Section 5: Connecting the Laser to Your Computer

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- 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.

Section 5: Connecting the Laser to Your Computer

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.



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.

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 straight forward 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.

Found New Hardware Wiz	ard	
	Welcome to the Found New Hardware Wizard	
	Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). <u>Read our privacy policy</u>	5. Click on <i>No</i> , <i>not this <u>t</u>ime</i> ,
	Can Windows connect to Windows Update to search for software? Yes, this time only Yes, now and every time L connect a device	then click on <u>N</u> ext >.
	Click Next to continue.	
	< Back Next > Cancel	





Found New Hardware Wizard	
Please choose your search and installation options.	7. Click on
Search for the best driver in these locations. Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed. Search removable media (floppy, CD-ROM) Include this location in the search: D:\drivers\Epilog Driver 7.07 Browse Opent search. I will choose the driver to install. Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware. < Back Next > Cancel	Don't Search. I will choose the driver to install., then click <u>N</u> ext>.

Found New Hardware Wizard		
Add Printer Wizard		8. Click on <u>H</u> ave Disk
Select the manufacturer and model of your prin disk, click Have Disk. If your printer is not lister compatible printer.	ter. If your printer came with an installation d, consult your printer documentation for a	
Show compatible hardware		
Manufacturer A Printers	<u>~</u>	
Agfa SAGFA-AccuS	et v52.3	
Apollo	etSF v52.3	
Apple APS-PS	et 800SF v52.3	
🖙 This driver is digitally signed.	Have Disk	
Tell me why driver signing is important		
	K <u>B</u> ack <u>N</u> ext > Cancel	





Locate File	10 Click on
Look in: 💽 My Computer 🕜 🕜 🎓 🖽 -	the disk drive named
Sepilog Laser (D:)	Dashboard
C Shared Documents	Driver [on this
C Administrator's Documents	computer we
	will click on
	drive (D:)],
	then click on
File <u>name:</u> EpilogWin32.inf	<u>O</u> pen.
Files of type: Setup Information (*.inf)	



Locate File	? 🛽	3	11. Click on
Look jn: 🥝	Dashboard Driver (D:) 🔽 😯 😥 📴 📆	┢	folder, then
			click <u>O</u> pen.
Graphics			
🤌 autorun.inf			/
		X	
File <u>n</u> ame:	autorun.inf		
Files of <u>type</u> :	Setup Information (*.inf)		
		55	





Locate File	3
Look jn: 🔁 Epilog Driver 8.01 <table-cell> 🔇 🎓 📴</table-cell>	13. Insure the EpilogWin32.i nf file is selected and then click on <u>Open</u> .
File name: EpilogWin32.inf Files of type: Setup Information (*.inf)	
Install From Disk	3
Insert the manufacturer's installation disk, and then OK make sure that the correct drive is selected below. Cancel	
	14. Click OK .
Copy manufacturer's files from:	
D:\drivers\Epilog Driver 8.01	



Found New Hardware Wizard	
Add Printer Wizard	
Select the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for a compatible printer.	
Show compatible hardware	
Printers	
Epilog Engraver Win32	15. Click <u>N</u> ext>.
This driver is not digitally signed! <u>I ell me why driver signing is important</u>	
< <u>B</u> ack <u>N</u> ext Cancel	
Hardware Installation	
The software you are installing for this hardware:	16. Click <u>Continue</u>
Printers	Anyway.

has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)

Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.

Continue Anyway

STOP Installation

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 straightthrough 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.



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, an 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:





IP ADDRESS

- 1. To set the IP Address Press the **CONFIG** button on the keypad.
- 2. Press the \square **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 \Rightarrow 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 \Rightarrow 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 \mathcal{P} 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 ⇒ 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 \mathbb{P} 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*.





4. The window below will appear. Select Use the following IP address radio button.

Internet Protocol (TCP/IP) Prope	rties 🛛 🕐 🔀			
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.				
O <u>O</u> btain an IP address automatical <u>l</u>	y			
• Use the following IP address:				
IP address:	192.168.3.3			
S <u>u</u> bnet mask:	255 . 255 . 255 . 0			
<u>D</u> efault gateway:	· · ·			
○ O <u>b</u> tain DNS server address autor	natically Iresses:			
Preferred DNS server:				
Alternate DNS server:	· · ·			
Ad <u>v</u> anced				
	OK Cancel			

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

IP Address Subnet Mask	192 168 3 <u>3</u> ▼ 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.



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:

WinZip Self-Extractor - driver_705.exe	×	
To unzip all files in driver_705.exe to the specified folder press the Unzip button. Unzip to folder: c:/Epilog_Driver ☑ verwrite files without prompting ☑ when done unzipping open: RUNDLL32	<u>U</u> nzip Run <u>W</u> inZip <u>C</u> lose <u>A</u> bout <u>H</u> elp	1. Click on the <i>Unzip</i> 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:







Add Standard TCP/IP Prin	ter Port Wizard 🛛 🔀	
	Welcome to the Add Standard TCP/IP Printer Port Wizard	
	You use this wizard to add a port for a network printer.	
	Before continuing be sure that: 1. The device is turned on. 2. The network is connected and configured.	
		Click <u><i>N</i></u> ext> to continue.
	To continue, click Next.	
	< Back Next > Cancel	

Add Standard TCP/IP Printer Port Wizard			
Add Port For which device do you want to add a port?			
Enter the Printer Name or IP add	dress, and a port name for the desired device.		
Printer Name or IP <u>A</u> ddress:	192.168.3.4		
<u>P</u> ort Name:	IP_192.168.3.4		
	< <u>B</u> ack Next≻	Cancel	



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.



Add Standard TCP/IP Printer Port Wizard	$\overline{\mathbf{X}}$
Additional Port Information Required The device could not be identified.	
 The device is not found on the network. Be sure that: The device is turned on. The network is connected. The device is properly configured. The address on the previous page is correct. If you think the address is not correct, click Back to return to the previous page. Then correct 	Click the <i>Custom</i> button, and then <i>Settings</i> .
the address and perform another search on the network. If you are sure the address is correct select the device type below. Device Type O Standard Generic Network Card	
<u>Custom</u> <u>Settings</u>	
< <u>B</u> ack <u>N</u> ext > Cancel	

Configure Standard TCP/IP	Port Monitor ?	×	Set Protocol to <i>LPR</i> . This is a very
Port Name: Printer Name or IP <u>A</u> ddress: Protocol	IP_192.168.3.4 192.168.3.4		important step. Your download time will be greatly increased if LPR is not selected.
Raw Settings Port Number: 910 LPR Settings Queue Name: Leg	lend		Type <i>Legend</i> in the Queue Name box.
LPR Byte Counting Enabled	lic		Click OK to continue.
	OK Cancel		

Additional Port Information Required The device could not be identified.	Etherne
The device is not found on the network. Be sure that: 1. The device is turned on. 2. The network is connected. 3. The device is properly configured. 4. The address on the previous page is correct. If you think the address is not correct, click Back to return to the previous page. Then correct the address and perform another search on the network. If you are sure the address is correct, celeat the device time below.	Click <u>N</u> ext> to continue.
Device Type ○ Standard Generic Network Card ○ Lustom Settings < Back Next >	

Add Standard TCP/IP Prin	ter Port Wizard 🛛 👂	X	
	Completing the Add Standard TCP/IP Printer Port Wizard You have selected a port with the following characteristics.		
	SNMP: No Protocol: LPR, Legend Device: 192.168.3.4 Port Name: IP_192.168.3.4 Adapter Type:		Click <i>Finish</i> to continue.
-	To complete this wizard, click Finish.		
	< <u>B</u> ack Finish Cancel	נ	

Conne	Add Printer Wizard	
Ethernet	Install Printer Software The manufacturer and model determine which printer software to use.	Click <u>H</u> ave Disk
	Select the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for compatible printer software.	
	Manufacturer Printers Agfa Alps Alps AGFA-AccuSet v52.3 Apollo AGFA-AccuSet SF v52.3 Apple AGFA-AccuSet 800 APS-PS AGFA-AccuSet 800SF v52.3 This driver is digitally signed. Have Disk	
	Teil me why driver signing is important < Back Next>	
	Install From Disk	Click on <i>Browse</i> .
	Insert the manufacturer's installation disk, and then OK make sure that the correct drive is selected below. Cancel	
	Copy manufacturer's files from:	



Locate File			? 🔀	Select <i>Epilog</i>
Look jn: 🔁	Epilog Driver 8.01	✓ ③	*	<i>Win32.inf</i> , and then select <i>Open</i> to continue
File <u>n</u> ame:	EpilogWin32.inf	*	<u>O</u> pen	
Files of <u>typ</u> e:	Setup Information (*.inf)	~	Cancel .::	



Install F	rom Disk			
F	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel	•	
	Copy manufacturer's files from:			Click <i>OK</i> to continue.
	D:\drivers\Epilog Driver 8.01	<u>B</u> rowse		





Add Printer Wizard	
Name Your Printer You must assign a name to this printer.	
Type a name for this printer. Because some programs do not support printer and server name combinations of more than 31 characters, it is best to keep the name as short as possible.	
Printer name: Epilog Engraver Win32 Do you want to use this printer as the default printer?	 Name your printer and determine if you want the laser to be the default printer.
	Click <i>Next</i> > to continue.
< <u>B</u> ack <u>N</u> ext > Cancel	

Add Printer Wizard		
Printer Sharing You can share this printer with other network users.		Select Do not
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.		share this printer.
Share name:	/	Click <i>Next></i> to continue.
< <u>B</u> ack <u>N</u> ext> Cancel		



Add Printer Wizard	
Print Test Page To confirm that the printer is installed properly, you can print a test page.	Select <i>No</i> to Do you want to print
Do you want to print a test page?	a test page.
	Click <i>Next></i> to continue.
<pre><<u>Back</u> Cancel</pre>	



Hardwar	e Installation	
<u>.</u>	The software you are installing for this hardware: Printers has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing. Continue Anyway	Click on the <i>Continue Anyway</i> 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 36EXT laser system!