Section

2

2 Warrior Software Installation

2.1 Distribution Media

The Warrior Data Acquisition Software version 7.0 (051114) or latest is distributed on one CDROM. Or the software is downloadable in the form of a single executable file WAR7CH05114.exe from the web site http://www.warriorsystem.com/under **DOWNLOADS** Warrior Software 32 Bit Version Warrior 7.0 STD Casedhole 051114 This file should be copied to a temporary directory and run to expand itself. To install the Warrior software runs the SETUP.EXE.

It is a fact of life that every computer system will, sooner or later; suffer a failure, such as a disk crash, where there is the potential for loss of programs and/or data. This will generally happen at the most inconvenient time. The importance of keeping current backups cannot be overemphasized. It is vital that the time be taken to keep current backups of all essential programs and data.

All Warrior systems from Scientific Data Systems are shipped with some type of mass storage device, (usually a CD-R/W drive) which can be used for backing up programs and data. The procedure for using CD drives varies with the software supplied. Become familiar with the specific software by reading the manual, or select 'Help' after starting the program. It may be useful to purchase an off the self-CD program to standardize all systems.

All files copied from a CD to a hardrive are written as read only. Some files used by the Warrior software will not function properly as read only. To change the attribute, use Windows Explorer select the copied files, right click on the files and select properties, uncheck the 'Read Only' Attribute and click the apply button.

The warrior system is usually configured for the selection of services to be run by a given client. This information is primarily contained in three files, Warrior.ini, Services.ini, and Tools.ini. (A copy of all files a client can changed and back up to floppy by using Backup/Restore utility 'Configuration Files'). A complete backup of the Warrior program (excluding data base files) can be done using the Backup/Restore Utility.

2.2 New Installation Warrior Software.

Previous to the installation of the Warrior software we recommend to update the Windows operating system through the Internet connection. When performing a new installation all Warrior program files, default configuration and Data files are copied to hard disk. Configurations are subsequently modified to suit customer requirements.

Warning!

Restart the computer and turn OFF the Interface Panel Power supply

Place the new version of Warrior CD in CD Drive. It should auto run if not run setup from CD causes the installation. An interactive menu appears as shown in The Fig: 2.1

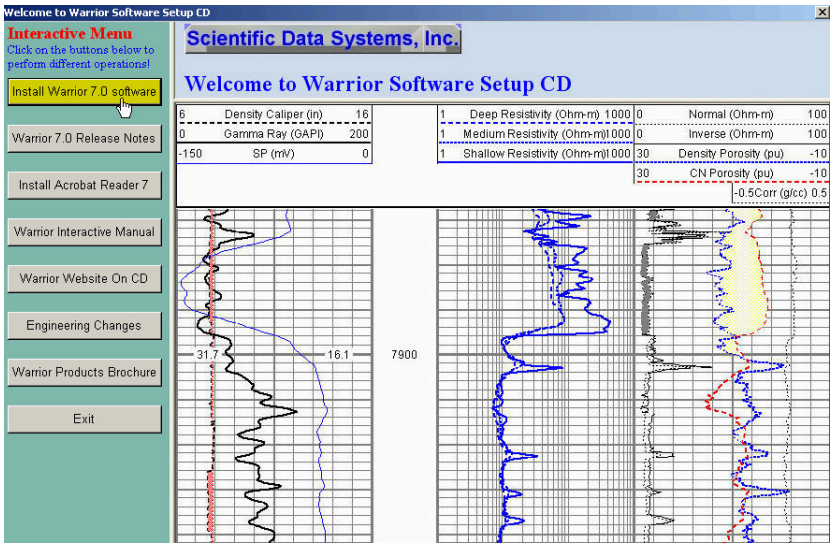

FIG: 2.1 Interactive Menu.

Click on **Install Warrior 7.0 Software**

FIG: 2.2 Warrior 7.0 Version 051114

Click **Next** to continue with the Setup program.

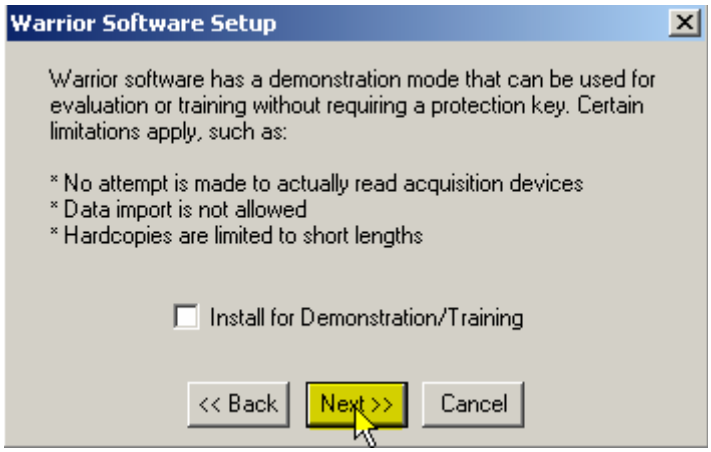

FIG: 2.3 Warrior Software Setup

At this screen a choice can be made to install the software in Demonstration/Training Mode.
In this mode, no software USB key is required and most functions can be accessed in a limited way for training. However, all acquisition and import capabilities are disabled.
Approximately 300 feet of log can be plotted when in this mode. Services and Tools can be entered, checked and installed on a full system. The software may be switched between Normal and Demo modes by the Demo Mode parameter in the [GLOBAL] section of the Warrior.ini file. Normal Mode has "Demo-Mode=0"; Demonstration and Training Mode has "Demo-Mode=1". Note that a reboot is required after changing this parameter.

Click **Next** to continue with the Setup program, if the software would be run in demo Mode check **Install for Demonstration/Training.**

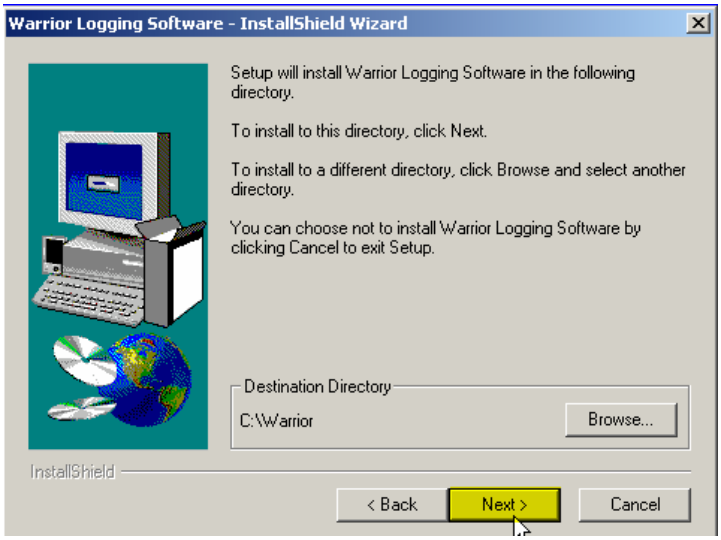

FIG: 2.4 Setup directories

Install to default directory C:\Warrior, Click **Next**

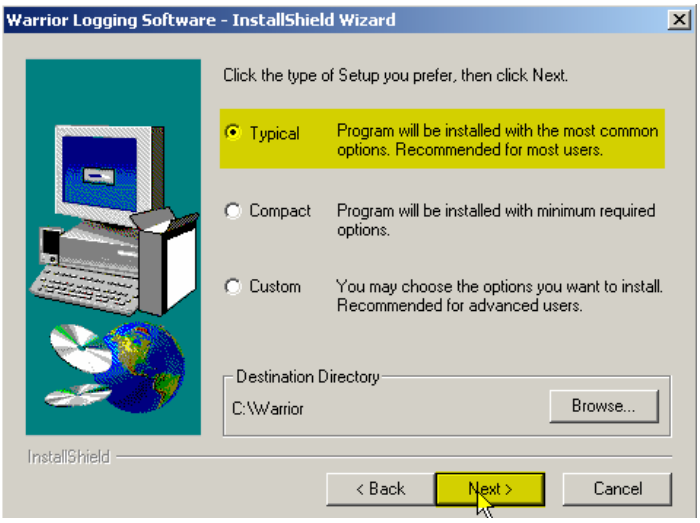

FIG: 2.5 Setup Options

Fig: 2.5 Shows the choice of setup types available. **Typical** installs all the available items, **Compact** installs the minimum set of items and **Custom** allows you to choose which items to install. For a new installation, select the **Typical** option. If you wish to install to a directory other than the default (\Warrior), change the **Install to** entry now (However, this is not recommended). Click on **Install** to copy the programs, data and other files. Select the **Typical** option, and then click **Next**.

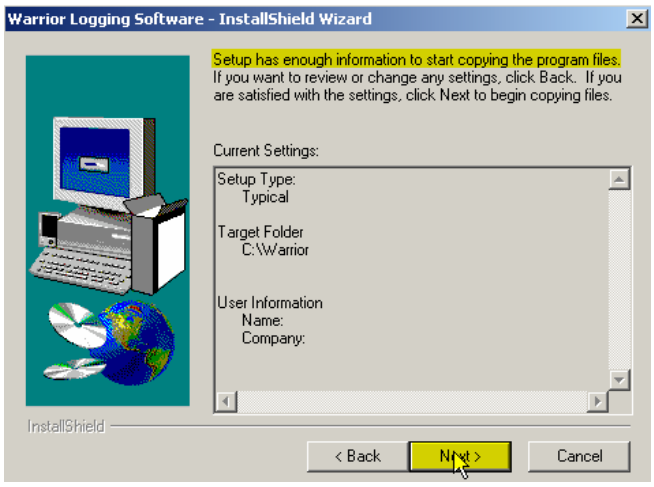

FIG: 2.6 Setup Ready to install

Click Next to continue.

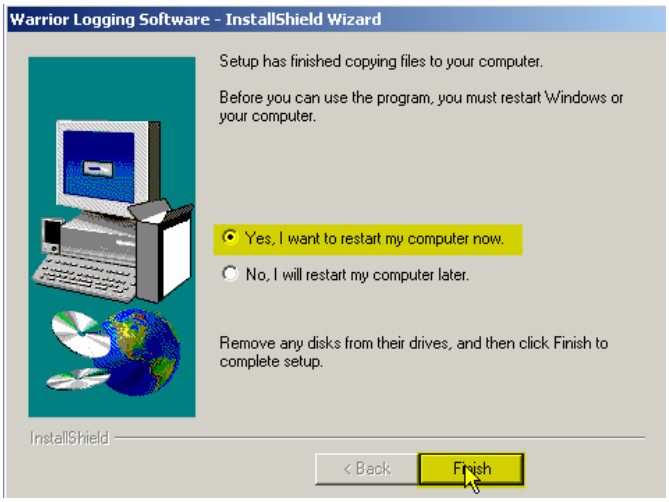

FIG: 2.7 Setup has finished.

Remove any disk from their drives, and click Finish to complete setup.

VIDEO: 2.1 Install the Warrior Software for the First Time

2.3 Warrior Software Upgrade or Perform new versions.

Upgrades are released from time to time to distribute new or improved components of the software. These are different from upgrades, which are full releases in their own right.
Upgrades Warrior Data Acquisition Software version 7.0 (051114) or latest is distributed on one CDROM. Or the software is downloadable in the form of a single executable file WAR7CH05114.exe from the web site http://www.warriorsystem.com/ under **DOWNLOADS** Warrior Software 32 Bit Version Warrior 7.0 STD Casedhole 051114 This file should be copied to a temporary directory and run to expand itself. To install the Warrior software runs the SETUP.EXE.

Restart the computer and turn OFF the Interface Panel Power supply
Place the new version of Warrior CD in CD Drive. It should auto run if not run setup from CD causes the installation. An interactive menu appears as shown in The Fig: 2.8

To install the update from CD, Place the new version of Warrior CD in CD Drive. It should auto run if not run setup from CD. When upgrading from an existing installation, the current Warrior system program files and configuration files are saved to a backup directory. If problems occur with the new installation, the previous installation can be restored entirely. Select Upgrade from Version X.x to Version Y.y, the program files will be updated and existing configuration files will be then retained.

FIG: 2.8 Warrior 7.0 Version 051114

Click **Next** to continue with the Setup program.

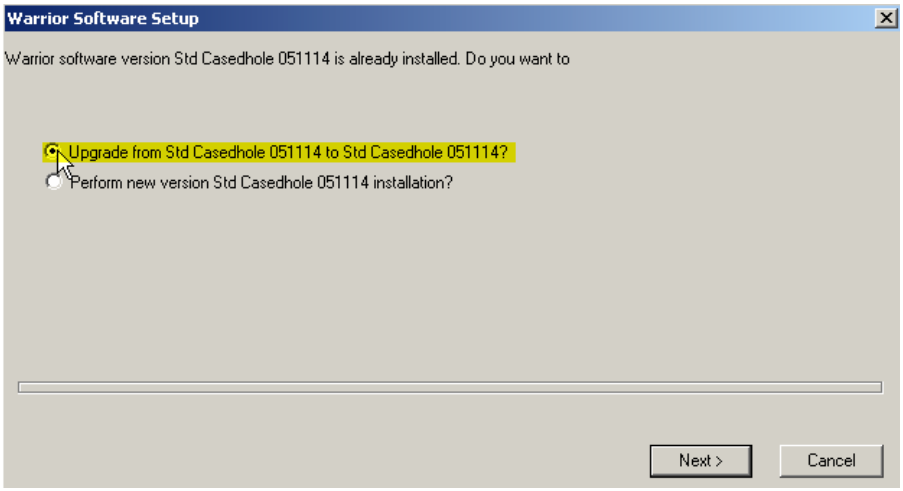

FIG: 2.9 Upgrade and Perform new version.

The Upgrade option of the software will keep the Services, Tools configurations, your customized presentations, and the tools string.
The option perform a new version the system will install new software, but it will perform a backup before of installing the new version, the system performs a backup and saves in the following path **C:\warroldbin**
If either upgrade or new version is selected and a previous version of Warrior exists, the current installation is saved to a backup directory.

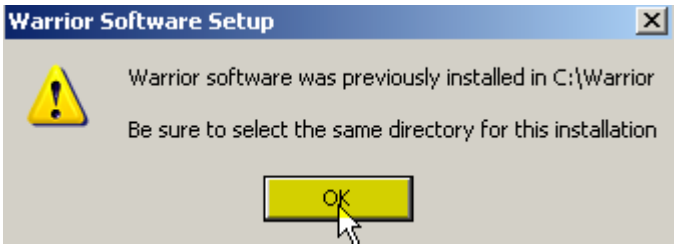

FIG: 2.10 Start the installation

The following dialog box (FIG: 2.11) will be shown while the information is being backed up. No action is required.

If you wish to backup to a directory other than the default (c:\warroldbin), click the Browse button and select the directory that you wish to use.

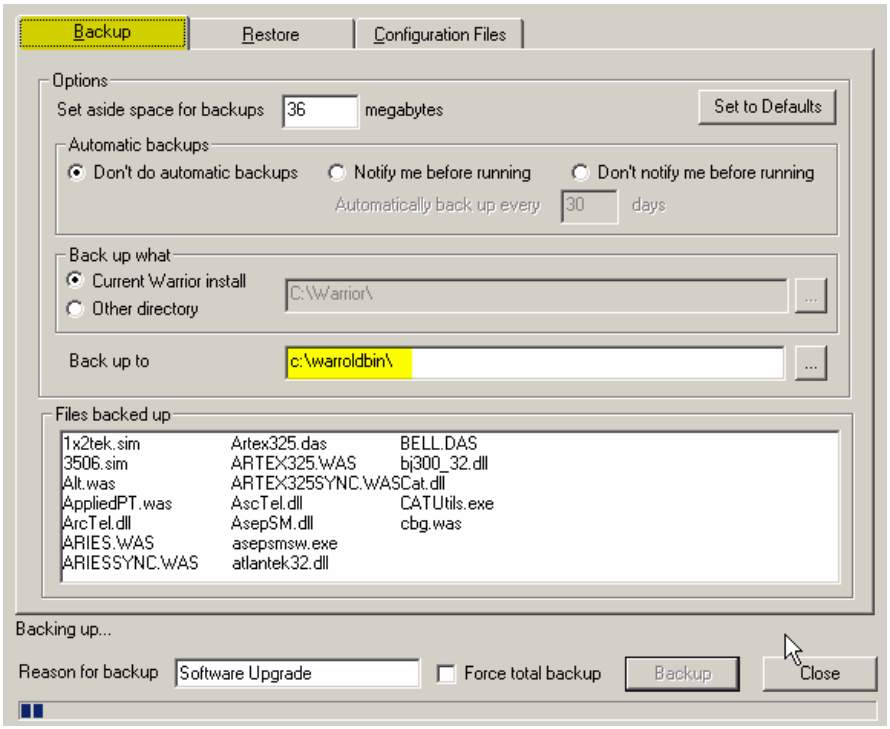

FIG: 2.11 Backup files

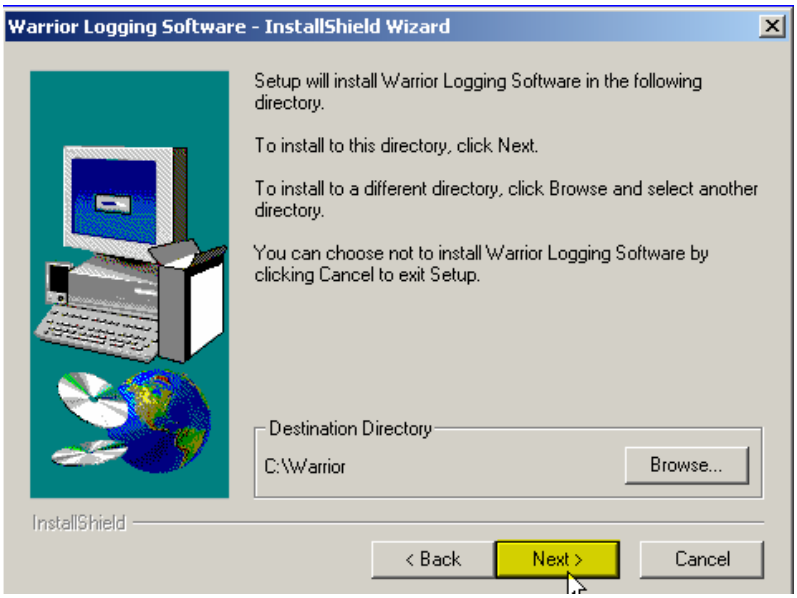

FIG: 2.12 Setup directory

VIDEO: 2.2 Warrior Upgrade or Perform a new version

2.4 Warrior Software Structure

The Warrior system has been designed to run a large number of downhole tools from a variety of manufacturers. For this, and other reasons, the system is highly configurable. The configuration of a particular installation is controlled by a number of configuration files. These files reside in the active warrior directory. At the time of commissioning of a system the configuration files are always modified from the SDS general release to meet a clients particular requirements. SDS does not keep copies of every installation, and while it is always possible to regenerate a particular configuration it is much simpler if copies of the configuration files are made and stored safely.

Under warrior the system has the following folders:
BIN 32: are all the Applications (.exe), Dynamical link libraries (.dll), Digital Acquisition Script (.DAS, and .WAS), Simulator files (.sim), System file (sys), and Help files (.hlp). Control Files (.cnt), CBL Acquisition Script (.cas)

CONFIG: are all configuration setting (.ini), Company logo (.lgo), Warrior Calibration File (.wcf), Warrior Service File (.wsf), Warrior Import Filter (.wif), Warrior Convert File (.wcu).

DATA: the database from the logs.

FAX: The structure system to received and sends faxes.

DRVERS: The system drivers (.sys), Dynamical link libraries (.dll), and setup information (,inf)

FORMAT: Heading (.hug) , List Export Template (.let), Presentation Script (.prs), Warrior Calibration Plot (wcp), Warrior Tool Diagram (.wtd), and Warrior Well Diagram (.wwd).

MANUAL: Warrior Manual. PDF

TEMP: Temporal files.

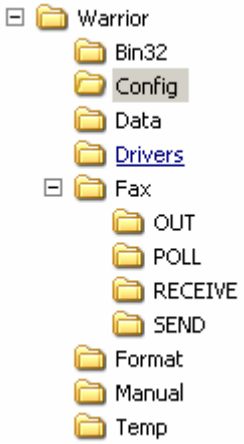

FIG: 2.13 Warrior Structure.

2.4.1 Program Files

EXE (Executable files). Software programs start from an executable file.
DLL (Dynamical Link Library files). EXE files will call these to execute certain functions.

2.4.2 INI Files

There are several files with suffix .ini. They are generally used to store information concerning the overall setup of the system, and also information concerning tools and services. The files are generally updated from Warrior programs, but it may sometimes be desirable or necessary for the advanced user to update them directly using a text editor.

Before changing any *.ini file make a copy of the original under another name so that if anything goes wrong you can recover by reverting to the original.

Warrior.ini – Controls the system settings for a particular system. The warrior.ini file contains information concerning the global configuration of the logging system, both hardware and software. It is divided into sections delineated by keywords inside square brackets. Many parameters are set from Warrior system menus; however, some may only be modified from the warrior.ini file.
It defines such things as where and how data is obtained. Default headings, default log scales, screen and plotter setups, and certain logging service parameters are setup in this file. (It is what makes a system different from other systems). The primary edit programs for this are the Warrior Control Panel and the Depth control panel.

Services.ini – Defines what services are available from acquisition and how each individual service is setup. The primary edit program for this is the Edit Logging Service Details button from Warrior Utilities.

The warrior system is highly configurable in order to support a wide variety of downhole tools. SDS sets up the services.ini file for a particular service set according to client and hardware requirements. **Do not modify it without first creating a backup.**

The first series of entries define the content of the Services menu in the Acquisition module. The following entries define the setup of those services. Services are composed of one or more tools.

Tools.ini – Defines the tools that are available for the system. Information includes physical model description (length, weight, type software, default filters, etc.) and calibration information for each particular serial number.

Annotate.ini-Defines the annotation text which appears in the annotation window.
Items under Always appear in the selection box of the annotate window and may be added or deleted and may be translated into another language.
Items under translations define the extended curve names produced when a mnemonic is chosen from the list in the annotate window. The `translation' may change to whatever the user requires.
Text file used to setup default annotation selections. May be edited using WordPad or notepad.

Gates.ini – Text file used to save the PMON discriminators and WAVEFORM gates setups.
LAS.ini – Text file used to setup default settings for writing LAS files, may be edited using WordPad or Notepad.
LISTOWAR.ini – Text file used for conversion of warrior mnemonics to standard LIS mnemonics.
VARS.ini – Default variables when acquisition starts. May be edited using WordPad or Notepad.
Printers.ini – Default printer setups for adding printers through the warrior control panel.
CGBTEL.ini, Servedit.ini, Tooledit.ini, Trcintrp.ini, Units.ini, and Wobjedit.ini are miscellaneous text files used to initialize certain services or programs.

2.4.3 LST Files

Layouts.LST – Text file to describe default grid layouts for log formats in the Format Editor. May be edited using WordPad or Notepad.
Data.LST – Text file used for default DB item List when defining a curve in the Format Editor. May be edited using WordPad or notepad.

2.4.4 Miscellaneous Warrior File

DAS – DSP Data Acquisition Script. Text file used to control how the Digital Signal Processor looks at signals and acquires data.
HDG – Heading File. Text files that describe what is in a heading. May be edited using WordPad or notepad.
WLB – Well Log Banner. Text files that describe what is in a banner. May be edited using WordPad or notepad.
HLP – Help files for particular programs.
LET – LIS Export Template. Text file used to describe how Warrior Data is exported to an LIS file. May be edited using WordPad or Notepad.
BIN – Binary files used by certain processes (Mainly DSP).
CNT – Control files used by certain processes.
LGO – Warrior Logo Files. Created by use of MFGRAB.exe.
PRS – Warrior presentation file. Text file used to describe log format presentations. Edited with the Log Format Editor.
WCF – Warrior Calibration file. Exported file used by the Tool editor for exporting/importing tool calibrations.
WCP – Warrior Calibration Plot. Text file that describes how a calibration is printed out during a plot job. May be edited using WordPad or Notepad.
WSV – Warrior Service file. Used by the service editor for exporting and importing services.
WTD – Warrior Tool Diagram. Created by use of MFGRAB.exe.

2.4.5 Data Base Files

Files, which terminate in the suffix .db are Warrior database files. They contain the well log data stored in a hierarchy by field, well, run and pass. The Warrior database file is physically a DOS file. Within the DOS file data from multiple wells or jobs may be stored, although generally one job is stored in a database file. The database files also contain various embedded files which themselves contain important information. These include:

- Service data, e.g. tool string, depth offsets, filters etc. which relate to the log data within the *.db file.
- Headings, the completed heading information and formats generated by the Heading Editor.
- Plot job, the information generated by the Plot Job Editor for one or more plot jobs.
- Annotations or curve labels.
- Well sketches.

2.4.6 Warrior\ Bin32

DAS and WAS – DSP Data Acquisition Script. Text file used to control how the Digital Signal Processor looks at signals and acquires data.

2.4.7 Warrior\ Config

Layouts.LST – Text file to describe default grid layouts for log formats in the Format Editor. May be edited from the Format Editor by choosing Layout – Edit Layout
Data.LST – Text file used for default DB item Quick Pick List when defining a curve in the Format Editor.
CNT – Control files used by Help file processes.
HLP – Help files for particular programs.
LGO – Warrior Logo Files used in Headings and Log Banners.
WCF – Warrior Calibration file. Exported text file used by the Tool editor for exporting/importing tool calibrations.
WMP – Warrior MATH PACK file. Text file for saving Math Pack calculations.
WSV – Warrior Service file. Text file created by the Service editor for exporting and importing services.
SIM – Binary file used for playback of recorded signals by the Warrior Simulator Box.

2.4.8 Warrior\ Data

DB – Warrior Database Files.
LAS – ASCII data files that are produced from an LAS Export.
PDF – Adobe Acrobat Portable Data File produced from a Warrior Print to PDF Action.
TIF – Graphical image Tiff file produced from a Warrior Print to TIFF action.

2.4.9 Warrior\ Format

HDG – Heading File. Text files that describe how a heading is constructed and what information can be shown in a heading.
LET – LIS Export Template. Text file used to describe how Warrior Data is exported to an LIS file.
PRS – Warrior presentation file. Text file used to describe log format presentations. Edited with the Log Format Editor.
WCP – Warrior Calibration Plot. Text file that describes how a calibration is printed out during a plot job.
WLB – Well Log Banner. Text files that describe how a Log Banner is constructed and what information can be shown in the banner.
WRF – Casing Joint Table. Text files that describe how a Casing Joint Table is constructed and what information can be shown in the table.
WTD – Warrior Tool Diagram. Normally created through the Logging Tool Editor.
WWD – Graphical file for user defined well object in the Well Object Editor.

2.5 Create Device Manager on Desktop

In Windows XP. Open Windows Explorer, navigate to C:\Windows\system32 find devmgmt.msc Right-click on the file select Send to Desktop (create shortcut). Rename this shortcut to Device Manager.

VIDEO: 2.3 Device Manager

2.6 Warrior Shortcut Icon

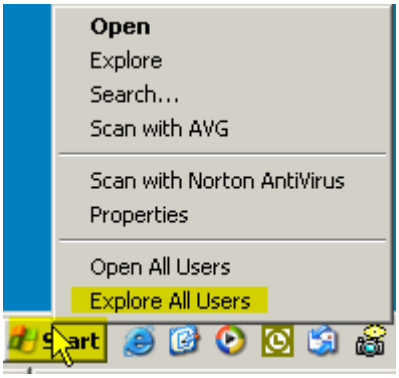

FIG: 2.14 Explore All Users

On Start Right Click and select Explore All Users

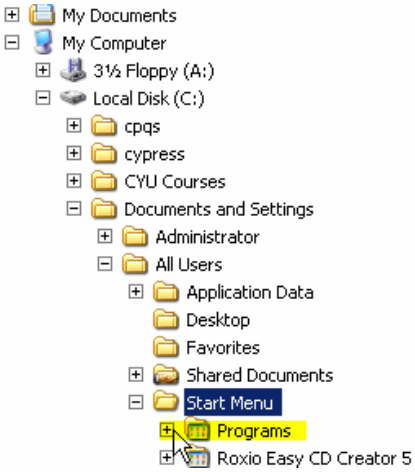

FIG: 2.15 Select Start Menu\Programs\Warrior 7.0

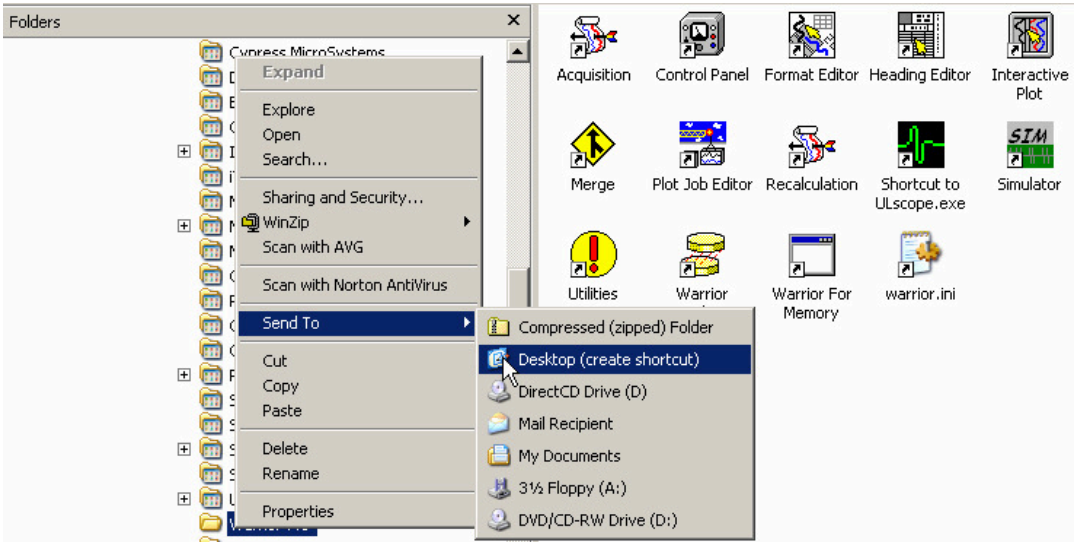

FIG: 2.16 Send the Shortcut Icon to Desktop

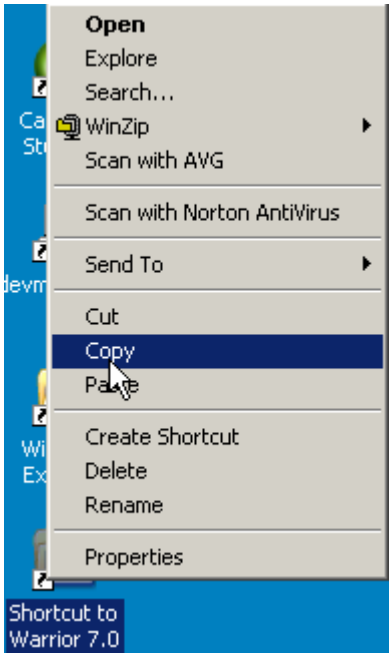

FIG: 2.17 Copy the Shortcut Warrior 7.0 and Paste to Start Menu

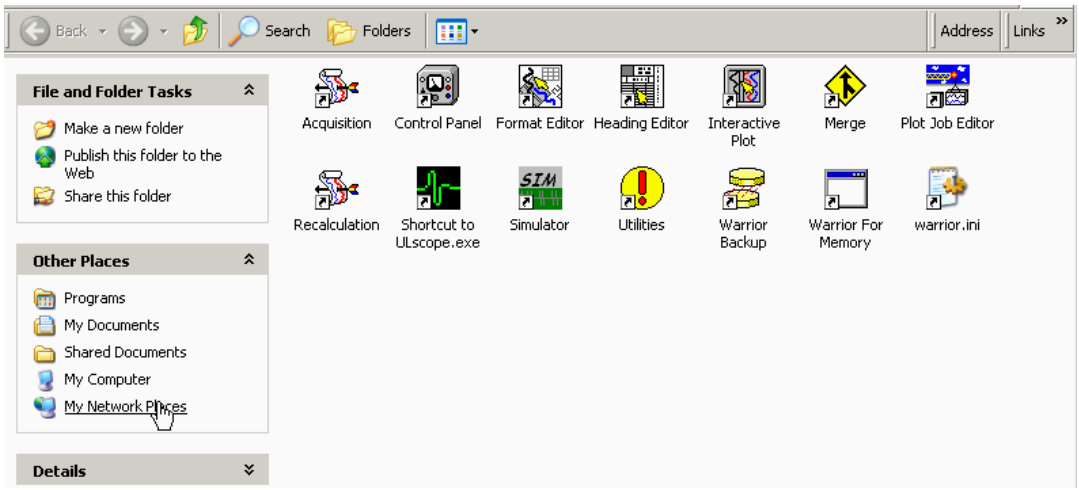

FIG: 2.18 Open the shortcut warrior 7.0 and Select Tools\Folder option

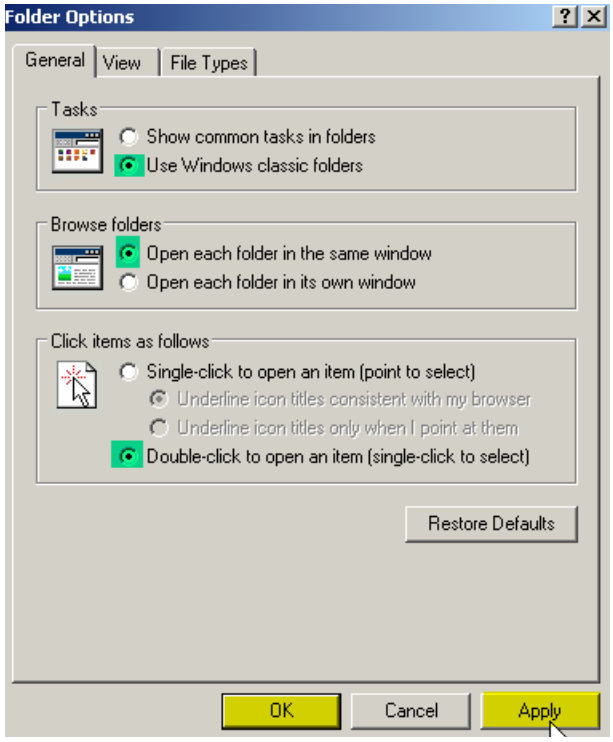

FIG: 2.19 Folder Options

Check Use Windows classic Folders open each folder in the same window, and Double click to open an item (single click to select) select **Apply** and **OK**.

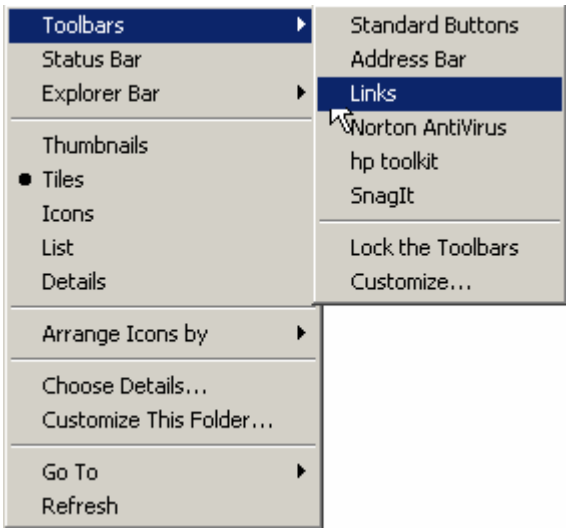

FIG: 2.20 Select View\Toolbars uncheck Standard Buttons, Address Bar, Link, and check Tiles

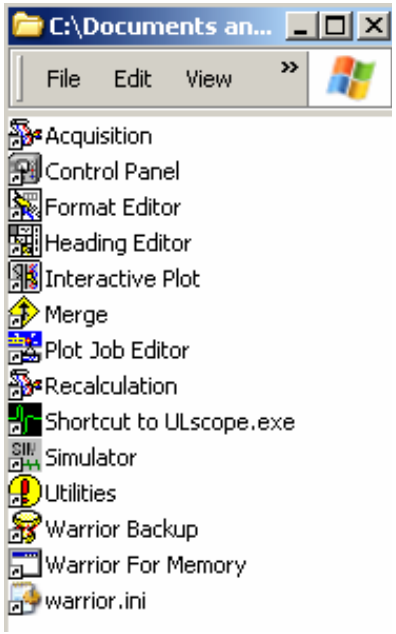

FIG: 2.21 Resize the Window and move to right bottom side

VIDEO: 2.4 Warrior Shortcuts

2.7 Key Software Authorization Setup

There are two types of keys commonly supplied with systems:

2.7.1 Full key

Allow complete and unrestricted operation of the Cased Hole and/or Open Hole Software.

2.7.2 Companion key

Allow full operation of all the software, except for logging data against depth from an encoder. Companion keys are generally supplied on their own for stand-alone desktop processing systems.
A Warrior USB key must be attached to a USB port on the computer for the software to operate (unless it has been installed in Demonstration mode). In addition, the key code and the panel type for the key being used (which is written on the tag attached to right side of the panel) must be entered into the Warrior Control Panel for the key to be recognized.
Connect the Computer to the Warrior Panel (CP/CD/PA/OP/SLA) with USB Cable and let the panel OFF.

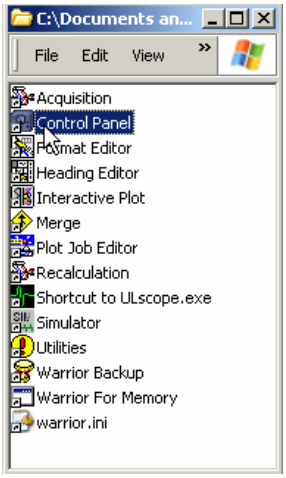

FIG: 2.22 Select Control Panel

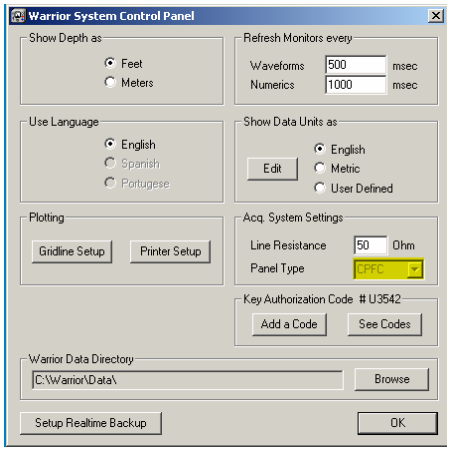

FIG: 2.23 Panel type

The software read automatically the Panel Type from the USB key inside the panel

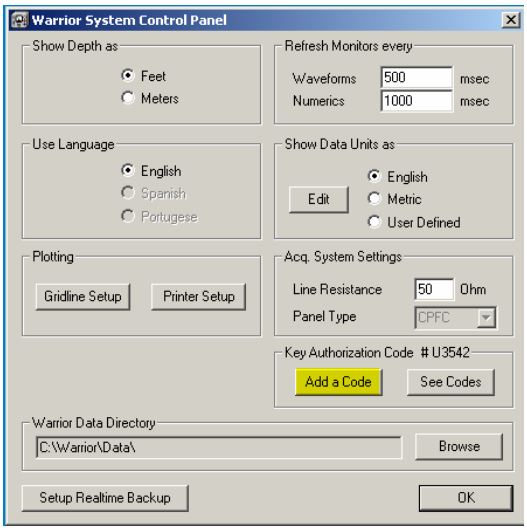

FIG: 2.24 Click on Add Code

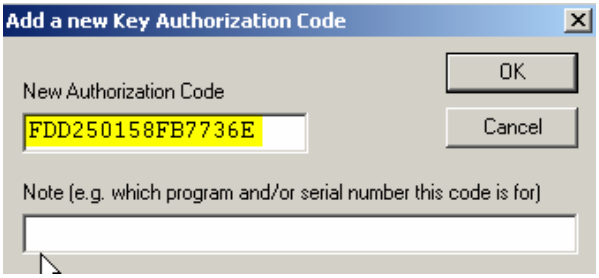

FIG: 2.25 Type the Key Authorization Code (16 Hex Digits).

In Demo Mode the software does not need the Key authorization.

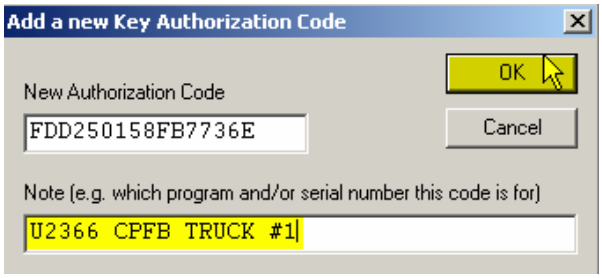

FIG: 2.26 Type the notes about the Key Number, Panel Type, Software version, and Logging Unit.

VIDEO: 2.5 Key Authorization setup

2.8 Warrior USB Drivers Setup

USB Warrior Drivers are copy under C:\Warrior\Drivers the first time you installed the Warrior Software.
Since your computer comes with more than one USB port to connect your Warrior Panel, the Following procedure should be repeated for each USB port in the computer:

- Connect the USB from Warrior Tool Interface Power Supply Panel cable to the new USB port Computer.
- Turn ON the Warrior Tool Interface Power Supply Panel.

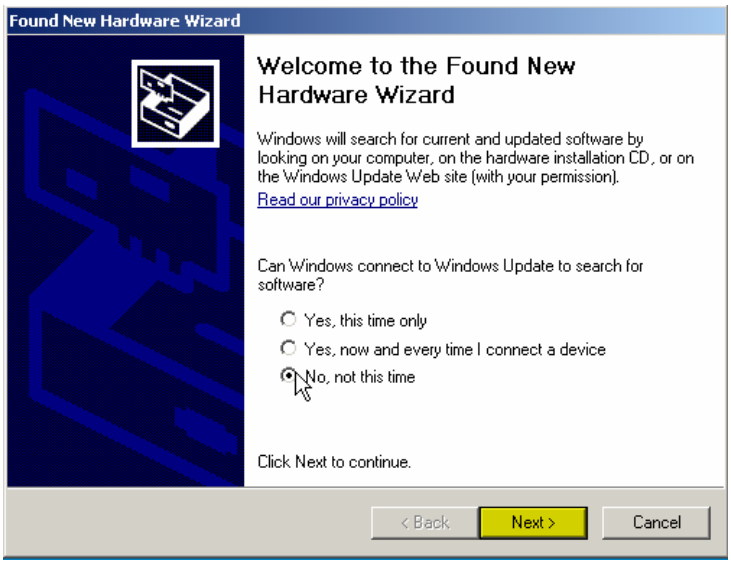

FIG: 2.26 Windows XP Found New Hardware

Select: **No, not this time** and click on **Next** to continue

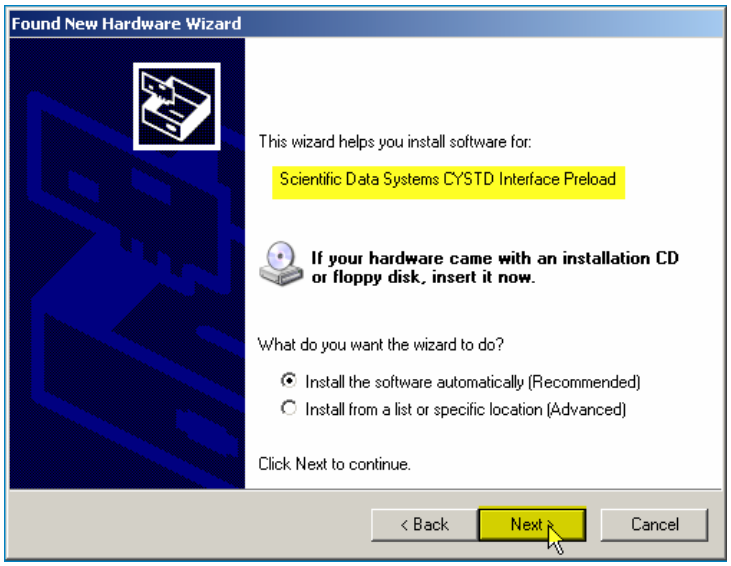

FIG: 2.27 Cypress Driver STD interface Installation

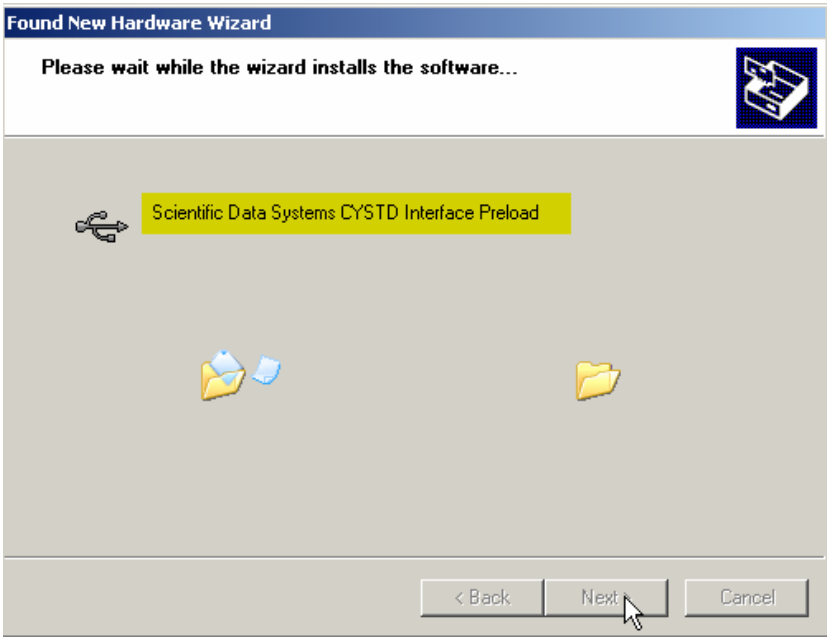

FIG: 2.28 Preload Driver CYSTD

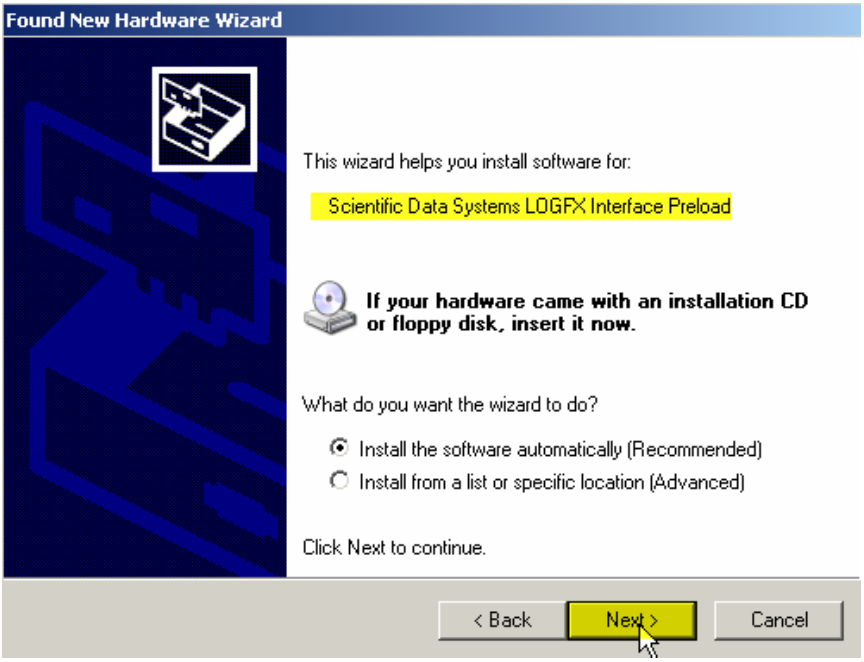

FIG: 2.29 Start LOGFX Interface Preload.

Click on Select **Next** to Continue

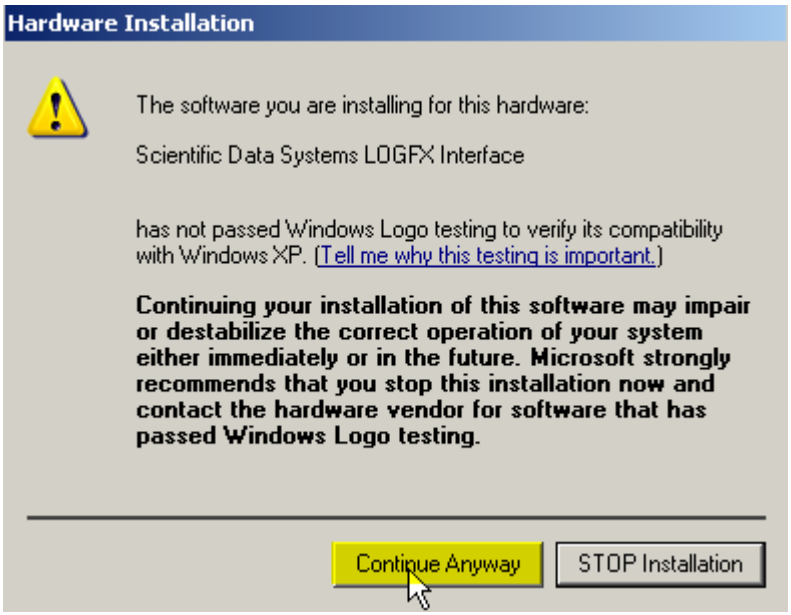

FIG: 2.30 Continuing your Installation

Click on **Continue Anyway**

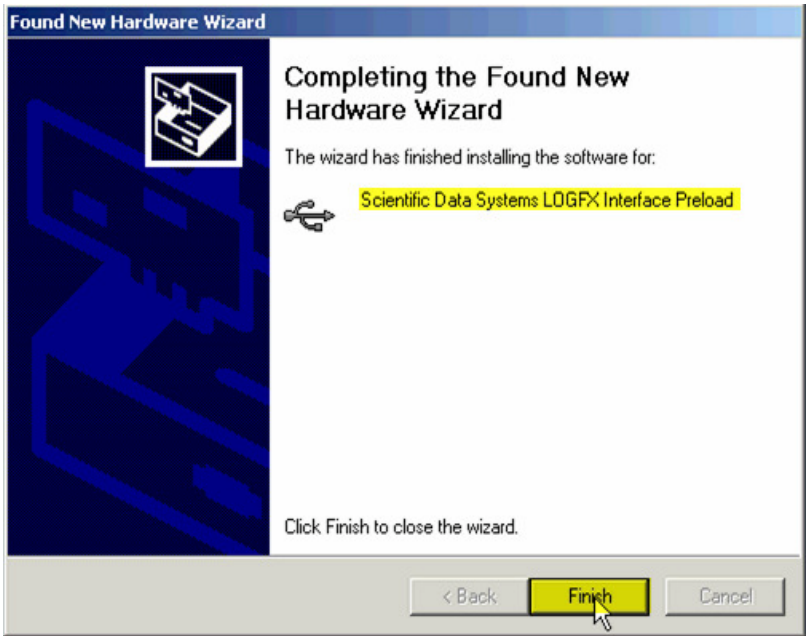

FIG: 2.31 End the LOGFX Interface Preload

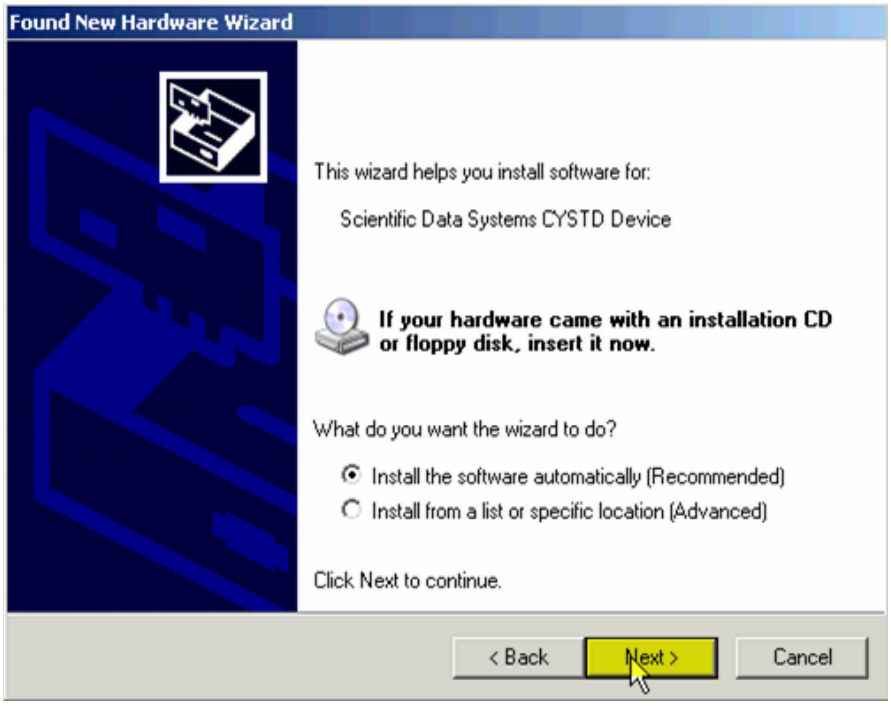

FIG: 2.32 Install driver CYSTD

Click on Select **Next** to Continue

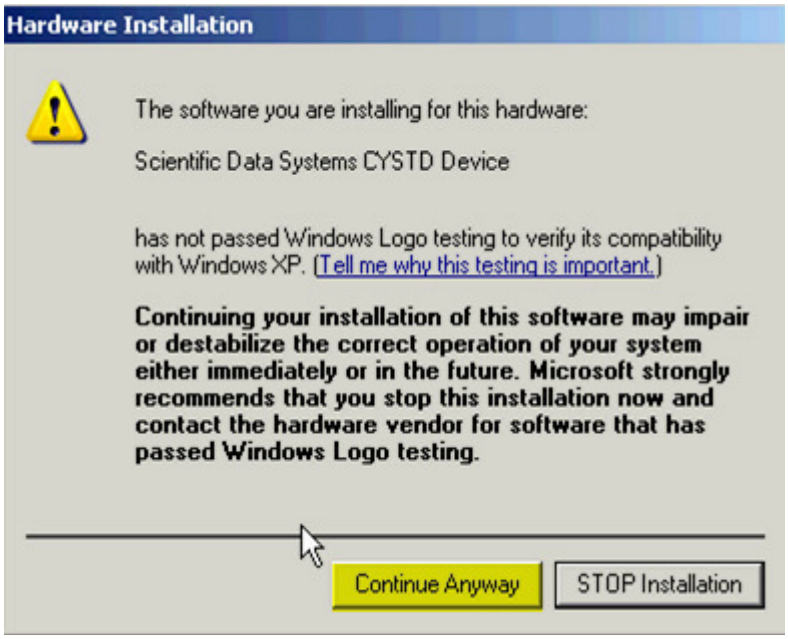

FIG: 2.33 CYSTD Driver Installation

Click on **Continue Anyway**

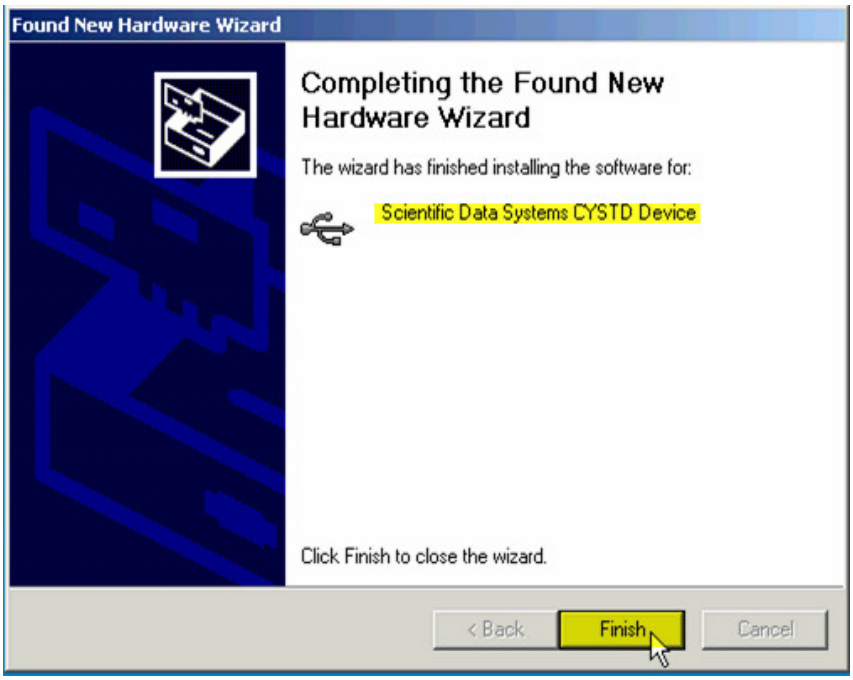

FIG: 2.34 End CYSTD Installation

Click on Select **Next** to Continue

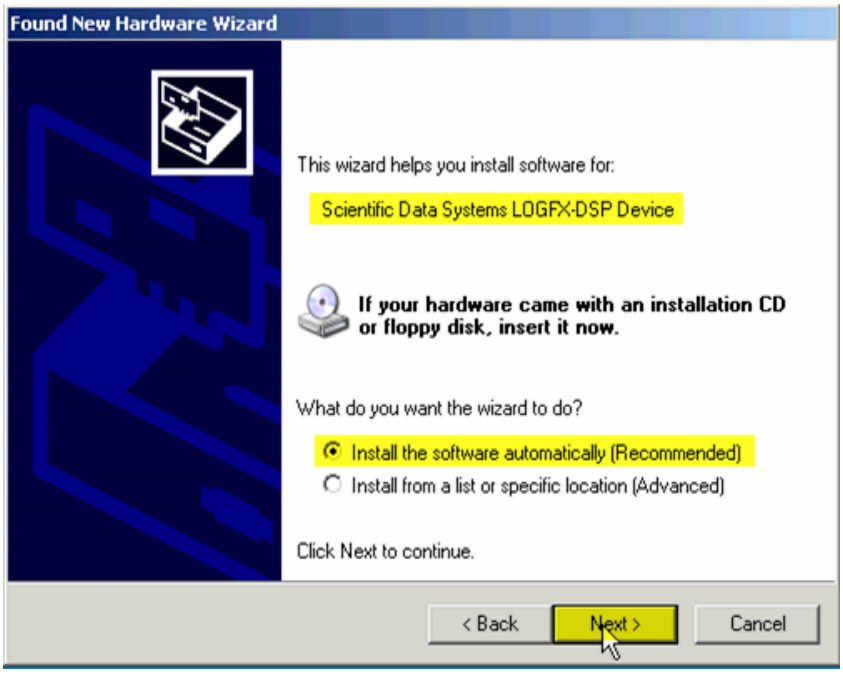

FIG: 2.35 Install driver LOGFX-DSP

Click on Select **Next** to Continue

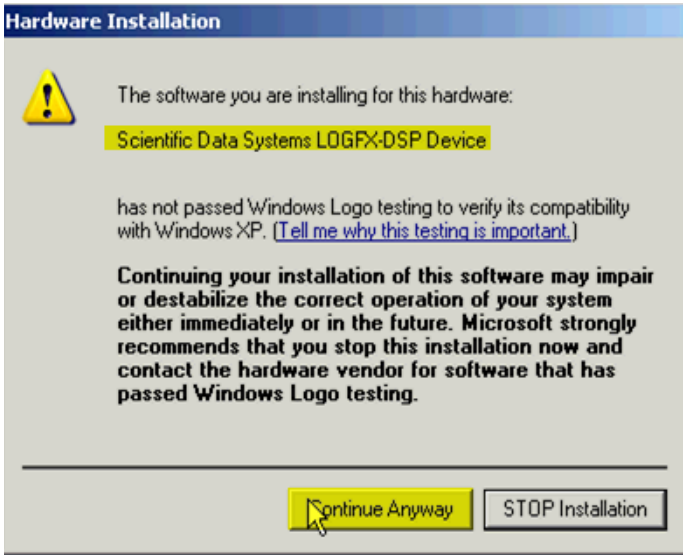

FIG: 2.36 Install LOGFX-DSP Device

Click on **Continue Anyway**

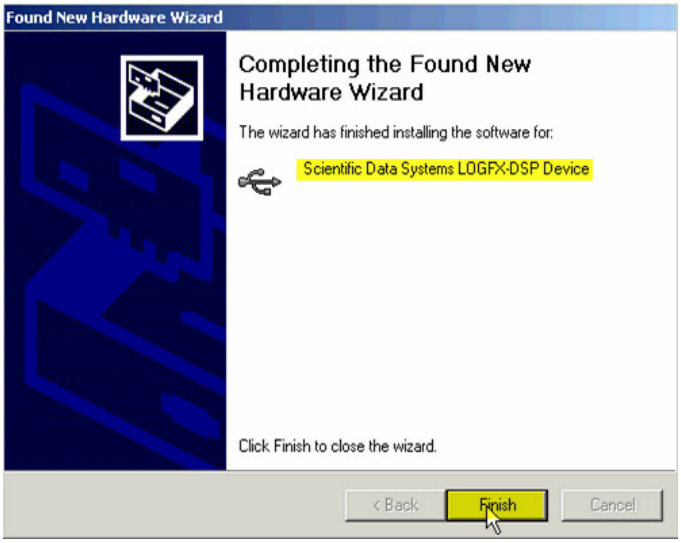

FIG: 2.37 End LOGFX-DSP Installation

Click on **Continue Anyway**
Turn OFF the Warrior panel, Connect the USB Cable to next USB port, Turn ON the Warrior Panel and repeat all the process until pass for all the USB ports in the Computer.

VIDEO: 2.6 Drivers Installation.

2.9 Device Manager

The device manager checks the connectivity between the Devices (Warrior Panel), USB Connection, and the computer. Double click over Icon

FIG: 2.38 Device Manager Icon

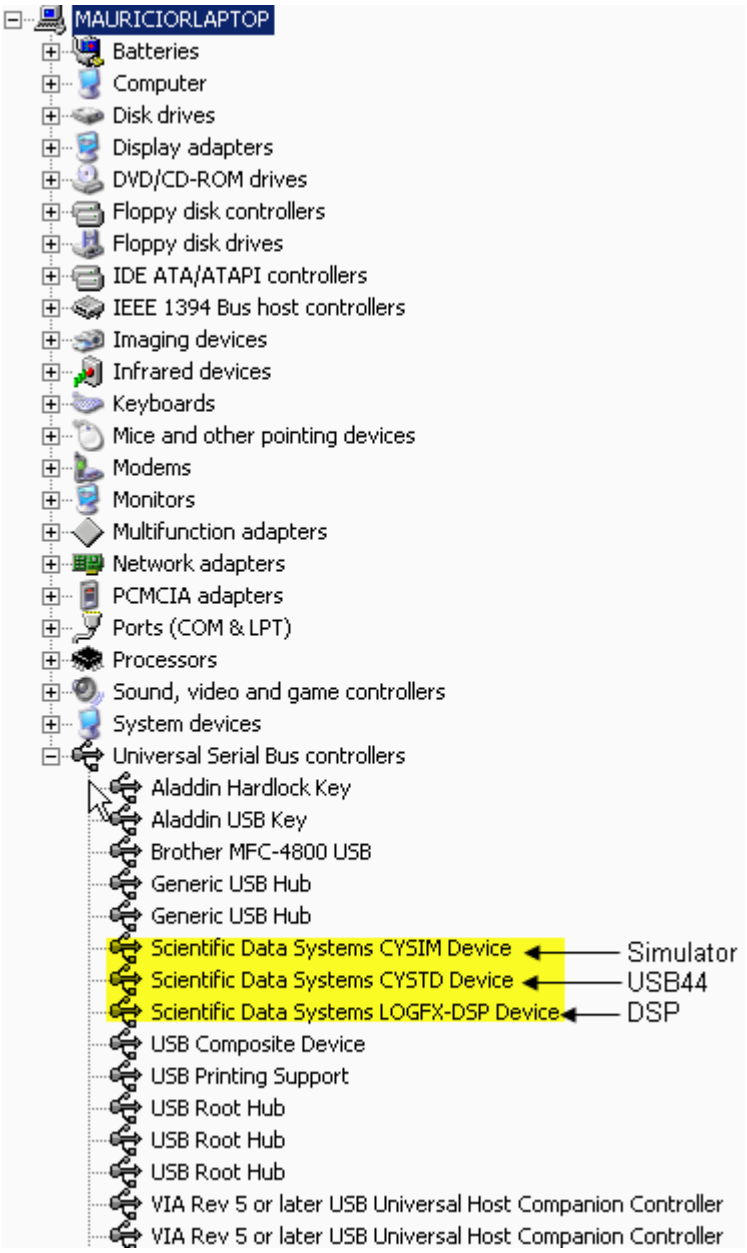

FIG: 2.39 Device Manager Path

The new Warrior software version install in XP windows Control panel the new Devices:

CYSTD: Replace the old DAMUPCI (USB44 Board)
CYAUX: Replace the old USBAUX (Slab, Sondex Panels)
CYDEP: For a new Acquisition/Depth Panel
CYUSB: Generic Replace the HID (Human Interface Devices drivers for USB44 board)
EZUSB: Generic used by DSP
SDSLOGFX: DSP Driver

DEVICE MANAGER:
Scientific Data Systems CYSTD (USB44 Board)
Scientific Data Systems LOGFX-DSP (DSP Board)
Scientific Data Systems CYSIM (Simulator Box)
Scientific Data Systems CYSHPNL USB Shooting Panel)

The new software version installs the Icon Scientific data Systems under Control Panel
Aladdin USB Key is inside the panel, Simulator is connecting to USB HUB, SDS LOGFX-DSP, and USB44 are inside the panel.

FIG: 2.40 SDS Control Panel

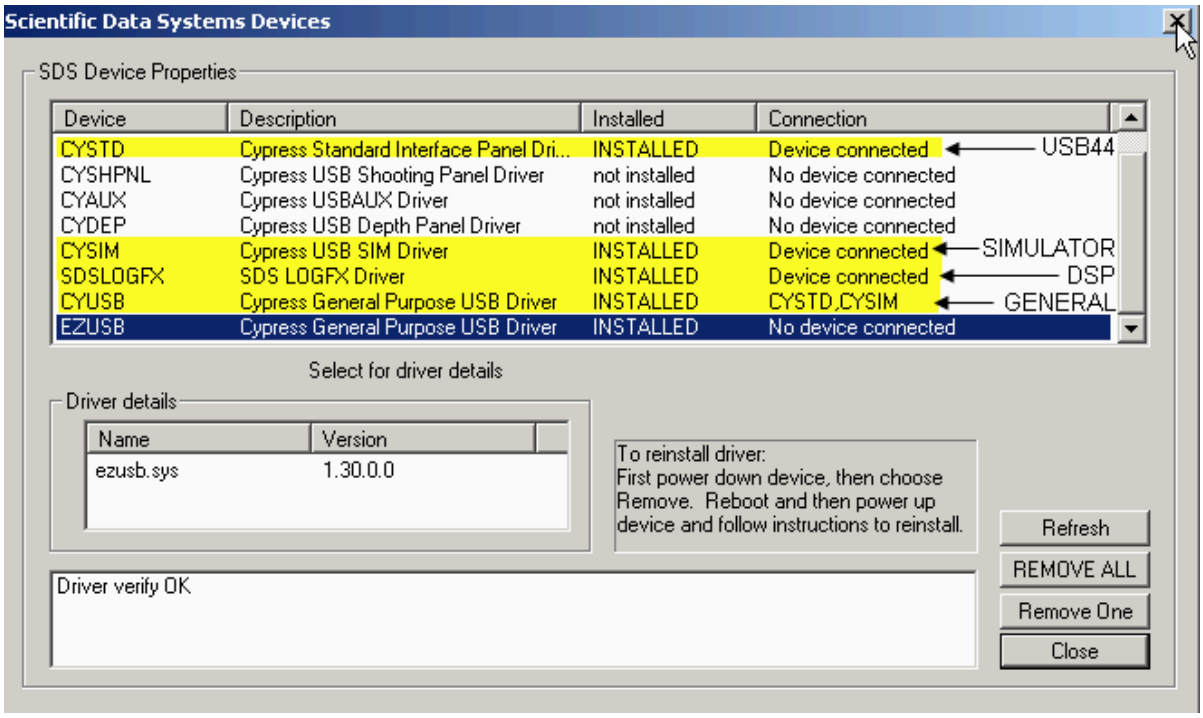

FIG: 2.41 SDS Device Properties

2.10 Creating Logo

The following will explain how to create a Warrior Logo file (*.LGO files) for use on headings and log banners. The primary Warrior program for creating LGO files is called MFGRAB.EXE and is located in the Warrior\Bin32 folder. MFGRAB “captures” any graphic image that is on the Windows Clipboard and allows the user to save the file as an image that can be used by the Warrior Software. This is the last part of the process and is relatively easy. The hard part is to get an appropriate logo copied to the Windows Clipboard.

For a logo to work correctly in the Warrior Standard heading, it should be twice as wide as it is high and be outlined with a heavy dark line. The actual dimensions used are not critical, it is the two to one relationship that is important so that the logo will appear in correct proportion when placed in the heading. If the logo is not outlined, it will cover the Border area of the heading around the logo and make it look unusual.

If you do not have any existing graphical image for a logo, such as a JPG, TIF, or BMP, you can use most drawing program such as Windows Paint to create your LOGO image. If you meet the above criteria, you should be able to copy the image directly to the Windows Clipboard. In Paint, this is done by clicking on **Edit ->Select All**, to select the image. Then clicking on Edit -> Copy, to copy the image to the clipboard.

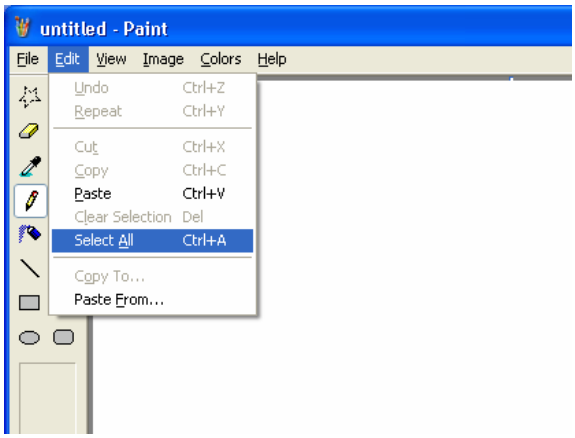

FIG: 2.42 Windows Paint

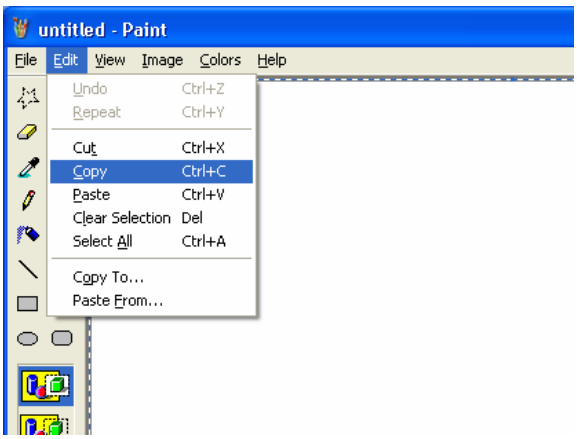

FIG: 2.43 Copy

At this point, you could use the MFGRAB program to save your logo. We will look at this later. What we want to look at now is if you already have an existing graphical image, how do you use this image to create a logo.
The problem is to get your existing graphical image to match the criteria of being twice as wide as high and having a border around it. You could put it into a drawing program and try to get it to fit. I like to us Microsoft WORD.
The first step is to insert the image into the WORD document. To do this, open a new WORD Document. On the Menu Bar, click on Insert -> **Picture -> From File** … An Insert picture dialog box will come up.

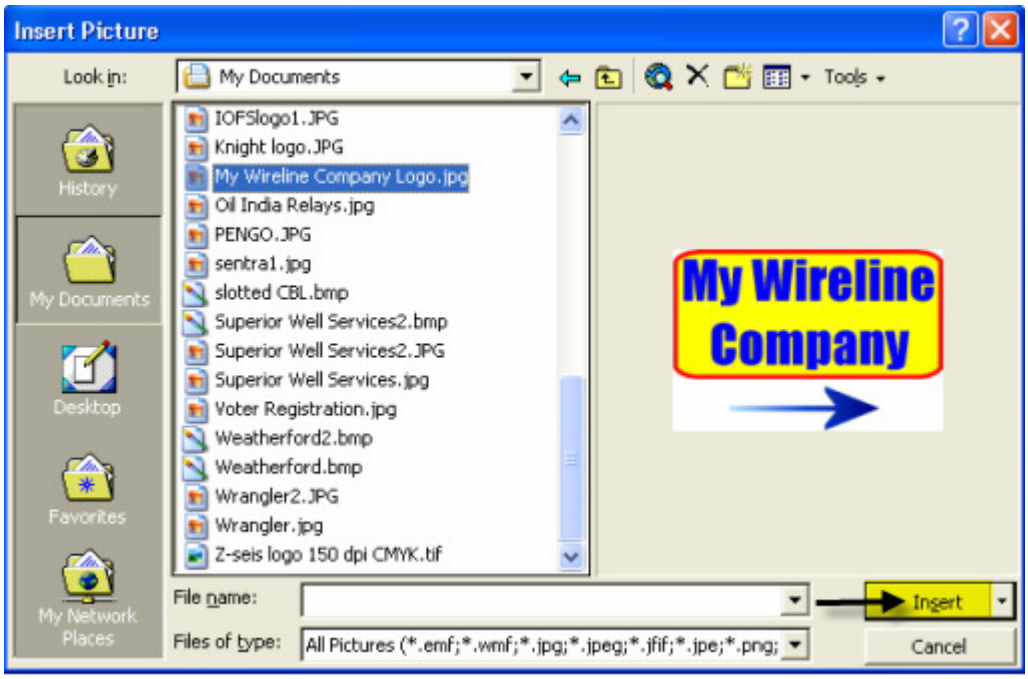

FIG: 2.44 Insert File

You can use the Look in: dropdown list to choose the drive or folder that the file is located in. Click on the image file that you wish to make into a logo. Then click on the Insert Button. Your selected image should now be in your word document.

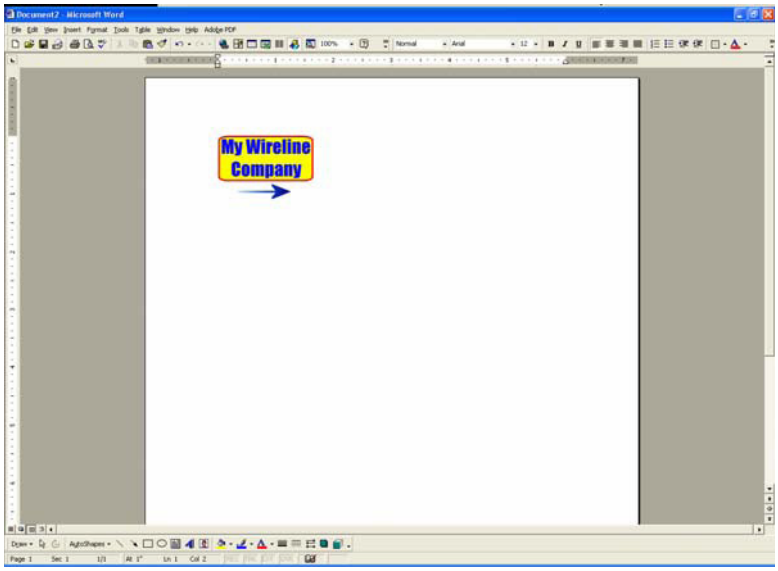

FIG: 2.45 Insert in Word document

Next we need to create a box to put the logo into. If the Drawing Toolbar is not at the bottom of the WORD window, click on **View -> Toolbars** and click on **Drawing** to activate the drawing toolbar. Look on the drawing toolbar and click on the rectangle. Now use the cross hairs of your mouse to draw a rectangle on the WORD document. When you have the rectangle drawn, right click inside the rectangle and choose the Format Autoshape choice.

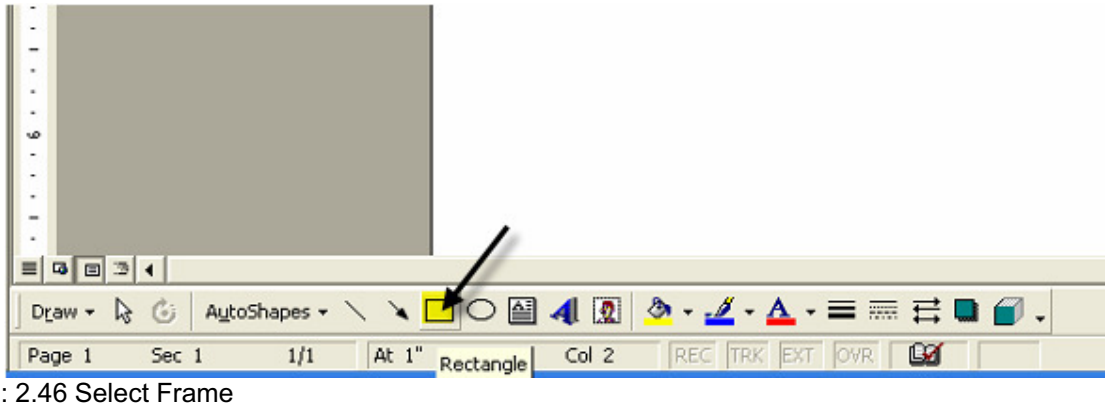

FIG: 2.46 Select Frame

There are several things that we need to do to format the rectangle. First select the Colors and Lines Tab. Set the Color to No Fill. The line defaults are Color - **black, Dashed – solid, and Style – single** line. Change the line weight to 2.

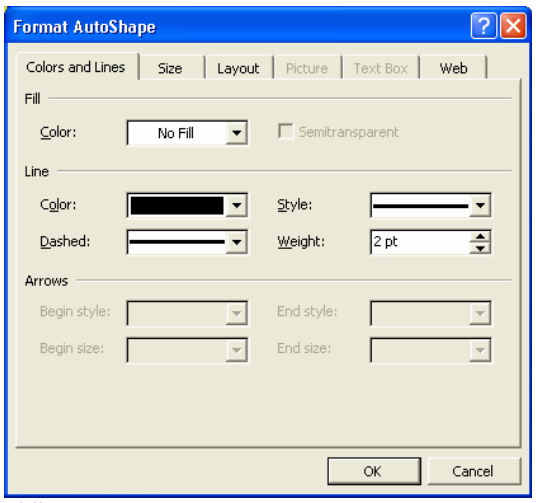

FIG: 2.47 Select me color and line

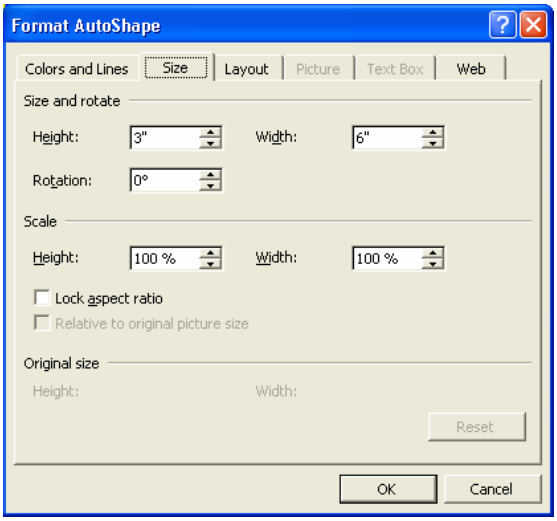

FIG: 2.48 Set Frame Size (3x6)

Next, click on the Size tab and set the **Height** and **Width** to your desired dimensions. Three inches by six inches work well form most logos. Your WORD document should now have your logo image and the box on it.

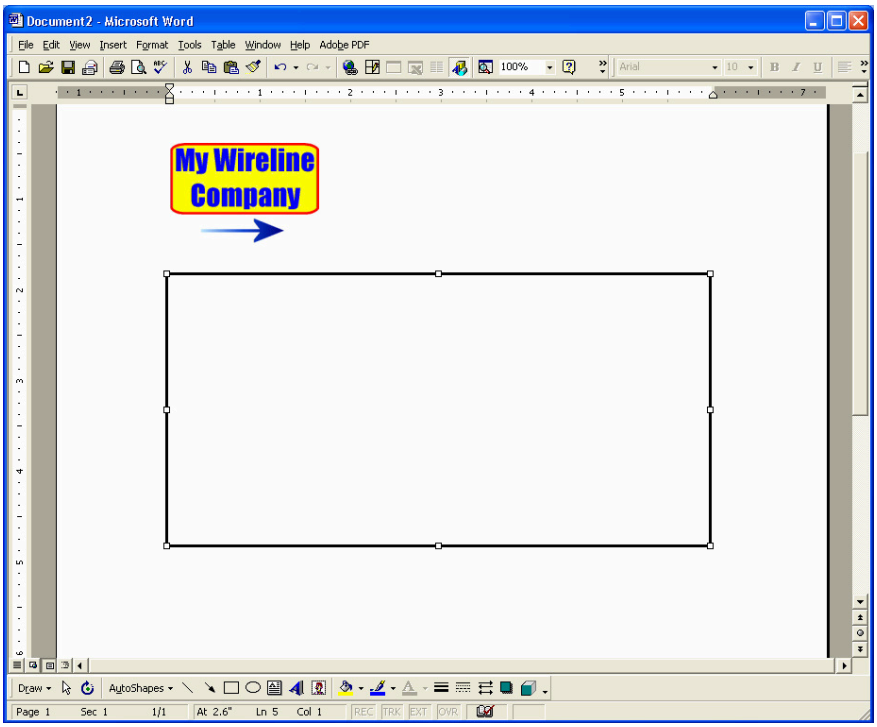

FIG: 2.49 Setup Frame

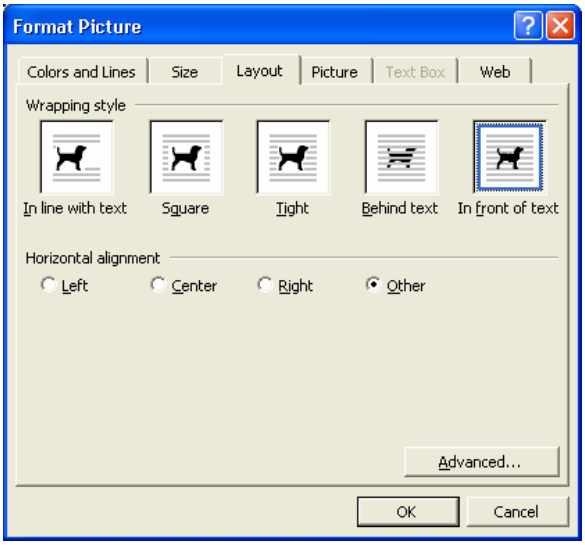

FIG: 2.50 Layout Picture

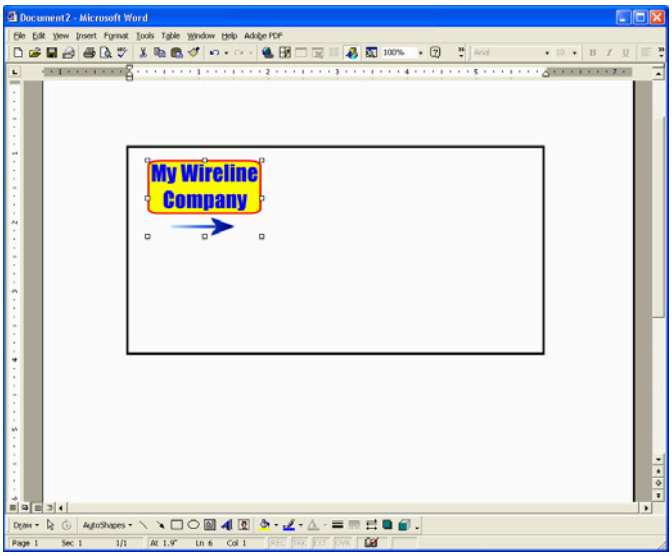

FIG: 2.51 Set picture into the Frame

Next we need to move the image and size it to fit into the box. Right click on the image and choose Format Picture. Then click on the Layout tab. Choose the right most icon, In front of text, and click OK. Your image should not be surrounded by squares. If you position the mouse on the image and click and hold the left mouse, you should be able to reposition the image. If you move the mouse to one of the squares and click and hold the left mouse, you should be able to resize the image. Move and resize the image as needed so that it fits into the logo box.

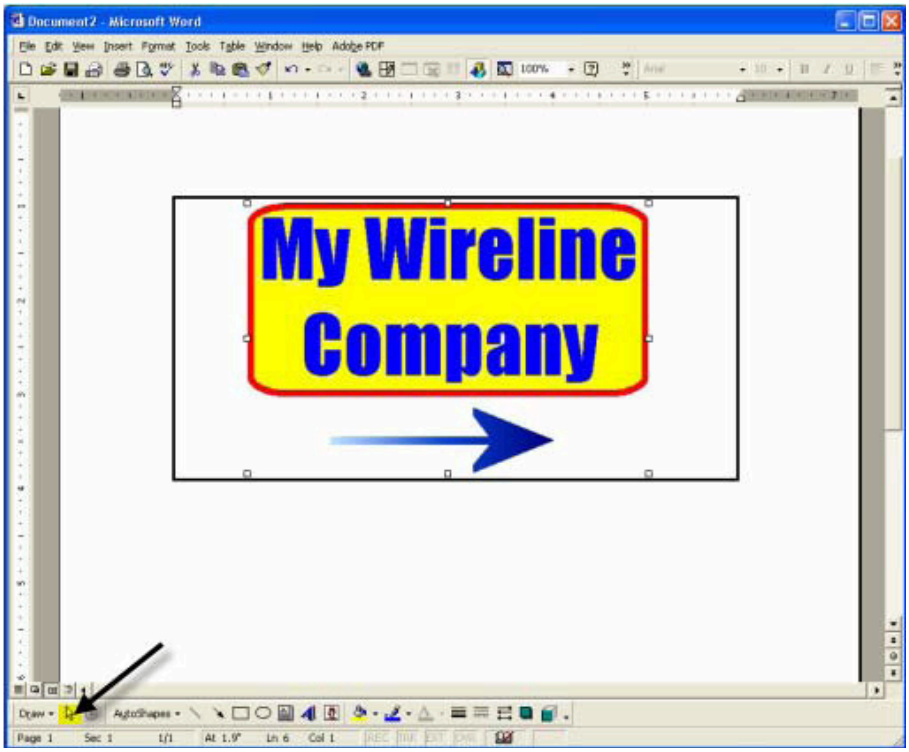

FIG: 2.52 Resize Logo picture

Now the image is in the box but we still have a bit more to do. On the drawing toolbar, click on the select objects arrow. Then use your mouse to make a rectangle around both the image and the logo box. Both the image and the logo box should have the resize rectangles on them now. On the drawing toolbar, click on Draw and select Group. The resize rectangles should only appear on the logo box.

At this point, you can right click on the logo and select Copy. Or you can select Edit on the Menu Bar

FIG: 2.53 Copy Logo

and select Copy. This copy action has copied the logo that you have created to the Windows Clipboard.
You will find MFGRAB.EXE in the Warrior\Bin32 folder. You can use Windows Explore to find the program and execute it or you can use the Start Button – Run option to find the program and execute it. It should show the logo that you have created.

FIG: 2.54 Execute MFGRAB

FIG: 2.55 Save file in warrior

To save the logo, Click on **File -> Save As** . . . You will get a dialog box in which to enter the logo file name. The path must be C:\warrior\config\. The file name must be an 8 character or less DOS compliant file name with the .LGO extension. In the example below, NAME would be the DOS file name.

FIG: 2.53 Create a path to save the file

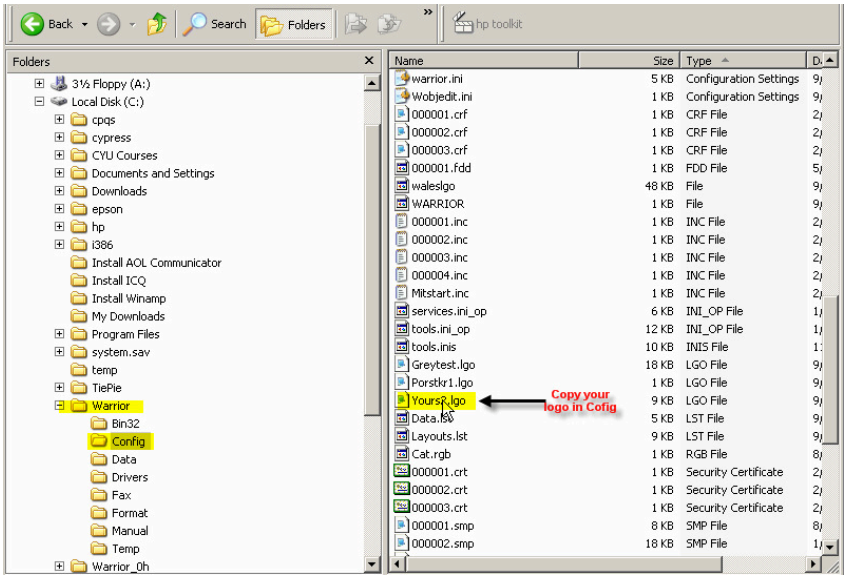

FIG: 2.54 File Logo Path

Double Click over your Warrior.ini

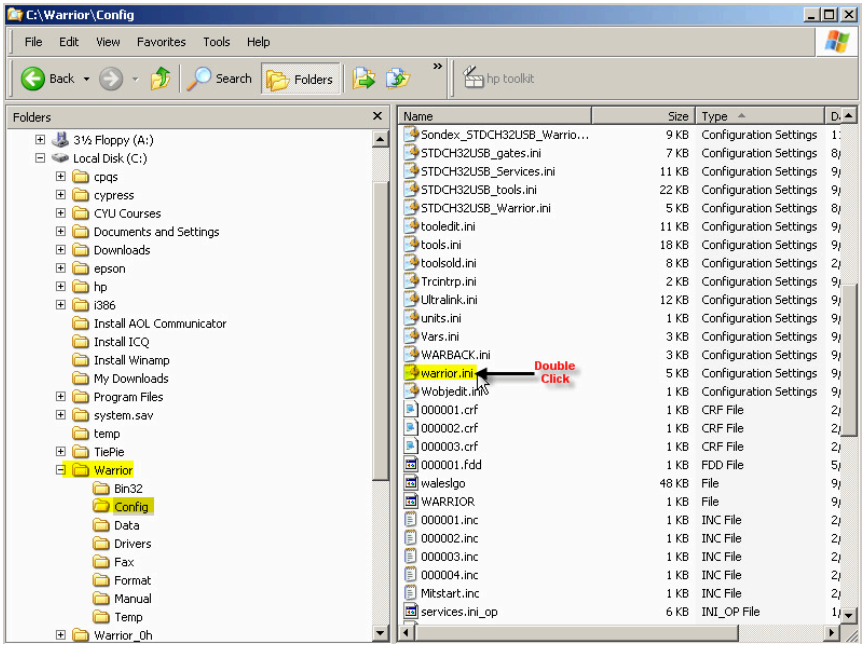

FIG: 2.55 Warrior.ini

Finally, in order to use the logo, we must declare it in the Warrior\Config\Warrior.INI folder under the heading section as shown:

```
[Heading]
default=StdCased.hdg
Logo=NAME.lgo
```

StdCased heading uses the picture name Logo, which is defined here. Different headings may use different picture names, but that will not be discussed at this time.
Copy your logo under Warrior\Config

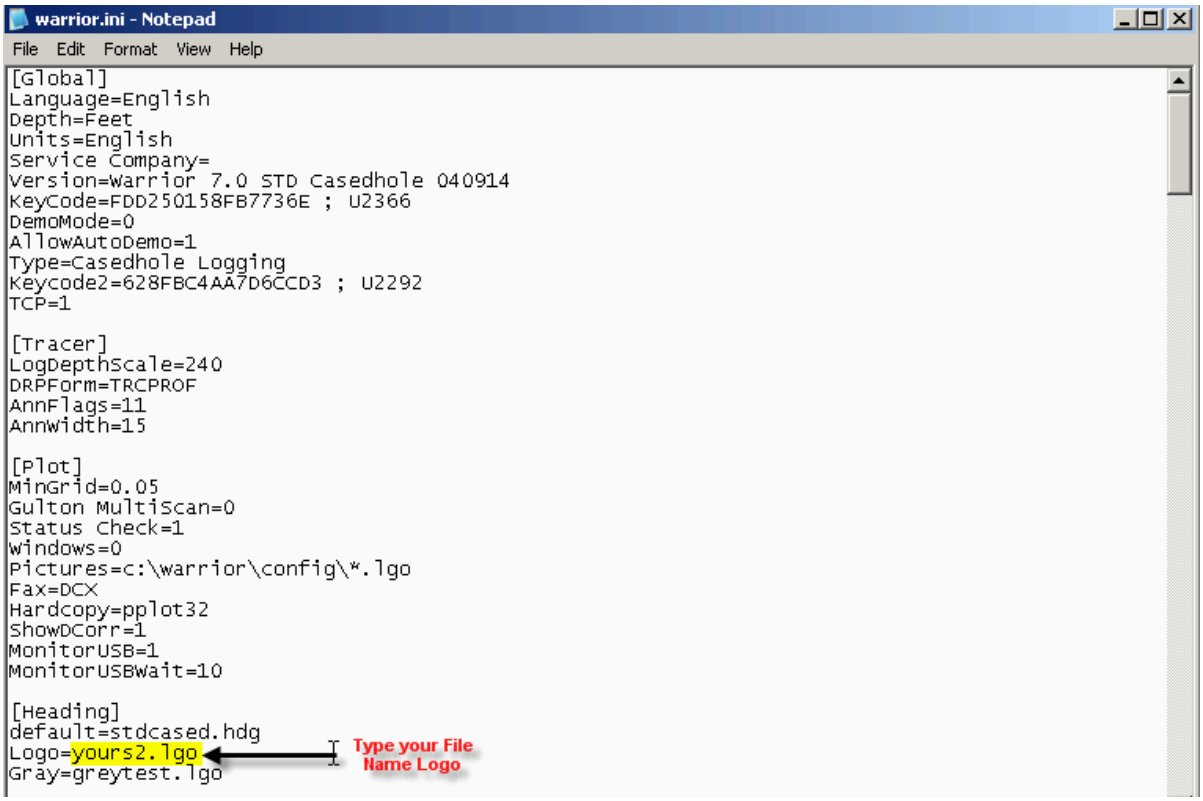

FIG: 2.56 Warrior.ini

Save the File

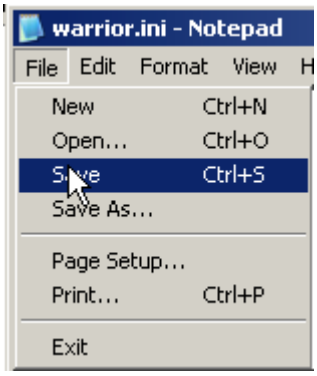

FIG: 2.57 Save

2.11 Warrior Convert for OLD version 7.0

Convert files from previous versions 7.0 - 051114 to the new ones 7.0

2.11.1 If you Upgrade your old version

Go to Warrior\Bin32\WarConv.exe

FIG: 2.58 Select WarConv

Double click over WarConv

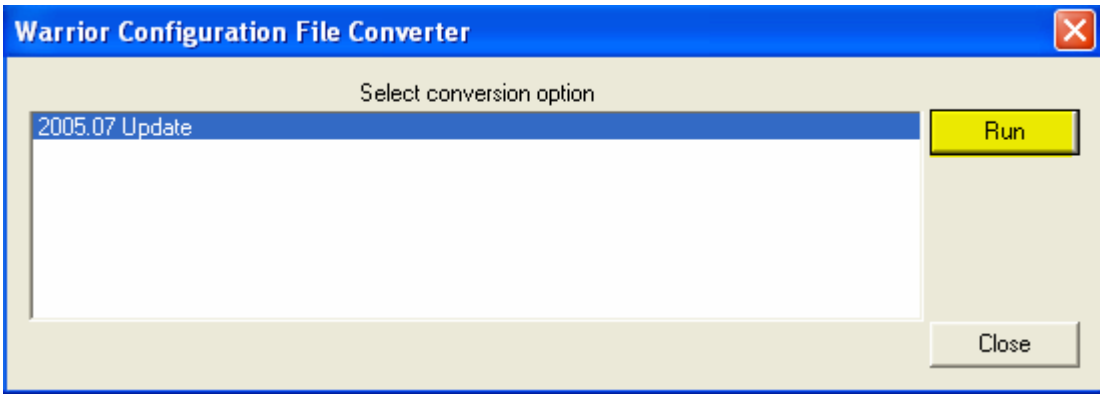

FIG: 2.59 Run Warrior Configuration File Convert

Select 2005.07 Update
Click on **Run**

2.11.2 If you perform a new version and you have the old configuration, Files

Restore the Old Configuration files version 7.0
Go to Warrior\Bin32\WarConv.exe

FIG: 2.60 Select WarConv

Double click over WarConv

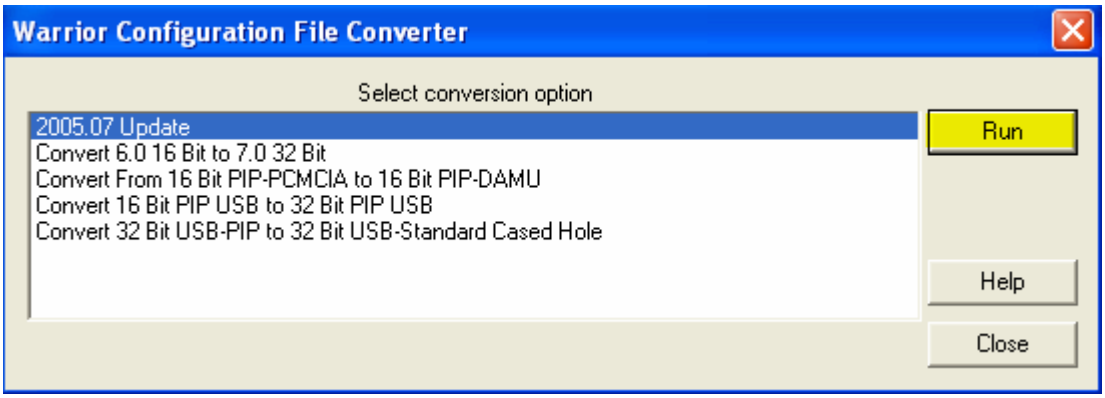

FIG: 2.61 Run Warrior Configuration File Convert

Select 2005.07 Update
Click on **Run**