



HP ProCurve 1810G-24 Switch

Installation and Getting Started Guide

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Publication Number

5992-5474

July 2009

Applicable Product

HP ProCurve 1810G-24 Switch (J9450A)

Safety

Before installing and operating this product, please read the “Installation Precautions” in Chapter 2, “Installing the Switch”, and the safety statements in Appendix B, “Safety and EMC Regulatory Statements”.

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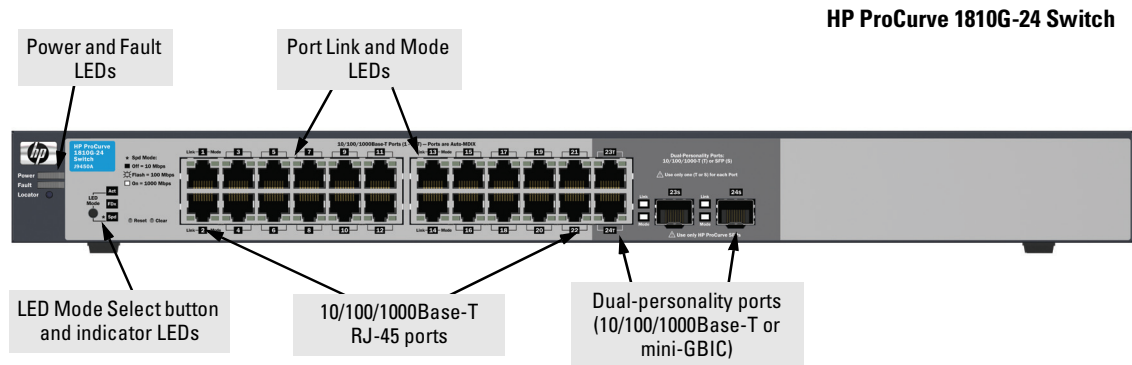
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Switch Overview

Switch Hardware Features

The HP ProCurve 1810G-24 Switch (J9450A) is a multiport switch that can be used to build high-performance switched workgroup networks. This switch is a store-and-forward device that offers low latency for high-speed networking.



Switch Ports

The switch has 24 auto-sensing 10/100/1000Base-T RJ-45 ports. Two of these ports are dual-personality (ports 23 and 24). Because the RJ-45 ports support automatic MDI/MDI-X operation, you can use straight-through cables for all network connections to PCs or servers, or to other switches or hubs.

Dual-personality ports use either the 10/100/1000Base-T RJ-45 connector, or a supported ProCurve mini-GBIC for fiber-optic connections. By default, the RJ-45 connectors are enabled.

This switch is designed to be used primarily as a high-density wiring closet or desktop switch. With this switch you can directly connect computers, printers, and servers to provide dedicated bandwidth to those devices, and you can build a switched network infrastructure by connecting the switch to hubs, other switches, or routers. In addition, the switch offers network management capabilities.

LEDs

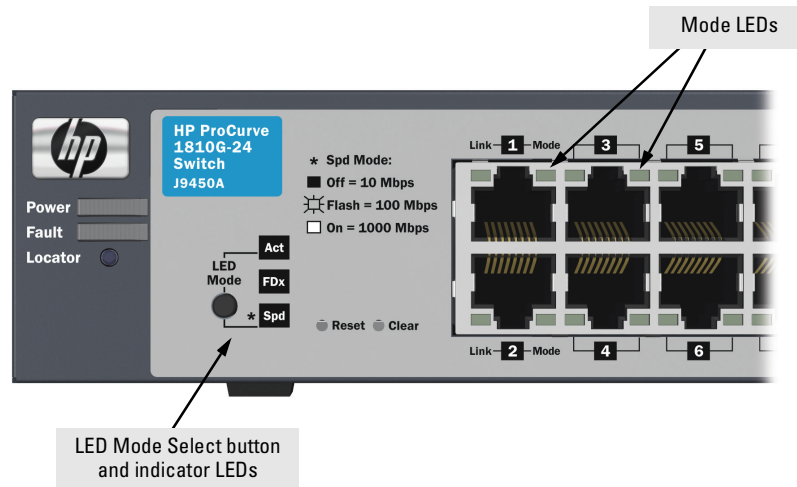
The front panel of the switch provides status LEDs for system monitoring. The following table details the functions of the various indicators.

System LED	State	Meaning
Power (green)	On	The switch is receiving power.
	Off	The switch is NOT receiving power.
Fault (orange)	On	On briefly after the switch is powered on or reset, at the beginning of switch self test. If the LED remains on, it indicates a detected hardware failure during the self test.
	Blinking*	A fault has occurred on the switch or one of the switch ports. The Link LED for the port with the fault will blink simultaneously.
	Off	The normal state; indicates that there are no fault conditions on the switch.
Locator (blue)	Blinking**	The Locator LED is used to locate a specific switch in an area full of switches. The LED blinks for 30 minutes when activated through the switch software.
	Off	The Locator LED is disabled by default.
LED Mode Select (3 green LEDs)	Act	Indicates that the port LEDs are displaying network activity information.
	FDx	Indicates the port Mode LEDs are lit for ports that are in full-duplex mode.
	Spd	Indicates that the port LEDs are displaying the connection speed at which each port is operating: - if the port LED is off, the port is operating at 10 Mbps. - if the port LED is blinking*, the port is operating at 100 Mbps. - if the port LED is on continuously, the port is operating at 1000 Mbps.
* The blinking behavior is an on/off cycle once every 1.6 seconds, approximately.		
** The blinking behavior is an on/off cycle once every 0.8 seconds, approximately.		

Port LED	State	Meaning
Link	On	The port is enabled and receiving a link indication from the connected device.
	Off	The port has no active network cable connected, is not receiving link signal, or Green Mode has been enabled.
	Blinking	A fault has been detected on the port. The port LED will blink simultaneously (once every 1.6 seconds) with the Fault LED.
Mode	Depending on the mode selected, displays port activity, indicates the operating speed, or shows if the port is configured for full-duplex operation. When off, may indicated that Green Mode is enabled. See “LED Mode Select Button and Indicator LEDs” below for more information.	

LED Mode Select Button and Indicator LEDs

To optimize the amount of information that can be displayed for each of the switch ports, the ProCurve 1810G-24 Switch uses a Mode LED for each port. The operation of this LED is controlled by the LED Mode Select button on the switch panel, and the current selection is indicated by the mode indicator LEDs near the button. Press the button to change from one mode to the next.



- If the Activity (Act) indicator LED is lit, each port LED displays activity information for the associated port—it flickers as network traffic is received and transmitted through the port.
- When the FDx (full duplex) indicator LED is on, the port Mode LEDs turn on for those ports that are operating at full duplex.
- If the Speed (Spd) indicator LED is lit, the port LEDs behave as follows to indicate the connection speed for the port:
 - Off = 10 Mbps
 - Blinking = 100 Mbps (the blinking behavior is a repeated on/off cycle once every 1.6 sec.)
 - On = 1000 Mbps

Reset Button

This button is used to reset the switch while it is powered on. This action clears any temporary error conditions that may have occurred and executes the switch self test.

Clear Button

This button is used for these purposes:

- **Deleting Passwords** - When pressed by itself for at least three seconds, the button deletes any switch console access passwords that you may have configured. Use this feature if you have misplaced the password and need console access.

This button is provided for your convenience, but its presence means that if you are concerned with the security of the switch configuration and operation, you should make sure the switch is installed in a secure location, such as a locked wiring closet.

- **Restoring Factory Default Configuration** - When pressed with the Reset button in a specific pattern, any configuration changes you may have made through the switch console, the web browser interface, and SNMP management are removed, and the factory default configuration is restored to the switch. For the specific method to restore the factory default configuration, see “Restoring the Factory Default Configuration” in chapter 4, “Troubleshooting” of this manual.

Switch Features

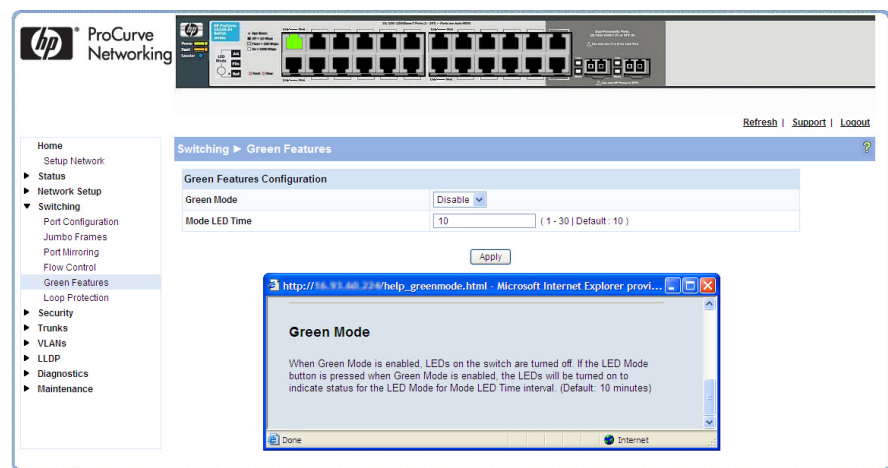
The features of the ProCurve 1810G-24 Switch include:

- 24 auto-sensing 10/100/1000Base-T RJ-45 ports.
- plug-and-play networking—all ports are enabled—just connect the network cables to active network devices and your switched network is operational.
- IEEE 802.3ab Auto MDI/MDI-X on all twisted-pair ports, meaning that all connections can be made using straight-through twisted-pair cables. Cross-over cables are not required, although they will also work. The pin operation of each port is automatically adjusted for the attached device: if the switch detects that a 10/100 Mbps switch or hub is connected to the port, it configures the port as MDI; if the switch detects that a 10/100 Mbps end-node device is connected to the port, it configures the port as MDI-X.
- a “Green Mode” option that keeps LEDs turned off except for when the Mode Select button is pressed.
- an automatic low-power mode for ports when a link is not present.
- automatic learning of the network addresses in each switch’s 8000-address forwarding table.
- automatically negotiated full-duplex operation for all 10/100/1000Base-T RJ-45 ports when connected to other auto-negotiating devices
- the mini-GBIC ports always operate at full duplex.

- easy management of the switch through several available interfaces:
 - Web browser interface — an easy to use built-in graphical interface that can be accessed from common Web browsers.
 - ProCurve Manager (PCM) — allows network administrators to discover and map the ProCurve 1810G-24 Switch within their network and launch the ProCurve 1810G-24 Switch's built-in graphical interface from within PCM to configure the switch.
- support for up to 64 IEEE 802.1Q-compliant VLANs so you can divide the attached end nodes into logical groupings that fit your business needs.
- support for up to 8 trunks so you can assign physical links to one logical link (trunk) that functions as a single, higher-speed link providing dramatically increased bandwidth.
- support for many advanced features to enhance network performance—for a description, see the *Management and Configuration Guide*.
- download of new switch software for product bug fixes.

Green Mode

A Green Mode feature can be configured through the Web browser interface. When Green Mode is enabled, port LEDs are turned off unless the LED Mode button is pressed.



Installing the Switch

The ProCurve 1810G-24 Switch device is easy to install. It comes with an accessory kit that includes the brackets for mounting the switch in a standard 19-inch telco rack, in an equipment cabinet, and with rubber feet that can be attached so the switch can be securely located on a horizontal surface. The brackets are designed to allow mounting the switch in a variety of locations and orientations. This chapter shows how to install the switch.

Included Parts

The following components ship with a ProCurve 1810G-24 Switch:

- Documentation kit
 - Read Me First
 - ProCurve 1810G-24 Switch Quick Setup Guide
 - Safety and Regulatory information
 - Software License, Warranty, and Support information
- Accessory kit (5064-2085)
 - two mounting brackets
 - four 8-mm M4 screws to attach the mounting brackets to the switch
 - two 5/8-inch (15.875 mm) number 12-24 screws to attach the switch to a rack
 - four rubber feet
- Power cord, one of the following:

Australia/New Zealand	8121-0833
China	8120-8377
Continental Europe	8120-6802
Denmark	8120-6806
Japan	8120-6804
Switzerland	8120-6807
United Kingdom/Hong Kong/Singapore	8120-8709
United States/Canada/Mexico	8120-6805
South Africa	8120-6806
India	8121-0772
Israel	8120-6799
Thailand	8121-0667
Taiwan	8121-0964

**Japan Power Cord
Warning**

製品には、同梱された電源コードをお使い下さい。
同梱された電源コードは、他の製品では使用出来ません。

Installation Procedure

1. **Prepare the installation site** ([page 2-3](#)). Please see below for some installation precautions.
2. **Verify the switch passes self test** ([page 2-4](#)).
3. **Mount the switch** ([page 2-6](#)).
4. **Connect power to the switch** ([page 2-11](#)).
5. **Connect the network cables** ([page 2-11](#)).

Installation Precautions

Follow these precautions when installing the switch.

WARNING

- **The rack or cabinet should be adequately secured to prevent it from becoming unstable and/or falling over.**

Devices installed in a rack or cabinet should be mounted as low as possible, with the heaviest devices at the bottom and progressively lighter devices installed above.

- **When wall mounting, to meet national and international safety requirements, wall mount either with the front facing up or down. The side vents cannot be placed up or downward.**
-

Installation Precautions (Continued)

Cautions

- Ensure the power source circuits are properly grounded, then use the power cord supplied with the switch to connect it to the power source.
- If your installation requires a different power cord than the one supplied with the switch, be sure to use a power cord displaying the mark of the safety agency that defines the regulations for power cords in your country. The mark is your assurance that the power cord can be used safely with the switch.
- When installing the switch, the AC outlet should be near the switch and should be easily accessible in case the switch must be powered off.
- Ensure the switch does not overload the power circuits, wiring, and over-current protection. To determine the possibility of overloading the supply circuits, add together the ampere ratings of all devices installed on the same circuit as the switch and compare the total with the rating limit for the circuit. The maximum ampere ratings are usually printed on the devices near the AC power connectors.
- Do not install the switch in an environment where the operating ambient temperature might exceed 40 °C (104 °F).
- Ensure the air flow around the sides of the switch is not restricted.

1. Prepare the Installation Site

Be sure to follow the guidelines below to ensure proper operation when installing the switch into a network:

- Ethernet cable type: Unshielded twisted pair (UTP) or shielded twisted pair (STP) cables with RJ-45 connectors, maximum length 100 meters (328 ft); Category 3 or better for 10Base-T, Category 5 or better for 100Base-TX, and Category 5, 5e, or 6 for 1000Base-T.
- Fiber cable type: For 1000Base-SX mini-GBIC, 62.5/125 µm or 50/125 µm core/cladding diameter, graded-index, multimode fiber-optic cables that are fitted with LC connectors. For 1000Base-LX and 1000Base-LH mini-GBICs, single-mode cables fitted with LC connectors.
- Protect the switch from radio frequency interference emissions.
- Use electrical surge suppression.
- Use safe connections with no damaged cables, connectors or shields.

Installation Space Requirements

Switch Orientation	Clearance Requirements
Front	At least 7.6 cm (3 inches) of space for the twisted-pair and fiber-optic cabling.
Back	At least 3.8 cm (1 1/2 inches) of space for the power cord and switch cooling.
Sides	At least 7.6 cm (3 inches) for cooling, except if the switch is installed in an open EIA/TIA rack.

2. Verify the Switch Passes Self Test

Before mounting the switch, verify it is working properly by plugging it into a power source and confirming that it passes self test.

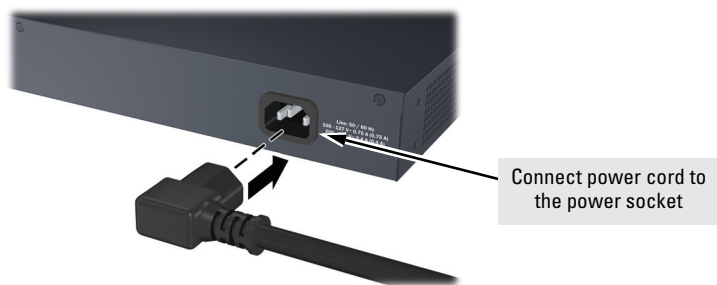
Note

The switch does not have a power switch. It is powered on when the power cord is connected to the switch and to a power source. For safety, the power outlet should be located near the switch installation.

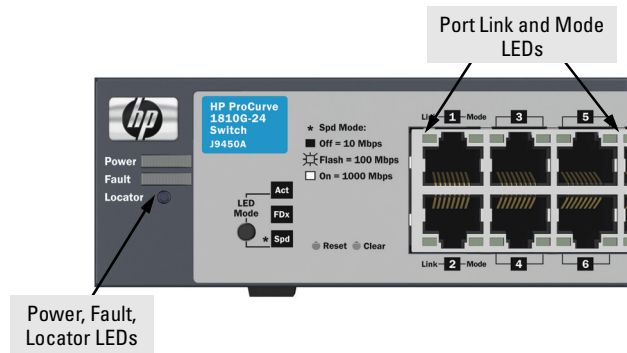
The switch automatically adjusts to any voltage between 100-240 volts and either 50 or 60 Hz. No voltage range settings are required.

If your installation requires a different power cord than the one supplied with the switch, be sure to use a power cord displaying the mark of the safety agency that defines the regulations for power cords in your country. The mark is your assurance that the power cord can be used safely with the switch.

1. Connect the power cord supplied with the switch to the power socket on the back of the switch, and then into a properly grounded electrical outlet.



2. Check the LEDs on the switch as described below.



When the switch is powered on, it performs its diagnostic self test. The self test takes approximately 30 seconds to complete.

Self Test LED Behavior:

During the self test:

- Initially, all the status, and all port **Link** and **Mode** LEDs turn on, with the **Locator** LED blinking.
- After several seconds all LEDs turn off, except for the **Power**, **Fault**, **Locator**, and **Act** LEDs, which remain on.
- The port **Link** LEDs turn on in sequence from port 1 to port 24, and then the **Mode** LEDs flash once in sequence. Finally, the **Link** LEDs turn off in the same sequence and the self test is complete.

When the self test completes successfully:

- The **Power** LED remains on.
- The **Fault** and **Locator** LEDs stay off.
- The **Act** LED remains on indicating the default LED mode.
- The port LEDs on the front of the switch go into their normal operational mode:
 - If the ports are connected to active network devices, the **Link** LEDs stay on and the **Mode** LEDs behave according to the mode selected. In the default mode (**Act**), the Mode LEDs should be blinking indicating port activity.
 - If the ports are not connected to active network devices, the **Link** and **Mode** LEDs will stay off.

If the LED display is different than what is described above, the self test has not completed correctly. Refer to “Troubleshooting” for diagnostic help.

3. Remove power to the switch before mounting.

3. Mount the Switch

The switch can be mounted in these ways:

- in a rack or cabinet
- on a horizontal surface
- on a wall

Rack or Cabinet Mounting

The switch is designed to be mounted in any EIA-standard 19-inch telco rack or communication equipment cabinet. Note that the mounting brackets have multiple mounting holes and can be rotated allowing for a wide variety of mounting options.

WARNING

For safe operation, please read the “Installation Precautions” on [page 2-2](#) and [page 2-3](#), before mounting the switch.

Equipment Cabinet Note

The screws supplied with the switch are the correct threading for standard EIA/TIA open 19-inch racks. If you are installing the switch in an equipment cabinet such as a server cabinet, use the clips and screws that came with the cabinet in place of the screws that are supplied with the switch.

Complete step 1. Then, plan which four holes you will be using in the cabinet and install all four clips and partially install the two bottom screws, as described in step 2. Then proceed to step 3.

1. Use a #1 Phillips (cross-head) screwdriver and attach the mounting brackets to the switch with the included 8-mm M4 screws.

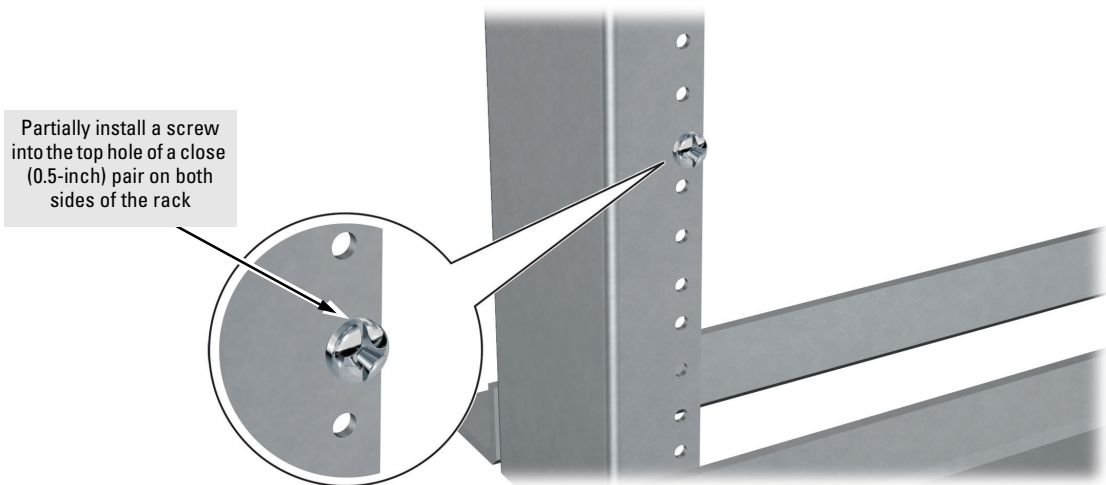


Note

The mounting brackets have multiple mounting holes and can be rotated allowing for a wide variety of mounting options. These include mounting the switch so its front face is flush with the face of the rack, or mounting it in a more balanced position as shown in the illustration.

Steps 2, 3, and 4 on the next page describe a convenient method of mounting the switch in a rack by placing it on two screws that you first install in the rack. You may, instead, just hold the switch with attached brackets up to the rack and move it vertically until rack holes line up with the bracket holes and notches, then insert and tighten the four screws holding the brackets to the rack.

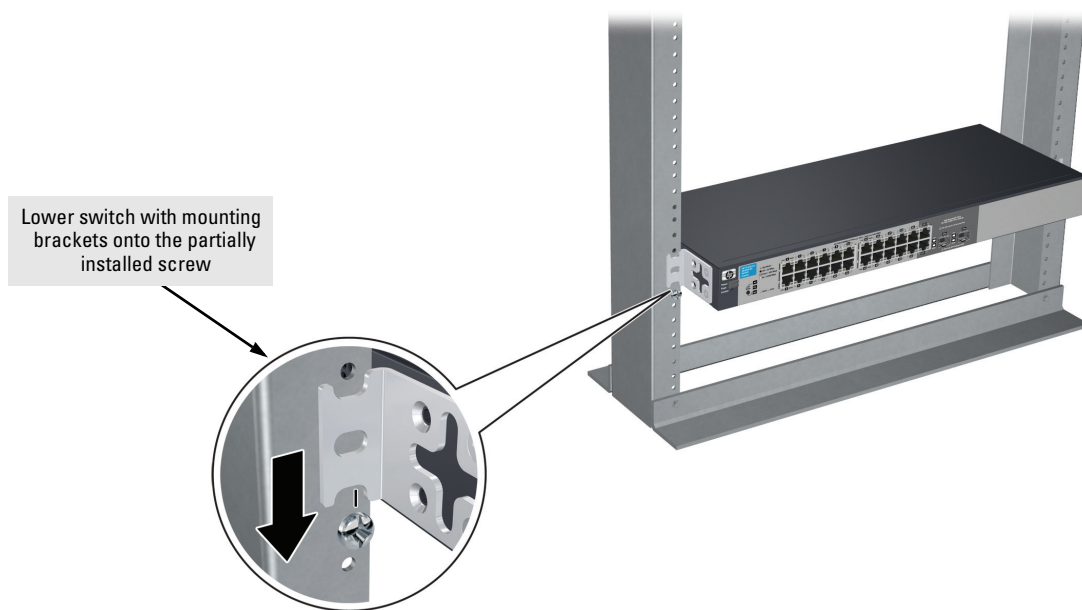
-
2. Partially install a screw (5/8-inch number 12-24) into the top hole of a pair of holes that are 0.5 inches apart in each rack/cabinet upright as shown in the illustration below. Ensure that the screws are at the same level in each upright.



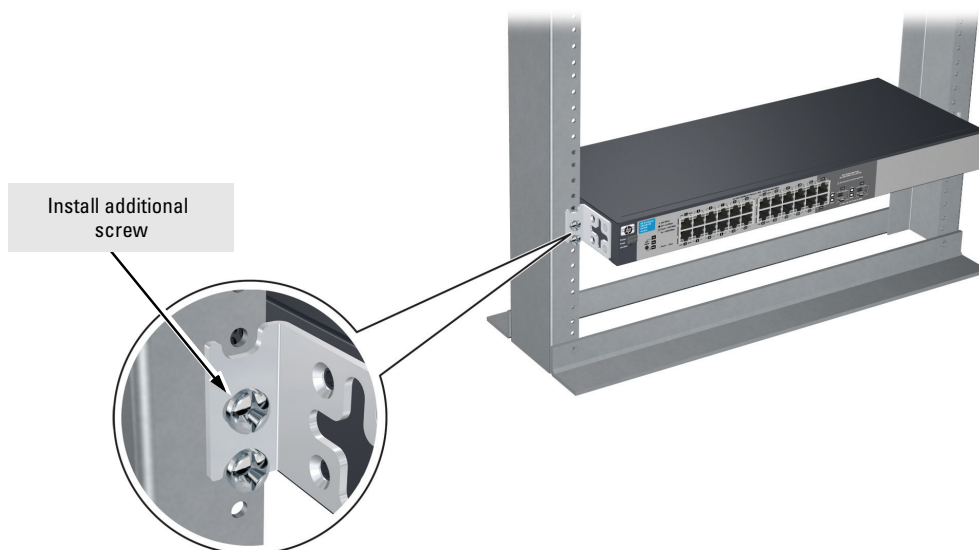
Installing the Switch

Installation Procedure

3. Place the switch in the rack and lower it so the notches in the bottom of the bracket slide onto the screws, then tighten these screws.



4. Install the other number 12-24 screw into the upper hole in each bracket. Tighten these screws.



Wall Mounting

You can mount the switch on a wall with either the front or rear panel facing up.

WARNING

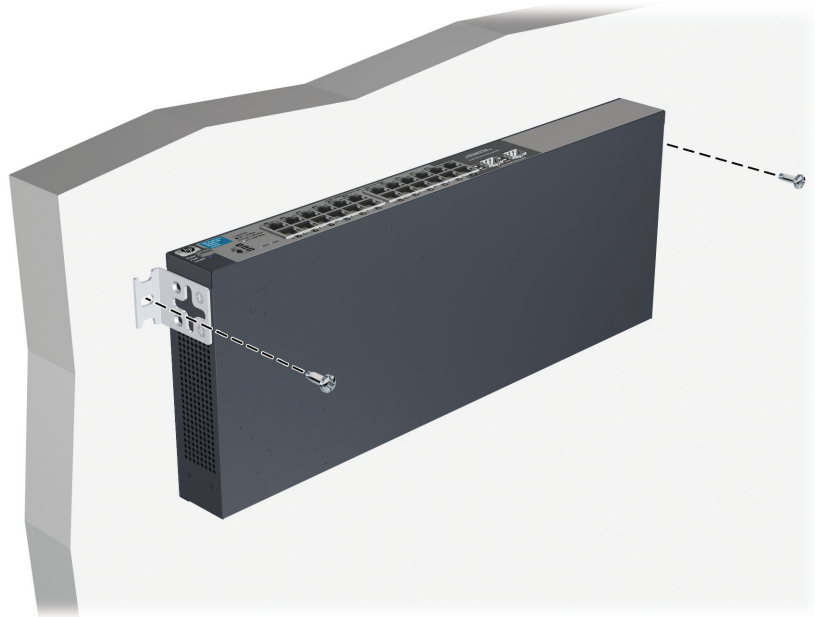
For safe operation, please read the “Installation Precautions” on [page 2-2](#) and [page 2-3](#), before mounting the switch.

It is recommended the switch be mounted with the ports facing up or downward.

Caution

The switch should be mounted only to a wall or wood surface that is at least 3/4-inch (19.1 mm) plywood or its equivalent.

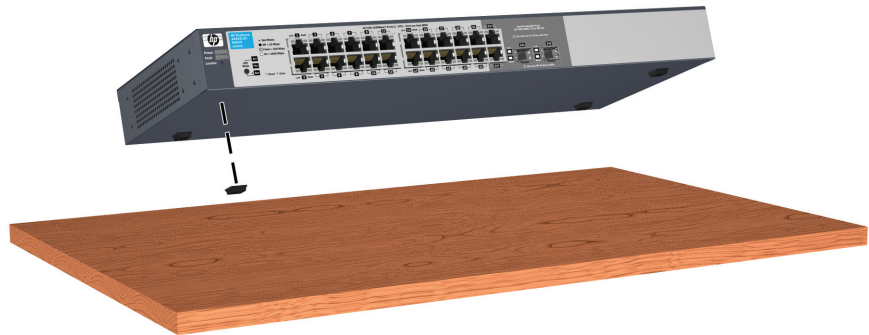
1. Use a #1 Phillips (cross-head) screwdriver and attach the mounting brackets to the switch with the included 8-mm M4 screws.
2. Attach the switch to the wall or wood surface with two 5/8-inch (15.875 mm) number 12 wood screws (not included).



Horizontal Surface Mounting

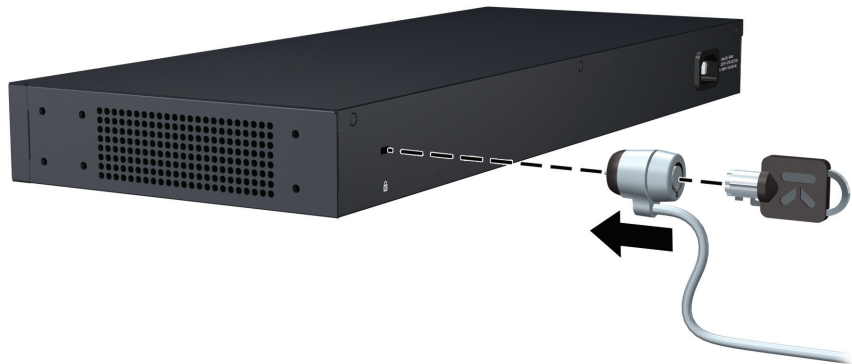
Place the switch on a table or other horizontal surface. The switch comes with rubber feet in the accessory kit that can be used to help keep the switch from sliding on the surface.

Attach the rubber feet to the four corners on the bottom of the switch within the embossed angled lines. Use a sturdy surface in an uncluttered area. You may want to secure the networking cables and switch power cord to the table leg or other part of the surface structure to help prevent tripping over the cords.



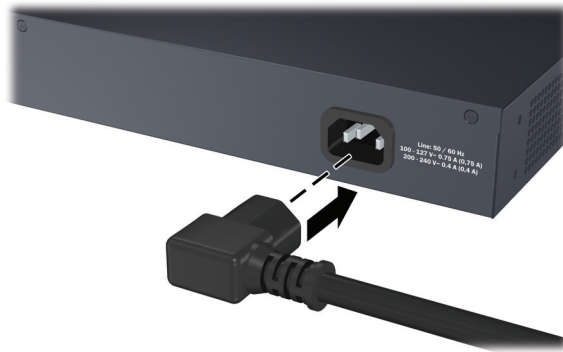
Using a Kensington Security Cable

To prevent unauthorized removal of the switch, you can use a Kensington Slim MicroSaver security cable (not included) to attach the switch to an immovable object.



4. Connect the Switch to a Power Source

- 1.) Plug the included power cord into the switch's power socket and into a nearby AC power source.
- 2.) Re-check the LEDs during self test. See "Self Test LED Behavior" on [page 2-5](#).



5. Connect the Network Cables

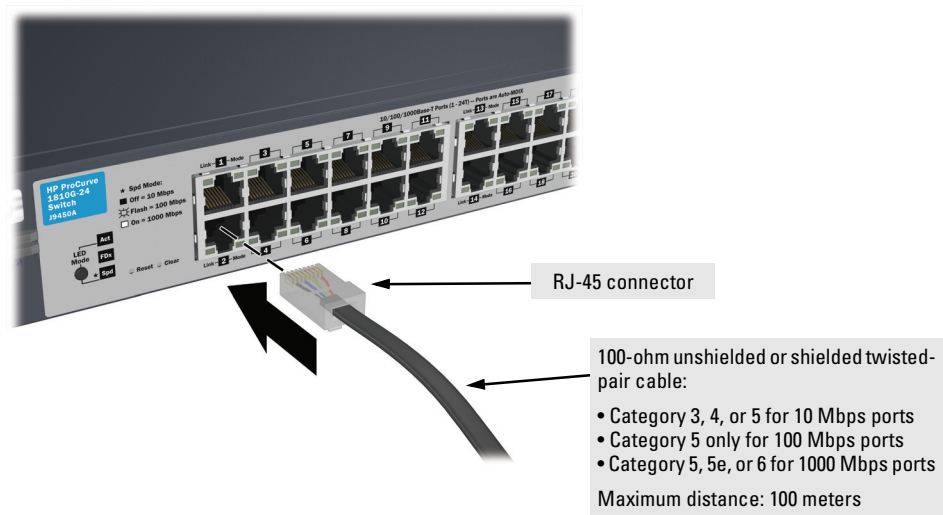
Connect the network cables, from the network devices or your patch panels, to the fixed RJ-45 ports on the switch or to any mini-GBICs you have installed in the switch.

Note

Each of the two mini-GBIC slots is shared with the associated 10/100/1000Base-T RJ-45 port. If a mini-GBIC is installed in a slot, the associated RJ-45 port is disabled.

Installing the Switch

Installation Procedure



When a network cable from an active network device is connected to the port, the port LEDs for that port should go on (if Green Mode is not enabled). If the port LEDs do *not* go on when the network cable is connected to the port, see [“Diagnosing with the LEDs” on page 4-2](#).

6. Installing or Removing mini-GBICs

You can install or remove a mini-GBIC from a mini-GBIC slot without having to power off the switch. Use only ProCurve mini-GBICs.

Note

- The mini-GBIC slots are shared with 10/100/1000Base-T RJ-45 ports 23 and 24. If a mini-GBIC is installed in a slot, the associated RJ-45 port is disabled and cannot be used.
 - The mini-GBIC ports operate only at full duplex. Half duplex operation is not supported.
 - Ensure the network cable is NOT connected when you install or remove a mini-GBIC.
-

The current supported mini-GBICs include the following:

- ProCurve 100-FX SFP-LC Transceiver (J9054B)
- ProCurve 100-BX-D SFP-LC Transceiver (J9099B)
- ProCurve 100-BX-U SFP-LC Transceiver (J9100B)
- ProCurve Gigabit-SX-LC Mini-GBIC (J4858A/B/C)
- ProCurve Gigabit-LX-LC Mini-GBIC (J4859A/B/C)
- ProCurve Gigabit-LH-LC Mini-GBIC (J4860A/B/C)

Caution

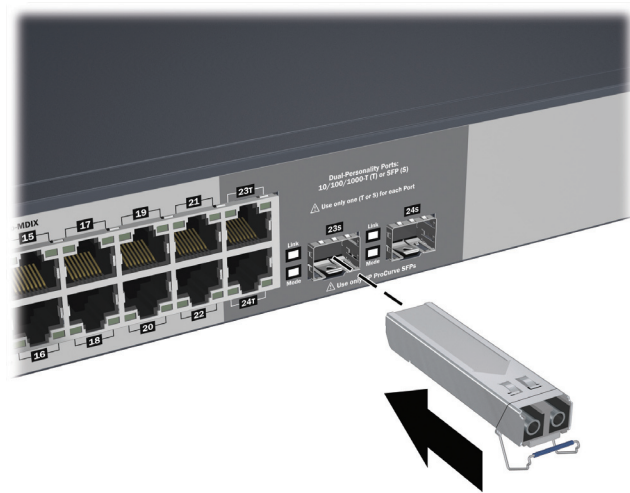
Use only supported genuine ProCurve mini-GBICs with your switch. Non-ProCurve mini-GBICs are not supported, and their use may result in product malfunction. Should you require additional ProCurve mini-GBICs, contact your ProCurve Networking Sales and Service Office or authorized dealer.

Installing the mini-GBICs:

Remove the protective plastic cover and retain it for later use. Hold the mini-GBIC by its sides and gently insert it into either of the slots on the switch until the mini-GBIC clicks into place.

WARNING

The ProCurve mini-GBICs are Class 1 laser devices. Avoid direct eye exposure to the beam coming from the transmit port.



Removing the mini-GBICs:

Note

You should disconnect the network cable from the mini-GBIC before removing it from the switch.

Depending on when you purchased your ProCurve mini-GBIC, it may have either of three different release mechanisms: a plastic tab on the bottom of the mini-GBIC, a plastic collar around the mini-GBIC, or a wire bail.

To remove the mini-GBICs that have the plastic tab or plastic collar, push the tab or collar toward the switch until you see the mini-GBIC release from the switch (you can see it move outward slightly), and then pull it from the slot.

To remove the mini-GBICs that have the wire bail, lower the bail until it is approximately horizontal, and then using the bail, pull the mini-GBIC from the slot.

Replace the protective plastic cover on the mini-GBIC.

Configuring the Switch

Initial Configuration

The ProCurve 1810G-24 Switch can be managed through a Web-browser interface that you can access from any PC or workstation in the connected network. For initial configuration, you may want to assign an IP address to the switch that is compatible with your existing network. However, you first need to access the Web interface using the switch's default IP address.

In the factory default configuration, the default IP (Internet Protocol) address of the switch is **192.168.2.10** and the subnet mask is **255.255.255.0**.

The following procedure shows how to access the Web interface and change the switch's IP address:

1. Place the switch close to the PC that you will use for configuration. It helps if you can see the front panel of the switch while working from your PC.
2. Connect power to the switch, and then start your PC (if it is not already running) and wait until it has finished its start-up sequence.
3. Reconfigure the PC's IP address and Subnet Mask so that it can communicate with the switch. If you are unfamiliar with this process, see [“Changing the PC's IP Address” on page 3-2](#).
4. Connect the PC to any port on the switch using a standard Ethernet LAN cable. Verify that you have a link by checking the LEDs on the front-panel of the switch (see [“LEDs” on page 1-2](#) for more information).
5. Open your Web browser on the PC, and enter the factory-default address, **http://192.168.2.10**, to access the switch's Web interface. If your PC is properly configured, you will see the log on page of the switch. If you do not see the log on page, check your settings and repeat step 3.
6. Click **Log on** to log onto the switch (there is no default password).
7. Click **Network Setup > Get Connected** and configure IP network settings on the switch for operation on your network. and then click on the **Apply** button.

Note

If you enable DHCP for IP network configuration, the switch must be connected to the same network as the DHCP server. You will need to access your DHCP server to determine the IP address assigned to the switch.

8. Click **Maintenance > Save Configuration** and save your settings to retain them when the switch is rebooted.

No other configuration changes are required at this stage, but it is recommended that you configure an administrator password before logging out. From the menu, click **Maintenance**, then **Password Manager**. Fill in all the fields before clicking on the **Apply** button.

You are done with preconfiguration. Disconnect the LAN cable.

Be sure to return your PC to its original network settings for your network.

Note

If you cannot remember the switch's IP address or password, you can restore the factory default settings by following the procedure described in the "Troubleshooting" section.

Changing the PC's IP Address

To reconfigure the PC's IP address and Subnet Mask so that it can communicate with the switch. For example, on a PC running Windows® XP:

1. Click **Start > Connect to > Show all connections**.
2. Select and right-click **Local Area Connection**, then click **Properties**.
3. Scroll and select **Internet Protocol (TCP/IP)**, then click **Properties**.

Note

Be sure to record all your PC's current IP settings to be able to restore them later.

4. On the **General** tab, click **Use the following IP address**.
5. For **IP address**, enter an IP address in the same range as the switch's default IP address. For example, enter **192.168.2.12**.
6. For **Subnet mask**, enter **255.255.255.0**, then click **OK**.
7. Click **Close** (or **OK**) to close the **Local Area Connection Properties** screen.

Where to Go From Here

For more information on the Web browser interface and all the features that can be configured on the ProCurve 1810G-24 Switch, see the *ProCurve Series 1810G Switch Management and Configuration Guide*, which is available on the ProCurve Networking Web site, <http://www.hp.com/go/procurve/manuals>.

Troubleshooting

This section describes how to troubleshoot the switch. For more information, see the chapter “Troubleshooting” in the *ProCurve Series 1810G Switch Management and Configuration Guide*, available on the ProCurve Networking Web site, <http://www.hp.com/go/procurve/manuals>.

This chapter describes the following:

- basic troubleshooting tips ([page 4-1](#))
- diagnosing with the LEDs ([page 4-2](#))
- forgotten the IP address or password ([page 4-3](#))
- testing the switch by resetting It ([page 4-4](#))
- HP Customer Support Services ([page 4-4](#))

Basic Troubleshooting Tips

Common problems and their solutions are listed in the following table.

For more information on possible network problems and their solutions, refer to the technical note “Troubleshooting LAN Performance and Intermittent Connectivity Problems”, which can be found on the ProCurve Networking Web site, <http://www.hp.com/go/procurve>, in the Information Library section.

Problem	Resolution
Switch fails Power-On Self Test (POST)	Troubleshoot using the LEDs. See “Diagnosing with the LEDs” on page 4-2
Link light does not light when a cable is connected.	The switch may be enabled in Green Mode, where port Link and Mode LEDs would be off. Press the LED Mode button to temporarily override Green Mode. Look for loose or obviously faulty connections. If they appear to be OK, make sure the connections are snug. If that does not correct the problem, try a different cable.

Diagnosing with the LEDs

When resetting the switch, or during a power-on self test (POST), LED patterns on the switch may indicate a problem condition.

- 1. Check in the table below for the LED pattern you see on your switch.
- 2. Refer to the corresponding diagnostic tip on the next few pages.

LED Pattern Indicating Problems			Diagnostic Tips
Power	Fault	Port LED (in Link view mode)	
Off with power cord plugged in	*	*	❶
On	Blinking [†]	*	❷
On	Blinking [†]	Blinking [†]	❸
On	Off	Off with cable connected	❹
* This LED is not important for the diagnosis.			
† The blinking behavior is an on/off cycle once every 1.6 seconds, approximately.			

Diagnostic Tips:

Tip	Problem	Solution
❶	The switch is not plugged into an active AC power source, or the switch's power supply may have failed.	1. Verify the power cord is plugged into an active power source and to the switch. Make sure these connections are snug. 2. Try power cycling the switch by unplugging and plugging the power cord back in. 3. If the Power LED is still not on, verify that the AC power source works by plugging another device into the outlet. Or try plugging the switch into a different outlet or try a different power cord. If the power source and power cord are OK and this condition persists, the switch power supply may have failed. Call your ProCurve Networking authorized network reseller, or use the electronic support services from ProCurve Networking to get assistance. See the Software License, Warranty and Support booklet for more information.
❷	The switch has experienced a hardware failure.	Try resetting the switch by pressing the Reset button on the front of the switch, or by power cycling the switch. If necessary to resolve the problem, contact your ProCurve Networking authorized network reseller, or use the electronic support services from ProCurve Networking to get assistance. See the Software License, Warranty and Support booklet for more information.

Tip	Problem	Solution
③	The network port for which the Link LED is blinking has experienced a self test or initialization failure.	Try power cycling the switch. If the fault indication reoccurs, the switch port may have failed. To confirm, try a different port that appears to be good. Call your ProCurve Networking authorized network reseller, or use the electronic support services from ProCurve Networking to get assistance. See the Software License, Warranty and Support booklet for more information. If the port is a mini-GBIC, verify that it is one of the mini-GBICs supported by the switch. Unsupported mini-GBICs will be identified with this fault condition. The supported mini-GBICs are listed in Chapter 2, “Installing the Switch” on page 2-13. The mini-GBICs are also tested when they are “hot-swapped”—installed or changed while the switch is powered on. To verify that the port has failed, try removing and reinstalling the mini-GBIC without having to power off the switch. If the port fault indication reoccurs, you will have to replace the mini-GBIC.
④	The network connection is not working properly.	Try the following procedures: • For the indicated port, verify that both ends of the cabling, at the switch and the connected device, are secure. • Verify the connected device and switch are both powered <i>on</i> and operating correctly. • Verify that the connected devices comply with the appropriate IEEE 802.3 standard, including transmission of the Link signal. • If the other procedures do not resolve the problem, try using a different port or a different cable.

Testing the Switch by Resetting It

If you believe the switch is not operating correctly, you can reset the switch to test its circuitry and operating code. To reset the switch, unplug and plug in the power cord (power cycling)

Power cycling the switch will cause the switch to perform its power-on self test. Resetting the switch can also be invoked from the Web interface.

Restoring to Factory Defaults

If you forget the switch IP address or password, you can restore the factory default configuration by pressing the Reset and Clear buttons.

To execute the factory default reset on the switch, perform these steps:

1. Using a small, thin tool with blunt ends (such as a paper clip), simultaneously press both the Reset and Clear buttons on the front of the switch.
2. Continue to press the Clear button while releasing the Reset button.
3. When all three Mode LEDs (Act, FDx, and Spd) begin to blink, release the Clear button.

The switch will then complete its self test and begin operating with its configuration restored to the factory default settings.

After completing this procedure, there will be no password, the IP address will be returned to the default 192.168.2.10, and all configuration settings will be returned to factory defaults.

HP Customer Support Services

If you are still having trouble with your switch, ProCurve Networking offers support 24 hours a day, seven days a week through the use of a number of automated electronic services. See the Software License, Warranty and Support booklet that came with your switch for information on how to use these services to get technical support. The ProCurve Networking Web site, <http://www.hp.com/go/procurve> also provides up-to-date support information.

Additionally, your ProCurve Networking authorized network reseller can provide you with assistance, both with services they offer and with services offered by ProCurve Networking.

Before Calling Support

Before calling your networking dealer or HP Support, to make the support process most efficient, you first should have retrieved the following information:

Information Item	Information Location
product identification, including mini-GBICs	the front of the switch, and on labels on the mini-GBICs
details about the switch's status including the operating software (OS) version, a copy of the switch configuration, and contents of the Support file	Web interface
copy of your network topology map, including network addresses assigned to the relevant devices	your network records

Specifications

Switch Specifications

Physical

Width:	44 cm (17.42 in)
Depth:	17 cm (6.74 in)
Height:	4.4 cm (1.73 in)
Weight:	1.97 kg (4.32 lbs)

Electrical

The switch automatically adjusts to any voltage between 100-127 and 200-240 volts and either 50 or 60 Hz.

AC voltage:	100-127 volts, 200-240 volts
Maximum current:	0.75 A (100-127 V), 0.4 A (200-240 V)
Frequency range:	50/60 Hz

Environmental

	Operating	Non-Operating
Temperature:	0 °C to 40 °C (32 °F to 104 °F)	-40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity: (non-condensing)	15% to 95% at 40 °C (104 °F)	15% to 90% at 65 °C (149 °F)
Maximum altitude:	3048 m (10,000 ft)	3048 m (10,000 ft)

Safety

Complies with:

- EN60950-1 / IEC 60950-1
- CSA 22.2 No. 60950-1
- UL 60950-1

Standards

Table A-1. Technology standards and safety compliance

Technology	Compatible with these IEEE standards	Laser safety information	
		EN/IEC standard compliance	SFP ("mini-GBIC") Lasers
10/100/1000-T	IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T		
100-FX	IEEE 802.3u 100BASE-FX	EN/IEC 60825	Class 1 Laser Product Laser Klasse 1
100-BX	IEEE 802.3ah 100BASE-BX10	EN/IEC 60825	Class 1 Laser Product Laser Klasse 1
1000-SX	IEEE 802.3z 1000BASE-SX	EN/IEC 60825	Class 1 Laser Product Laser Klasse 1
1000-LX	IEEE 802.3z 1000BASE-LX	EN/IEC 60825	Class 1 Laser Product Laser Klasse 1
1000-LH	(not an IEEE standard)	EN/IEC 60825	Class 1 Laser Product Laser Klasse 1

Cabling and Technology Information

Note

Incorrectly wired cabling is the most common cause of problems for LAN communications. HP ProCurve recommends that you work with a qualified LAN cable installer for assistance with your cabling requirements.

Cabling specifications

Table A-2.

Twisted-pair copper	10 Mbps Operation	Category 3, 4 or 5, 100-ohm unshielded twisted-pair (UTP) or shielded twisted-pair (STP) cable, complying with IEEE 802.3 10Base-T specifications.
	100 Mbps Operation	Category 5, 100-ohm UTP or STP cable, complying with IEEE 802.3u 100Base-TX specifications.
	1000 Mbps Operation	Category 5, 100-ohm 4-pair UTP or STP cable, complying with IEEE 802.3ab 1000Base-T specifications—Category 5e or better is recommended. See note on 1000Base-T Cable Requirements below.
Multimode fiber		62.5/125 μm or 50/125 μm (core/cladding) diameter, low metal content, graded index fiber-optic cables, complying with the ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a standards respectively. ¹
Single mode fiber		9/125 μm (core/cladding) diameter, low metal content fiber-optic cables, complying with the ITU-T G.652 and ISO/IEC 793-2 Type B1 standards.

¹ A mode conditioning patch cord may be needed for some Gigabit-LX installations. See [“Mode Conditioning Patch Cord” on page A-4](#) for more information.

Note on 1000Base-T Cable Requirements. The Category 5 networking cables that work for 100Base-TX connections should also work for 1000Base-T, as long as all four-pairs are connected. But, for the most robust connections, you should use cabling that complies with the Category 5e specifications, as described in Addendum 5 to the TIA-568-A standard (ANSI/TIA/EIA-568-A-5).

Because of the increased speed provided by 1000Base-T (Gigabit-T), network cable quality is more important than for either 10Base-T or 100Base-TX. Cabling plants being used to carry 1000Base-T networking must comply with

the IEEE 802.3ab standards. In particular, the cabling must pass tests for Attenuation, Near-End Crosstalk (NEXT), and Far-End Crosstalk (FEXT). Additionally, unlike the cables for 100Base-TX, the 1000Base-T cables must pass tests for Equal-Level Far-End Crosstalk (ELFEXT) and Return Loss.

When testing your cabling, be sure to include the patch cables that connect the switch and other end devices to the patch panels on your site. The patch cables are frequently overlooked when testing cable and they must also comply with the cabling standards.

Technology distance specifications

Table A-3.

Technology	Supported cable type	Multimode fiber modal bandwidth	Supported distances
100-FX	multimode fiber	any	up to 2,000 meters
100-BX	single mode fiber	N/A	0.5 - 10,000 meters
1000-T	twisted-pair copper	N/A	up to 100 meters
1000-SX	multimode fiber	160 MHz*km	2 - 220 meters
		200 MHz*km	2 - 275 meters
		400 MHz*km	2 - 500 meters
		500 MHz*km	2 - 550 meters
1000-LX	multimode fiber	400 MHz*km	2 - 550 meters
	single mode fiber	500 MHz*km	2 - 550 meters
1000-LH	single mode fiber	N/A	2 - 10,000 meters
1000-LH	single mode fiber	N/A	10 - 70,000 meters ¹

¹ For distances less than 20km, a 10dB attenuator must be used. For distances between 20km and 40km, a 5dB attenuator must be used. Attenuators can be purchased from most cable vendors.

Mode Conditioning Patch Cord

The following information applies to installations in which multimode fiber-optic cables are connected to a Gigabit-LX port. Multimode cable has a design characteristic called “Differential Mode Delay”, which requires the transmission signals be “conditioned” to compensate for the cable design and thus prevent resulting transmission errors.

Under certain circumstances, depending on the cable used and the lengths of the cable runs, an external Mode Conditioning Patch Cord may need to be installed between the Gigabit-LX transmitting device and the multimode network cable to provide the transmission conditioning. If you experience a high number of transmission errors on those ports, usually CRC or FCS errors, you may need to install one of these patch cords between the fiber-optic port in your switch and your multimode fiber-optic network cabling, at both ends of the network link.

The patch cord consists of a short length of single mode fiber cable coupled to graded-index multimode fiber cable on the transmit side, and only multimode cable on the receive side. The section of single mode fiber is connected in such a way that it minimizes the effects of the differential mode delay in the multimode cable.

Note

Most of the time, if you are using good quality graded-index multimode fiber cable that adheres to the standards listed above, there should not be a need to use mode conditioning patch cords in your network. This is especially true if the fiber runs in your network are relatively short.

Safety and EMC Regulatory Statements

Safety Information



Documentation reference symbol. If the product is marked with this symbol, refer to the product documentation to get more information about the product.

WARNING

A **WARNING** in the manual denotes a hazard that can cause injury or death.

CAUTION

A **CAUTION** in the manual denotes a hazard that can damage equipment.

Do not proceed beyond a **WARNING** or **CAUTION** notice until you have understood the hazardous conditions and have taken appropriate steps.

Grounding

These are safety class I products and have protective earthing terminals. There must be an uninterruptible safety earth ground from the main power source to the product's input wiring terminals, power cord, or supplied power cord set. Whenever it is likely that the protection has been impaired, disconnect the power cord until the ground has been restored.

For LAN cable grounding:

- If your LAN covers an area served by more than one power distribution system, be sure their safety grounds are securely interconnected.
- LAN cables may occasionally be subject to hazardous transient voltages (such as lightning or disturbances in the electrical utilities power grid). Handle exposed metal components of the network with caution.

Servicing

There are no user-serviceable parts inside these products. Any servicing, adjustment, maintenance, or repair must be performed only by service-trained personnel.

These products do not have a power switch; they are powered on when the power cord is plugged in.

Informations concernant la sécurité



Symbole de référence à la documentation. Si le produit est marqué de ce symbole, reportez-vous à la documentation du produit afin d'obtenir des informations plus détaillées.

WARNING

Dans la documentation, un **WARNING** indique un danger susceptible d'entraîner des dommages corporels ou la mort.

CAUTION

Un texte de mise en garde intitulé **CAUTION** indique un danger susceptible de causer des dommages à l'équipement.

Ne continuez pas au-delà d'une rubrique **WARNING** ou **CAUTION** avant d'avoir bien compris les conditions présentant un danger et pris les mesures appropriées.

Cet appareil est un produit de classe I et possède une borne de mise à la terre. La source d'alimentation principale doit être munie d'une prise de terre de sécurité installée aux bornes du câblage d'entrée, sur le cordon d'alimentation ou le cordon de raccordement fourni avec le produit. Lorsque cette protection semble avoir été endommagée, débrancher le cordon d'alimentation jusqu'à ce que la mise à la terre ait été réparée.

Mise à la terre du câble de réseau local:

- si votre réseau local s'étend sur une zone desservie par plus d'un système de distribution de puissance, assurez-vous que les prises de terre de sécurité soient convenablement interconnectées.
- Les câbles de réseaux locaux peuvent occasionnellement être soumis à des surtensions transitoires dangereuses (telles que la foudre ou des perturbations dans le réseau d'alimentation public). Manipulez les composants métalliques du réseau avec précautions.

Aucune pièce contenue à l'intérieur de ce produit ne peut être réparée par l'utilisateur. Tout dépannage, réglage, entretien ou réparation devra être confié exclusivement à un personnel qualifié.

Cet appareil ne comporte pas de commutateur principal ; la mise sous tension est effectuée par branchement du cordon d'alimentation.

Hinweise zur Sicherheit



Symbol für Dokumentationsverweis. Wenn das Produkt mit diesem Symbol markiert ist, schlagen Sie bitte in der Produktdokumentation nach, um mehr Informationen über das Produkt zu erhalten.

WARNING

Eine **WARNING** in der Dokumentation symbolisiert eine Gefahr, die Verletzungen oder sogar Todesfälle verursachen kann.

CAUTION

CAUTION in der Dokumentation symbolisiert eine Gefahr, die das Gerät beschädigen kann.

Fahren Sie nach dem Hinweis **WARNING** oder **CAUTION** erst fort, nachdem Sie den Gefahrenzustand verstanden und die entsprechenden Maßnahmen ergriffen haben.

Dies ist ein Gerät der Sicherheitsklasse I und verfügt über einen schützenden Erdungsterminal. Der Betrieb des Geräts erfordert eine ununterbrochene Sicherheitserdung von der Hauptstromquelle zu den Geräteingabeterminals, den Netzkabeln oder dem mit Strom belieferten Netzkabelsatz voraus. Sobald Grund zur Annahme besteht, daß der Schutz beeinträchtigt worden ist, das Netzkabel aus der Wandsteckdose herausziehen, bis die Erdung wiederhergestellt ist.

Für LAN-Kabelerdung:

- Wenn Ihr LAN ein Gebiet umfaßt, das von mehr als einem Stromverteilungssystem beliefert wird, müssen Sie sich vergewissern, daß die Sicherheitserdungen fest untereinander verbunden sind.
- LAN-Kabel können gelegentlich gefährlichen Übergangsspannungen ausgesetzt werden (beispielsweise durch Blitz oder Störungen in dem Starkstromnetz des Elektrizitätswerks). Bei der Handhabung exponierter Metallbestandteile des Netzwerkes Vorsicht walten lassen.

Dieses Gerät enthält innen keine durch den Benutzer zu wartenden Teile. Wartungs-, Anpassungs-, Instandhaltungs- oder Reparaturarbeiten dürfen nur von geschultem Bedienungspersonal durchgeführt werden.

Dieses Gerät hat keinen Netzschalter; es wird beim Anschließen des Netzkabels eingeschaltet.

Considerazioni sulla sicurezza



WARNING

Simbolo di riferimento alla documentazione. Se il prodotto è contrassegnato da questo simbolo, fare riferimento alla documentazione sul prodotto per ulteriori informazioni su di esso.

La dicitura **WARNING** denota un pericolo che può causare lesioni o morte.

CAUTION

La dicitura **CAUTION** denota un pericolo che può danneggiare le attrezzature.

Non procedere oltre un avviso di **WARNING** o di **CAUTION** prima di aver compreso le condizioni di rischio e aver provveduto alle misure del caso.

Questo prodotto è omologato nella classe di sicurezza I ed ha un terminale protettivo di collegamento a terra. Dev'essere installato un collegamento a terra di sicurezza, non interrompibile che vada dalla fonte d'alimentazione principale ai terminali d'entrata, al cavo d'alimentazione oppure al set cavo d'alimentazione fornito con il prodotto. Ogniqualvolta vi sia probabilità di danneggiamento della protezione, disinserite il cavo d'alimentazione fino a quando il collegamento a terra non sia stato ripristinato.

Per la messa a terra dei cavi LAN:

- se la vostra LAN copre un'area servita da più di un sistema di distribuzione elettrica, accertatevi che i collegamenti a terra di sicurezza siano ben collegati fra loro;
- i cavi LAN possono occasionalmente andare soggetti a pericolose tensioni transitorie (ad esempio, provocate da lampi o disturbi nella griglia d'alimentazione della società elettrica); siate cauti nel toccare parti esposte in metallo della rete.

Nessun componente di questo prodotto può essere riparato dall'utente. Qualsiasi lavoro di riparazione, messa a punto, manutenzione o assistenza va effettuato esclusivamente da personale specializzato.

Questo apparato non possiede un commutatore principale; si mette scotto tensione all'inserirsi il cavo d'alimentazione.

Consideraciones sobre seguridad



WARNING

Símbolo de referencia a la documentación. Si el producto va marcado con este símbolo, consultar la documentación del producto a fin de obtener mayor información sobre el producto.

Una **WARNING** en la documentación señala un riesgo que podría resultar en lesiones o la muerte.

CAUTION

Una **CAUTION** en la documentación señala un riesgo que podría resultar en averías al equipo.

No proseguir después de un símbolo de **WARNING** o **CAUTION** hasta no haber entendido las condiciones peligrosas y haber tomado las medidas apropiadas.

Este aparato se enmarca dentro de la clase I de seguridad y se encuentra protegido por una borna de puesta a tierra. Es preciso que exista una puesta a tierra continua desde la toma de alimentación eléctrica hasta las bornas de los cables de entrada del aparato, el cable de alimentación o el juego de cable de alimentación suministrado. Si existe la probabilidad de que la protección a tierra haya sufrido desperfectos, desenchufar el cable de alimentación hasta haberse subsanado el problema.

Puesta a tierra del cable de la red local (LAN):

- Si la LAN abarca un área cuyo suministro eléctrico proviene de más de una red de distribución de electricidad, cerciorarse de que las puestas a tierra estén conectadas entre sí de modo seguro.
- Es posible que los cables de la LAN se vean sometidos de vez en cuando a voltajes momentáneos que entrañen peligro (rayos o alteraciones en la red de energía eléctrica). Manejar con precaución los componentes de metal de la LAN que estén al descubierto.

Este aparato no contiene pieza alguna susceptible de reparación por parte del usuario. Todas las reparaciones, ajustes o servicio de mantenimiento debe realizarlos solamente el técnico.

Este producto no tiene interruptor de potencia; se activa cuando se enchufa el cable de alimentación.

Safety Information (Japan)

安全性の考慮

安全記号



マニュアル参照記号。製品にこの記号がついている場合はマニュアルを参照し、注意事項等をご確認ください。

WARNING マニュアル中の「WARNING」は人身事故の原因となる危険を示します。

CAUTION マニュアル中の「CAUTION」は装置破損の原因となる危険を示します。

「WARNING」や「CAUTION」の項は飛ばさないで必ずお読みください。危険性に関する記載事項をよく読み、正しい手順に従った上で次の事項に進んでください。

これは安全性クラス I の製品で保護用接地端子を備えています。主電源から製品の入力配線端子、電源コード、または添付の電源コード・セットまでの間、切れ目のない安全接地が存在することが必要です。もしこの保護回路が損なわれたことが推測されるときは、接地が修復されるまで電源コードを外しておいてください。

LAN ケーブルの接地に関して:

- もし貴社の LAN が複数の配電システムにより電力を受けている領域をカバーしている場合には、それらのシステムの安全接地が確実に相互に結合されていることを確認してください。
- LAN ケーブルは時として危険な過度電圧（例えば雷や、配電設備の電力網での障害）にさらされることがあります。露出した金属部分の取扱いには十分な注意をはらってください。

本製品の内部にはユーザーが修理できる部品はありません。サービス、調整、保守および修理はサービス訓練を受けた専門家におまかせください。

本製品には電源スイッチがありません。電源コードを接続したとき電源入となります。

Safety Information (China)

HP 网络产品使用安全手册

使用须知

欢迎使用惠普网络产品，为了您及仪器的安全，请您务必注意如下事项：

1. 仪器要和地线相接，要使用有正确接地插头的电源线，使用中国国家规定的220V电源。
2. 避免高温和尘土多的地方，否则易引起仪器内部部件的损坏。
3. 避免接近高温，避免接近直接热源，如直射太阳光、暖气等其它发热体。
4. 不要有异物或液体落入机内，以免部件短路。
5. 不要将磁体放置于仪器附近。

警告

为防止火灾或触电事故，请不要将该机放置于淋雨或潮湿处。

安装

安装辅助管理模块，请参看安装指南。

保修及技术支持

如果您按照以上步骤操作时遇到了困难，或想了解其它产品性能，请按以下方式与我们联络。

如是硬件故障：

1. 与售出单位或当地维修机构联系。
2. 中国惠普有限公司维修中心地址：
北京市海淀区知春路49号希格玛大厦
联系电话：010-62623888 转 6101
邮政编码：100080

如是软件问题：

1. 惠普用户响应中心热线电话：010-65645959
2. 传真自动回复系统：010-65645735

EMC Regulatory Statements

U.S.A.

FCC Class A

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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Canada

This product complies with Class A Canadian EMC requirements.

Australia/New Zealand



This product complies with Australia/New Zealand EMC Class A requirements.

Japan

VCCI Class A

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Korea

사용자 안내문 : A 급기기

이기는 업무용으로 전자파 적합등록을 받은 기기 이오니, 판매자 또는 사용자는 이점을 주의하시기 바라며, 만약 잘못 구입하셨을 때에는 구입한 곳에서 비업무용으로 교환하시기 바랍니다.

Taiwan

警告使用者：這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

European Community



DECLARATION OF CONFORMITY

according to ISO/IEC 17050-1 and EN17050-1

Supplier's Name: Hewlett-Packard Company **DOC#:** RSVLC-0903_06032009

Supplier's Address: 8000 Foothills Blvd.
Roseville, CA 95747-5502
U.S.A.

declares, that the product

Product Name²: ProCurve 1810G-24 Switch

Product Model(s): J9450A

Regulatory Model Number¹: RSVLC-0903

Product Options: all.

conforms to the following Product Specifications and Regulations:

EMC: Class A
EN 55022:2006
EN 55024:1998 +A1:2001 +A2:2003
EN 61000-3-2:2006
EN 61000-3-3:1995 +A1:2001 +A2 :2005
FCC CFR47 Part 15

Safety:

EN 60950-1:2001 + A11:2004
IEC 60950-1:2001
EN 60825-1:1994 +A1+A2 / IEC 60825-1:1993 +A2 Class 1

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.

The product herewith complies with the requirements of the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, and carries the CE-marking accordingly.

Additional Information:

- 1) This product is assigned a Regulatory Model Number which stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports. This number should not be confused with the marketing name or the product numbers.
- 2) This product was tested with HP branded products only.

Roseville, 06 March 2009


Michael E. Avery, Regulatory Eng. Manager

European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE, Herrenberger Straße 140, D-71034 Böblingen (FAX: + 49-7031-14-3143)

Regulatory Information (China)

除非另有标明，此电子信息产品污染控制标记
适用于所有 ProCurve Networking by HP 产品

Recycle Statements

Waste Electrical and Electronic Equipment (WEEE) Statements



Disposal of Waste Equipment by Users in Private Household in the European Union

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



Likvidace zařízení soukromými domácími uživateli v Evropské unii

Tento symbol na produktu nebo balení označuje výrobek, který nesmí být vyhozen spolu s ostatním domácím odpadem. Povinností uživatele je předat takto označený odpad na předem určené sběrné místo pro recyklaci elektrických a elektronických zařízení. Okamžité třídění a recyklace odpadu pomůže uchovat přírodní prostředí a zajistí takový způsob recyklace, který ochrání zdraví a životní prostředí člověka. Další informace o možnostech odevzdání odpadu k recyklaci získáte na příslušném obecním nebo městském úřadě, od firmy zabývající se sběrem a svozem odpadu nebo v obchodě, kde jste produkt zakoupili.



Bortskaffelse af affald fra husstande i den Europæiske Union

Hvis produktet eller dets emballage er forsynet med dette symbol, angiver det, at produktet ikke må bortskaffes med andet almindeligt husholdningsaffald. I stedet er det dit ansvar at bortskaffe kasseret udstyr ved at aflevere det på den kommunale genbrugsstation, der forestår genvinding af kasseret elektrisk og elektronisk udstyr. Den centrale modtagelse og genvinding af kasseret udstyr i forbindelse med bortskaffelsen bidrager til bevarelse af naturlige ressourcer og sikrer, at udstyret genvindes på en måde, der beskytter både mennesker og miljø. Yderligere oplysninger om, hvor du kan aflevere kasseret udstyr til genvinding, kan du få hos kommunen, den lokale genbrugsstation eller i den butik, hvor du købte produktet.



Seadmete jäätmete kõrvaldamine eramajapidamistes Euroopa Liidus

See tootel või selle pakendil olev sümbol näitab, et kõnealust toodet ei tohi koos teiste majapidamisjäätmega kõrvaldada. Teie kohus on oma seadmete jäätmed kõrvaldada, viies need elektri- ja elektroonikaseadmete jäätmete ringlussevõtmiseks selleks ettenähtud kogumispunkti. Seadmete jäätmete eraldi kogumine ja ringlussevõtmise kõrvaldamise ajal aitab kaitsta loodusvarasid ning tagada, et ringlussevõtmise toimub viisil, mis kaitseb inimeste tervist ning keskkonda. Lisateabe saamiseks selle kohta, kuhu oma seadmete jäätmed ringlussevõtmiseks viia, võtke palun ühendust oma kohaliku linnakantselei, majapidamisjäätmete kõrvaldamise teenistuse või kauplusega, kust Te toote ostsite.

**Laitteiden hävittäminen kotitalouksissa Euroopan unionin alueella**

Jos tuotteessa tai sen pakkauksessa on tämä merkki, tuotetta ei saa hävittää kotitalousjätteiden mukana. Tällöin hävitettävä laite on toimitettava sähkölaitteiden ja elektronisten laitteiden kierrätyspisteeseen. Hävitettävien laitteiden erillinen käsittely ja kierrätys auttavat säästämään luonnonvaroja ja varmistamaan, että laite kierrätetään tavalla, joka estää terveyshaitat ja suojelee luontoa. Lisätietoja paikoista, joihin hävitettävät laitteet voi toimittaa kierrätettäväksi, saa ottamalla yhteyttä jätehuoltoon tai liikkeeseen, josta tuote on ostettu.

**Élimination des appareils mis au rebut par les ménages dans l'Union européenne**

Le symbole apposé sur ce produit ou sur son emballage indique que ce produit ne doit pas être jeté avec les déchets ménagers ordinaires. Il est de votre responsabilité de mettre au rebut vos appareils en les déposant dans les centres de collecte publique désignés pour le recyclage des équipements électriques et électroniques. La collecte et le recyclage de vos appareils mis au rebut indépendamment du reste des déchets contribue à la préservation des ressources naturelles et garantit que ces appareils seront recyclés dans le respect de la santé humaine et de l'environnement. Pour obtenir plus d'informations sur les centres de collecte et de recyclage des appareils mis au rebut, veuillez contacter les autorités locales de votre région, les services de collecte des ordures ménagères ou le magasin dans lequel vous avez acheté ce produit.

**Entsorgung von Altgeräten aus privaten Haushalten in der EU**

Das Symbol auf dem Produkt oder seiner Verpackung weist darauf hin, dass das Produkt nicht über den normalen Hausmüll entsorgt werden darf. Benutzer sind verpflichtet, die Altgeräte an einer Rücknahmestelle für Elektro- und Elektronik-Altgeräte abzugeben. Die getrennte Sammlung und ordnungsgemäße Entsorgung Ihrer Altgeräte trägt zur Erhaltung der natürlichen Ressourcen bei und garantiert eine Wiederverwertung, die die Gesundheit des Menschen und die Umwelt schützt. Informationen dazu, wo Sie Rücknahmestellen für Ihre Altgeräte finden, erhalten Sie bei Ihrer Stadtverwaltung, den örtlichen Müllentsorgungsbetrieben oder im Geschäft, in dem Sie das Gerät erworben haben

**Απορρίψη άχρηστου εξοπλισμού από χρήστες σε ιδιωτικά νοικοκυριά στην Ευρωπαϊκή Ένωση**

Το σύμβολο αυτό στο προϊόν ή τη συσκευασία του υποδεικνύει ότι το συγκεκριμένο προϊόν δεν πρέπει να διατίθεται μαζί με τα άλλα οικιακά σας απορρίμματα. Αντίθετα, είναι δική σας ευθύνη να απορρίψετε τον άχρηστο εξοπλισμό σας παραδίδοντάς τον σε καθορισμένο σημείο συλλογής για την ανακύκλωση άχρηστου ηλεκτρικού και ηλεκτρονικού εξοπλισμού. Η ξεχωριστή συλλογή και ανακύκλωση του άχρηστου εξοπλισμού σας κατά την απόρριψη θα συμβάλει στη διατήρηση των φυσικών πόρων και θα διασφαλίσει ότι η ανακύκλωση γίνεται με τρόπο που προστατεύει την ανθρώπινη υγεία και το περιβάλλον. Για περισσότερες πληροφορίες σχετικά με το πού μπορείτε να παραδώσετε τον άχρηστο εξοπλισμό σας για ανακύκλωση, επικοινωνήστε με το αρμόδιο τοπικό γραφείο, την τοπική υπηρεσία διάθεσης οικιακών απορριμμάτων ή το κατάστημα όπου αγοράσατε το προϊόν.

**Készülékek magánháztartásban történő selejtezése az Európai Unió területén**

A készüléken, illetve a készülék csomagolásán látható azonos szimbólum annak jelzésére szolgál, hogy a készülék a selejtezés során az egyéb háztartási hulladéktól eltérő módon kezelendő. A vásárló a hulladékká vált készüléket köteles a kijelölt gyűjtőhelyre szállítani az elektromos és elektronikai készülékek újrahasznosítása céljából. A hulladékká vált készülékek selejtezés kori begyűjtése és újrahasznosítása hozzájárul a természeti erőforrások megőrzéséhez, valamint biztosítja a selejtezett termékek környezetre és emberi egészségre nézve biztonságos feldolgozását. A begyűjtés pontos helyéről bővebb tájékoztatást a lakhelye szerint illetékes önkormányzattól, az illetékes személtakarító vállalatától, illetve a terméket elárúsító helyen kaphat.



Smaltimento delle apparecchiature da parte di privati nel territorio dell'Unione Europea

Questo simbolo presente sul prodotto o sulla sua confezione indica che il prodotto non può essere smaltito insieme ai rifiuti domestici. È responsabilità dell'utente smaltire le apparecchiature consegnandole presso un punto di raccolta designato al riciclo e allo smaltimento di apparecchiature elettriche ed elettroniche. La raccolta differenziata e il corretto riciclo delle apparecchiature da smaltire permette di proteggere la salute degli individui e l'ecosistema. Per ulteriori informazioni relative ai punti di raccolta delle apparecchiature, contattare l'ente locale per lo smaltimento dei rifiuti, oppure il negozio presso il quale è stato acquistato il prodotto.



Nolietotu iekārtu iznīcināšanas noteikumi lietotājiem Eiropas Savienības privātajās mājāsaimniecībās

Šāds simbols uz izstrādājuma vai uz tā iesaiņojuma norāda, ka šo izstrādājumu nedrīkst izmest kopā ar citiem sadzīves atkritumiem. Jūs atbildat par to, lai nolietotās iekārtas tiktu nodotas speciāli iekārtotos punktos, kas paredzēti izmantoto elektrisko un elektronisko iekārtu savākšanai otrreizējai pārstrādei. Atsevišķa nolietoto iekārtu savākšana un otrreizējā pārstrāde palīdzēs saglabāt dabas resursus un garantēs, ka šīs iekārtas tiks otrreizēji pārstrādātas tādā veidā, lai pasargātu vidi un cilvēku veselību. Lai uzzinātu, kur nolietotās iekārtas var izmest otrreizējai pārstrādei, jāvērsas savas dzīves vietas pašvaldībā, sadzīves atkritumu savākšanas dienestā vai veikalā, kurā izstrādājums tika nopirkts.



Vartotojų iš privačių namų ūkių įrangos atliekų šalinimas Europos Sąjungoje

Šis simbolis ant gaminio arba jo pakuotės rodo, kad šio gaminio šalinti kartu su kitomis namų ūkio atliekomis negalima. Šalintinas įrangos atliekas privalote pristatyti į specialią surinkimo vietą elektros ir elektroninės įrangos atliekoms perdirbti. Atskirai surenkamos ir perdirbamos šalintinos įrangos atliekos padės saugoti gamtinius išteklius ir užtikrinti, kad jos bus perdirbtos tokiu būdu, kuris nekenkia žmonių sveikatai ir aplinkai. Jeigu norite sužinoti daugiau apie tai, kur galima pristatyti perdirbtinas įrangos atliekas, kreipkitės į savo seniūniją, namų ūkio atliekų šalinimo tarnybą arba parduotuvę, kurioje įsigijote gaminį.



Verwijdering van afgedankte apparatuur door privé-gebruikers in de Europese Unie

Dit symbool op het product of de verpakking geeft aan dat dit product niet mag worden gedeponeerd bij het normale huishoudelijke afval. U bent zelf verantwoordelijk voor het inleveren van uw afgedankte apparatuur bij een inzamelingspunt voor het recyclen van oude elektrische en elektronische apparatuur. Door uw oude apparatuur apart aan te bieden en te recyclen, kunnen natuurlijke bronnen worden behouden en kan het materiaal worden hergebruikt op een manier waarmee de volksgezondheid en het milieu worden beschermd. Neem contact op met uw gemeente, het afvalinzamelingsbedrijf of de winkel waar u het product hebt gekocht voor meer informatie over inzamelingspunten waar u oude apparatuur kunt aanbieden voor recycling.



Pozbywanie się zużytego sprzętu przez użytkowników w prywatnych gospodarstwach domowych w Unii Europejskiej

Ten symbol na produkcie lub jego opakowaniu oznacza, że produktu nie wolno wyrzucać do zwykłych pojemników na śmieci. Obowiązkiem użytkownika jest przekazanie zużytego sprzętu do wyznaczonego punktu zbiórki w celu recyklingu odpadów powstałych ze sprzętu elektrycznego i elektronicznego. Osobna zbiórka oraz recykling zużytego sprzętu pomogą w ochronie zasobów naturalnych i zapewnią ponowne wprowadzenie go do obiegu w sposób chroniący zdrowie człowieka i środowisko. Aby uzyskać więcej informacji o tym, gdzie można przekazać zużyty sprzęt do recyklingu, należy się skontaktować z urzędem miasta, zakładem gospodarki odpadami lub sklepem, w którym zakupiono produkt.

**Descarte de Lixo Elétrico na Comunidade Européia**

Este símbolo encontrado no produto ou na embalagem indica que o produto não deve ser descartado no lixo doméstico comum. É responsabilidade do cliente descartar o material usado (lixo elétrico), encaminhando-o para um ponto de coleta para reciclagem. A coleta e a reciclagem seletivas desse tipo de lixo ajudarão a conservar as reservas naturais; sendo assim, a reciclagem será feita de uma forma segura, protegendo o ambiente e a saúde das pessoas. Para obter mais informações sobre locais que reciclam esse tipo de material, entre em contato com o escritório da HP em sua cidade, com o serviço de coleta de lixo ou com a loja em que o produto foi adquirido.

**Likvidácia vyradených zariadení v domácnostiach v Európskej únii**

Symbol na výrobku alebo jeho balení označuje, že daný výrobok sa nesmie likvidovať s domovým odpadom. Povinnosťou spotrebiteľa je odovzdať vyradené zariadenie v zbernom mieste, ktoré je určené na recykláciu vyradených elektrických a elektronických zariadení. Separovaný zber a recyklácia vyradených zariadení prispieva k ochrane prírodných zdrojov a zabezpečuje, že recyklácia sa vykonáva spôsobom chrániacim ľudské zdravie a životné prostredie. Informácie o zberných miestach na recykláciu vyradených zariadení vám poskytne miestne zastupiteľstvo, spoločnosť zabezpečujúca odvoz domového odpadu alebo obchod, v ktorom ste si výrobok zakúpili.

**Odstranjevanje odslužene opreme uporabnikov v zasebnih gospodinjstvih v Evropski uniji**

Ta znak na izdelku ali njegovi embalaži pomeni, da izdelka ne smete odvreči med gospodinjске odpadke. Nasprotno, odsluženo opremo morate predati na zbirališče, pooblaščeno za recikliranje odslužene električne in elektronske opreme. Ločeno zbiranje in recikliranje odslužene opreme prispeva k ohranjanju naravnih virov in zagotavlja recikliranje te opreme na zdravju in okolju neškodljiv način. Za podrobnejše informacije o tem, kam lahko odpeljete odsluženo opremo na recikliranje, se obrnite na pristojni organ, komunalno službo ali trgovino, kjer ste izdelek kupili.

**Eliminación de residuos de equipos eléctricos y electrónicos por parte de usuarios particulares en la Unión Europea**

Este símbolo en el producto o en su envase indica que no debe eliminarse junto con los desperdicios generales de la casa. Es responsabilidad del usuario eliminar los residuos de este tipo depositándolos en un "punto limpio" para el reciclado de residuos eléctricos y electrónicos. La recogida y el reciclado selectivos de los residuos de aparatos eléctricos en el momento de su eliminación contribuirá a conservar los recursos naturales y a garantizar el reciclado de estos residuos de forma que se proteja el medio ambiente y la salud. Para obtener más información sobre los puntos de recogida de residuos eléctricos y electrónicos para reciclado, póngase en contacto con su ayuntamiento, con el servicio de eliminación de residuos domésticos o con el establecimiento en el que adquirió el producto.

**Bortskaffande av avfallsprodukter från användare i privathushåll inom Europeiska Unionen**

Om den här symbolen visas på produkten eller förpackningen betyder det att produkten inte får slängas på samma ställe som hushållssopor. I stället är det ditt ansvar att bortskaffa avfallet genom att överlämna det till ett uppsamlingsställe avsett för återvinning av avfall från elektriska och elektroniska produkter. Separat insamling och återvinning av avfallet hjälper till att spara på våra naturresurser och gör att avfallet återvinns på ett sätt som skyddar människors hälsa och miljön. Kontakta ditt lokala kommunkontor, din närmsta återvinningsstation för hushållsavfall eller affären där du köpte produkten för att få mer information om var du kan lämna ditt avfall för återvinning.

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July 2009

Manual Part Number
5992-5474

