Use

4G LTE M

Preface

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Manual Revisions

Revision	Date	Description
1.00	May 16, 2017	• Initial release

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Table of Contents

Package Contents

DWM-312 4G LTE M2M Router

Power Adapter

2x 3G/4G Antennas

RJ-45 Cable

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

System Requirements

- A compatible micro-SIM/UICC card with service.*
- Computer with Windows, Mac OS, or Linux-based operating system with an installed Ethernet adapter.
- Java-enabled browser such as Internet Explorer 6, Safari 4.0, Chrome 20.0, or Firefox 7 or above (for con guration).

* Subject to services and service terms available from your carrier.

Introduction

The D-Link DWM-312 4G LTE M2M Router is an easy-to-deploy, high-performance 3G/4G router. It features a dedicate Ethernet port and dual-SIM 4G LTE mobile broadband for maximum redundancy and exibility for intense Machine-to-Machine (M2M) applications. Powerful VPN tools and advanced remote management combined wit use make the DWM-312 ideal for both large-scale and individual deployments.

Easily connect to your high-speed 3G/4G LTE mobile connection with the DWM-312 4G LTE M2M Router, and enjoy fas downlink speeds of up to 150 Mbps [1] and uplink speeds up to 50 Mbps [1], giving you the speed you need for Internet access. Deploy it in a remote location to access IP cameras and systems remotely. The blazing fast LTE conne allows multiple users to access e-mail and stream music and video on the go. Con gurable dual-SIM fallback provides reliability and exibility in mixed network environments.

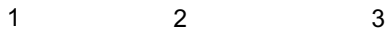
The DWM-312 4G LTE M2M Router's integrated VPN Client and Server support almost any VPN policy. The router's ha engine can support and manage multiple VPN con gurations. It supports IPSec, PPTP, L2TPv2, and GRE protocols in S mode, and handles pass-through tra c as well. Advanced VPN con guration options include multiple encryption key management, negotiation modes, and VPN authentication using an internal user database.

The industrial-grade casing means the DWM-312 provides reliable high-speed connectivity in extreme condition corrosion-resistant zinc-plated steel case and wide operating temperature and humidity tolerance mean that the is ready for the most demanding M2M applications in virtually any environment. Wall mounts allow the DWM-31 mounted virtually anywhere for optimal connectivity. Flexible power input allows the router to be powered by any convenient power source.

[1] Data rates are theoretical. Data transfer rate depends on network capacity, signal strength, and environmental factors.

Hardware Overview

Front View

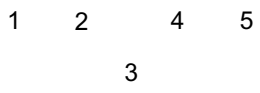


1	Ethernet Port	This is a standard 10/100 Mbps Ethernet port to connect any device via Cat 5/5e/6 RJ-45 cables.
2	Ethernet Activity	Flashes green when there is Ethernet tra c.
3	DC Power Input	5.5 mm barrel connector for power.

Top Panel

1	SMA Connector Main	SMA female connector - Primary antenna.	
2	SMA Connector AUX	SMA female connector - Auxiliary Antenna.	
3	Wall Mounts	Wall mounts for standard 8 gauge (4 mm) screws.	
4	Power	A green LED indicates the DWM-312 is receiving power.	
5	Internet	A green LED indicates Internet connectivity.	
6	Network	Solid Green	Connected to SIM A LTE Network.
		Flashing Green	Fallback to SIM A 3G/2G network.
		Solid Blue	Connected to SIM B LTE Network.
		Flashing Blue	Fallback to SIM B 3G/2G network.
		O	No Service/SIM Error/APN Error.
7	Signal	Green	Indicates strong signal.
		Amber	Indicates fair signal.
		Red	Indicates weak signal.
		O	Indicates no signal.

Rear Panel



1	SMA Connector AUX	SMA female connector - Auxiliary Antenna.
2	SIM A	Primary SIM card slot.
3	Reset	Press and hold for 3 seconds to reset.
4	SIM B	Secondary SIM card.
5	SMA Connector Main	SMA female connector - Primary antenna.

Installation

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

Before You Begin

Observe the following precautions to help prevent shutdowns, equipment failures, and personal injury:

- Install the DWM-312 in a cool and dry place. Refer to the technical speci cations in the user manual for the acceptable operating temperature and humidity ranges.
- Install the router in a site free from strong electromagnetic sources, vibration, dust, excessive moisture, and direct sunlight.
- Place antennas in an unobstructed area with clear mobile signal. Avoid metal boxes, brick walls, and other dense materials. It is recommended to use the web interface to con rm signal strength before permanent installation.
- Visually inspect the power connector and make sure that it is fully secure.
- Do not stack any devices on top of the router.

Attaching the External Antennas

The DWM-312 requires two external antennas to function correctly. The included antennas are interchangeable, but third party antennas may require connection to speci c ports.

1. Attach the antennas to the SMA connectors labelled "Main" and "Aux" on the back of the router Turn clockwise to fasten the antenna.
2. Position the router where it will recieve optimal signal. Arrange them so they point upward.

Note: The included antennas are interchangeable. Third party antennas may require connection to speci c ports.

Installing the SIM card(s)

The DWM-312 is equipped with dual-SIM slots. At least one active SIM card with Internet access is required for proper operation.

1. Insert a micro-SIM card into the slot labelled SIM A with the contacts facing down. If you wish to install a second SIM card, insert it into the slot labelled SIM B.
2. Gently press the micro-SIM into the slot until it locks into place. To remove, press again and the SIM card will be ejected.

Note: SIM behavior must be configured from the web UI before an Internet connection can be established.

Con guration

Getting Started

To access the con guration utility, open a web browser such as Internet Explorer and enter the address of the router (192.168.0.1 by default).

To log in to the con guration utility, enter the default username admin and the default password admin.

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

Once you have successfully logged in, you will see the Home page. On this page you can view information about your Internet connection, the wireless/LAN status, and system information.

At the top of the page is a menu. Clicking on one of these icons will take you to the appropriate con guration section.

On each page, ll out the desired settings and click Apply when you are done or Refresh to revert to the old settings.

Internet

WAN Service

On this page you can con gure your Internet connection. If you are not sure which settings to use, please contact your Internet Service Prov (ISP). Note that the DWM-312 requires a SIM card and active cellular internet service to connect to the Internet.

Preferred SIM Card

Prefered SIM Card: Select SIMA, SIMB, SIMA First, SIMB Backup, or SIMB First; SIMA Backup.

Selecting a single SIM card, either SIMA or SIMB will connect over a single SIM only. Selecting a backup option will change cause the connection to switch to the speci ed backup if the primary SIM cannot connect after the speci ed time.

Selecting SIM cards will cause the menu options to display according to active SIM cards, either showing SIMA, SIMB, or SIMA and SIMB. The con guration options for each are the same.

Switch Time: Select the amount of time in minutes for the router to attempt to reconnect to the primary SIM. If this time elapses, it will automatically switch to the backup.

Click Apply to save your settings, or Refresh to revert to your previous settings.

SIMA/SIMB
Network Status

Network Provider:	Shows the name of the current network provider.
Network Type:	Speci es the current network type. Indicates LTE, 3G, or 2G.
Connection Time:	Indicates the amount of time the network has been up.
Signal Strength:	Shows cellular signal strength as a percentage.
IP Type:	Shows whether the router is assigned an IPv4 or an IPv6 address.
Total DL:	Shows total downloaded bytes since last reboot.
Total UL:	Shows total uploaded bytes since last reboot.
Pro le Name:	Indicates the name of the APN pro le.
	Click Refresh to update the page.

APN Settings

Dial Up Pro le:	Select Auto-Detection to have the router automatically detect the settings for your connection. Select Manual to enter the details of your connection manually. Select Selection to choose several pre-con gured pro les, con gurable in APN Con guration on page 12.
	If you select Manual, the following options will appear:
Country/ Telecom:	Select your country and service provider to automatically ll in some of the required settings.
Username:	Fill in only if requested by ISP (optional).
Password:	Fill in only if requested by ISP (optional).
Verify Password:	Re-type your password in this eld (optional).
Dialed Number:	Enter the number to be dialed.
Authentication:	Select PAP, CHAP, or Auto detection. The default authentication method is Auto.
APN:	Enter the APN information (optional).
PIN Code:	Enter the PIN associated with your SIM card.
Primary DNS Server:	Fill in if provided by your ISP. If not, keep the default value (optional).
Secondary DNS Server:	Fill in if provided by your ISP. If not, keep the default value (optional).
	Click Apply to save your settings, or Refresh to revert to your previous settings.

APN Con guration

Item: This check box allows you to select one or more APN pro les.

Pro le Name: Indicates the name of the pro le.

APN: Indicates the access point name (APN) in use by the selected pro le.

Priority: APN pro les are prioritized by number. If one pro le does not lead to an active internet connection, the router will automatically switch to the next pro le in the queue.

Actions: Click Edit to edit the corresponding pro le, described in New/Edit APN Pro le on page 13.

Add New APN: Click Add New APN to create a new APN, described in New/Edit APN Pro le on page 13.

Delete: Click Delete to all pro les selected in the Item column.

New/Edit APN Pro le

Pro le Name:	Enter a name for the pro le.
APN:	Enter the APN to be used. This information should be provided by your ISP.
PIN Code:	If your SIM uses a PIN, enter it here.
User Name:	If your mobile connection requires a username, enter it here.
Password:	If your mobile connection requires a password, enter it here.
Priority:	Enter a priority between 1 and 4, with 1 being highest priority and 4 being lowest.
Authentication:	Select the authentication type used by your ISP.

Click Save to save your settings, or Undo to revert to your previous settings.

Connection Settings

Prefer Service Type:	Choose whether the DWM-312 should only use 4G networks, 3G networks, 2G networks, or use Auto Mode to automatically select a network.
Allow Data Roaming:	Enabling this option will allow you to connect when roaming outside your carrier's home coverage. Note: Roaming connections may incur additional fees from your service provider.
Reconnect Mode:	Choose Always when you want to establish mobile connection all the time. Choose Manual to only connect when you click Connect on the home screen. If you choose Connect-on-demand, the device will establish a mobile connection when local users want to connect to the Internet, and disconnect if there is no tra c after the time period de ned by the Maximum Idle Time setting. Note: These options are only available if SIMA Only has been selected in WAN Service on page 15.
Maximum Idle Time:	If you have chosen Connect-on-demand, enter the maximum idle time before disconnection in seconds.
IP Type:	Specify IPv4, IPv6, or IPv4/IPv6 to determine what type of IP address will be allocated by your ISP. This information should be provided by your ISP.
	Click Apply to save your settings, or Refresh to revert to your previous settings.

SIM Card Settings

SIM Status:	Indicates which SIM is currently active.
PIN Code Request function:	Enable this if you wish to set a PIN for your SIM.
Input SIM PIN Code:	If you have selected Enable for the above feature, enter your new PIN here.
PIN Attempts:	Shows the number of attempts remaining before the SIM is locked. SIM cards generally allow three attempts, after which they can only be unlocked by a PUK code provided by the ISP. For information on the con guration of your SIM card, consult your ISP or carrier.

Click Apply to save your settings, or Refresh to revert to your previous settings.

IPv4 and IPv6 info

IPv4

IP Address:	Shows the IPv4 address of the current SIM card.
Subnet Mask	Shows the subnet mark of the current SIM card.
Gateway:	Shows the gateway used by the current SIM card.
DNS Server1:	Indicates the IP address of the primary DNS server.
DNS Server2:	Indicates the IP address of the primary DNS server.

IPv6

IP Address:	Shows the IPv4 address of the current SIM card.
Gateway:	Shows the gateway used by the current SIM card.
DNS Server1:	Indicates the IP address of the primary DNS server.
DNS Server2:	Indicates the IP address of the primary DNS server.

Click Refresh to update this page.

Device Mode

Device Mode: Router Mode is the default mode, which enables NAT and DCHP. In this con guration, the DWM-312 gets an IP from the ISP, and then creates its own subnet with a private IP range.

Bridge Mode disables all DHCP, NAT, and routing functions. In this mode, the DWM-312 acts as a simple modem, and IPs are assigned directly by the ISP.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Router Mode

NAT: Select NAT or Classical. The Classical option disables the NAT rewall.

Enable: Select Enable to enable WAN keep alive. This may be useful if your provider automatically disconnects you after an idle period.

DNS Query / ICMP Checking: Specify the method for keep-alive. Choose between DNS Query or ICMP Checking.

Check Incoming/ Outgoing packet: This option cannot be changed.

Check interval: Select either 60 seconds or 120 seconds to set the interval at which the router will check for a connection.

Fail Threshold: The Failure Threshold speci es the number of retries before the WAN is assumed to be down.

Target 1: Specify a target of the DNS queries or ICMP checks. Options include DNS1, DNS2, Gateway, NTP Server which automatically use this information from other settings, or your can manually specify an address after selecting Other Host. The default is DNS1.

Target 2: In addition to the options available for Target1, you can also select None to use only the host selected in Target1.

Click Apply to save your settings, or Refresh to revert to your previous settings.

LAN

This section allows you to change the local network settings of your router and to con gure the DHCP Server settings. IPv4 and IPv6 are c seperately.

IPv4

LAN Settings

Router IP Address:	Enter the IP address you want to use for the router. The default IP address is 192.168.0.1. If you change the IP address, you will need to enter the new IP address in your browser to get into the con guration utility.
Default Subnet Mask:	Enter the subnet mask of the router. The default subnet mask is 255.255.255.0.
Local Domain Name:	Enter the local domain name for your network.
Dynamic Route:	Click this to con gure the Router Information Protocol (RIP), described on the following page.
LAN Snooping:	Click this to toggle LAN snooping, described on the following page.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Dynamic Route

RIP: Click Enable to toggle the Router Identi cation Protocol (RIP). If enabled, choose RIP1 or RIP2.

Click Save to save your settings, or the X button to revert to your previous settings.

LAN Snooping: Check Enable to enable LAN snooping.

Click Save to save your settings, or the X button to revert to your previous settings.

DHCP

The DWM-312 has a built-in DHCP (Dynamic Host Con guration Protocol) server. The DHCP server assigns IP addresses to devices on the that request them. By default, the DHCP server is enabled on the device. The DHCP address pool contains a range of IP addresses, which automatically assigned to the clients on the network.

Enable DHCP Server:	Select this box to enable the DHCP server on your router.
DHCP IP Address Range:	Enter the range of IPs for the DHCP server to use to assign IP addresses to devices on your network. These values will represent the last octet of the IP addresses in the pool.
DHCP Lease Time:	Enter the lease time for IP address assignments.
Primary DNS IP Address:	Enter the primary DNS IP address that will be assigned to DHCP clients.
Secondary DNS IP Address:	Enter the secondary DNS IP address that will be assigned to DHCP clients.
Static IP Setting:	Click Static IP Setting to assign a dedicated IP to a speci ed MAC address to be saved by the DHCP server. Select a DHCP client and click Copy to, or enter the MAC address and IP address manually, to assign the IP address to the MAC address. Click Enable to enable the rule. Click Apply to save your settings, or Refresh to revert to your previous settings.

IPv6

IPv6 Con g

IPv6: Select Enable to enable IPv6, otherwise select Disable.

IPv6 settings are con gured on the next page.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Internet Connection Type

The DWM-312 supports both SLAAC and DHCP IPv6 con guration options. Which one is used will depend on your serivce provider and net
con guration.

LAN Assigned Type:	Select DHCPv6, SLAAC+Stateless DHCP or SLAAC+RDNSS.
	If you selected DHCPv6, the following options will appear:
IPv6 Address Range(Start):	Enter the starting IPv6 address for the DHCP server's IPv6 assignment.
IPv6 Address Range (End):	Enter the ending IPv6 address for the DHCP server's IPv6 assignment.
IPv6 Address Lifetime:	Enter the IPv6 address lifetime (in seconds).
	Click Apply to save your settings, or Refresh to revert to your previous settings.

VPN

The DWM-312 supports a number of virtual private network (VPN) protocols. VPNs are used to create virtual private tunnels to remote VPN gateways. The tunnel technology supports data con dentiality, data origin authentication, and data integrity of network information encapsulation protocols, encryption algorithms, and hashing algorithms. Supported protocols as a client include: IPSec, PPTP, L2TP, and G Supported protocols as a server include PPTP and L2TP.

IPSec

VPN Settings

VPN-IPSEC: Tick this box to enable the IPSec VPN function.

Netbios over IPSEC: Tick this box to receive Netbios from Network Neighborhood.

NAT Traversal: Some NAT routers and ISPs will block IPSec packets if they don't support IPSec passthrough. If you connect to another NAT router which doesn't support IPSec passthrough on the WAN side, you need to activate this option.

Dyanmic VPN: Tick this box to enable this feature and click More to con gure VPN Dynamic IP on a separate page. Please see the next page for more details.

Tunnel Settings: Tunnel details are displayed here. Click More to con gure a new tunnel or click Disconnect to disconnect from an existing tunnel. Select the Enable checkbox to activate this rule. In tunnel settings page, you can click More under Action for detailed tunnel settings.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Dynamic VPN Settings

Enabled:	Tick this box to enable this feature and click More to con gure VPN Dynamic IP on a separate page. Please see the next page for more details.
Tunnel Name:	Enter a name for your VPN.
Local Subnet:	Enter the local (LAN) subnet. (ex. 192.168.0.0)
Local Netmask:	Enter the local (LAN) subnet mask. (ex. 255.255.255.0)
Pase1 Key Life Time:	Enter the amount of time in seconds that the Phase 1 key should last.
Phase2 Key Life Time:	Enter the amount of time in seconds that the Phase 2 key should last.
Encapsulation protocol:	Choose either ESP, AH or ESP+AH from the drop-down menu.
PFS Group:	Enable or Disable the PFS Group option using the drop-down menu. PFS is an additional security protocol.
Aggressive Mode:	Check this box to enable aggressive mode.
Preshare Key:	Enter an ASCII passphrase in the box.
Local ID:	Choose from Username, FQDN, User@FQDN, or Key ID using the drop-down menu and then enter an ID in the box.

Dynamic VPN Settings (Cont)

Dead Peer Detection (DPD):	Tick this box to enable Dead Peer Detection, then enter the time in seconds after which a peer is determined to be no longer active. You may also enter a delay period in seconds.
XAUTH:	Select Server or None. If Server has been selected, set up XAUTH user accounts in XAUTH Account on page 27.
Set IKE Proposal:	Check this box to enable IKE Proposal.
Set IPSEC Proposal:	Check this box to enable IPSec Proposal.
IKE Proposal Settings:	Use this area to Enable IKE Proposals. Then choose the Encryption and Authentication types, as well as the DH Group from the drop-down menus
IPSEC Proposal Settings:	Use this area to Enable IPSec Proposals. Then choose the Encryption and Authentication types from the drop-down menus.
	Click Apply to save your settings, or Refresh to revert to your previous settings.

XAUTH Account

If you have con gured an IPSec server on the previous page, enter XAUTH account information for clients here.

Username: Enter an XAUTH username for users to connect to your IPSec server.

Password: Enter a password corresponding to the username for users to connect to your IPSec server.

Click Apply to save your settings, or Refresh to revert to your previous settings.

PPTP

PPTP Server

Server Seup: Check this box to enable the DWM-312's internal PPTP server. If enabled, the following options will appear:

Authentication Type: Select one or more authetication types for the server, either PAP, CHAP, MS_CHAP, or MS_CHAP2. Note that PAP and CHAP are not compatible with encryption.

Server Virtual IP: Enter the address assigned to the server within the VPN. This will dictate the IP pool for clients.

IP Pool Start Address: Input the starting address for the server's IP pool, from 1 to 254.

IP Pool End Address: Input the end address for the server's IP pool from 1 to 254. Note that this number must be higher than the start address.

Encryption: Check this box to enable PPTP encryption.

Encryption Length: Specify the length of the encryption key.

User Account Setting: Up to 5 user accounts can be created for VPN access. Specify the user names and passwords that will be used to connect to the VPN server. Note that user names and passwords are visible to any adminstrator.

PPTP Server

Connection Status: This table describes the connection status of each client, displayed in detail below.
User Name: The user name that the client has used to connect to the VPN network.
Peer IP: The "real" IP of the client.
Virtual IP: The client's IP address within the virtual network.
Peer Call ID: Used to identify and associate a tunnel with a packet.
Operation: Click Disconnect to disconnect a speci c client.

Click Apply to save your settings, or Refresh to revert to your previous settings.

PPTP Client

VPN-PPTP Client:	Check Enable to enable the router to act as a PPTP client. If enabled, the following options will appear:
ID:	Indicates the internal ID of the PPTP account for reference in the Connection Status table.
Name:	Specify a name for the PPTP account for reference in the Connection Status table. This name is for reference only and does not a ect functionality.
Peer IP/Domain:	Enter the IP address or domain of your VPN server.
User Name:	Enter the user name provided to you by your VPN operator.
Password:	Enter the password provided to you by your VPN operator.
Route:	Enter the route to which to bind the VPN tunnel.
Connect:	Select On Demand, Auto, or Manual.
Option:	Check the appropriate boxes to support Microsoft Point-to-Point Encryption (MPPE) and Network Address Translation (NAT).
Enable:	Check this box to enable the VPN client.

PPTP Client (Cont)

Connection Status

This table displays information about currently active tunnels.

ID: Displays the numeric ID of the tunnel.
Tunnel Name: Displays the name of the tunnel.
Virtual IP: Lists the IP assigned by the tunnel.
Remote IP: Lists the IP of the VPN server.
Status: Displays the current connection status of the VPN tunnel.

Click Apply to save your settings, or Refresh to revert to your previous settings.

L2TP

L2TP Server

Server Setup:	Check this box to enable the DWM-312's internal L2TP server. If enabled, the following options will appear:
Authentication Type:	Select one or more authentication types for the server, either PAP, CHAP, MS_CHAP, or MS_CHAP2. Note that PAP and CHAP are not compatible with encryption.
Server Virtual IP:	Enter the address assigned to the server within the VPN. This will dictate the IP pool for clients.
IP Pool Start Address:	Input the starting address for the server's IP pool, from 1 to 254.
IP Pool End Address:	Input the end address for the server's IP pool from 1 to 254. Note that this number must be higher than the start address.
Encryption:	Check this box to enable L2TP encryption.
Encryption Length:	Specify the length of the encryption key.
User Account Setting:	Up to 5 user accounts can be created for VPN access. Specify the user names and passwords that will be used to connect to the VPN server. Note that user names and passwords are visible to any administrator.

L2TP Server (Cont)

Connection Status: This table describes the connection status of each client, displayed in detail below.

User Name: The user name that the client has used to connect to the VPN network.

Peer IP: The "real" IP of the client.

Virtual IP: The client's IP address within the virtual network.

Peer Call ID: Used to identify and associate a tunnel with a packt.

Operation: Click Disconnect to disconnect a speci c client.

Click Apply to save your settings, or Refresh to revert to your previous settings.

L2TP Client

VPN-PPTP Client:	Check Enable to enable the router to act as a L2TP client. If enabled, the following options will appear:
ID:	Indicates the internal ID of the L2TP account for reference in the Connection Status table.
Name:	Specify a name for the L2TP account for reference in the Connection Status table. This name is for reference only and does not a ect functionality.
Peer IP/Domain:	Enter the IP address or domain of your VPN server.
User Name:	Enter the user name provided to you by your VPN operator.
Password:	Enter the password provided to you by your VPN operator.
Route:	Enter the route to which to bind the the VPN tunnel.
Connect:	Select On Demand, Auto, or Manual.
Option:	Check the appropriate boxes to support Microsoft Point-to-Point Encryption (MPPE) and Network Address Translation (NAT)
Enable:	Check this box to enable the VPN client.

L2TP Client (cont)

Connection Status

This table displays information about currently active tunnels.

ID: Displays the numeric ID of the tunnel.
Tunnel Name: Displays the name of the tunnel.
Virtual IP: Lists the IP assigned by the tunnel.
Remote IP: Lists the IP of the VPN server.
Status: Displays the current connection status of the VPN tunnel.

Click Apply to save your settings, or Refresh to revert to your previous settings.

GRE

The Generic Routing Encapsulation protocol (GRE) can be used to create tunnels to compatible servers similar to IPSec.

ID: Displays the numeric ID of the tunnel.

Name: Enter the name of the IP tunnel for reference.

Tunnel IP: Enter the IP used to connect to the tunnel (optional).

Peer IP: Enter the remote IP of the GRE gateway. This is normally a public IP address.

Key: Enter a key for the GRE connection.

TTL: Speci es the time to live in number of hops, up to 255.

Subnet: Specify a gateway to reach the GRE server. Specify a subnet (e.g. 10.0.0.2/24).

Enable: Check this box to enable the GRE tunnel.

Default Gateway: Select a default gateway from the drop down list.

Tunnels Information: This table displays information about currently active tunnels.

ID: Displays the numeric ID of the tunnel
Transmitted Packets: Displays the number of packets sent.
Transmitted Bytes: Displays the number of bytes sent.
Received Packets: Displays the number of packets received.
Received Bytes: Displays the number of bytes received.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Advanced
DNS

On this page you can con gure the Domain Name System (DNS) server, which manages the resolution of host/domain names to IP address

DNS

This page allows you to con gure Dynamic DNS (DDNS) services to more easily gain remote access to your router.

DDNS:	Tick this check box to enable the DDNS feature.
Provider:	Select a DDNS service provider to use.
Host Name:	Enter the Host Name that you registered with your DDNS service provider.
Username / E-mail:	Enter the Username for your DDNS account.
Password / Key:	Enter the Password for your DDNS account.
	Click Apply to save your settings, or Refresh to revert to your previous settings.

DNS Redirect

DNS Redirect causes all DNS requests to reply with a single address, resulting in all tra c using the local DNS resolver to be redirected toa location.

Enable DNS Redirect:	Select Enable to enable DNS redirect.
DNS Redirect IP Address:	Enter the IP that should be returned whenever a DNS request is sent to the router. All URLs queried through the router's DNS will redirect to the same location.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Firewall

Outbound Filter

Outbound Filter enables you to control what packets are allowed to be sent out to the Internet. The outbound lter applies to all outbound p

Outbound Filter: Select this box to enable outbound ltering.

Use Schedule Rule: Select a schedule to use and copy to the speci ed rule ID when you click the Copy to button. You may select Always On or use a speci c schedule that you have de ned. To create and edit schedules, please refer to Schedules on page 40.

OUTBOUND FILTER RULES LIST

Here, you can select whether to Allow or Deny all outgoing tra c except for tra c that matches the listed rules.

ID: This identi es the rule.

Source IP : Ports: Specify the local IP address and then specify the port after the colon.

Destination IP : Ports: Specify the remote IP address and then the port after the colon.

Enable: Check the box to enable the speci ed rule.

Schedule Rule #: Specify the schedule rule number. Click on the Add New Rule button to create a new schedule rule.

Previous Page: Click to go back to the previous lter page.

Next Page: Click to advance to the next lter page.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Inbound Filter

Inbound Filter enables you to control what packets are allowed to come in to your network from the Internet. The inbound lter onl packets that are destined for Virtual Servers or DMZ hosts.

Inbound Filter: Select this box to enable the lter.

Use Schedule Rule: Select a schedule to use and copy to the speci ed rule ID when you click the Copy to button. You may select Always On or use a speci c schedule that you have de ned. To create and edit schedules, please refer to Schedules on page 41.

INBOUND FILTER RULES LIST

Here, you can select whether to Allow or Deny all incoming tra c except for tra c that matches the listed rules.

ID: This identi es the rule.

Source IP : Ports: Specify the local IP address and then specify the port after the colon.

Destination IP : Ports: Specify the remote IP address and then the port after the colon.

Enable: Check the box to enable the speci ed rule.

Schedule Rule #: Specify the schedule rule number. Click on the Add New Rule button to create a new schedule rule.

Previous Page: Go back to the previous lter page.

Next Page: Advance to the next lter page.

Click Apply to save your settings, or Refresh to revert to your previous settings.

URL Filter

URL Filter allows you to set up a list of websites that will be blocked from users on your network.

URL Filtering: Check the box to enable URL Filtering.

URL FILTERING RULES

ID: This identi es the rule.

URL: Enter a URL that you would like to block. All URLs that begin with this string will be blocked.

Enable: Check the box to enable the speci ed rule.

Click Apply to save your settings, or Refresh to revert to your previous settings.

MAC Address Filter

The MAC (Media Access Controller) Address Filter option is used to control network access based on the MAC address of the network adap
A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be con gured to ALLOW or DENY net
Internet access.

MAC Address Control: Tick this box to enable MAC Filtering.

Connection Control: Check the box to allow wireless and wired clients with C selected to connect to this device. You can also select to allow or deny connections from unspeci ed MAC addresses.

MAC FILTERING RULES

ID: This identi es the rule.

MAC Address: Specify the MAC address of the computer to be ltered.

C: If this box is ticked, the rule will follow the connection control setting speci ed in MAC ltering settings speci ed above.

Click Apply to save your settings, or Refresh to revert to your previous settings.

DMZ

A Demilitarized Zone (DMZ) directly exposes a single client device to the outside world for certain types of applications. If you choose to exp
computer, you can enable a DMZ.

Enable SPI: Enabling Stateful Packet Inspection (SPI) helps to prevent cyber attacks by validating that the tra c passing through the session conforms to the protocol.

Enable DMZ: If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

Note: Placing a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is recommended for advanced users only.

DMZ IP Address: Specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication. If this computer obtains its IP address automatically using DHCP, be sure to make a static reservation on the Setup > Network Settings page so that the IP address of the DMZ machine does not change.

Click Apply to save your settings, or Refresh to revert to your previous settings.

QoS

The QoS Engine improve the performance of certain bandwidth or latency-sensitive applications by ensuring that your such tra c over other network tra c, such as FTP or web. For best performance, use the Automatic Classi cation option to automatically set the priority your applications.

Enable QOS Packet Filter: Select this box to enable the QoS feature.

Upstream Bandwidth: Specify the maximum upstream bandwidth here (e.g. 400 Kbps).

Use Schedule Rule: Select a schedule to use and copy to the speci ed rule ID when you click the Copy to button. You may select Always On or use a speci c schedule that you have de ned. To create and edit schedules, please refer to Schedules on page 45.

QOS RULES

ID: This identi es the rule.

Local IP : Ports: Specify the local IP address(es) and port(s) for the rule to a ect.

Remote IP : Ports: Specify the remote IP address(es) and port(s) for the rule to a ect.

QoS Priority: Select what priority level to use for tra c a ected by the rule: Low, Normal, or High.

Enable: Check the box to enable the speci ed rule.

Use Rule #: Specify the schedule rule number. To create a new schedule, click on the Add New Rule button. For more information about schedules, please refer to Schedules on page 45.

Click Apply to save your settings, or Refresh to revert to your previous settings.

SNMP

SNMP (Simple Network Management Protocol) is a widely used network monitoring and control protocol that reports activity on e
device to the administrator of the network. SNMP can be used to monitor tra c and statistics of the DWM-312. The DWM-312 supports SNM
v2c, and v3. D-View software uses the SNMP protocol. For details on managing your device with D-View, see the D-View Manual.

SNMP Local: Select whether to Enable or Disable local SNMP administration.

SNMP Remote: Select whether to Enable or Disable remote SNMP administration.

Get Community: Enter the password public in this eld to allow read-only access to network administration using SNMP. You can view the network, but no con guration is possible with this setting.

Set Community: Enter the password private in this eld to enable read/write access to the network using SNMP.

IP 1/IP 2/IP 3/IP 4: Enter up to 4 IP addresses to use as trap targets for your network.

SNMP Version: Select the SNMP version of your system.

WAN Access IP Address: If you want to limit remote access SNMP access, enter the IP address of the remote computer you will use to access this device; all other IP addresses will be denied remote SNMP access.

System Contact: Enter a contact point for the system for reference.

System Name: Enter the system name for reference.

System Location: Enter the system location for reference.

User Privacy De nition

User accounts can be de ned for SNMP remote access. Click Edit to change settings. Up to ve users can be added.

SNMP (Cont)

ID:	Indicates the ID of the user account.
User Name:	Enter the user name of the account.
Password:	Enter the password of the account.
	Note: Passwords are stored in plaintext and are visible to anyone with access to the web UI.
Authentication:	If authNoPriv or authPriv is selected under Privacy Mode, choose SHA1 or MD5 authentication.
Encryption:	If authPriv is selected under Privacy Mode, DES encryption is available.
Privacy Mode:	Select NoauthNoPriv for no authentication and no encryption, authNoPriv for authentication only, and authPriv to use both authentication and encryption.
Privacy Key:	If encryption is enabled, enter a key between 8 and 27 ASCII characters in length.
Authority:	Select Read to allow this user read-only access to con guration, or Read/Write to enable full read-write access.
Enable:	Check Enable to activate the user account. Uncheck to disable the user account.
Actions:	Click Edit to make changes to the corresponding account.
	Click Apply to save your settings, or Refresh to revert to your previous settings.

Virtual Server

The device can be con gured as a virtual server so that users can access services such as Web or FTP via the public (WAN) IP address of
You can also allow the settings to run on a speci ed schedule.

Well-known Services: This contains a list of pre-de ned services. You can select a service, select a rule ID, then click the Copy to button to copy the default settings for that service to the speci ed rule ID.

ID: Speci es which rule to copy the selected Well known service settings to when you click the Copy to button.

Use schedule rule: Select a schedule to use and copy to the speci ed rule ID when you click the Copy to button. You may select Always On or use a speci c schedule that you have de ned. To create and edit schedules, please refer to Schedules on page 48.

VIRTUAL SERVERS LIST

ID: This identi es the rule.

Service Ports Enter the public port(s) you want to open.

Server IP: Port: Enter the IP address and port of the computer on your local network that you want to forward the Service Ports to.

Enable: Check the box to enable the speci ed rule.

Schedule Rule #: Specify the schedule rule number. To create schedules, click on the Add New Rule button. For further information on schedules, please refer to Schedules on page 48.

Click Apply to save your settings, or Refresh to revert to your previous settings.

UPnP

Enable UPnP: Check the box to enable the Universal Plug and Play (UPnP™) feature. UPNP provides compatibility with various networking equipment, software, and peripherals.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Network Scan

This page lets you set whether to allow the DWM-312 to automatically select a 3G/4G network based on the inserted SIM card, or allows yo manually scan for networks and select one to connect to.

Scan Approach: Leave this setting on Auto to allow the DWM-312 to automatically select a cellular network to connect to. If you need to select a network manually, select Manual, and the following options will appear:

Network Provider List

Scan: Click Scan to load the list of network providers.

Register: Allows you to register on the selected network.

Provider Name: The name of the detected cellular carrier.

Mobile System: Indicates whether the network is using 2G, 3G, or 4G technology.

Network Status: Indicates the status of the network.

Action: Check the box corresponding to the network you wish to register on, and then click Register.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Note: You will only be able to scan for networks if the device is set to single SIM mode in WAN Service on page 50, as well as having Reconnect Mode set to Manual in Connection Settings on page 50.

Email Settings

Email Settings allow you to send the system log les, router alert messages, and rmware update noti cations to an e-mail address.

Enable Email Noti cation:	When this option is enabled, router activity logs will be e-mailed to the speci ed e-mail address.
SMTP Sever IP and Port:	Enter the SMTP server IP address the router will use to send e-mails. Enter the complete IP address followed by a colon(:) and the port number. (e.g. 123.123.123.1:25).
SMTP Username:	Enter the username for the SMTP account.
SMTP Password:	Enter the password for the SMTP account.
Send Email alert to:	Enter the email address where you would like the router to send e-mails to.
Email Subject:	Enter a subject for the e-mail.
Email Log Now:	Click this button to send the current logs to the speci ed e-mail address.
	Click Apply to save your settings, or Refresh to revert to your previous settings.

System Administration

Password Settings

The Admin page allows you to change the Administrator password and enable Remote Management. The admin has read/write access w
only have read-only access. Only the admin has the ability to change both admin and user account passwords.

Old Password:	Enter the current admin password.
New Password:	Enter the new admin password.
Con rm Password:	Reenter the new password to con rm.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Remote Login Settings

Enable Remote Management: Tick this check box to enable remote management. Remote management allows the DWM-312 to be con gured over the Internet through a web browser. A username and password will still be required to access the web-management interface.

IP Allowed to Access: Enter the Internet IP address of the PC that has access to the broadband router. If you enter an asterisk (*) in this eld, then anyone will be able to access the router. Adding an asterisk (*) into this eld could present a security risk and is not recommended.

Port: This is the port number used to access the router. 443 is the port usually used for the HTTPS web-management interface. Select 443, 88, 1080, or Manual to enter one manually.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Con guration Backup

Here, you can save the current system settings to a local hard drive.

Save Settings To Local Hard Drive:	Use this option to save your current router con guration settings to a le. Click Save to open a le dialog, and then select a location and le name for the settings.
Load Settings From Local Hard Drive:	Use this option to load previously saved router con guration settings. Click Browse... and select the saved le and then click the Upload Settings button to upload the settings to the router.
Restore To Factory Default Settings:	This option will restore all settings back to their defaults. Any settings that have not been backed up will be lost, including any rules that you have created.

SMS

SMS Inbox

This page shows all messages that are stored on the SIM card. Select a message to display its contents in the SMS window. After you read
can delete it, or reply to the sender. Click the Refresh button to update the list.

Delete: Deletes the selected SMS message(s).

Reply: Opens a Create Message window to reply to the selected SMS message.

Forward: Opens a Create Message windows to forward the selected SMS message to another recipient.

Refresh: Click this button to check for new messages.

Compose SMS

This page allows you to send an SMS message. Enter the phone number of the recipient, and type the content of message. Then click the S
Message button to send this message. To add more than one recipient, put a semicolon (;) between each of the phone numbers.

Receiver: Type the phone number of the recipient.

Text Message: Type the message that you would like to send.

Click Send to send your message, or Refresh to clear the message.

Message Settings

The DWM-312 can be managed remotely over SMS. Get status updates, manage connections, and reboot remotely with a single text. Rece continuous updates about connectivity status. Access control lists and security keys can help protect your router from unwanted r management. Once remote management is con gured, you can send SMS messages to the router's phone number in the following format: <security Key> <command>. For example, if your security key were "12345" and you wanted to reboot the router, you would send an SMS t router's phone number with the contents 12345 reboot. Note that commands must be either lower case, upper case, or with only the rst lette capitalized.

Note: SMS messages may incur fees from your operator.

Remote Management via SMS: Select Enable to enable SMS remote management. The default is Disable.

Delete SMS for Remote management: Select Enable to delete SMS messages related to remote management from the inbox once they are processed. The default is Disable.

Security Key: If you have enabled Remote Management via SMS, you will have the option to add a security key, which is sent at the beginning of the message. The key is case-sensitive.

Note: The security key is not encrypted, and all messages to and from the router are sent in plaintext.

Command Settings

Status: Select Enable and send the Status command over SMS to receive a message with the WAN IP, current networks, and connection time.

Connect: Select Enable to use the Connect command to have the router connect to the mobile network.

Message Settings (Cont)

Disconnect: Select Enable to use the Disconnect command to have the router disconnect from the mobile network.

Reconnect: Select Enable to use the Reconnect command to have the router cycle the mobile connection o and then back on again.

Reboot: Select Enable to use the Reboot command to have the router initiate a reboot.

Noti cation Settings

WAN Link Up: Select Enable to receive SMS noti cations when the WAN Link is up. These noti cations will be sent to numbers speci ed in the access control list.

WAN Link Down: Select Enable to receive SMS noti cations when the WAN Link is down.

Access Control Settings

Access Control: Select Enable to input phone numbers. When enabled, the router will accept SMS commands only from those phone numbers which have the Management option selected. Additionally, the router will send any noti cation messages to any numbers with the Noti cation option selected.

Note: The access control settings rely on caller-ID information provided by the phone system, and contain no additional authentication or encryption tools.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Time Settings

This section will help you set the time zone that you are in and an NTP (Network Time Protocol) server to use. Daylight Saving can also be to adjust the time when needed.

Time Zone:	Select the appropriate time zone from the drop-down box.
Enable Daylight Saving:	Check the box to allow for daylight saving adjustments. Use the drop-down boxes to specify a start date and end date for daylight saving time adjustments.
Automatically synchronize with Internet time server:	Check the box to allow the router to use an NTP server to update the router's internal clock.
NTP Server Used:	Enter an NTP server to use for time synchronization, or use the drop-down box to select one. Click the Update Now button to synchronize the time with the NTP server.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Firmware Upgrade

Device Upgrade

Here, you can upgrade the rmware of your router. The DWM-312 provides support for both Firmware Over the Air and for manual upgrades a manual upgrade, make sure the rmware you want to use is on the local hard drive of the computer and then click Browse to upload the le You can check for and download rmware updates at the D-Link support site at http://support.dlink.com.

Current Firmware Version: Displays your current rmware's version.

Check File: Queries the remote server to check for a rmware update over the Internet. If one is available, it will be displayed below.

Update: This button will appear if Check File nds new rmware. Click this button to begin the update process.

Warning: Do not unplug or power o the device while the update is in progress.

Current Firmware Date: Displays your current rmware's release date.

Upgrade: Use this option if you wish to manually install rmware. After you have downloaded a new rmware le, click Browse to locate the rmware on your computer, then click Upgrade to start the rmware upgrade.

Accept uno cial Firmware: If the rmware you want to install is not an o cial D-Link release, you will need to check this box.

Warning: Uno cial rmware is not supported, and may cause damage to your device. Use of uno cial rmware is at your own risk.

Module Upgrade

This section allows you to perform an upgrade of the cellular module's rmware, separate from the router rmware. For this option, only Firmw
Over the Air (FOTA) is supported.

Current Firmware Version: Displays your current rmware's version.

Check File: Queries the remote server to check for a rmware update over the Internet. If one is available, it will be displayed below.

Update: This button will appear if Check File nds new rmware. Click this button to begin the update process.

Warning: Do not unplug or power o the device while the update is in progress.

System Log

The DWM-312 keeps a running log of events and activities occurring on the router. You may send these logs to a Syslog server on your n

Enable Logging to Syslog Server:	Check the box to send the router logs to a Syslog server.
Syslog Server IP Address:	Enter the IP address of the Syslog server that the router will send the logs to.
	View Logs
Previous Page:	Click to go to the previous page of logs.
Next Page:	Click to go to the next page of logs.
First Page:	Click to go to the rst page of logs.
Last Page:	Click to go to the last page of logs.
Download:	Click to download a text le with all log entries.
Clear logs:	Click this button to clear all logs.
	Click Apply to save your settings, or Refresh to revert to your previous settings.

Schedules

This section allows you to manage schedule rules for various rewall and parental control features. Click Apply to save your settings, or Refr
revert to your previous settings.

Enable Schedule:	Check this box to enable schedules.
Edit:	Click this icon to edit the selected rule. (see below)
Delete:	Click this icon to delete the selected rule.
Previous Page:	Click this button to go to the previous page of rules.
Next Page:	Click this button to go to the next page of rules.
	Click this button to specify the start time, end time, and name of the rule.
Add New Rule..:	Click this button to create a new rule. (see below)

Add New Rule

Name of Rule #:	Enter a name for your new schedule.
Policy:	Select Activate or Inactivate to decide whether features that use the schedule should be active or inactive except during the times speci ed.
Week Day:	Select a day of the week for the start time and end time.
Start Time (hh:mm):	Enter the time at which you would like the schedule to become active.
End Time (hh:mm):	Select the time at which you would like the schedule to become inactive.

Reboot and Reset

Reboot the Device

Reboot the Device:	Click Reboot to reboot the device.

Connection Reset

This feature allows you to reset the Internet connection on your router by periodically resetting the connection. You can choose to have this on a predetermined schedule by con guring the options on this page.

Auto-Reboot:	Select whether the connection reset feature should be enabled or disabled.
Reboot-Schedule:	If the connection reset feature is enabled, select the hour and minute it should be triggered using the dropdown boxes.
Daily Schedule:	Select this option if you want the connection reset feature to activate on a daily schedule.
Weekly Schedule Day of Week:	Select this option if you want the connection reset feature to activate only on a certain day of the week.
Date of Month:	Select this option if you want the connection reset feature to activate only on a certain day of the month.

Click Apply to save your settings, or Refresh to revert to your previous settings.

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DWM-312 following descriptions if you are having problems. The examples below are illustrated in Windows® XP. If you have a di operating system, the screenshots on your computer will look similar to these examples.

1. Why can't I access the web-based con guration utility?

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

• Make sure you have an updated Java-enabled web browser. We recommend the following:

- Microsoft Internet Explorer® 7 or higher
- Mozilla Firefox 3.5 or higher
- Google™ Chrome 8 or higher
- Apple Safari 4 or higher

• Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try di erent cable, or connect to a di erent port on the device if possible. If the computer is turned o , the link light may no be on.

• Disable any Internet security software running on the computer. Software rewalls such as ZoneAlarm, BlackIC Norton Personal Firewall, and Windows® XP rewall may block access to the con guration pages. Check the help with your rewall software for more information on disabling or con guring it.

• Con gure your Internet settings:

  • Go to Start > Settings > Control Panel. Double-click the Internet Options Icon. From the Security tab, cli
    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 b
  should open the login page for your web management.

• If you still cannot access the con guration, unplug the power to the router for 10 seconds and plug back in. Wait about
  seconds and try accessing the con guration. If you have multiple computers, try connecting using a di erent c

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 de

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperc
to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait abou
seconds to access the router. The default IP address is 192.168.0.1. When logging in, leave the password box empty.

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

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

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

- Click on Start and then click Run.
- Windows® 95, 98, and Me users type in command (Windows® NT, 2000, XP, Vista®, and 7 users type in cmd) and press Enter (or click OK).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

  ping [url] [-f] [-l] [MTU value]

Example: ping yahoo.com -f -l 1472

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 frag
packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, lets say that 1452 was
proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with (1452+28=1

Once you nd your MTU, you can now con gure your router with the proper MTU size.

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

- Navigate to the Internet con guration page (see Internet on page 69 for details).
- To change the MTU, enter the number in the MTU eld and click Apply to save your settings.
- Test your email. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

Networking Basics

Check your IP address

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

Click on Start > Run. In the run box type cmd and click OK. (Windows® 7/Vista® users type cmd in the Start Search bo

At the prompt, type ipcon g 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 rewall software programs may block a DHCP
request on newly installed adapters.

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

Step 1
Windows® 7 - Click on Start > Control Panel > Network and Internet > Network and Sharing Center.
Windows Vista® - Click on Start > Control Panel > Network and Internet > Network and Sharing Center > Mana
Connections.
Windows® XP - Click on Start > Control Panel > Network Connections.
Windows® 2000 - From the desktop, right-click My Network Places > Properties.

Step 2
Right-click on the Local Area Connection which represents your network adapter and select Properties.

Step 3
Highlight Internet Protocol Version 4 (TCP/IPv4) and click Properties.

Step 4
Click Use the following IP address and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router´s LAN IP address is 192.168.0.1, make your IP address 192.168.1.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set the Default Gateway the same as the LAN IP address of your router (I.E. 192.168.0.1).

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

Step 5
Click OK twice to save your settings.

Technical Speci cations

Mobile Network Support [2]	• North America
	  • LTE Cat. 4 Bands 2/4/5/12/13/17
	  • UMTS/HSPA 2/5, 850/1900 Mhz
	• World Wide
	  • LTE Cat. 4 Bands 1/2/3/5/7/8/20/28/38/40
	  • UMTS/HSPA 1/2/5/8, 850/900/1900/2100 Mhz
		• Japan
		  • LTE Cat. 3 Bands 1/3/5/8/9/18/19/21
		  • UMTS 1/6/8/19, 800(19)/800(6)/900/2100 Mh
		• All regions
		  • Quadband GSM

Data Throughput [1]	• LTE Throughput
	  • NA and WW: Up to 150 Mbps down/50 Mbps Up
	  • JP: Up to 100 Mbps down/50 Mbps Up
		• All Regions
		  • HSPDA-DC up to 42 Mbps down/5.76 Mbps
		  • Quadband EDGE up to 236.8 kbps

Device Interfaces	• 1 x 10/100 Fast Ethernet WAN port • 1 x 5.5 mm DC input	• 2 x SMA (antenna connectors) • Dual Micro-SIM slots
Standards	• IEEE 802.3i	• IEEE 802.3u
Advanced Features	• QoS engine (Quality of Service) • L2TP/PPTP/IPSec VPN Client/Server modes • SNMP and D-View 7 Support	• Firmware over the air (FOTA) upgrades • Web-based UI • TR-069 CPE WAN Management Protocol
LED Status Indicators	• Power • Internet Connectivity • Network Status	• Signal Strength • Ethernet
Power	• 5V/2A adapter	• Flexible input: DC 5V/2A ~ 18V/0.7A
Enclosure	• Corrosion-resistant zinc-plated steel	
Dimensions	• 93 x 70 x 23.6 mm (3.66 x 2.76 x 0.92 in)	
Weight	• 210 g (7.41 oz)	
Temperature	• Operating: -20 to 60 ˚C (-4 to 140 ˚F) [3]	• Storage : -40 to 85 ˚C (-40 to 185 ˚F) [3]
Humidity	• Operating: 5% to 85% non-condensing	• Storage: 0% to 95% non-condensing
Certifications	• RoHS • CE • FCC	• TELEC (optional) • JATE (optional)

Appendix B - Technical Speci cations

Part Number	Description
DWM-312	4G LTE M2M Router

[1] Data rates are theoretical. Data transfer rate depends on network capacity, signal strength, and environmental factors.
[2] Available frequencies and speeds vary and may not be available in all regions.
[3] Default power adaptor operating temperature range limited to 0 to 40 °C (32 to 104 °F). An optional power adaptor supports 20 to 60 °C (-4 to 140 °F).
Updated 2017/05/16

Regulatory Information

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Thes
are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates
can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to rad
communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause har
interference to radio or television reception, which can be determined by turning the equipment o and on, the user is encouraged to try to
correct the interference by one of the following measures:

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

Non-modi cations Statement:

Any changes or modi cations not expressly approved by the party responsible for compliance could void the user's authority to operate this
equipment.

Caution:

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

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

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordanc
with FCC multi-transmitter product procedures. For product available in the USA/Canada market, only channel 1~11 can be operated. Selec
of other channels is not possible.

Note

The country code selection is for non-USA models only and is not available to all USA models. Per FCC regulations, all WiFi product marke
the USA must be xed to USA operational channels only.

Appendix C - Regulatory Information

IMPORTANT NOTICE:

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be operated with minimum distance 20 cm between the radiator and your body.

NCC 警語 ：

以下警語適用台灣地區
依據 低功率電波輻射性電機管理辦法

第十二條: 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或
能。

第十四條: 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善
用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用
擾。

電磁波曝露量MPE標準值(MPE) 0.9 mW/㎠ 送測產品實值為 0.0738 mW/㎠

減少電磁波影響，請妥適使用。

European Community Declaration of Conformity:

Česky [Czech]	Tímto D-Link Corporation prohlašuje, že tento produkt, jeho příslušenství a software jsou v souladu se sm 2014/53/EU. Celý text ES prohlášení o shodě vydaného EU a o rmwaru produktu lze stáhnout na stránká produktu www.dlink.com.
Dansk [Danish]	D-Link Corporation erklærer herved, at dette produkt, tilbehør og software er i overensstemmelse 2014/53/EU. Den fulde tekst i EU-overensstemmelseserklæringen og produkt rmware kan wnload produktsiden hos www.dlink.com.
Deutsch [German]	Hiermit erklärt die D-Link Corporation, dass dieses Produkt, das Zubehör und die Software der Richtlinie 2 EU entsprechen. Der vollständige Text der Konformitätserklärung der Europäischen Gemeinschaf Firmware zum Produkt stehen Ihnen zum Herunterladen von der Produktseite im Internet auf ww Verfügung.
Eesti [Estonian]	Käesolevaga kinnitab D-Link Corporation, et see toode, tarvikud ja tarkvara on kooskõlas direktiiviga 2014 Euroopa Liidu vastavusdeklaratsiooni täistekst ja toote püsivara on allalaadimiseks saadaval toote com.
English	Hereby, D-Link Corporation, declares that this product, accessories, and software are in compliance with 2014/53/EU. The full text of the EU Declaration of Conformity and product rmware are available for downl from the product page at www.dlink.com
Español [Spanish]	Por la presente, D-Link Corporation declara que este producto, accesorios y software cumplen con las dir 2014/53/UE. El texto completo de la declaración de conformidad de la UE y el rmware del producto están disponibles y se pueden descargar desde la página del producto en www.dlink.com.
Ελληνική [Greek]	Με την παρούσα, η D-Link Corporation δηλώνει ότι αυτό το προϊόν, τα αξεσουάρ και το λογισ ικό συ ορφώνονται ε την Οδηγία 2014/53/ΕΕ. Το πλήρε κεί ενο τη δήλωση συ όρφωσ υλικολογισ ικό του προϊόντο είναι διαθέσι α για λήψη από τη σελίδα του προϊόντο στην τοποθεσία www.dli com.
Français [French]	Par les présentes, D-Link Corporation déclare que ce produit, ces accessoires et ce logiciel sont conform directives 2014/53/UE.Le texte complet de la déclaration de conformité de l'UE et le icroprogramme du pr sont disponibles au téléchargement sur la page des produits à www.dlink.com.
Italiano [Italian]	Con la presente, D-Link Corporation dichiara che questo prodotto, i relativi accessori e il software sono co alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE e il rmware del pr disponibili per il download dalla pagina del prodotto su www.dlink.com.

Latviski [Latvian]	Ar šo uzņēmums D-Link Corporation apliecina, ka šis produkts, piederumi un programmatūra atbilst direkt 2014/53/ES. ES atbilstības deklarācijas pilno tekstu un produkta aparātprogrammatūru var lejupie produkta lapā vietnē www.dlink.com.
Lietuvių [Lithuanian]	Šiuo dokumentu „D-Link Corporation" pareiškia, kad šis gaminys, priedai ir programinė įranga atitinka dire 2014/53/ES. Visą ES atitikties deklaracijos tekstą ir gaminio programinę aparatinę įrangą galima atsisiųsti puslapio adresu www.dlink.com.
Nederlands [Dutch]	Hierbij verklaart D-Link Corporation dat dit product, accessoires en software voldoen aan de richtl EU. De volledige tekst van de EU conformiteitsverklaring en product rmware is beschikbaar voor downloa productpagina op www.dlink.com.
Malti [Maltese]	Bil-preżenti, D-Link Corporation tiddikjara li dan il-prodott, l-aċċessorji, u s-software huma konform 2014/53/UE. Tista' tniżżel it-test sħiħ tad-dikjarazzjoni ta' konformità tal-UE u l- rmware tal-prodott mill-paġ prodott fuq www.dlink.com.
Magyar [Hungarian]	Ezennel a D-Link Corporation kijelenti, hogy a jelen termék, annak tartozékai és szoftvere megfelelnek a 2 EU sz. rendeletek rendelkezéseinek. Az EU Megfelelőségi nyilatkozat teljes szövege és a termék rmware oldaláról tölthető le a www.dlink.com címen.
Polski [Polish]	D-Link Corporation niniejszym oświadcza, że ten produkt, akcesoria oraz oprogramowanie są zgodne z dyrektywami 2014/53/EU. Pełen tekst deklaracji zgodności UE oraz oprogramowanie sprzętowe d można pobrać na stronie produktu w witrynie www.dlink.com.
Português [Portuguese]	Desta forma, a D-Link Corporation declara que este produto, os acessórios e o software estão em conform com a diretiva 2014/53/UE. O texto completo da declaração de conformidade da UE e do rmware
Slovensko[Slovenian]	Podjetje D-Link Corporation s tem izjavlja, da so ta izdelek, dodatna oprema in programska oprema skla direktivami 2014/53/EU. Celotno besedilo izjave o skladnosti EU in vdelana programska oprema sta na vo prenos na strani izdelka na www.dlink.com.
Slovensky [Slovak]	Spoločnosť D-Link týmto vyhlasuje, že tento produkt, príslušenstvo a softvér sú v súlade so smernicou 21 EÚ. Úplné znenie vyhlásenia EÚ o zhode a rmvéri produktu sú k dispozícii na prevzatie zo stránky produk dlink.com.
Suomi [Finnish]	D-Link Corporation täten vakuuttaa, että tämä tuote, lisävarusteet ja ohjelmisto ovat direktiivin 201 vaatimusten mukaisia. Täydellinen EU-vaatimustenmukaisuusvakuutus samoin kuin tuotteen laite ladattavissa osoitteesta www.dlink.com.

Svenska[Swedish]	D-Link Corporation försäkrar härmed att denna produkt, tillbehör och programvara överensstämm direktiv 2014/53/EU. Hela texten med EU-försäkran om överensstämmelse och produkt- rmware k produktsidan på www.dlink.com.
Íslenska [Icelandic]	Hér með lýsir D-Link Corporation því y r að þessi vara, fylgihlutir og hugbúnaður eru í samræmi við tilskipu 2014/53/EB. Sækja má ESB-samræmisy rlýsinguna í heild sinni og fastbúnað vörunnar af vefsíðu vörunna dlink.com.
Norsk [Norwegian]	Herved erklærer D-Link Corporation at dette produktet, tilbehøret og programvaren er i samsvar m 2014/53/EU. Den fullstendige teksten i EU-erklæring om samsvar og produktets fastvare er tilgjen nedlasting fra produktsiden på www.dlink.com.

Warning Statement:

The power outlet should be near the device and easily accessible.

Appendix C - Regulatory Information

NOTICE OF WIRELESS RADIO LAN USAGE IN THE EUROPEAN COMMUNITY FOR WIRELESS PRODUCT ONLY

- This device is restricted to indoor use when operated in the European Community using channels in the 5.15-5.35 GHz band to reduce potential for interference.
- This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries. Th equipment may be operated in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, and CY.

Usage Notes:

- To remain in conformance with European National spectrum usage regulations, frequency and channel limitations will be app products according to the country where the equipment will be deployed.
- This device is restricted from functioning in Ad-hoc mode while operating in 5 GHz. Ad-hoc mode is direct peer-to-peer communication between two client devices without an Access Point.
- Access points will support DFS (Dynamic Frequency Selection) and TPC (Transmit Power Control) functionality as required when opera 5 GHz band within the EU.
- Please refer to the product manual or datasheet to check whether your product uses 2.4 GHz and/or 5 GHz wireless.

HINWEIS ZUR VERWENDUNG VON DRAHTLOS-NETZWERK (WLAN) IN DER EUROPÄISCHEN GEMEINSCHAFT EIN DRAHTLOSES PRODUKT)

- Der Betrieb dieses Geräts in der Europäischen Gemeinschaft bei Nutzung von Kanälen im 5,15-5,35 GHz Frequenzband ist ausschließ Innenräume beschränkt, um das Interferenzpotential zu reduzieren.
- Bei diesem Gerät handelt es sich um ein zum Einsatz in allen EU-Mitgliedsstaaten und in EFTA-Ländern - ausgenommen Frankreich. D Betrieb dieses Geräts ist in den folgenden Ländern erlaubt: AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

Gebrauchshinweise:

- Um den in Europa geltenden nationalen Vorschriften zum Nutzen des Funkspektrums weiterhin zu entsprechen, werden Fre Kanalbeschränkungen, dem jeweiligen Land, in dem das Gerät zum Einsatz kommt, entsprechend, auf die Produkte angewandt.
- Die Funktionalität im Ad-hoc-Modus bei Betrieb auf 5 GHz ist für dieses Gerät eingeschränkt. Bei dem Ad-hoc-Modus handelt es sich u Peer-to-Peer-Kommunikation zwischen zwei Client-Geräten ohneeinen Access Point.
- Access Points unterstützen die Funktionen DFS (Dynamic Frequency Selection) und TPC (Transmit Power Control) wie erforderlich be auf 5 GHz innerhalb der EU.
- Bitte schlagen Sie im Handbuch oder Datenblatt nach nach, ob Ihr Gerät eine 2,4 GHz und / oder 5 GHz Verbindung nutzt.

AVIS CONCERNANT L'UTILISATION DE LA RADIO SANS FIL LAN DANS LA COMMUNAUTÉ EUROPÉENNE (UNIQ POUR LES PRODUITS SANS FIL)

- Cet appareil est limité à un usage intérieur lorsqu'il est utilisé dans la Communauté européenne sur les canaux de la bande de 5,15 à 5 a n de réduire les risques d'interférences.
- Cet appareil est un système de transmission à large bande (émetteur-récepteur) de 2,4 GHz, destiné à être utilisé dans tous les États- membres de l'UE et les pays de l'AELE. Cet équipement peut être utilisé dans les pays suivants : AL, AD, BE , BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT , MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

Notes d'utilisation:

- Pour rester en conformité avec la réglementation nationale européenne en matière d'utilisation du spectre, des limites de fréquence et canal seront appliquées aux produits selon le pays où l'équipement sera déployé.
- Cet appareil ne peut pas utiliser le mode Ad-hoc lorsqu'il fonctionne dans la bande de 5 GHz. Le mode Adhoc fournit une communicatio directe pair à pair entre deux périphériques clients sans point d'accès.
- Les points d'accès prendront en charge les fonctionnalités DFS (Dynamic Frequency Selection) et TPC (Transmit Power Control) au be du fonctionnement dans la bande de 5 GHz au sein de l'UE.
- Merci de vous référer au guide d'utilisation ou de la che technique a n de véri er si votre produit utilise 2.4 GHz et/ou 5 GHz sans l.

AVISO DE USO DE LA LAN DE RADIO INALÁMBRICA EN LA COMUNIDAD EUROPEA (SOLO PARA EL PRODUCTO INALÁMBRICO)

- El uso de este dispositivo está restringido a interiores cuando funciona en la Comunidad Europea utilizando canales en la banda de 5, GHz, para reducir la posibilidad de interferencias.
- Este dispositivo es un sistema de transmisión (transceptor) de banda ancha de 2,4 GHz, pensado para su uso en todos los estados mi de la UE y en los países de la AELC. Este equipo se puede utilizar en AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, M NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

Notas de uso:

- Para seguir cumpliendo las normas europeas de uso del espectro nacional, se aplicarán limitaciones de frecuencia y canal en los prod en función del país en el que se pondrá en funcionamiento el equipo.
- Este dispositivo tiene restringido el funcionamiento en modo Ad-hoc mientras funcione a 5 Ghz. El modo Ad-hoc es la comunicación di de igual a igual entre dos dispositivos cliente sin un punto de acceso.
- Los puntos de acceso admitirán la funcionalidad DFS (Selección de frecuencia dinámica) y TPC (Control de la potencia de transmisión necesario cuando funcionan a 5 Ghz dentro de la UE.
- Por favor compruebe el manual o la cha de producto para comprobar si el producto utiliza las bandas inalámbricas de 2.4 GHz y/o la d GHz.

AVVISO PER L'USO DI LAN RADIO WIRELESS NELLA COMUNITÀ EUROPEA (SOLO PER PRODOTTI WIRELESS)

- Nella Comunità europea, l'uso di questo dispositivo è limitato esclusivamente agli ambienti interni sui canali compresi nella banda da 5
  5,35 GHz al ne di ridurre potenziali interferenze. Questo dispositivo è un sistema di trasmissione a banda larga a 2,4 GHz (ricetrasmitte
  destinato all'uso in tutti gli stati membri dell'Unione europea e nei paesi EFTA.
- Questo dispositivo può essere utilizzato in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO,
  SE, RS, SK, ES, CI, HU, CY

Note per l'uso

- Al ne di mantenere la conformità alle normative nazionali europee per l'uso dello spettro di frequenze, saranno applicate limitazioni sull
  frequenze e sui canali per il prodotto in conformità alle normative del paese in cui il dispositivo viene utilizzato.
- Questo dispositivo non può essere attivato in modalità Ad-hoc durante il funzionamento a 5 Ghz. La modalità Ad-hoc è una comunicazi
  diretta peer-to-peer fra due dispositivi client senza un punto di accesso.
- I punti di accesso supportano le funzionalità DFS (Dynamic Frequency Selection) e TPC (Transmit Power Control) richieste per operare
  nell'Unione europea.
- Ti invitiamo a fare riferimento al manuale del prodotto o alla scheda tecnica per veri care se il tuo prodotto utilizza le frequenze 2,4 GHz
  5 GHz.

KENNISGEVING VAN DRAADLOOS RADIO LAN-GEBRUIK IN DE EUROPESE GEMEENSCHAP (ALLEEN VOOR DRAADLOOS PRODUCT)

- Dit toestel is beperkt tot gebruik binnenshuis wanneer het wordt gebruikt in de Europese Gemeenschap gebruik makend van kanalen i
  5.15-5.35 GHz band om de kans op interferentie te beperken.
- Dit toestel is een 2.4 GHz breedband transmissiesysteem (transceiver) dat bedoeld is voor gebruik in alle EU lidstaten en EFTA landen
  uitrusting mag gebruikt worden in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE,
  ES, CI, HU, CY

Gebruiksaanwijzingen:

- Om de gebruiksvoorschriften van het Europese Nationale spectrum na te leven, zullen frequentie- en kanaalbeperkingen wo
  op de producten volgens het land waar de uitrusting gebruikt zal worden.
- Dit toestel kan niet functioneren in Ad-hoc mode wanneer het gebruikt wordt in 5 GHz. Ad-hoc mode is directe peer-to-peer communica
  tussen twee klantenapparaten zonder een toegangspunt.
- Toegangspunten ondersteunen DFS (Dynamic Frequency Selection) en TPC (Transmit Power Control) functionaliteit zoals v
  in 5 GHz binnen de EU.
- Raadpleeg de handleiding of de datasheet om te controleren of uw product gebruik maakt van 2.4 GHz en/of 5 GHz.

Appendix C - Regulatory Information

SAFETY INSTRUCTIONS

The following general safety guidelines are provided to help ensure your own personal safety and protect your product from potential damag
Remember to consult the product user instructions for more details.

- Static electricity can be harmful to electronic components. Discharge static electricity from your body (i.e. touching grounded
  before touching the product.
- Do not attempt to service the product and never disassemble the product. For some products with a user replaceable battery, please re
  and follow the instructions in the user manual.
- Do not spill food or liquid on your product and never push any objects into the openings of your product.
- Do not use this product near water, areas with high humidity, or condensation unless the product is speci cally rated for outdoor applica
- Keep the product away from radiators and other heat sources.
- Always unplug the product from mains power before cleaning and use a dry lint free cloth only.

SICHERHEITSVORSCHRIFTEN

Die folgenden allgemeinen Sicherheitsvorschriften dienen als Hilfe zur Gewährleistung Ihrer eigenen Sicherheit und zum Schutz
Weitere Details nden Sie in den Benutzeranleitungen zum Produkt.

- Statische Elektrizität kann elektronischen Komponenten schaden. Um Schäden durch statische Au adung zu vermeiden, leite
  elektrostatische Ladungen von Ihrem Körper ab,
  (z. B. durch Berühren eines geerdeten blanken Metallteils), bevor Sie das Produkt berühren.
- Unterlassen Sie jeden Versuch, das Produkt zu warten, und versuchen Sie nicht, es in seine Bestandteile zu zerlegen. Für einige Produ
  austauschbaren Akkus lesen Sie bitte das Benutzerhandbuch und befolgen Sie die dort beschriebenen Anleitungen.
- Vermeiden Sie, dass Speisen oder Flüssigkeiten auf Ihr Produkt gelangen, und stecken Sie keine Gegenstände in die Gehäuseschlitze
  -ö nungen Ihres Produkts.
- Verwenden Sie dieses Produkt nicht in unmittelbarer Nähe von Wasser und nicht in Bereichen mit hoher Luftfeuchtigkeit oder Kondens
  es sei denn, es ist speziell zur Nutzung in Außenbereichen vorgesehen und eingestuft.
- Halten Sie das Produkt von Heizkörpern und anderen Quellen fern, die Wärme erzeugen.
- Trennen Sie das Produkt immer von der Stromzufuhr, bevor Sie es reinigen und verwenden Sie dazu ausschließlich ein trockenes fuss
  Tuch.

CONSIGNES DE SÉCURITÉ

Les consignes générales de sécurité ci-après sont fournies a n d'assurer votre sécurité personnelle et de protéger le produit d'éventuels dommages. Veuillez consulter les consignes d'utilisation du produit pour plus de détails.

- L'électricité statique peut endommager les composants électroniques. Déchargez l'électricité statique de votre corps (en touchant un ob en métal relié à la terre par exemple) avant de toucher le produit.
- N'essayez pas d'intervenir sur le produit et ne le démontez jamais. Pour certains produits contenant une batterie remplaçable par l'utilis veuillez lire et suivre les consignes contenues dans le manuel d'utilisation.
- Ne renversez pas d'aliments ou de liquide sur le produit et n'insérez jamais d'objets dans les ori ces.
- N'utilisez pas ce produit à proximité d'un point d'eau, de zones très humides ou de condensation sauf si le produit a été spéci quement conçu pour une application extérieure.
- Éloignez le produit des radiateurs et autres sources de chaleur.
- Débranchez toujours le produit de l'alimentation avant de le nettoyer et utilisez uniquement un chi on sec non pelucheux.

INSTRUCCIONES DE SEGURIDAD

Las siguientes directrices de seguridad general se facilitan para ayudarle a garantizar su propia seguridad personal y para proteger el prod frente a posibles daños. No olvide consultar las instrucciones del usuario del producto para obtener más información.

- La electricidad estática puede resultar nociva para los componentes electrónicos. Descargue la electricidad estática de su cuerpo (p. e tocando algún metal sin revestimiento conectado a tierra) antes de tocar el producto.
- No intente realizar el mantenimiento del producto ni lo desmonte nunca. Para algunos productos con batería reemplazable por el usua lea y siga las instrucciones del manual de usuario.
- No derrame comida o líquidos sobre el producto y nunca deje que caigan objetos en las aberturas del mismo.
- No utilice este producto cerca del agua, en zonas con humedad o condensación elevadas a menos que el producto esté clasi cado especí camente para aplicación en exteriores.
- Mantenga el producto alejado de los radiadores y de otras fuentes de calor.
- Desenchufe siempre el producto de la alimentación de red antes de limpiarlo y utilice solo un paño seco sin pelusa.

ISTRUZIONI PER LA SICUREZZA

Le seguenti linee guida sulla sicurezza sono fornite per contribuire a garantire la sicurezza personale degli utenti e a proteggere il prodotto potenziali danni. Per maggiori dettagli, consultare le istruzioni per l'utente del prodotto.

- L'elettricità statica può essere pericolosa per i componenti elettronici. Scaricare l'elettricità statica dal corpo (ad esempio toccando una metallica collegata a terra) prima di toccare il prodotto.
- Non cercare di riparare il prodotto e non smontarlo mai. Per alcuni prodotti dotati di batteria sostituibile dall'utente, leggere e seguire le istruzioni riportate nel manuale dell'utente.
- Non versare cibi o liquidi sul prodotto e non spingere mai alcun oggetto nelle aperture del prodotto.
- Non usare questo prodotto vicino all'acqua, in aree con elevato grado di umidità o soggette a condensa a meno che il prodotto non sia speci catamente approvato per uso in ambienti esterni.
- Tenere il prodotto lontano da caloriferi e altre fonti di calore.
- Scollegare sempre il prodotto dalla presa elettrica prima di pulirlo e usare solo un panno asciutto che non lasci lacce.

VEILIGHEIDSINFORMATIE

De volgende algemene veiligheidsinformatie werd verstrekt om uw eigen persoonlijke veiligheid te waarborgen en uw product te tegen mogelijke schade. Denk eraan om de gebruikersinstructies van het product te raadplegen voor meer informatie.

- Statische elektriciteit kan schadelijk zijn voor elektronische componenten. Ontlaad de statische elektriciteit van uw lichaam (d aanraken van geaard bloot metaal) voordat uhet product aanraakt.
- U mag nooit proberen het product te onderhouden en u mag het product nooit demonteren. Voor sommige producten met do gebruiker te vervangen batterij, dient u de instructies in de gebruikershandleiding te lezen en te volgen.
- Mors geen voedsel of vloeistof op uw product en u mag nooit voorwerpen in de openingen van uw product duwen.
- Gebruik dit product niet in de buurt van water, gebieden met hoge vochtigheid of condensatie, tenzij het product speci ek geclassi ceerd voor gebruik buitenshuis.
- Houd het product uit de buurt van radiators en andere warmtebronnen.
- U dient het product steeds los te koppelen van de stroom voordat u het reinigt en gebruik uitsluitend een droge pluisvrije doek.

Disposing of and Recycling Your Product

ENGLISH

This symbol on the product or packaging means that according to local laws and regulations this product should be not be
of in household waste but sent for recycling. Please take it to a collection point designated by your local authorities once it
reached the end of its life, some will accept products for free. By recycling the product and its packaging in this manner you
conserve the environment and protect human health.

D-Link and the Environment

At D-Link, we understand and are committed to reducing any impact our operations and products may have on the environment. To minim
this impact D-Link designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in
products and packaging.

D-Link recommends that you always switch o or unplug your D-Link products when they are not in use. By doing so you will help to save e
and reduce CO2 emissions.

To learn more about our environmentally responsible products and packaging please visit www.dlinkgreen.com.

DEUTSCH

Dieses Symbol auf dem Produkt oder der Verpackung weist darauf hin, dass dieses Produkt gemäß bestehender örtlicher
und Vorschriften nicht über den normalen Hausmüll entsorgt werden sollte, sondern einer Wiederverwertung zuzuführen is
Sie es bitte zu einer von Ihrer Kommunalbehörde entsprechend amtlich ausgewiesenen Sammelstelle, sobald das Produkt
seiner Nutzungsdauer erreicht hat. Für die Annahme solcher Produkte erheben einige dieser Stellen keine Gebühren. Durc
diese Weise durchgeführtes Recycling des Produkts und seiner Verpackung helfen Sie, die Umwelt zu schonen und die me
Gesundheit zu schützen.

D-Link und die Umwelt

D-Link ist sich den möglichen Auswirkungen seiner Geschäftstätigkeiten und seiner Produkte auf die Umwelt bewusst und fühlt sich verp i
diese entsprechend zu mindern. Zu diesem Zweck entwickelt und stellt D-Link seine Produkte mit dem Ziel größtmöglicher Umweltfreundl
her und verwendet wiederverwertbare, schadsto arme Materialien bei Produktherstellung und Verpackung.

D-Link emp ehlt, Ihre Produkte von D-Link, wenn nicht in Gebrauch, immer auszuschalten oder vom Netz zu nehmen. Auf diese Weise he
Sie, Energie zu sparen und CO2-Emissionen zu reduzieren.

Wenn Sie mehr über unsere umweltgerechten Produkte und Verpackungen wissen möchten, nden Sie entsprechende Informationen im In
unter www.dlinkgreen.com.

FRANÇAIS

Ce symbole apposé sur le produit ou son emballage signi e que, conformément aux lois et règlementations locales, ce pro
doit pas être éliminé avec les déchets domestiques mais recyclé. Veuillez le rapporter à un point de collecte prévu à cet e
autorités locales; certains accepteront vos produits gratuitement. En recyclant le produit et son emballage de cette manière
aidez à préserver l'environnement et à protéger la santé de l'homme.

D-Link et l'environnement

Chez D-Link, nous sommes conscients de l'impact de nos opérations et produits sur l'environnement et nous engageons à le réduire. Pou
cet impact, D-Link conçoit et fabrique ses produits de manière aussi écologique que possible, en utilisant des matériaux recyclables et fai
toxiques, tant dans ses produits que ses emballages.

D-Link recommande de toujours éteindre ou débrancher vos produits D-Link lorsque vous ne les utilisez pas. Vous réaliserez ainsi des éc
d'énergie et réduirez vos émissions de CO2.

Pour en savoir plus sur les produits et emballages respectueux de l'environnement, veuillez consulter le www.dlinkgreen.com.

ESPAÑOL

Este símbolo en el producto o el embalaje signi ca que, de acuerdo con la legislación y la normativa local, este producto n
desechar en la basura doméstica sino que se debe reciclar. Llévelo a un punto de recogida designado por las autoridades
vez que ha llegado al n de su vida útil; algunos de ellos aceptan recogerlos de forma gratuita. Al reciclar el producto y su e
de esta forma, contribuye a preservar el medio ambiente y a proteger la salud de los seres humanos.

D-Link y el medio ambiente

En D-Link, comprendemos y estamos comprometidos con la reducción del impacto que puedan tener nuestras actividades y nuestros pro
en el medio ambiente. Para reducir este impacto, D-Link diseña y fabrica sus productos para que sean lo más ecológicos posib
materiales reciclables y de baja toxicidad tanto en los productos como en el embalaje.

D-Link recomienda apagar o desenchufar los productos D-Link cuando no se estén utilizando. Al hacerlo, contribuirá a ahorrar energía y a
las emisiones de CO2.

Para obtener más información acerca de nuestros productos y embalajes ecológicos, visite el sitio www.dlinkgreen.com.

ITALIANO

La presenza di questo simbolo sul prodotto o sulla confezione del prodotto indica che, in conformità alle leggi e alle norma
questo prodotto non deve essere smaltito nei ri uti domestici, ma avviato al riciclo. Una volta terminato il ciclo di vita utile, p
prodotto presso un punto di raccolta indicato dalle autorità locali. Alcuni questi punti di raccolta accettano gratuitamente i p
da riciclare. Scegliendo di riciclare il prodotto e il relativo imballaggio, si contribuirà a preservare l'ambiente e a sa
salute umana.

D-Link e l'ambiente

D-Link cerca da sempre di ridurre l'impatto ambientale dei propri stabilimenti e dei propri prodotti. Allo scopo di ridurre al minimo tale impa
D-Link progetta e realizza i propri prodotti in modo che rispettino il più possibile l'ambiente, utilizzando materiali riciclabili a bass
tossicità sia per i prodotti che per gli imballaggi.

D-Link raccomanda di spegnere sempre i prodotti D-Link o di scollegarne la spina quando non vengono utilizzati. In questo modo si contri
a risparmiare energia e a ridurre le emissioni di anidride carbonica.

Per ulteriori informazioni sui prodotti e sugli imballaggi D-Link a ridotto impatto ambientale, visitate il sito all'indirizzo www.dlinkg

NEDERLANDS

Dit symbool op het product of de verpakking betekent dat dit product volgens de plaatselijke wetgeving niet mag worden w
met het huishoudelijk afval, maar voor recyclage moeten worden ingeleverd. Zodra het product het einde van de levensduu
bereikt, dient u het naar een inzamelpunt te brengen dat hiertoe werd aangeduid door uw plaatselijke autoriteiten
autoriteiten accepteren producten zonder dat u hiervoor dient te betalen. Door het product en de verpakking op d
recyclen helpt u het milieu en de gezondheid van de mens te beschermen.

D-Link en het milieu

Bij D-Link spannen we ons in om de impact van onze handelingen en producten op het milieu te beperken. Om deze impact te beperken,
en bouwt D-Link zijn producten zo milieuvriendelijk mogelijk, door het gebruik van recycleerbare producten met lage toxiciteit in
verpakking.

D-Link raadt aan om steeds uw D-Link producten uit te schakelen of uit de stekker te halen wanneer u ze niet gebruikt. Door dit te doen b
u energie en beperkt u de CO2-emissies.

Breng een bezoek aan www.dlinkgreen.com voor meer informatie over onze milieuverantwoorde producten en verpakkingen.

POLSKI

Ten symbol umieszczony na produkcie lub opakowaniu oznacza, że zgodnie z miejscowym prawem i lokalnymi przepisami niniejszego produktu nie wolno wyrzucać jak odpady czy śmieci z gospodarstwa domowego, lecz należy go podd recyklingu. Po zakończeniu użytkowania produktu, niektóre odpowiednie do tego celu podmioty przyjmą takie pro nieodpłatnie, dlatego prosimy dostarczyć go do punktu zbiórki wskazanego przez lokalne władze. Poprzez proces recyklin dzięki takiemu postępowaniu z produktem oraz jego opakowaniem, pomogą Państwo chronić środowisko natural ludzkie zdrowie.

D-Link i środowisko

D-Link podchodzimy w sposób świadomy do ochrony otoczenia oraz jesteśmy zaangażowani w zmniejszanie wpływu naszych działań i pr na środowisko naturalne. W celu zminimalizowania takiego wpływu rma D-Link konstruuje i wytwarza swoje produkty w taki sposób, aby b one jak najbardziej przyjazne środowisku, stosując do tych celów materiały nadające się do powtórnego wykorzystania, charak małą toksycznością zarówno w przypadku samych produktów jak i opakowań.

Firma D-Link zaleca, aby Państwo zawsze prawidłowo wyłączali z użytku swoje produkty D-Link, gdy nie są one wykorzystywane. Postęp ten sposób pozwalają Państwo oszczędzać energię i zmniejszać emisje CO2.

Aby dowiedzieć się więcej na temat produktów i opakowań mających wpływ na środowisko prosimy zapoznać się ze stroną Internetową w dlinkgreen.com.

ČESKY

Tento symbol na výrobku nebo jeho obalu znamená, že podle místně platných předpisů se výrobek nesmí vyhazovat do ko odpadu, ale odeslat k recyklaci. Až výrobek doslouží, odneste jej prosím na sběrné místo určené místními úřady k tomuto Některá sběrná místa přijímají výrobky zdarma. Recyklací výrobku i obalu pomáháte chránit životní prostředí i lidské zdrav

D-Link a životní prostředí

Ve společnosti D-Link jsme si vědomi vlivu našich provozů a výrobků na životní prostředí a snažíme se o minimalizaci těchto vlivů. Proto s výrobky navrhujeme a vyrábíme tak, aby byly co nejekologičtější, a ve výrobcích i obalech používáme recyklovatelné a nízkotoxické mate

Společnost D-Link doporučuje, abyste své výrobky značky D-Link vypnuli nebo vytáhli ze zásuvky vždy, když je nepoužíváte. Pomůžete ta energii a snížit emise CO2.

Více informací o našich ekologických výrobcích a obalech najdete na adrese www.dlinkgreen.com.

MAGYAR

Ez a szimbólum a terméken vagy a csomagoláson azt jelenti, hogy a helyi törvényeknek és szabályoknak megfelelően ez a
nem semmisíthető meg a háztartási hulladékkal együtt, hanem újrahasznosításra kell küldeni. Kérjük, hogy a termék életta
elteltét követően vigye azt a helyi hatóság által kijelölt gyűjtőhelyre. A termékek egyes helyeken ingyen elhelyezhetők. A ter
a csomagolás újrahasznosításával segíti védeni a környezetet és az emberek egészségét.

A D-Link és a környezet

A D-Linknél megértjük és elkötelezettek vagyunk a műveleteink és termékeink környezetre gyakorolt hatásainak csökkentésére
csökkentése érdekében a D-Link a lehető leginkább környezetbarát termékeket tervez és gyárt azáltal, hogy újrahasznosítható, alacsony
tartalmú termékeket gyárt és csomagolásokat alkalmaz.

A D-Link azt javasolja, hogy mindig kapcsolja ki vagy húzza ki a D-Link termékeket a tápforrásból, ha nem használja azokat. Ezzel segít a
megtakarításában és a széndioxid kibocsátásának csökkentésében.

Környezetbarát termékeinkről és csomagolásainkról további információkat a www.dlinkgreen.com weboldalon tudhat meg.

NORSK

Dette symbolet på produktet eller forpakningen betyr at dette produktet ifølge lokale lover og forskrifter ikke skal k
med husholdningsavfall, men leveres inn til gjenvinning. Vennligst ta det til et innsamlingssted anvist av lokale my
det er kommet til slutten av levetiden. Noen steder aksepteres produkter uten avgift. Ved på denne måten å gjenvinne proc
og forpakningen hjelper du å verne miljøet og beskytte folks helse.

D-Link og miljøet

Hos D-Link forstår vi oss på og er forpliktet til å minske innvirkningen som vår drift og våre produkter kan ha på miljøet. For å minimalisere
innvirkningen designer og lager D-Link produkter som er så miljøvennlig som mulig, ved å bruke resirkulerbare, lav-toksiske ma
produktene og forpakningen.

D-Link anbefaler at du alltid slår av eller frakobler D-Link-produkter når de ikke er i bruk. Ved å gjøre dette hjelper du å spare energi og å r
CO2-utslipp.

For mer informasjon angående våre miljøansvarlige produkter og forpakninger kan du gå til www.dlinkgreen.com.

DANSK

Dette symbol på produktet eller emballagen betyder, at dette produkt i henhold til lokale love og regler ikke må bo
husholdningsa ald, mens skal sendes til genbrug. Indlever produktet til et indsamlingssted som angivet af de lokale myndig
når det er nået til slutningen af dets levetid. I nogle tilfælde vil produktet blive modtaget gratis. Ved at indlevere produktet o
emballage til genbrug på denne måde bidrager du til at beskytte miljøet og den menneskelige sundhed.

D-Link og miljøet

Hos D-Link forstår vi og bestræber os på at reducere enhver indvirkning, som vores aktiviteter og produkter kan have på miljøet. For at mi
denne indvirkning designer og producerer D-Link sine produkter, så de er så miljøvenlige som muligt, ved at bruge genanvende
med lavt giftighedsniveau i både produkter og emballage.

D-Link anbefaler, at du altid slukker eller frakobler dine D-Link-produkter, når de ikke er i brug. Ved at gøre det bidrager du til at spare ene
reducere CO2-udledningerne.

Du kan nde ere oplysninger om vores miljømæssigt ansvarlige produkter og emballage på www.dlinkgreen.com.

SUOMI

Tämä symboli tuotteen pakkauksessa tarkoittaa, että paikallisten lakien ja säännösten mukaisesti tätä tuotetta ei
yleisen kotitalousjätteen seassa vaan se tulee toimittaa kierrätettäväksi. Kun tuote on elinkaarensa päässä, toimit
viranomaisten hyväksymään kierrätyspisteeseen. Kierrättämällä käytetyn tuotteen ja sen pakkauksen autat tukemaan sekä
että ihmisten terveyttä ja hyvinvointia.

D-Link ja ympäristö

D-Link ymmärtää ympäristönsuojelun tärkeyden ja on sitoutunut vähentämään tuotteistaan ja niiden valmistuksesta ympäristölle
aiheutuvia haittavaikutuksia. Nämä negatiiviset vaikutukset minimoidakseen D-Link suunnittelee ja valmistaa tuotteensa mahdo
ympäristöystävällisiksi käyttämällä kierrätettäviä, alhaisia pitoisuuksia haitallisia aineita sisältäviä materiaaleja sekä tuotteissaan
pakkauksissa.

Suosittelemme, että irrotat D-Link-tuotteesi virtalähteestä tai sammutat ne aina, kun ne eivät ole käytössä. Toimimalla näin auta
energiaa ja vähentämään hiilidioksiidipäästöjä.

Lue lisää ympäristöystävällisistä D-Link-tuotteista ja pakkauksistamme osoitteesta www.dlinkgreen.com.

SVENSKA

Den här symbolen på produkten eller förpackningen betyder att produkten enligt lokala lagar och föreskrifter inte s
hushållssoporna utan i stället återvinnas. Ta den vid slutet av dess livslängd till en av din lokala myndighet utsedd uppsaml
vissa accepterar produkter utan kostnad. Genom att på detta sätt återvinna produkten och förpackningen hjälper du till att
miljön och skydda människors hälsa.

D-Link och miljön

På D-Link förstår vi och är fast beslutna att minska den påverkan våra verksamheter och produkter kan ha på miljön. För att minska denna utformar och bygger D-Link sina produkter för att de ska vara så miljövänliga som möjligt, genom att använda återvinningsbara låg gifthalt i både produkter och förpackningar.

D-Link rekommenderar att du alltid stänger av eller kopplar ur dina D-Link produkter när du inte använder dem. Genom att göra detta hjälp du till att spara energi och minska utsläpp av koldioxid.

För mer information om våra miljöansvariga produkter och förpackningar www.dlinkgreen.com.

PORTUGUÊS

Este símbolo no produto ou embalagem signi ca que, de acordo com as leis e regulamentações locais, este produto não d
eliminado juntamente com o lixo doméstico mas enviado para a reciclagem. Transporte-o para um ponto de recolha design
suas autoridades locais quando este tiver atingido o m da sua vida útil, alguns destes pontos aceitam produtos gratuitame
reciclar o produto e respectiva embalagem desta forma, ajuda a preservar o ambiente e protege a saúde humana.

A D-Link e o ambiente

Na D-Link compreendemos e comprometemo-nos com a redução do impacto que as nossas operações e produtos possam ter
Para minimizar este impacto a D-Link concebe e constrói os seus produtos para que estes sejam o mais inofensivos para o ambiente pos
utilizando meteriais recicláveis e não tóxicos tanto nos produtos como nas embalagens.

A D-Link recomenda que desligue os seus produtos D-Link quando estes não se encontrarem em utilização. Com esta acção ajudará a p
energia e reduzir as emissões de CO2.

Para saber mais sobre os nossos produtos e embalagens responsáveis a nível ambiental visite www.dlinkgreen.com.