Section 5: Connecting the Laser to Your Computer

In This Section

- Connecting the Laser to your Computer
- USB Port
- Ethernet Port

Connecting the Laser to Your Computer

All Epilog systems are designed to be used with Microsoft Windows XP, 2000 or 32 bit Vista operating systems. There are two different methods of connecting the laser to your computer. You can connect to your computer with either an Ethernet cable or a USB cable. Choose either the USB or Ethernet cable – but do not plug both cables into the laser at the same time! Many users, especially those that do not have a lot of experience installing printers or other devices to their computers, find the USB cable is the easier method of connection.

If your laser is going to be a long distance from your computer, you will be better off using the Ethernet cable.

If you are using the USB port, make sure the laser system is turned off before connecting the USB cable from your computer (it doesn’t matter if the computer is on or off).

For your convenience, Epilog includes both an Ethernet crossover cable and a USB cable in the Accessories kit.
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The data port connections are on the back of the machine, towards the bottom right. The drawing below shows the location of the data ports on the laser system.

USB Port

A USB cable is included in the accessory kit. The USB port is located on the right side of the machine, near the rear. USB cables have different connectors on each end. Turn the laser off, then connect this end to the laser and connect the other end into any available USB port at the back of your computer. After connecting the USB cable, turn the laser back on. Your computer will recognize a new USB device and walk you through the Dashboard print driver installation (detailed Dashboard installation instructions are found in later sections of this manual).

Ethernet Port

The Ethernet Port is a standard 10BaseT connection. A crossover cable (included in the accessories kit) plugs into the Ethernet port. The Ethernet port is located on the right side of the machine, near the rear. Your Epilog laser has all of the versatility of a Network capable peripheral. As such, there are many different ways that the laser can be connected to a computer or a network. A direct connection using a crossover cable is the only method that will be described in this manual. Plug the cable into the Ethernet port on the laser and then plug the other end into the Ethernet port on the back of your computer.
Section 6: Installing the Epilog Dashboard Print Driver - Windows XP or 2000

In This Section

- This section applies to Windows XP/2000 only. Installation instructions for Windows Vista are found in Appendix C – Additional Dashboard Print Driver Instructions, of this manual
- Installing the Dashboard Print Driver Using an USB Connection
- Installing the Dashboard Print Driver Using an Ethernet Connection and a Crossover Cable

The Epilog Dashboard is the print driver that allows your computer to talk to your Epilog laser system when either the USB or Ethernet Crossover cables are connected. The Dashboard is designed for use with Windows XP, Windows 2000 and the 32 bit version of Windows Vista (32 bit is the standard version). The driver is included in the accessories kit on a CD-ROM or on our web site - www.epiloglaser.com. You will need to install the Dashboard by following the procedures on the following pages.

There are two ways of installing the Epilog Dashboard. Both methods are similar, and your computer configuration will determine which method to use.

- The first method is using the USB connection. This is very straightforward and easy to accomplish.
- The second method is using the Ethernet connection. This process is very similar to the USB installation, but there are a couple of important additional steps.

Instructions for installing the Dashboard using the Windows Vista operating system are included in the appendix.

The Epilog EXT, Mini and Helix laser systems all use the same Dashboard print driver. The driver will be identified as the “Epilog Engraver Win32” when it is installed onto your computer.
Installing the Dashboard Driver Using a USB Connection and Cable

There are a couple of different ways to install the Dashboard print driver when using the USB connection, but we have found the following sequence is very easy for users who are installing a print driver for the first time.

Please read the first four steps of this procedure before starting the installation process.

1. Turn off your laser system (keep your computer powered on).
2. Insert the Epilog Dashboard driver disk into your CD or DVD drive on your computer. The following window will appear:
   a) Close this screen by clicking on the red X
3. Connect the USB cable to both your system and your computer. The USB cable is provided in the Accessories Kit that came with your machine.
4. Turn your laser system on. After a few moments the following window will appear, and you can now proceed with installing the Dashboard print driver.

5. Click on *No, not this time*, then click on *Next >*.  

6. When this window appears, click on *Install from a list or specific location (Advanced)* then click on *Next >*.  

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7. Click on **Don’t Search. I will choose the driver to install**, then click **Next**.

8. Click on **Have Disk**...
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9. Click on **Browse…**

10. Click on the disk drive named **Dashboard Driver** [on this computer we will click on drive (D:)], then click on **Open**.
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11. Click on the **drivers** folder, then click **Open**.

12. Click on the Epilog Driver X.XX, then click **Open**.
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13. Insure the EpilogWin32.inf file is selected and then click on Open.

14. Click OK.
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15. Click Next.

16. Click Continue Anyway.

While the print driver has not been tested by Microsoft, it will not destabilize your computer.
That’s it! You should see a balloon in the lower right corner of your computer screen indicating that new hardware has been found and is ready to use. You’re now ready to print to your laser system!
Installing the Dashboard Driver Using an Ethernet Connection and a Crossover Cable

(Skip this part if you are using a USB cable described in the previous section.)

There are three easy steps involved in setting up the laser and computer system to operate through an Ethernet connection:

1. Setting the Ethernet IP Address on the laser,
2. Setting up the computer’s TCP/IP Address, and
3. Dashboard Driver Installation.

Note: The following instructions work only for a direct connection from the computer to the Epilog laser using a Crossover cable. This procedure does not work with a hub or a server. For Ethernet connections that require a hub, server, or multiple machines/computers, please consult with your network administrator.

Hardware Requirements

- A 10Base-T or 10/100Base T Ethernet network card installed in your computer. All brand name computers that have been built in the last couple of years should have come standard with an Ethernet card installed.
- A crossover cable connecting your computer to the laser (included in your accessories kit).

Please Note! - The crossover cable looks almost exactly like a standard straight-through network cable, but they have different purposes for making network connections. Normally, the crossover cable should only be used when connecting the Epilog laser directly to your computer. Ask your network administrator for assistance if you are unsure of which type of cable you have. It is a good idea to place a tag or label on the cable indicating if it is a crossover cable or standard (CAT5) straight-through cable.
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Step 1: Setting the Ethernet IP Address on the Laser

In order to set up the laser system with the appropriate IP Address, you will need to set-up the laser through a sequence of steps that are described below.

Although it may seem intimidating if this is your first experience setting up Ethernet connections, it’s really quite simple to accomplish. If you have problems, don’t panic! You cannot do anything wrong that starting over will not fix!

There are three network protocols that will need to be set from the keypad. They are set in the following order.

1. IP ADDRESS,
2. SUBNET MASK
3. GATEWAY.

You will use the EXT control panel to set these three protocols. The main control panel on the laser systems is used for all of the common laser functions as explained in later sections of this manual, and it is also used to program some of the setup functions of the laser system including the IP ADDRESS, SUBNET MASK, and the GATEWAY. The steps below will walk you through these settings.

For this example, we will show you how to set the IP Address to 192.168.003.004 and the Subnet Mask to 255.255.255.000:
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IP ADDRESS

1. To set the IP Address Press the CONFIG button on the keypad.
2. Press the Down cursor key – The following will show on the keypad:

   IP Address:
   192.168.XXX.XXX (there will be a flashing cursor under the 1 in 192)

3. Notice that there is a little red number in the lower right corner of some of the keypad keys: example, the Job Save key has a “0” in the lower right corner. We will use these RED Numeric Keys to set the IP Address, etc.
   a) Press the 1 key (the Job Save key) – the flashing cursor automatically moves to the next position.
   b) Press the 9 key (the Focus key) – the flashing cursor moves to the next position.
   c) Press the 2 key (the Speed key) – The flashing cursor returns to the 1 position.

4. Press the Right cursor key on the keypad to advance the flashing cursor to the next set of three numbers (168 in our example).
   a) Press the 1 key – the flashing cursor moves to the next position.
   b) Press the 6 key – the flashing cursor moves to the next position.
   c) Press the 8 key – the flashing cursor returns to the 1 position.

5. Press the Right cursor key on the keypad to advance the flashing cursor to the next set of three numbers (003 in our example).
   a) Press the 0 key – the flashing cursor moves to the next position.
   b) Press the 0 key – the flashing cursor moves to the next position.
   c) Press the 3 key – the flashing cursor returns to the 0 position.
6. Press the $\rightarrow$ Right cursor key on the keypad to advance the flashing cursor to the last set of three numbers (004 in our example).
   a) Press the 0 key – the flashing cursor moves to the next position.
   b) Press the 0 key – the flashing cursor moves to the next position.
   c) Press the 4 key – the flashing cursor returns to the 0 position.

**SUBNET MASK**

The IP Address is set, and we must now set the Subnet Mask. To get to the Subnet Mask setting, press the $\downarrow$ Down cursor key on the keypad. The following will appear:

```
Subnet Mask:
255.255.XXX.XXX.
```

To set the Subnet Mask to 255.255.255.000 follow the same procedure that was used to set the IP Address (use the RED Numeric keys and the $\rightarrow$ Right cursor key to set each set of three numbers).

**GATEWAY**

The GATEWAY address does not need to be set if you are using the provided cross over cable.

*Note:* The GATEWAY address is not required if you are using the provided cross over cable. You can leave it at the factory preset. If you are running your laser through a network, you will need to set the laser GATEWAY numbers to correspond to your network.

If you are running your laser through a network, you will need to set the laser GATEWAY numbers to correspond to your network. The Gateway can be accessed by pressing the $\downarrow$ Down cursor key after the Subnet Mask has been set and following the same procedure to set the numbers.

Once the IP Address, Subnet Mask and Gateway are set, press the **Enter/Go** key and your settings will be saved.
Step 2: Setting up the Computer’s TCP/IP Address

Once you have set the IP Address on the laser you will need to set the TCP/IP Address in your computer.

1. From the Start menu at the bottom of your computer monitor screen select **Start | Control Panel | Network Connections**.

2. Highlight the **Internet Protocol (TCP/IP)** option.

3. Then click on **Properties**.
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4. The window below will appear. Select Use the following IP address radio button.

5. Type in the following (leave everything else blank on this page).

   IP Address  192 168 3 3
   Subnet Mask  255 255 255 0
   Default Gateway  Leave blank

   This number is not an error -- the last digit of the IP address in this window only must be different than the IP address set in the Epilog Mini/Helix.

6. Click the OK button in this window and then click on the Close button in the next window.

7. Your computer is now set to print through a crossover cable to the Ethernet port on the laser.
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Step 3: - Installing the Dashboard Driver for an Ethernet Connection:

Insert the Epilog Laser CD into your computer’s CD player. It should Auto-Start and the following window should appear (refer to Appendix C if the AutoRun feature does not bring up the following screen):

Click on the Epilog Mini/Helix and EXT... button. The following window appears:

1. Click on the Unzip button.
NOTE - When you Unzip the driver files they will be unzipped into the c:/Epilog_Driver directory. Do not move them from this directory. The installation process looks for them in this directory later on in the process.

The following window will appear:

Click on OK and the following window appears:
Select Local printer attached to this computer.

Deselect Automatically detect and install my Plug and Play printer.

Click Next> button to continue.

Click on Create a new port:

Use the scroll button to select TCP/IP Port.

Click Next> to continue.
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Enter the same IP Address that you set using the Mini/Helix keyboard (Step 1 in this procedure). It is important that the IP addresses be the same in both places, but the format of the numbers looks a little different. In the control panel the IP Address will look like this: 192.168.003.004. When you enter the IP Address in this window, you do not need the zeros, and the address will look like this: 192.168.3.4.
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Set Protocol to **LPR**. This is a very important step. Your download time will be greatly increased if LPR is not selected.

Type **Legend** in the Queue Name box.

Click **OK** to continue.
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Click **Next** to continue.

Click **Finish** to continue.
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Click Have Disk…

Click on Browse.
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There are multiple drivers on this disc for different Epilog systems.
Select Epilog Driver X.XX, and then select Open to continue.

Select Epilog Win32.inf, and then select Open to continue.
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Click **OK** to continue.

Select **Epilog Engraver Win32**.

If you are upgrading from an older Epilog driver you may have several choices in this window. Be sure to select **Epilog Engraver Win32**.

Click **Next** to continue.
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Add Printer Wizard
Name Your Printer
You must assign a name to this printer.

Printer name:
Epilog Engraver Win32

Do you want to use this printer as the default printer?

☐ Yes
☐ No

Click Next> to continue.

Add Printer Wizard
Printer Sharing
You can share this printer with other network users.

If you want to share this printer, you must provide a share name. You can use the suggested name or type a new one. The share name will be visible to other network users.

☐ Do not share this printer
☐ Share name:

Select Do not share this printer.
Click Next> to continue.
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Select No to Do you want to print a test page.

Click Next> to continue.

Click on the Finish button.

To close this wizard, click Finish.
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That’s it! You’re now ready to print to your 36EXT laser system!