



Order

Virtual Digital Instrumentation

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 - Create virtual digital dashboard
 - Display real-time sensor inputs using a variety of graphic formats
 - Configures any vGauge unit with an easy to use interface.
 - Remote data logging and real-time viewing on any Windows XP compatible PC/Laptop
- Monitor engine performance directly from your PC with Bluetooth wireless interface

Contact

- Design custom sensor calibration tables match any sender application
- NMEA 0183 input/output accepts GPS/SONAR data
- Stores instrumentation projects

vDash is a virtual digital <u>gauge</u> application for any Windows XP compatible PC or Laptop that allows creation of custom dashboards in real-time. Now get digital instrumentation display of a variety of engine performance parameters such as TACHOMETER, RPM, OIL PRESSURE, ENGINE TEMPERATURE, FUEL LEVEL, VOLTMETER, MAIN and AUXILIARY BATTERY, and much more on your laptop or PC. **vDash** will work with any **vGauge** unit . Use Bluetooth technology and NMEA 0183 formats to transmit gauge readings to laptops and PDA's.

vDash contains a library of <u>eight graphic display modes</u> which can be placed on a virtual dashboard using <u>simple mouse</u> clicks. <u>Sensor names</u> are assigned by entering them into configuration dialogs. Up to 8 dashboard configuration <u>screens</u> can be created to show instrumentation data in easy to read formats. Custom sensor <u>calibration tables</u> can be loaded and modified using on screen dialogs. Set min/max <u>alarms</u> for each sensor value with the click of the mouse

vDash saves all configuration data into a series of text files that can be downloaded to any **vGauge** unit in real-time using built-in <u>FLASH memory</u> <u>programming</u> algorithms. Configuration data can also be saved in project files to allow multiple applications such as street driving and off-road.

vDash accepts real-time data via built-in serial port or wireless Bluetooth connections for display and data logging. <u>NMEA 0183</u> integrated instrumentation

sentences (\$IIXDR) ensure compatibility. Bluetooth wireless connectivity allows a laptop or PDA to receive data up to 100 feet away. The Bluetooth wireless capabilities allows you laptop of PC to located in a convenient location while a **vGauge** unit is mounted at an alternate location. View live instrumentation data without wires.

vDash can be programmed to match your existing sensors/senders. Simply attach to a computer via serial cable or wireless ports - and download a text file to recalibrate. All display values are user programmable by typing values in any text editor and downloading to the device. Unit can be upgraded in the field without removing from the dash. Use **vDash** to test out new calibrations instantly before downloading to **vGauge** No matter what your current sender/sensors are currently installed - **vDash can adapt**.

vDash will work with any vGauge - even the display less remote unit. Simply install the remote unit near sensor locations and attach to PC/Laptop for live dashboard display and data logging in a compact - cost efficient package.
vDash will replace 16 mechanical instruments in a fraction of the space. Install multiple remote vGauge units in different vehicles and simply take your laptop to view and record data.

Transform your dash into the digital age.

Virtual Dashboard Utility for PC





Start and Stop real-time data capture to selected file. Also enables playback of capture log.







Saves current display configuration to programming files



Specify the vGauge device to connect to and start display or data logging



Sends configuration text files to the unit for reprogramming



Scrolls to next virtual dashboard page. 8 maximum pages

Configuration Pages

Enables a series of configuration dialogs for calibration tables, sensor labels, alarms, and more.



Clears all selections on current virtual dashborad page

Port Select

Select the serial port number to connect through. Also used to select Bluetooth Device since they behave like a serial port.

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Capture Interval

Set the real-time data capture interval. Can be from 1 second to 30 Minutes per sample.

Graphic Display Modes

Digital Dial

A 16 segment dial with needle rotating around perimeter as signal increases. A 4 character digital readout of sensor values is in the center and a user defined sensor label is below.

Large Dial

A 16 segment dial with a fill bar rotating around perimeter as signal increases. A 4 character digital readout of sensor values is in the center and a user defined sensor label is below.

Digital Data

A 8 character user defined sensor label and a 6 character sensor readout from calibration table

Small Data

SA 8 character user defined sensor label and a 6 character sensor readout from calibration table

Bar Graph

A 8 character user defined sensor label and a 6 character sensor readout from calibration table followed by a 32 segment bar graph as signal increases

Histogram

A 8 character user defined sensor label and a 6 character sensor readout from calibration table Histogram is a 16 segment bar graph as signal increases and 16 position time plot from left to right.











194		TEMP2### > FUEL ### > VOLT1 ## > VOLT2 ## >	DATA	
		VOLT3 ## OIL ### JET ### SPEED # COURSE # TIME #	BAR DIAL SMALL LARGE NONE	
Τ € MP 2		BEAR # ► TIME # ► RANGE ## ► TAC ## ► RPM #### ►		

Virtual Dashboard Configuration

To place display graphic element on virtual dashboard page, simply right click mouse button and pick the sensor label and display mode. The selected item will appear at the grid point of the mouse position.

Virtual Dashboard Utility for PC



Graphic display modes can be mixed in any combination to create the desired display format.

User defined sensor labels



User defined display labels are up to 8 characters each. Special "#" symbol is used to aligning spaces. Just type in sensor label to match calibration table

Customized calibration tables

Display Labels F	le.					
DisplayLables	CAL TABLE				ave ave	
Page File Nam CALTABLES\	Address	A000			ave	
Calibration Tab	Location	Value	Index	Comment	~	
H:\developme	000	SHORT#	3F	999 deg F#, 000"	ave	
Calibration Tab	001	336F# 336F#	3F 3F	336 deg F#, 001" 336 deg F#, 002"		
CALTABLES	003	336F#	3F	336 deg F#, 003"	ave	
Calibration Tab	004	311F# 293F#	3E 3E	311 deg F#, 004'' 293 deg F#, 005''		
CALTABLES	006	279F#	3E	279 deg F#, 006"	ave	
Calibration Tab	007	CAL TABL	E EDIT	000 1 54 0070		
CALTABLES	009	CAL TABL				
Calibration Tab	010	Location	009			
CALTABLES\	012	and the second				
Calibration Tab	013	Value	250F#			
CALTABLES	014					
Calibration Tab	016	Index	3D			
CALTABLES\	017					
Calibration Tab	019	Comment	250 d	leg F#, 009''		
CALTABLES						
Log Data File	OK	0K			Cancel	
CALTABLES	caulaugente	013			Canoor	

Calibration tables can be edited directly from within application and changes saved to text files for later update. vDash can lookup values from local calibration tables or display data received from attached vGauge units.

Real-time FLASH memory programming

Display Labels File	
CALTABLES\SeaGaugeX4\DisplayLabels.txt	FLASH
Page File Name	
CALTABLES\SeaGaugeX4\PageFormatPositions20X4_2.txt	FLASH
Alarms File	
CALTABLES\SeaGaugeX4\AlarmsTable.txt	FLASH
Channels File Name	FLACU
LALTABLES (Seaciaugex4) Channels Table.txt	FLASH
uptions File Name CALTABLES\SeaGaugeX4\OptionsTable txt	FLASH
Calibration Table 0 File Name	
CALTABLES\SeaGaugeX4\VDO_TEMP_250_GAUGE.txt	FLASH
Calibration Table 1 File Name	
CALTABLES\SeaGaugeX4\Cal_Table_1.txt	FLASH
Calibration Table 2 File Name	EL LOUL
CALTABLES/SeablaugeX4/Cal_Table_2.txt	FLASH
Jalibration Table 3 File Name CALTABLES/SeaGaugeX4/Cal_Table_3 tvt	FLASH
alibration Table 4 File Name	TEASH
CALTABLES\SeaGaugeX4\Cal_Table_4.txt	FLASH
Calibration Table 5 File Name	
CALTABLES\SeaGaugeX4\Cal_Table_5.txt	FLASH
Calibration Table 6 File Name	
CALTABLES\SeaGaugeX4\Cal_Table_6.txt	FLASH
Jalibration Table 7 File Name	FLACH
LALTADLES VSBACIAUGEX4VLALTADIE_7.(X)	FLASH

All configuration data is stored in text files for FLASH memory programming of attached vGauge units. To update unit, simple click the appropriate FLASH button.

Multiple alarm settings

Seagauge Pre	eferences				
LABELS FIL	es opions chann	ELS ALARMS NME	A TAGS		
TEMP1###	95 ÷ > 178##	255 ; < OF	F 🔽 In	vert	
TEMP2###	0 🕂 > 0FF	255 📫 < OF	F 🔽 In	vert	
FUEL ###	0 ÷ > OFF	255 🕂 < OF	F 🔽 İn	vert	
VOLT1 ##	0 ÷ < OFF	255 ÷ 🔿 OF	F In	vert	
VOLT2 ##	0 🕂 < OFF	255 🔶 > OF	F In	vert	
VOLT3 ##	0 ÷ < 0FF	255 ÷ > 0F	F In	vert	
OIL ###	0 🕂 < OFF	255 ÷ 🔿 OF	F 📃 In	vert	
JET ###	0 ÷ < OFF	255 ÷ > 0F	F In	vert	
OPEN	CALTABLES\SeaGaug	eX4\AlarmsTable.txt		SAVE	
		ОК	Cancel	Apply	Help

Min/Max alarms can be set for each of the 8 sensor inputs by scrolling the associated selector. Values from calibration tables are displayed to show trip points. Setting alarm index to max (255) or min (0) disables the alarm. Alarm vales are stored in selected text file for later loading into unit.

NMEA data display

Seagauge Preferences				
LABELS FILES UPIUNS CH	ANNELS	NMEA TAUS		
NMEA 0: SPEED #	\$GPRMC,	•	7 🕂	
NMEA 1: COURSE #	\$GPRMC,		8	
NMEA 2: TIME #	\$GPRMC,	•	1 📑	
NMEA 3: BEAR #	\$GPRMB,	•	11 🕂	
NMEA 4: TIME #	\$GPRMC,	•	0 ÷	
NMEA 5: RANGE ##	\$IIXDR,G	•	0	
UTC Time Adjust 8 📑 Hour Tac Adjust 0 📑	0 • 9 •	52		
	OK	Cancel	Apply	Help

User defined NMEA tags can be selected for data parsing. Drop-down menus pick the tag while the number represents location index within the tag to extract data field. If displaying UTC time, an optional hour offset can be added to adjust for local time. The built-in hour tachometer can be reset to a specified start time.

vGauge configuration

Seagauge Preferences		×
LABELS FILES OPIONS CHANNELS	ALARMS NMEA TAGS	
Display Format ○ 24×2 ○ 20×4 ○ 240×128	Analog 8 🛁 NMEA 4 🚍	
Command Input 💿 Serial 0 👔	Serial Input Mode	
Data Input 💿 Serial 0 🔘	Serial 1 Master	
Data Out 💿 Serial O 🔘	Serial Slave	
Baud Rate 💽 9600 (4800	
Pulse 0- Input Enabled 1X Edge O High O Low Scale 20 Time 75 Alarms O Enable O Active High O Disable O Active Lov	Pulse 1 Input Disabled Edge High Low Scale 20 3 Time 75 3 Histogram Time Constant 0 3	
OPEN CALTABLES\SeaGaugeX4	\OptionsTable.txt SAVE	
	OK Cancel Apply Help	

All vGauge options can be set from preference dialog and saved to selected file for later loading onto attached unit. The number of virtual display pages and screen size is set from this dialog.