
vDash™

Version 3.0 USB Installation Manual



Chetco Digital Instruments

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SeaGauge™ is a trademark of Chetco Digital Instruments, Inc.

vGauge™ is a trademark of Chetco Digital Instruments, Inc.

WARNING!

USE THIS UNIT ONLY AS AN AID TO MONITORING ENGINE PERFORMANCE INFORMATION.

CAUTION

When showing sensor data, this unit will only show information based on the sender used and its installed position.

The operating and storage temperature for your unit is from -4 degrees to +167 degrees Fahrenheit (-20 to +75 degrees Celsius). Extended storage temperatures higher or lower than specified will cause the liquid crystal display to fail. Neither this type of failure nor its consequences are covered by the warranty. For more information, consult the factory customer service department.

All features and specifications subject to change without notice.

Chetco Digital Instruments may find it necessary to change or end our policies, regulations, and special offers at any time. We reserve the right to do so without notice.

All screens in this manual are simulated.

NOTICE!

Free software upgrades will be available on our website at [http:// www.chetcodigital.com](http://www.chetcodigital.com) as they are released. Please check our website periodically for these and other information as they become available.

Thank you for choosing Chetco Digital Instruments

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the factory customer service department for help.

SPECIFICATIONS

Operating System:Windows XP/Vista Home

Maximum Update Rate: 2 per second

NMEA 2.0 Instrumentation Sentences \$IIXDR,A \$IIXDR,C \$IIXDR,D \$IIXDR,F
\$IIXDR,G \$IIXDR,I \$IIXDR,P \$IIXDR,R \$IIXDR,S \$IIXDR,T \$IIXDR,U \$IIXDR,V,
\$GPGLL, \$SDMTW, \$SDDBT, \$SDVLW, \$SDVHW

Table of Contents

Table of Contents	5
Introduction.....	7
Welcome	7
Installation.....	8
Windows XP PC/Laptop.....	8
Verify Installation.....	10
UPDATE USB DRIVERS.....	21
CONNECT TO vDASH	31
One Year Warranty.....	36
VDASH SOFTWARE LICENSE AGREEMENT	37

vDash USB Install

Introduction

Welcome

Thank you for purchasing a Chetco Digital Instruments product.

vDash™ is a software application utility that provides a virtual dashboard on a Windows XP PC/Laptop. vDash™ works with SeaGauge™ and vGauge™ to allow configuration and data logging via attached serial cable or Bluetooth wireless interface.

Once installed on your PC/Laptop, vDash™ accepts NMEA 0183 data from built-in serial ports, parses the recognized sentences and displays the data in a real-time viewer window. Up to 8 display screens can be laid out with a variety of graphic display formats using the point and click interface of attached computer mouse or touch pad. Once desired formats are configured, vDash™ provides real-time programming of any attached SeaGauge™ or vGauge™ product.

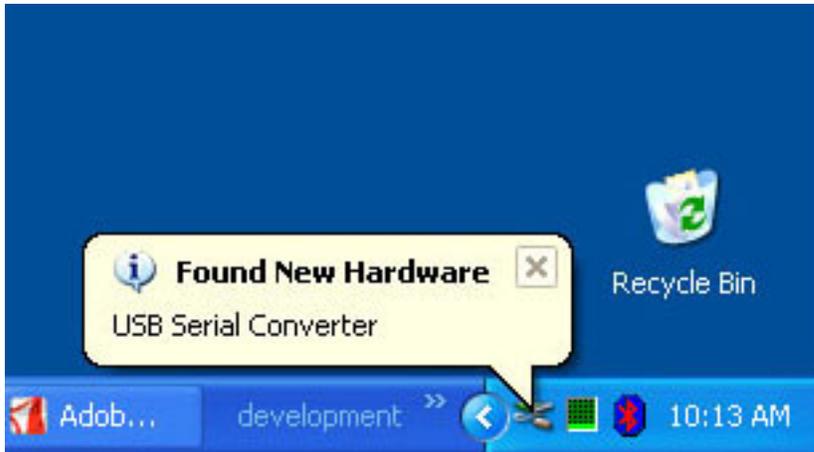
Some vGauge and SeaGauge products are equipped with USB 2.0 ports for connection to host PC running WindowsXP or Windows Vista. This manual covers the installation of third-party drives to allow communication over the USB ports.

Only USB slave ports can be connected directly to PC or Laptop without requiring a special adapter.

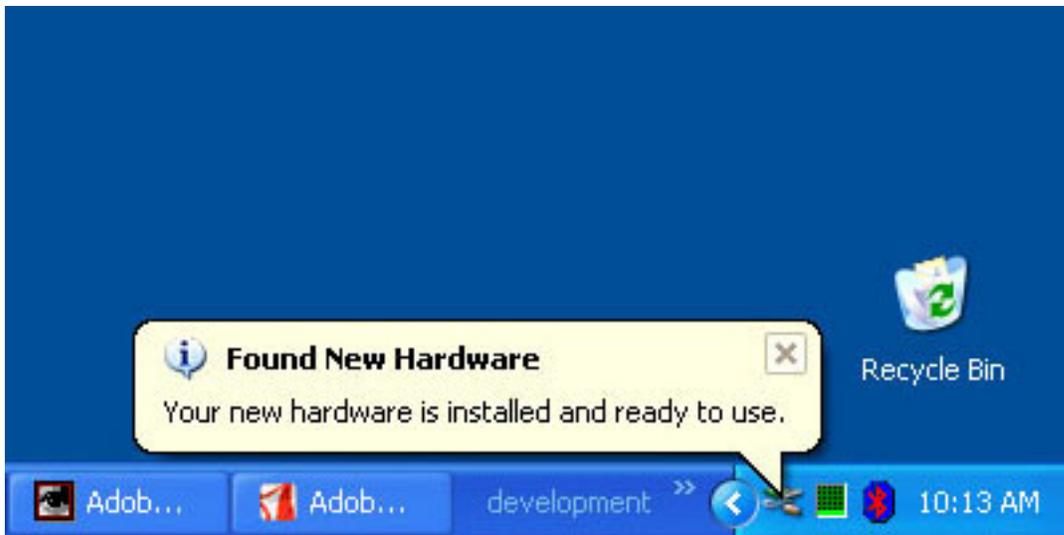
Installation

Windows XP PC/Laptop

Start by plugging a appropriate USB cable from the slave port on the vGauge/SeaGauge unit to an available USB port on the PC/Laptop. Windows will respond with a “NEW HARDWARE FOUND” message in the notification area of the task bar.



If proper USB drivers are already installed, windows will load them and indicate success with another message in the notification area of the taskbar.



vDash USB Install

If the USB drivers are successfully installed and this is the first time the vGauge unit has been connect to the target computer – proceed to the **VERIFY INSTALLATION** chapter to confirm proper configuration.

If the vGauge has been successfully attached previously, then proceed to the **CONNET vDASH** chapter to start display and logging operations.

In the event the drivers were not previously installed or removed, proceed to the **UPDATE DRIVERS** chapter to configure the USB device

vDash USB Install

Verify Installation

During initial installation, verification of proper configuration of USB drivers should be performed.

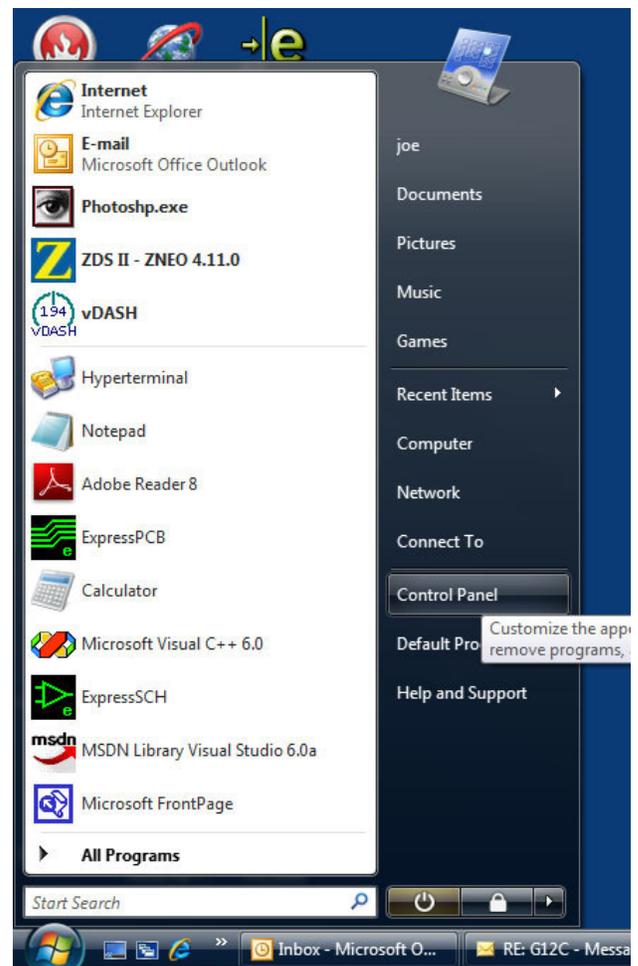
To confirm proper driver installation, access the Device Manager to view the virtual serial ports that are installed by the USB drivers.

Start by accessing the CONTROL PANEL from the START MENU

Windows XP



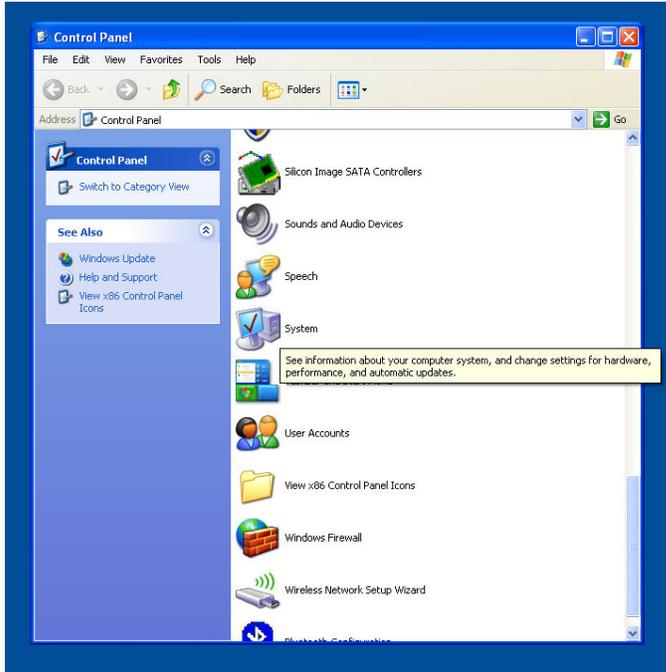
Windows Vista



vDash USB Install

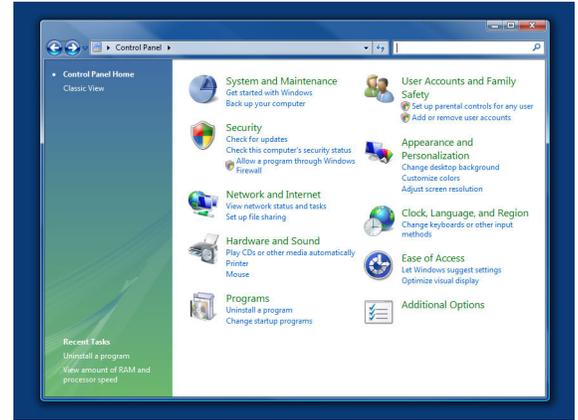
Windows XP

Select System Icon



Windows Vista

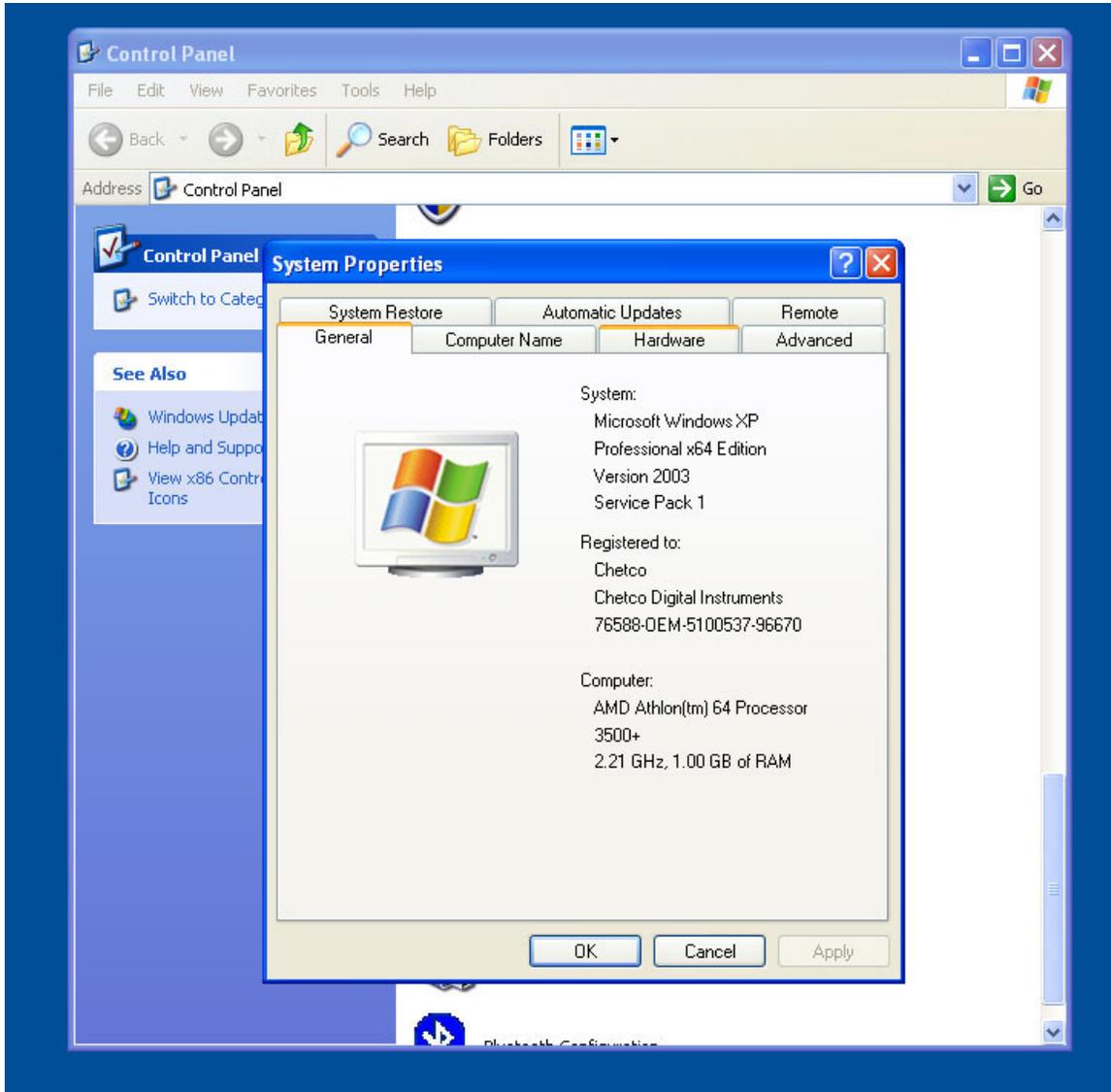
Select Classic View



vDash USB Install

Windows XP ONLY

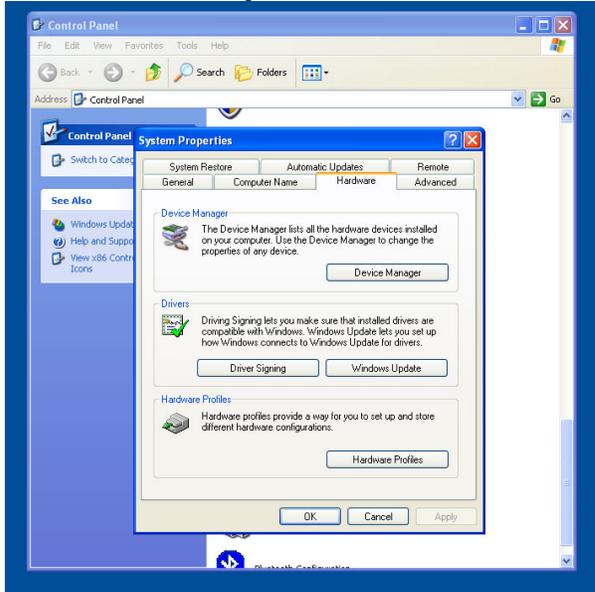
The System Properties panel has several tabs to choose from. Select the HARDWARE TAB



vDash USB Install

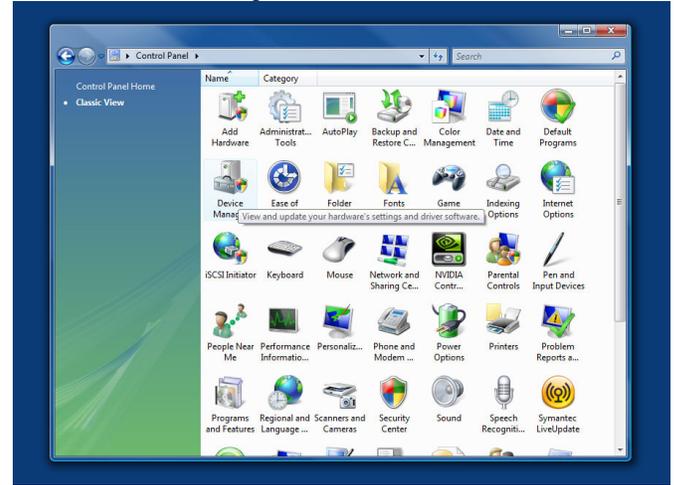
Windows XP

Select Device Manager button



Windows Vista

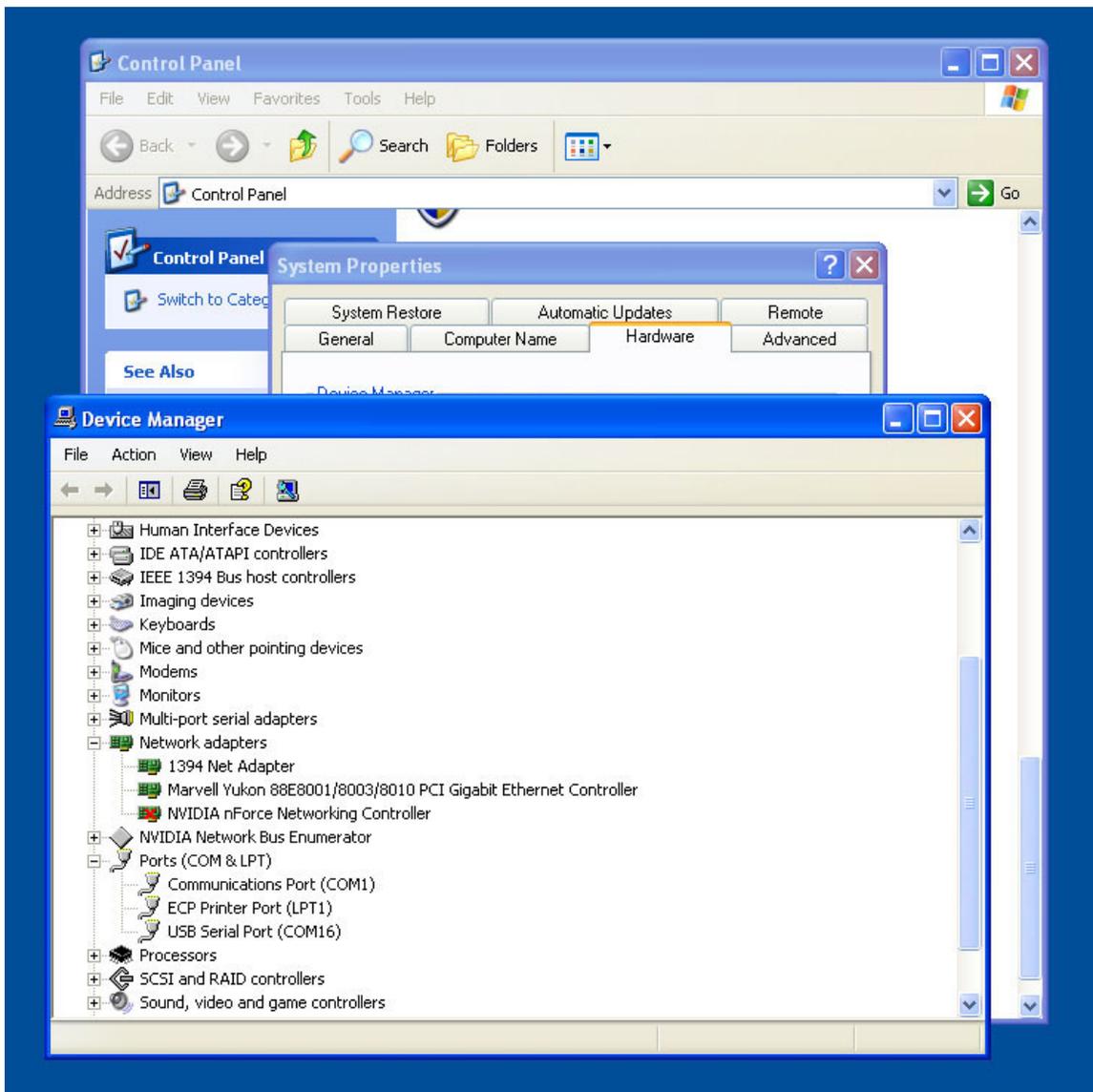
Select Device Manager Icon



vDash USB Install

The Device Manager lists hardware used by the PC. Scroll down to the PORTS section and expand the selection by clicking on the “+” symbol. It will expand the PORTS section to show all serial and virtual COM ports. The USB driver installs a USB SERIAL PORT for each unique USB device attached to the computer. The port numbers can range from 1 to 100 and are assigned in order of attachment. Once a new device is configured, it will retain the same COM PORT NUMBER even if it is not currently plugged in. No other device can use the same number.

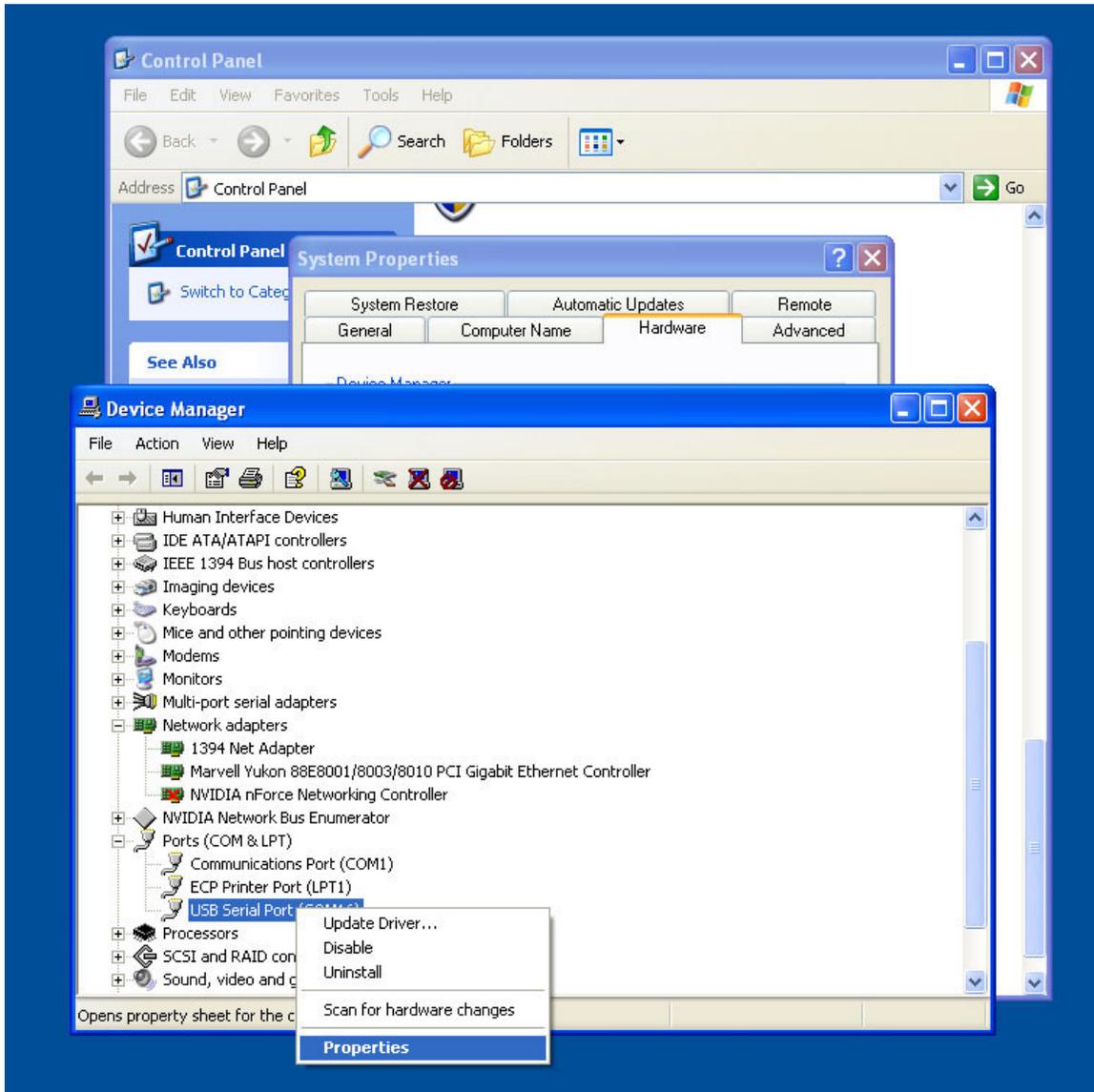
Make note of the port number assigned, it will be required by the vDash program to identify which device to connect to. If multiple USB SERIAL PORTS are listed, disconnect the USB cable to verify which number belongs to the vGauge/SeaGauge unit. It will disappear when removed and reappear when reconnected.



vDash USB Install

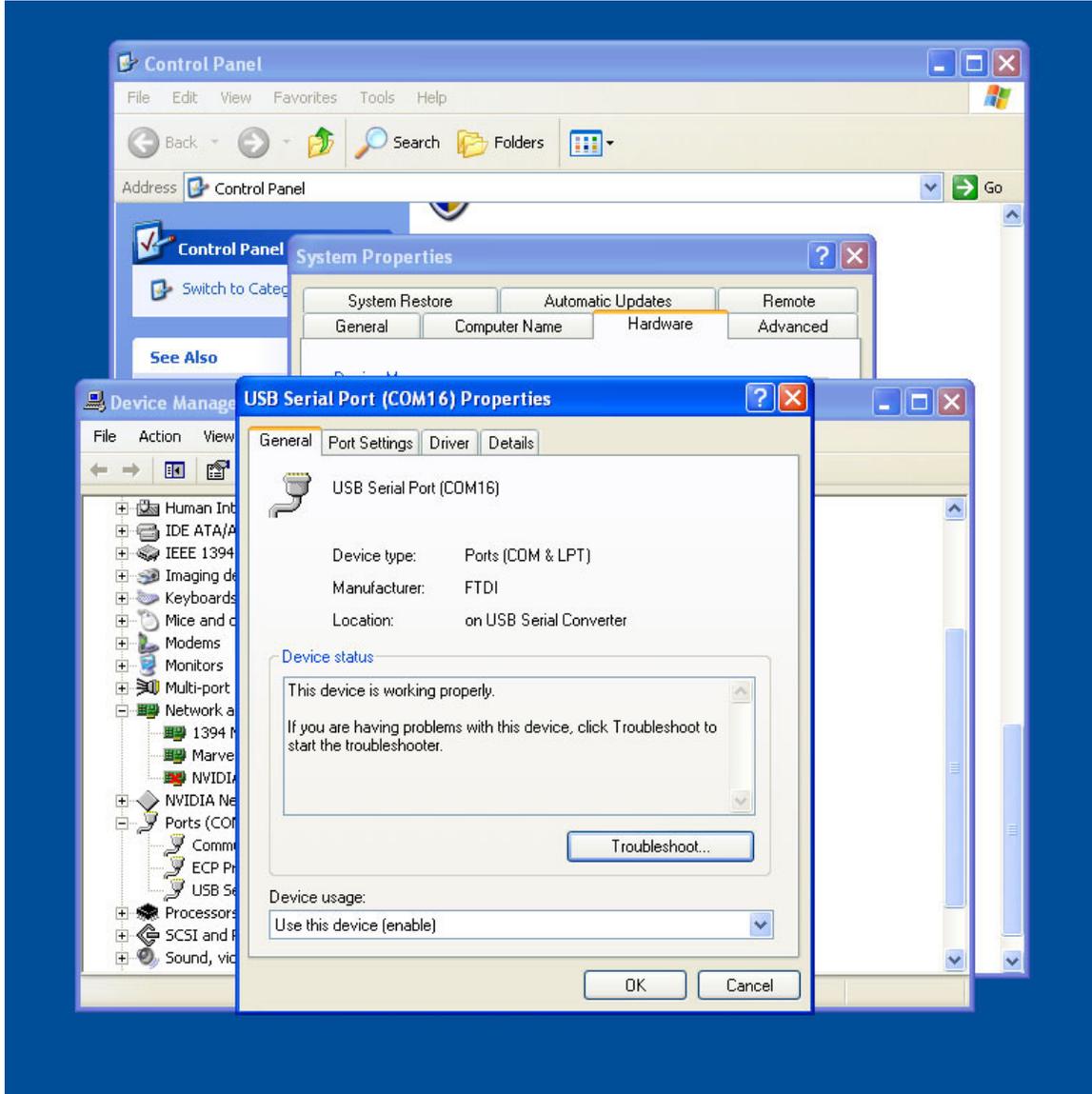
After identifying the proper USB SERIAL PORT, view the device properties by right-clicking on the selected port and choosing the PROPERTIES sub-menu.

This procedure can also be used to update drivers if a yellow exclamation point appears next to the USB SERIAL PORT icon.



vDash USB Install

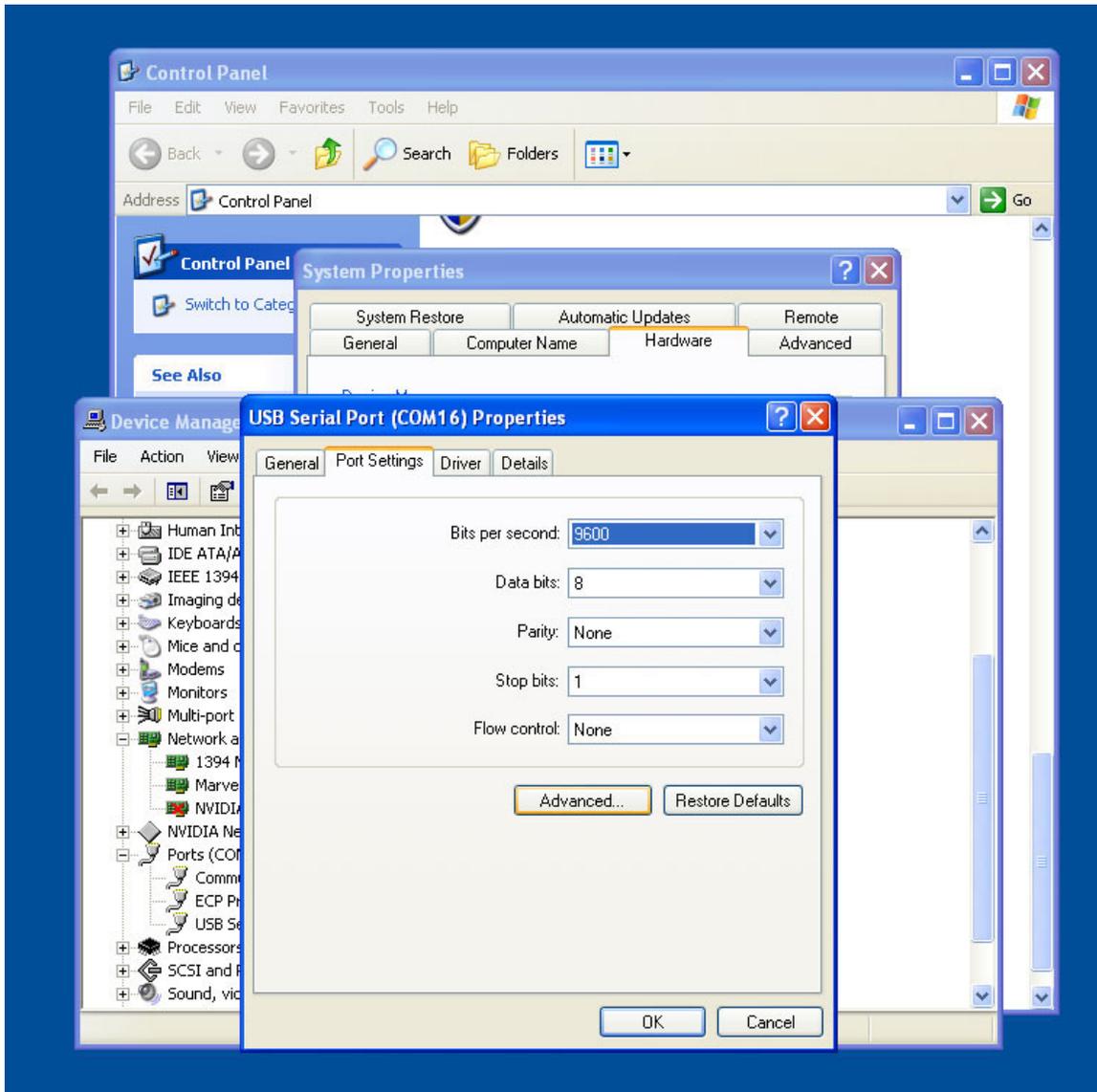
Once in the USB SERIAL PORT Properties tab, select the PORT SETTINGS tab



vDash USB Install

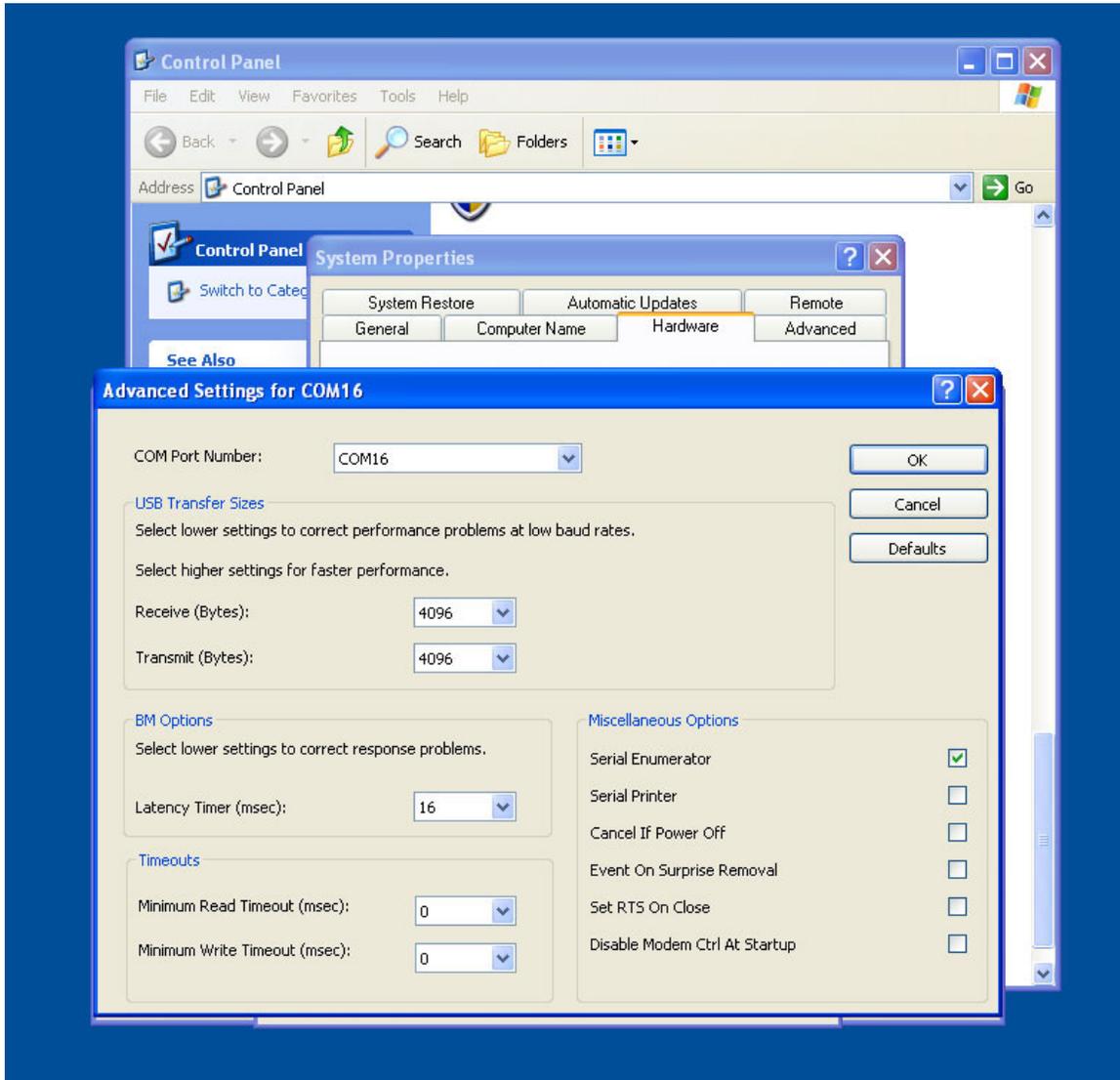
The Port Settings tab will display the current default values and should appear as shown. It is not necessary to adjust them as they are initial port values and are changed by the vDash program under user control.

Select the ADVANCED button.



vDash USB Install

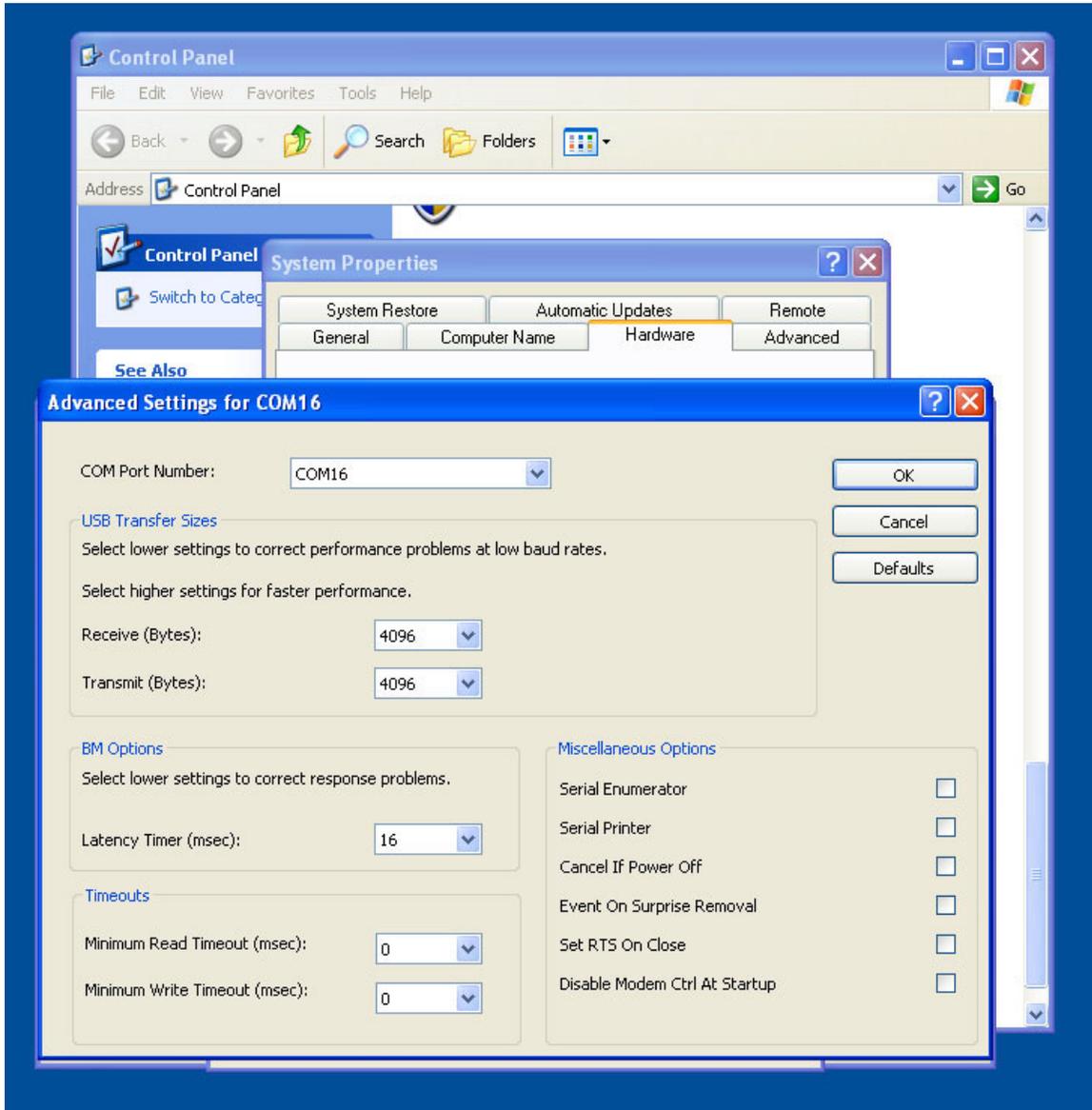
Verify the advanced settings are as shown with the exception of the unique COM Port Number.



vDash USB Install

It is very important the Serial Enumerator field NOT BE CHECKED. If enabled, improper operation will occur when trying to connect while the vGauge unit is transmitting data. An error message will usually appear indicating the port is in use by another device if this field is checked.

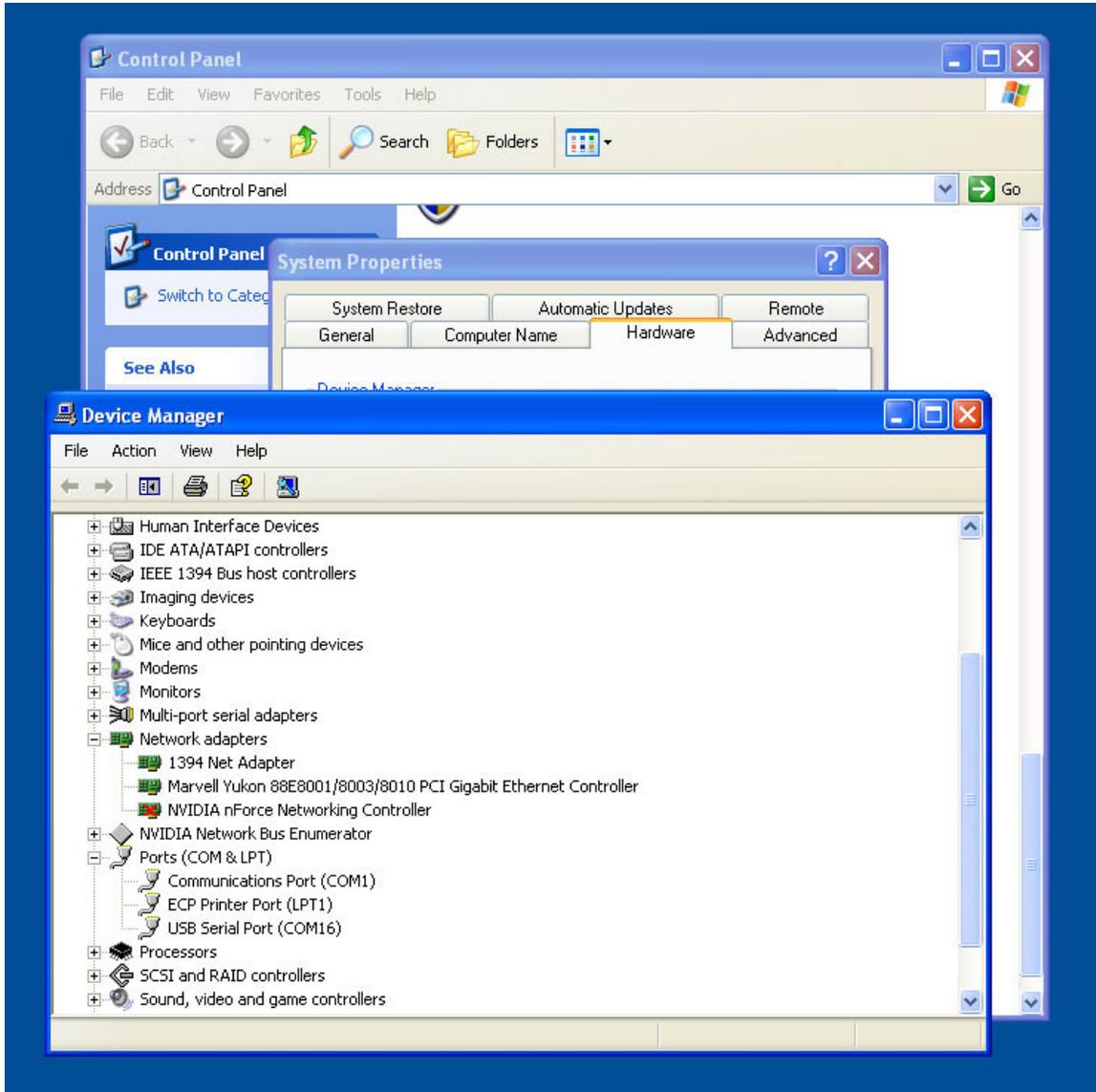
To avoid any conflicts, clear the Serial Enumerator field by clicking on the green check to remove it.



vDash USB Install

If the USB drivers are properly loaded, the USB SERIAL PORT will be assigned a number and no yellow exclamation points will appear next to the ICON.

At this point, proceed to the CONNECT vDASH chapter to begin operation.

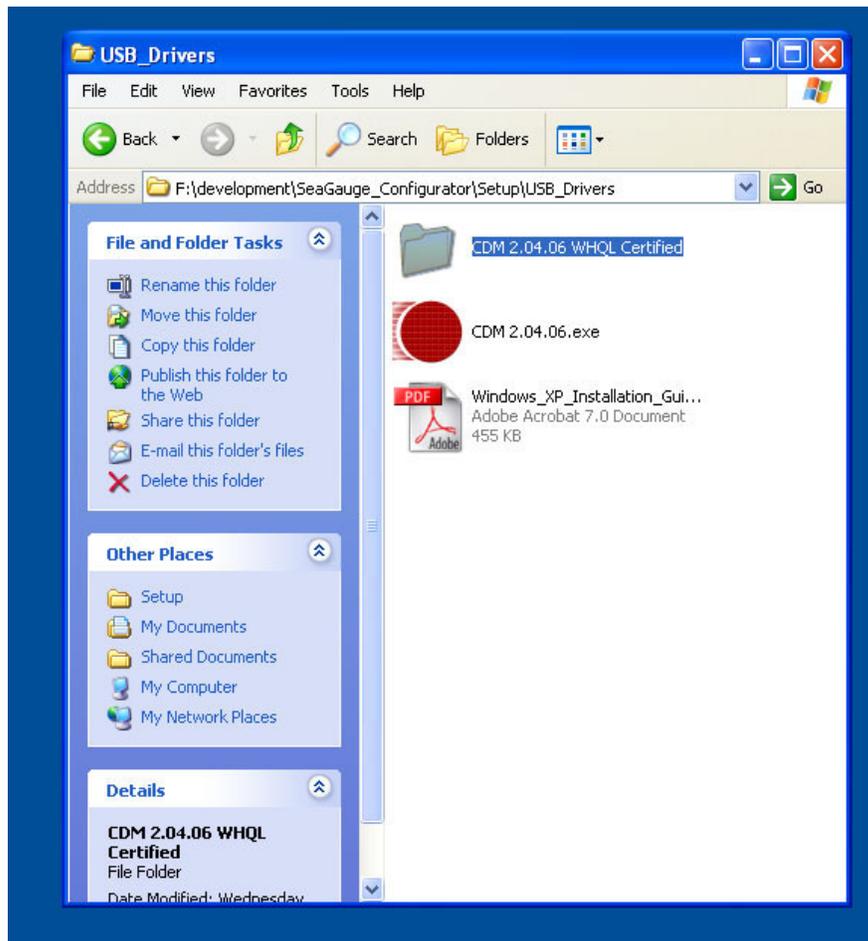


UPDATE USB DRIVERS

During initial installation it may be necessary to install third-party USB drivers. This section covers how to install or update drivers.

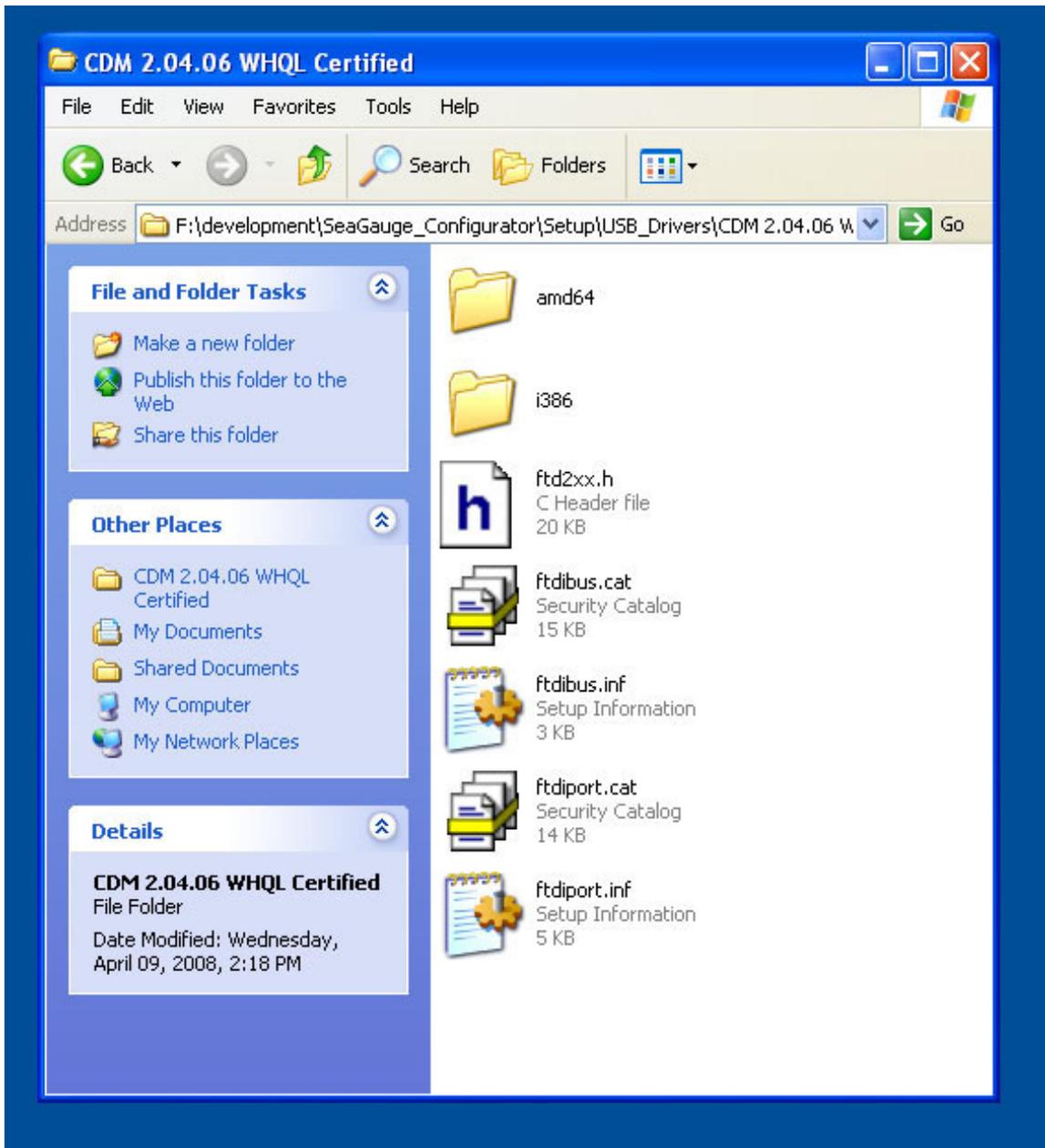
The vDash Installation CD contains USB_DRIVERS folder with the current USB driver files. During installation, you will be prompted for the location of the folder. Copy the folder to a location on your computer prior to starting installation.

The latest USB drivers can also be found on the Support Page on our WEB Site at www.chetcodigital.com/vGauge/support.htm.



vDash USB Install

The USB Drivers support both AMD and INTEL based computers running Windows XP and Windows VISTA.

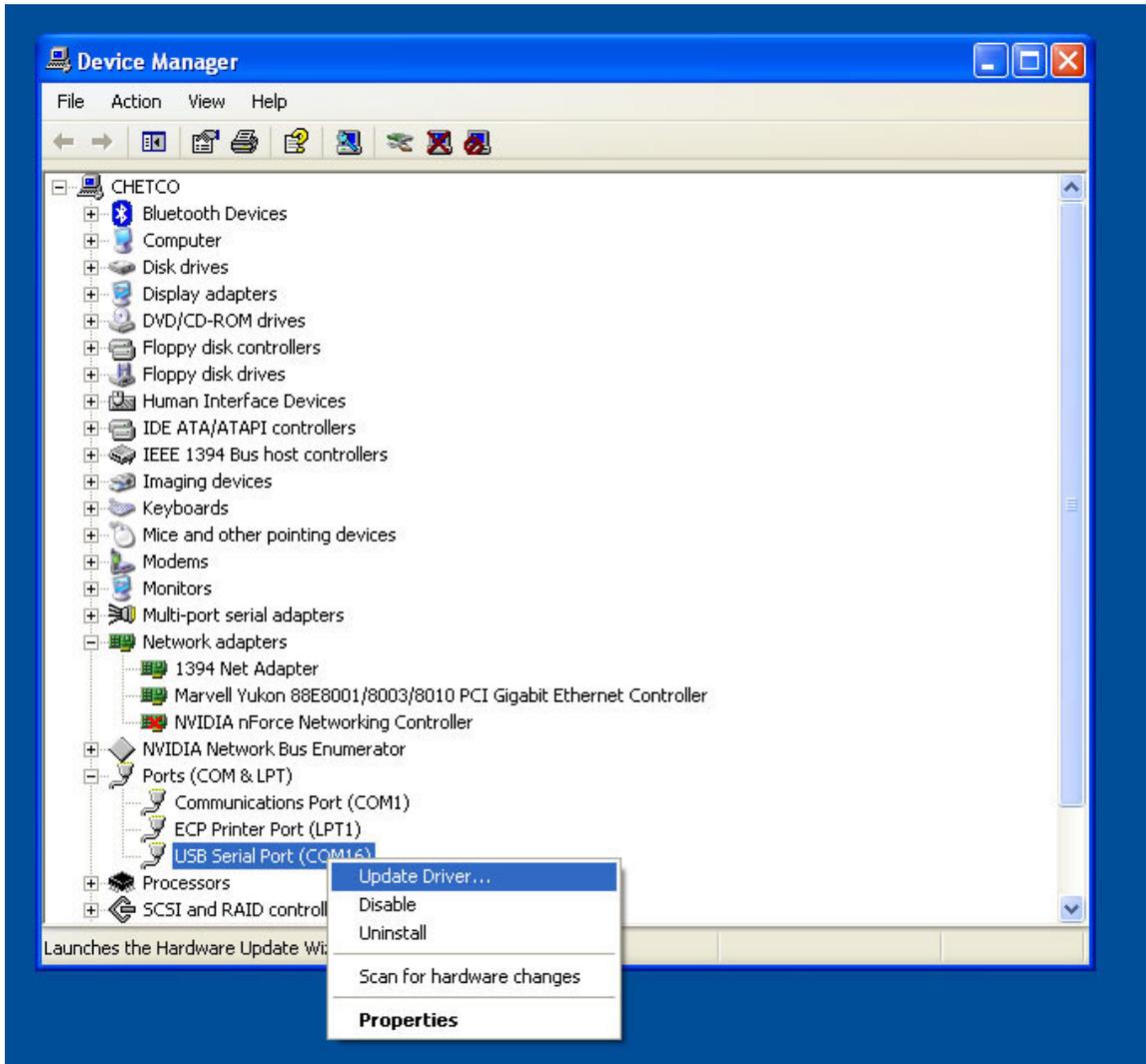


vDash USB Install

To start installation or upgrade, access the Device Manager as describe in the VERIFY INSTALLATION chapter.

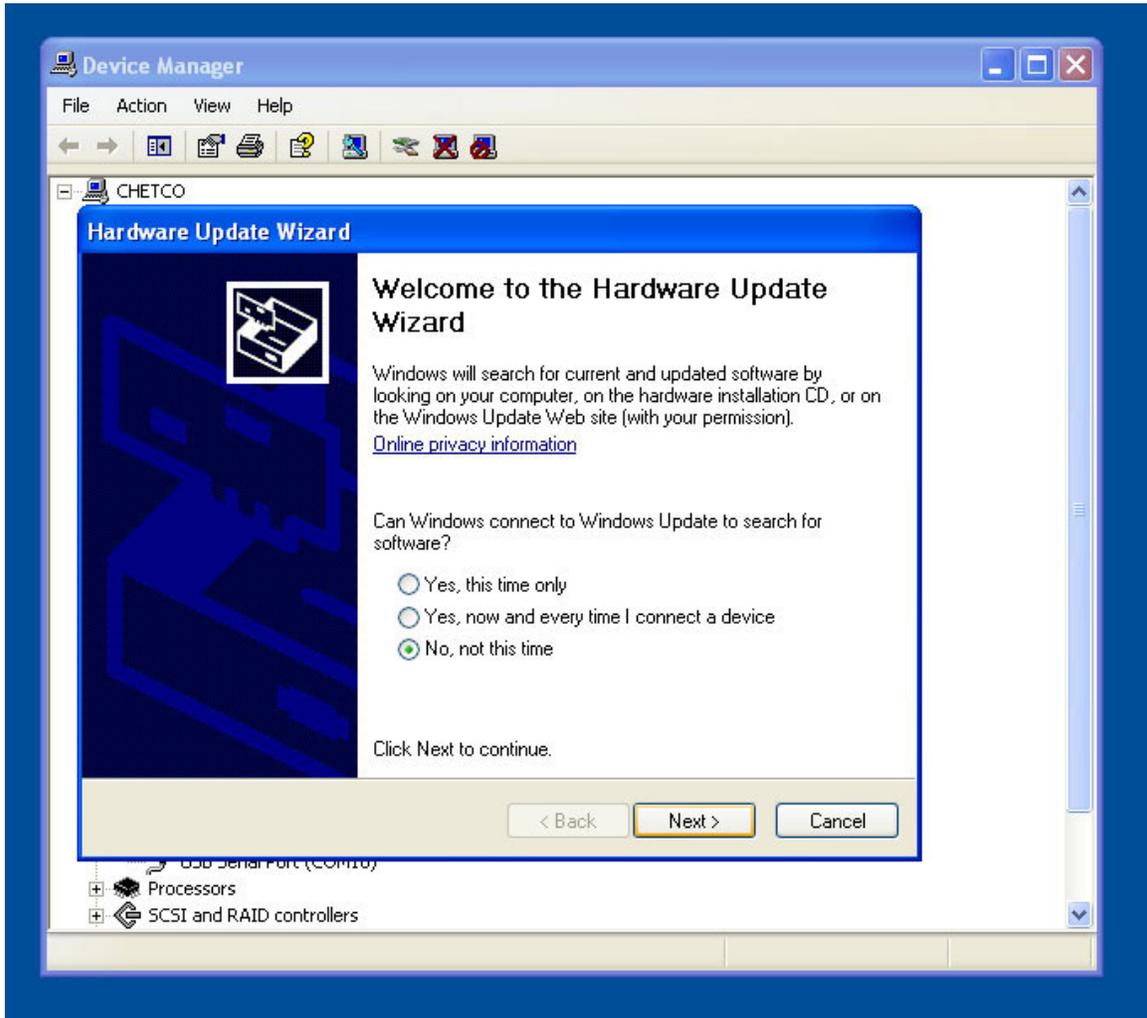
Expand and locate the correct USB SERIAL DRIVER device and right-click to bring up the device sub-menu.

Select UPDATE DRIVER



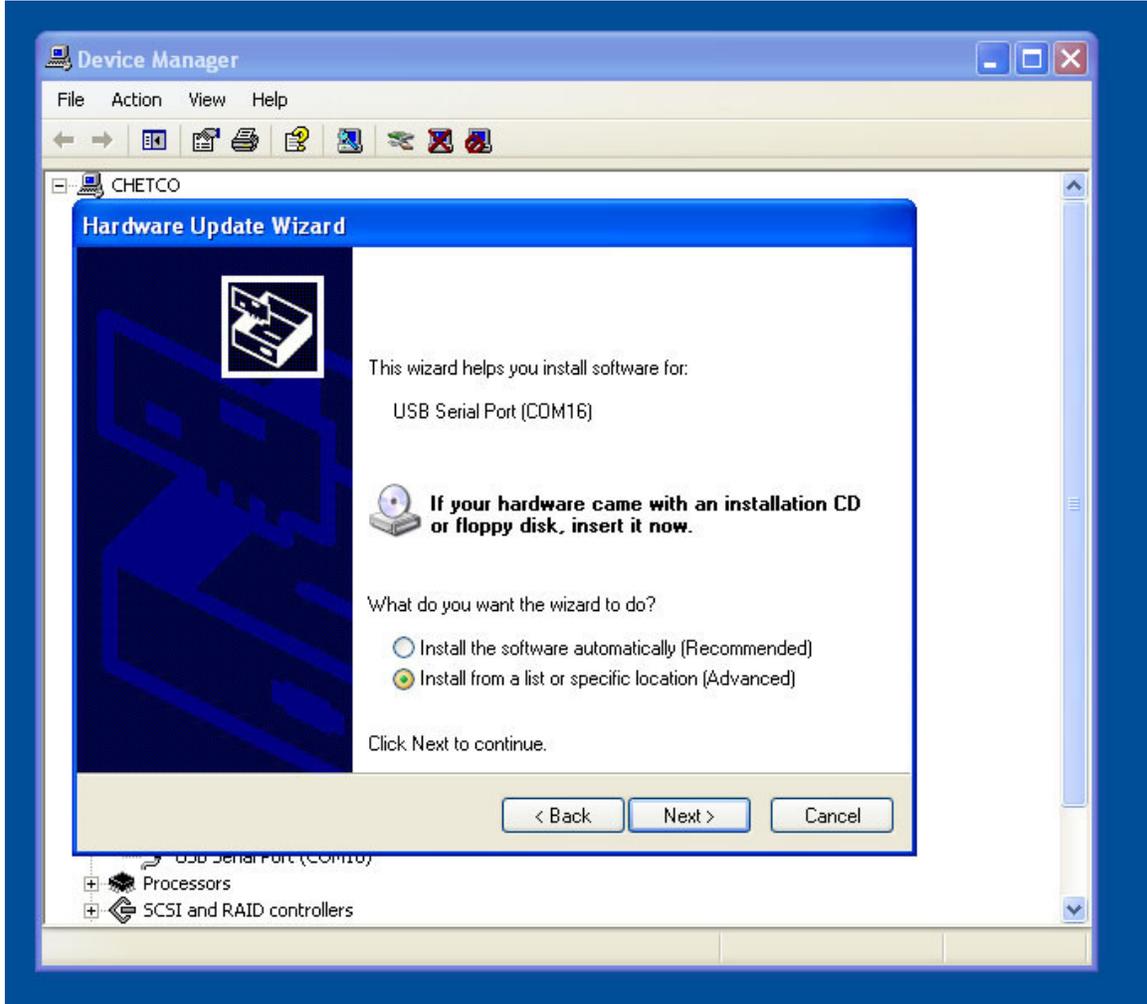
vDash USB Install

Windows will ask to connect to the Internet to look for drivers. Select NO since the drivers are already copied to the local drive.



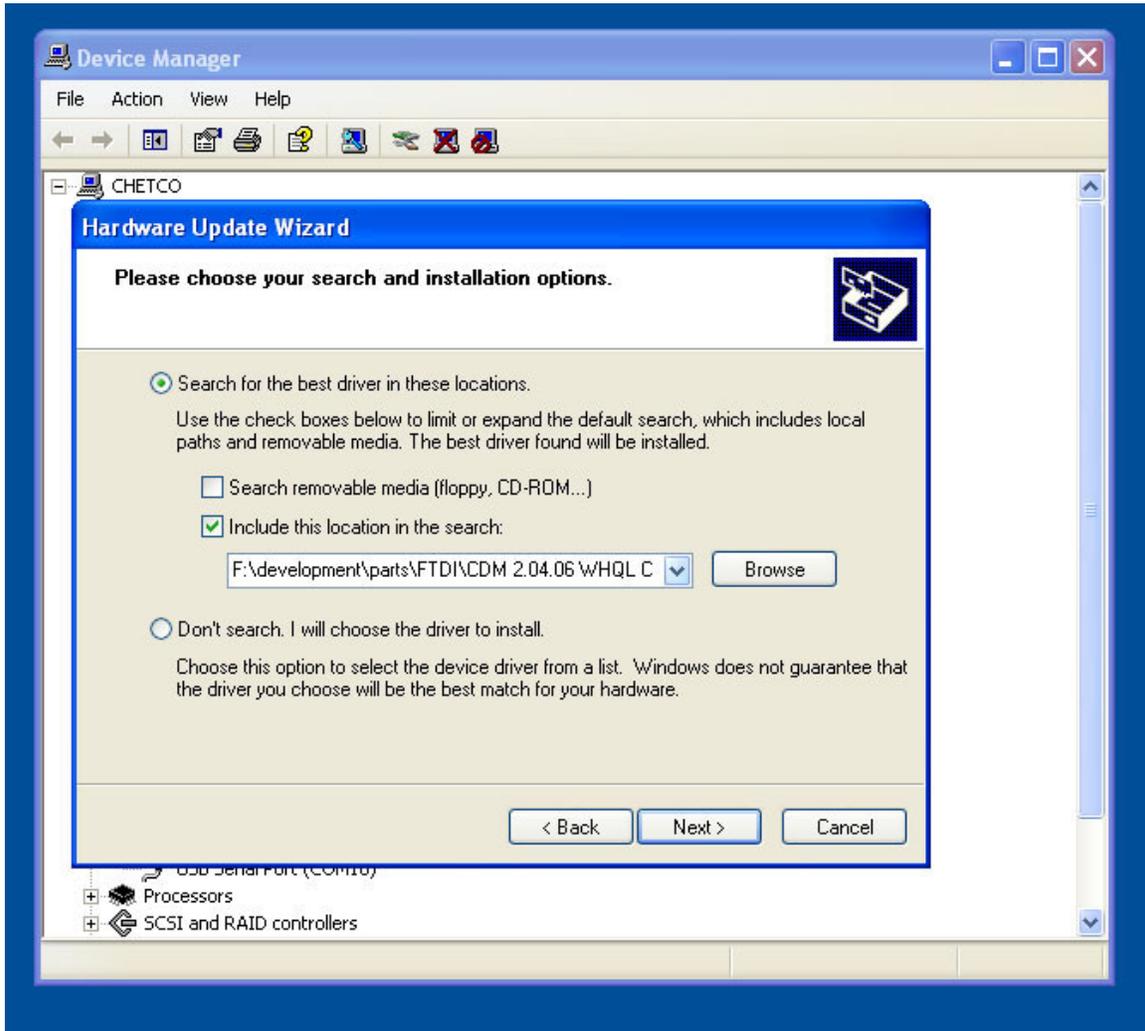
vDash USB Install

Next, Select Install From Specific Location



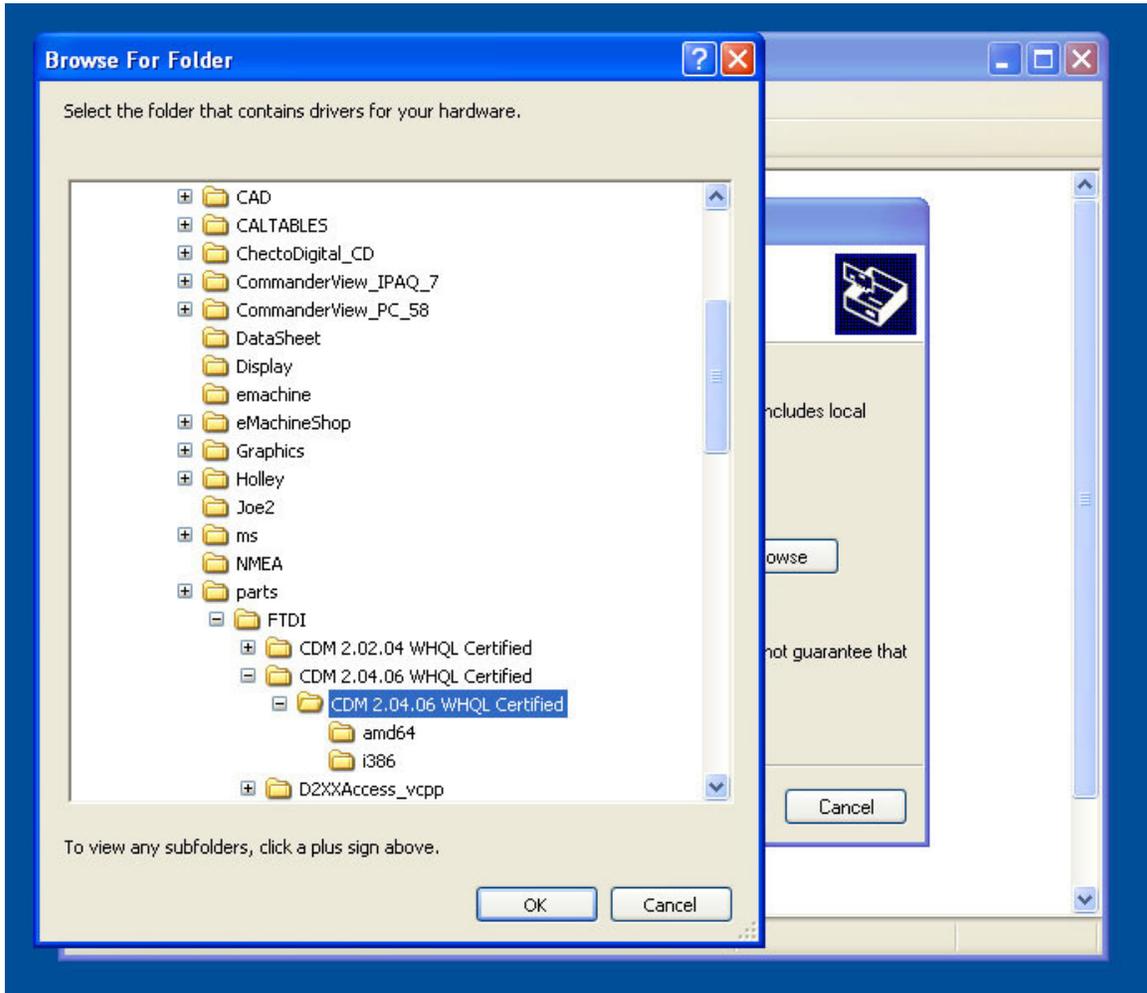
vDash USB Install

At this point, you will need to browse to the location where the USB Drivers were copied on the local hard drive.



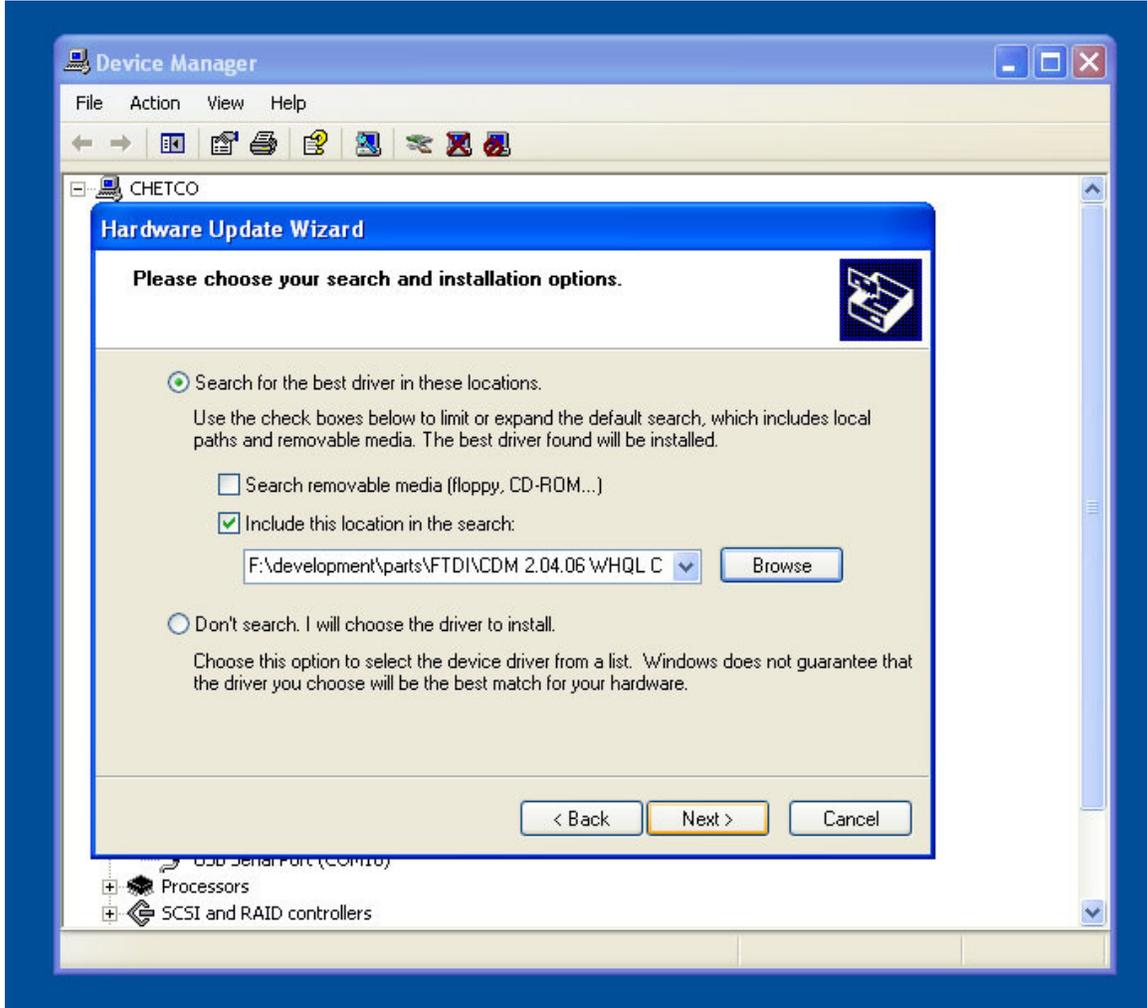
vDash USB Install

Select the containing folder for the drivers. Do not select the subfolders as Windows will decide which one to use based on the type of process used by your computer.



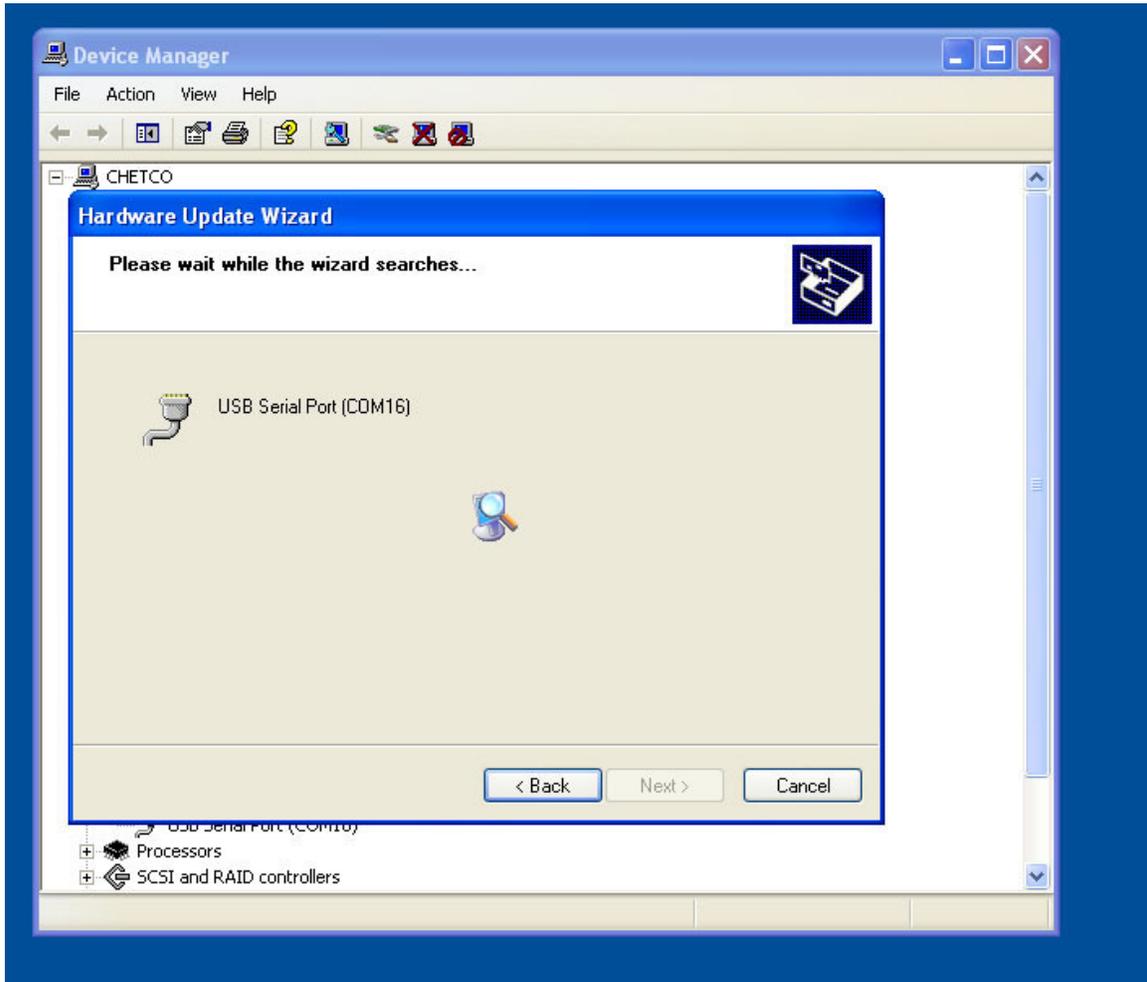
vDash USB Install

Once the proper folder is selected, continue with installation by selecting NEXT.



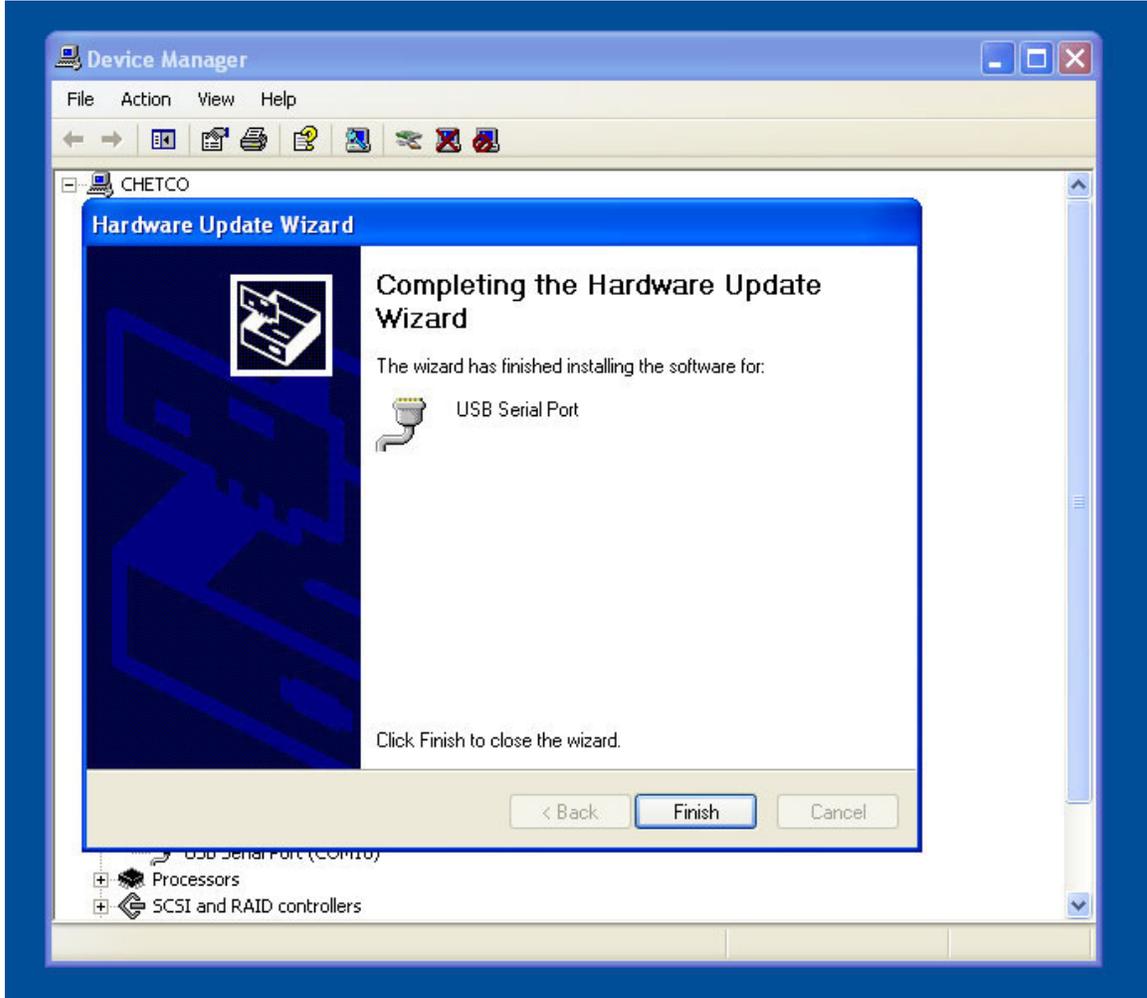
vDash USB Install

Windows will proceed with installation. I may do this twice depending on previous devices and hardware installed on your computer



vDash USB Install

When finished, the device will be installed and ready to use. .



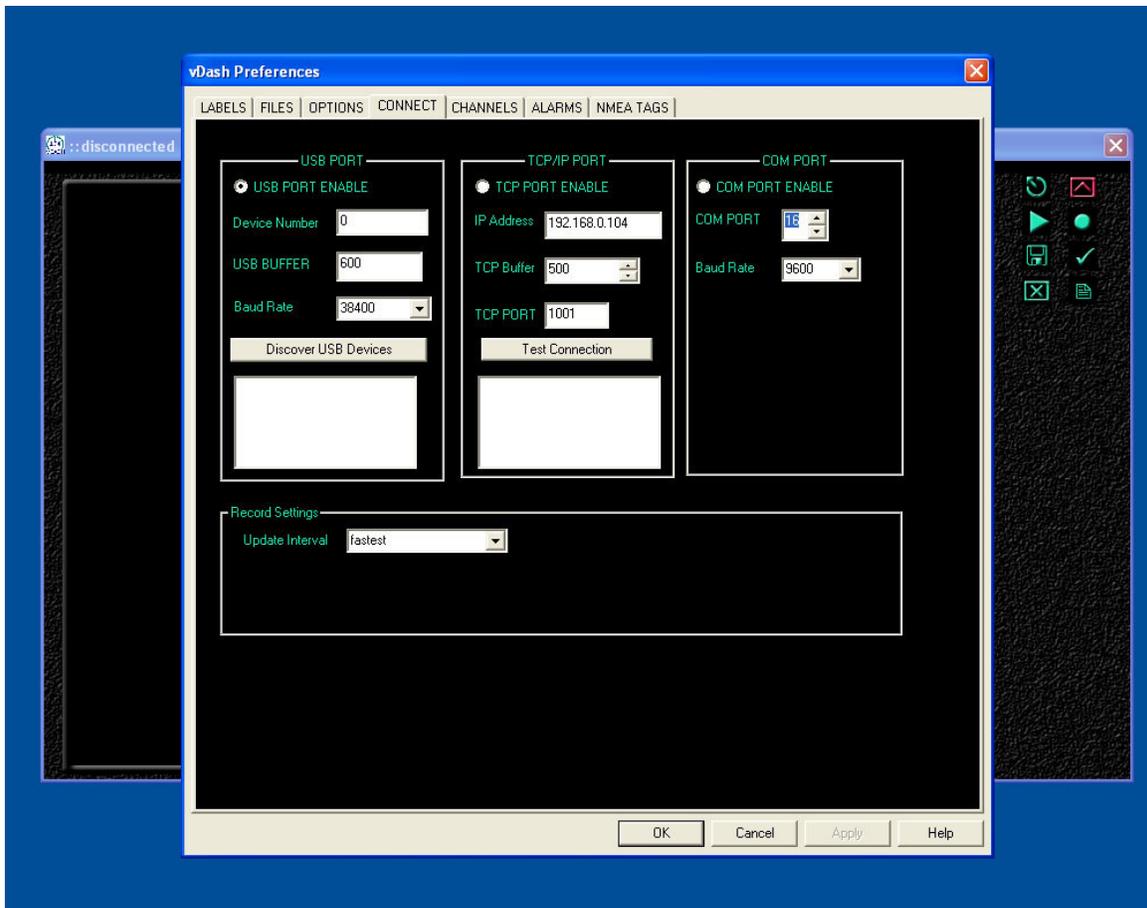
It is a good idea to verify the device is properly installed and configured as described in the VERIFY INSTALLATION chapter.

CONNECT TO vDASH

The vDash program can be used to connect to selected vGauge/SeaGauge units using a variety of connection methods. Version 2.6 and above of vDash have a CONNECT tab in the Preference Dialog to select connection methods.

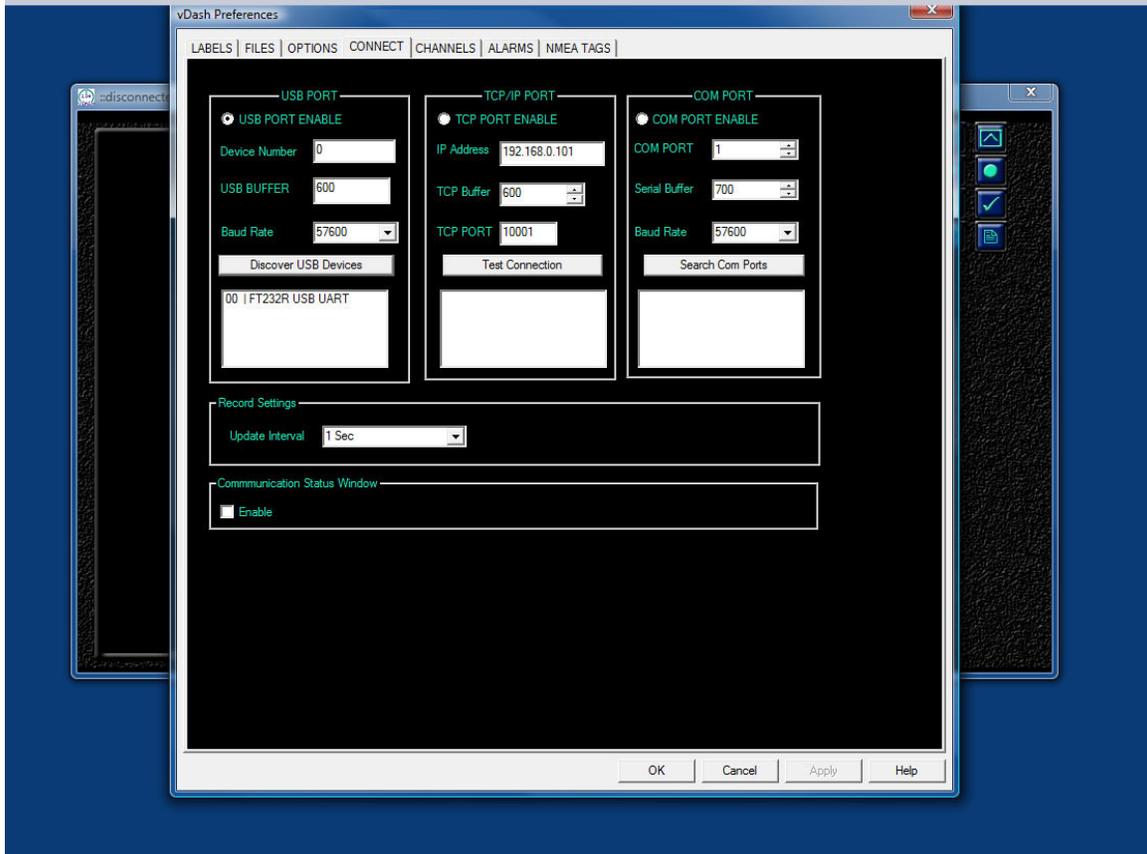
USB Driver installs a USB SERIAL PORT that behaves like any other type of serial port. Proper connection requires knowledge of Port Number and Baud Rate.

vDash will allow connection via USB Driver or COM port. When using a USB port, both methods behave the same. However, if using a physical Serial Port, only the COM PORT method can be used.



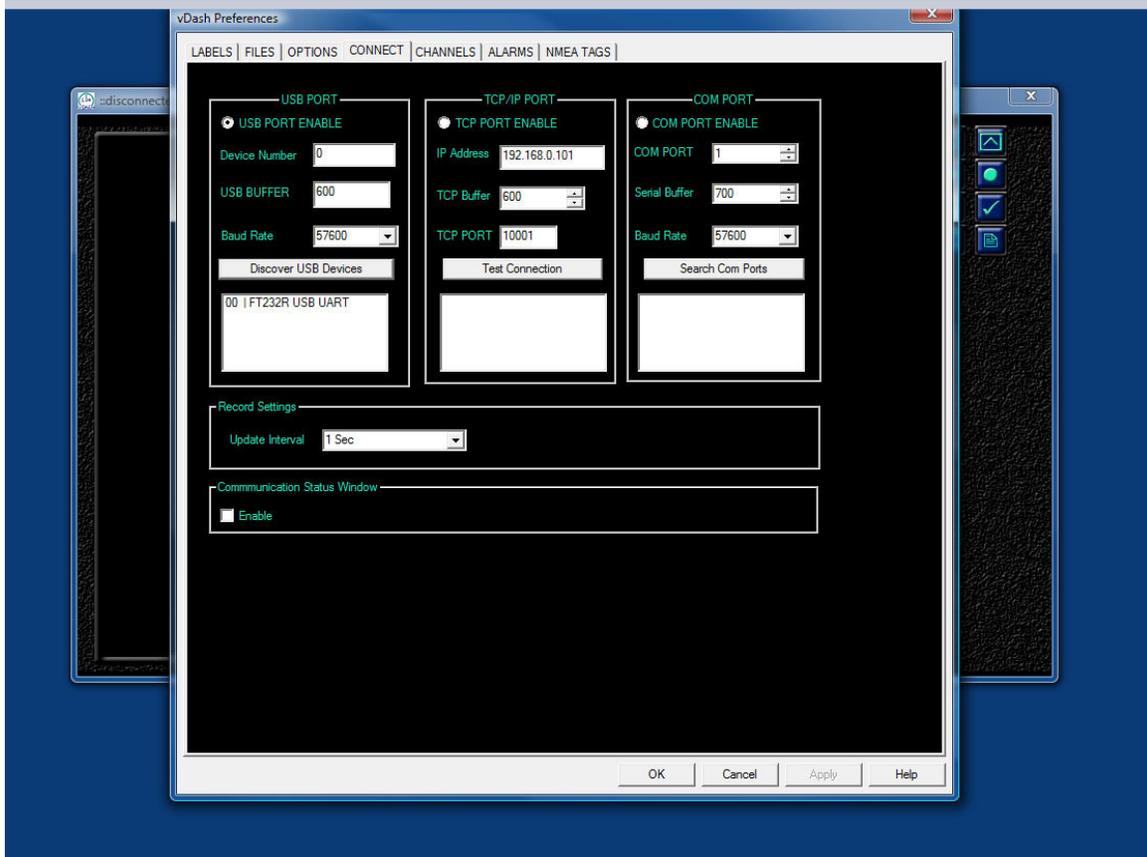
vDash USB Install

The USB PORT option allows for Discovery of the compatible USB enabled devices without needing to know what COM PORT numbers are assigned. Use the DISCOVER USB DEVICES button to view a list of currently attached vGauge units.



vDash USB Install

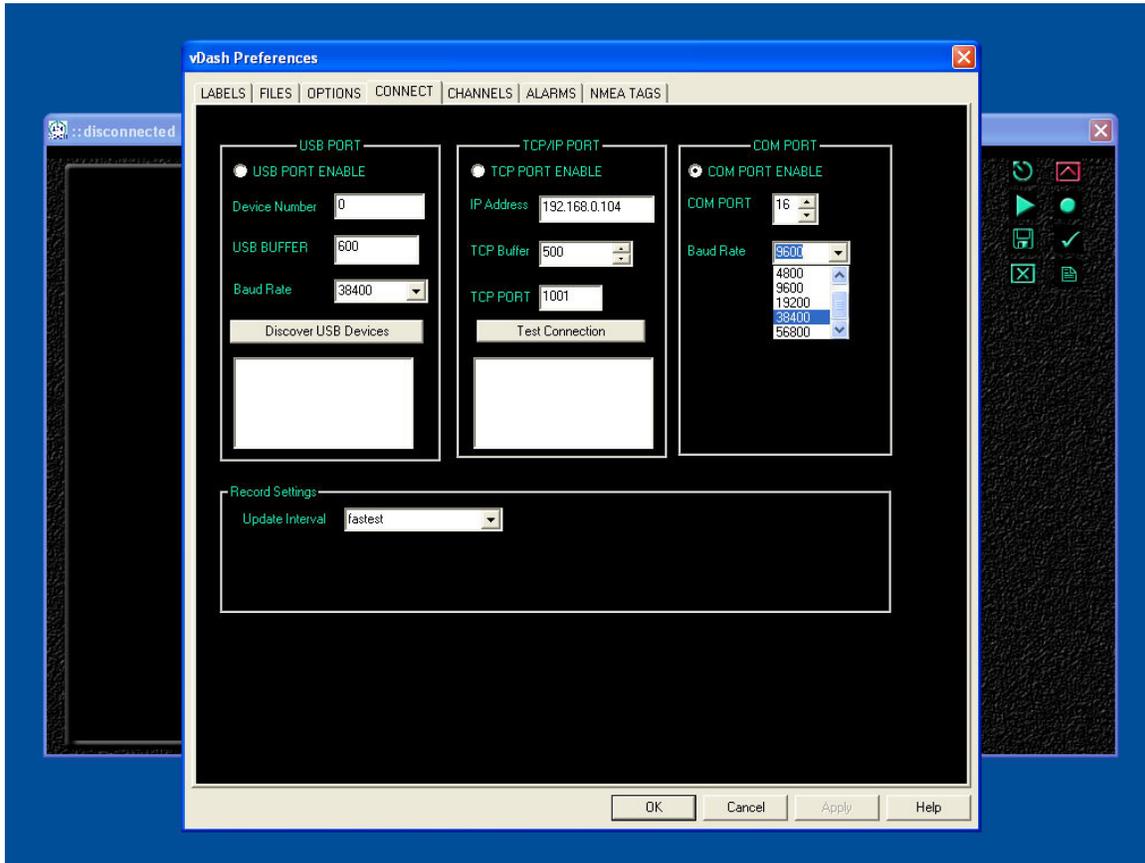
Once discovered, select the desired device from the list. The device number will automatically be entered for you. Be sure to select the correct Baud Rate (Communication Speed) for the interface being used. Improper Baud Rate selection will result in a blank screen when connected.



vDash USB Install

It is also possible to use the COM PORT option to connect since the USB Driver installs a SERIAL COM PORT. If you know the port number and Baud Rate, you can use this option to connect. Both options perform about the same with the COM PORT option being more compatible with older systems.

You must use the COM PORT connection method when performing a firmware update of any vGauge unit.



vDash USB Install



Once the proper connection settings are made, close the preferences dialog and use the connect button to start communication. If successful, you will see a CONNECTED message in the Title bar and the screen will update with selected gauges.

When connected to vGauge-Remote units, you will also see then current unit time in the Title Bar. The Connection Button will turn Green if connected to a unit.



If after connection, you see CONNECTED in the Title Bar but no screen updates, it is most likely a improper Baud Rate selection.

One Year Warranty

“We”, “our”, or “us” refers to **Chetco Digital Instruments**, the manufacturer of this product. “You” or “your” refers to the first person who purchases this product as a consumer item for personal, family, or household use.

We warrant this product against defects or malfunctions in materials and workmanship, and against failure to conform to this product’s written specifications, all for one year (1) from the date of original purchase by you. WE MAKE NO OTHER EXPRESS WARRANTY OR REPRESENTATION OF ANY KIND WHATSOEVER CONCERNING THIS PRODUCT. Your remedies under this warranty will be available so long as you can show in a reasonable manner that any defect or malfunction in materials or workmanship, or any nonconformity with the product’s written specifications, occurred within one year from the date of your original purchase, which must be substantiated by a dated sales receipt or sales slip. Any such defect, malfunction, or non-conformity which occurs within one year from your original purchase date will either be repaired without charge or be replaced with a new product identical or reasonably equivalent to this product, at our option, within a reasonable time after our receipt of the product. If such defect, malfunction, or non-conformity remains after a reasonable number of attempts to repair by us, you may elect to obtain without charge a replacement of the product or a refund for the product. THIS REPAIR, REPLACEMENT, OR REFUND (AS JUST DESCRIBED) IS THE EXCLUSIVE REMEDY AVAILABLE TO YOU AGAINST US FOR ANY DEFECT, MALFUNCTION, OR NON-CONFORMITY CONCERNING THE PRODUCT OR FOR ANY LOSS OR DAMAGE RESULTING FROM ANY OTHER CAUSE WHATSOEVER. WE WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO ANYONE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR OTHER INDIRECT DAMAGE OF ANY KIND.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty does NOT apply in the following circumstances: (1) when the product has been serviced or repaired by anyone other than us, (2) when the product has been connected, installed, combined, altered, adjusted, or handled in a manner other than according to the instructions furnished with the product, (3) when any serial number has been effaced, altered, or removed, or (4) when any defect, problem, loss, or damage has resulted from any accident, misuse, negligence, or carelessness, or from any failure to provide reasonable and necessary maintenance in accordance with the instructions of the owner’s manual for the product.

We reserve the right to make changes or improvements in our products from time to time without incurring the obligation to install such improvements or changes on equipment or items previously manufactured.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

REMINDER: You must retain the sales slip or sales receipt proving the date of your original purchase in case warranty service is ever required.

Chetco Digital Instruments, INC.
14377 Highway 101 South Unit C
Harbor, OREGON 97415
541-661-2051

VDASH SOFTWARE LICENSE AGREEMENT

THIS IS A LEGAL AGREEMENT BETWEEN THE END-USER WHO FIRST PURCHASES THIS PRODUCT AS A CONSUMER ITEM FOR PERSONAL, FAMILY, OR HOUSEHOLD USE (“YOU”) AND CHETCO DIGITAL INSTRUMENTS, INC., THE MANUFACTURER OF THIS PRODUCT. (“WE”, “OUR”, OR “US”). USING THE PRODUCT ACCOMPANIED BY THIS LICENSE AGREEMENT CONSTITUTES ACCEPTANCE OF THESE TERMS AND CONDITIONS.

1. This License Agreement applies to the microcode and one or more lookup tables that your product may contain. We refer to these singly as a “SOFTWARE”.
2. The SOFTWARE that your product may contain are licensed, not sold. We grant to you the nonexclusive, non-assignable right to use these SOFTWARE for monitoring sensor/sender data, but only as long as you comply with the terms and conditions of this License Agreement. We reserve the right to terminate this license if you violate any aspect of this License Agreement.
3. The SOFTWARE housed in your product are protected by the copyright notices appearing on the product or its screen(s). You may NOT modify, adapt, translate, reverse engineer, decompile, disassemble, rent, lease, or resell any SOFTWARE, and you may NOT create derivative works based upon any SOFTWARE or its contents.. Any unauthorized reproduction, use, or transfer of a SOFTWARE may be a crime and may subject you to damages and attorney fees.
4. This License Agreement will terminate immediately without prior notice from us if you fail to comply with or violate any of the provisions of this Agreement. Upon termination, you will promptly return all products containing one or more SOFTWARE to us.
5. Prices and programs are subject to change without notice.
6. This License Agreement shall be governed by the laws of the State of Oregon and comprises the complete and exclusive understanding between you and us concerning the above subject matter.

vDash USB Install

How to Obtain Service

We back your investment in quality products with quick, expert service and genuine replacement parts. If you're in the United States and you have questions, please contact the Factory Customer Service Department using our number listed below. You must send the unit to the factory for warranty service or repair. Please call the factory before sending the unit. You will be asked for your unit's serial number (shown above). Use the following number:

541-661-2051

U.S.A. only. Monday through Friday, except holidays.

Your unit is covered by a full one-year warranty. (See inside for complete warranty details.) If your unit fails and the failure is not covered by the original warranty, Chetco Digital Instruments has a flat-rate repair policy that covers your unit and accessories packed with the unit at the factory. There is a 180-day warranty on all non-warranty repairs from the factory, which is similar to the original warranty, but is for 180 days rather than one year. For further details, please call us at the above number.

Remember, non-warranty repairs are subject to Chetco Digital Instruments published flat rate charges and 180-day warranty.

CHETCO DIGITAL INSTRUMENTS, INC

BOX 5359

Brookings, OR 97415

541-661-2051

<http://www.chetcodigital.com>