

RacePak V-Net Four Channel High Speed Shock Module

Part Number 230-VM-4ANA7HS

Module Configuration Setup:

Module Type: G2XP_ANALOG

Serial Number:

Input Number: 1

Description Right Rear Shock Position
Channel Name: RR Shock Pos
Vnet ID: Shock Travel RR x3A7
Sensor: 0-8 Inch travel
V-Net Update Rate 250 SPS

Input Number: 2

Description Left Rear Shock Position
Channel Name: LR Shock Pos
Vnet ID: Shock Travel LR x3A6
Sensor: 0-8 Inch travel
V-Net Update Rate 250 SPS

Input Number: 3

Description Right Front Shock Position
Channel Name: RR Shock Pos
Vnet ID: Shock Travel RR x3A5
Sensor: 0-4 Inch travel
V-Net Update Rate 100 SPS

Input Number: 4

Description Left Front Shock Position
Channel Name: LR Shock Pos
Vnet ID: Shock Travel LR x3A4
Sensor: 0-4 Inch travel
V-Net Update Rate 100 SPS

IMPORTANT INFORMATION

Sportsman Data Recorder requires firmware version 6 or greater before connecting the shock module.

If your Sportsman data logger does not meet the minimum firmware version requirement, you will need to contact Racepak.

This module's channels will not count against the Sportsman's V-Net channel allowance.

Module Installation:

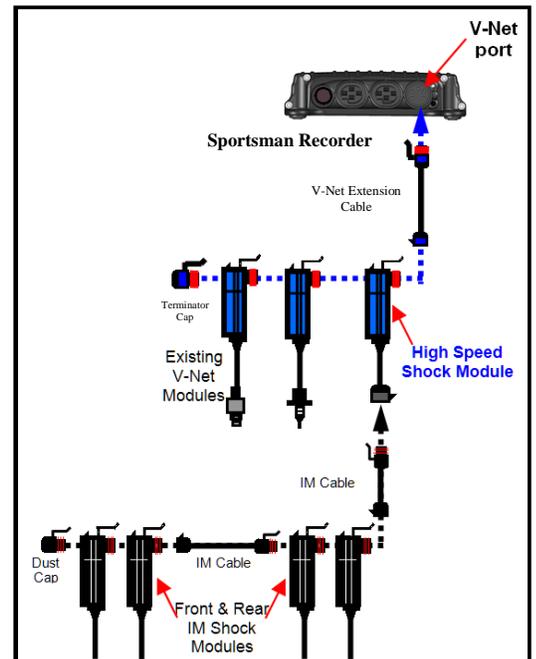
The 4 channel high speed shock module is a special purpose V-Net module designed to interface to RacePak's Sportsman Data Recorder and plugs in as shown in the illustration to the right. **Individual shock IM modules, linear sensors, and IM extension cables must be purchased separately.**

The first step in installing the module is to place the 4 channel high speed shock module in a location that is convenient to the routing of the existing V-Net cables and shock travel modules.

The 4 channel high speed shock module can be inserted at any location in the V-Net data bus (blue connectors) in your vehicle. Select locations where the module can be mounted safely. Avoid mounting near heat sources and high voltage ignition wires. The module must be mounted in a location that does not exceed 185°F or the module will be damaged. "Stack" the shock travel IM modules and cables onto the 4 channel high speed shock module pigtail. Dust cap must be installed at the end of the "stack".

Module Setup:

This module has been factory configured as described in the setup box located at the top of this page. If you purchased this module as an upgrade to an existing system, 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 below. If this module was purchased with a complete data logger system from Racepak and it is not an upgrade to an existing system, no further setup is typically required and you do not need to perform the steps below. However, it is highly recommended that you read through the next section to familiarize yourself with the software setup procedure.

Software Setup and Module Configuration

Before you can use this module as an upgrade to an existing 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 data logger's serial interface cable (See your data logger's 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 automatically be opened when you start the DataLink program (noted by the file tab showing the selected car configuration file). If it is not, open your car configuration file by selecting the **Open Car Configuration** menu item located in the **File** main menu selection.

Next turn power to the data logger on, wait 5-10 seconds for the data logger to completely boot up (verified by the solid red LED indicator on the data logger), and select the **Read VNET Config** menu item located in the **Edit** main menu selection. The DataLink program will read in the configuration and sync the system. If everything works properly, 4 new channel buttons will be added to the configuration file representing this module. For example, a button may be captioned "RR Shock Pos".

In some cases 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, in this example "RR Shock Pos". You must change the V-Net ID on one of the modules to something else like "LR Shock Pos". 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.

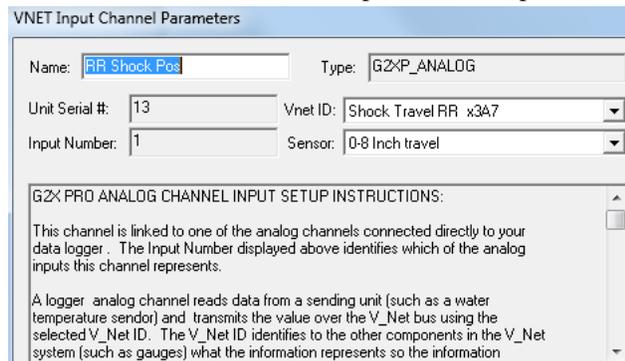
To edit the setup parameters on this sensor module, position the mouse cursor over the channel button and click the right mouse button. The VNET Input Channel Parameters dialog box will be displayed. A portion of this dialog box is show below.

If the module was not configured at the factory you will need to configure each of the channels that are used in your system. This process is described below.

Changing the Module Setup:

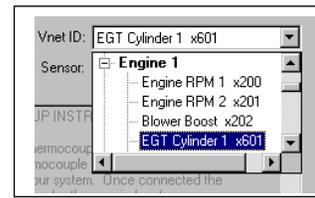
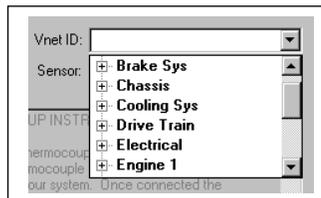
To edit the setup parameters on this module, position the mouse cursor over the channel button and click the right mouse button. The VNET Input Channel Parameters dialog box will be displayed. A portion of this dialog box is show below. Locate the **Unit Serial** number box and verify the serial number is the same number as the module you wish to edit. Next locate the **Input Number** box. The number in this box corresponds to the input channel for each shock sensor. Make sure you are editing the desired channel.

Locate the **G2X Pro Analog Channel Input Setup Instructions** text box. 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 bar located on the left-hand portion of the text box is used to scroll through the instructions).



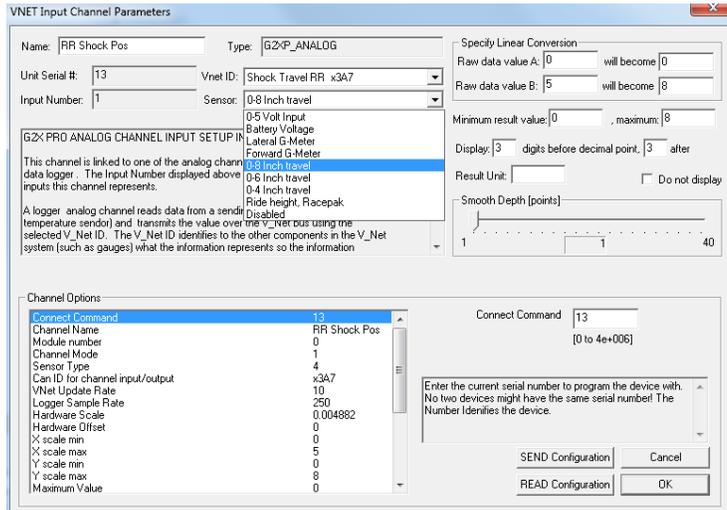
Programming the V-Net ID:

Every sensor device in your data logger system must be assigned a unique V-Net ID. This ID identifies to the system what the sensor is measuring. For instance RR Shock Pos. To set the V-Net ID click on the V-Net ID selection list located above. A list of sensor groups will be displayed as shown. Each group contains an extensive list of parameters associated with that grouping. To open a group, click on the plus sign located in front of the group name. The group will be expanded and individual parameters will be listed. Select the parameter that matches your sensor application by clicking on it. The program will load the appropriate default values including the name for the selection. If you wish to modify the name change the name in the name entry box after you have selected the V-Net ID.



Setting the Sensor Type:

The next step in setting up the channel is to tell the V-Net module what type of sensor is plugged into the corresponding channel on the 4 channel high speed shock module. To set the sensor type click on the Sensor selection list as shown in the illustration on the right. Scroll through the list and locate the correct sensor that is installed. Select the sensor by clicking on the name in the list. The software will automatically setup the channel scaling (Specify Linear Conversion) for the channel to the default values for the module type.

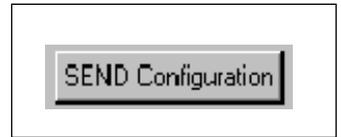


Setting the Channel Options:

Next locate the Channel Options box located in the lower left hand corner of the channel edit box. The channel options box will contain a list of options associated with this channel such as logger sample rate. These options are used to customize the operation on the module to best fit your application. To edit an option simply place the mouse cursor over the option and click the left mouse button. The option edit dialog box and option help box located at the right side of the Channel Options box will display information on the option and allow the option to be modified. Refer to the Four Channel Analog Input Setup Instructions dialog box for further help (see above).

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 module. Be sure the serial interface cable is connected to your Sportsman 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 below 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.

Save the configuration file to disk and update the Module Configuration Setup Box on the front of this worksheet with the new setup configuration.

