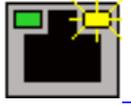


ethernet connection

The printer's built-in ethernet feature allows you to connect the printer directly to an ethernet network without the need for an external print server.

For more information about the printer's ethernet feature, click the topic below:



[ethernet lights](#)



[network configuration page](#)



[printer's internal web page](#)

For installation instructions, click the appropriate topic below:



[ethernet basics](#)



[connecting the printer to an ethernet network](#)



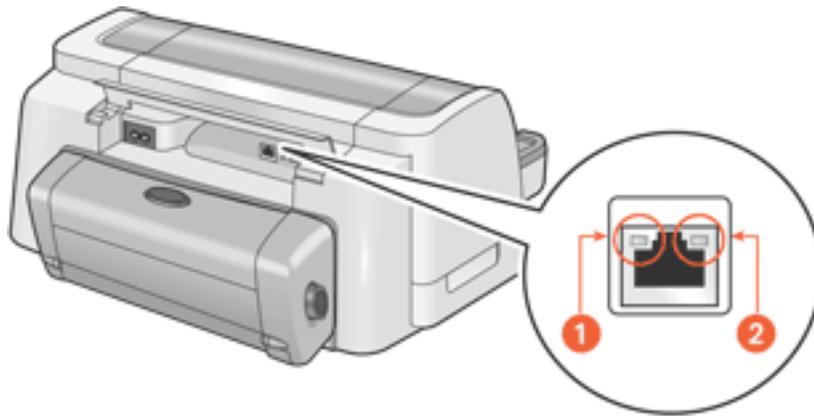
[installing the printer software on a networked computer](#)

Other information:

- [troubleshooting](#)
- [resetting the printer to the factory default configuration](#)
- [ethernet glossary](#)

ethernet lights

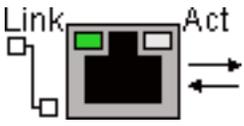
The printer's ethernet lights indicate the status of the printer's ethernet connection.



1. link light 2. activity light

link light

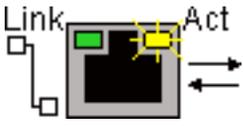
The Link light is solid when the printer is connected to an ethernet network and powered on.

link light is...	the printer is...
	connected to an ethernet network and powered on
	not connected to an ethernet network -or- powered off

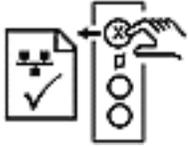
activity light

The Activity light flashes when the printer is receiving or transmitting data over the ethernet connection.

activity light is...	the printer is...

 <p>The diagram shows an Ethernet port with two indicator lights. The 'Link' light (top left) is lit green, and the 'Act' light (top right) is lit yellow. Two arrows on the right side of the port indicate data flow: one pointing right (transmission) and one pointing left (reception).</p>	<p>receiving or transmitting data over the ethernet connection</p>
 <p>The diagram shows an Ethernet port with two indicator lights. The 'Link' light (top left) is lit green, and the 'Act' light (top right) is unlit. Two arrows on the right side of the port indicate data flow: one pointing right (transmission) and one pointing left (reception).</p>	<p>not receiving or transmitting data over the ethernet connection</p>

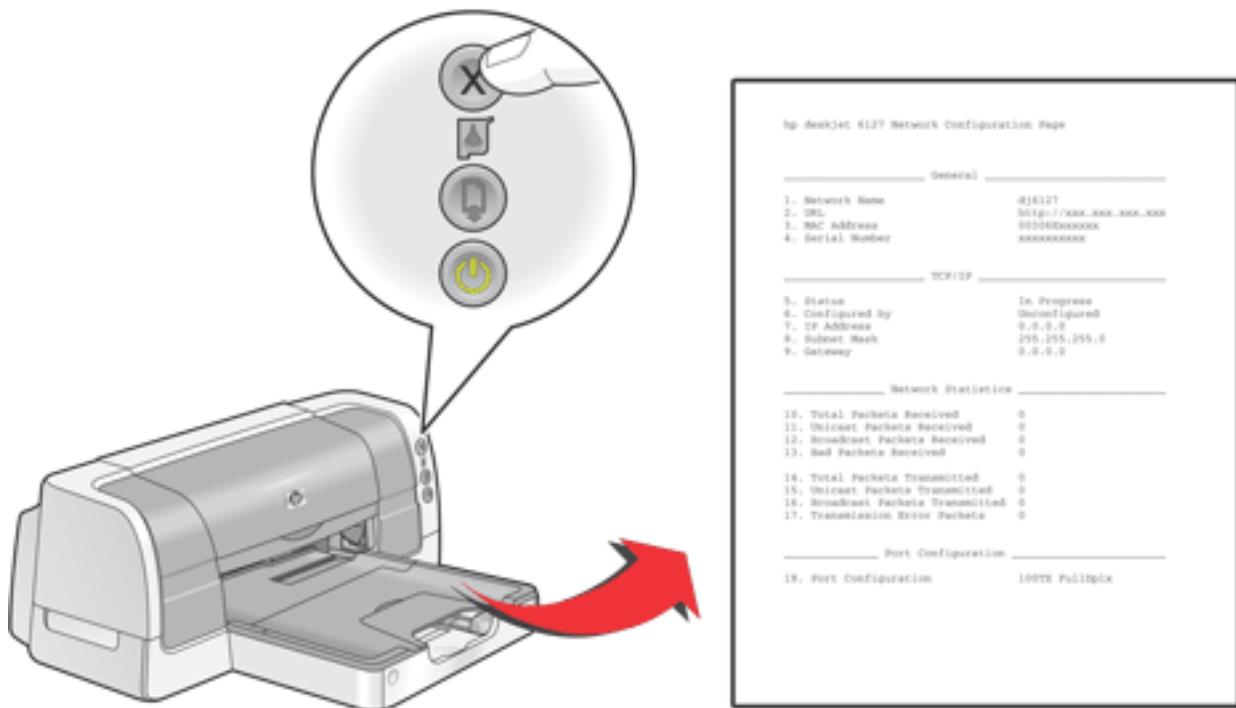
network configuration page



The printer's network configuration page supplies useful information about the printer's ethernet connection.

printing a network configuration page

While the printer is powered on and idle, press the **Cancel** button (**X**) on the printer to print a network configuration page.



If the printer has just been connected to a network, wait a few minutes before printing the network configuration page to allow the printer to obtain valid network settings. You will know that the settings on the configuration page are valid if the **Status** is **Succeeded**.

network configuration page topics

The printer's network configuration page is organized into four topics.

Hp dj6127 Network Configuration Page

```

----- General -----
1. Network Name          dj6127
2. URL                  http://xxx.xxx.xxx.xxx
3. MAC Address          XXXXXXXXXXXXX
4. Serial Number        XXXXXXXXXXXXX

----- TCP/IP -----
5. Status               Succeeded
6. Configured by       DHCP
7. IP Address           xxx.xxx.xxx.xxx
8. Subnet Mask         255.255.255.0
9. Gateway              xxx.xxx.xxx.xxx

----- Network Statistics -----
10. Total Packets Received      0
11. Unicast Packets Received   0
12. Broadcast Packets Received 0
13. Bad Packets Received       0
14. Total Packets Transmitted   0
15. Unicast Packets Transmitted 0
16. Broadcast Packets Transmitted 0
17. Transmission Error Packets 0

----- Port Configuration -----
18. Port Configuration         10TX halftone

```

1. [General](#)
2. [TCP/IP](#)
3. [Network Statistics](#)
4. [Port Configuration](#)

general

```

----- General -----
1. Network Name          dj6127
2. URL                  http://xxx.xxx.xxx.xxx
3. MAC Address          XXXXXXXXXXXXX
4. Serial Number        XXXXXXXXXXXXX

```

1. Network Name: Printer's friendly name.

2. URL: [IP address](#) for the printer's [internal web page](#).

3. MAC Address: Printer's Media Access Control address (also appears on the label on the back of the printer).

4. Serial Number: Printer's serial number.

TCP/IP

TCP/IP	
5. Status	Succeeded
6. Configured by	DHCP
7. IP Address	xxx.xxx.xxx.xxx
8. Subnet Mask	255.255.255.0
9. Gateway	xxx.xxx.xxx.xxx

5. Status: Printer's network status: **Succeeded, Failed, or In Progress.**

6. Configured by: How the printer obtained its [IP address](#): [DHCP](#), [AutoIP](#), **Manual, Unconfigured.**

7. IP Address: Printer's [IP address](#).

8. Subnet Mask: Printer's [subnet mask](#).

9. Gateway: Printer's [gateway address](#).

network statistics

Network Statistics	
10. Total Packets Received	0
11. Unicast Packets Received	0
12. Broadcast Packets Received	0
13. Bad Packets Received	0
14. Total Packets Transmitted	0
15. Unicast Packets Transmitted	0
16. Broadcast Packets Transmitted	0
17. Transmission Error Packets	0

10. Total Packets Received:

Number of [packets](#) received without error.

11. Unicast Packets Received:

Number of [packets](#) specifically addressed to the printer.

12. Broadcast Packets Received:

Number of [packets](#) addressed to all devices on the network received.

13. Bad Packets Received:

Number of [packets](#) received with errors.

14. Total Packets Transmitted:

Number of [packets](#) sent without error.

15. Unicast Packets Transmitted:

Number of [packets](#) addressed to a specific device on the network transmitted.

16. Broadcast Packets

Transmitted: Number of [packets](#) addressed to all devices on the network transmitted.

17. Transmission Error Packets:

Number of [packets](#) not sent due to errors.

port configuration

```

_____ Port Configuration _____
18. Port Configuration                10T HalfDplx

```

18. Port Configuration: Type of ethernet port. This setting is determined by the network to which the printer is connected and is not configurable from the printer.

- **10T FullDplx:** Printer can simultaneously transmit and receive data (full duplex) at 10 [Mb/s](#) (megabits per second).
- **10T HalfDplx:** Printer can transmit and receive data at 10 [Mb/s](#), but must transmit or receive separately (half duplex).
- **100TX FullDplx:** Printer can simultaneously transmit and receive data (full duplex) at 100 [Mb/s](#).
- **100TX HalfDplx:** Printer can transmit and receive data at 100 [Mb/s](#), but must transmit or receive separately (half duplex).

ethernet glossary

10/100 Base-T: A technical term for "ethernet." 10/100 refers to the speed at which the ethernet network functions. 10 indicates 10 megabits per second ([Mb/s](#)) for normal Ethernet, and 100 indicates 100 [Mb/s](#) for Fast Ethernet.

AutoIP: A process by which a device on a network automatically assigns [IP addresses](#) to itself.

Broadcast packet: A [packet](#) sent from one device on a network to all devices on the network.

DHCP (Dynamic Host Configuration Protocol): A [protocol](#) used to automatically assign an IP address to each device on a network.

Ethernet: A popular form of wired computer networking for [Local Area Networks](#).

Ethernet cable: There are two types of ethernet cables. A straight-through cable is the most common and is used to connect devices on a network to a [hub](#) or [router](#). A crossover cable is a twisted pair patch cable the routes the transmit signals from one device to the receive signals of another device. Use an unshielded CAT-5 straight-through cable with an [RJ-45](#) plug to connect the printer to an ethernet network.

Gateway: A dedicated device ([router](#) or computer) that connects two different networks. For example, a computer on an ethernet network may act as a gateway between a network and the Internet.

Firewall: A combination of hardware and software that protects a network from unwanted entry.

Hub: A simple device that acts as the center of an ethernet network. Other devices on the network are connected to the hub.

ICS (Internet Connection Sharing): A Windows program that allows a computer to act as a [gateway](#) between the Internet and a LAN. ICS uses [DHCP](#) to assign [IP addresses](#). See Windows documentation for more information about ICS.

IP address (Internet Protocol address): A unique number that identifies a device on a LAN. The IP address is often automatically assigned by [DHCP](#) or [AutoIP](#). However, a device can be manually assigned a [static IP address](#).

LAN (Local Area Network): A high-speed type of computer network that connects devices that are a relatively short distance from one another. Ethernet is one type of LAN.

MAC address (Media Access Control address): The hardware address for a device on a network. The printer's MAC address appears on the network configuration page and on the label near the printer's ethernet port.

Mb/s (megabits per second): The measure for the rate at which an ethernet network functions. For example, 1 Mb/s equals 1,000,000 bits per second (or 125,000 bytes per second).

Network Name: The name by which the printer identifies itself on the network (also known as the printer's "friendly name"). The printer's Network Name is item 1 on the [network configuration page](#). Use the Network Name to open the printer's [internal web page](#).

Packet: A message sent from one device on a network to other devices on the network.

Protocol: A "language" that devices on a network use to communicate with each other. A popular network protocol is [TCP/IP](#).

RJ-45: The type of plug at the end of an ethernet cable.

Router: A complex internetworking device that directs packets from one network to another network. A router can act as a gateway between a [LAN](#) and the Internet.

Static IP address: An [IP address](#) that is manually assigned to a device on a network. A static IP address remains fixed until changed manually. Alternative methods for assigning IP address are [DHCP](#) and [AutoIP](#).

Subnet: A "small network" that acts as part of a large network. It is recommended that the printer and the computers that use it all be on the same subnet.

Subnet mask: A number that identifies what [subnet](#) an [IP address](#) belongs to.

TCP/IP (Transmission Control Protocol/Internet Protocol): The network communication [protocol](#) used on the Internet. The printer's built-in ethernet feature supports LANs that use TCP/IP.

Unicast packet: A [packet](#) sent from one device on a network to another device on the network.

printer's internal web page



Use the printer's internal web page to do the following:

- Adjust network configuration
- Check estimated ink levels in the print cartridges
- View network statistics
- Link to HP's website for support and to purchase supplies

before using the internal web page

Before using the printer's internal web page, verify that the printer and the computer are powered on and connected to the network.

If you want to use the internal web page to access HP support or to purchase supplies, verify that the computer is connected to the Internet.

opening the internal web page

Follow these steps to open the printer's internal web page.

1. Launch your Internet browser.



Use Microsoft Internet Explorer 5.0 or higher or Netscape 4.75 or higher.

2. Enter one of the following in the address box, then press **Enter**.

- Printer's [Network Name](#)
- Printer's URL



If the printer is on a different [subnet](#) than your computer, enter the printer's URL in the browser's address box to open the internal web page.

If you don't know either of the above, print a [network configuration page](#).

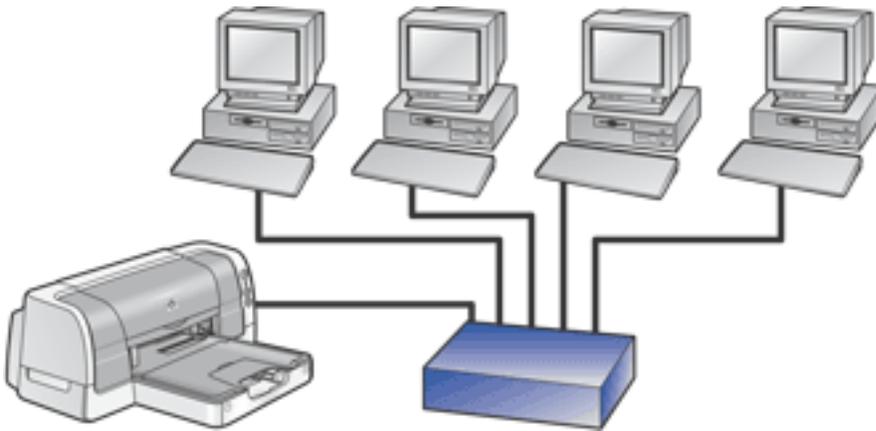
ethernet basics

The printer's built-in ethernet feature allows you to connect the printer directly to a [10/100 Base-T](#) ethernet network without the aid of an external print server.

hardware

hubs and routers

On an ethernet network, computers and the printer are each connected to a [hub](#) or a [router](#).



an example of an ethernet network

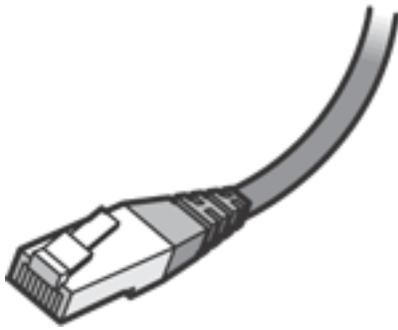
Hubs and routers may look similar, but there is one important difference.

Hubs are passive—other devices on the network plug into the hub in order to communicate with one another. The hub does not manage the network.

Routers are active. Routers have network administration tools, such as [firewalls](#) and [DHCP](#). A router can act as a [gateway](#), while a hub cannot.

cables

Use an unshielded CAT-5 ethernet cable to connect the printer to an ethernet network. Ethernet cables have an RJ-45 plug.



rj-45 plug



To prevent damaging the printer, do not use a phone cord to connect the printer to an ethernet network, and do not connect the printer to a phone jack.

network communication

TCP/IP

Devices on a network communicate with one another using a "language" called a [protocol](#). The printer is designed to operate on networks that use a popular protocol called [TCP/IP](#).

IP address

Each device on a network identifies itself with a unique [IP address](#). Most networks use [DHCP](#) or [AutoIP](#) to automatically assign IP addresses.

internet connections

Ethernet networks may or may not be connected to the Internet.

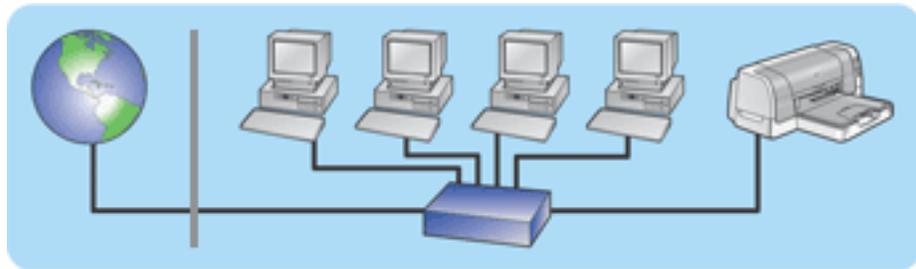
If you place the printer on an ethernet connected to the Internet, it is recommended that you use a [gateway](#) so that the printer's [IP address](#) is assigned through [DHCP](#).

A gateway can either be a [router](#) or a Windows computer running [Internet Connection Sharing \(ICS\)](#). For more information about ICS, see the documentation that came with the Windows computer.

examples of ethernet networks

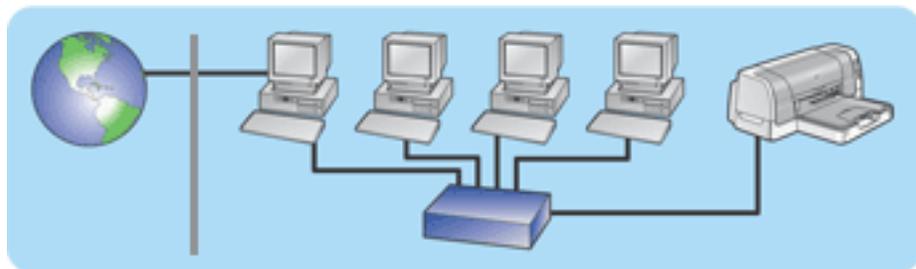
These are some common ethernet network configurations:

shared internet connection with a router acting as a gateway



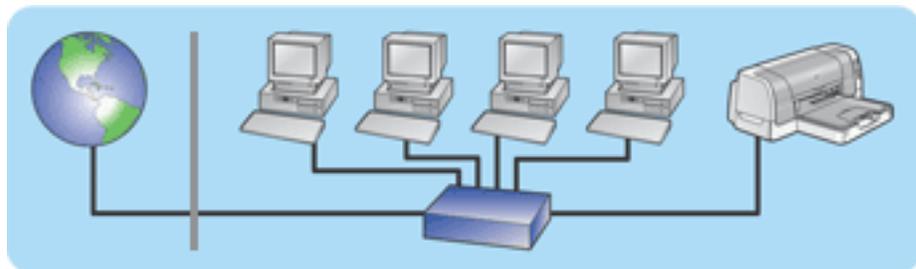
In this example, a [router](#) manages the network connections and acts as a [gateway](#) between the network and the Internet.

shared internet connection with a PC acting as a gateway



In this example, the network devices are connected to a [hub](#). A computer on the network acts as the [gateway](#) between the network and the Internet. The gateway computer uses [Windows Internet Connection Sharing \(ICS\)](#) to manage the network connections and provide Internet access to the other devices.

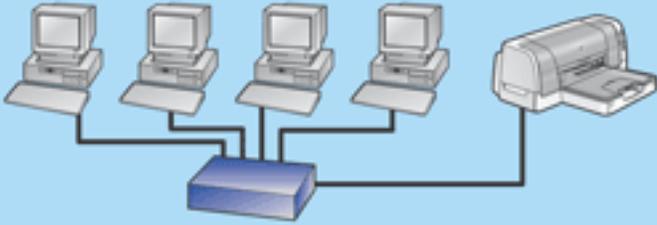
DSL or cable internet connection without a gateway



This example looks similar to the first example. However, in this example, the network devices are connected to a [hub](#), rather than a [router](#). The hub is directly connected to the Internet.

Caution! HP does not recommend this configuration. If possible, use a gateway to manage your network's Internet access in order to limit exposure to viruses and guard against unwanted entry.

ethernet network without an internet connection



In this example, the network devices are connected to a [hub](#). Devices use [AutoIP](#) to obtain [IP addresses](#).

using the printer on an ethernet network

Computers on the network send print jobs directly to the printer, which prints them in the order received.

printer's ethernet capacity

The printer can accept print jobs sent simultaneously from four users.

For example, if five users each send a print job to the printer at the same time, the printer accepts four of the print jobs and rejects the fifth. The user who sent the fifth print job should wait a few minutes and then resend the print job.

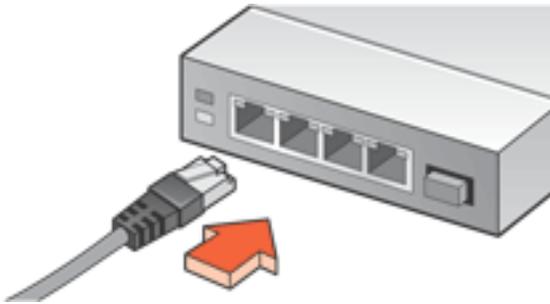
connecting the printer to an ethernet network

Follow these steps to connect the printer to an ethernet network.

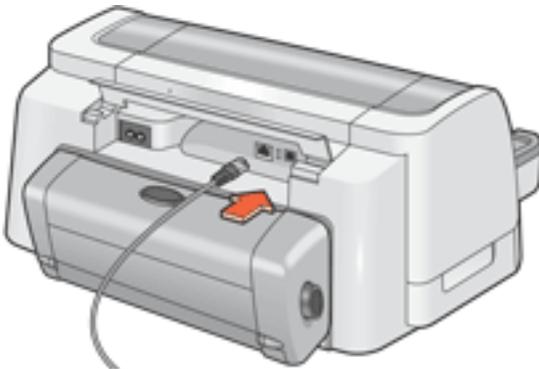
1. If necessary, set up the printer hardware.

For printer hardware setup instructions, see the *setup* poster that came with the printer.

2. Verify that the printer is powered on.
3. Connect the [ethernet cable](#) to an available port on the ethernet [hub](#) or [router](#).

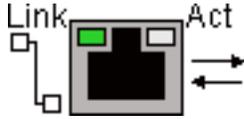


4. Connect the [ethernet cable](#) to the ethernet port on the back of the printer.



To prevent damaging the printer, do not use a phone cord to connect the printer to an ethernet network, and do not connect the printer to a phone jack.

5. Do one of the following:

if the link light is...	then...
 A diagram of an ethernet port. The port is labeled 'Link' on the left and 'Act' on the right. The 'Link' light is illuminated green. There are two arrows pointing out from the 'Act' label, one above and one below the port.	<p>Install the printer software on the network computers.</p>



Repeat steps 2-4. If the lights are still off, then verify the following:

- The printer is powered on.
- The [hub](#) or [router](#) is powered on.
- All cable connections are secure.
- You are using an [ethernet cable](#).

installing the printer software on a networked computer

before installing

Before installing the printer software on a networked computer, verify the following:

- The printer is set up and powered on.
- The ethernet [hub](#) or [router](#) is powered on and functioning properly.
- All computers on the network are powered on and connected to the network.
- The [printer is connected to the ethernet network](#).



If the printer was previously installed on a computer with a USB cable, disconnect the USB cable from the printer. Use the printer software CD and follow the instructions below to install an ethernet version of the printer driver on the computer.

installation steps

Follow these steps to install the printer software on a networked computer:

1. Insert the printer software CD in the computer's CD-ROM drive.



If the CD does not autoplay, then open the CD in Windows and double-click the **setup.exe** file.

2. Follow the onscreen instructions and use the following information to complete the installation.

- **Printer connection:** Connected via network
- **Network setup:** Basic network setup for a PC or server



If the printer cannot be detected during the installation process, then follow the *printer cannot be detected during software installation* instructions in [ethernet troubleshooting](#).

3. After the installation has completed, follow the onscreen instructions to print a test page.

ethernet troubleshooting

Click the option that best describes the problem:

- [The printer will not print.](#)
- [You cannot browse to the printer's internal web page.](#)
- [The printer cannot be detected during software installation.](#)

printer will not print

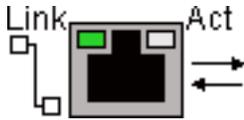
Verify the following:

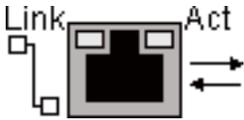
- The printer is set up and powered on.
- The print cartridges are installed.
- The printer is on and the paper tray is loaded.
- The printer is free of paper jams.

If any of the above are problems, then click [here](#).

Answer the following questions:

Is the Link light on and solid?

Yes.  Proceed to the next question.

No.  Verify the following:

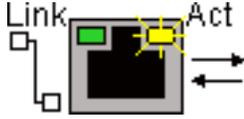
- You are not using a phone cord to connect the printer to the network.
- The [ethernet cable](#) is securely connected to the printer.
- The ethernet [hub](#) or [router](#) is on and working properly.
- The computer that you are using is connected to the network.

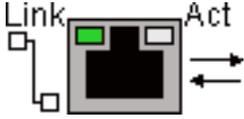
Were more than four people printing to the printer at the same time ?

Yes. Wait until the printer is idle, then reprint your document.

No. Proceed to the next question.

Does the Activity light blink when you try to print a document?

Yes.  [If the document does not print, then click here](#) for more troubleshooting.

No.  Verify the following:

- The printer is selected in the application from which you are trying to print.
- The computer is connected to the network.

If you still cannot print then [reset the printer to the factory default configuration](#).

cannot browse to the printer's internal web page

Verify the following:

- You are not using a phone cord to connect the printer to the network.
- The [ethernet cable](#) is securely connected to the printer.
- The ethernet [hub](#) or [router](#) is on and working properly.
- The computer that you are using is connected to the network.

If you still cannot access the printer's internal web page, then follow these steps:

1. Print a [network configuration page](#).
2. Find the printer's URL (item 2 on the configuration page).
3. Launch your Internet browser.



Use Microsoft Internet Explorer 5.0 or higher or Netscape 4.75 or higher.

4. Enter the printer's **URL** in the address box, then press **Enter**.

If you still cannot open the printer's internal web page with the printer, then [reset it to its factory default configuration](#).

The printer cannot be detected during software installation

Follow these steps if the printer cannot be detected during the software installation:

1. Print a [network configuration page](#).
2. Find the printer's IP Address (item 7 on the configuration page).
3. On the **Identify Printer** panel of the software installer, select **Specify a printer by address**, then click **Next**.
4. On the **Specify Printer** panel of the software installer, select **IP Address**.
5. Enter the printer's **IP Address** in the IP Address box, then click **OK**.
6. Follow the onscreen instructions to complete the installation.

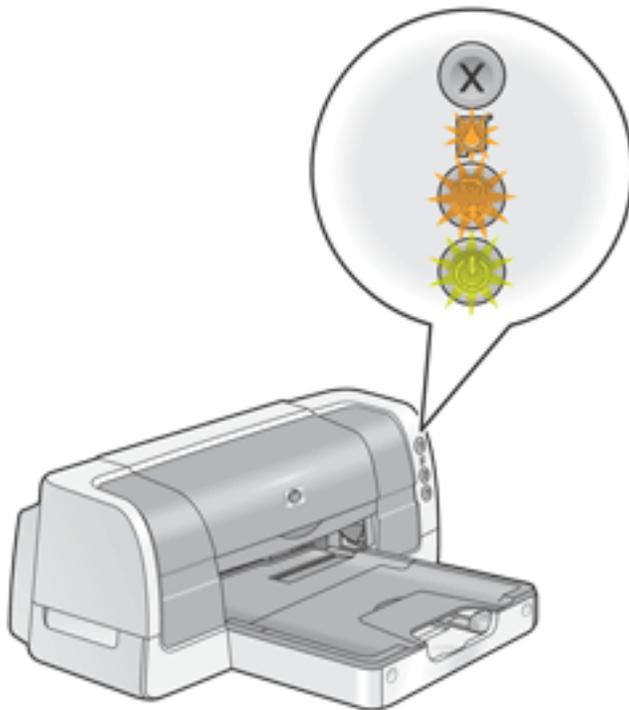
resetting the printer to the factory default configuration

Once the printer is configured on an ethernet, its configuration settings are saved in its memory. You may need to reset the printer to its factory default configuration, if you cannot:

- Print to the printer
- Open the printer's [internal web page](#)

Follow these steps to reset the printer to the factory default configuration:

1. Verify that the printer is powered off.
2. Press and hold down the **Cancel** button (**X**).
3. While holding down the **Cancel** button, press the **Power** button to turn the printer on.
4. Release the **Cancel** button.
5. Verify that all three printer lights simultaneously blink twice.



all three lights simultaneously blink twice

If the lights do not blink, then repeat steps 1-4.