Part Number: 230-VM-EFIVIPEC

ViPEC V44/V88 Interface Module

Module Configuration Setup:

Module Type: ViPEC   **Serial Number: 501140**

Sample Rate: All channels set to 20 samples per second:

Channel Number	Channel Name	V_Net ID #	EFI Variable	Default Units
1	EFI Engine Rpm	0x532	Engine Rpm	RPM
2	EFI MAP Press	0x53C	Manifold Abs Pressure	PSI
3	Barometer	0x581	Barometer	kPa
4	EFI TPS	0x538	Throttle Position	%
5	Inj Duty Cycle	0x521	Injector Duty Cycle	%
6	Inj Pulse W	0x520	Injector Pulse Width	ms
7	EFI H2O Temp	0x536	Water Temperature	ECU Selectable
8	EFI Intake Temp	0x529	Intake Air Temp	ECU Selectable
9	EFI Voltage	0x52A	ECU Supply Voltage	V
10	EFI Gear	0x551	Gear	
11	Inj Timing	0x53D	Injector Timing	Deg BTDC
12	Ing Timing	0x288	Ignition Timing	Deg TDC
13	E1-Knock	0x530	Knock Level	
14	Custom 1	0x501	User Defined Channel 1	
15	Custom 2	0x502	User Defined Channel 2	
16	Custom 3	0x503	User Defined Channel 3	
17	Custom 4	0x504	User Defined Channel 4	

Description:

The ViPEC Interface Module is a used to convert the serial data stream of a ViPEC V44 or V88 ECU into a CAN bus data stream compatible with the RacePak V_Net System. Data from the module is then available for use with the full range of RacePak V_Net devices including on board displays, real time telemetry, and data logging applications.   The module also provides setup capability to accommodate selection of scaling units, data logging sample rates and even custom sensor calibration. Up to 17 different ECU data channels can be monitored and recorded.

Module Installation:

The V_Net connector module can be inserted at any location in the V_Net data bus 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.

Vipec Connection:

This module has been designed to interface directly to the ViPEC ECU via the RS-232 serial connector on the Module. Plug the VNet module in to the connector labled CAN on the ViPEC ECU. ViPEC firmware version 4.2.0 or higher is required.

Software Setup and Module Configuration

Before you can use this module with a V-Net Series 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 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 for each of the 17 data channels shown on the previous page.

If a new button is added, however, the button is captioned per the unit serial number (example: **SN 1001**), you have sensors in your system programmed to with the same V_Net ID as one of the channels in this module. You must change the V_Net ID on one of the sensors. In the case of duplicate sensors measuring the same value, either remove the duplicate module or change the V_Net ID on one of the modules to the Engine 2 (E2) parameters.

To edit the setup parameters on any of the data channels, 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 Input Number text box this value corresponds to the data channel from the module as outlined on page 1. If you change any of the default configurations for the channel be sure you are editing the proper input channel as pointed to by this value.

Locate the text box labeled **ViPec Interface Module 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.
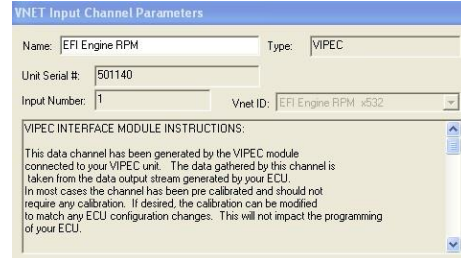
When you have finished editing the configuration on your PC, you will need to send the information to the sensor module. Be sure the serial interface cable is connected to your data logger and power is applied to the system. To send the information position the mouse cursor over the **Send Configuration** button and click the left mouse button. The progress box as shown to the left will be displayed.
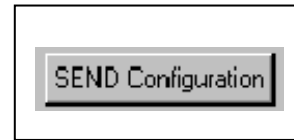
When finished sending the message "**Device Programmed Successfully**" should be displayed at the bottom of the progress box. If you receive an error message, turn power to the system off and then back on and repeat the send configuration process. If problems persist, check the troubleshooting section in your manual and then contact RacePak.
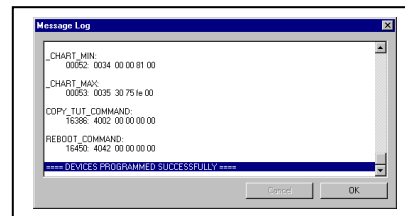
IMPORTANT INFORMATION FOR V300 AND V500 DATA LOGGERS:

V300 Data Loggers Require Firmware Version 36 or Higher.
V500 Data Loggers Require Firmware Version 53 or Higher.

If you do not know how to check the firmware version currently installed in your V300 or V500 data logger, please call us 949-709-5555 for assistance.

If you have a V300 or V500 data logger and do not meet the minimum firmware version requirement, you will need to send your data logger to Racepak to have the firmware upgraded.

All other Racepak data loggers, including V300SD, will work with all firmware versions and do not require any firmware updates to work properly with this module.