Section 5: Installing the Print Driver

In This Section

  ➢ Print Driver Installation for USB Connection
  ➢ Using the Ethernet Connection and a Crossover Cable

Print Driver: The Epilog print driver is the software that allows your computer to talk to your Epilog laser system when either the USB or Ethernet Crossover cables are connected. This custom print driver is designed for use with either Windows XP or Windows 2000. 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 print driver by following the procedure below.

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

  ➢ The first method is to insert the Epilog CD into your computer's CD player and your computer will automatically start the installation process (this may take about 20 seconds or so to get going after you input the CD, so don't be surprised if nothing happens immediately).

  ➢ The other method also requires you to inset the CD into the CD player, but some computers have the Auto-Run feature turned off. If the Auto-Run process doesn't start after about 20 seconds you will need to access the driver installation a little differently. Go to the Start button on your computer (lower left corner of your monitor). Select *Settings* (or Control Panel), click on *Printers and Faxes*, then *Add Printer*. From this point you will be able to follow the procedure as outlined below.

⚠ *The Mini and the Helix systems use the same print driver. The driver will identified as the "Legend Engraver MINI Win32" when it is installed onto your computer.*

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Print Driver Installation for USB Connection

1. Insert the Epilog Laser CD into your computer's CD player. It should Auto-Start and the following window should appear:
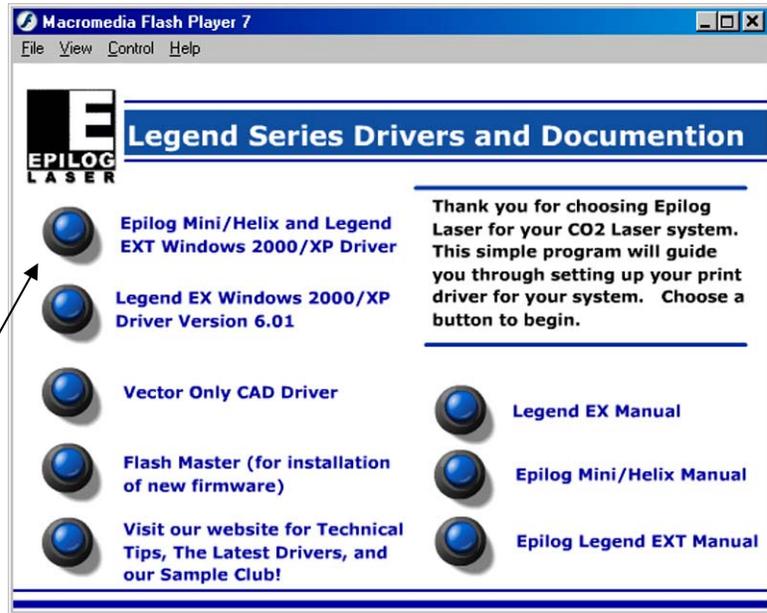
2. Click on the **Epilog Mini/Helix and Legend EXT Windows 2000/XP Driver** button. The following window appears:

3. Click on the Unzip button. It will take just a few seconds for the following window to appear:

WinZip Self-Extractor

5 file(s) unzipped successfully

OK

4. Click on OK and the following window appears:

Add Printer Wizard

Welcome to the Add Printer Wizard

This wizard helps you install a printer or make printer connections.

If you have a Plug and Play printer that connects through a USB port (or any other hot pluggable port, such as IEEE 1394, infrared, and so on), you do not need to use this wizard. Click Cancel to close the wizard, and then plug the printer's cable into your computer or point the printer toward your computer's infrared port, and turn the printer on. Windows will automatically install the printer for you.

To continue, click Next.

< Back | Next > | Cancel

Click the *Next >* button to continue

Select *Local printer attached to this computer*
Deselect *Automatically Detect and Install*
Click the *Next>* button to continue.

Select one of the USB (USB001 or USB002) ports and then Click on *Next >* to continue.
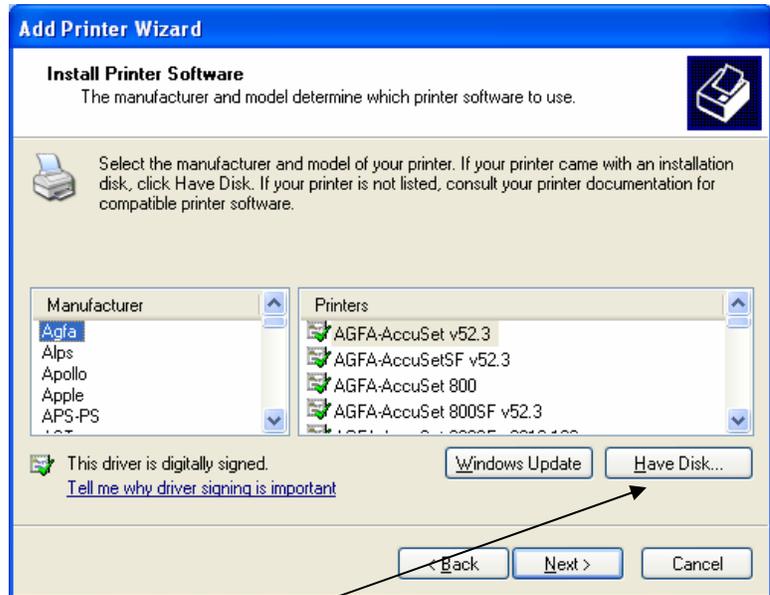
Click the **Have Disk** button. The following window appears:
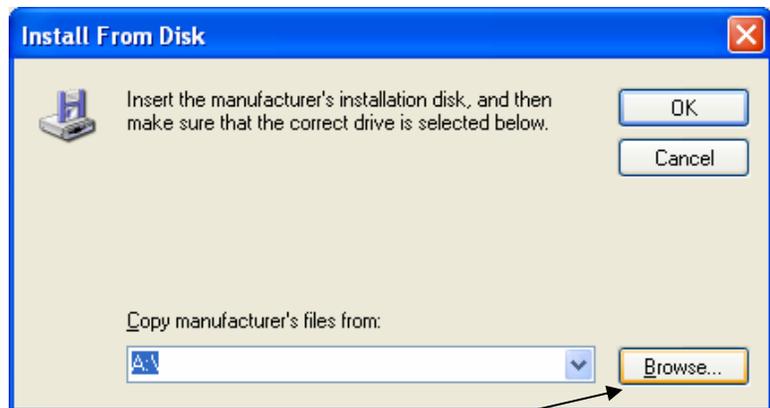
Click the **Browse…** button.

Connection

USB
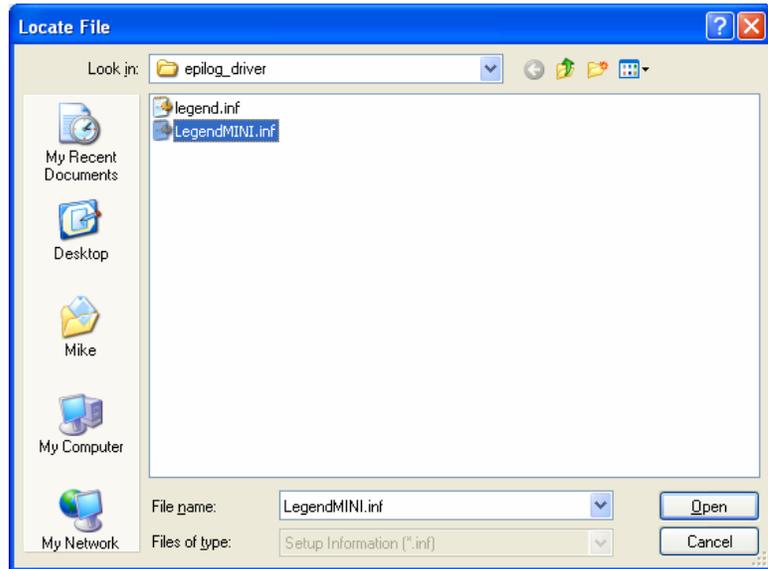
Click on the **LegendMINI.inf** file then click on the **Open** button.
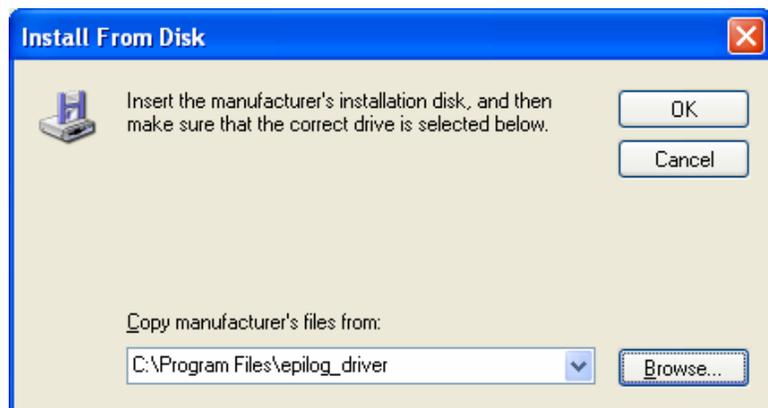
Click on the **OK** button.
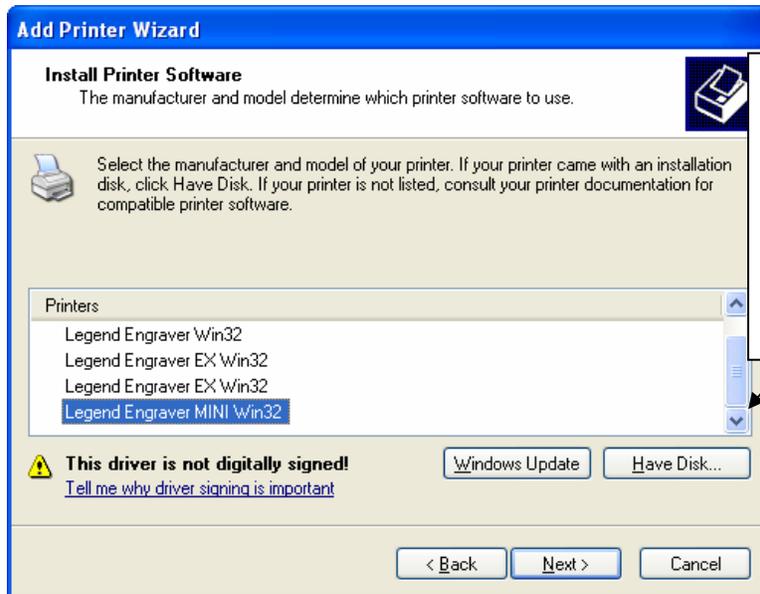
Select the **Legend Engraver Mini Win32** driver and then click on the *Next>* button.
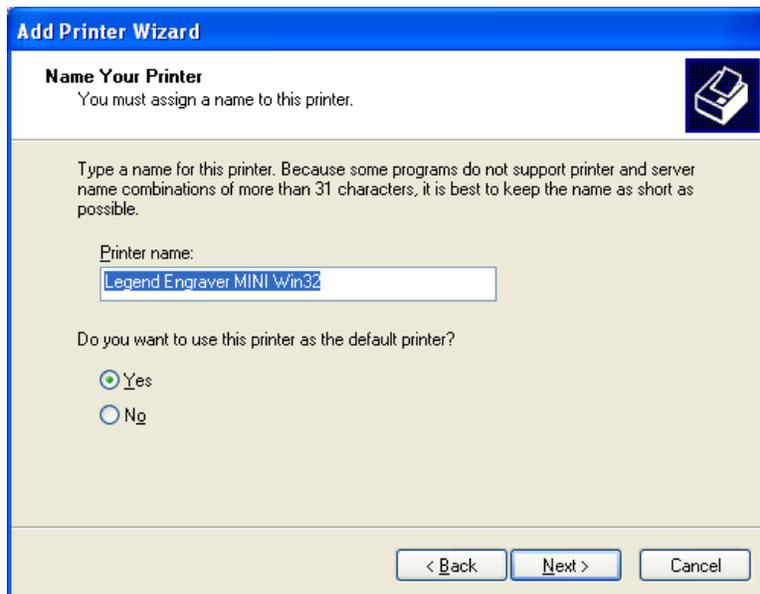
Name your printer and determine if you want the laser to be the default printer. You probably do if the laser is the only printer connected to your computer. Click the *Next>* button to continue.
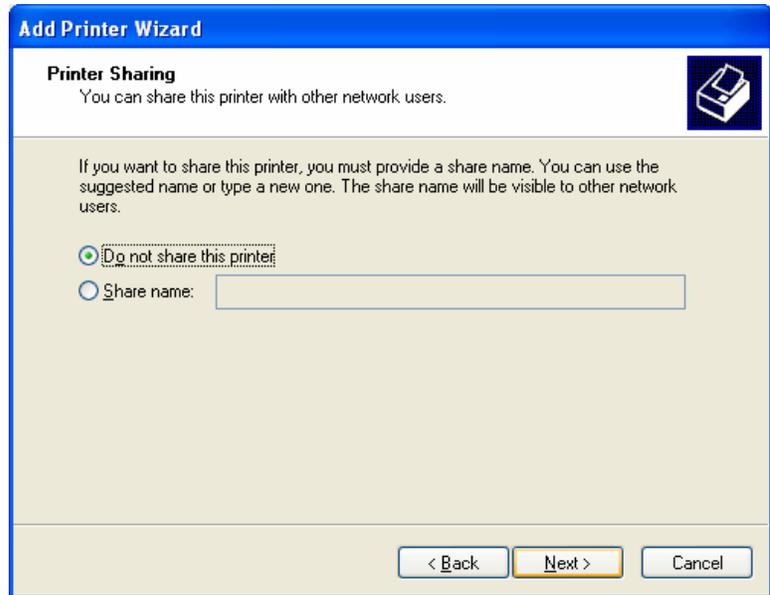
Select D<u>o</u> not share this printer, then click on the ***Next***> button to continue.

Select ***No***.
Click on the ***Next***>
button

Click on the *Finish* button.
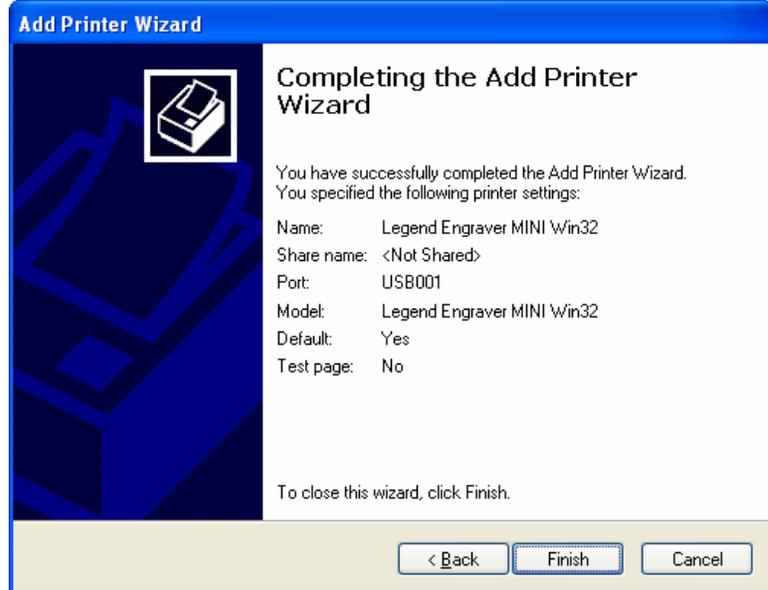
Click on the *Continue Anyway* button. While the print driver has not been tested by Microsoft, it will not destabilize your computer.

That's it! You're now ready to print to your laser system!

Using the Ethernet Connection and a Crossover Cable (Skip this part if you are using a USB cable described in the previous section.)
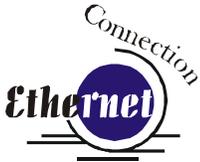
There are three easy steps involved in setting up the laser and computer system to operate through an Ethernet connection:

5.   Setting the IP Address from the laser keyboard.
6.   Setting up the IP Address in the computers TCP/IP.
7.   Print 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).

➢ Warning! - 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.

Section 5: Installing the Print Driver

Setting the IP Address on the Laser
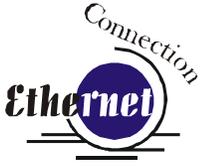
1. Be sure all packaging materials have been removed then plug the power cord into the laser system and turn the machine "ON". The laser will boot up, beep, and the carriage will find its home position.

The control panel serves two functions. It acts as the main control panel for all of the common laser functions and it is also used to program some of the setup functions of the laser system. In order to program some of these setup functions we assign a set of "hidden" numbers to the keys on the control panel. The diagram below shows which keys are associated with each hidden number.

```
   GO    STOP                                      UP   POINTER
  [  ]   [  ]        Job:1.Sample.cdr             [8]    [9]

  ( )  [0] [1] [2] [3] [4] [5] [6] [7]            ( )
  DATA
      RESET SPEED POWER SET  X/Y  JOB FOCUS DOWN
                        HOME OFF
```
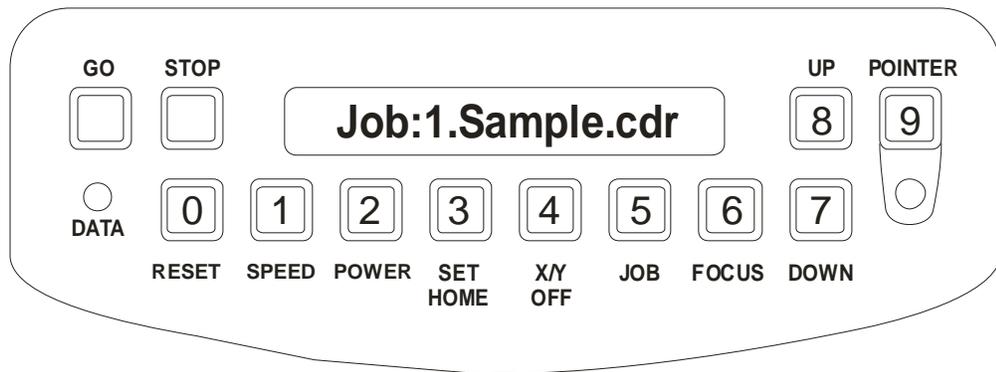
Figure 5: Control Panel with hidden numbers for use with Network Settings

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.

Great Idea: 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. They are set in the following order.
➢ IP ADDRESS
➢ SUBNET MASK
➢ GATEWAY

1. To set the IP Address press the **GO** and **POINTER** buttons simultaneously on the control panel. You will see "**FUNCTIONS MENU**" displayed on the control panel LCD screen.
2. Press the **GO** button. - **"SERIAL #"** will appear on the screen. This is a factory set number and corresponds to the serial number of the laser system. You should not change this serial number!
3. Press the **GO** button again. – **"IP ADDRESS"** will appear on the screen.
4. Press the **GO** button again. - The factory set IP address will appear on the screen. It will look something like this: "192.168.003.004", with a flashing box over the 1 in 192.
5. To change the IP Address, follow these instructions:
   a) If you want to change the 1 in 192 to any other number, simply press the "hidden" number key for that number. For example, if you want to change the 1 (in 192) to a 4, press the "*X/Y Off*" key. After pressing the "*X/Y Off*" key the 1 will change to a 4. When a number key is pressed, the flashing box will automatically shift right to the next number in that three number group.
   b) At this point, press the appropriate key for the second number (if you want to keep the 9 a 9, you must press the "*Pointer*" key).
   c) Finally, press the appropriate key for the third number.
   d) After pressing the key for the third number the flashing box will go back to the first number – it WILL NOT shift to the next set of three numerals. If you want to move to the next group of three numbers simply press the **GO** button. Pressing **GO** will cause the flashing box to shift right to the next three number group. Repeat this process to change any of the numbers.

   There is no way to simply scroll through the IP Address numbers and skip over single numbers you do not want to change. You can skip groups of three by pressing "Go", but skipping single numbers cannot be done. There is also no way to move the cursor (flashing box) backwards. The cursor scrolls through each three number group continuously until you press the "Go" button, where it will then go to the next three number groups. The following example shows you how to change the number 196 to 195. When you start with the flashing box over the 1, press the "Speed" button (this keeps the 1 a 1 and allows you to move to the next numeral). The flashing box will shift to the 9, where you will press the "Pointer" button (it will stay a 9 and the flashing box will shift right to the 6). Lastly, we want to change the 6 to a 5. Press the "Job" button. This will change the 6 to a 5 (it will also move the flashing box back to the 1 where you first started). If you now have the number you want to keep (195) and you are ready to move to the next three numeral set, pressing the "Go" button will get you there.
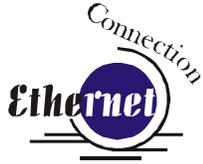
e) Repeat this process for all of the number groups to get the IP Address you need.

6. After all the IP address numbers have either been changed or verified as the ones you need, press GO again – this will bring the "SUBNET MASK" screen.

7. Press **GO** again to see the "**SUBNET MASK"** settings. Use the same process of number selection using the keypads to select the appropriate number for the "**SUBNET MASK"**

Note: If you are using the cross-over cable provided by Epilog, make sure the "**SUBNET MASK"** is set to:

"255.255.255.0"

8. After you have set the "**SUBNET MASK"**, Press **GO** again.
9. You will now see "**GATEWAY"**, Press **GO** again.
10. The **GATEWAY** setting can be set using the same process of number selection using the key pads to select the appropriate numbers for "**GATEWAY"**.

Note: The GATEWAY address is not important if you are using the provided cross over cable. If you are running your laser through a network, you will need to set the laser GATEWAY numbers to correspond to your network.

At the end of the programming process, the laser will prompt you to either SAVE or NO (Not Save) the numbers you have applied. The Screen will look like:

Save – GO, No- STOP

Press the **GO** button to save the changes you made to the network settings. Press the **STOP** button if you do not want to save the changes and you want to return to the factory default.

If at any time in the programming process you want to stop or restart, press the **STOP** button. This will take you out of the programming functions. If you want

Connection

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to restart the programming process, simultaneously press **GO** and **POINTER** to get back to the start of the Function Menu.
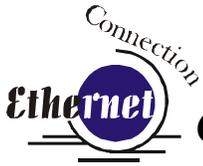
Computer TCP/IP Setup

Once you have set the Network settings on the laser, you will need to set the TCP/IP at your computer.

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

1. Double click on **Local Area Connection.** This window will appear.

2. Highlight **Internet Protocol (TCP/IP).** As shown on the right.

3. Then click on the **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

7.   Click the last *OK* button and your computer is set to print through a crossover cable to the Ethernet port on the laser.

Internet Protocol (TCP/IP) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
◉ Use the following IP address:

IP address: 192 . 168 . 3 . 3
Subnet mask: 255 . 255 . 255 . 0
Default gateway: .   .   .

○ Obtain DNS server address automatically
◉ Use the following DNS server addresses:

Preferred DNS server: .   .   .
Alternate DNS server: .   .   .

Advanced...

OK   Cancel

Section 5: Installing the Print Driver

Installing the Print Driver for an Ethernet Connection:

Installing the print driver for an Ethernet connection is very easy, but involves a few more steps than the USB connection.

To Begin:

1. Click the **Start** button at the lower left hand corner of your computer screen.
2. Click Settings, then Control Panel
3. Click on the **Printers and Faxes** icon.
4. Click on Add New Printer: The following window will appear.

Click **Next** > to continue.
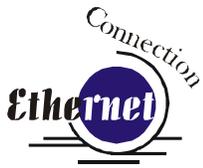
Section 5: Installing the Print Driver

Select *Local printer attached to this computer*

Deselect *Automatically Detect and Install*

Click the *Next>* button to continue.
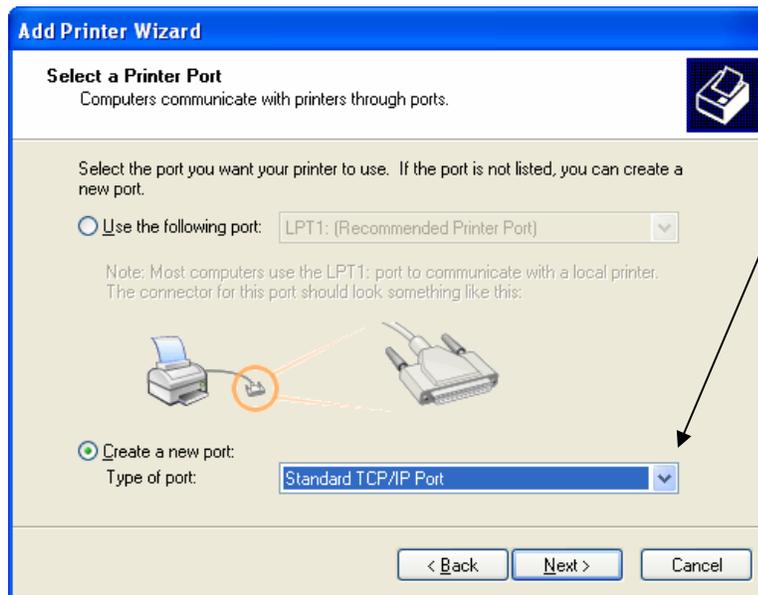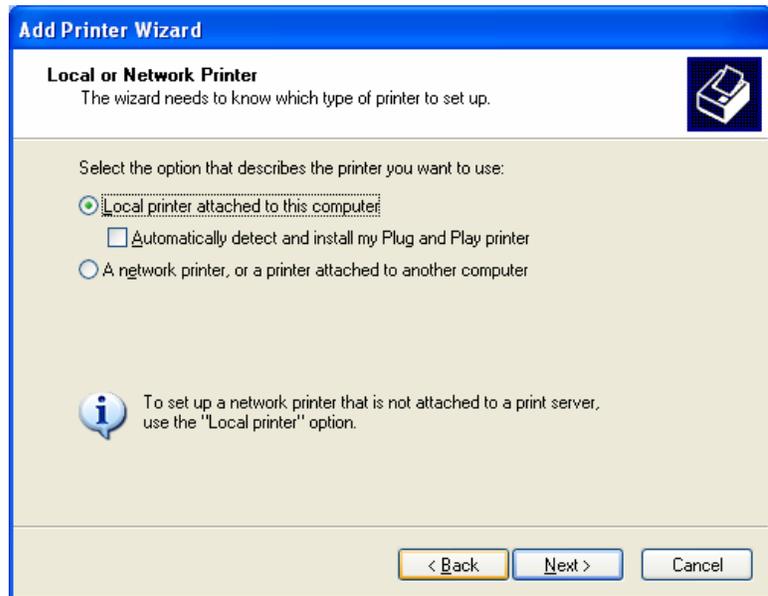
Click on *Select a New Port*:

Use the scroll button to select *TCP/IP Port*.

Click *Next>* to continue.

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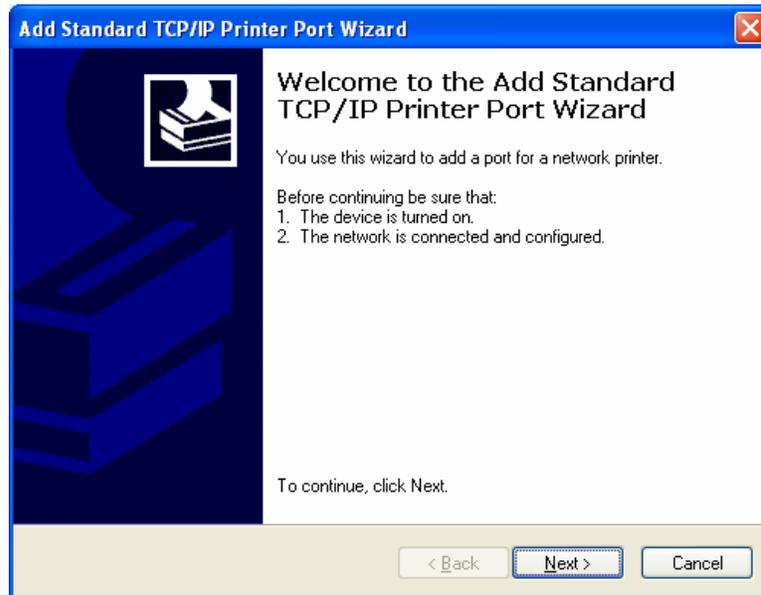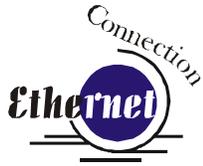
Click *Next>* to Continue.
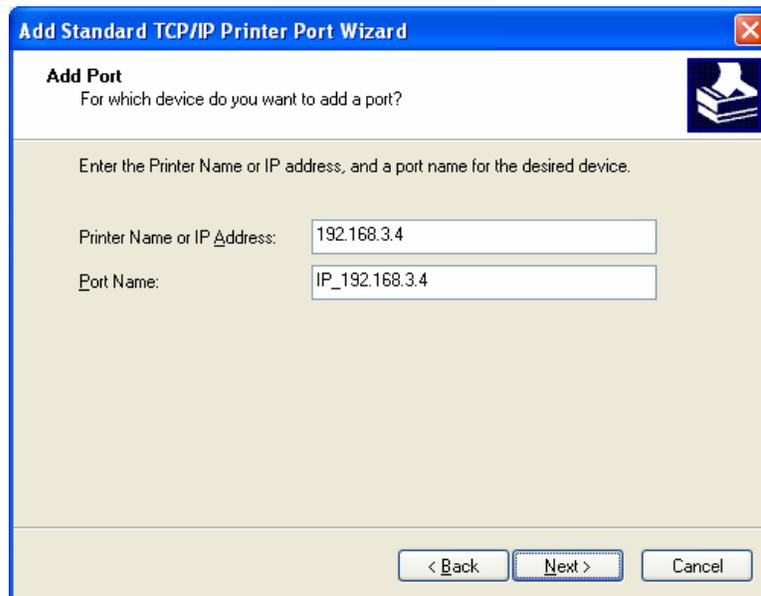
Enter the same IP Address that you set in the control panel (on page 27 and 28). It's important that you use the same address in both places, but the format of the numbers looks a little different. In the control panel the IP Address will look like this: 192.168.003.004. When you enter the IP Address in this window, you do not need the zeros, and the address will look like this: 192.168.3.4.

Section 5: Installing the Print Driver
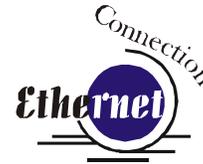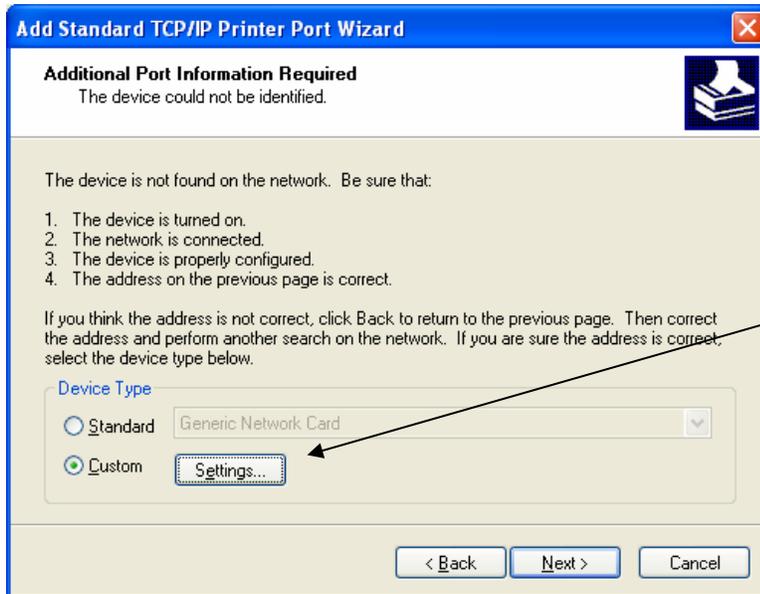
Click *Custom*, and then *Settings*.
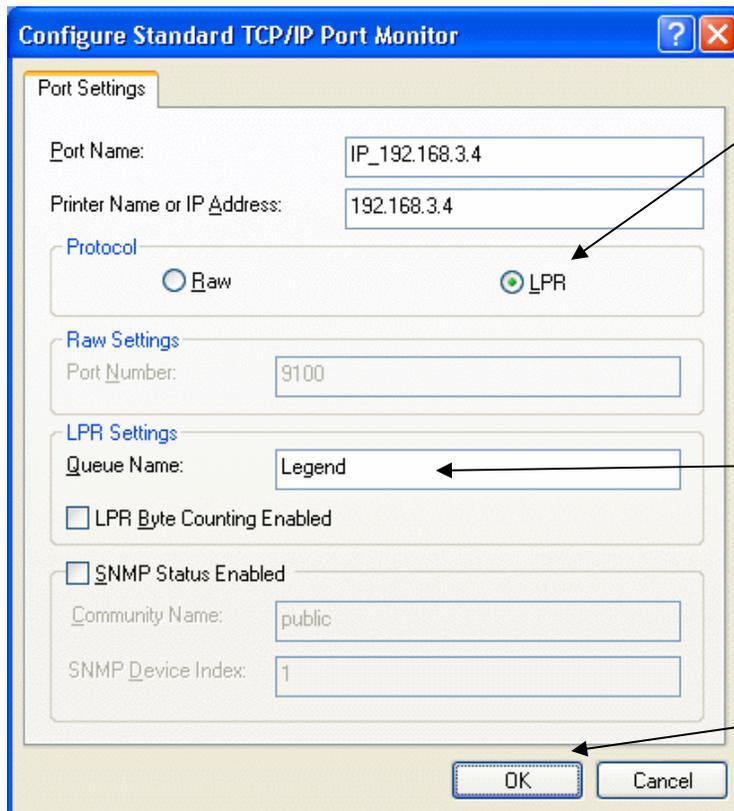
Set Protocol to *LPR*. This is a very important step. Your download time will be greatly increased if LPR is not selected.

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

Click OK to continue.
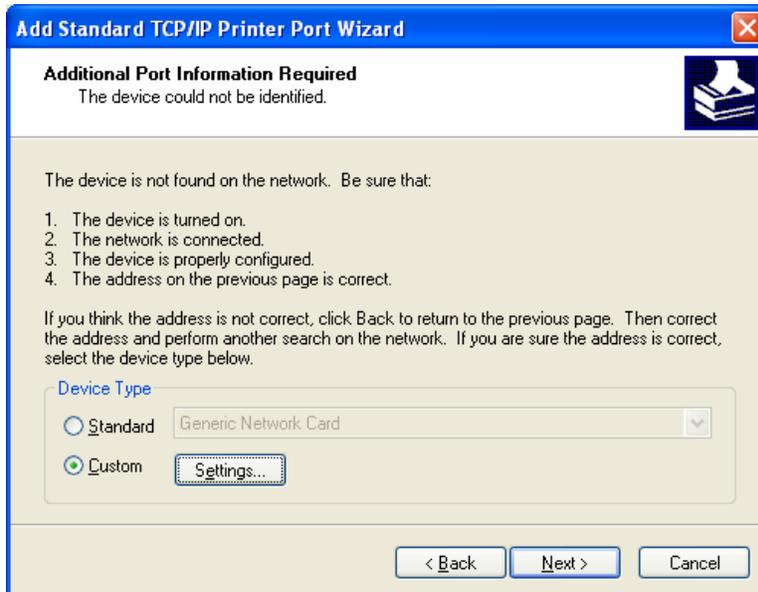
Click *Next>* to continue.
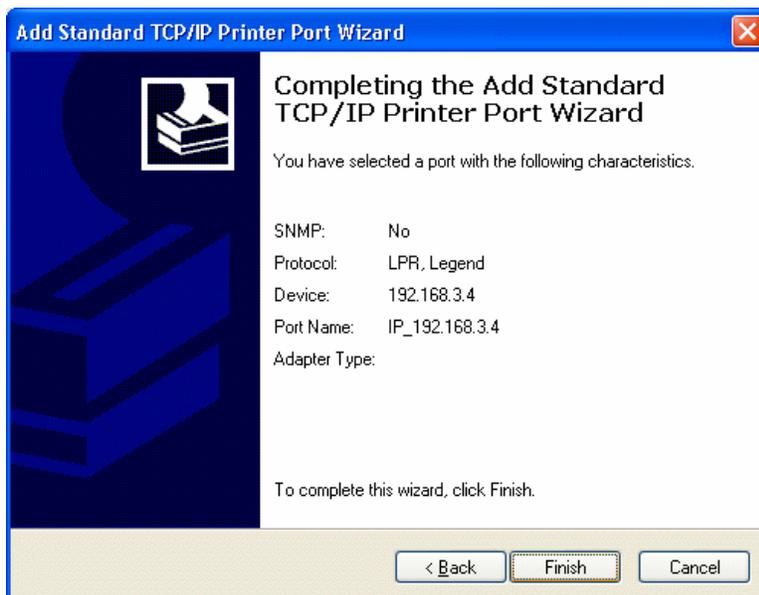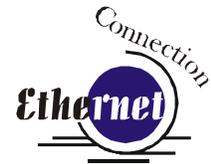
Click *Finish* to continue.

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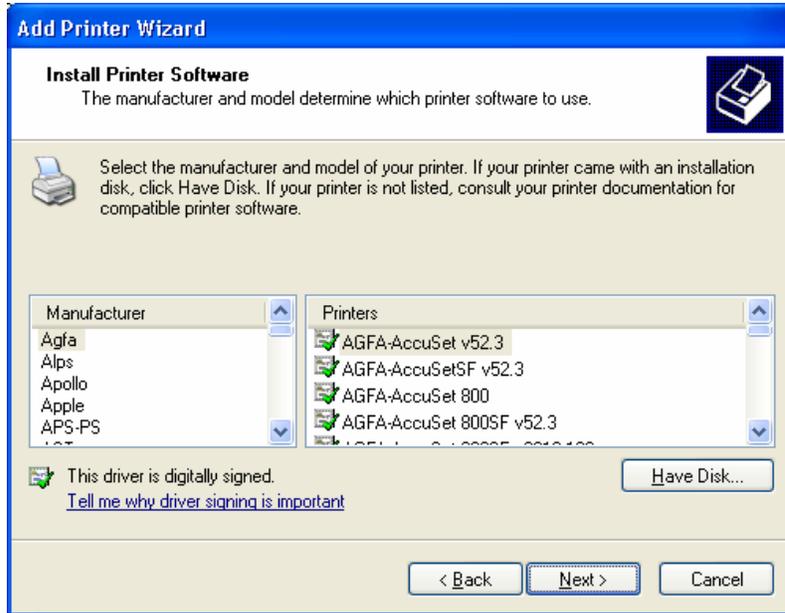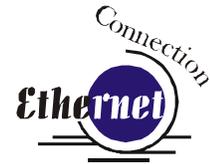
Click *Have Disk….*
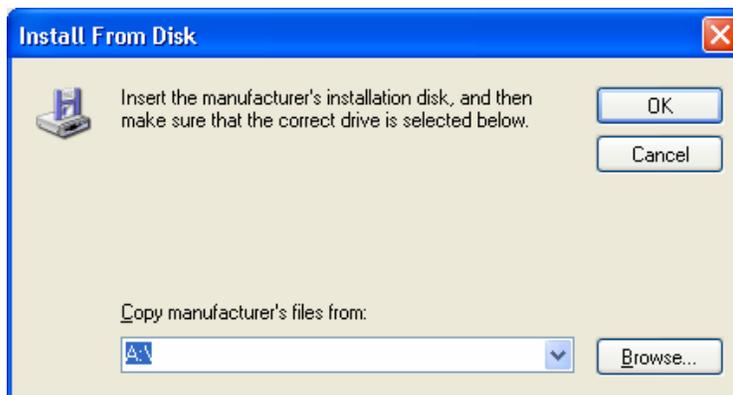
Make sure the Epilog CD-ROM is in the computer's drive and click **Browse…** Select the CD-ROM Drive from the drives listed.
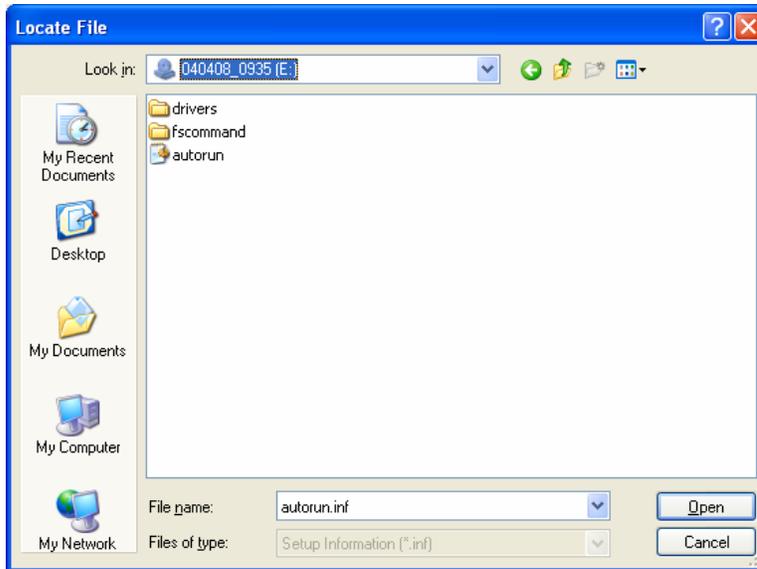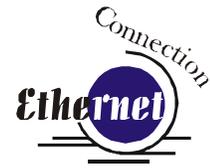
Select **Drivers**

Select **Open** to continue
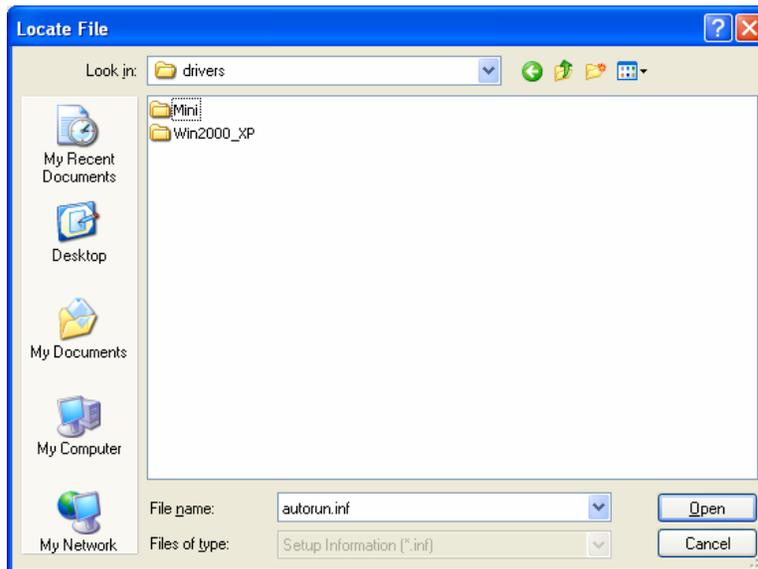
Highlight **Mini**.

Select **Open** to continue

Section 5: Installing the Print Driver
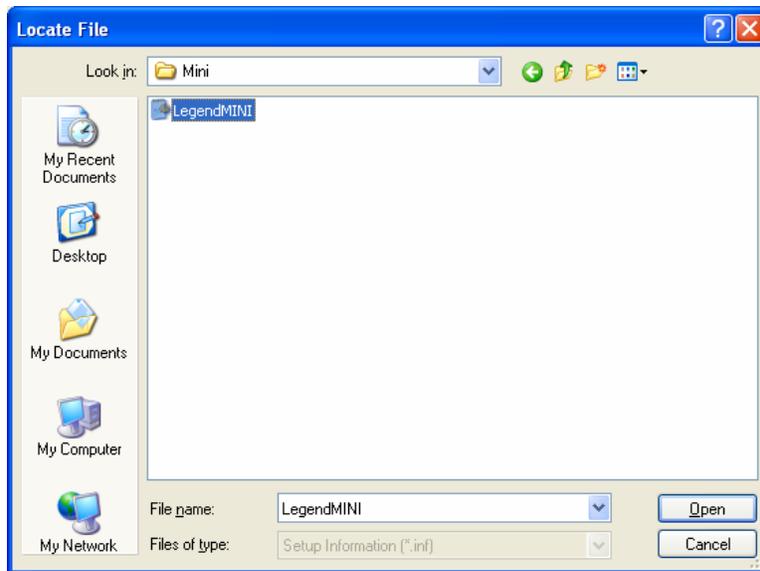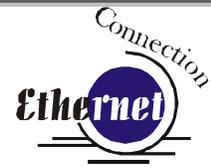
Select *LegendMini*

Click *Open* to continue
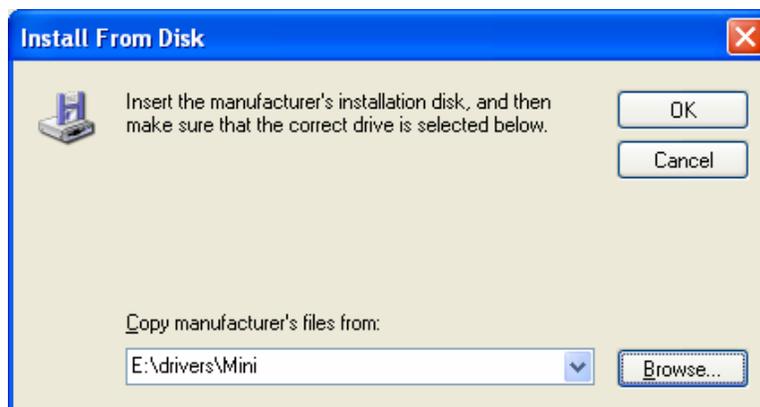
Click *OK* to continue.
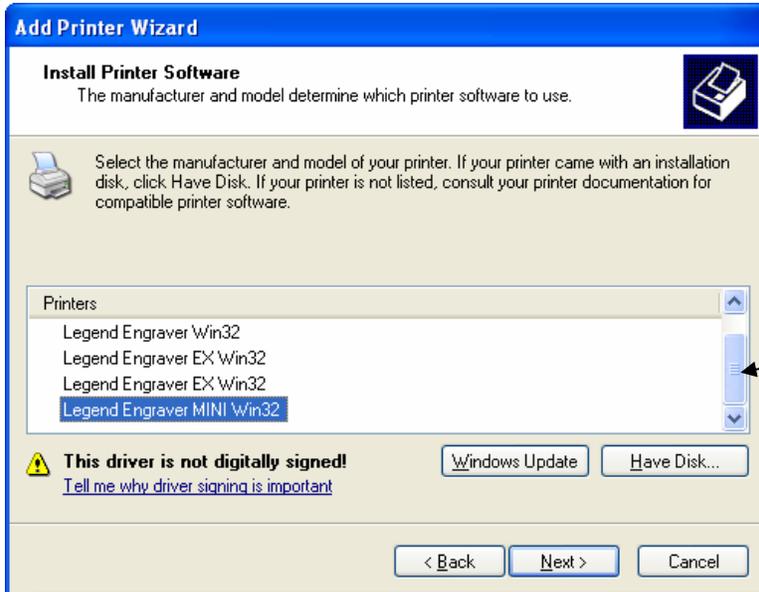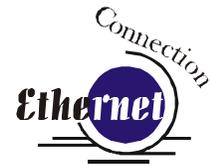
Select *Legend Engraver MINI Win32.*

You may need to use the scroll bar to access the Mini Driver.

Click *Next>* to continue.
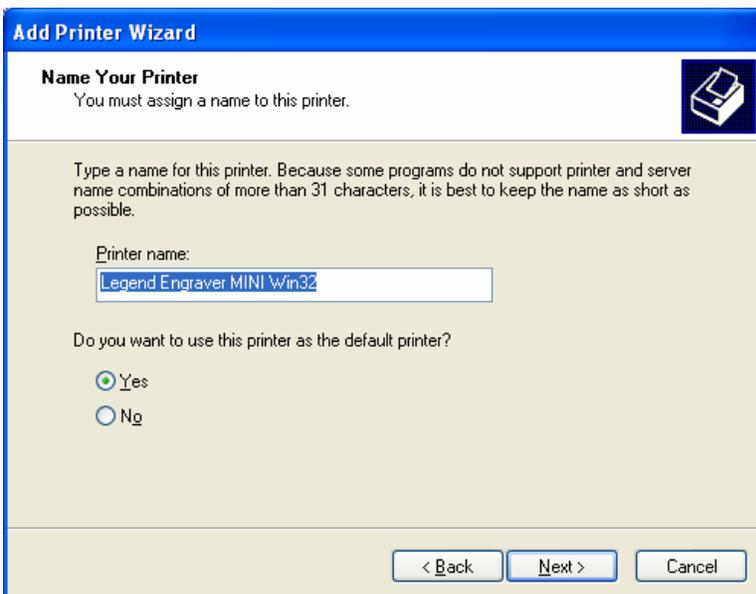
Name your printer and determine if you want the Mini to be the default printer. You probably do if the Mini is the only "printer" connected to your computer.

Click *Next>* to continue.

Select **Do not share this printer**.

Click **Next>** to continue.

Select **No**.

Click on the **Next>** button.
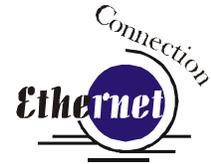
Click on the **Finish** button

Click on the **Continue Anyway** button. While the Mini print driver has not been tested by Microsoft, it will not destabilize your computer.

That's it! You're now ready to print to your Mini/Helix laser system!