

# V\_Net Head Temperature Thermocouple Module

Part Number 220-VP-TC-HEADL

## Module Configuration Setup:

**Module Type:** SC\_TEMP600

**Serial Number:**

**Channel Name:** L Head Temp

**Channel Options:**

**V\_Net ID:** Left Head Temp

**Sensor Type:** Type K Thermocouple

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

**Logger Sample Rate:** 50 /second

**Module Record Rate:** 25 /second

**Sensor Scaling:**

A   0   will become   0  

B  600  will become  600 

**Graph Scaling:**

**Min Value**   0   **Max Value**  600 

**Digits Before**   3   **Digits After**   0  

## Sensor Installation:

Install the sensor by bolting the ring terminal to the head where you want to measure the temperature.

## 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 to the thermocouple sensor. The interface cable can be shortened to remove excess cable. Before you shorten the cable, complete the module installation and be sure the module is functioning properly then shorten the cable. If you shorten the cable be sure to connect the wires to the same terminals on the connector. In addition be sure to put each terminal screw back into the same terminal lug. Each wire in the cable, terminal lug, and screw is made of a different metal. Mixing them will cause inaccurate readings.



## 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 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 with a V300 or V500 Data Logger you will need to update your 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 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.

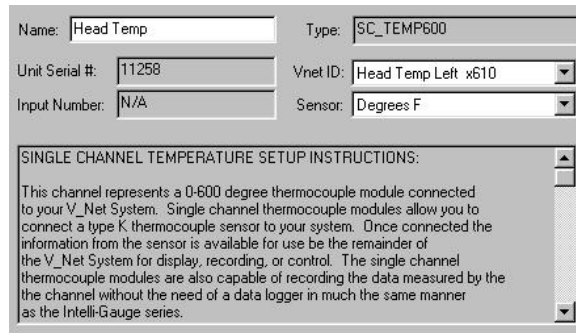
Next apply power to your on board system, wait 10 seconds and select the **Read VNET Config** menu item located in the **Edit** main menu selection. The DataLink program will read in the configuration of your system. If everything works properly, a new channel button will be added to the configuration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

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, **“L Head Temp”**. You must change the V\_Net ID on one of the modules to something else like **“R Head Temp”**. 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.

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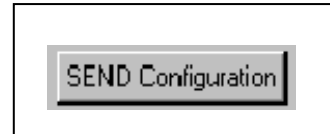
Locate the box labeled **Unit Serial #**. Make sure the serial number is the same as the serial number of the module as shown in the module configuration box on the opposite side of this installation work sheet. If it is not, you are not editing the correct channel/sensor module. Check the other channel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



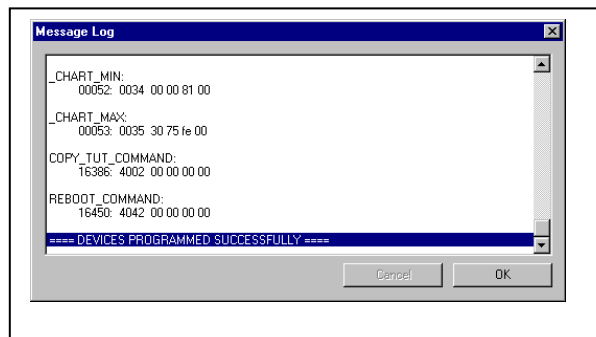
Locate the text box labeled **Single Channel Temperature Setup Instructions**. This text box provides online instructions for modifying the setup of this module. Read the instructions and modify the setup as desired. (Please note the scroll bars located on the left- hand portion of the text box is used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

### **Sending the Configuration to the module:**

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 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.



## **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.**