2 Windows Set Up

The Warrior well logging system runs in the Microsoft Windows operating system. This gives the user many powerful tools and facilities not previously available in an inexpensive logging system. One of the principle advantages is that the system is multitasking, meaning that several programs (or tasks) may be running on one computer at the same time. Within the Warrior system, for example, several different log plots may be displayed independently on the screen and other logs may be directed to plotters. Headings may be prepared, and final log presentations set up, all while continuing to acquire data.

Another advantage of the Windows environment is the graphical user interface, which presents the functions available in the system in an easy to understand manner (well, fairly easy). While the simple interface makes the Warrior easy and fast to operate, the full power of the system can only be realized when an understanding of MS Windows itself has been acquired. It is therefore strongly recommended that, after some initial experimentation with the system, the Windows User Guide is studied and the Windows Tutorials run. Courses are also available on videotape, and other media, from many sources.

2.1 Windows Printer Setup

To be able to produce a hardcopy of your data from the Warrior software, a Windows printer must first be installed. The Warrior software includes the capability to print / plot to common plotters while logging but the software uses the Windows spooling to buffer the plotter output. Other plotters may be used to plot logs through Windows after data recording as stopped.

2.1.1 Windows 7 Printer Installation

To facilitate this operation a USB Port has been assign on the Interface Panel (rear Plate) and marker “Plotter”. It is recommended to use this USB port for your printer connection. With the printer turned off, plug in the USB cable or USB to Centronix Printer Adapter cable into the USB port. Make sure that the USB cable from the computer to the Interface Panel is properly connected. Turn the Printer On.

Windows will often install printer driver automatically. To see if Windows has installed the printer, click on the Windows start button and then click on the Device and Printers selection. To aid in automatic printer installation,

Fig. 2.1.1 Windows Start Button and Devices and Printers selection

Look in the Printers and Faxes section and see if the printer that you have connect has been automatically installed. If it hasn't been, then Windows drivers will have to be installed manually. At this point the manufacturer's drivers must be available. Drivers for black and white plotters normally supplied by Scientific Data Systems, such as Printrex and ISYS, are on the Warrior installation DVD.

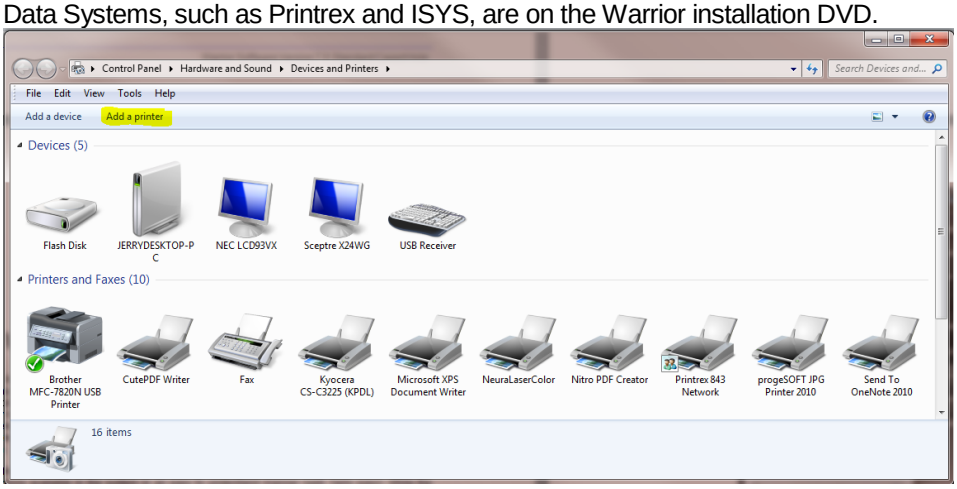

Fig. 2.1.2 Click on Add a printer

Place the CD /DVD or other media containing the device drivers in the computer so that they are available when required during the printer installation. Click on Add a Printer in the Windows Devices and Printers window.

Click on the Add a local printer selection

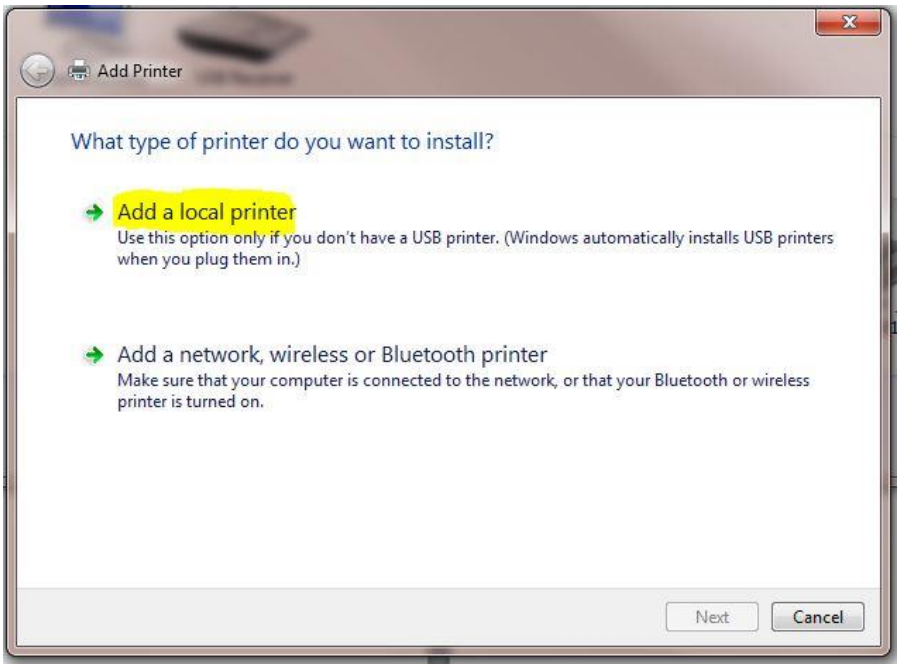

Fig. 2.1.3 Add a local printer

Click on the Use existing port selection, then drop down the scroll down printer port list to the right of the selection until you find USBxxx (Virtual printer port for USB). There may be several USB virtual printer ports, typically the highest numbered one is the last device that was plugged in to a USB Port. After selecting a USB port click the **[Next]** button.

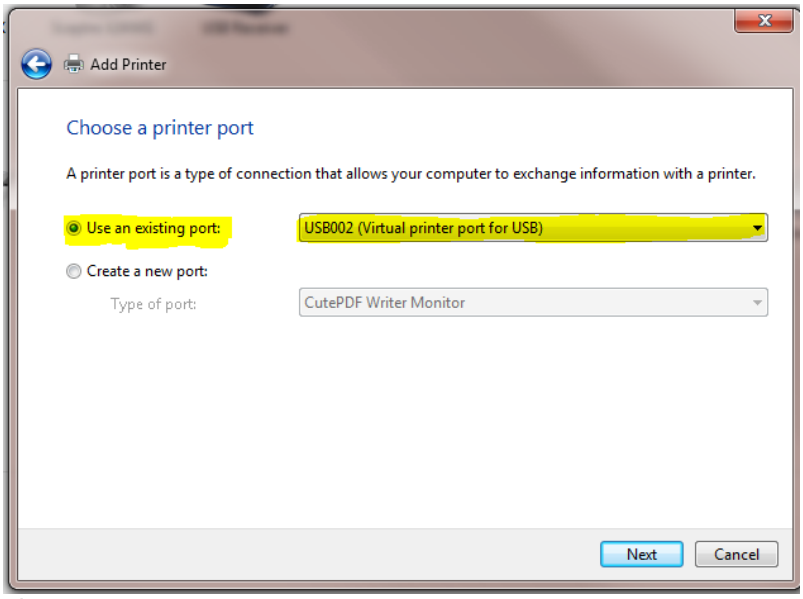

Fig. 2.1.4

The next step is to select the location of the printer driver to be installed.

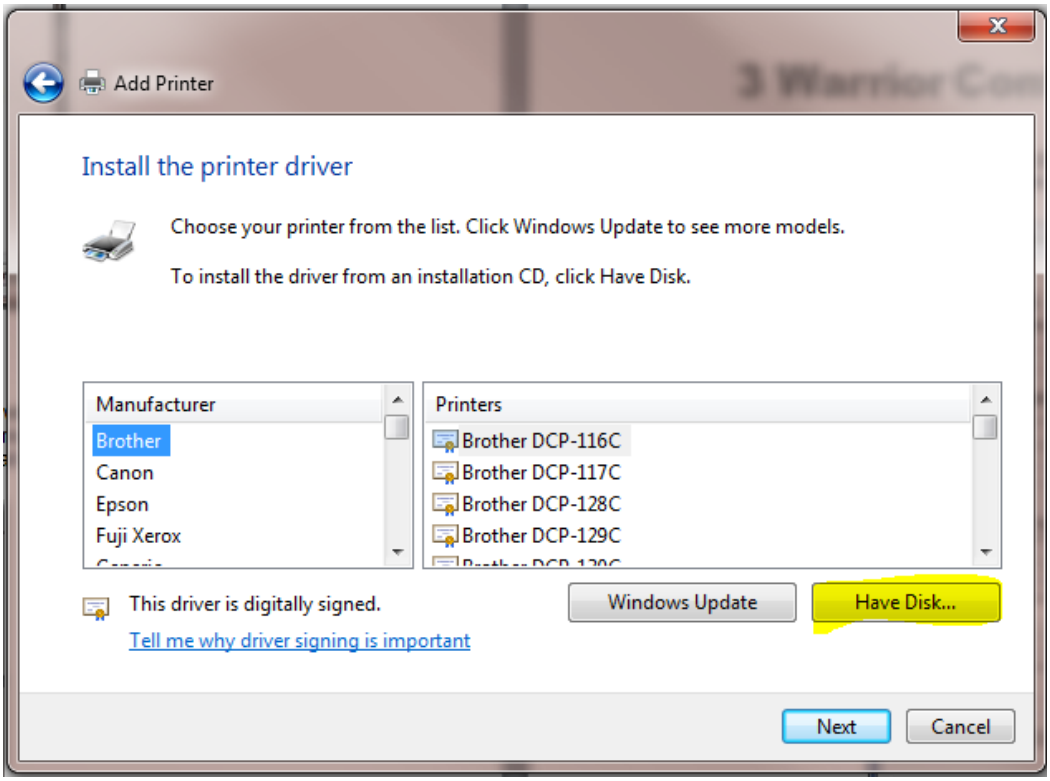

Fig. 2.1.5 Click [Have Disk]

The list on the left side of the window are printer manufacturers that Microsoft supports or that have previously been installed on the computer. Check the list to see if the manufacturer is in the list. If it is not in the list, click on [Have Disk …].

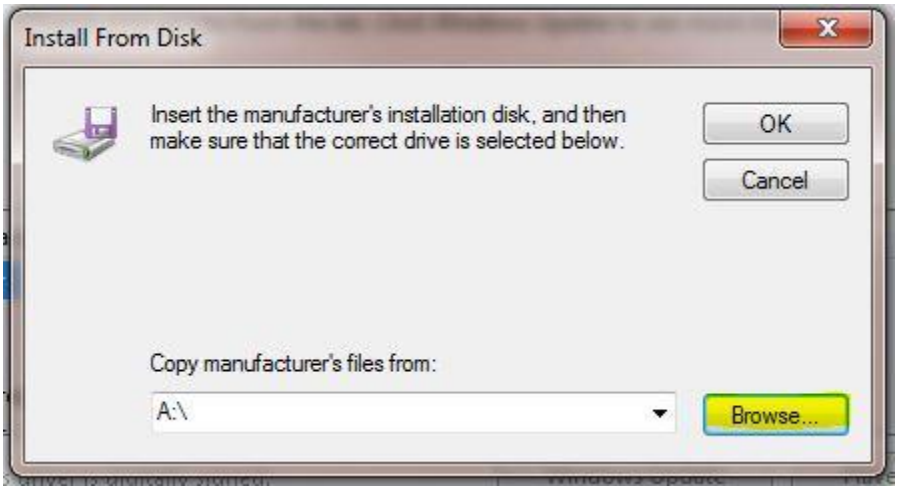

Fig. 2.1.6 Plotter Manufacturer Installation disk

Click on the [Browse …] button to locate the drivers for the printer. The Warrior Installation CD contains drivers for the plotters that Scientific Data Systems has supplied.

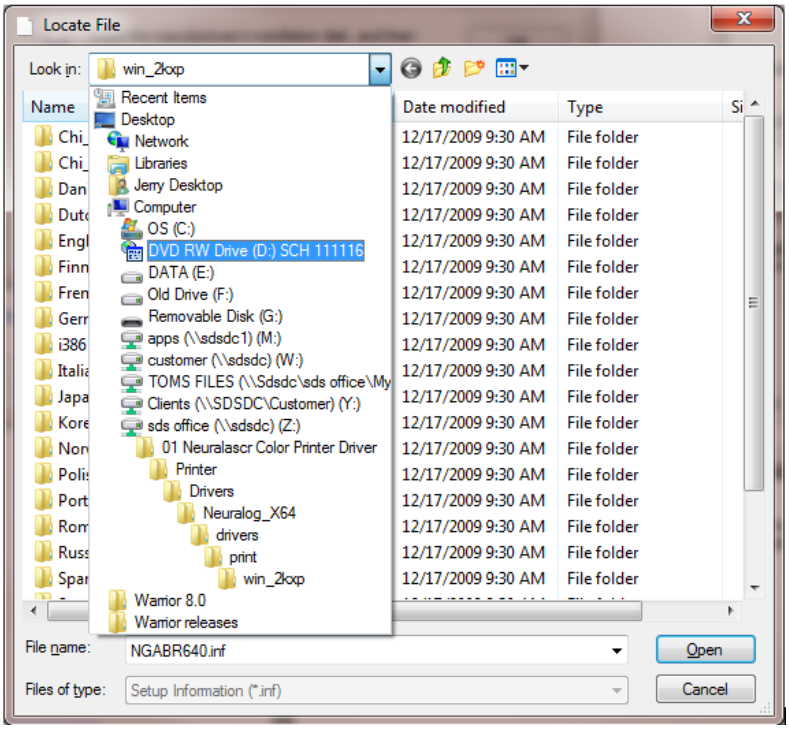

Fig. 2.1.7 Warrior CD

Click the Look in: drop down list in the Locate File window to find the Warrior Installation CD in the computer CD / DVD Drive and double click on it.

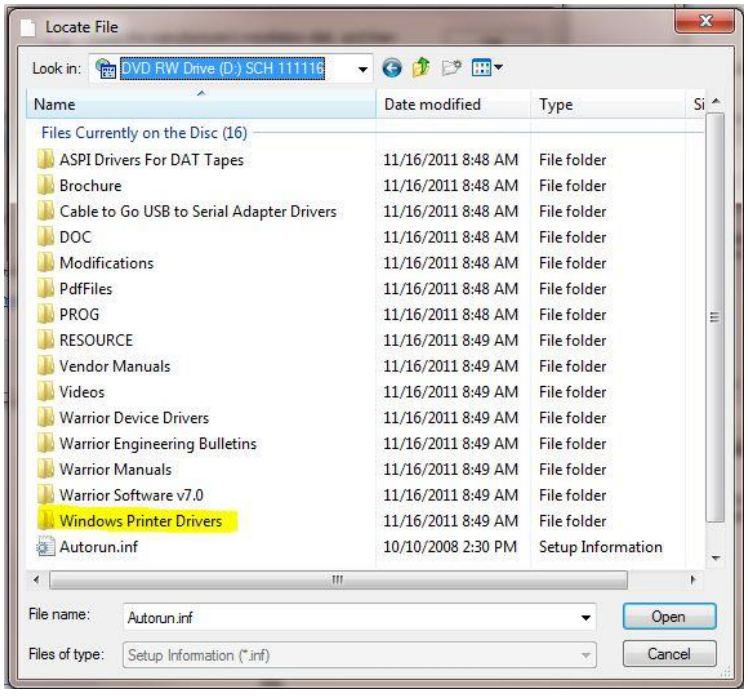

Fig. 2.1.8

On the Warrior CD, locate the Windows Printer Drivers folder and double click on it.

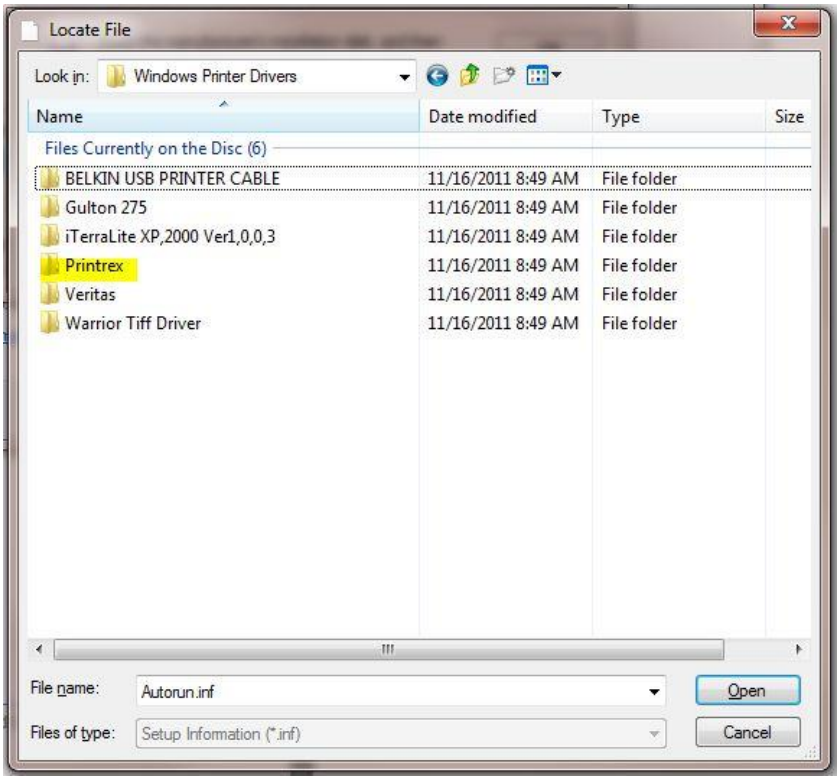

Fig. 2.1.9

Select the plotter manufacturer and double click on that folder.

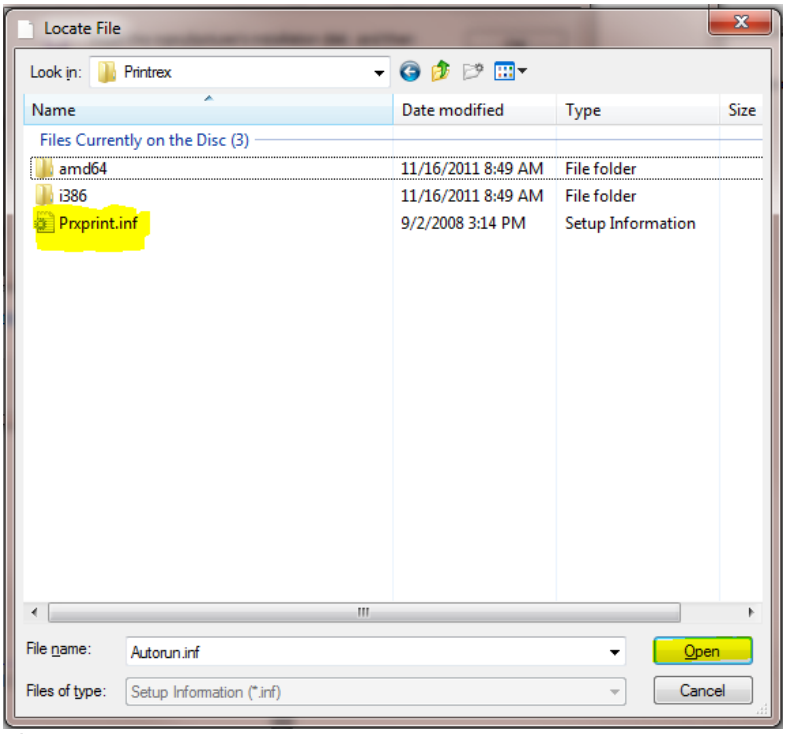

Fig 2.1.10

When the proper .inf, or setup information file has been located, click the file and then click on the [Open] Button.

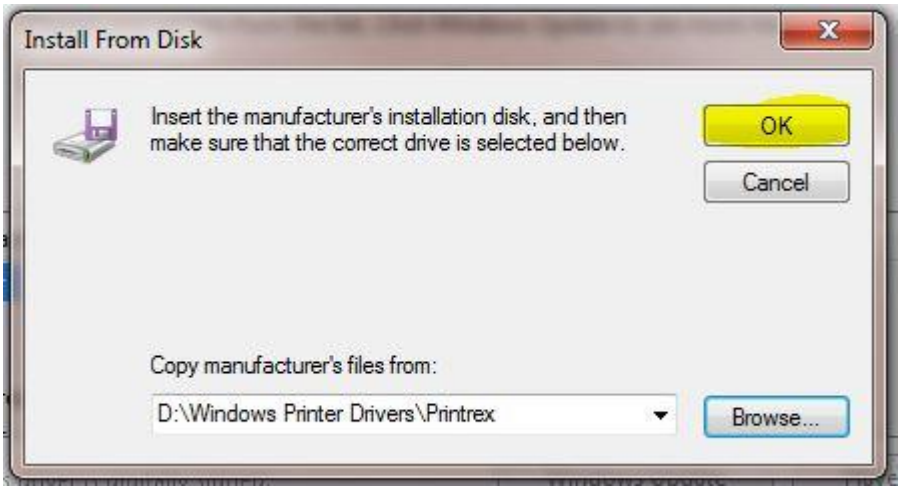

Fig 2.1.11

This should return you to the Install from Dick window with the folder with the manufacturers files selected. Click the [OK] button to continue.

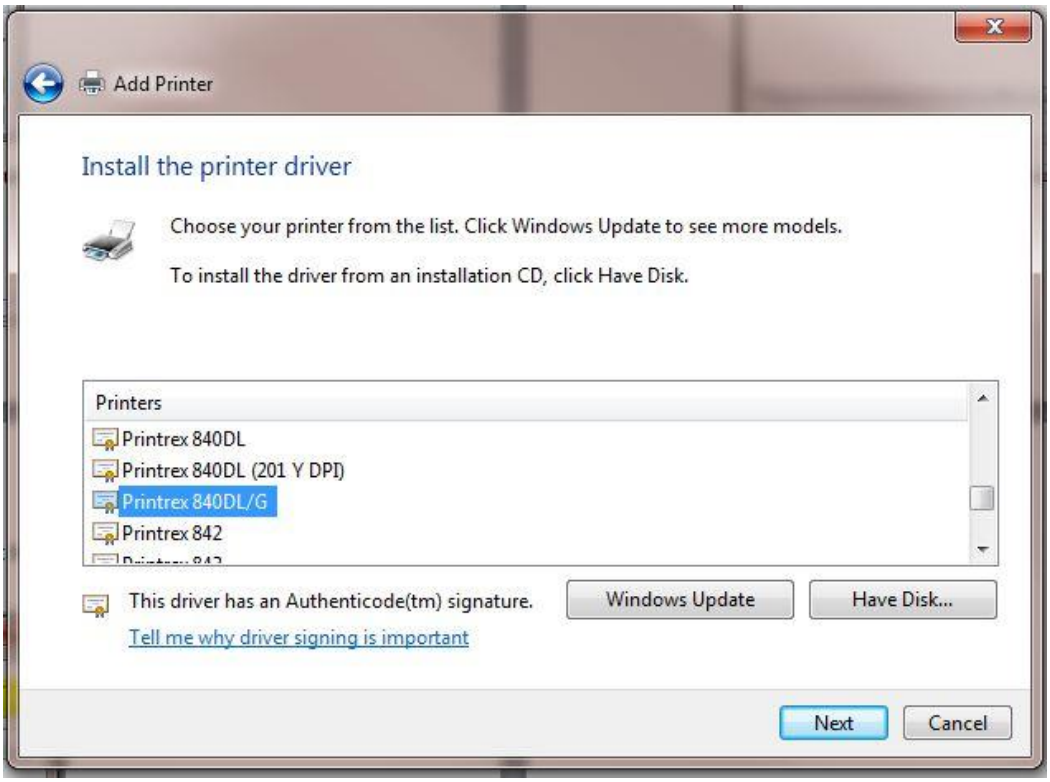

Fig. 2.1.12 Selecting printer

You should now have a drop down list of the manufacturers printers. Scroll down the list to find the model of the printer that in being installed and click [Next].

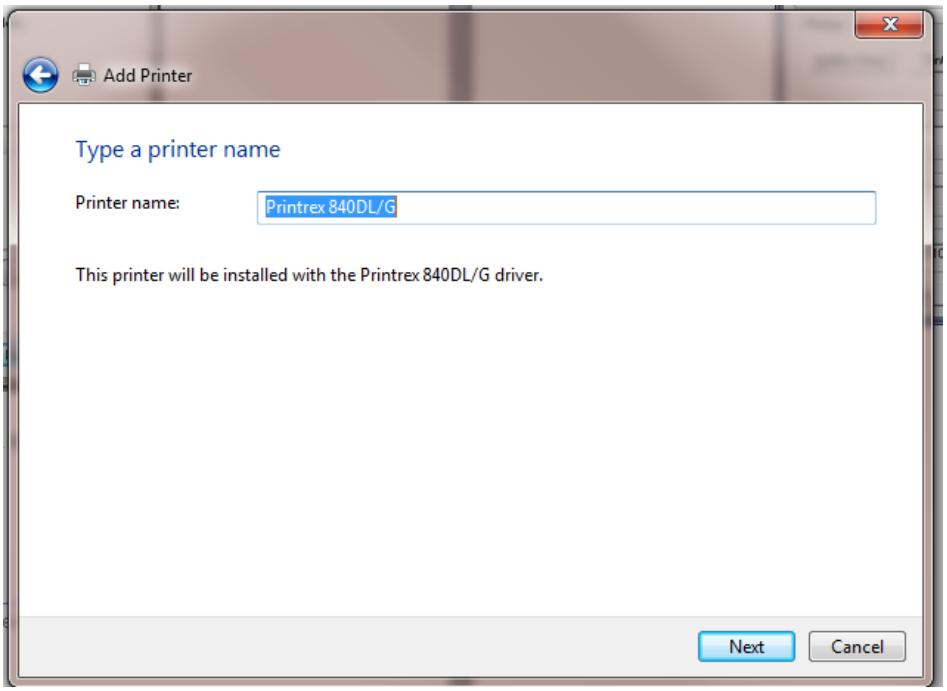

Fig. 2.1.13

Either enter a new printer name or accept the printer name Windows has assigned by clicking the [Next] button.

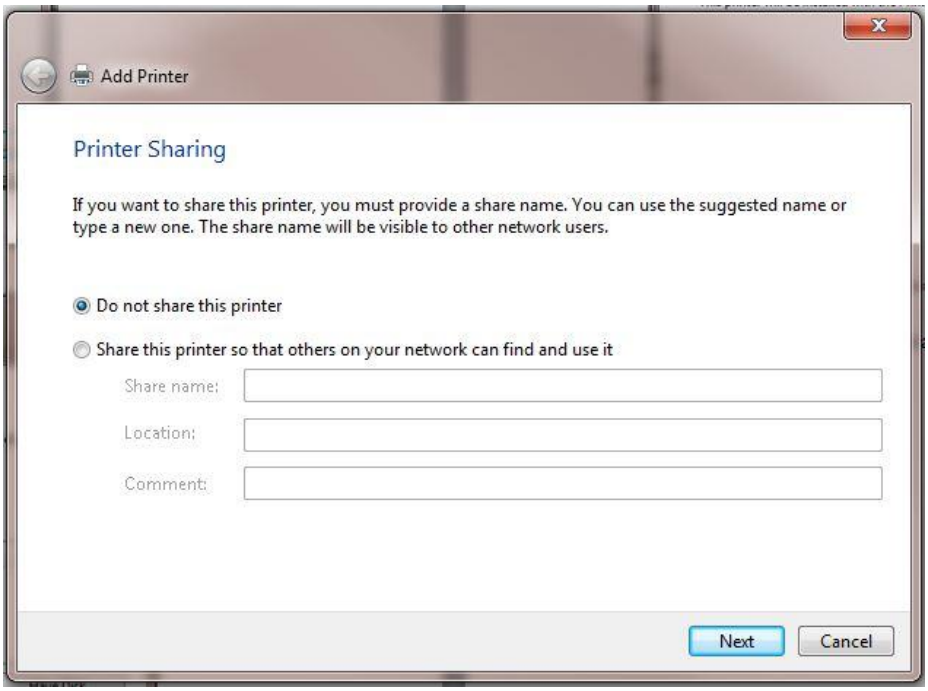

Fig. 2.1.14

Warrior will not print through a shared printer (Warrior does print through network printers) so select the Do not share this printer option and then click [Next].

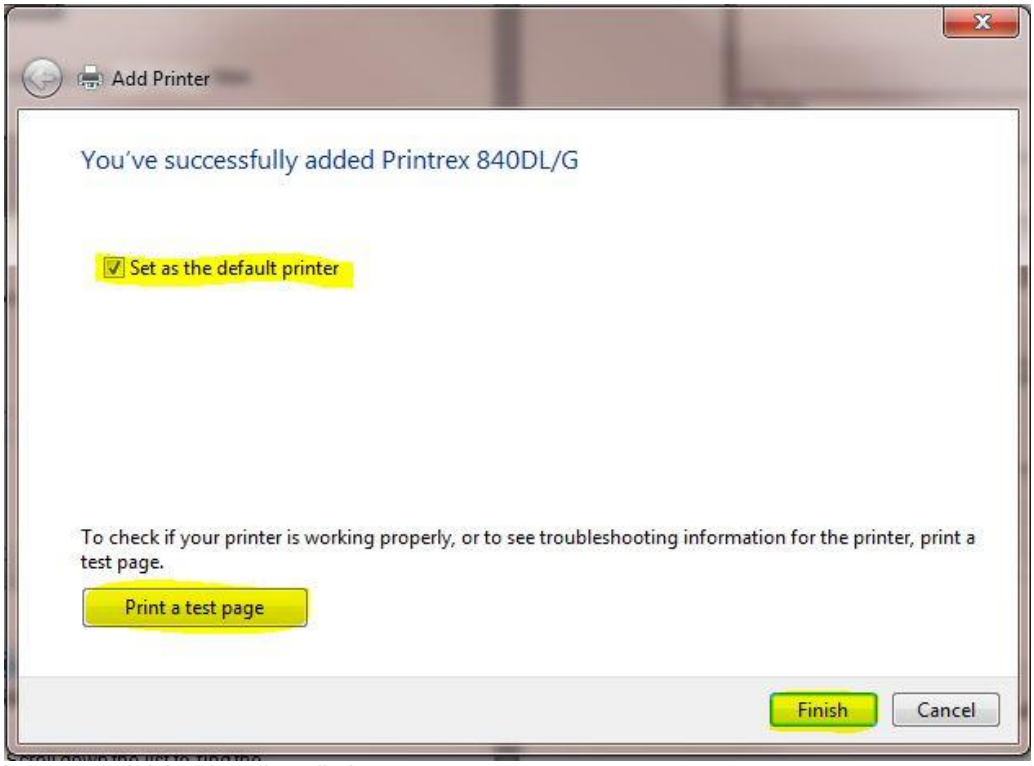

Fig. 2.1.15 Finish printer installation

If this is the only printer to be used on the computer, click the Set as the default printer check box. If no other printers are attached to the computer click the Set as Default printer selection.

Add the installed Windows Printers into the Warrior Plotting Program

3.3.2 Plotting – Printer Setup

There are two different plotting modes that Warrior software can use to plot data. In the Direct Print mode, printer drivers contained in the Warrior Software allow real time printing while acquiring data and use only the Windows spooling function. In Windows mode, the Warrior software prints the data through the Windows installed printer drivers. Windows mode should not be used for real time printing.

For good quality color prints, or to print to a printer that is not in the list of supported Direct Print mode printers, select the option Enable printing through Windows printer. If you have that option checked, then when you print from Warrior, you will see either (Direct) or (Windows) label for each printer in the list of printers to print to.

Direct to Printer

Printers supported for Direct printing by Warrior, also have Windows drivers, so when a Direct Printer is installed; the Windows driver must be installed as well for printer spooling. When selecting a printer name, as would be done during a printer selection in Windows programs, Warrior can use the port properties you set up for that printer through the standard Windows printer setup, so the port name doesn't have to be specified in two different places. When a Windows name is specified, then the Port Name doesn't need to be changed in Warrior, as it will use the same port that is set up through your standard Windows printer setup. When using Direct printing, settings, such as media type, plot speed, etc., are all controlled by Warrior software directly, not by the Windows printer driver.

Printers supported by Warrior Software for monochrome printing Direct:
Printrex 820 and 820 DL and the 840 DL/G or 843 DL/G and 920 (www.printrex.com)

ISys V8.5 or V8.5e (www.isys-group.com)

Printers supported by Warrior Software for color printing Direct:
Epson Stylus Color 900
Epson Stylus Color 1520
Epson Stylus Color 3000
Epson Stylus Color C60, C80, C82, C84
HP DesignJet 750C, 1050C
HP LaserJet 5L

In addition PDF and image (TIFF) file can also be made directly.

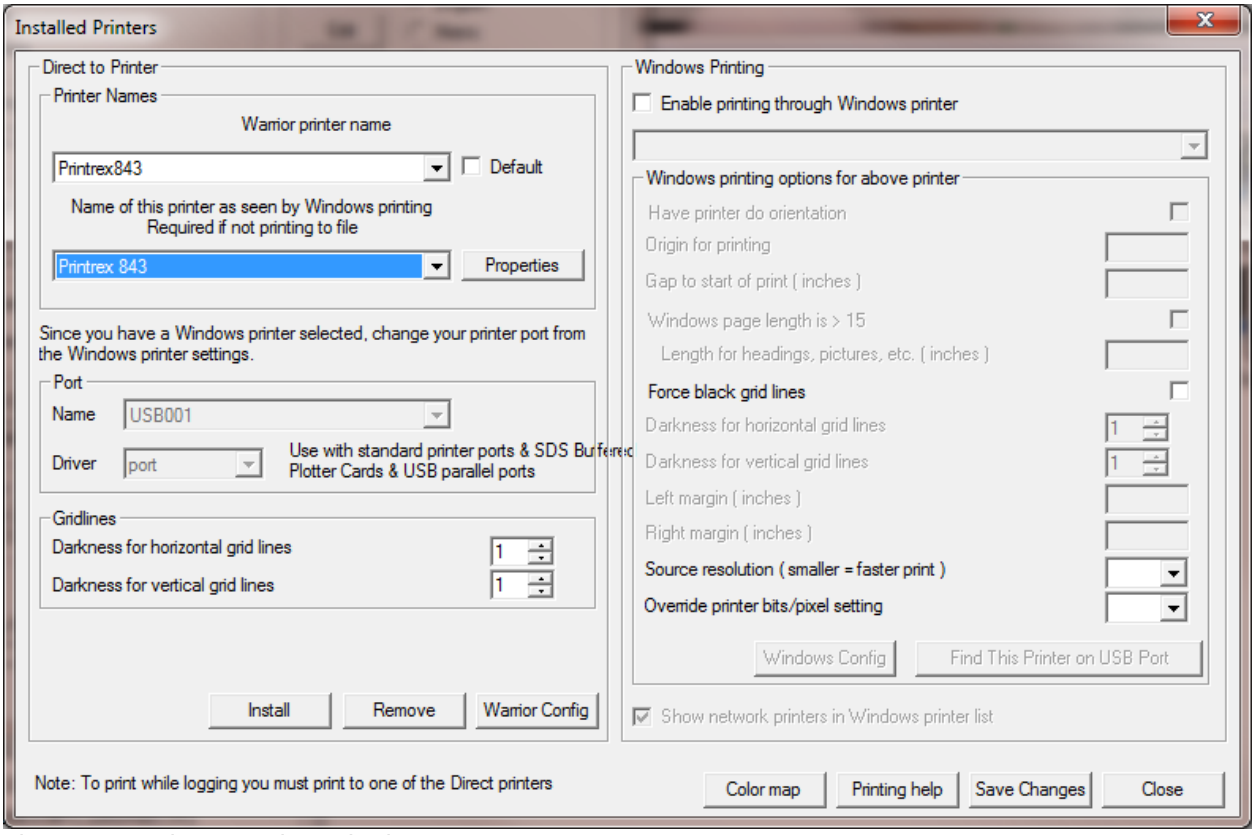

Fig. 3.3.3 Warrior Control panel Printer Setup

Printing through Windows Printing
While logging, it is possible to print to a Windows printer. However, printing hardcopy of your pass that you are currently logging is not possible do to windows printing full pages at a time. SDS cannot guarantee that all printers will work properly for making prints from Warrior, therefore a list of tested printers that are able to make continuous prints, is available. The Windows printing options are settings that may change from one printer to the next. However, most of the settings are set by SDS, so they should not be changed. Some printers place a large gap at the start of a print, so a print gap is added during start of print, so the first fan fold can be skipped and a distance can be added to get the <fold here> to come out in the right place.
When using Windows printing, settings, such as media type, plot speed, etc., are all controlled by the Windows printer driver.

3.3.3 Plotting – Installing a Direct Warrior Printer

From the Warrior Control Panel, click the Plot tab. From the plot sheet, click on the [Printer Setup] button. From the Installed Printers window, select the **[Install]** button at the bottom of the page for a list of printers supported by Warrior for direct printing while logging.

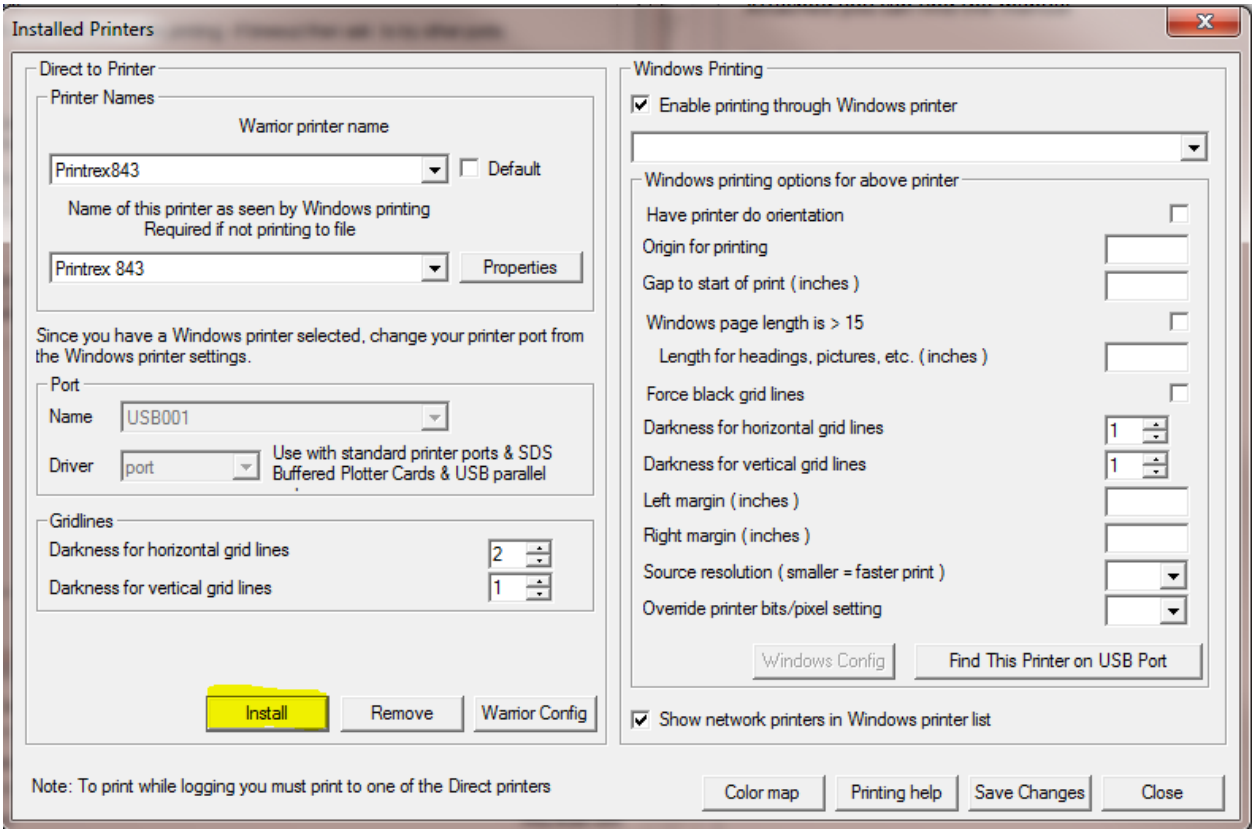

Fig. 3.3.4 Warrior Installed Printers Setup

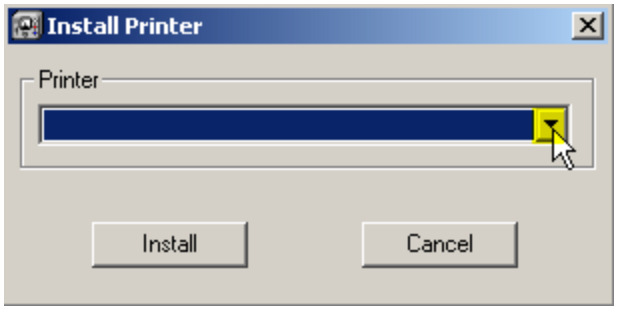

FIG: 3.3.5 Install Printer

Open the Drop- down list to view the list of printers. Note that there is a scroll bar to the side of the list to scroll up and down to view all of the selectable printers.

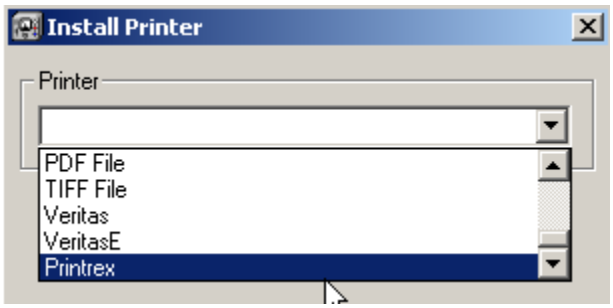

FIG: 3.3.6 Install Printer

In this example we will select Printrex for the Printrex 840 DL/G.

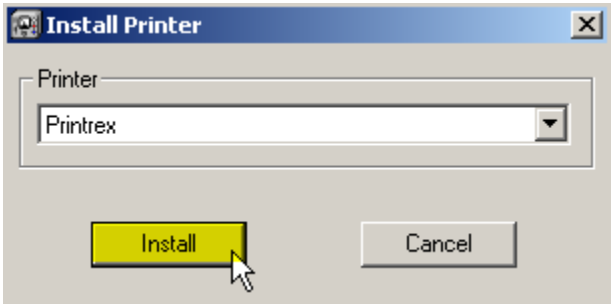

FIG: 3.3.7 Install Printer

Click the [Install] button to select the printer shown for installation.

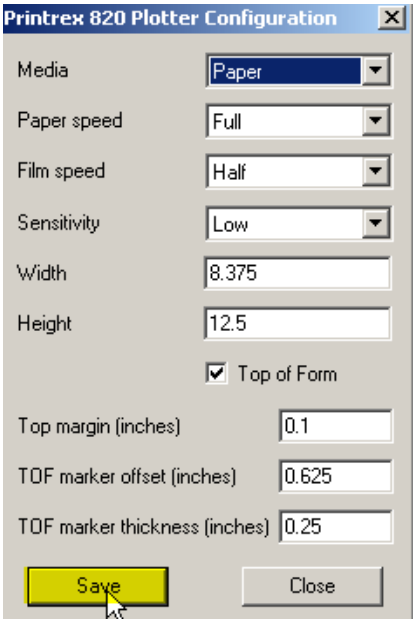

FIG: 3.3.8 Printrex 820/840 Plotter Configuration

The Plotter Configuration window for the plotter selected will now open. In this example, the Media can be paper or film. Depending upon the media selected, the plotter will run at either the paper speed or the film speed. The sensitivity setting controls the heat selection for the thermal paper or film that is installed. A low

sensitivity will increase the heat setting. For fan fold printing, set the printer page height to twice the size of one fan fold page.

Some of the Windows printers may require a value to be entered for the “Gap to start of print”. Having a non-zero value will cause the printer to advance the paper that distance, so the first fan fold page may be blank in order to position the print head to the proper place.

Select [Save] to save the plotter configuration.

One physical plotter in a system can be installed under different names and each installation can then have different configuration settings. To install multiple configurations for the same physical plotter, start the installation by clicking the [Install] on the lower portion of the screen. Find and select the plotter in the drop- down list. If that plotter name already exists in the list of installed plotters, you will be given the option of entering a new name. Click the [Rename] button to continue to the configuration window for that plotter name.

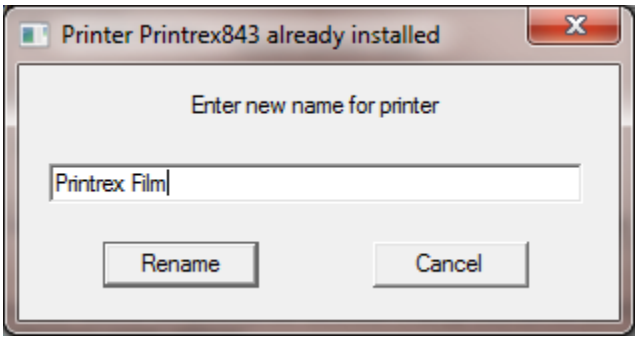

Fig. 3.3.9

Once the plotter has been selected and installed, the plotter used for windows spooling needs to be selected. This plotter must already have been installed in windows as discussed in section 2.1.

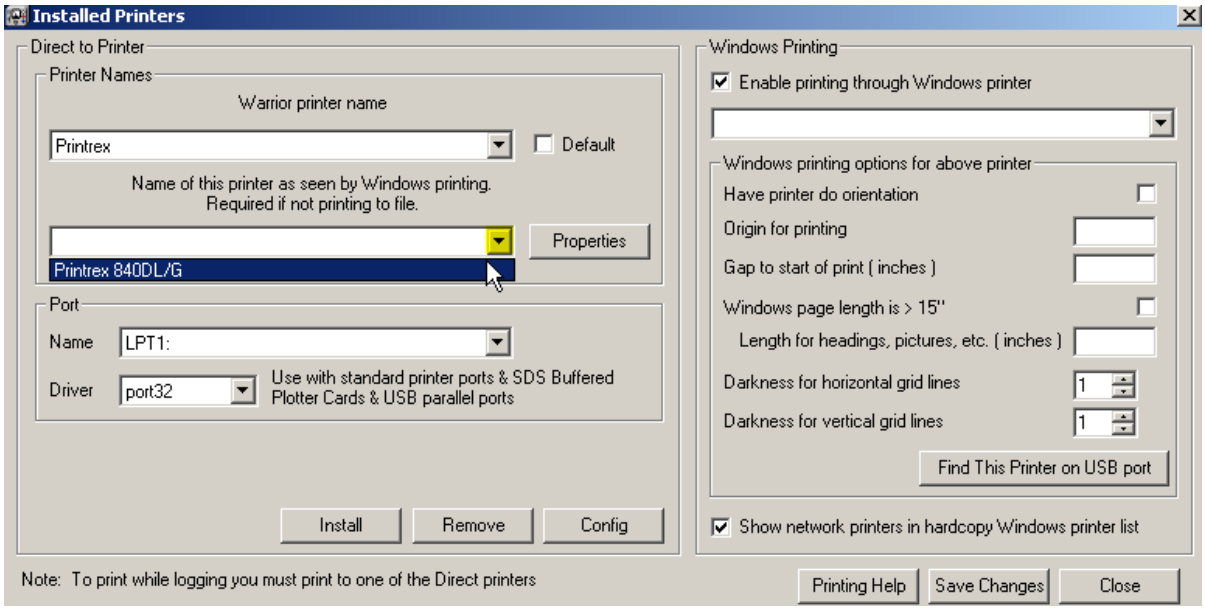

FIG: 3.3.10 Installed Printers

Select the Drop-down list for the Name of this printer as seen by Windows printers and select the Windows installed printer. If no plotter is selected you will get the plotter may be off-line error message when you try to print from Warrior.

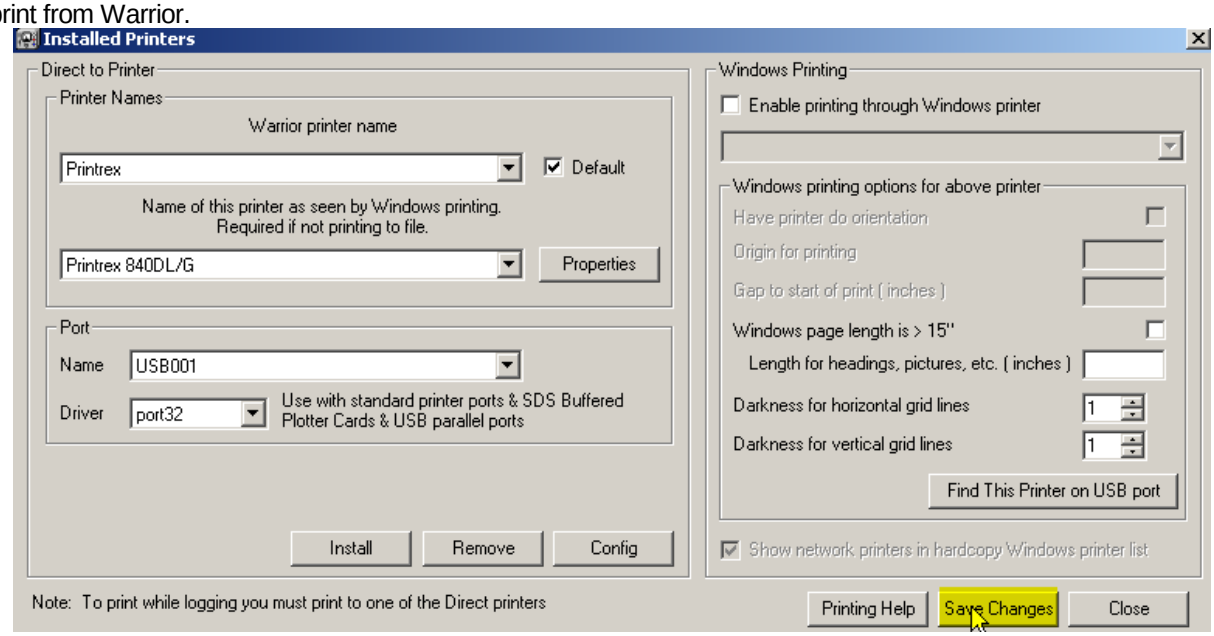

FIG: 3.3.11 Installed Printers

Select [Save Changes] to save the installed plotter and its configuration settings.

3.3.4 Printing to PDF

Warrior supports direct printing to PDF files through its own driver. Before creating a PDF output, determine what the customer intends to do with the file and configure the PDF configuration options accordingly. If it is intended only to view the PDF on the screen, then the driver should be set to Continuous Viewable Image and Color. If the customer intends to print the PDF, then it should be set to Continuous Printable Image and Color or Monochrome, depending on the printer being used. In addition, it may be important to set the page size to match the page size of the customer's printer; otherwise gaps between pages can appear. Furthermore, there is a trade off between file size and quality. The higher the dpi setting, the better the quality normally, but the file size is larger. Some experimentation may be required with the customer to produce optimal results. This is also true for the selected compression mode. For most situations, FLATE compression works well.

3.3.5 Printing to TIFF

Warrior also supports direct printing to TIFF files through its own driver. Again, determine what the file is intended for and configure the driver accordingly. Note that the driver supports TIFF single continuous pages of longer than 90 inches. However, many TIFF applications (including Warrior fax) do not support this, so before increasing the maximum page length make sure that the customer can read such files.

3.3.6 Windows Printing

Check Enable printing through Windows printer. When this box is checked, either a (Direct) or (Windows) label for each available printer is shown when printing from Warrior.

COLOR PRINTING NOTICE: You will always get better color prints printing through a Windows color printer. None of the direct color printers were designed for printing continuous log prints. Unless you require color printing while logging, we recommend you use one of the Windows printers and not use Direct printing to a color printer.

There are several settings that need to be set to achieve a quality print using Windows printers. By clicking on [Printing Help] you can read further about settings.

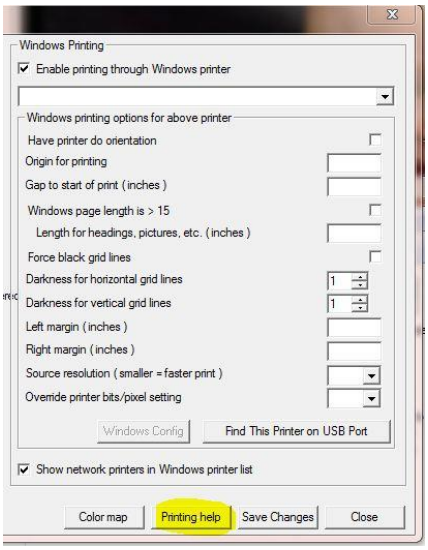

Fig. 3.3.12 Printing Help

If you click on the Supported Windows Printers, a list of printers will drop down. If you click on one of the listed printers, settings for Windows printing from Warrior will be shown. In addition, suggested settings for the Windows printer properties will be listed.

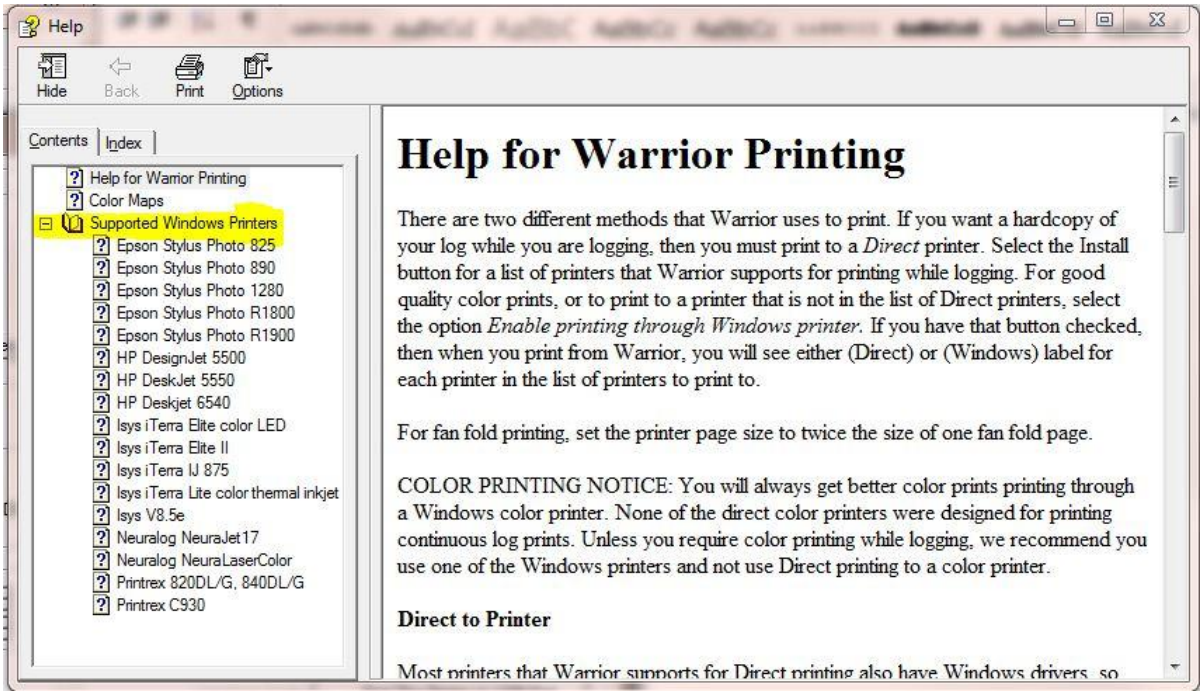

Fig. 3.3.13 Supported Windows Printers

Source Resolution: If it takes a long time to print to your Windows printer, try setting this to a lower value. The default is 1. A lower value may degrade the print quality, so test with your printer to find the optimal setting. You may be able to use a higher Windows printer resolution (600 or 720 dpi) and use a Source Resolution of 1/2 or 1/3 and still get a quality print.

3.3.7 Finding Printer

We recommend connect the Printer/Plotter in the same USB port but if you do not know which port to use , you can find the USB port where the printer is connected . This will work for printers that print only through Windows or for printers that use the Windows spooler for direct printing through Warrior.

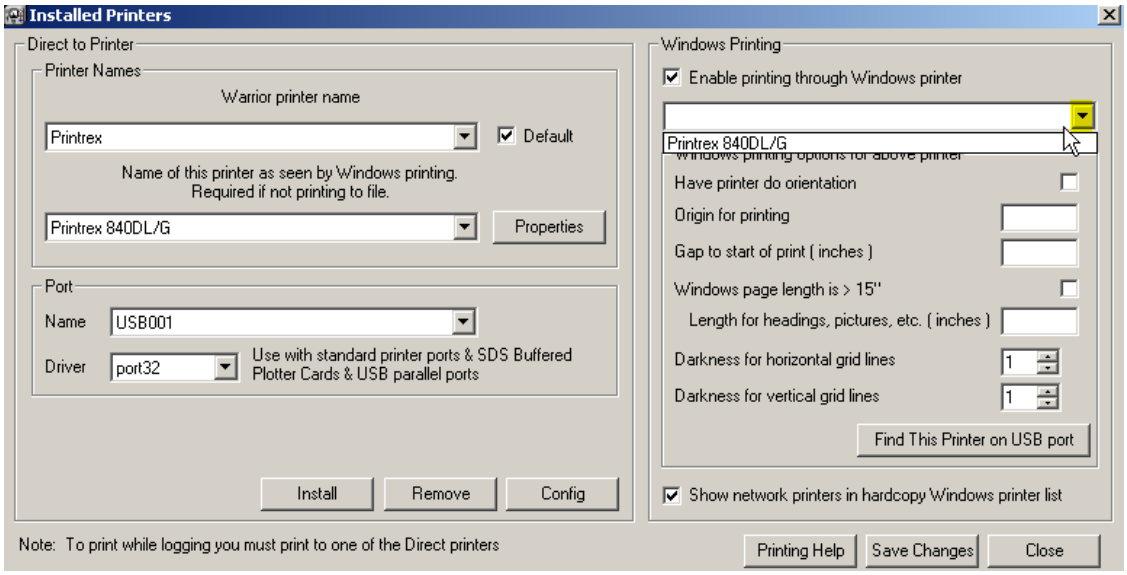

FIG: 3.3.14 Installed Printers

Select on the Drop-down the Printer that you wish to find what USB port it is attached to. In this case Printrex 840DL/G.

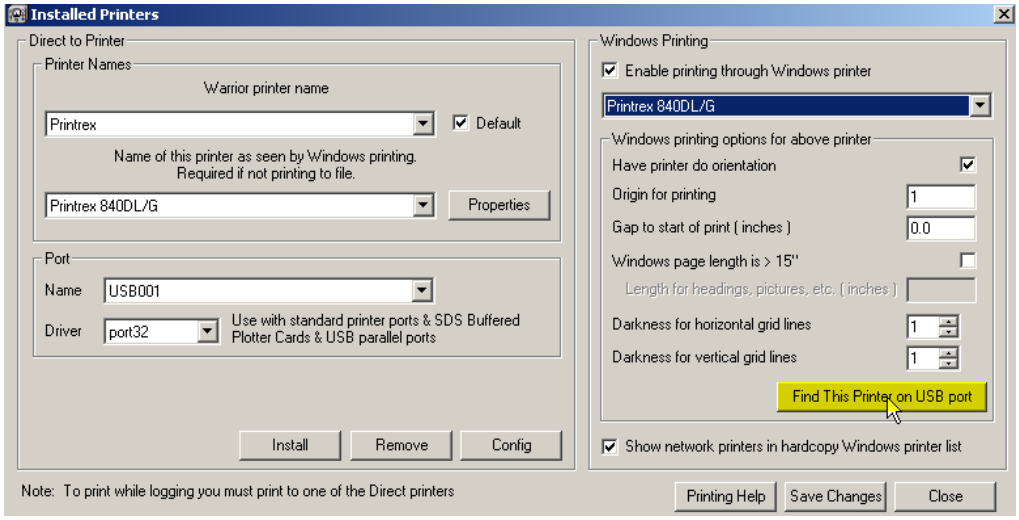

FIG: 3.3.15 Installed Printers

Click on the [Find this Printer on USB port] button. The find printer dialog box will come up. At this time it is import to disconnect any plotter that is not the plotter that you are trying to locate. A sample test page will be sent to the plotter and if the plotter is not the correct plotter being tested it may generate large amounts of wasted paper.

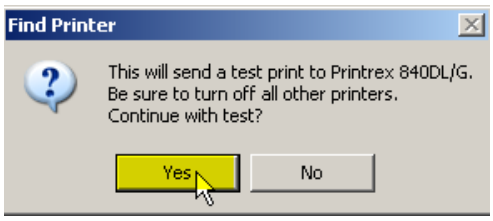

FIG: 3.3.16 Find Printer

Select [Yes] to start the test. Several USB ports may be tested before what the software thinks is the correct port is found.

FIG: 3.3.17 Testing Printer

If the test print comes out, select [Yes]. The software will automatically set the Windows printer to the shown port. The confirmation that the printer is connected to USB002 is then shown. Select [OK] to continue.

FIG: 3.3.18 Printer Found

If you received the message shown in Fig. 3.12.6 and the test print did not come out and it did not come out after the rest of the USB ports have been tested, then it is possible that something may be wrong with that port. One common problem is that there may be prints in the print queue that are ahead of the test print. To check this check the Windows Devices and Printers and check the status of the printer and make sure there is nothing pending.

One the setup and configuration of the Windows printers has been completed, If Windows printers are not to be used, uncheck the Enable printing through Windows printer check box. On the left side, again select the Warrior printer name drop down list and select the default printer and the Window printer that it will use for Windows spooling. Check to Default check box to save it as the default printer when printing through Warrior.

Before leaving the Printer Setup, click the [Save Changes] button and then the [Close] button.

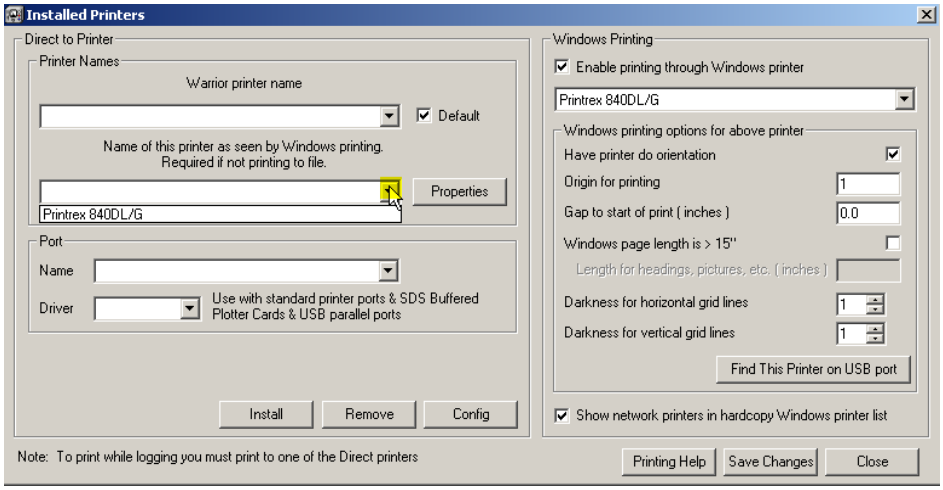

FIG: 3.3.19 Installed Printers

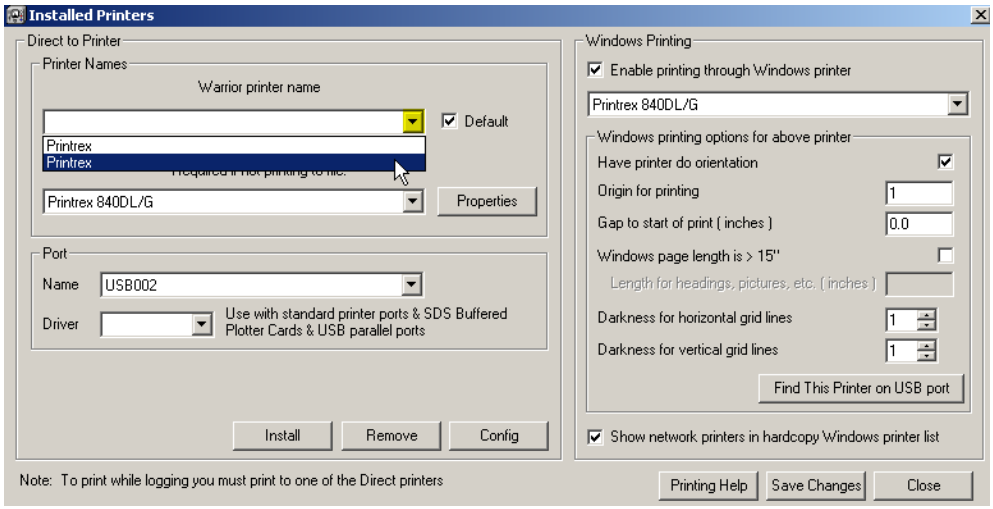

FIG: 3.3.20 Installed Printers

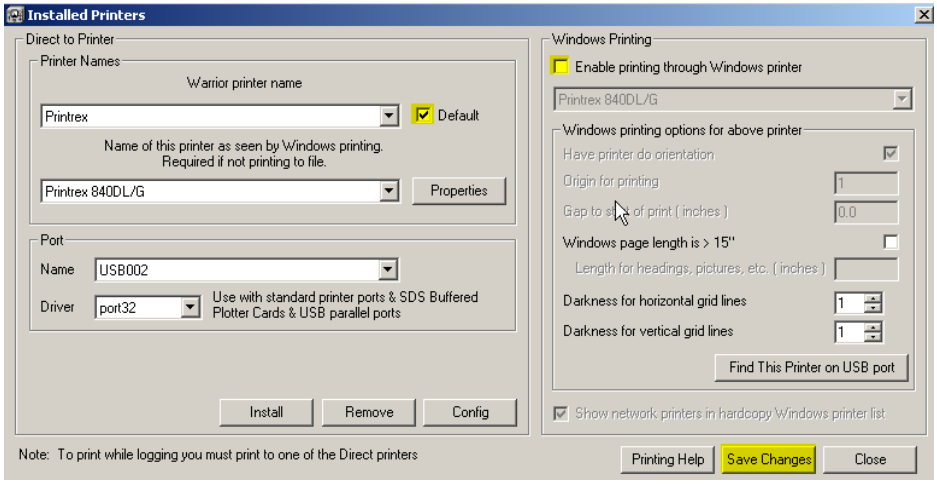

FIG: 3.3.21 Installed Printers