

# V\_Net Throttle Position Sensor Module

Part Number: 230-VM-TPS

## Module Configuration Setup:

**Module Type:** SC\_ANALOG

**Serial Number:**

**Channel Name:** Throttle Pos

**Channel Options:**

**V\_Net ID:** x30B

**Sensor Type:** TPS(Potentiometer)

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

**Logger Sample Rate:** 50 /second

**Module Record Rate:** 25 /second

**Sensor Scaling:**

A   0   will become   0  

B   5   will become 100

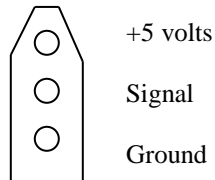
**Graph Scaling:**

**Min Value**   0   **Max Value** 100

**Digits Before**   3   **Digits After**   2  

## Sensor Installation:

Due to the wide variety of throttle position sensor mounting requirements Racepak does not provide throttle position sensors. We recommend you visit your local auto parts store and look over there their catalogs and inventory to pick out a TPS that will best fit you mounting requirements. The overall resistance of the TPS is not critical. Most sensor will have 5k Ohm to 50k Ohm output when measured with an Ohm meter. The pin out of the wire connector provided to interface with the TPS is as follows:



Incorrectly wiring the TPS should not cause any damage, however, if you are not sure how to connect the module to your TPS you may want to send us the sensor to properly installed the connector.

## 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 TPS. Check the throttle movement carefully to ensure nothing can interfere with the throttle return.

## Module Setup:

This module has been factory configured to read and display the 0-5 volt signal from the TPS. In a stand-alone V\_Net system you must insure 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 V50 Record/Playback module or a V300 or V500 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.

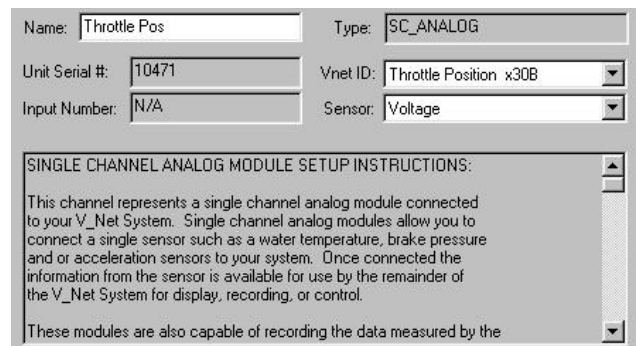
## Software Setup and Module Configuration

Before you can use this module as an upgrade to an existing V50 Module, V300 or V500 Data Logger you will need to update the Car Configuration File in your PC. To perform this step you will need to connect the V50 module or 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 the 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, "Throttle Pos", 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 "Throttle Pos". You must change the V\_Net ID on one of the modules to something else like "WOT". 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: Throttle Pos      Type: SC\_ANALOG

Unit Serial #: 10471      Vnet ID: Throttle Position x30B

Input Number: N/A      Sensor: Voltage

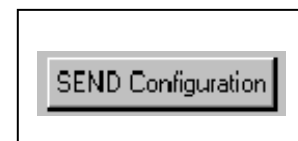
SINGLE CHANNEL ANALOG MODULE SETUP INSTRUCTIONS:

This channel represents a single channel analog module connected to your V\_Net System. Single channel analog modules allow you to connect a single sensor such as a water temperature, brake pressure and or acceleration 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.

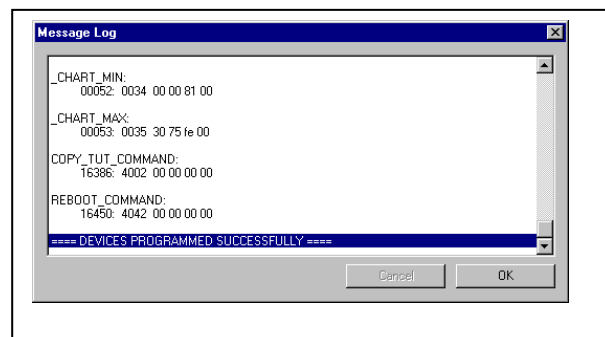
These modules are also capable of recording the data measured by the

Locate the text box labeled **Single Channel Analog 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.**