Sniper Recon data logging & Diagnostic Trouble Code reader for <u>EEC-V vehicles</u>

Getting connected

1. Open the Recon software by double clicking on the icon. This may take a few moments.
2. Open the Dyno control panel by clicking on TOOLS in the menu bar or by clicking on Dyno panel.
3. Start the vehicle and let idle.
4. Connect the Sniper Interface box to the laptop with the USB cable and connect the Interface box to the vehicle with the black OBD-II cable. When connected, all LED's should be lit up.
5. In the Recon software, click on PCM and then click CONNECT. This will cause LED #7 to turn red. **Note: The Recon defaults for gasoline engine vehicles. To log/view for diesel engines, click on TOOLS in the menu bar; select OPTIONS, then ENGINE TYPE, then diesel.**
6. On the Dyno control panel (bottom left), click on ENABLE CONTROL PANEL. This may take a few moments to connect. Once connected, the gauges will activate and show you live parameters (providing it's a supported PID).

Viewing additional PIDs (Parameter Identifications)

The PIDs that make up the Dyno Control Panel are the main parameters needed for tuning. However, the Recon does offer many additional PIDs for you to view. These additional PIDs can be viewed in two gauge styles (analog or digital). To view additional PIDs than what's shown on the Dyno Control Panel, perform the following.

1. After you have connected to your vehicle and the Dyno Control Panel is active as described previously, click on TOOLS in the menu bar.
2. Click on PIDs. This will display the PIDs that are available for logging/viewing.
3. You will need to click on and check the PID you wish to log/view and then click on the style of gauge (analog or digital). You may choose as many PIDs as you like but keep in mind, the more PIDs you choose, the slower the information processing and sampling. We recommend that you do not log/view more than 6 additional PIDs to the Dyno Panel so accuracy is not jeopardized.
4. Once you have selected the PIDs, click on APPLY at the bottom. It may take up to 15 seconds for the additional gauges to appear. Once they do appear, you can "drag" them over towards the right side of the Control panel.

Recording a session & Triggers

Now that you have selected the PIDs, to Record a session perform the following.

1. Make sure you're connected to the vehicle and gauges are active as previously described in the "Getting Connected" paragraph.
2. To start recording, click on LOGGING in the menu bar and then select RECORD. You can also click on the RECORD button (round red circle in the menu bar). The recording session will last as long as you have memory space in your laptop. At this time you can make a dyno pull, take a blast down the track or go through the gears on the street.
3. When done recording, click on the STOP button on the menu bar (black square).
4. To save the recording session, click on FILE, and then click on SAVE SESSION AS. A window will pop open that says Save As at the top left corner. At the bottom of that window there will be a "flashing cursor" in the File name section. Type in a name for this recording. This file will be saved as an .xml file. Once save, this can be viewed at a later day/time.

Triggers

Triggers can be used to start recording and stop recording a session at a predetermined value (rpm, temperature, MAF voltage, etc..). This allows you to not be present to click on the record or stop button. The software will automatically start and stop recording.

1. Open the Dyno Control Panel as previously described.
2. Click on TOOLS in the menu bar, click on OPTIONS, then click on SET TRIGGERS.
3. Select the PID that you would like to activate the recording
4. Select the start recording point (< >) and value.
5. Select the stop recording point (< >) and value.
6. Click OK. Now you're set to make a dyno pull or track run.

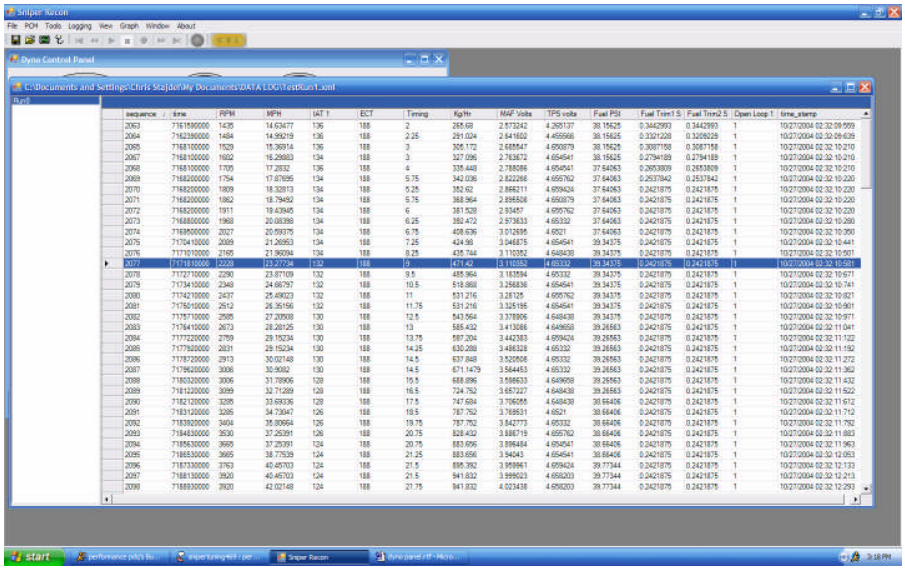
Reviewing a previously recorded session
The Recon allows you to view previously recorded sessions in different ways (Dyno Control Panel, 2D graph, 2D graph or Spreadsheet). However, actual live playback can ONLY be done with the Dyno Control Panel.

Dyno Control Panel

1. Open the Recon software (you do not need to be connected to the vehicle).
2. Open the Dyno Control Panel by clicking on TOOLS in the menu bar and then select DYNO CONTROL PANEL or just click the Dyno Control Panel icon in the menu bar.
3. After the panel opens up, click on LOAD FILE at the bottom right of the panel. This will pop open a window that should display the contents of the DATA LOG folder. In there you should find your recorded session. If you do not find your recorded session there could be 2 issues
    a. Confirm that you saved the session in the DATA LOG folder
    b. Confirm that you actually recorded the session
4. Select the file you will to play back.
5. Click on the PLAY button in the menu bar (black right arrow). The session should start to play back.

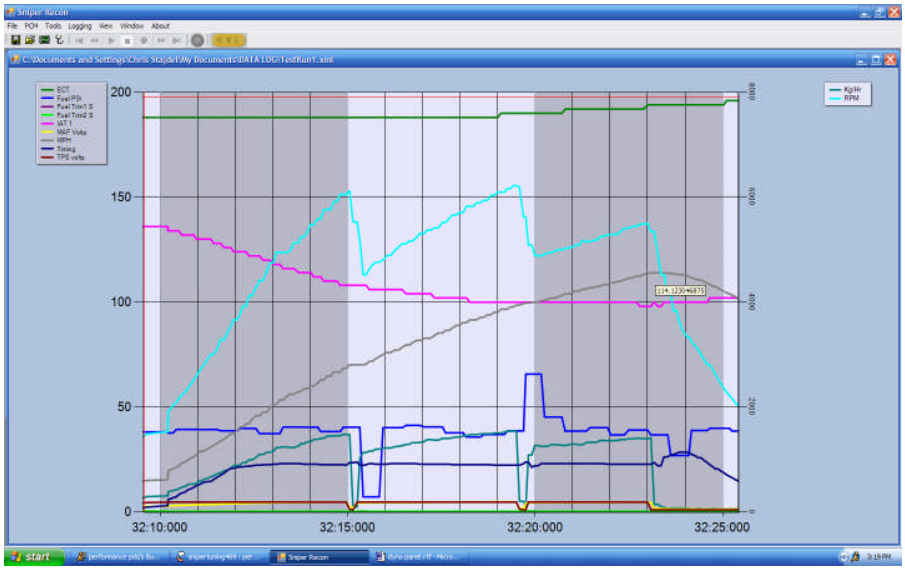
Spreadsheet

1. After you have loaded the session as previously described in the Dyno Control Panel section, you can move the panel with your computer mouse and notice a spreadsheet behind the dyno panel.
2. Click on the spreadsheet to bring it forward (you can enlarge it to a full size screen).
3. You will notice that all the PIDs that you previously selected will be displayed in columns. The top row represents when recording was started and the last low represents when recording was stopped.
4. You can highlight an individual cel by clicking on it or you can highlight the entire row by clicking on the gray box just to the left of the first column.



2D & 3D Graphs

1. To view the 2D graph, you must have Spreadsheet opened up (see previous text).
2. Click on GRAPH in the menu bar and select SHOW 2D GRAPH
3. A window will pop open. This allows you to choose the PIDs you want displayed on the graph. Select them and then click Next.
4. The 2D graph will pop open displaying the selected PIDs.
5. Across the bottom (x-axis) will display the elapsed time from when you started recording until when you stopped recording.
6. On the left side running up and down (y-axis) will display values. The right side (y-axis) may display additional values.



Additional 2D features
While you have the 2D graph open

1. You can view exact values of a particular PID by placing your mouse directly on the PID line. This will pop up a small yellow box with the actual value in it.
2. Not available for 3D. You can zoom in on any area of the 2D graph by pointing your mouse in an area of the graph and click & hold the left mouse button down. As you're holding the button down, drag your mouse to another area of the graph. As you're doing this you will notice a shaded area being created. This is the area that will actually zoom in. Once you have your area marked, let go of the left mouse button and the image will zoom in. You can zoom in numerous times.
3. Not available for 3D. To zoom back out, you will notice a small circle with a minus sign in it, next to the LEFT Arrow and next to the UP arrow.

Diagnostic Trouble Code (DTC)
The Recon software will allow you to view and clear Diagnostic Trouble Codes (DTC) that have been set. If your check engine light has come on, simply…

1. Connect your laptop to the Sniper Interface box via the USB cable and connect the Interface box to your vehicle via the OBD-II cable.
2. Click on PCM in the menu bar and select CONNECT. This will take a few moments.
3. If any trouble codes have been set, the yellow CEL (check engine light) will come on.
4. Now click on TOOLS in the menu bar and then select DIAGNOSTICS. You can also click on the stethoscope in the menu bar.
5. Another window will pop open, which displays the trouble code that has been set and will also display a description of the code.
6. To clear a particular trouble code, click on the code (so that it's highlighted) and then click on the "clear trouble code" icon (sheet of paper).
7. If you have cleared all the trouble codes, the yellow CEL light should turn off.

Disclaimer
This software is intended for testing purposes while in a controlled environment. DO NOT attempt to use this software while you are driving upon a highway unless a passenger controls the software/laptop. Sniper, Inc. will not be held responsible for the improper use of this software.

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