



Hardware Installation Guide

Product Model : 5000 Series
Layer 2/3 Managed 10G/25G/40G/100G Data Center
Switches
Release 1.10

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Intended Readers

The **5000 Series Hardware Installation Guide** contains detailed information about the hardware specifications of one or more switches in this series. It also contains brief information on how to configure and manage a switch in this series. This manual is intended for advanced level users that are familiar with network management concepts and terminology. For all practical reasons, the **DXS-5000-54S**, **DQS-5000-32S**, **DQS-5000-54SQ28**, and **DQS-5000-32Q28** will simply be referred to as the **switch** throughout this manual.

Typographical Conventions

Convention	Description
[]	This convention is generally used in CLI commands. Square brackets indicate an optional entry. For example: [copy paste] means that optionally you can type copy or you can type paste. Do not type the brackets.
Bold Font	This font is generally used to put emphasis on a key subject in a sentence throughout this manual. This font is also used to represent the physical CLI command used when explaining a topic.
<i>Courier New Font</i>	This font is used to indicate CLI command examples used in this document.
Initial capital letter	The use of initial capital letters indicates that a referral to a specific name was made. This will be seen a lot when referring to protocols, standards, and keyboard keys. For example: Press Enter.
Menu Name > Menu Option	This convention indicates the referral to a menu structure found in the Web User Interface of this Switch. For example: Device > Port > Port Properties means the Port Properties menu option under the Port menu option that is located under the Device menu.

Notes, Notices, and Cautions



NOTE: A note indicates important information that helps you make better use of your device.



NOTICE: A notice indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



CAUTION: A caution indicates a potential for property damage, personal injury, or death.


Safety Instructions

Please pay careful attention to the following safety guidelines to ensure your own personal safety and to help protect your system from potential damage.

Safety Cautions

To greatly reduce the risk of physical injury, electrical shock, fire, and damage to equipment, observe the following precautions.

Observe and follow service markings:

- Do not attempt to service any product, except when it is explained in the system's documentation.
- Opening or removing covers that are marked with this () symbol may expose the user to electrical shock.
- Only a trained service technician should service components inside these compartments.

If any of the following conditions occur, contact your trained service provider or unplug the product from the electrical outlet and replace the part:

- Damage to the power cable, extension cable, or plug.
- An object has fallen into the product.
- The product has been exposed to water.
- The product has been dropped or damaged.
- The product does not operate correctly when the operating instructions are correctly followed.

General safety cautions:

- Keep the system away from radiators and other heat sources. Also, do not block cooling vents.
- Do not spill food or liquids on system components, and never operate the product in a wet environment. If the system gets wet, contact your trained service provider.
- Do not push any objects into the openings of the system. Doing so can cause fire or electric shock by shorting out interior components.
- Only use this product with approved equipment.
- Allow the product to cool before removing the cover or touching internal components.
- Operate the product only from the type of external power source indicated on the electrical ratings label. If unsure of the type of power source required, consult your service provider or local power company.
- Be sure that attached devices are electrically rated to operate with the power available in your location.
- Use only approved power cable(s). If you have not been provided with a power cable for your system or for any AC-powered option intended for your system, purchase a power cable that is approved for use in your country. The power cable must be rated for the product and for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cable should be greater than the ratings marked on the product.
- To help prevent electric shock, plug the system and peripheral power cables into properly grounded electrical outlets. These cables are equipped with three-prong plugs to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from a cable. If using an extension cable is necessary, use a 3-wire cable with properly grounded plugs.
- Be aware of the extension cable and power strip ratings. Make sure that the total ampere rating of all products plugged into the extension cable or power strip does not exceed 80 percent of the ampere ratings limit for the extension cable or power strip.
- To help protect the system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- Position system cables and power cables carefully so that they cannot be stepped on or tripped over. Be sure that nothing rests on any cables.
- Do not modify power cables or plugs. Consult a licensed electrician or your power company for site modifications. Always follow your local or national wiring rules.

When connecting or disconnecting power to and from hot-pluggable power supplies, observe the following guidelines:

- Install the power supply before connecting the power cable to the power supply.
- Unplug the power cable before removing the power supply.
- If the system has multiple sources of power, disconnect power from the system by unplugging all power cables from the power supplies.
- Move products with care and ensure that all casters and stabilizers are firmly connected to the system. Avoid sudden stops and uneven surfaces.

To help avoid damage to the system, be sure that the voltage selection switch on the power supply is set to match the power available at the switch's location:

- 115 V / 60 Hz is used mostly in North and South America as well as Far Eastern countries like as South Korea and Taiwan
- 100 V / 50 Hz is used mostly in Eastern Japan and 100 V / 60 Hz in Western Japan
- 230 V / 50 Hz is used mostly in Europe, the Middle East, Africa and the Far East



CAUTION: Using an incorrect or unsupported battery type with the switch may cause battery explosion. Only use batteries compatible with the switch.

General Precautions for Rack-Mountable Products

Please pay careful attention to the following precautions concerning rack stability and safety. Systems are considered to be components in a rack. Thus, a component refers to any system, as well as to various peripherals or supporting hardware:



CAUTION: Always install the stabilizers before installing components in the rack. Installing systems in a rack without the front and side stabilizers installed could cause the rack to tip over, potentially resulting in bodily injury under certain circumstances. After installing systems in a rack, never pull more than one system out of the rack on its slide assemblies at one time. The weight of more than one extended component could cause the rack to tip over and may result in serious injury.

- Before working on the rack, make sure that the stabilizers are secured to the rack, extended to the floor, and that the full weight of the rack rests on the floor. Install front and side stabilizers on a single rack or front stabilizers for joined multiple racks before working on the rack.
- Always load the rack from the bottom up, and load the heaviest item in the rack first.
- Make sure that the rack is level and stable before extending a component from the rack.
- Use caution when pressing the component rail release latches and sliding a component into or out of a rack; the slide rails can pinch your fingers.
- After a component is inserted into the rack, carefully extend the rail into a locking position, and then slide the component into the rack.
- Do not overload the AC supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.
- Ensure that proper airflow is provided to components in the rack.
- Do not step on or stand on any component when servicing other components in a rack.



CAUTION: Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if uncertain that suitable grounding is available.



CAUTION: The system chassis must be positively grounded to the rack cabinet frame. Do not attempt to connect power to the system until grounding cables are connected. Completed power and safety ground wiring must be inspected by a qualified electrical inspector. An energy hazard will exist if the safety ground cable is omitted or disconnected.

Protecting Against Electrostatic Discharge

Static electricity can harm delicate components inside the system. To prevent static damage, discharge static electricity from your body before touching any of the electronic components, such as the microprocessor. This can be done by periodically touching an unpainted metal surface on the chassis.

The following steps can also be taken prevent damage from electrostatic discharge (ESD):

- When unpacking a static-sensitive component from its shipping carton, do not remove the component from the antistatic packing material until ready to install the component in the system. Just before unwrapping the antistatic packaging, be sure to discharge static electricity from your body.
- When transporting a sensitive component, first place it in an antistatic container or packaging.
- Handle all sensitive components in a static-safe area. If possible, use antistatic floor pads, workbench pads and an antistatic grounding strap.

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Introduction

Switch Description

Package Contents

Front Panel

Rear Panel

Side Panel

Switch Description

The D-Link 5000 Series Data Center Switches are a series of high-performance switches that feature high port density, routing, and ultra-low latency, designed to be deployed as Top-of-Rack (ToR), End-of-Row (EoR), or leaf-spine switches in data center applications. Combined with ONIE support and increased cost-efficiency, the 5000 Series form a flexible long-term solution for managing and expanding data center infrastructures in a Software-defined Networking (SDN) environment.

Package Contents

Open the shipping carton of the switch and carefully unpack its contents. The carton should contain the following items:

For the **DXS-5000-54S** and **DQS-5000-54SQ28**:

- One 5000 Series switch.
- One CD containing documentation.
- Two preinstalled AC or DC power supply modules.
- Two AC power cords (if purchased with AC power supplies)
- Four preinstalled fan modules.
- One RS-232 to RJ-45 console cable.
- One RS-232 to Mini-USB console cable.
- One console cable extension.
- One rack mounting kit (two brackets and screws).
- Four rubber feet with adhesive backing.

For the **DQS-5000-32S** and **DQS-5000-32Q28**:

- One 5000 Series switch.
- One CD containing documentation.
- Two preinstalled AC or DC power supply modules.
- Two AC power cords (if purchased with AC power supplies).
- Four preinstalled fan modules.
- One RS-232 to RJ-45 console cable.
- One rack mounting kit (two brackets and screws).
- Four rubber feet with adhesive backing.

If any item is missing or damaged, please contact your local D-Link reseller for replacement.

Front Panel

Depending on the model, the front panel of the switch consists of LED indicators, a USB 2.0 port, an out-of-band Management port (MGMT), a Console port, and a combination of QSFP28, QSFP+, SFP28, and SFP+ access ports.

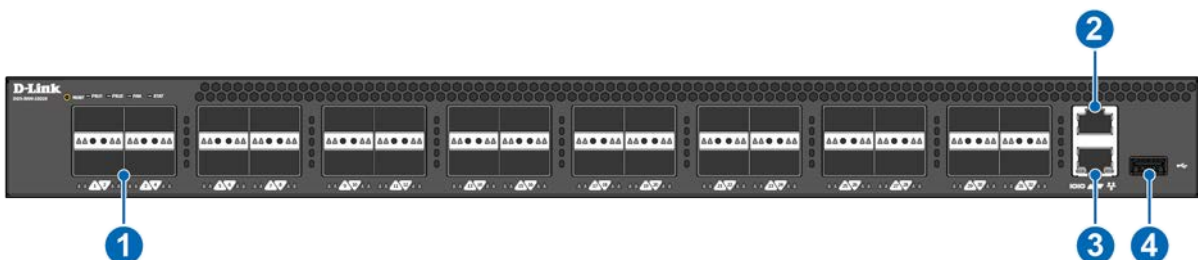


Figure 1-1 Front panel view of the DQS-5000-32Q28

#	Port	Description
1	100G QSFP28 Ports	32 100G fiber optic access ports.
2	Console Port	RJ-45 console port for accessing the command line interface (CLI) of this switch for configuration, management, and monitoring.
3	Management Port	RJ-45 port for out-of-band management to configure the switch without being connected to the network.
4	USB 2.0 Type A Port	USB 2.0 port for connecting a USB storage device.



Figure 1-2 Front panel view of the DQS-5000-32S

#	Port	Description
1	40G QSFP+ Ports	32 40G fiber optic access ports.
2	Console Port	RJ-45 console port for accessing the command line interface (CLI) of this switch for configuration, management, and monitoring.
3	Management Port	RJ-45 port for out-of-band management to configure the switch without being connected to the network.
4	USB 2.0 Type A Port	USB 2.0 port for connecting a USB storage device.

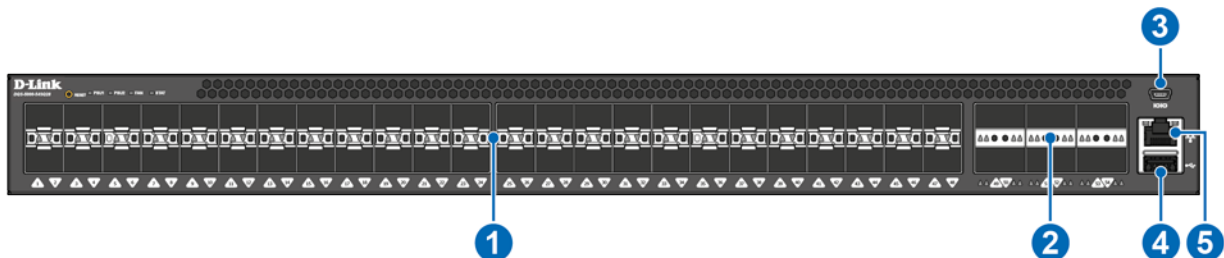


Figure 1-3 Front panel view of the DQS-5000-54SQ28

#	Port	Description
1	25G SFP28 Ports	48 25G fiber optic access ports.
2	100G QSFP28 Ports	6 100G fiber optic access ports.
3	Console Port	Mini-USB console port for accessing the command line interface (CLI) of this switch for configuration, management, and monitoring.
4	USB 2.0 Type A Port	USB 2.0 port for connecting a USB storage device.
5	Management Port	RJ-45 port for out-of-band management to configure the switch without being connected to the network.

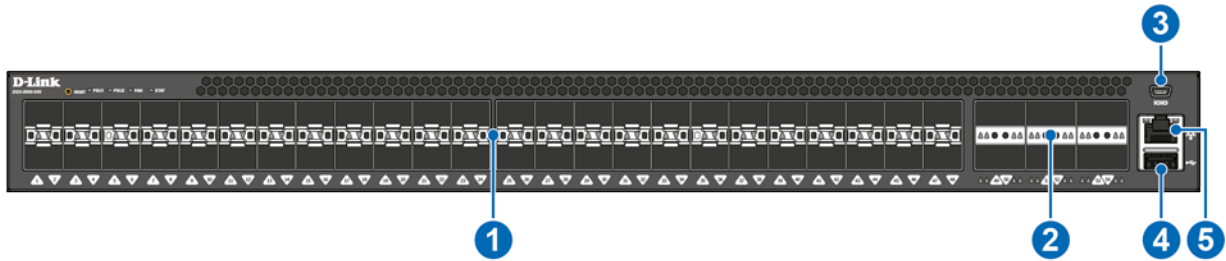


Figure 1-4 Front panel view of the DXS-5000-54S

#	Port	Description
1	10G SFP+ Ports	48 10G fiber optic access ports.
2	40G QSFP+ Ports	6 40G fiber optic access ports.
3	Console Port	Mini-USB console port for accessing the command line interface (CLI) of this switch for configuration, management, and monitoring.
4	USB 2.0 Type A Port	USB 2.0 port for connecting a USB storage device.
5	Management Port	RJ-45 port for out-of band-management to configure the switch without being connected to the network.

LED Indicators

Located on the front panel of all the 5000 Series switches are the following LED indicators: PSU1, PSU2, FAN, and STAT. To the left of the LED panel is the reset button used to reset the switch back to factory default settings.

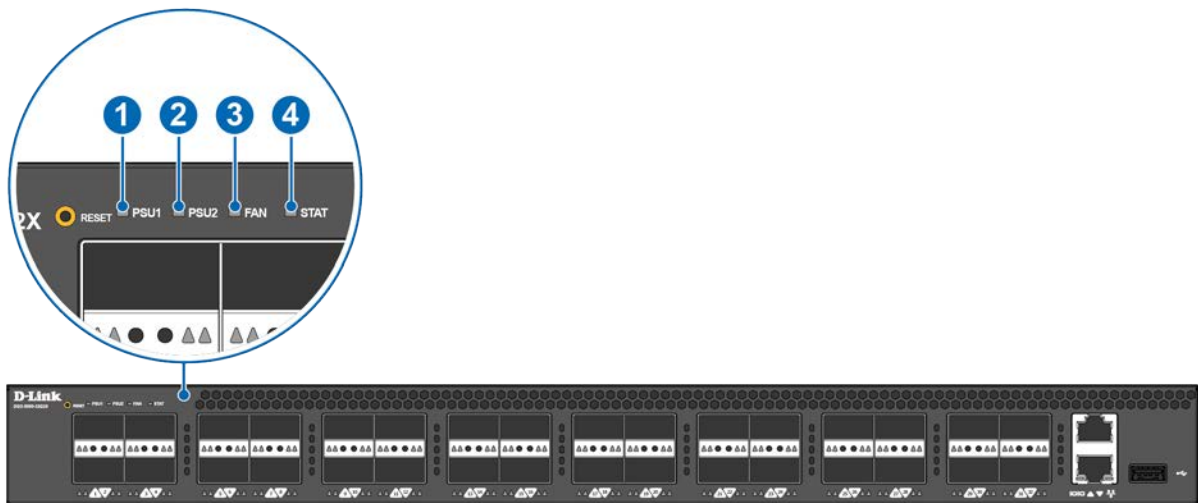


Figure 1-5 LED indicators for the 5000 Series switches

#	LED	Description	
1	PSU1	Off	The switch is turned off.
		Solid green	The switch is powered on and functioning normally.
		Solid amber	The switch's power supply has failed or is not working properly.
2	PSU2	Off	The switch is turned off.
		Solid green	The switch is powered on and functioning normally.
		Solid amber	The switch's power supply has failed or is not working properly.

#	LED	Description	
3	FAN	Off	The fans are powered off.
		Solid green	The fans are operating normally.
		Solid amber	Indicates a fan has failed. Check the FAN Status LED on the rear panel to identify which fan is malfunctioning.
4	STAT	Solid green	The diagnostic test was successfully completed.
		Solid amber	The self-diagnostics system has detected a fault or failure (e.g. fan, thermal, or interface fault).
		Off	The system is down, the switch is booting up, or the NOS did not boot up normally.

Rear Panel

Located on the rear panel of the 5000 Series switches are two power supply module slots and four fan module slots. Two power supply modules and four fan modules are included in the package for this switch. This switch also supports the use of a DC power supply module.

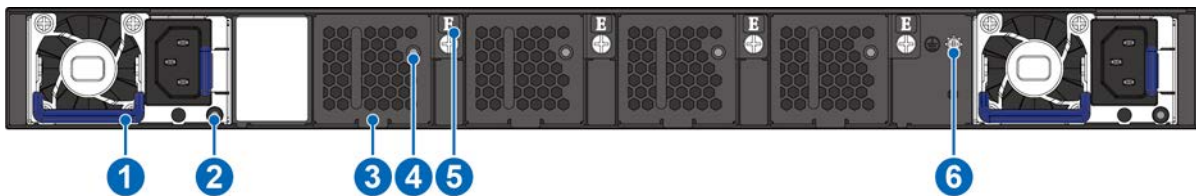


Figure 1-6 Rear panel view of the 5000 Series switches

#	Item	Description
1	Power Supply Slot 1/2	Both slots come preinstalled with AC or DC power supply modules. The slots can be outfitted with 2 DC modules, 2 AC modules, or 1 DC and 1 AC combination for load sharing and redundancy purposes. The base model only ships with either 2 AC or 2 DC PSUs. An additional AC or DC PSU must be purchased separately to outfit the switch with a 1 AC + 1 DC PSU combination.
2	PSU Status LED	Indicates the current status of the installed PSU module.
3	Fan Module Slots (x 4)	These slots can be equipped with a Smart fan module.
4	Fan Status LED	Indicates the current status of the installed fan module.
5	Air Flow Indicator	Indicator for identifying the fan's airflow. This can be either front-to-back exhaust (labeled E) or back-to-front intake (labeled I).
6	Grounding Node	Node for grounding the switch to a grounding source.

Power Supply Modules

The 5000 Series switches ship with two power supply units preinstalled. When the primary power connection fails, the secondary power connection will take over all the power immediately and automatically. The primary and secondary power supply can be either AC or DC supplied, depending on the power supply module inserted, allowing for dual redundancy.

The power supply modules are hot-swappable, they can be inserted and removed while the switch is powered on. This feature offers load-sharing, and enhances the reliability and capacity of this switch. However, in the event that a power failure might occur and no UPS is used, as a precaution, unplug the power cord from the switch. After the power has returned, you can plug the power cord back into the switch's power connector.

Fan Modules

The fan modules on this switch can provide front-to-back or back-to-front airflow depending on type of fan module installed. Another unique smart fan feature is that fans are capable of automatically adjusting their speed depending on the IC sensor reading of the temperature required.

Side Panel

Located on the side panels of the switch are screw openings for attaching mounting brackets to the switch. Allowing the switches to be installed in a standard 19" (1U) rack.

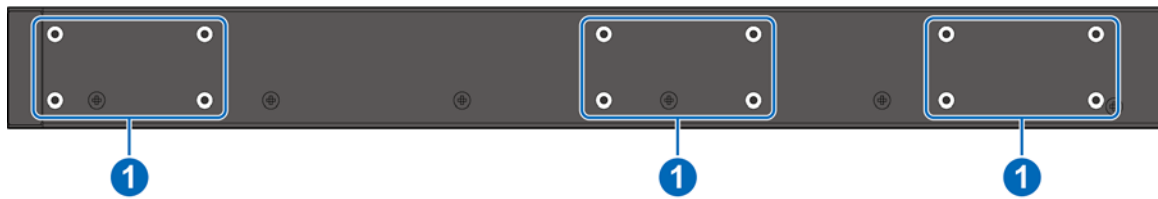


Figure 1-7 Side panels of the 5000 Series switches

#	Item	Description
1	Mounting Holes	Mounting holes for attaching rack mounting brackets.

Installation

Installation Guidelines

Installing the Switch into a Rack

Installing Transceivers into the Transceiver Ports

Installing Power Modules into the Power Module Slots

Installing Fan Modules into the Fan Module Slots

Installation Guidelines

This section will discuss the hardware installation guidelines that the user must follow in order to properly and safely install this switch into the appropriate environment.

- Visually inspect the power cord and see that it is fully secured to both the power connector, the switch, and the electrical outlet that will be supplying the power.
- Install the switch in a fairly cool and dry place within the acceptable temperature and humidity operating ranges.
- Install the switch in a site free from strong electromagnetic field generators such as motors, vibration, dust, and direct exposure to sunlight.

Installing the Switch into a Rack

The switch can be mounted in a standard 19" (1U) rack using the provided mounting brackets. Use the following diagrams as a guide.



Caution: Make sure that there is adequate space around the switch to allow for proper air flow, ventilation, and cooling.

1. Fasten the mounting brackets to the sides of the switch using the screws provided.

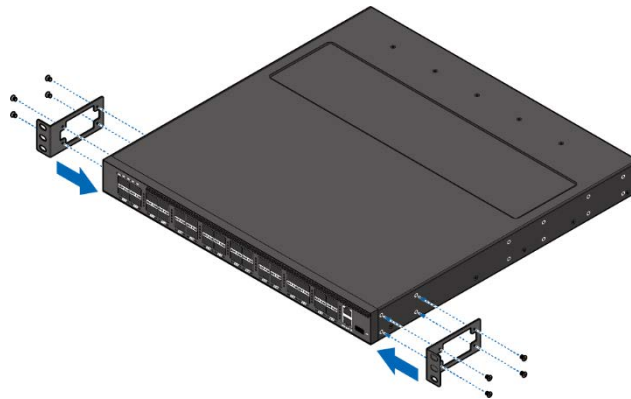


Figure 2-1 Fasten mounting brackets on the switch

2. Slide the switch into the rack.
3. Fasten mounting bracket to the rack using the screws provided.

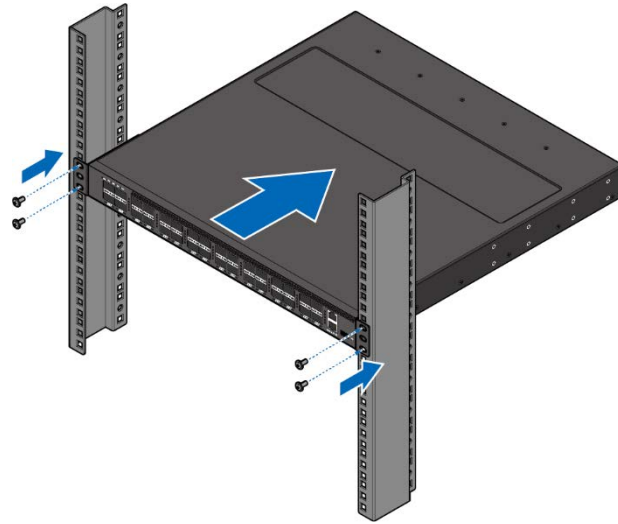


Figure 2-2 Installing the switch in a rack

Installing Transceivers into the Transceiver Ports

The 5000 Series supports a combination of Small Form-Factor pluggable (SFP) or Quad-Small Form-Factor pluggable (QSFP) ports, including SFP, SFP+, SFP28, QSFP+, and QSFP28. The SFP+ ports also support other transceiver form factors like SFP, SFP+, and WDM transceivers. For a complete list of SFP/SFP+/WDM transceivers, compatible with this switch, refer to

Appendix A - Technical Specifications.

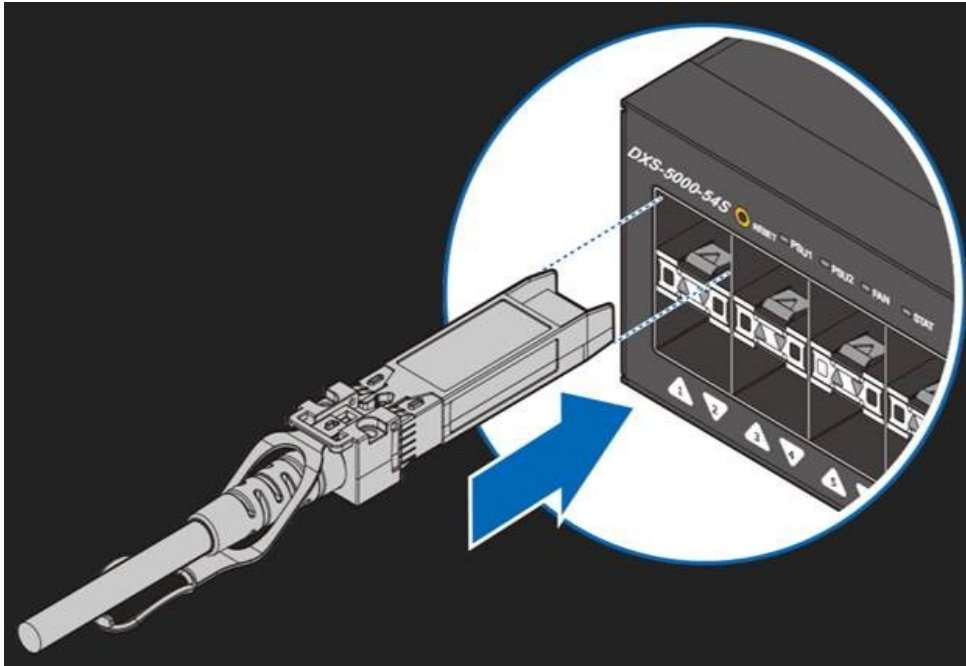


Figure 2-3 Installing SFP transceivers

1. Insert a compatible SFP transceiver into an available SFP port.

Installing Power Modules into the Power Module Slots

The power supply modules are hot-swappable and can be replaced during operation as long as the remaining module is installed and operating.

Depending on whether you plan on positioning the ports in a hot or cold aisle, you can order a power supply module with port-side intake or port-side exhaust airflow.

The power module slots, located on the rear panel of this switch, support two types of power supply modules.

- **DXS-PWR550AC**: 550W AC modular power supply with front-to-back or back-to-front airflow.
- **DXS-PWR800DC**: 800W DC modular power supply with front-to-back or back-to-front airflow.



NOTE: The power modules support a specific airflow direction. This airflow direction of the installed power module(s) must be the **same** as the fan module(s) installed. **By default** the airflow direction of the power module and fan module installed is **front-to-back**.



Caution: If the switch is installed for **port-side exhaust** airflow, you must install **green-labeled** PSU modules to drive the air flow from the front of the switch into the hot aisle. If the switch is installed for **port-side intake** airflow, you must install **blue-labeled** PSU modules to drive the air flow from the rear of the switch and out into the hot aisle. Failure to install the switch with the correct airflow configuration can cause the switch to overheat and shut down.

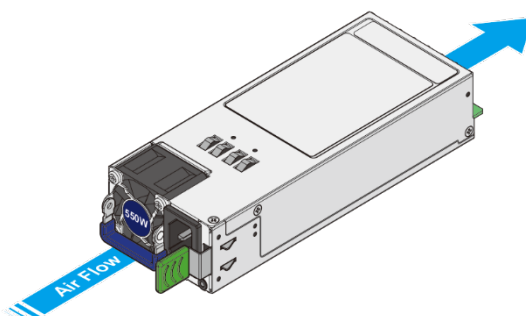


Figure 2-4 Green label port-side exhaust power supply module

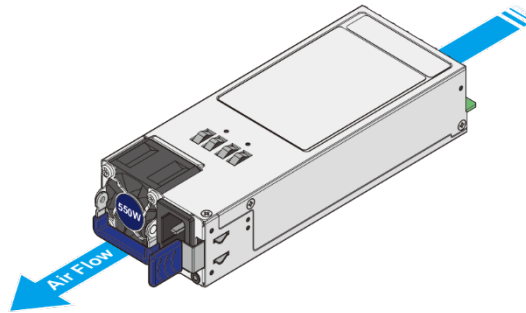


Figure 2-5 Blue label port-side intake power supply module

Removing a Power Supply

1. Hold the PSU handle and press the release latch to unlock the PSU from the switch.
2. Pull the PSU module out of the switch.

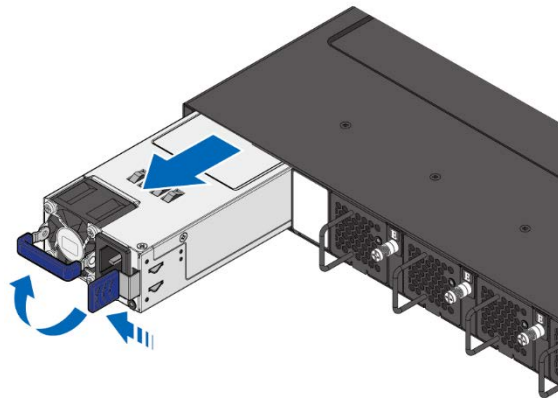


Figure 2-6 Unlocking and removing a power supply

Installing a Power Supply

1. Align the PSU with the switch bay.
2. Slide the PSU into the switch and push until it is firmly slotted into the bay.

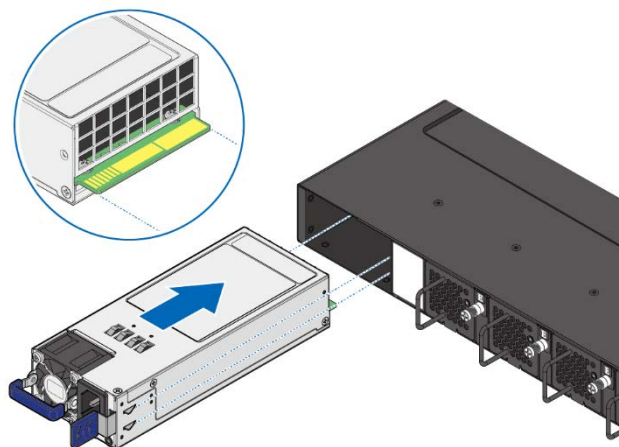


Figure 2-7 Inserting the power supply

Installing Fan Modules into the Fan Module Slots

The fan modules are hot swappable and can be replaced during operation as long as the remaining modules are installed and operating.

Depending on whether you plan on positioning the ports in a hot or cold aisle, you can order a fan module with port-side intake (E) or port-side exhaust (I) airflow.



NOTE: The power modules support a specific airflow direction. This airflow direction of the installed power module(s) must be the **same** as the fan module(s) installed. **By default** the airflow direction of the power module and fan module installed is **front-to-back**.



Caution: If the switch is installed for **port-side exhaust** airflow, you must install fan modules labeled **(I)** to drive the air flow from the front of the switch into the hot aisle. If the switch is installed for port-side intake airflow, you must install fan modules labeled **(E)** to drive the air flow from the rear of the switch and out into hot aisle. Failure to install the switch with the correct airflow configuration can cause the switch to overheat and shut down.

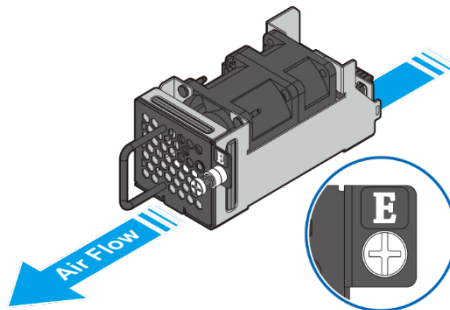


Figure 2-8 Fan module (E) with port-side intake

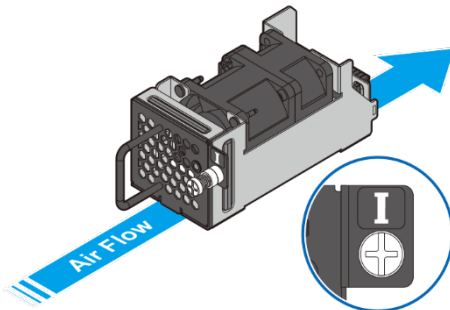


Figure 2-9 Fan module (I) with port-side exhaust

Removing a Fan Module

1. Loosen the captive screw securing the fan module.
2. Pull out the fan module.

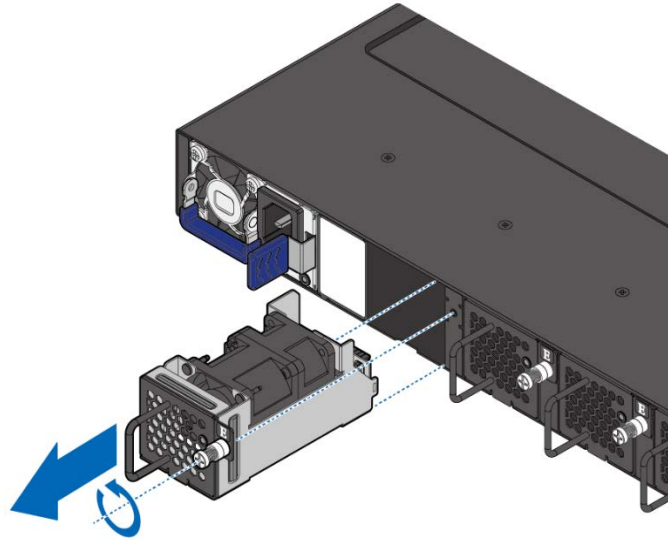


Figure 2-10 Removing a fan module

Installing a Fan Module

1. Align the fan module with the switch bay.
2. Slide the fan module into the switch and push until it is firmly slotted into the bay.
3. Secure the captive screw.

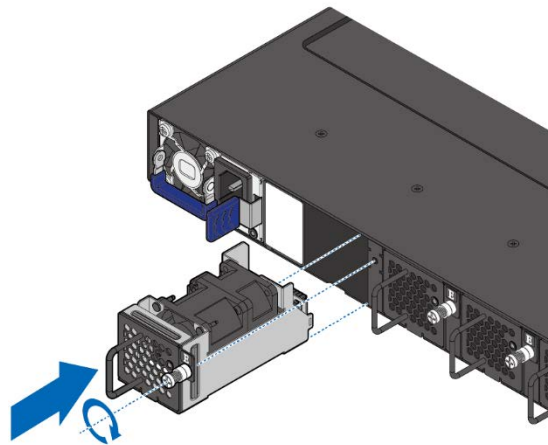


Figure 2-11 Inserting a fan module.

Grounding the Switch

It is recommended that a compliant system is installed as part of the chassis to reduce or prevent the risk of shock hazards, greatly reduce the risk of equipment damage or reduce the potential of data corruption.



Warning: This equipment must be grounded. Do not defeat the ground conductor or operate the equipment without a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available.



Warning: Ensure the rack is properly grounded and in compliance with local regulatory guidelines. Ensure that a good electrical connection to the grounding point exists. Remove any paint or material that may prevent good contact.

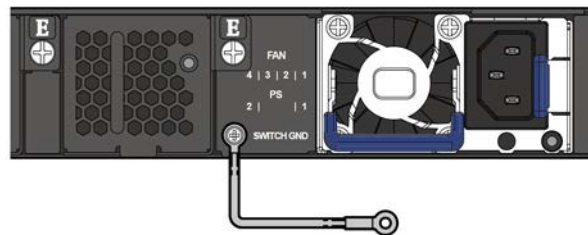


Figure 2-12 Grounding the Switch

1. Remove the grounding screw from the switch.
2. Connect the screw to an 18 AWG minimum grounding wire (not provided), and connect it to the grounding point on the switch.
3. Connect the other end of the wire to rack ground.

Switch Connections

Switch to another Switch

Switch to a Server

Switch to another Switch

Two or more switches can also be interlinked using fiber optic cables or direct-attached cables via the switch's SFP+, SFP28, QSFP+, and QSFP28 access ports.

Switch to a Server

Servers can be connected to the network using fiber optic cables via the switch's SFP+, SFP28, QSFP+, and QSFP28 access ports.

Switch Management

Management Options

Connecting to the Console Port

Management Options

This switch provides multiple access platforms that can be used to configure, manage, and monitor networking features available on this switch.

The Command Line Interface (CLI)

This switch can be managed, out-of-band, by using the console port on the front panel of the switch. Alternatively, the switch can also be managed, in-band, by using a Telnet connection to any of the LAN ports on this switch. The command line interface provides complete access to all switch management features.

D-Link OS: For more detailed information about the D-Link OS CLI, refer to the *5000 Series CLI Reference Guide*.

Pluribus Networks OS: For more detailed information about the Pluribus Networks OS CLI, refer to the [Pluribus Networks Technical Documentation](#).

SNMP-based Management

The switch can be managed with an SNMP-compatible console program. The switch supports SNMP v1, SNMPv2c and SNMPv3. The SNMP agent decodes the incoming SNMP messages and responds to requests with MIB objects stored in the database. The SNMP agent updates the MIB objects to generate statistics and counters.

Connecting to the Console Port

The front panel of the switch provides a console port that enables a connection to a computer monitoring and configuring the switch. The console port is an RJ-45 or Mini-USB port and requires a special cable that is included with the switch, to establish a physical connection.



NOTE: To use the Mini-USB console port, you may be required to install a mini-USB driver.

To use the console port, the following equipment is needed:

- A terminal or a computer with both an RS-232 serial port and terminal emulation software.
 - A console cable with a male DB-9 connector on one end and an RJ-45 or Mini-USB connection on the other end. This cable should be included with the switch.
1. Connect the male DB-9 connector on the console cable (included) to the RS-232 serial port on the computer running terminal emulation software. Next, connect the RJ-45 or Mini-USB connector to the console port on the front of the switch.

2. Set the terminal emulation software as follows:
 - Select the appropriate serial port (COM1 or COM2).
 - Set the data rate to **115200 baud**.
 - Set the data format to **8 data bits, 1 stop bit, and no parity**.
 - Set flow control to **none**.

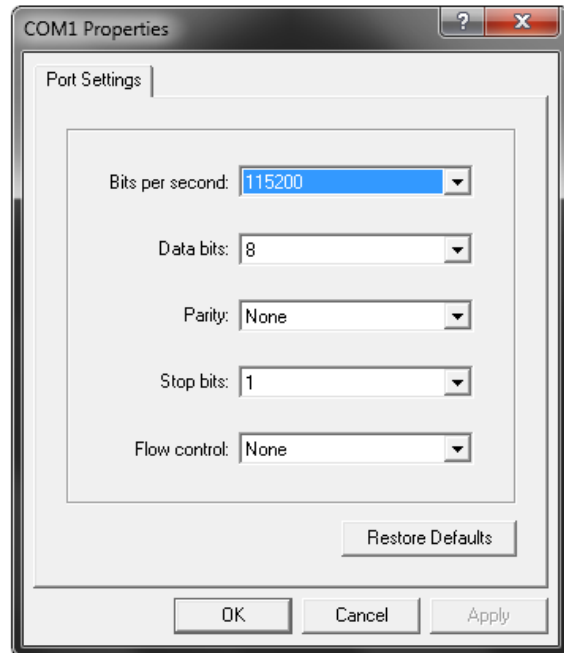


Figure 4-1 COM1 Properties – Port Settings

- Under Properties, select **VT100** for Emulation mode.
- Select **Terminal keys** for Function, Arrow and Ctrl keys.

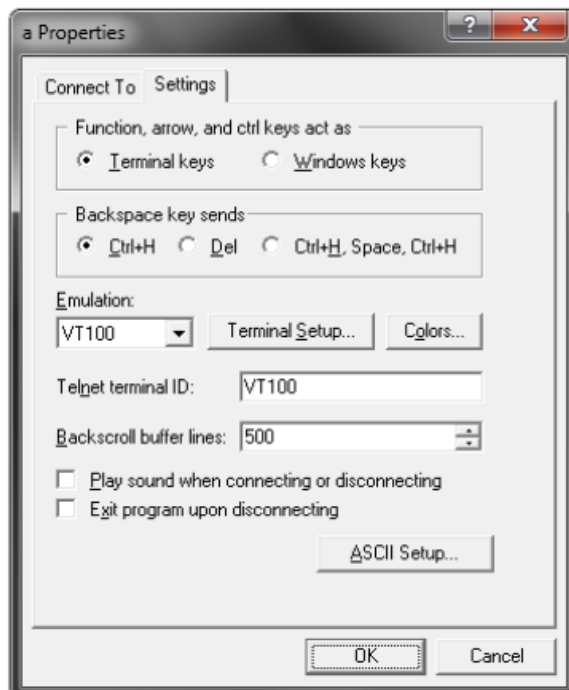
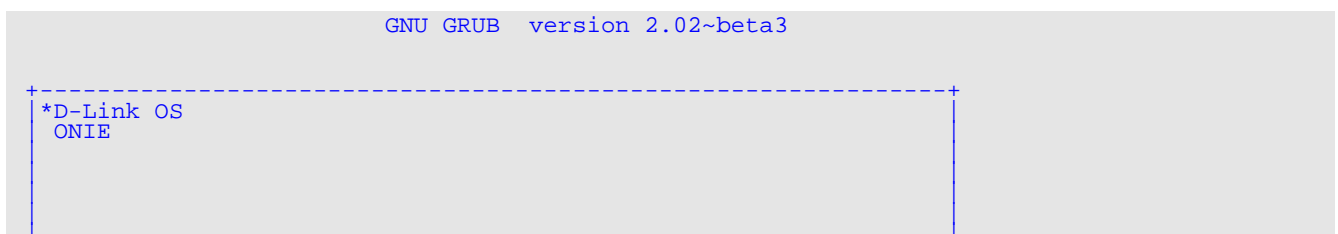


Figure 4-2 COM1 Properties – General Settings

3. After correctly configuring the terminal, plug the power cable into the power connector on the back of the switch. You will be presented with an option to select an operating system to boot the switch in, either D-Link OS or ONIE.



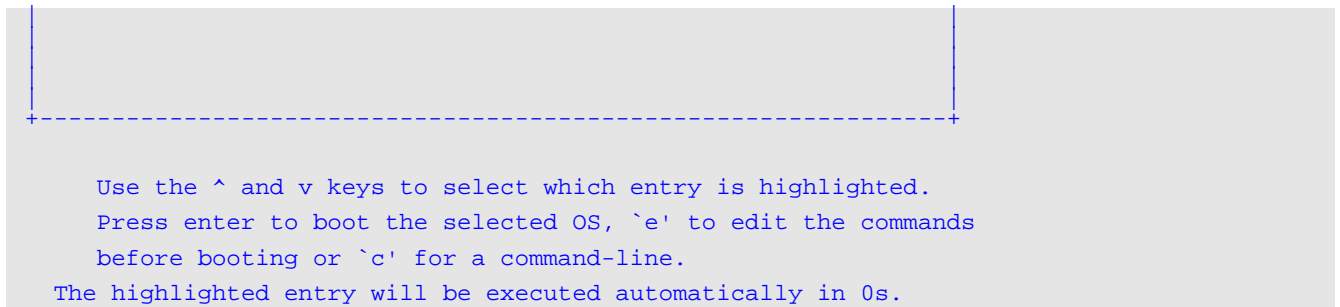


Figure 4-3 OS Selection Screen

Installing D-Link OS



NOTE: D-Link OS and all third-party operating systems must be activated first. Refer to the OS license activation information for more details on how to activate the OS.

1. In the OS selection window, do not press any key. The system will automatically boot the Linux-based D-Link OS after a few seconds.

```
* Starting configure network device [ OK ]
* Starting RPC portmapper replacement [ OK ]
* Stopping Send an event to indicate plymouth is up [ OK ]
* Starting configure network device security [ OK ]
* Starting NSM status monitor [ OK ]
* Starting Bridge socket events into upstart [ OK ]
* Starting Bridge file events into upstart [ OK ]
* Starting Mount network filesystems [ OK ]
* Stopping Mount network filesystems [ OK ]
* Stopping Failsafe Boot Delay [ OK ]
* Starting configure network device [ OK ]
* Starting System V initialisation compatibility [ OK ]
* Setting sensors limits [ OK ]
* Stopping System V initialisation compatibility [ OK ]
* Starting System V runlevel compatibility [ OK ]
* Starting save kernel messages [ OK ]
* Starting regular background program processing daemon [ OK ]
* Not starting fancontrol; run pwmconfig first.
* Starting automatic crash report generation [ OK ]
* Starting OpenSSH server [ OK ]
* Stopping save kernel messages [ OK ]
* Starting NTP server ntpd [ OK ]
* Stopping System V runlevel compatibility [ OK ]
* Starting D-Link OS [ OK ]

Ubuntu 14.04 LTS Switch ttyS1
Switch login: admin
Password:
Last login: Mon Feb 26 19:40:30 UTC 2001 on ttyS1
Welcome to Ubuntu 14.04 LTS (GNU/Linux 3.16.0-29-generic x86_64)
```

Figure 4-4 D-Link OS Boot Screen

2. Once loaded, enter the default username and password **admin** to log into the Linux Shell.

```

Ubuntu 14.04 LTS Switch ttyS1
Switch login: admin
Password:
Last login: Mon Feb 26 19:40:30 UTC 2001 on ttyS1
Welcome to Ubuntu 14.04 LTS (GNU/Linux 3.16.0-29-generic x86_64)

 * Documentation:  https://help.ubuntu.com/
admin@Switch:~$

```

Figure 4-5 D-Link OS Boot Screen

- If this is the first time logging into D-Link OS, enter the command **sudo license install [activation code]** to activate the operating system. Refer to the license activation information for the required information. The switch will need to be rebooted to continue. Once rebooted, repeat steps 1 and 2 to continue.

```

#####
##      There is NO valid License.                               ##
##      Install License by executing "license install <AC Number>"   ##
##      Reboot the device after installing AC.                       ##
#####
Ubuntu 14.04 LTS Switch ttyS1
Switch login: admin
Password:
Last login: Fri Aug 10 15:40:23 UTC 2001 on ttyS1
Welcome to Ubuntu 14.04 LTS (GNU/Linux 3.16.0-29-generic x86_64)

 *Documentation:  https://help.ubuntu.com/

admin@Switch:~$ sudo license install 27062[REDACTED]
sudo: unable to resolve host Switch
License successfully installed (AC: 27062[REDACTED])
Please reboot the device to activate the license.
Do you want to reboot now? (y/n): y

```

Figure 4-6 D-Link OS Activation

- Enter the command **sudo dlink-os-cli** to enter the D-Link OS command interface.

```

Ubuntu 14.04 LTS Switch ttyS1
Switch login: admin
Password:
Last login: Mon Feb 26 19:40:30 UTC 2001 on ttyS1
Welcome to Ubuntu 14.04 LTS (GNU/Linux 3.16.0-29-generic x86_64)

 * Documentation:  https://help.ubuntu.com/
admin@Switch:~$ sudo dlink-os-cli
sudo: unable to resolve host Switch
[sudo] password for admin:

Initializing console session. Press ^z to exit.

(Switch) #

```

Figure 4-7 D-Link OS Boot Screen

Creating a User Account

When logging into the switch using D-Link OS, there is no preconfigured default username and password. One of the first and most important tasks will be to create user accounts. Logging in using a predefined administrator-level username will give the user privileged access to the switch's management software. Also this will prevent unauthorized access to the switch.

An example to create an administrator-level account for the switch called 'NewUser':

```
(Switch) enable
(Switch) #
(Switch) #configure
(Switch) (Config) #username NewUser Password 12345 level 15
(Switch) (Config) #end
(Switch) #
```

Figure 4-8 To create a user account

1. At the CLI command prompt, enter the **enable** command to enter the Privileged EXEC Mode. Press **Enter**.
2. Enter the **configure** command to enter the Global Configuration Mode. Press **Enter**.
3. Enter the **username NewUser password 12345 level 15** command. Press **Enter**. This will create an Administrative (15) privilege user account with the username of NewUser and a password of 12345.
4. Enter the **end** command to exit back to the Privileged EXEC Mode.



NOTE: Passwords are case sensitive. Usernames should be between 1 to 64 characters in length. Passwords should be between 8 to 64 characters in length.

Configuring the IP Address

Each switch must be assigned its own IP address, which is used for communication with an SNMP network manager or other TCP/IP applications. The switch's VLAN1 default IP address is **10.90.90.90/8**, and the management port default IP address is **192.168.0.1/24**. You can change the switch's default IP address to fit into your networking address range.

Below is an example to change the IP address of the switch to 10.50.50.50, using a subnet mask of 255.0.0.0:

```
(Switch) enable
(Switch) #
(Switch) #network parms 10.50.50.50 255.0.0.0
(Switch) #
```

Figure 4-9 To change the IP address

1. At the CLI command prompt, enter the **enable** command to enter the Privileged EXEC Mode. Press **Enter**.
2. Enter the **network parms 10.50.50.50 255.0.0.0** command to change the IP address and subnet mask. Press **Enter**.

The switch can now be configured and accessed through Telnet.

The switch's IP address can also automatically be obtained by using the BOOTP or DHCP protocol.

Upgrading D-Link OS in Linux Shell



NOTE: The latest firmware can be downloaded from <http://tsd.dlink.com.tw>. Please verify that D-Link OS is properly installed before proceeding with the upgrade process.



NOTE: When using a TFTP server, it is recommended to configure the TFTP server to be in the same subnet as the switch and to connect the server directly to the switch. The switch's default IP is **192.168.3.10** with subnet mask **255.255.255.0**, so the server should be configured in the **192.168.3.x** subnet.

1. In the Linux Shell interface, upload the D-Link OS firmware .deb file and hardware monitoring drivers (if available) to the switch using the **scp -P 2233 [filename.deb] admin@[switch IP]:[filename.deb]** command.

In this example, the command would appear as follows: **scp -P 2233 3.2-nc2x-1.00.006-rc-advance-DLink-DXS-5000-54S.deb admin@172.20.192.70:3.2-nc2x-1.00.006-rc-advance-DLink-DXS-5000-54S.deb**

2. Enter the password **admin**.

```
[tester@lhatws1 ~/upgradeboot]$ scp -P 2233 3.2-nc2x-1.00.006-rc-advance-DLink-DXS-5000-54S.deb admin@172.20.192.70:3.2-nc2x-1.00.006-rc-advance-DLink-DXS-5000-54S.deb
admin@172.20.192.70's password:
3.2-nc2x-1.00.006-rc-advance-DLink-DXS-5000-54S.deb          100%   23MB   3.4MB/s   00:01

[tester@lhatws1 ~/upgradeboot]$ scp -P 2233 3.2-nc2x-1.00.006-rc-advance-DLink-HMDRV.deb admin@172.20.192.70: 3.2-nc2x-1.00.006-rc-advance-DLink-HMDRV.deb
admin@172.20.192.70's password:
3.2-nc2x-1.00.006-rc-advance-DLink-HMDRV.deb              100%   143KB   143 KB/s   00:00
[tester@lhatws1 ~/upgradeboot]$
```

3. Verify the firmware file is uploaded to the switch.
4. Enter the command **dpkg -I [filename.deb]** to begin upgrading the switch.

```
root@Switch:/home/admin# ls
3.2-nc2x-1.00.006-rc-advance-DLink-DXS-5000-54S.deb      3.2-nc2x-1.00.006-rc-advance-DLink-
HMDRV.deb

Switch:/home/admin# dpkg -I 3.2-nc2x-1.00.006-rc-advance-DLink-DXS-5000-54S.deb
new debian package, version 2.0.
size 24534688 bytes: control archive=4564 bytes.
   130 bytes,    5 lines   conffiles
   333 bytes,   10 lines   control
  7523 bytes,  119 lines   md5sums
  2872 bytes,   84 lines   * postinst             #!/bin/sh
   664 bytes,   23 lines   * preinst              #!/bin/sh
   662 bytes,   23 lines   * prerm                #!/bin/sh

Package: dlink-os-x86
Version: 1.00.006
Architecture: amd64
Maintainer: D-Link Corporation
```

```
Installed-Size: 111665
Depends: p7zip-full, gawk, tftp-hpa, screen, psmisc, gdbserver, iptables
Section: misc
Priority: optional
Description: Networking software for D-Link Corporation
Image signature 3.2-nc2x-1.00.006-rc.img.
```

5. Enter the command **#show version** to verify the firmware version of D-Link OS.

```
(DXS-5000-54S-2011) #show version

Switch: 1

System Description..... DXS-5000-54S - 48 10GE + 6 40GE, 1.00.006,
Linux 3.16.0-29-generic
Machine Type..... DXS-5000-54S - 48 10GE + 6 40GE
Machine Model..... DXS-5000-54S
Hardware Version..... A1
Serial Number..... SG1J10000001
Part Number..... BXS500054SAB.A1
Burned In MAC Address..... 00:05:64:2F:0F:80
Software Version..... 1.00.006
Operating System..... Linux 3.16.0-29-generic
```

Installing Other Operating Systems Using ONIE

Open Network Install Environment (ONIE) allows the installation of third-party network operating systems on the switch.



NOTE: When using a TFTP server, it is recommended to configure the TFTP server to be in the same subnet as the switch and to connect the server directly to the switch. The switch's default IP is **192.168.3.10** with subnet mask **255.255.255.0**, so the server should be configured in the **192.168.3.x** subnet.



NOTE: Currently only Pluribus Network OS is supported. For more information on how to obtain a license and installation instructions, visit www.pluribusnetworks.com.

Use the following procedure for installing/upgrading the switch to install the OS on the switch. Below is an example of installing D-Link OS over TFTP.

1. In the OS selection, select **ONIE** and press Enter.
2. From the ONIE interface window, select **ONIE: Install OS** and press Enter.



CAUTION: Choosing the **ONIE: Install OS** option will automatically remove any previously installed operating systems from the switch and will require the OS to be reinstalled.

```

GNU GRUB  version 2.02-beta3

+-----+
|*ONIE: Install OS|
|ONIE: Rescue    |
|ONIE: Uninstall OS|
|ONIE: Update ONIE|
|ONIE: Embed ONIE|
+-----+

Use the ^ and v keys to select which entry is highlighted.
Press enter to boot the selected OS, `e' to edit the commands
before booting or `c' for a command-line.

```

Figure 4-10 ONIE Interface Screen

3. Enter the command **onie-discovery-stop** to stop ONIE discovery.

```

ONIE:/ #onie-discovery-stop
discover: installer mode detected.
Stopping: discover...done.

```

Figure 4-11 ONIE Stopping Discovery

4. Enter the command: **onie-nos-install tftp://[IP address]/[ONIE installer file name]**

In this example, the command would appear as follows: **onie-nos-install tftp://192.168.3.168/onie-installer-x86_64-nc2x_rangeley-1.00.006-rc-DLink-DXS-5000-54S**

```

ONIE:/# onie-nos-install tftp://192.168.3.168/onie-installer-x86_64-nc2x_rangeley-1.00.006-rc-DLink-DXS-5000-54S

```

Figure 4-12 ONIE OS Installation

When the OS installation is successful, the switch will automatically reboot. The newly installed OS will now appear in the OS selection menu.

Appendix A - Technical Specifications

General	DXS-5000-54S	DQS-5000-32S	DQS-5000-32Q28	DQS-5000-54SQ28
Interfaces	48 x 10G SFP+ ports 6 x 40G QSFP+ ports 1 x USB 2.0 port	32 x 40G QSFP+ ports 1 x USB 2.0 port	32 x 100G QSFP28 ports 1 x USB 2.0 port	48 x 25G SFP28 ports 6 x 100G QSFP28 ports 1 x USB 2.0 port
Console Port	1 x mini-USB console port	1 x RJ-45 console port	1 x RJ-45 console port	1 x mini-USB console port
OOB Management Port	1 x 10/100/1000BASE-T RJ-45 port			
Performance				
Switching Capacity	1.44 Tbps	2.56 Tbps	6.4 Tbps	3.6 Tbps
Max. Forwarding Rate	1,071 Mpps (1.071 Bpps)	1,428 Mpps (1.428 Bpps)	2,980 Mpps (2.980 Bpps)	2,380 Mpps (2.380 Bpps)
Packet Buffer Memory	12 MB	12 MB	16 MB	16 MB
MAC Address Table	288K	288K	40K	40K
Physical				
Power Input	1+1 redundant power supply design Input: 100 to 240 V AC, 50/60 Hz			
Maximum Power Consumption	295 W	406 W	420 W	395 W
Heat Dissipation (Max.)	1006.58 BTU/hr	1385.27 BTU/hr	1433.04 BTU/hr	1347.74 BTU/hr
Fans	4 x fans	4 x fans	4 x fans	4 x fans
Acoustics	Max: 74 dB Min: 62 dB	Max: 69.8 dB Min: 59.5 dB	Max: 71.8 dB Min: 57.2 dB	Max: 72.3 dB Min: 58.6 dB
Dimensions (W x D x H)	440 x 406 x 44 mm (17.32 x 16 x 1.73 inch)			
Weight	9 kg (19.8 lbs)	9 kg (19.8 lbs)	8.7 kg (19.2 lbs)	9 kg (19.8 lbs)
Operating Temperature	0 to 45 °C (32 to 113 °F)			
Storage Temperature	-40 to 70 °C (-40 to 158 °F)			
Operating Humidity	5% to 95% RH, non-condensing			
Storage Humidity	5% to 95% RH, non-condensing			
MTBF	205,000 hours	85,937 hours	206,685 hours	205,500 hours
Certifications				
Safety	cULus CCC BSMI		CB CE	
EMI/EMC	cULus CCC CB		CE BSMI	

Optional D-Link OS Activation Licenses

DXS-5K-54S-DC-LIC	License to activate the D-Link OS on the DXS-5000-54S
DQS-5K-32S-DC-LIC	License to activate the D-Link OS on the DQS-5000-32S
DQS-5K-32Q28-DC-LIC	License to activate the D-Link OS on the DQS-5000-32Q28
DQS-5K-54SQ28-DC-LIC	License to activate the D-Link OS on the DQS-5000-54SQ28

Optional Management Software

DV-700-N25-LIC	D-View 7 - 25 node license
DV-700-N50-LIC	D-View 7 - 50 node license
DV-700-N100-LIC	D-View 7 - 100 node license
DV-700-N250-LIC	D-View 7 - 250 node license
DV-700-N500-LIC	D-View 7 - 500 node license
DV-700-N1000-LIC	D-View 7 - 1000 node license
DV-700-P5-LIC	D-View 7 - 5 probe license
DV-700-P10-LIC	D-View 7 - 10 probe license
DV-700-P25-LIC	D-View 7 - 25 probe license
DV-700-P50-LIC	D-View 7 - 50 probe license
DV-700-P100-LIC	D-View 7 - 100 probe license

Optional 10G SFP+ Transceivers

DEM-431XT	10GBASE-SR, multi-mode, OM1: 33 m/ OM2: 82 m/ OM3: 300 m (without DDM)
DEM-431XT-DD	10GBASE-SR, multi-mode, OM1: 33 m/ OM2: 82 m/ OM3: 300 m (with DDM)
DEM-432XT	10GBASE-LR, single-mode, 10 km (without DDM)
DEM-432XT-DD	10GBASE-LR, single-mode, 10 km (with DDM)
DEM-433XT	10GBASE-LR, single-mode, 40 km (without DDM)
DEM-433XT-DD	10GBASE-LR, single-mode, 40 km (with DDM)
DEM-434XT	10GBASE-ZR, single-mode, 80 km (without DDM)
DEM-435XT	10GBASE-LRM, multi-mode, 200 m (without DDM)

DEM-435XT-DD	10GBASE-LRM, multi-mode, 200 m (with DDM)
Optional WDM (Bidi) SFP+ Transceivers	
DEM-436XT-BXD	10GBASE-LR, single-mode, 20 km (TX: 1330 nm, RX: 1270 nm) (without DDM)
DEM-436XT-BXU	10GBASE-LR, single-mode, 20 km (TX: 1270 nm, RX: 1330 nm) (without DDM)
Optional 40G QSFP+ Transceivers	
DEM-QX01Q-SR4	40GBASE-SR4, multi-mode, OM3: 100 m / OM4: 150 m
DEM-QX10Q-SR4	40GBASE-LR4, single-mode, 10 km
Optional 10G SFP+ Direct Attach Cables	
DEM-CB100S	10G SFP+ to SFP+ 1 m Direct Attach Cable
DEM-CB300S	10G SFP+ to SFP+ 3 m Direct Attach Cable
DEM-CB700S	10G SFP+ to SFP+ 7 m Direct Attach Cable
DEM-CB100QXS-4XS	40G QSFP+ to 4 10G SFP+ 1 m Direct Attach Cable

Appendix B - Cables and Connectors

Console Cable

A console cable is used when a user wants to connect to the console port of the switch, to access the command line interface. The following diagrams and tables show the standard RS-232-to-RJ-45/Mini-USB receptacle/connector and their pin assignments.

DB9/RS-232-to-RJ-45 Pin Assignment

Contact	Console (DB9/RS232)	RJ-45
1	NC	Not Used
2	TX	Not Used
3	RX	UART-TX
4	NC	GND
5	GND (shared)	GND
6	NC	UART-RX
7	NC	Not Used
8	NC	Not Used
9	NC	X

DB9/RS-232-to-Mini-USB Pin Assignment

Contact	Console (DB9/RS232)	Mini-USB
1	NC	NC
2	TX	RX
3	RX	TX
4	NC	NC
5	GND	GND
6	NC	X
7	NC	X
8	NC	X
9	NC	X

Regulatory Statements

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Non-modification Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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 that may cause undesired operation.

Safety Warning:

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

ATTENTION: Risque d'explosion si la batterie est remplacée par un type incorrect. Jetezles piles usagées selon les instructions.

警告使用者:

此為甲類的資訊技術設備，在居住環境中使用時，可能會造成射頻擾動，在這種情況下，使用者會被要求採取某些適當的對策。

Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

電池警語

廢電池請回收。



廢電池請回收

CE EMI Class A Warning

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

SAFETY INSTRUCTIONS

The following general safety guidelines are provided to help ensure your own personal safety and protect your product from potential damage. 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 bare metal) 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 read 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 specifically rated for outdoor application.
- 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 Ihres Produkts. Weitere Details finden Sie in den Benutzeranleitungen zum Produkt.

- Statische Elektrizität kann elektronischen Komponenten schaden. Um Schäden durch statische Aufladung zu vermeiden, leiten Sie 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 Produkte mit 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 oder -öffnungen Ihres Produkts.
- Verwenden Sie dieses Produkt nicht in unmittelbarer Nähe von Wasser und nicht in Bereichen mit hoher Luftfeuchtigkeit oder Kondensation, 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 fusselfreies Tuch.

CONSIGNES DE SÉCURITÉ

Les consignes générales de sécurité ci-après sont fournies afin 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 objet 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'utilisateur, 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 orifices.
- 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 spécifiquement 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 chiffon 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 producto 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. ej., 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 usuario, 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 clasificado específicamente 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.

EU Battery & WEEE Directives Disposal and Recycling

This product may contain a battery. Recycle or dispose of batteries in accordance with the battery manufacturer's instructions and local/national disposal and recycling regulations. For more information, please refer to the warranty guide.

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 da 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 parte 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 specificatamente 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 filacce.
-

VEILIGHEIDSINFORMATIE

De volgende algemene veiligheidsinformatie werd verstrekt om uw eigen persoonlijke veiligheid te waarborgen en uw product te beschermen 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.w.z. het aanraken van geaard bloot metaal) voordat u het product aanraakt.
- U mag nooit proberen het product te onderhouden en u mag het product nooit demonteren. Voor sommige producten met door de 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 specifiek geclassificeerd is 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 and Recycling Your Product

ENGLISH

EN



This symbol on the product or packaging means that according to local laws and regulations this product should be not be disposed of in household waste but sent for recycling. Please take it to a collection point designated by your local authorities once it has reached the end of its life, some will accept products for free. By recycling the product and its packaging in this manner you help to 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 minimise this impact D-Link designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in both products and packaging.

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

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

DEUTSCH

DE



Dieses Symbol auf dem Produkt oder der Verpackung weist darauf hin, dass dieses Produkt gemäß bestehender örtlicher Gesetze und Vorschriften nicht über den normalen Hausmüll entsorgt werden sollte, sondern einer Wiederverwertung zuzuführen ist. Bringen Sie es bitte zu einer von Ihrer Kommunalbehörde entsprechend amtlich ausgewiesenen Sammelstelle, sobald das Produkt das Ende seiner Nutzungsdauer erreicht hat. Für die Annahme solcher Produkte erheben einige dieser Stellen keine Gebühren. Durch ein auf diese Weise durchgeführtes Recycling des Produkts und seiner Verpackung helfen Sie, die Umwelt zu schonen und die menschliche 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 verpflichtet, diese entsprechend zu mindern. Zu diesem Zweck entwickelt und stellt D-Link seine Produkte mit dem Ziel größtmöglicher Umweltfreundlichkeit her und verwendet wiederverwertbare, schadstoffarme Materialien bei Produktherstellung und Verpackung.

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

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

FRANÇAIS

FR



Ce symbole apposé sur le produit ou son emballage signifie que, conformément aux lois et réglementations locales, ce produit ne doit pas être éliminé avec les déchets domestiques mais recyclé. Veuillez le rapporter à un point de collecte prévu à cet effet par les autorités locales; certains accepteront vos produits gratuitement. En recyclant le produit et son emballage de cette manière, vous 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. Pour limiter cet impact, D-Link conçoit et fabrique ses produits de manière aussi écologique que possible, en utilisant des matériaux recyclables et faiblement 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 économies 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

ES



Este símbolo en el producto o el embalaje significa que, de acuerdo con la legislación y la normativa local, este producto no se debe desechar en la basura doméstica sino que se debe reciclar. Lévelo a un punto de recogida designado por las autoridades locales una vez que ha llegado al fin de su vida útil; algunos de ellos aceptan recogerlos de forma gratuita. Al reciclar el producto y su embalaje 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 productos en el medio ambiente. Para reducir este impacto, D-Link diseña y fabrica sus productos para que sean lo más ecológicos posible, utilizando 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 reducir las emisiones de CO₂.

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

ITALIANO

IT



La presenza di questo simbolo sul prodotto o sulla confezione del prodotto indica che, in conformità alle leggi e alle normative locali, questo prodotto non deve essere smaltito nei rifiuti domestici, ma avviato al riciclo. Una volta terminato il ciclo di vita utile, portare il prodotto presso un punto di raccolta indicato dalle autorità locali. Alcuni questi punti di raccolta accettano gratuitamente i prodotti da riciclare. Scegliendo di riciclare il prodotto e il relativo imballaggio, si contribuirà a preservare l'ambiente e a salvaguardare la 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 impatto, D-Link progetta e realizza i propri prodotti in modo che rispettino il più possibile l'ambiente, utilizzando materiali riciclabili a basso tasso di 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 contribuirà 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.dlinkgreen.com.

NEDERLANDS

NL



Dit symbool op het product of de verpakking betekent dat dit product volgens de plaatselijke wetgeving niet mag worden weggegooid met het huishoudelijk afval, maar voor recyclage moeten worden ingeleverd. Zodra het product het einde van de levensduur heeft bereikt, dient u het naar een inzamelpunt te brengen dat hiertoe werd aangeduid door uw plaatselijke autoriteiten, sommige autoriteiten accepteren producten zonder dat u hiervoor dient te betalen. Door het product en de verpakking op deze manier te 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, ontwerpt en bouwt D-Link zijn producten zo milieuvriendelijk mogelijk, door het gebruik van recycleerbare producten met lage toxiciteit in product en 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 bespaart 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

PL



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 poddać procesowi recyklingu. Po zakończeniu użytkowania produktu, niektóre odpowiednie do tego celu podmioty przyjmą takie produkty nieodpłatnie, dlatego prosimy dostarczyć go do punktu zbiórki wskazanego przez lokalne władze. Poprzez proces recyklingu i dzięki takiemu postępowaniu z produktem oraz jego opakowaniem, pomogą Państwo chronić środowisko naturalne i dbać o ludzkie zdrowie.

D-Link i środowisko

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

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

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

ČESKY

CZ



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

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 své výrobky navrhujeme a vyrábíme tak, aby byly co nejekologičtější, a ve výrobcích i obalech používáme recyklovatelné a nízkotoxické materiály.

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

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

MAGYAR

HU



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

A D-Link és a környezet

A D-Linknél megértjük és elköteleztünk vagyunk a műveleteink és termékeink környezetre gyakorolt hatásainak csökkentésére. Az ezen hatás csökkentése érdekében a D-Link a lehető leginkább környezetbarát termékeket tervez és gyárt azáltal, hogy újrahasznosítható, alacsony károsanyag-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 az energia megtakarításában és a széndioxid kibocsátásának csökkentésében.

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

NORSK

NO



Dette symbolet på produktet eller forpakningen betyr at dette produktet ifølge lokale lover og forskrifter ikke skal kastes sammen med husholdningsavfall, men leveres inn til gjenvinning. Vennligst ta det til et innsamlingssted anvist av lokale myndigheter når det er kommet til slutten av levetiden. Noen steder aksepteres produkter uten avgift. Ved på denne måten å gjenvinne produktet 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 denne innvirkningen designer og lager D-Link produkter som er så miljøvennlig som mulig, ved å bruke resirkulerbare, lav-toksiske materialer både i 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 redusere CO₂-utslipp.

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



DANSK

DK

Dette symbol på produktet eller emballagen betyder, at dette produkt i henhold til lokale love og regler ikke må bortskaffes som husholdningsaffald, mens skal sendes til genbrug. Indlever produktet til et indsamlingssted angivet af de lokale myndigheder, når det er nået til slutningen af dets levetid. I nogle tilfælde vil produktet blive modtaget gratis. Ved at indlevere produktet og dets 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 minimere denne indvirkning designer og producerer D-Link sine produkter, så de er så miljøvenlige som muligt, ved at bruge genanvendelige materialer 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 energi og reducere CO₂-udledningerne.

Du kan finde flere oplysninger om vores miljømæssigt ansvarlige produkter og emballage på www.dlinkgreen.com.

SUOMI

FI



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

D-Link ja ympäristö

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

Suosittelimme, että irrotat D-Link-tuotteesi virtalähteestä tai sammutat ne aina, kun ne eivät ole käytössä. Toimimalla näin autat säästämään energiaa ja vähentämään hiilidioksidipäästöjä.

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

SVENSKA

SE



Den här symbolen på produkten eller förpackningen betyder att produkten enligt lokala lagar och föreskrifter inte skall kastas i hushållssoporna utan i stället återvinnas. Ta den vid slutet av dess livslängd till en av din lokala myndighet utsedd uppsamlingsplats, vissa accepterar produkter utan kostnad. Genom att på detta sätt återvinna produkten och förpackningen hjälper du till att bevara 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 påverkan utformar och bygger D-Link sina produkter för att de ska vara så miljövänliga som möjligt, genom att använda återvinningsbara material med 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 hjälper du till att spara energi och minska utsläpp av koldioxid.

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

PORTUGUÊS

PT



Este símbolo no produto ou embalagem significa que, de acordo com as leis e regulamentações locais, este produto não deverá ser eliminado juntamente com o lixo doméstico mas enviado para a reciclagem. Transporte-o para um ponto de recolha designado pelas suas autoridades locais quando este tiver atingido o fim da sua vida útil, alguns destes pontos aceitam produtos gratuitamente. Ao 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 no ambiente. Para minimizar este impacto a D-Link concebe e constrói os seus produtos para que estes sejam o mais inofensivos para o ambiente possível, utilizando materiais 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 poupar energia e reduzir as emissões de CO₂.

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

Warranty & Technical Support



Limited Warranty (USA Only)

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

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

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

Limited Lifetime Warranty for the product is defined as follows:

- Hardware: For as long as the original customer/end user owns the product, or five (5) years after product discontinuance, whichever occurs first (excluding power supplies and fans)
- Power supplies and fans: Three (3) Year
- Spare parts and spare kits: Ninety (90) days

The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

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

Non-Applicability of Warranty: The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim: The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.com/>.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to **D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708**. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer.

D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

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

or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product. While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties: EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability: TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law: This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

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

- **FCC Statement:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. Operation of this equipment in a residential environment is likely to cause harmful interference to radio or television reception. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.

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

Product Registration

Register your D-Link product online at <http://support.dlink.com/register/>

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

Technical Support

U.S. and Canadian customers

This guide is only for initial configuration. Please refer to the user manual to learn more or visit <http://www.mydlink.com> for more information. Also feel free to contact us. U.S. and Canadian customers can contact D-Link Technical Support through our website.

USA

<http://support.dlink.com>

Canada

<http://support.dlink.ca>

Europe customers

TECHNICAL SUPPORT	dlink.com/support
TECHNISCHE UNTERSTÜTZUNG	
ASSISTANCE TECHNIQUE	
ASISTENCIA TÉCNICA	
SUPPORTO TECNICO	
TECHNISCHE ONDERSTEUNING	
POMOC TECHNICZNA	
TECHNICKÁ PODPORA	
TECHNICKÁ PODPORA	
TECHNIKAI TÁMOGATÁS	
TEKNISK SUPPORT	
TEKNISK SUPPORT	
TEKNISK STØTTE	
TEKNINEN TUKI	
ASSISTÊNCIA TÉCNICA	
ΤΕΧΝΙΚΗ ΥΠΟΣΤΗΡΙΞΗ	
TEHNIČKA PODRŠKA	
TEHNIČNA PODPORA	
SUPPORT TEHNIC	
ТЕХНИЧЕСКА ПОДДРЪЖКА	

Australia customers

Tel: 1300-700-100

24/7 Technical Support

Web: <http://www.dlink.com.au>

E-mail: support@dlink.com.au

India customers

Tel: +91-832-2856000 or 1860-233-3999

Web: www.dlink.co.in

E-Mail: helpdesk@in.dlink.com

Singapore, Thailand, Indonesia, Malaysia, Philippines, Vietnam customers

Singapore - www.dlink.com.sg

Thailand - www.dlink.co.th

Indonesia - www.dlink.co.id

Malaysia - www.dlink.com.my

Philippines - www.dlink.com.ph

Vietnam - www.dlink.com.vn

Korea customers

Tel : +82-2-2028-1810

Monday to Friday 9:00am to 6:00pm

Web : <http://d-link.co.kr>

E-mail : g2b@d-link.co.kr

New Zealand customers

Tel: 0800-900-900

24/7 Technical Support

Web: <http://www.dlink.co.nz>

E-mail: support@dlink.co.nz

South Africa and Sub Sahara Region customers

Tel: +27 12 661 2025

08600 DLINK (for South Africa only)

Monday to Friday 8:30am to 9:00pm South Africa Time

Web: <http://www.d-link.co.za>

E-mail: support@za.dlink.com

D-Link Middle East - Dubai, U.A.E. customers

Plot No. S31102,

Jebel Ali Free Zone South,

P.O.Box 18224, Dubai, U.A.E.

Tel: +971-4-8809022

Fax: +971-4-8809066 / 8809069

Technical Support: +971-4-8809033

General Inquiries: info.me@me.dlink.com

Tech Support: support.me@me.dlink.com

Egypt customers

1, Makram Ebeid Street -

City Light Building - floor 5

Nasrcity - Cairo, Egypt

Tel.: +2 02 23521593 - +2 02 23520852

Technical Support: +2 02 26738470

General Inquiries: info.eg@me.dlink.com

Tech Support: support.eg@me.dlink.com

Kingdom of Saudi Arabia customers

Office # 84 ,

Al Khaleej Building (Mujamathu Al-Khaleej)

Opp. King Fahd Road, Olaya

Riyadh - Saudi Arabia

Tel: +966 1121 70008

Technical Support:

+966 1121 70009

General Inquiries: info.sa@me.dlink.com

Tech Support: support.sa@me.dlink.com

Pakistan customers

Islamabad Office:

61-A, Jinnah Avenue, Blue Area,
Suite # 11, EBC, Saudi Pak Tower,
Islamabad - Pakistan

Tel.: +92-51-2800397, 2800398

Fax: +92-51-2800399

Karachi Office:

D-147/1, KDA Scheme # 1,
Opposite Mudassir Park, Karsaz Road,
Karachi – Pakistan

Phone: +92-21-34548158, 34326649

Fax: +92-21-4375727

Technical Support: +92-21-34548310, 34305069

General Inquiries: info.pk@me.dlink.com

Tech Support: support.pk@me.dlink.com

Iran customers

Unit 1, 1st Floor, Plot No 3, Pazhoheshgah (2) Alley, Ahmad Ghasir (Bokharest) St. ,
Shahid Beheshti (Abbas Abad) St. , Tehran, Iran.

Postal Code : 1514615911

Tel: +98-21-88880918,19

General Inquiries: info.ir@me.dlink.com

Tech Support: support.ir@me.dlink.com

Morocco customers

M.I.T.C

Route de Nouaceur angle RS et CT 1029 Bureau N° 312 ET 337

Casablanca , Maroc

Phone : +212 663 72 73 24

Email: support.na@me.dlink.com

Lebanon RMA center customers

Dbayeh/Lebanon

PO Box:901589

Tel: +961 4 54 49 71 Ext:14

Fax: +961 4 54 49 71 Ext:12

Email: taoun@me.dlink.com

Bahrain customers

Technical Support: +973 1 3332904

Kuwait customers

Technical Support: + 965 22453939 / +965 22453949

Техническая Поддержка

Обновления программного обеспечения и документация доступны на Интернет-сайте D-Link.

D-Link предоставляет бесплатную поддержку для клиентов в течение гарантийного срока.

Клиенты могут обратиться в группу технической поддержки D-Link по телефону или через Интернет.

Техническая поддержка компании D-Link работает в круглосуточном режиме ежедневно, кроме официальных праздничных дней. Звонок бесплатный по всей России.

Техническая поддержка D-Link:

8-800-700-5465

Техническая поддержка через Интернет:

<http://www.dlink.ru>

e-mail: support@dlink.ru

Изготовитель:

Д-Линк Корпорейшн, 114, Тайвань, Тайпей, Нэйху Дистрикт, Шинху 3-Роуд, № 289

Уполномоченный представитель, импортер:

ООО "Д-Линк Трейд"

390043, г.Рязань, пр. Шабулина, д.16

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Офисы

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E-mail: mail@dlink.ru

Україна

Київ, вул. Межигірська, 87-А

Тел.: +38 (044) 545-64-40

E-mail: ua@dlink.ua

Moldova

Chisinau; str.C.Negruzzi-8

Tel: +373 (22) 80-81-07

E-mail: info@dlink.md

Беларусь

Мінск, пр-т Незалежнасці, 169

Тэл.: +375 (17) 218-13-65

E-mail: support@dlink.by

Қазақстан

Алматы, Құрманғазы к-сі, 143 үй

Тел.: +7 (727) 378-55-90

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թաղամաս, 23/5

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Tel.: +371 (6) 761-87-03

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Lietuva

Vilnius, Žirmūnu 139-303

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E-mail: info@dlink.lt

Eesti

E-mail: info@dlink.ee

Türkiye

Uphill Towers Residence A/99

Ataşehir /ISTANBUL

Tel: +90 (216) 492-99-99

Email: info.tr@dlink.com.tr

ישראל

20 רח' המגשימים

קרית מטלון

פתח תקווה

072-2575555

support@dlink.co.il

Soporte Técnico Para Usuarios En Latino America

Por favor revise el número telefónico del Call Center de su país en <http://www.dlinkla.com/soporte/call-center>

Soporte Técnico de D-Link a través de Internet

Horario de atención Soporte Técnico en www.dlinkla.com

e-mail: soporte@dlinkla.com & consultas@dlinkla.com

Cientes de Brasil

Caso tenha dúvidas na instalação do produto, entre em contato com o Suporte Técnico D-Link.

Acesse o site: **www.dlink.com.br/suporte**

D-Link 友訊科技 台灣分公司 技術支援資訊

如果您還有任何本使用手冊無法協助您解決的產品相關問題，台灣、香港或是澳門用戶可至網站、電子郵件或電話等方式與D-Link技術支援工程師聯絡。

台灣D-Link免付費技術諮詢專線

台灣技術諮詢服務專線 0800-002-615

台灣手機付費電話 (02) 6600-0123#8715

台灣服務時間：週一至週五：9:00~21:00

週六日及國定假日(不含農曆春節) 10:00~19:00

台灣網站：<http://www.dlink.com.tw>

台灣電子郵件：dssqa_service@dlink.com.tw

產品保固期限、台灣區維修據點查詢，請參考<http://www.dlink.com.tw>網頁說明。

香港、澳門D-Link技術諮詢專線

香港技術諮詢服務專線 (852) 8100 8892

香港服務時間：週一至週五9:00AM~1:00PM及2:00PM~6:00PM

週六 9:00AM~1:00PM

香港網站：<http://www.dlink.com.hk>

香港電子郵件：service@cn.synnex-grp.com

香港、澳門維修據點查詢請參考<http://www.dlink.com.hk/contact.html> 網頁說明

如果您是其他地區的用戶，請參考D-Link網站www.dlink.com 查詢全球各地分公司的聯絡資訊以取得相關支援服務。

Pelanggan Indonesia

Update perangkat lunak dan dokumentasi pengguna dapat diperoleh pada situs web D-Link.

Dukungan Teknis untuk pelanggan:

Tel: 0800-14014-97 (Layanan Bebas Pulsa)

Dukungan Teknis D-Link melalui Internet:

Pertanyaan Umum: sales@id.dlink.com

Bantuan Teknis: support@id.dlink.com

Website : <http://www.dlink.co.id>

日本のお客様

この度は弊社製品をお買い上げいただき、誠にありがとうございます。
す。

製品に同梱されている保証書の購入元にお問い合わせください。

中国客户

技术支持中心电话：

400-629-6688(家用产品热线) 4006-828-828(企业产品热线)

技术支持中心邮箱：dlink400@cn.dlink.com

各地维修中心地址请登录官方网站查询

网址：<http://www.dlink.com.cn>

400电话工作时间：工作日9:00-19:00；节假日9:00-18:00