



# vDASH

## Virtual Digital Instrumentation

Products Support Order Contact

### Virtual Digital Instrumentation

- 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
- 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 gauge 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 eight graphic display modes which can be placed on a virtual dashboard using simple mouse clicks. Sensor names are assigned by entering them into configuration dialogs. Up to 8 dashboard configuration screens can be created to show instrumentation data in easy to read formats. Custom sensor calibration tables can be loaded and modified using on screen dialogs. Set min/max alarms 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 FLASH memory programming 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. NMEA 0183 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 or PC to be 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.

## vDash Specifications

### Virtual Dashboard Utility for PC



#### Capture:

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

#### Set:

Remote control of attached vGauge SET button

#### Save

Saves current display configuration to programming files

#### Connect:

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

#### Flash:

Sends configuration text files to the unit for reprogramming

#### Scroll:

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.

#### Clear Page

Clears all selections on current virtual dashboard 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.

## vDash Specifications

### 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.



## vDash Specifications

### 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.

## vDash Specifications

### Virtual Dashboard Utility for PC



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

## vDash Specifications

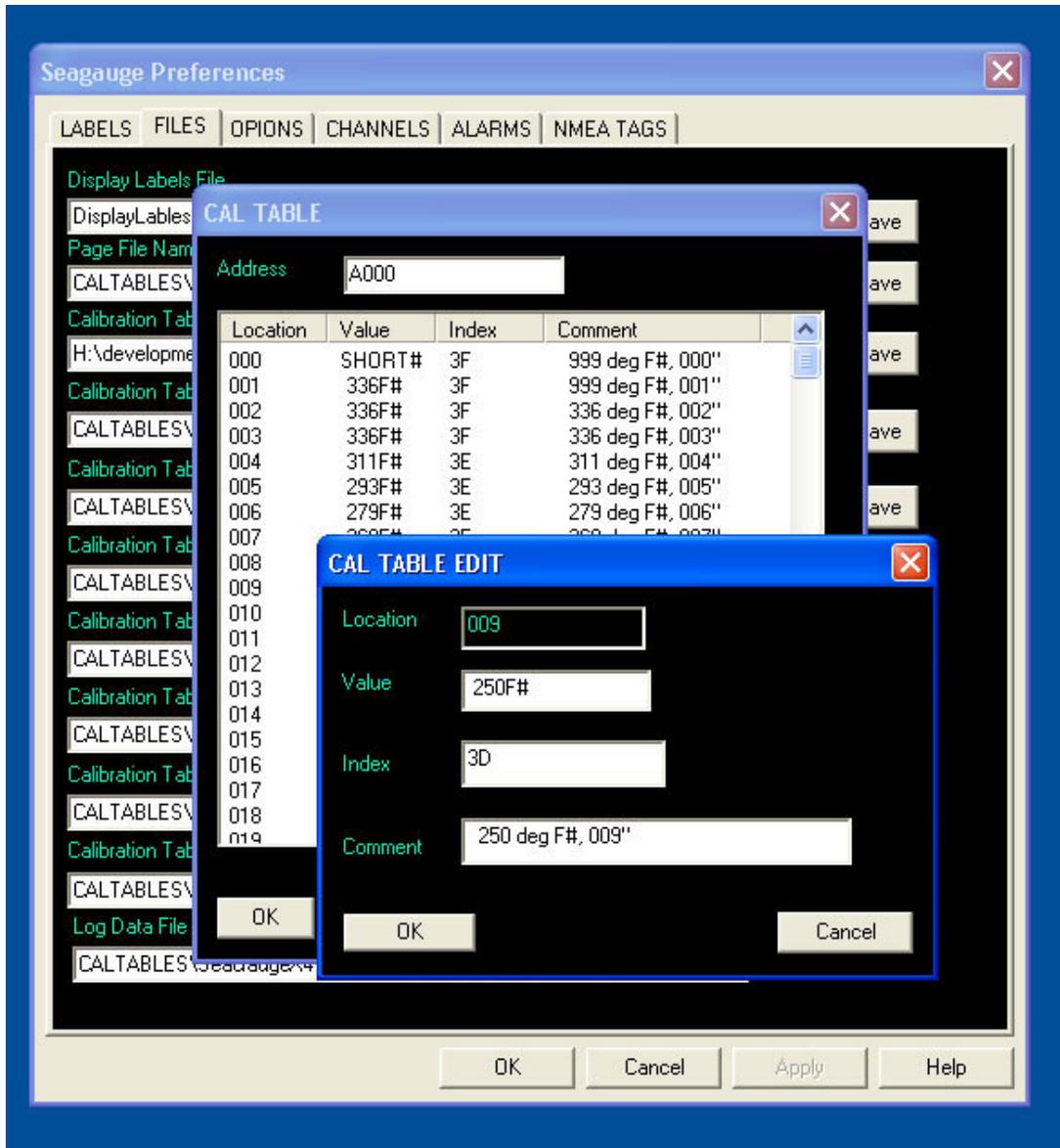
### User defined sensor labels

Display Label	Input	NMEA Label	Input
Display Label 0	TEMP1###	NMEA Label 0	SPEED #
Display Label 1	TEMP2###	NMEA Label 1	COURSE #
Display Label 2	FUEL ###	NMEA Label 2	TIME #
Display Label 3	VOLT1 ##	NMEA Label 3	BEAR #
Display Label 4	VOLT2 ##	NMEA Label 4	TIME #
Display Label 5	VOLT3 ##	NMEA Label 5	RANGE ##
Display Label 6	OIL ###	PULSE Label 1	TAC ##
Display Label 7	JET ###	PULSE Label 0	RPM #####

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

## vDash Specifications

### Customized calibration tables



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.

## vDash Specifications

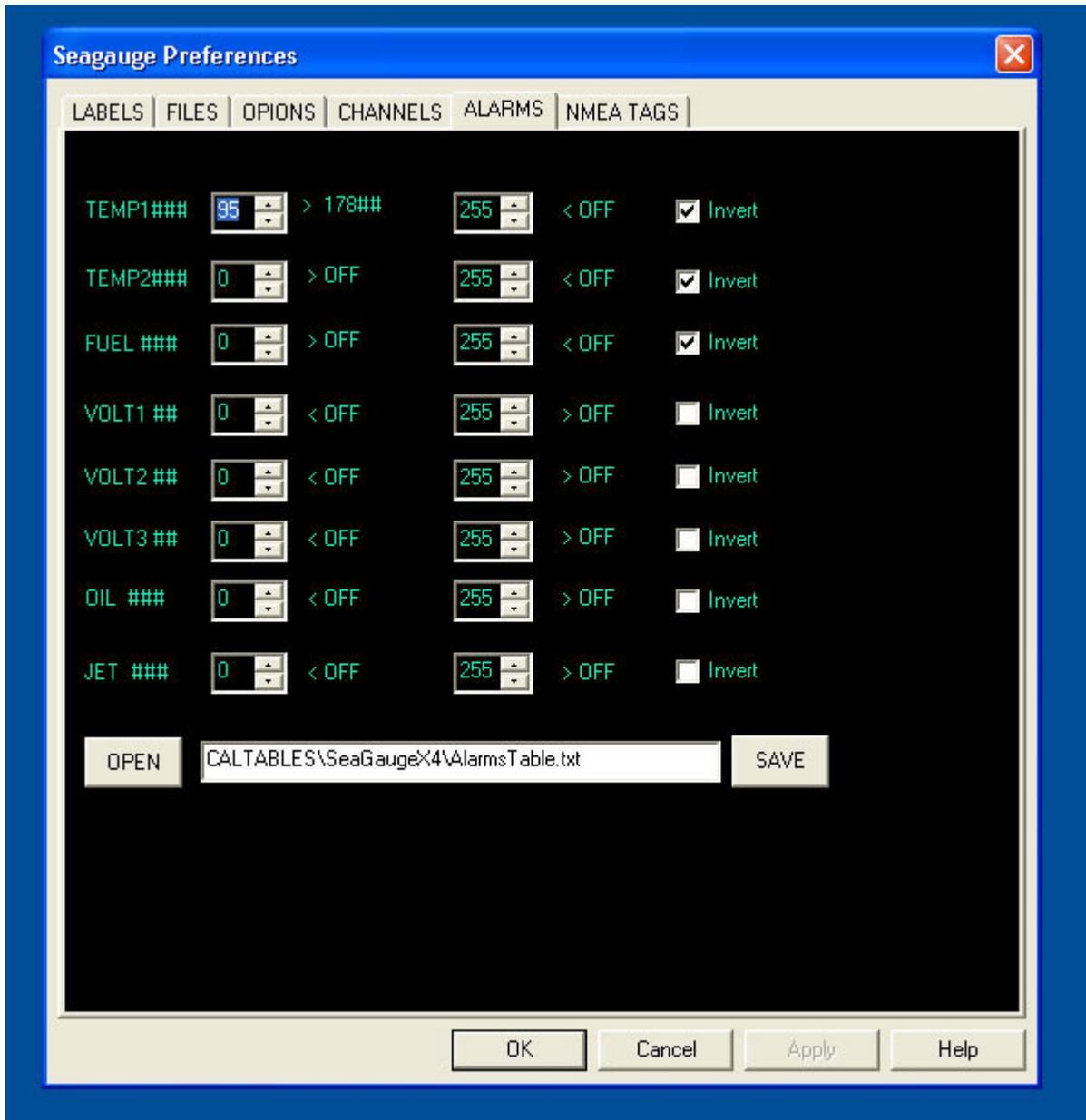
### Real-time FLASH memory programming



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.

## vDash Specifications

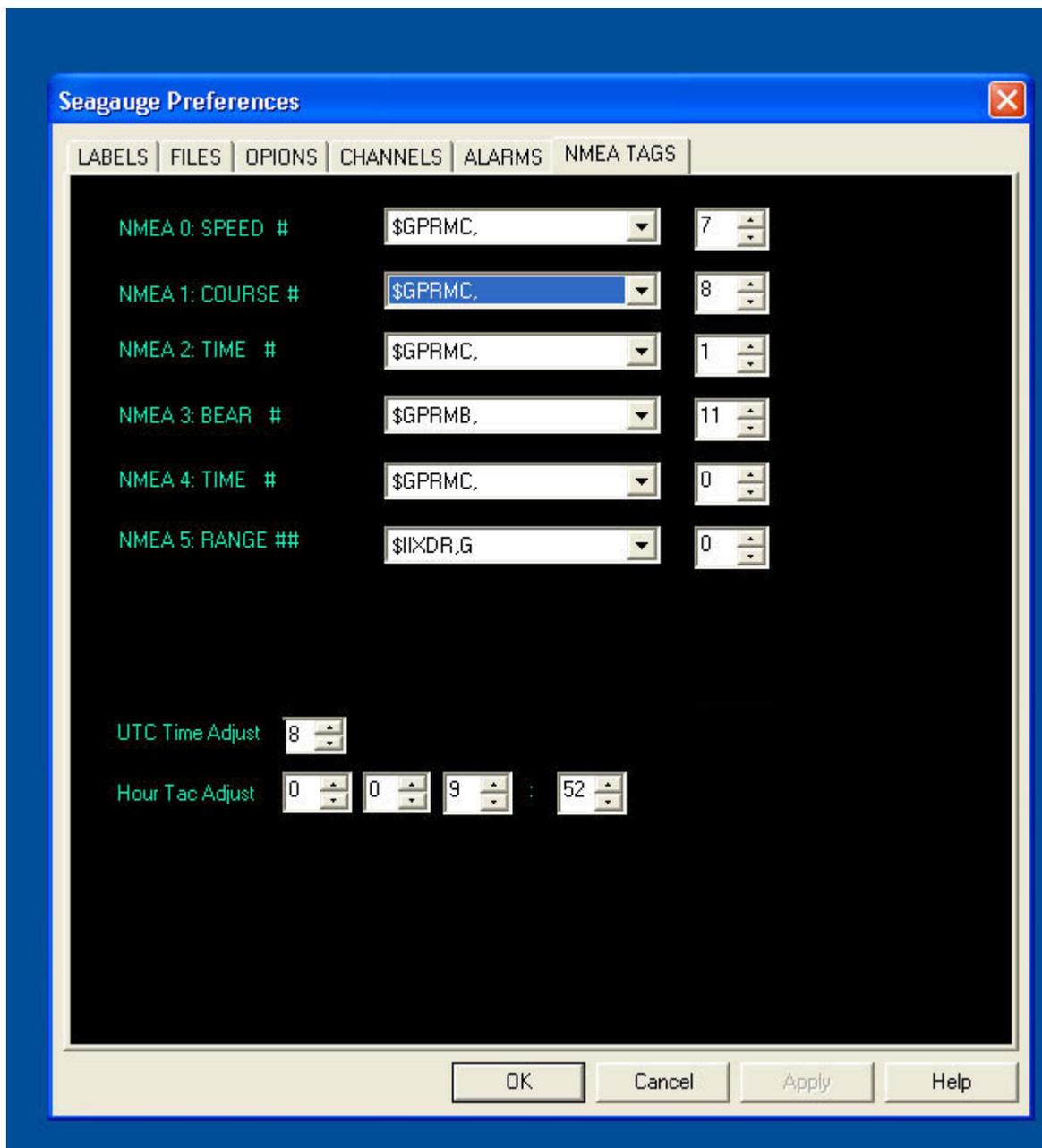
### Multiple alarm settings



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 values are stored in selected text file for later loading into unit.

## vDash Specifications

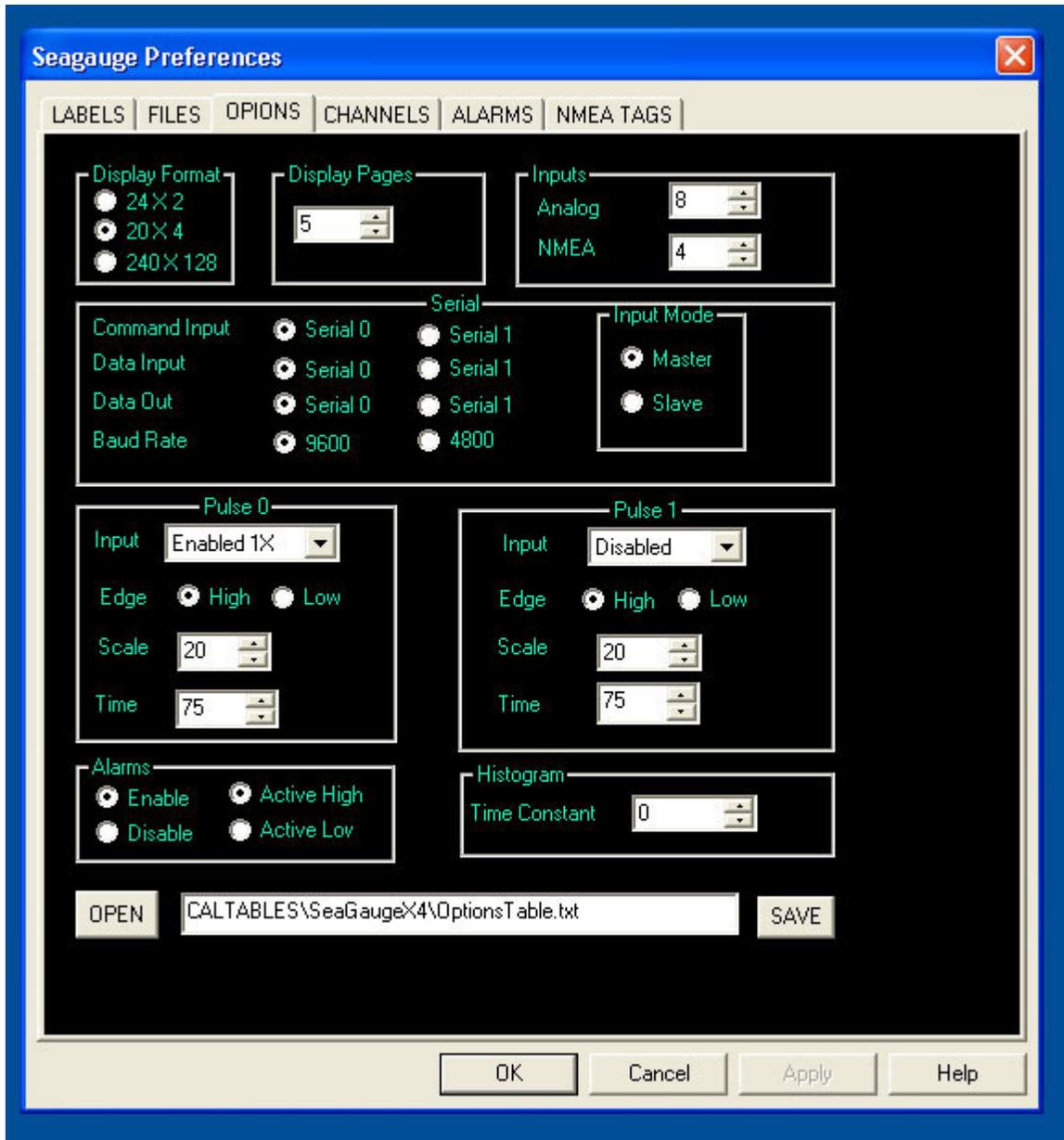
### NMEA data display



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.

## vDash Specifications

### vGauge configuration



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.