## VPN Status

This displays the VPN status information.

PPTP: Enabled/Disabled

L2TP: Enabled /Disabled

Server IP address: IP address attained from the server.

Local IP address: Local IP of attained from your device.

Remote Address: IP address of the Remote access device.

Status: This will state if the connection is connected/disconnected.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Status	This page shows the status information for PPTP and L2TP.						
WAN Status							
VPN Status							
User Traffic							
Statistics							

Connect name	Enable	Server IP Address	Local IP Address	Remote IP Address	Status
PPTP	Disabled				
L2TP	Disabled				

## User Traffic

This Displays the User traffic Information such as IP address of connected devices, Total Download/Upload statistics.

<b>DIR-822K</b> HW:822K FW:TK_1.00	<b>Status</b>	<b>Setup</b>	<b>Network</b>	<b>Wireless</b>	<b>EasyMesh</b>	<b>Features</b>	<b>Management</b>						
<b>Status</b>	This Page will show each user's total traffic statistics.												
<b>WAN Status</b>	<hr/>												
<b>VPN Status</b>	<table border="1"><thead><tr><th>IP Addr</th><th>Total Down</th><th>Total Up</th></tr></thead><tbody><tr><td>10.0.0.100</td><td>136 520 892 Bytes</td><td>22 176 686 Bytes</td></tr></tbody></table>							IP Addr	Total Down	Total Up	10.0.0.100	136 520 892 Bytes	22 176 686 Bytes
IP Addr	Total Down	Total Up											
10.0.0.100	136 520 892 Bytes	22 176 686 Bytes											
<b>User Traffic</b>													
<b>Statistics</b>													

## Statistics

This page shows the packet counters for transmission and reception regarding the wireless and Ethernet networks of the device.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Status	This page shows the packet counters for transmission and reception regarding to wireless and Ethernet networks.						
WAN Status							
VPN Status							
User Traffic							
Statistics							

Wireless 5G	Sent Bytes	3660703
	Received Bytes	9470008
Wireless 2.4G	Sent Bytes	5661579
	Received Bytes	336470291
Ethernet LAN	Sent Bytes	1477485231
	Received Bytes	114616679
WAN	Sent Bytes	103941500
	Received Bytes	1483431903

Refresh

# Setup

## Wizard

This Section displays the “Quick Setup Wizard” which is used during first time setup.

DIR-822K HW:822K FW:TK_1.00	Status	<b>Setup</b>	Network	Wireless	EasyMesh	Features	Management
<b>Wizard</b>	Quick Setup						
Operation Mode	step1 -> step2 -> step3 -> step4 -> step5 -> step6 -> step7 -> step8						
	Please select which WAN interface to use:3G/4G or Ethernet WAN, then click the 'test' button to detect if the hardware interface is correctly connected.						
	Select Interface Type: <input type="text" value="ETH"/>						
	Cancel	Test	Next				

## Operation Mode

This section allows you to setup different modes on the LAN and WAN Interface for NAT and bridging functions.

Gateway: This mode allows the device to connect to the Internet via Ethernet WAN connection, NAT Enabled.

Bridge/AP: This mode bridges all Ethernet ports and wireless interface and Disables NAT.

Wireless ISP: This mode has all Ethernet ports are bridged together and the wireless client will connect to the ISP Router, NAT Enabled.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Wizard							
Operation Mode	You can setup different modes to LAN and WLAN interface for NAT and bridging function.						

Gateway:  In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and PCs in LAN ports share the same IP to ISP through WAN port. The connection type can be setup in WAN page by using PPPOE, DHCP client or static IP.

Bridge/AP:  In this mode, all ethernet ports and wireless interface are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported.

Wireless ISP:  In this mode, all ethernet ports are bridged together and the wireless client will connect to ISP Router. The NAT is enabled and PCs in ethernet ports share the same IP to ISP through wireless LAN. You can connect to the ISP AP in Site-Survey page. The connection type can be setup in WAN page by using PPPOE, DHCP client or static IP.

Save & Apply      Reset

# Network LAN Setting

Here you can configure the parameters for local area network.

IP Address: The IP address can be set.

Subnet Mask: The Subnet mask can be set.

Default Gateway: Default Gateway of the Router.

WORK MODE: Can be set to

OFF/Client/Server/DHCP Relay.

DHCP Client Range: Set an IP Range for your DHCP clients.

Lease Time: Set a Time limit the DHCP will lease the IP.

DNS: DNS address of Router.

Static DHCP: Set a Static DHCP (Enable/Disable, IP address, MAC address).

Domain Name: Enter a domain name,  
Eg: dlinkrouter.local

802.1d Spanning Tree: Enable Spanning tree On/Off.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>LAN Setting</b>							
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

You can config the parameters for local area network which connects to the LAN port of your Router. Here you may change the setting for IP addresss, subnet mask, DHCP, etc.

---

IP Address:

Subnet Mask:

Default Gateway:

WORK MODE:

DHCP Client Range:  -  [Show Client](#)

Lease Time:  (1 ~ 10080 minutes)

DNS:

Static DHCP: [Set Static DHCP](#)

Domain Name:

802.1d Spanning Tree:

[Save & Apply](#) [Reset](#)

## WAN Setting

Connection name: Choose a WAN from the drop-down menu.

Enable: Choose to Enable/Disable the profile.

WAN Access Type: Select a WAN type such as PPPOE/DHCP/Static.

User Name: Enter the ISP username if using PPPOE.

Password: Enter the ISP password if using PPPOE.

Service Name: Leave blank or give it a name.

MTU: Please ensure this is set to the value of 1492.

Connection Type: You can set the connection to Continuous/Connect on demand or manual.

Clone MAC Address: This option is used to Clone the Mac address of a device.

Enable VLAN: Choose whether to Enable/Disable the VLAN.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

You can config the parameters for Internet network which connects to the WAN port of your Router. Here you may change the access method to static IP, DHCP, PPPoE by click the item value of WAN Access type.

---

Connect name:

Enable:

WAN Access Type:

User Name:

Password:

Service Name:

MTU:  (1360-1492 bytes)

Connection Type:

Clone MAC Address:

Enable VLAN:

## PPTP Setting

Here you can configure the parameters for the PPTP Server

Enable: Choose to Enable/Disable the service

Server: Enter the Server IP address

Username: Enter the username associated

Password: Enter the password associated

MTU: This value must be 1492

MPPE: Enable/Disable (Microsoft Point-to-Point Encryption)

MPPC: Enable/Disable (Microsoft Point-to-Point Compression)

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting	You can config the parameters for Internet network which connects to the PPTP server.						
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

Enable:

Server:

Username:

Password:

MTU:  (1360-1492 bytes)

MPPE:

MPPC:

## L2TP Setting

Here you can configure the parameters for the L2TPv2 Server

Enable: Choose to Enable/Disable the service

Server: Enter the Server IP address

Username: Enter the username associated

Password: Enter the password associated

MTU: maximum transmission unit, this value is usually 1492 (represents the largest data packet a network device will accept)

MPPE: Enable/Disable (Microsoft Point-to-Point Encryption)

MPPC: Enable/Disable (Microsoft Point-to-Point Compression)

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting							
L2TP Setting	You can config the parameters for Internet network which connects to the L2TPv2 server.						
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

Enable:

Server:

Username:

Password:

MTU:  (1360-1492 bytes)

## GRE Setting

Here you can configure the parameters to connect to GRE. (Packet encapsulation protocol to route packets over an IP network)

Enable: Enable or disable the function.

Local Host Address: Local IP address.

Remote Host Address: Remote IP address.

Tunnel Address: Insert the Tunnel IP address.

Remote Tunnel Address: Insert the Remote Tunnel IP address.

NAT: Enable or Disable Nat Function.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting							
L2TP Setting							
<b>GRE Setting</b>							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

You can config the parameters for Internet network which connects to the GRE.

Enable:

Local Host Address:  (0.0.0.0 is autoconfig)

Remote Host Address:  (10.10.10.10)

Tunnel Address:  (172.10.12.1)

Remote Tunnel Address:  (172.10.13.1)

NAT:

GRE Table

Local Host	Remote Host	Tunnel	Remote Tunnel	NAT Status	Status	Select
<input type="button" value="Delete Selected"/>			<input type="button" value="Delete All"/>		<input type="button" value="Reset"/>	

## VPN LITE

Here you can configure your Telkom VPN profile

Enable: Enable or Disable the Feature.

Username: Enter your Telkom VPN Lite Username.

Password: Enter your Telkom VPN Lite Password.

LAN IP/Netmask: Here you can Enter the IP or Netmask.

NAT: Enable or Disable the NAT Function.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite	You can config the parameters for vpn lite.						
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

Enable:

Username:

Password:

LAN IP/Netmask:  (Format: A.A.A.A/B(A:0-255,B:1-32))

NAT:

## IPv6 Wan Setting

Here you can configure the parameters of IPv6 Wan settings.

Enable IPv6: Enable/Disable IPv6

Origin Type: This can be set to AUTO/STATIC/6RD

Address Mode: You can set this to a Stateful/Stateless address

PD Enable: Enable or Disable the PD (Prefix Delegation)

Enable wan ds lite: Enable/Disable DS-Lite (Dual-Stack Lite) Allows the user to utilize IPV4 to access Internet via IPv6

Enable MLD Proxy: Enable/Disable Multicast Listener Discovery (used to discover Multicast Listeners)

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

You can config the parameters for Internet network which connects to the WAN port of your Router.

Enable IPv6:

Origin Type:

Address Mode:

DUID: 00030001a0ab1baa70b5

PD Enable:

Enable wan dslite:

Enable MLD Proxy:

## IPv6 Lan Setting

Here you can configure the DHCPv6 and RADVD Parameters

IP address: Enter the IP address.

DHCPv6 Server Enable: Enable or Disable the server.

RADVD: Enable or disable RADVD feature (Router advertisement daemon) used for IPv6 auto-configuration.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting	<p>This page config DHCPv6 and RADVD. Interface Id does NOT support ZERO COMPRESSION ":", Please enter the complete information. for example: Please enter "0:0:0:2" instead of ":".</p> <hr/> <p>IP Address: <input type="text" value="fe80"/> : <input type="text" value="0000"/> : <input type="text" value="0001"/> / <input type="text" value="64"/></p> <hr/> <p>DHCPv6 Server Enable: <input type="checkbox"/></p> <p>RADVD Enable: <input type="checkbox"/></p> <p><b>Save &amp; Apply</b></p>						
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
<b>IPv6 Lan Setting</b>							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

## Tunnel (6 over 4)

Here we can configure Tunnel 6 -4.

Enable: Enable or Disable the Tunnel.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting	Configuring Tunnel(6to4) <hr/> <p>Enabled: <input checked="" type="checkbox"/></p> <p>Save</p>						
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
<b>Tunnel (6 over 4)</b>							
VLAN Bridge							
Default Route							
Static Route							

## VLAN Bridge

Here we can change the VLAN parameters

VLAN ID: Assign an associated VLAN ID.

LAN1-LAN 4: Select which LAN ports are associated with the VLAN.

SSID Guest 1-4 (2.4Ghz): Select which 2.4Ghz SSID Guest are associated with the VLAN.

SSID Guest 1-4 (5Ghz): Select which 5Ghz SSID Guest are associated with the VLAN .

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
<b>VLAN Bridge</b>							
Default Route							
Static Route							

Entries in below table are used to config vlan settings.

---

VLAN ID(1-4095):

LAN1     LAN2     LAN3     LAN4

5G SSID1     5G GUEST1     5G GUEST2     5G GUEST3     5G GUEST4

2.4G SSID1     2.4G GUEST1     2.4G GUEST2     2.4G GUEST3     2.4G GUEST4

**Save & Apply**

Current VLAN Table

VLAN ID	Tagged Ports	Untagged Ports	Select
<div style="background-color: #336699; color: white; padding: 5px; display: inline-block; border-radius: 3px;">Delete Selected</div>			

## Default Route

Here you can select which wan connection is set as the default (If no default is set, the current configured wan will be selected as default).

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
Static Route							

You can select which wan connection as default gateway route.if not ,system will auto select a connect up wan as default gateway route.

Connect name	Type	VlanMuxId	Action
WAN1	pppoe	---	
WAN2	dhcp	---	UP

## Static Route

Here you can Enable and edit static routing to allow network traffic to be redirected to a specific client its location.

Enable Static Route: Set the Static Route to Enable/Disable.

IP Address: Enter the IP address associated.

Subnet Mask: Enter the Subnet Mask associated.

Gateway: Default Gateway IP address.

Metric: Enter the Metric unit you will utilize.

Interface: Choose LAN/WAN

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
LAN Setting							
WAN Setting							
PPTP Setting							
L2TP Setting							
GRE Setting							
VPN Lite							
IPv6 Wan Setting							
IPv6 Lan Setting							
Tunnel (6 over 4)							
VLAN Bridge							
Default Route							
<b>Static Route</b>							

Once connected to the Internet, your router automatically builds routing tables that determine where traffic should be sent. Static routes can override this process, allowing traffic to be directed to a specific client or location.

---

Enable Static Route:

IP Address:

Subnet Mask:

Gateway:

Metric:

Interface: LAN

Static Route Table

Destination IP Address	Netmask	Gateway	Metric	Interface	Status	Select
<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/> <input type="button" value="Reset"/>						

# Wireless (2.4GHz)

## Basic settings

Here we will configure the settings for the 2.4Ghz Network.

Disable Wireless LAN Interface: Set the Wireless state to Enabled or Disabled.

Country or Region: Choose your country of origin

Band: Select a wireless band

Mode: Select mode AP/Client

SSID: Set a name for your wireless network

Channel Width: Select the channel width of 20Mhz, 40Mhz or 20/40Mhz

Control Sideband: Set the Sideband to Upper or Lower.

Channel Number: Select a wireless channel number between 1-13 (recommended to use 1/6/11)

RX Chain Power Safe: Enable/Disable

Broadcast SSID: Enable to Broadcast the SSID (Wi-Fi Name)

WMM: Turn Wi-Fi Multimedia on/off.

Data Rate: Set the Rate to Auto or a selected value.

Associated clients: Click to show Active wireless clients

Enable Universal Repeater mode: Tick to Enable Universal Repeater mode.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>							
<b>Basic Settings</b>							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
<b>Basic Settings</b>							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

You can config the parameters for wireless LAN clients which may connect to your Router. Here you may change wireless encryption settings as well as wireless network parameters.

Disable Wireless LAN Interface:

Country or Region: SOUTH AFRICA

Band: 2.4 GHz (B+G+N)

Mode: AP

**Multiple AP**

SSID: Dlink2.4Ghz

Channel Width: 20/40MHz

Control Sideband: Upper

Channel Number: 6

Rx Chain Power Safe:

BroadcastSSID: On

WMM: On

Data Rate: Auto

Associated Clients: **Show Active Clients**

Enable Universal Repeater Mode:

## Security

Here you can set and change security parameters

Select SSID: Choose an SSID from the drop-down list.

Encryption: Select an Encryption type.

Authentication Mode: Select between Enterprise or Personal.

WPA2 Cipher Suite: Choose between TKIP/AES.

Management Frame Protection: Select between None/Capable/required.

Pre-Shared Key Format: Select between Passphrase or HEX (64 Characters)

Pre-shared Key: create a Wi-Fi password with a minimum of 8 characters.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

This page allows you setup the wireless security. Turn on WEP/WPA2/WPA-MIXED/WPA3/WPA2-WPA3-MIXED by using Encryption Keys could prevent any unauthorized access to your wireless network.

Select SSID:

Encryption:

Authentication Mode:  Enterprise (RADIUS)  Personal (Pre-Shared Key)

WPA2 Cipher Suite:  TKIP  AES

Management Frame Protection:  none  capable  required

Pre-Shared Key Format:

Pre-Shared Key:

## Access Control

Wireless ACL Mode: Set to Disable or choose to Allow or Deny Device access.

Allow: Allows the desired mac address

Disable: fully disables the ACL feature.

Deny: Denies the desired mac address

MAC Address: Enter the MAC of the device or choose it from the connected clients list.

Comment: You may enter a note/name/tag in this field.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Router. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Router.

---

Wireless ACL Mode:

MAC Address:

Comment:

Current ACL List

MAC Address	Comment	Select
<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/> <input type="button" value="Reset"/>		

## Site Survey

Here you can utilize the site survey tool to scan the wireless network in your area, if any Router or IBSS is found you can choose to connect to it. (Please note wireless client mode must be enabled to connect).

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>	<p>This page provides tool to scan the wireless network. If any Router or IBSS is found, you could choose to connect it manually when client mode is enabled.</p> <hr/> <div style="text-align: center;"> <div style="background-color: #4F81BD; color: white; padding: 5px 20px; display: inline-block;">Site Survey</div> </div>						
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

SSID	BSSID	Channel Number	Type	Encrypt	Signal
None					

## WPS

Here you can change the settings for the 2.4Ghz WPS (Wi-Fi Protected Setup), using this feature you can let your wireless client connect and synchronize all its settings and connect to the Router.

Disable WPS: Choose to Disable/Enable the WPS Function

WPS Status: This will state if the device is configured or unconfigured. (You can manually reset the configuration here)

Auto-lock-down state: Lock or Unlock your wireless network to prevent unauthorized access and keep your data secure.

Push Button Configuration: Connect multiple devices to the network and enable data encryption by pushing the button.

STOP WSC: Stop the WPS function by pressing this button.

Connected State: Shows the current State of the WPS connection as (Started/Stopped)

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management						
<b>2.4GHz</b>	<p>This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to the Router in a minute without any hassle.</p> <hr/> <p>Disable WPS: <input type="checkbox"/></p> <p><b>Save &amp; Apply</b>      <b>Reset</b></p> <hr/> <p>WPS Status: <input checked="" type="radio"/> Configured    <input type="radio"/> UnConfigured</p> <p><b>Reset to UnConfigured</b></p> <p>Auto-lock-down state: unlocked    <b>Unlock</b></p> <p>Push Button Configuration:    <b>Start PBC</b></p> <p>STOP WSC    <b>Stop WSC</b></p> <p>Connected State Started</p> <p>Current Key Info</p> <table border="1"> <thead> <tr> <th>Authentication</th> <th>Encryption</th> <th>Key</th> </tr> </thead> <tbody> <tr> <td>WPA3-WPA2-Mixed PSK</td> <td>AES</td> <td>*****</td> </tr> </tbody> </table>							Authentication	Encryption	Key	WPA3-WPA2-Mixed PSK	AES	*****
Authentication	Encryption	Key											
WPA3-WPA2-Mixed PSK	AES	*****											
<b>Basic Settings</b>													
<b>Security</b>													
<b>Access Control</b>													
<b>Site Survey</b>													
<b>WPS</b>													
<b>Schedule</b>													
<b>5GHz</b>													
<b>Basic Settings</b>													
<b>Security</b>													
<b>Access Control</b>													
<b>Site Survey</b>													
<b>WPS</b>													
<b>Schedule</b>													

## Schedule

Here you can setup the wireless schedule rule (Please note to configure system time)

**Enable:** Enable or Disable the Rule.

**DAY:** Select a day in which you want the rule to be active.

**FROM:** Set start time.

**TO:** Set end time.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

This page allows you setup the wireless schedule rule. Please do not forget to configure system time before enable this feature.

Enable Wireless Schedule:

Enable	Day	From	To
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)
<input type="checkbox"/>	Sun	00 (hour) 00 (min)	00 (hour) 00 (min)

Save & Apply      Reset

# Wireless (5GHz)

## Basic settings

Here we will configure the settings for the 5GHz Network.

Disable Wireless LAN Interface: Set the Wireless state to Enabled or Disabled.

Country or Region: Choose your country of origin

Band: Select a wireless band

Mode: Select mode AP/Client

SSID: Set a name for your wireless network

Channel Width: Select the desired channel width

Control Sideband: Set the Sideband to Upper or Lower.

Channel Number: Select a wireless channel number between 1 -13 ( recommended to use 1/6/11)

RX Chain Power Safe: Enable/Disable

Broadcast SSID: Enable to Broadcast the SSID (Wi-Fi Name)

WMM: Turn Wi-Fi Multimedia on/off.

Data Rate: Set the Rate to Auto or a selected value.

Associated clients: Click to show Active wireless clients

Enable Universal Repeater mode: Tick to Enable Universal Repeater mode.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

You can config the parameters for wireless LAN clients which may connect to your Router. Here you may change wireless encryption settings as well as wireless network parameters.

Disable Wireless LAN Interface:

Country or Region: SOUTH AFRICA

Band: 5 GHz (A+N+AC)

Mode: AP

**Multiple AP**

SSID: Dlink5Ghz

Channel Width: 80MHz

Channel Number: Auto(DFS)

Auto Channel Timer: 5 Hours (1-999)

RX Chain Power Safe:

BroadcastSSID: On

WMM: On

Data Rate: Auto

Associated Clients: **Show Active Clients**

Enable Universal Repeater Mode:

## Security

Here you can set and change security parameters.

Select SSID: Choose an SSID from the drop-down list.

Encryption: Select an Encryption type.

Authentication Mode: Select between Enterprise or Personal.

WPA2 Cipher Suite: Choose between TKIP/AES.

Management Frame Protection: Select between None/Capable/required.

Pre-Shared Key Format: Select between Passphrase or HEX (64 Characters)

Pre-shared Key: create a Wi-Fi password with a minimum of 8 characters.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>	This page allows you setup the wireless security. Turn on WEP/WPA2/WPA-MIXED/WPA3/WPA2-WPA3-MIXED by using Encryption Keys could prevent any unauthorized access to your wireless network.						
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

Select SSID:

Encryption:

Authentication Mode:  Enterprise (RADIUS)  Personal (Pre-Shared Key)

WPA2 Cipher Suite:  TKIP  AES

Management Frame Protection:  none  capable  required

Pre-Shared Key Format:

Pre-Shared Key:

## Access Control

Wireless ACL Mode: Set to Disable or choose to Allow or Deny Device access.

Allow: Enables the ACL mode.

Disable: Disables the ACL mode.

Deny: Deny any Mac Address on the ACL list.

MAC Address: Enter the MAC of the device or choose it from the connected clients list.

Comment: You may enter a note/name/tag in this field.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Router. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Router.

---

Wireless ACL Mode:

MAC Address:

Comment:

Current ACL List

MAC Address	Comment	Select
<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/> <input type="button" value="Reset"/>		

## Site Survey

Here you can utilize the site survey tool to scan the wireless network in your area, if any Router or IBSS is found you can choose to connect to it. (Please note wireless client mode must be enabled to connect).

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management												
<b>2.4GHz</b>	<p>This page provides tool to scan the wireless network. If any Router or IBSS is found, you could choose to connect it manually when client mode is enabled.</p> <hr/> <div style="text-align: center; margin: 10px 0;"> <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px;">Site Survey</span> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">SSID</th> <th style="text-align: left;">BSSID</th> <th style="text-align: left;">Channel Number</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Encrypt</th> <th style="text-align: left;">Signal</th> </tr> </thead> <tbody> <tr> <td colspan="6">None</td> </tr> </tbody> </table>							SSID	BSSID	Channel Number	Type	Encrypt	Signal	None					
SSID	BSSID	Channel Number	Type	Encrypt	Signal														
None																			
<b>5GHz</b>																			
Basic Settings																			
Security																			
Access Control																			
Site Survey																			
WPS																			
Schedule																			

## WPS

Here you can change the settings for 5GHz WPS (Wi-Fi Protected Setup), using this feature you can let your wireless client connect and synchronize all its settings and connect to the Router.

Disable WPS: Choose to Disable/Enable the WPS Function

WPS Status: This will state if the device is configured or unconfigured. (You can manually reset the configuration here)

Here you can change the settings for WPS (Wi-Fi Protected Setup), using this feature you can let your wireless client connect and synchronize all its settings and connect to the Router.

Auto-lock-down state: Lock or Unlock your wireless network to prevent unauthorized access and keep your data secure.

Push Button Configuration: Connect multiple devices to the network and enable data encryption by pushing the button.

STOP WSC: Stop the WPS function by pressing this button.

Connected State: Shows the current State of the WPS connection as (Started/Stopped)

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management						
<b>2.4GHz</b>	<p>This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to the Router in a minute without any hassle.</p> <hr/> <p style="text-align: center;">Disable WPS: <input type="checkbox"/></p> <div style="display: flex; justify-content: center; gap: 20px;"> <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px;">Save &amp; Apply</span> <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px;">Reset</span> </div> <hr/> <p style="text-align: center;">WPS Status: <input checked="" type="radio"/> Configured <input type="radio"/> UnConfigured</p> <div style="display: flex; justify-content: center; gap: 20px;"> <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px;">Reset to UnConfigured</span> </div> <p style="text-align: center;">Auto-lock-down state: unlocked <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px; margin-left: 10px;">Unlock</span></p> <p style="text-align: center;">Push Button Configuration: <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px; margin-left: 10px;">Start PBC</span></p> <p style="text-align: center;">STOP WSC <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px; margin-left: 10px;">Stop WSC</span></p> <p style="text-align: center;">Connected State: Started</p> <p style="text-align: center;">Current Key Info</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #e6e6e6;"> <th style="width: 33%;">Authentication</th> <th style="width: 33%;">Encryption</th> <th style="width: 33%;">Key</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">WPA3-WPA2-Mixed PSK</td> <td style="text-align: center;">AES</td> <td style="text-align: center;">*****</td> </tr> </tbody> </table>							Authentication	Encryption	Key	WPA3-WPA2-Mixed PSK	AES	*****
Authentication								Encryption	Key				
WPA3-WPA2-Mixed PSK								AES	*****				
Basic Settings													
Security													
Access Control													
Site Survey													
WPS													
Schedule													
<b>5GHz</b>	<p>This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to the Router in a minute without any hassle.</p> <hr/> <p style="text-align: center;">Disable WPS: <input type="checkbox"/></p> <div style="display: flex; justify-content: center; gap: 20px;"> <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px;">Save &amp; Apply</span> <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px;">Reset</span> </div> <hr/> <p style="text-align: center;">WPS Status: <input checked="" type="radio"/> Configured <input type="radio"/> UnConfigured</p> <div style="display: flex; justify-content: center; gap: 20px;"> <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px;">Reset to UnConfigured</span> </div> <p style="text-align: center;">Auto-lock-down state: unlocked <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px; margin-left: 10px;">Unlock</span></p> <p style="text-align: center;">Push Button Configuration: <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px; margin-left: 10px;">Start PBC</span></p> <p style="text-align: center;">STOP WSC <span style="background-color: #4a7ebb; color: white; padding: 5px 15px; border-radius: 3px; margin-left: 10px;">Stop WSC</span></p> <p style="text-align: center;">Connected State: Started</p> <p style="text-align: center;">Current Key Info</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #e6e6e6;"> <th style="width: 33%;">Authentication</th> <th style="width: 33%;">Encryption</th> <th style="width: 33%;">Key</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">WPA3-WPA2-Mixed PSK</td> <td style="text-align: center;">AES</td> <td style="text-align: center;">*****</td> </tr> </tbody> </table>							Authentication	Encryption	Key	WPA3-WPA2-Mixed PSK	AES	*****
Authentication								Encryption	Key				
WPA3-WPA2-Mixed PSK								AES	*****				
Basic Settings													
Security													
Access Control													
Site Survey													
WPS													
Schedule													

## Schedule

Here you can setup the wireless schedule rule (Please note to configure system time)

**Enable:** Enable or Disable the Rule.

**DAY:** Select a day in which you want the rule to be active.

**FROM:** Set start time.

**TO:** Set end time.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>2.4GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							
<b>5GHz</b>							
Basic Settings							
Security							
Access Control							
Site Survey							
WPS							
Schedule							

This page allows you setup the wireless schedule rule. Please do not forget to configure system time before enable this feature.

Enable Wireless Schedule:

Enable	Day	From		To	
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)
<input type="checkbox"/>	Sun	00 (hour)	00 (min)	00 (hour)	00 (min)

Save & Apply      Reset

# Easy Mesh

You can configure the Easy Mesh feature here and makes changes to the settings.

Role: Choose to Disable or make it the Controller or Agent.

Backhaul BSS: Choose which SSID you want to use.

Device name: Give the Device a unique name.

WPS Trigger: Click to start WPS process.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
General	<p>You can config the parameters for EasyMesh feature of your Router. The controller is the master device and is used to connect to the external network. Agent is a slave device, which is used to connect the controller or other agent. When configured as agent, this device will be used as bridge and dhcp server is closed, the WAN port becomes the LAN port. After configuration, press the WPS button of controller and agent to make a pairing connection. After success, the IP of the agent device will be obtained from the controller, and the ssid/password of WiFi will be automatically changed to be consistent with that of the controller.</p> <hr/> <p>Role: <input checked="" type="radio"/> Controller <input type="radio"/> Agent <input type="radio"/> Disabled</p> <p>Backhaul BSS: <input checked="" type="radio"/> 5G <input type="radio"/> 2.4G</p> <p>Device Name: <input type="text"/></p> <p>WPS Trigger: <input type="button" value="Start PBC"/></p> <p><input type="button" value="Save &amp; Apply"/></p>						

# Features

## Advanced

You can utilize the Routers high-performance features, monitor internet traffic and protect your network from malicious internet attacks.

Enable DMZ: Enabling this feature will add a perimeter network that adds an extra layer of security to internal local-area network from untrusted traffic

Enable UPNP: Enabling this feature will allow Universal plug and play ,this network protocol allows network devices to seemingly discover each other's presence and establish functional network service.

Enable IGMP Proxy: Enabling this feature will allow several devices to share one IP address so they can all receive the same data.

Enable Ping Access on WAN: Enable this feature to PING the WAN interface of the firewall/Router when troubleshooting connectivity issues when outside the office or home LAN.

Enable Web Server Access on WAN: Enable this feature to allow access to the router interface remotely.

Enable Web Server HTTPS Access on WAN: Enable this feature if you want to connect to the Web Server using an HTTPS address.

Web Lan Http access port: Choose a HTTP port to access the Web.

web Lan Https access port: Choose a HTTPS port to access the Web.

Enable IPsec pass through on VPN connection: Enable if you want to use IPsec on a VPN connection.

Enable PPTP pass through on VPN connection: Enable if you want to use PPTP on a VPN connection.

Enable L2TP pass through on VPN connection: Enable if you want to use L2TP on a VPN connection.

RTSP ALG: Enable this to control the delivery of data with real time properties.

SIP ALG: Enable this to prevent traffic from interfering with VoIP packets

Wi-Fi Guest Access Router: Enable this to allow Wi-Fi Guest access on Guest Profiles.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
<b>Advanced</b>	Your router's high-performance firewall feature continuously monitors Internet traffic, protecting your network and connected devices from malicious Internet attacks						
Port Filtering							
IP Filtering							
MAC Filtering							
Port Forwarding							
URL Filtering							
QOS							
	Enable DMZ: <input type="checkbox"/>						
	Enable UPNP: <input checked="" type="checkbox"/>						
	Enable IGMP Proxy: <input type="checkbox"/>						
	Enable Ping Access on WAN: <input type="checkbox"/>						
	Enable Web Server Access on WAN: <input type="checkbox"/>						
	Enable Web Server HTTPS Access on WAN: <input type="checkbox"/>						
	Web Lan Http Accessed port: <input type="text" value="80"/>						
	Web Lan Https Accessed port: <input type="text" value="443"/>						
	Enable IPsec pass through on VPN connection: <input checked="" type="checkbox"/>						
	Enable PPTP pass through on VPN connection: <input checked="" type="checkbox"/>						
	Enable L2TP pass through on VPN connection: <input checked="" type="checkbox"/>						
	RTSP ALG: <input type="checkbox"/>						
	SIP ALG: <input type="checkbox"/>						
	Wifi Guest Access Router: <input type="checkbox"/>						
	<b>Save &amp; Apply</b>			<b>Reset</b>			

## Port Filtering

You can restrict certain types of data packets from your local network to the internet. This can secure or restrict your local network.

Enable Port Filtering: This feature will enable port filtering.

Enable IPv4: This will Enable Port filtering to be done on IPv4

Enable IPv6: This will Enable Port filtering to be done on IPv6

Port Range: You can set the Port Range here (1 – 65535) – e.g.: (Http Port 80, Https Port 443)

Protocol: Select Protocol type (Both, UDP, TCP)

Comment: Input a name / tag.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Advanced							
Port Filtering							
IP Filtering							
MAC Filtering							
Port Forwarding							
URL Filtering							
QOS							

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

Enable Port Filtering:

Enable IPv4:

Enable IPv6:

Port Range:  -

Protocol:

Comment:

Port Filter Table

Port Range	Protocol	IP Version	Comment	Select
<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/> <input type="button" value="Reset"/>				

## IP Filtering

You can restrict certain types of data packets from your local network to the internet. This can secure or restrict your local network.

Enable IP Filtering: Enable this feature to use IP Filtering.

Enable IPv4: Enable this Feature to utilize IP Filtering over IPv4

Enable IPv6: Enable this Feature to utilize IP Filtering over IPv6

Local IPv4 Address: Enable this to use IPv4 on the local IP.

Remote IPv4 Address: Enable this to use IPv4 on the Remote IP.

Local IPv6 Address: Enable this to use IPv6 on the local IP

Protocol: Choose a Protocol to use (Both, UTP, TCP)

Comment: Enter a name or tag.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Advanced							
Port Filtering							
IP Filtering							
MAC Filtering							
Port Forwarding							
URL Filtering							
QOS							

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

Enable IP Filtering:   
 Enable IPv4:   
 Enable IPv6:   
 Local IPv4 Address:  << Computer Name   
 Remote IPv4 Address:   
 Local IPv6 Address:   
 Remote IPv6 Address:   
 Protocol: Both   
 Comment:

IP Filter Table

Local IP Address	Remote IP Address	Protocol	Comment	Select
<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/> <input type="button" value="Reset"/>				

## MAC Filtering

You can restrict certain types of data packets from your local network to the internet, use of such filters can secure or restrict your local network.

Mode: Choose to Blacklist or Whitelist a MAC address.

MAC Address: Select the device from the drop-down menu and type in its corresponding Mac address.

Comment: Enter a name or tag.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Advanced	Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.						
Port Filtering							
IP Filtering							
MAC Filtering	Mode: <input checked="" type="radio"/> Blacklist <input type="radio"/> Whitelist						
Port Forwarding	MAC Address: <input type="text"/> << Computer Name <input type="button" value="v"/>						
URL Filtering	Comment: <input type="text"/>						
QOS	<input type="button" value="Save &amp; Apply"/> <input type="button" value="Reset"/>						
	MAC Filter Table						
	MAC Address		Comment			Select	
	<input type="button" value="Delete Selected"/>		<input type="button" value="Delete All"/>			<input type="button" value="Reset"/>	

## Port Forwarding

You can setup your port forwarding rules here, this will allow you to connect to a specific device behind the NAT firewall.

Enable Port Forwarding: Use this feature to Enable Port Forwarding on the device.

Local IP Address: Internal IP address of the Router.

Local Port Start: Enter the Port Number

Local Port End: Enter the Port Number

Protocol: Choose a Protocol ( BOTH , UDP,TCP )

Remote IP address: Enter a remote IP address if you want an individual device to connect, if not leave it blank.

Remote Port Start: Enter Port Number.

Remote Port End: Enter Port Number.

Comment: Enter a name or tag.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Advanced							
Port Filtering							
IP Filtering							
MAC Filtering							
Port Forwarding							
URL Filtering							
QOS							

Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.

---

Enable Port Forwarding:

Local IP Address:  << Computer Name

Local Port Start:

Local Port End:

Protocol: Both

Remote IP Address:

Remote Port Start:

Remote Port End:

Comment:

## URL Filtering

You can use the URL Filter to deny LAN users access to certain Internet sites by blocking URL's which contain certain keywords.

Enable URL Filtering: Use this to Enable or Disable the URL Filtering rules.

DENY URL address (Black list): Enable this to use "Black-List" (Denies all access to the URL)

Allow URL address (white list): Enable this to use "White-List" (Allows access to the URL)

URL address: Enter the Web-Address you wish to Block content viewing.

<b>DIR-822K</b> HW:822K FW:TK_1.00	<b>Status</b>	<b>Setup</b>	<b>Network</b>	<b>Wireless</b>	<b>EasyMesh</b>	<b>Features</b>	<b>Management</b>
<b>Advanced</b>	URL filter is used to deny LAN users from accessing the internet. Block those URLs which contain keywords listed below.						
<b>Port Filtering</b>	<input type="checkbox"/> Enable URL Filtering:						
<b>IP Filtering</b>	<input checked="" type="radio"/> Deny URL address(black list):						
<b>MAC Filtering</b>	<input type="radio"/> Allow URL address(white list):						
<b>Port Forwarding</b>	URL Address: <input type="text"/>						
<b>URL Filtering</b>	<input type="button" value="Save &amp; Apply"/>			<input type="button" value="Reset"/>			
<b>QoS</b>	URL Filter Table						
	<input type="text" value="URL Address"/>						<input type="button" value="Select"/>
	<input type="button" value="Delete Selected"/>		<input type="button" value="Delete All"/>		<input type="button" value="Reset"/>		

## QoS

You can use this Feature to improve all round network traffic and prioritize network packets to improve online gaming / FTP or WEB services.

Enable QoS: Enable or Disable the Rule.

Automatic Uplink Speed : Enable or Disable .

Automatic Downlink Speed : Enable or Disable.

Name : : Give the Rule a name.

QoS Type: : Choose a type  
(IPv4,IPv6,MAC,PHYPORT,DSCP)

Protocol : Choose a protocol (Both, TCP,UDP)

Local IP Address : IP address of the Router.

Local Port : Enter the Local port you will be using.

Remote IP Address : Enter the IP you will be using to send and receive traffic.

Remote Port : Enter the Remote Port you will be using.

Mode : Guaranteed minimum or Restricted maximum bandwidth.

Uplink Bandwidth : Set a Uplink bandwidth limit.

Downlink Bandwidth : Set a downlink bandwidth limit.

Priority : Set a priority between 1 -7 (higher the number = higher the priority )

Remark DSCP : you can re-mark differentiated service codes to prioritize IP packets.

Comment : Enter a name or tag.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Advanced							
Port Filtering							
IP Filtering							
MAC Filtering							
Port Forwarding							
URL Filtering							
QoS							

Enable QoS:

Automatic Uplink Speed:

Automatic Downlink Speed:

Name:

QoS Type: IPv4

protocol: Both

Local IP Address:  -

Local Port:  -

Remot IP Address:  -

Remote Port:  -

Mode: Guaranteed minimum bandwi

Uplink Bandwidth (Kbps):

Downlink Bandwidth (Kbps):

Priority:  (0-7,7 is highest priority)

Remark DSCP:  (0-63)

Comment:

# Management

## Time Zone Setting

Here you can maintain the system time settings by synchronizing with a public time server over the internet.

Current time: set the current time manually.

Copy LAN time: Automatically Copies the Computer time from your device.

Time Zone Select: Select a time zone based on your location.

Enable NTP Client Update: Enable this to periodically keep the Time server up to date.

Automatically Adjust Daylight Saving: Select this if your country practices daylight saving.

NTP Server: Enter the NTP server address.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Time Zone Setting	You can maintain the system time by synchronizing with a public time server over the Internet.						
DDNS							
Deny Of Service							
Log							
Password							
Ping Diagnostic							
Traceroute							
System Settings							
Auto Reboot							
Upgrade Firmware							
Logout							

Current Time:	2023	-	6	-	16	16	:	24	:	23
Copy LAN time:	Copy Computer Time									
Time Zone Select:	(GMT+02:00)Harare, Pretoria ▼									
Enable NTP client update:	<input checked="" type="checkbox"/>									
Automatically Adjust Daylight Saving:	<input type="checkbox"/>									
NTP server:	<input type="radio"/> ntp.saix.net.za.pool.ntp.org									

Save & Apply	Reset	Refresh
--------------	-------	---------

## DDNS

Here you can setup you're existing DDNS account

Enable DDNS: This feature will allow you to Enable or Disable the DDNS account.

Status: this will show the DDNS account as Connected/Disconnected.

IP Address: this will show the IP address associated with the DDNS account.

Service Provider: Select your DDNS service provider from the drop down menu.

Domain Name: Enter your DDNS host name.

User Name/Email: Enter the DDNS name or email associated with your account.

Password Key: Enter the DDNS password associated with your account.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Time Zone Setting							
<b>DDNS</b>	Dynamic DNS is a service, that provides you with a valid, unchanging, internet domain name (an URL) to go with that (possibly everchanging) IP-address.						
Deny Of Service							
Log							
Password							
Ping Diagnostic							
Traceroute							
System Settings							
Auto Reboot							
Upgrade Firmware							
Logout							

Enable DDNS: <input checked="" type="checkbox"/>
Status: Disconnected
IP Address:
Service Provider: <input type="text" value="DynDNS"/>
Domain Name: <input type="text" value="host.dyndns.org"/>
User Name/Email: <input type="text"/>
Password/Key: <input type="text"/>

<b>Save &amp; Apply</b>	<b>Reset</b>
-------------------------	--------------



Enable DoS Prevention: You can enable the DDOS prevention Feature here to stop malicious attacks.

Whole System Flood: SYN: enable this to Prevent attacks affecting traffic denial to a server.

Whole System Flood: FIN: enable this to Prevent attacks affecting Packet traffic .

Whole System Flood: UDP: enable this to Prevent attacks that cause packet flooding to overwhelm or stop device ability to function.

Whole System Flood: ICMP: enable this to Prevent attacks that cause echo-requests (pings) to overwhelm device stability.

Per-Source IP Flood SYN: enable this to Prevent attacks that cause massive number of SYN requests to a server with open connections.

Per-Source IP Flood FIN: enable this to Prevent attacks that cause disruption of network activity due to bandwidth saturation.

Per-Source IP Flood UDP: enable this to Prevent attacks that cause UDP packets to overwhelm or stop a device ability to function.

Per-Source IP Flood ICMP: enable this to Prevent attacks that cause ICMP packets to overwhelm a device and the connection to it.

TCP/UDP Port Scan: enable to Prevent a port from being scanned or have its network status checked.

ICMP Smurf: enable to Prevent a flood of ICMP request packets.

IP Land: enable to Prevent attacks that can consist of sending special poison spoofed packets to a computer causing a lock-up.

IP Spoof: enable to Prevent the creation of IP packets with a false source Ip to impersonate another computer.

IP Teardrop: enable to Prevent attacks that flood the computer resource and cause instability.

Ping of Death: enable to Prevent attacks that can crash, destabilize or freeze a computer by sending oversized packets.

TCP Scan: enable to Prevent attacks that can sneakily scan open ports for intrusion.

TCP Syn With Data: enable to Prevent attacks that allow a server and client to pair or exchange message data.

UDP Bomb: enable to prevent Spoof IP to generate packets to overload the target the server.

UDP Echo Chargen: enable to Prevent and attack that can trigger the Echo-Chargen by spoofing a conversation between the Echo request/Reply service.

# Log

Here you can view and set the remote log server.

Enable Log: This Feature Enable's Logging.

Enable Remote log: This Feature Enable's Remote logging.

Log Server IP Address: Enter the Server IP.

Log Server Port: Enter the Log Port.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Time Zone Setting	This page can be used to set remote log server and show the system log.						
DDNS	Enable Log: <input type="checkbox"/>						
Deny Of Service	Enable Remote Log: <input type="checkbox"/>						
Log	Log Server IP Address: <input type="text"/>						
Password	Log Server Port: <input type="text" value="514"/>						
Ping Diagnostic	<input type="button" value="Apply Changes"/>						
Traceroute	<div style="border: 1px solid black; height: 150px; width: 100%;"></div>						
System Settings							
Auto Reboot							
Upgrade Firmware							
Logout							
	<input type="button" value="Refresh"/>		<input type="button" value="Clear"/>				

## Password

Here you can change the default Router password to enhance security.

New Password: Enter a password of at least 6 characters long, this can contain Numbers, Letters, Special characters.

Confirm Password: Confirm the above password.

<b>DIR-822K</b> HW:822K FW:TK_1.00	<b>Status</b>	<b>Setup</b>	<b>Network</b>	<b>Wireless</b>	<b>EasyMesh</b>	<b>Features</b>	<b>Management</b>
<b>Time Zone Setting</b>	This page is used to set the account to access the web server of Router. Empty user name and password will disable the protection.						
<b>DDNS</b>							
<b>Deny Of Service</b>							
<b>Log</b>							
<b>Password</b>							
<b>Ping Diagnostic</b>							
<b>Traceroute</b>							
<b>System Settings</b>							
<b>Auto Reboot</b>							
<b>Upgrade Firmware</b>							
<b>Logout</b>							

---

New Password:

Confirmed Password:

## Ping Diagnostic

Here you can Ping an IP and Run diagnostics.

Host Name or IP Address: Choose IPv4 or IPv6 and “Click Run”

<b>DIR-822K</b> HW:822K FW:TK_1.00	<b>Status</b>	<b>Setup</b>	<b>Network</b>	<b>Wireless</b>	<b>EasyMesh</b>	<b>Features</b>	<b>Management</b>
Time Zone Setting	This page gives you various diagnostics about ping for IP connection.						
DDNS							
Deny Of Service							
Log							
Password							
<b>Ping Diagnostic</b>							
Traceroute							
System Settings							
Auto Reboot							
Upgrade Firmware							
Logout							

Host Name or IP Address:

## Traceroute

Here you can use the Traceroute tool and Run Diagnostics.

Host Name or IP Address: Choose IPv4 or IPv6

<b>DIR-822K</b> HW:822K FW:TK_1.00	<b>Status</b>	<b>Setup</b>	<b>Network</b>	<b>Wireless</b>	<b>EasyMesh</b>	<b>Features</b>	<b>Management</b>
<b>Time Zone Setting</b>	This page gives you various diagnostics about traceroute for IP connection.						
<b>DDNS</b>	<hr/>						
<b>Deny Of Service</b>	Host Name or IP Address: <input type="text" value="IPv4"/> <input type="text"/>						
<b>Log</b>	<input type="button" value="RUN"/>						
<b>Password</b>	<div style="border: 1px solid black; height: 200px;"></div>						
<b>Ping Diagnostic</b>							
<b>Traceroute</b>							
<b>System Settings</b>							
<b>Auto Reboot</b>							
<b>Upgrade Firmware</b>							
<b>Logout</b>							

## System Settings

Here you can save current settings or configurations, Reboot/Reset the Device, or load a Config file onto the Router.

Save Settings to File: Save the Router config locally to your PC/Laptop.

Load Settings from File: Load a config backup previously saved.

Reset Settings to Default: Reset the Router to Factory default settings.

Reboot the Device: Reboot the Device using the Web Gui here.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Time Zone Setting	<p>This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.</p> <hr/> <p>Save Settings to File: <input type="button" value="Save"/></p> <p>Load Settings from File: <input type="button" value="Select File"/> <input type="button" value="Upload"/></p> <p>Reset Settings to Default: <input type="button" value="Reset"/></p> <p>Reboot The Device: <input type="button" value="Reboot"/></p>						
DDNS							
Deny Of Service							
Log							
Password							
Ping Diagnostic							
Traceroute							
<b>System Settings</b>							
Auto Reboot							
Upgrade Firmware							
Logout							

## Auto Reboot

Here you can Enable and Manage automatic Reboot for your Device.

Enable: Set the state to Enabled/Disabled.

Period Days: Set how many day intervals you want the device to reboot.

Reboot Time: Set a daily time you want the device to reboot.

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Time Zone Setting	<p>'Auto Reboot' is the feature which can do the Reboot automatically at a specified time. Please note: 'Auto Reboot' depend on the 'NTP Server',you have to enable the 'NTP Server' when use this feature. For example. Period Days is 2, Reboot Time is 03:00, the system will automatically reboot at 3 o'clock every 2 days.</p> <hr/> <p>Enable: <input checked="" type="checkbox"/></p> <p>Period Days: <input type="text" value="1"/></p> <p>Reboot Time: <input type="text" value="00:00"/></p> <p><input type="button" value="Save &amp; Apply"/></p>						
DDNS							
Deny Of Service							
Log							
Password							
Ping Diagnostic							
Traceroute							
System Settings							
<b>Auto Reboot</b>							
Upgrade Firmware							
Logout							

## Upgrade Firmware

Here you can update the Routers firmware, by downloading and selecting the correct firmware file.

Firmware Version: this will display the current Firmware version of the device.

Select file: Click here to browse your local PC/Laptop for the downloaded firmware file.

Upload: Click this button to start the firmware update process.

(It is recommended to never do a firmware upgrade over Wi-Fi but to rather utilize an Ethernet cable to ensure update stability)

DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Time Zone Setting	<p>This page allows you upgrade the Router firmware to new version. Please note, do not power off the device during the upload because it may crash the system.</p> <hr/> <p>Firmware Version: TK_1.00_20230613</p> <p>Select File: <input type="button" value="Select File"/></p> <p><input type="button" value="Upload"/></p>						
DDNS							
Deny Of Service							
Log							
Password							
Ping Diagnostic							
Traceroute							
System Settings							
Auto Reboot							
<b>Upgrade Firmware</b>							
Logout							

## Logout

Here you can safely and manually logout of your device after changing any settings or parameters.

Logout: Click this button to Exit the Web-Management page of the Router.

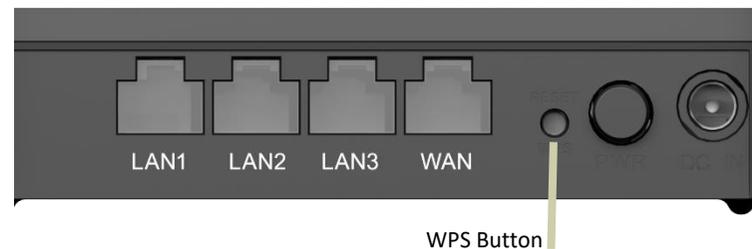
DIR-822K HW:822K FW:TK_1.00	Status	Setup	Network	Wireless	EasyMesh	Features	Management
Time Zone Setting	This page is used to logout.						
DDNS	<hr/>						
Deny Of Service	Do you want to logout ?						
Log	<input type="button" value="Logout"/>						
Password							
Ping Diagnostic							
Traceroute							
System Settings							
Auto Reboot							
Upgrade Firmware							
Logout							

# Connect a Wireless Client to your Router

## WPS Button

The easiest way to connect your wireless devices to the router is with WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-822K router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

**Step 1** - Press the WPS button on the DIR-822K for about 1 second. The WPS LED on the front will start to blink.



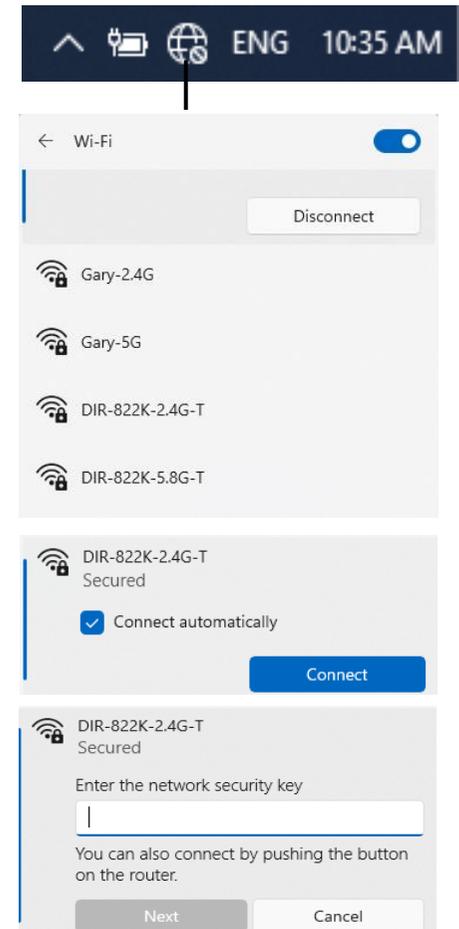
**Step 2** - Within 2 minutes, press the WPS button on your wireless device (or launch the software utility and start the WPS process).

**Step 3** - Allow up to 1 minute for your connection to be configured. Once the WPS LED stops blinking, you will be connected and your wireless connection will be encrypted with WPA2.

## Windows<sup>®</sup> 10

When connecting to the DIR-822K wirelessly for the first time, you will need to input the wireless network name (SSID) and Wi-Fi password (security key) of the device you are connecting to. If your product has a Wi-Fi configuration card, you can find the default network name and Wi-Fi password here. Otherwise refer to the product label for the default Wi-Fi network SSID and password, or enter the Wi-Fi credentials set during the product configuration.

1. To join an existing network, locate the wireless network icon in the taskbar, next to the time display and click on it.
2. Clicking on this icon will display a list of wireless networks which are within range of your computer. Select the desired network by clicking on the SSID.
3. To connect to the SSID, click **Connect**.
4. To automatically connect with the router when your device next detects the SSID, click the **Connect Automatically** check box.
5. You will then be prompted to enter the Wi-Fi password (network security key) for the wireless network. Enter the password into the box and click **Next** to connect to the network. Your computer will now automatically connect to this wireless network when it is detected.
6. You can also use Wi-Fi Protected Setup (WPS) to connect to the router. Press the WPS button on your D-Link device and you will be automatically connected.



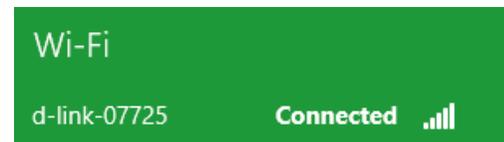
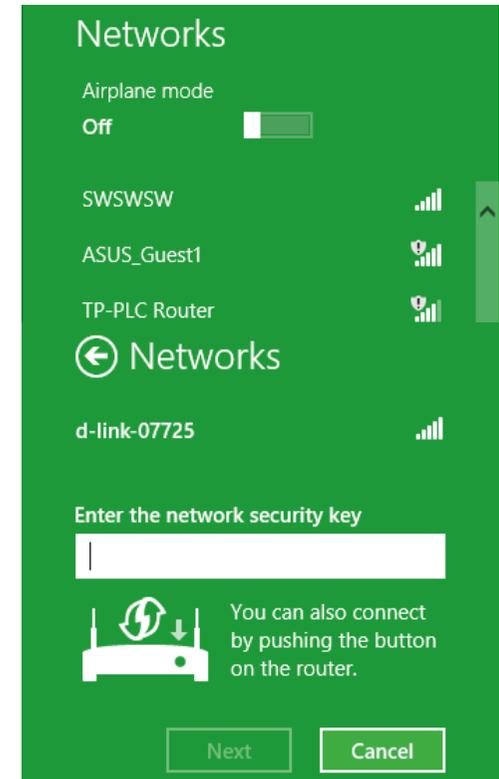
# Windows® 8

It is recommended that you enable wireless security (WPA/WPA2/WPA3) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key (Wi-Fi password) being used.

1. To join an existing network, locate the wireless network icon in the taskbar next to the time display.
2. Clicking on this icon will display a list of wireless networks that are within connecting proximity of your computer. Select the desired network by clicking on the network name.
3. You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.
4. If you wish to use Wi-Fi Protected Setup (WPS) to connect to the router, you can also press the WPS button on your router during this step to enable the WPS function.
5. When you have established a successful connection to a wireless network, the word **Connected** will appear next to the name of the network to which you are connected to.



Wireless Icon



## Windows<sup>®</sup> 7

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

1. Click on the wireless icon in your system tray (lower-right corner).



2. The utility will display any available wireless networks in your area.

3. Highlight the wireless connection with Wi-Fi name (SSID) you would like to connect to and click the **Connect** button.

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

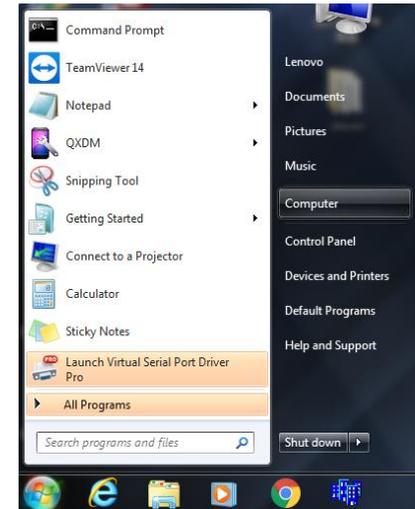
4. The following window appears while your computer tries to connect to the router.



## WPS

The WPS feature of the DIR-822K can be configured using Windows 7. Carry out the following steps to use Windows 7 to configure the WPS feature:

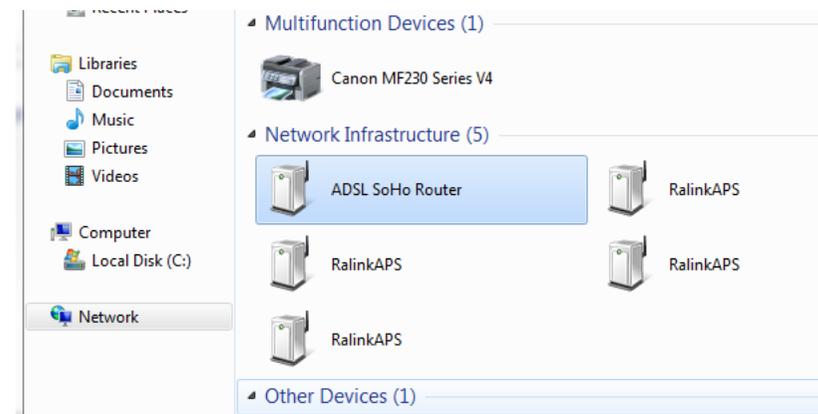
1. Click the **Start** button and select **Computer** from the Start menu.



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

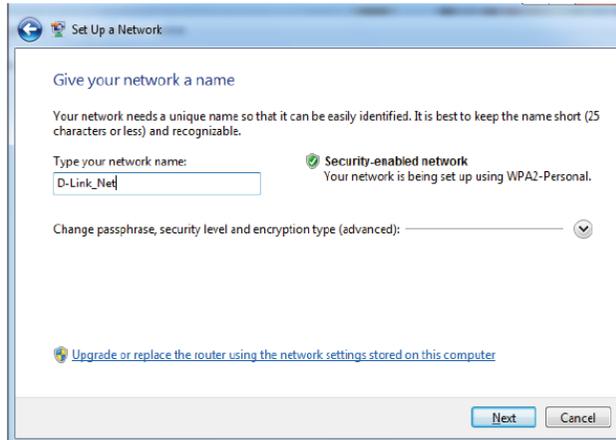


3. Double-click the DIR-822K (Will be displayed as RalinkAPS).



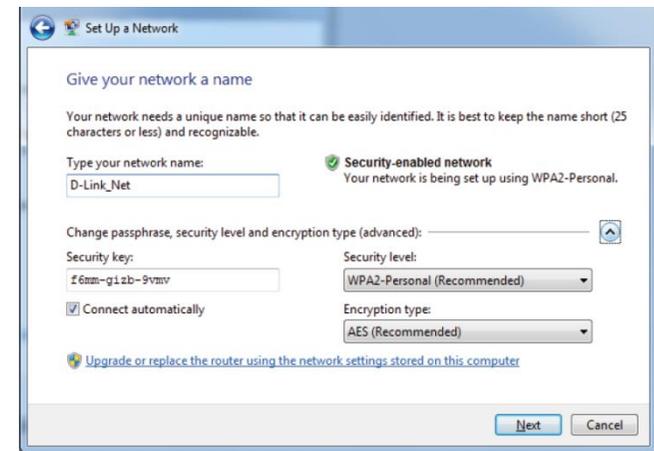
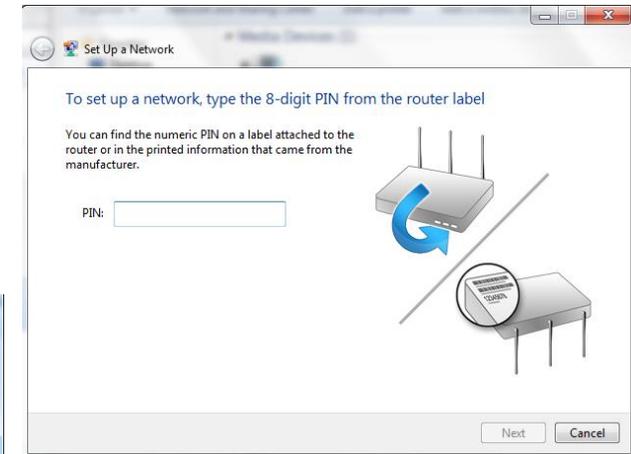
4. Input the WPS PIN number (on the router label) in the **Setup > Wireless Setup** menu in the Router's Web UI) and click **Next**.

5. Type a name to identify the network.



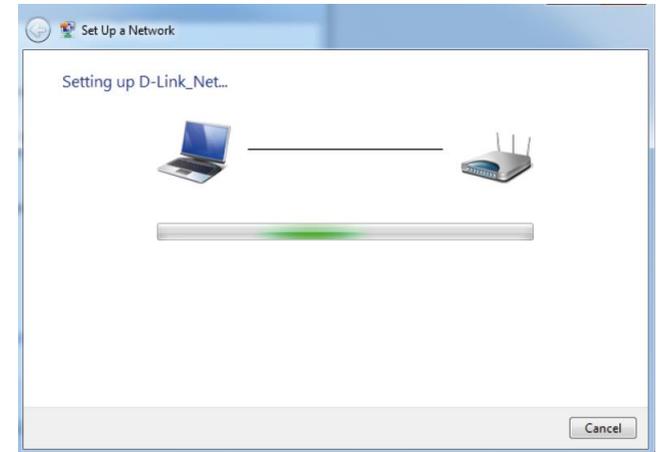
6. To configure advanced settings, click the Arrow icon.

Click **Next** to continue.



7. The following window appears while the DIR-822K is being configured.

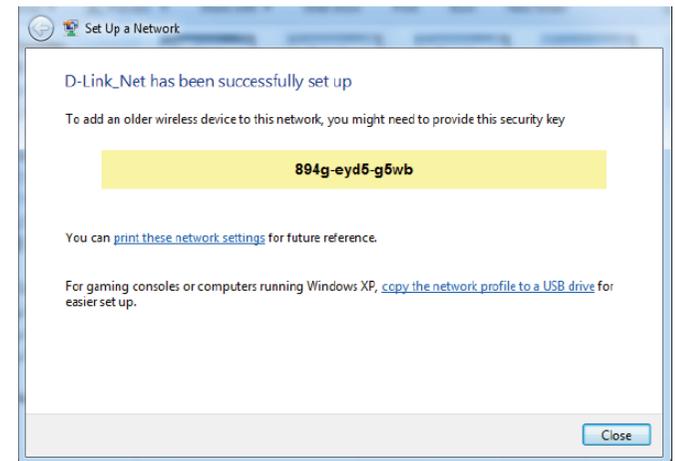
Wait for the configuration to complete.



8. The following window informs you that WPS on the DIR-822K has been set up successfully.

Make a note of the security key as you may need to provide this security key if adding an older wireless device to the network in the future.

9. Click **Close** to complete WPS setup.



# Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-822K. Read the following descriptions if you are having problems. The examples below are illustrated in WindowsR XP. If you have a different operating system, the screenshots on your computer will look similar to these examples.

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

When entering the IP address of the D-Link router (**10.0.0.2** for example), make sure you are not connected to a website, you don't have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Microsoft Internet ExplorerR 10 or higher
  - Microsoft EDGE Browser 20 or higher
  - Mozilla Firefox 11 or higher
  - Google™ Chrome 17 or higher
  - Apple Safari 5 or higher
- Verify physical connectivity by checking for solid LAN lights on the device. If you do not get a solid LAN light, try using a different cable, or connect to a different port on the device. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as ZoneAlarm, BlackICE, Sygate, Norton Personal Firewall, and WindowsR XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.
- Configure your Internet settings:
  - Go to **Start > Settings > Control Panel**. Double-click the **Internet Options** icon. From the **Security** tab, click the button to restore the settings to their defaults.
  - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
  - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.

- Close your web browser (if open) and open it.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your web management.
  
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

## **2. What can I do if I forgot my password?**

If you forgot your password, you must reset your router. This process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, press and hold the the rest button down for 20-25 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is **10.0.0.2**. When logging in, the default username is admin and the default password it admin.

## **3. Why can't I connect to certain sites or send and receive emails when connecting through my router?**

If you are having a problem sending or receiving email, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (WindowsR NT, 2000, XP, VistaR, 7, 8.x, and 10 users type in **cmd**) and press **Enter** (or click **OK**).
  - Once the window opens, you'll need to do a special ping.  
Use the following syntax: **ping [url] [-f] [-l] [MTU value]**  
Example: **ping yahoo.com -f -l 1472**

You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet.

Take that value and add 28 to the value to account for the various TCP/IP headers. For example, let's say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with ( $1452+28=1480$ ).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.1.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU, enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your email. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

```
C:\>ping yahoo.com -f -l 1482
Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:
Packet needs to be fragmented but DF set.

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping yahoo.com -f -l 1472
Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:

Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 93ms, Maximum = 203ms, Average = 132ms

C:\>
```

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

## Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point the signal can travel up to 100m. With an outdoor access point the signal can reach out up to 15km to serve places like manufacturing plants, industrial locations, university 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. This 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 Uses/Benefits

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

## Small Office and Home Office Uses/Benefits

- 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 USB adapter with your laptop, you can access the hotspot to connect to the Internet from remote locations like: airports, hotels, coffee shops, libraries, restaurants, and convention centres.

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 neighbours or intruders connect to your wireless network. Encrypt your wireless network by turning on the WPA or WEP security feature on the router. Refer to the product manual for detail information on how to set it up.

# Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-hoc** – Directly connecting to another computer for peer-to-peer communication using wireless network adapters on each computer, such as two or more DIR-822K wireless network USB adapters.

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

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

# Networking Basics

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

Click on **Start > Run**. In the run box type *cmd* and click **OK**. (WindowsR 7/VistaR 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
Connection-specific DNS Suffix . : localhost
Wireless LAN adapter Local Area Connection* 11:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Wireless LAN adapter Local Area Connection* 14:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Wireless LAN adapter Wi-Fi:
Connection-specific DNS Suffix . :
Link-local IPv6 Address . . . . . : fe80::14d5:9f08:b952:b322%17
IPv4 Address. . . . . : 192.168.100.160
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.100.1
C:\Users\Dawie>
```

# Statically Assign an IP address

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

## Step 1

Windows® 7- Click on Start > Control Panel > Network and Internet > Network and Sharing Center > Change Adaptor Options

Windows® 8,10 - Click on Start > Search for Control Panel > Network and Internet > Network and Sharing Center > Change adaptor settings.

## Step 2

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

## Step 3

Highlight **Internet Protocol version 4 (TCP/IP)** and click **Properties**.

## Step 4

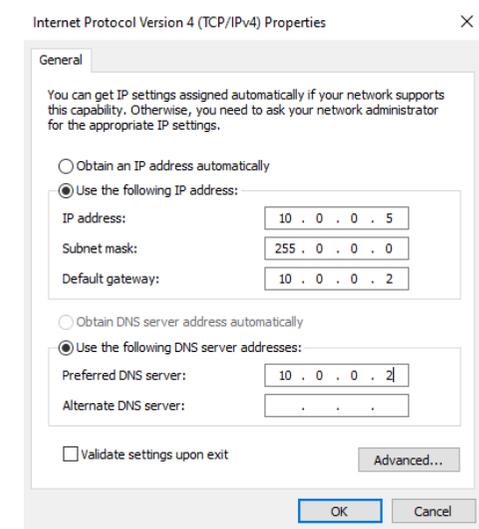
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router's LAN IP address is 10.0.0.2, make your IP address 10.0.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set the Default Gateway the same as the LAN IP address of your router (I.E. 10.0.0.2).

Set Primary DNS the same as the LAN IP address of your router (10.0.0.2). 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.



## Wireless Security

This section will show you the different levels of encryption you can use to help protect your data from intruders. The DIR-822K offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA2-PSK (Pre-Shared Key)
- WPA (Wi-Fi Protected Access)
- WPA-PSK (Pre-Shared Key)

## What is WPA?

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

The 2 major improvements over WEP:

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

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

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

# Technical Specifications

## Device Interfaces

- 3 x RJ-45 10/100 Ethernet LAN ports
- 1 x RJ-45 10/100 Ethernet WAN port
- 2.4 GHz and 5 GHz wireless for 802.11 a/b/g/n/ac

## Antenna Types

- 4x external dual band fixed antennas

## Standards

- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n
- IEEE 802.11ac
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3az
- IEEE 802.3x
- IEEE 802.11e
- IEEE 802.1p

## Wi-Fi Encryption

- WPA™ - Personal/Enterprise
- WPA2™ - Personal/Enterprise
- WPA3™ Personal/Enterprise
- Wi-Fi Protected Setup (WPS) PIN/PBC

## Power

- Input: 100 to 240 V AC, 50/60 Hz
- Output: 12 V DC, 1 A

## Operating Temperature

- 0 to 40 °C (32 to 104 °F)

## Storage Temperature

- -20 to 80 °C (-4 to 176 °F)

## Operating Humidity

- 5% to 85% maximum (non-condensing)

## Certifications

- CE

## Dimensions

- 230 x 150 x 35 mm (8.26 x 5.91 x 1.46 in)

## Weight

- 227g (1.05 lbs)

# Regulatory Information

## CE EMI Class A Warning

This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.



	Frequency Band(s) Frequenzband Fréquence bande(s) Bandas de Frecuencia Frequenza/e Frequentie(s)	Max. Output Power (EIRP) Max. Output Power Consommation d'énergie max. Potencia máxima de Salida Potenza max. Output Max. Output Power
5 GHz	5.15 – 5.25 GHz	200mW
	5.25 – 5.35 GHz	200Mw
	5.47 – 5.725 GHz	1W
2.4 GHz	2.4 – 2.4835 GHz	100 mW