

# V\_Net Manifold Vacuum/Boost Sensor Module

Part Number 220-VP-PT-BVAC

## Module Configuration Setup:

**Module Type:** SC\_TI\_PRESS

**Serial Number:**

**Channel Name:** Manifold Vac/Boost

**Channel Options:**

**V\_Net ID:** Manifold Press x206

**Sensor Type:** 30 PSI - 30 in. Hg

**V\_Net Update Rate:** 50 /second

**Logger Sample Rate:** 50 /second

**Module Record Rate:** 25 /second

**Sensor Scaling:**

A  1.8  will become  0

B  4.5  will become  30

**Graph Scaling:**

**Min Value:** 30 In. Hg    **Max Value:** 30 PSI

**Digits Before:** 3        **Digits After:** 1

This module is designed to measure both pressure and vacuum within the range of 30 PSI and 30 inches Hg. When, in reference to the atmosphere, there is pressure applied to the transducer the data units will be in PSI and when there is vacuum applied the data units will be in inches of Hg.

### Sensor Installation:

Select a location to install the sensor element such that the wires connecting the sensor to the V\_Net connector module can be routed safely, avoiding heat sources (exhaust manifold) and the high voltage ignition wires.

Install the pressure sensor element into the manifold using an 1/8 inch pipe thread adapter. Avoid installing near heat sources and high voltage ignition wires. Be sure to use an appropriate pipe thread sealant to insure no fluid leakage occurs during operation. Tighten securely.



### Module Installation:

The V\_Net connector module can be inserted at any location in the V\_Net cable in your vehicle. Select locations where the connector module can be mounted safely. Avoid mounting near heat sources and high voltage ignition wires. The connector module must be mounted in a location the temperature does not exceed 185 degrees or the module will be damaged.

Route and secure the sensor cable from the module and connect the sensor element. If there is excess cable the cable can be shortened using connector kit P/N 810-CN-TI3P. You should complete the installation and verify operation before shortening the cable.



### Module Setup:

The module has been factory configured as described in the setup box located at the top of this page. No further setup is required to begin using the module. In stand-alone V\_Net system you must insure, however, that no other modules in your system have been assigned to the same V\_Net ID as this module. If you already have a module in your system assigned to this ID you will either need to change the ID as described on the back of this setup sheet or exchange this module for one programmed with an appropriate ID.

If you are using the RacePak DataLink program to configure your V\_Net system or to upload data from the system using a V-Net Series data logger you will need to update your car configuration file before you will be able to access the information from this module. Please refer to the setup instructions on the back of this installation sheet.

## Software Setup and Module Configuration

Before you can use this module as an upgrade to an existing a V-Net Series data logger you will need to update the Car Configuration File in your PC. To perform this step you will need to connect the data logger to your PC using the units serial interface cable (See your units instruction manual for details). Next start the RacePak DataLink program. If you selected your car configuration file as the default configuration file, the file will be opened and the file tab for the car configuration file will be selected. If it is not, open your car configuration file by selecting the **Open Car Configuration** menu item located in the **Files** main menu selection.

Next apply power to your the board system, wait 10 seconds and select the **Read VNET Config** menu item located in the **Edit** main menu selection. The DataLink program will read in the configuration of your system. If everything works properly a new channel button, “Man Press”, will be added to the configuration file.

However, if the new button is captioned as the module serial number (example: SN\_12000), you have two modules in your system programmed using the same V\_Net ID “Man Press”. You must change the V\_Net ID on one of the modules to something else. If you cannot find an appropriate V\_Net ID in the list to match what the module is measuring you can use one of the User Custom ID’s found under the V\_Net ID list.

To edit the setup parameters on this sensor module, position the mouse cursor over the channel button and click the right mouse button. The VNET Input Channel Parameters dialog box will be displayed. A Portion of this dialog box is show below.

Locate the box labeled **Unit Serial #**. Make sure the serial number is the same as the serial number of the module as shown in the module configuration box on the opposite side of this installation work sheet. If it is not, you are not editing the correct channel/sensor module. Check the other channel buttons to locate the correct sensor module.

Name: Man Press      Type: SC\_TI\_PRESS

Unit Serial #: 11092      Vnet ID: Manifold Pressure x206

Input Number: N/A      Sensor: 30 PSI - 30 In. Hg G

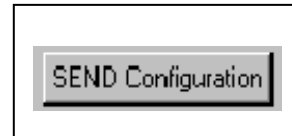
SINGLE CHANNEL TI PRESSURE MODULE SETUP INSTRUCTIONS:

This channel represents a single channel TI pressure module connected to your V\_Net System. Single channel pressure modules allow you to connect a TI type pressure sensor such as an oil, brake, manifold boost or fuel pressure sensors to your system. Once connected the information from the sensor is available for use by the remainder of the V\_Net System for display, recording, or control.

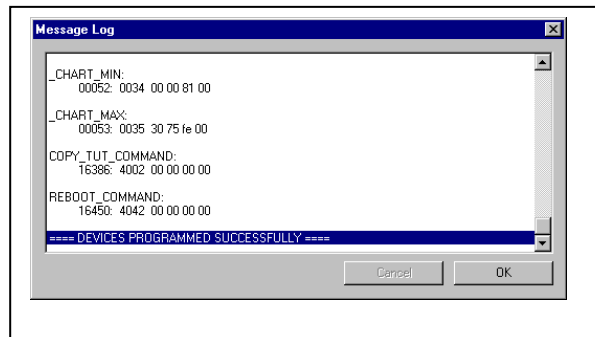
These modules are also capable of recording the data measured by the

Locate the text box labeled **Single Channel TI Pressure Module Setup Instructions**. This text box provides online instructions for modifying the setup of this module. Read the instructions and modify the setup as desired. (Please note the scroll bars located on the left-hand portion of the text box are used to scroll through the instructions).

When you have finished editing the configuration on your PC, you will need to send the information to the sensor module. Be sure the serial interface cable is connected to your V50 unit or data logger and power is applied to the system. To send the information position the mouse cursor over the **Send Configuration** button and click the left mouse button. The progress box as shown to the left will be displayed.



When finished sending the message “**Device Programmed Successfully**” should be displayed at the bottom of the progress box. If you receive an error message, turn power to the system off and then back on and repeat the send configuration process. If problems persist, check the troubleshooting section in your manual and then contact RacePak.



Update the Module Configuration Setup Box on the front of this worksheet with the new setup configuration.

## IMPORTANT:

**Save this Installation Worksheet in your System Manual in Appendix V. This worksheet is part of your system documentation. You may need this worksheet when modifying or trouble shooting your system.**