vDash™

Version 2.6 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 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

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Introduction

Welcome

Thank you for purchasing a Chetco Digital Instruments product.

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

Once installed on your PC/Laptop, vDashTM 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, vDashTM provides real-time programming of any attached SeaGaugeTM or vGaugeTM 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.



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

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



Once in the CONTROL PANEL, double click the SYSTEM ICON



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



Once the Hardware tab is selected, click on the DEVICE MANAGER button in the first row.



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.



After identifying the proper USB SERIAL PORT, view the device properties by rightclicking 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.



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



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.

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



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.



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.

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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 <u>www.chetcodigital.com/vGauge/support.htm</u>.



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



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



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



Next, Select Install From Specific Location



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



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.

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To view any subfolders, click a plus sign above.	Cancel	

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

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	 Search for the best driver in these locations. 	
	Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.	
	Search removable media (floppy, CD-ROM)	
	Include this location in the search:	
	F:\development\parts\FTDI\CDM 2.04.06 WHQL C 👽 Browse	
	O Don't search. I will choose the driver to install.	
	Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.	
	< Back Next > Cancel	
🕀 🌨 Î	Processors	

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



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



It is a good idea it 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.

:: disconnected

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.

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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.

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val fastest	<u> </u>		

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.

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USB PORT ENABLE Device Number USB BUFFER Baud Rate 38400 Discover USB Devices Update Interval [astest Come of the come	



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 WARRANTYOR 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 nonconformity 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.

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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

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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.

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