

# Appendix 9 New Features in v4.2

The Dyno DataMite Analyzer has had many updates since this user manual was written for the original v3.2 for Windows. Here is a brief listing of some of the features released in Version 4.2.

Here's a list of the most notable features which have been added or changed. For a complete list of changes, check the readme.doc file on the website right below the demo program download option (with the spinning disk). Some of the features listed here apply to only the Professional or Enterprise Edition, and it will be noted. Anything which applies to the Professional "Pro" version also applies to the Enterprise Edition.

**The website will have the most up-to-date information. This can be found under Support, then FAQs, then Dyno DataMite..., or Support, then User Manuals, or Programs, then Data Loggers, then either Dyno DataMite or Dyno DataMite – Enterprise Edition.**

## New Features and Hardware Enhancements

This new version can read the new 12 bit DataMite IIIs and DTM4s. What a particular logger is (10 or 12 bit), or what type of logger recorded a particular test file is displayed in the DataMite specs screen. These new 12 bit loggers provide a slight improvement in accuracy for recording analog data, like torque, pressure, etc. They also have some improvements in recording weather data like barometer and humidity, and better capabilities for controlling digital outputs (for relays, lights, etc). Fig A9.1.

Dyno Controller for water brakes with position feedback now sets the Differential multiplier to x100 and the Integral multiplier to /100 so the integral can be more finely tuned. Fig A9.1.

Program now loads the Max RPM from Test Conditions screen as the "Max RPM to Control" when loading Defaults in the Dyno Controller screen.

Made several changes in RPM Controller settings to better load proper settings into controller, including new feature in controller firmware 1.80 for the Integral effect only being able to ADD to the load, not remove load.

The program is now more reliable and better at showing proper messages when you click on the Find button for finding Com Ports and doing Detailed Checking of USB DataMite loggers.

Screen warning about using commas (,) for decimal points is now always shown 'on top of other screens. This is a common setting outside the USA and can cause some problems.

Program now better ensures the Current Readings screen is refreshed correctly, to display proper features.

Program now has more explanation about the Engine RPM calibration and what it means, and displays 'pulses per rev' info in calibration screen. Fig A9.2.

Program has a new method of opening pages on the internet, which should work better for a wider range in internet browsers.

There is now a Preference setting to let you keep the Graph on the main screen always at the same graph scales. This can cause problems if you open files for engines with different power levels than you normally run, or the engines you run produce quite different power levels. However, if you motors are always about the same power, this new Preference makes it easier to spot changes with the graph on the main screen. This preference also lets you have the program warn you if the current power curves are not appearing on the graph because you have set these limits very different than correct for the current power curves. Pro and Dyno Enterprise Edition only. Fig A9.3 and A9.4.

Program now redraws and refreshes Main Screen when you resize main screen.

If you change the printer within the program to something other than the computer's default printer, the program now restores the default printer (and printer orientation) when it shuts down.

Program now prints logo and test piece picture in proper aspect ratio, without distortion. Pro and Dyno Enterprise Edition only.

You can now hide the Graph Multiplier column in the DataMite screen. Most users were not using these 'Graph Multipliers' and hiding them makes for a less confusing screen. (Check Appendix 8 New Features in v4.1 for an explanation of 'Graph Multiplier'.) Pro and Dyno Enterprise Edition only. Fig A9.5.

## Starting and Running a Test, including Current Readings Screen

Program now has an option for power curve on Current Readings screen. You can choose a couple of different locations for this on the Current Readings screen, and the line thickness for the graph. The graph will also include the graph from the previous test you ran and saved. It is important to understand that these graphs are "raw" data, without the refinements of better averaging, more accurate acceleration calculations, inertia corrections, weather corrections, etc. They will let you see trends, like if the HP has peaked, but will not exactly match the final power curves produced. Dyno Enterprise Edition only. Fig A9.6.

There are now more enhancements so the 6 additional bar gauges on the right side are shown correctly. Dyno Enterprise Edition only. Fig A9.7. Notes:

- These extra 6 bar gauges can only display raw data, like pressures, temperatures, etc. They can not display calculated numbers like HP, total fuel (adding or subtracting 2 fuel flow readings), or slip.
- If you have selected to display the same data on more than 1 bar gauge, only the first bar gauge will display it. The 2<sup>nd</sup> bar gauge will not update with the data you have requested.

Exhaust thermocouples on the Current Readings screen are now shown larger and thicker for easier reading. The warning color is now a dark yellow instead of bright yellow, to show up better on white background.

The program now remembers what you are displaying at the bottom of the Current Readings screen for DataMite III and DataMite 4, either "RPMs, Internal TCs, more", "Standard Analogs", or "Accel, GPS, more". These are now remembered and restored when you shut down the program.

If you have a DataMite III or DataMite 4, the current readings screen now always updates the Engine RPM signal (first frequency signal) at about 10 times per second, even if you have slowed down the display readings. All other readings will be displayed more slowly if your computer screen can not keep up. This is because Engine RPM is critical, and is typically needed to be updated as often as possible. Notes:

- If you do not show a display for Engine RPM or are not using the first channel for anything, then this feature has no advantage.
- This reading will be updated at a fast rate even if you are asking for Engine RPM to be calculated from dyno RPM.

The 2 round gauges on the Current Readings display now also show the number values of the gauge. This is so you can be more precise at reading Engine RPM. Fig A9.8.

Program now explains why changes in 'Starting a New Test' screen are not saved if you don't start a new test.

Made changes when starting a new test to better choose file name numbering to provide for better sorting of file names in the future, suggesting xxx001 instead of xxx1.

The default size for the Current Readings screen is now larger, assuming newer computers have higher resolution screens.

The website has lots of tutorial movies on program and hardware operation, and troubleshooting. Visit it and look for Support, then Movie Demo Files. Movies are also available on performancetrends on youtube. Fig A9.12.

## New Calculations and Outputs

The program has eliminated all references to a Preference for adding or subtracting fuel flow channels for total fuel flow. The program now allows you to specify fuel flow channels as either To the Engine or Return from Engine. This replaces the

previous Preference of 'Fuel for BSFC' and is better because you can change this setting from test to test. With a Preference setting, all tests had to have the same setting. Fig A9.2.

Now the program displays the proper Label for Fuel Flow and Air Flow graphs which use a frequency channel.

Fixed a minor bug where the program would not do fuel flow calculations correctly if the fuel Multiplier was exactly 1.000.

The Trace Recorder on the Current Readings screen now has an option to display an average value. This lets you more precisely see minor changes in performance as you make modifications, like to spark or fuel through an engine controller. Pro and Dyno Enterprise Editions only. Fig A9.8.

There is a new option for producing comparison reports between 2 runs. You can show the difference as a *difference*, or as an *improvement*. If you select improvement, the Improvement column shows how much the current test is better than other tests included in the report. Difference shows the opposite, ie a 10 ft lb improvement will be shown as a -10 ft lb difference. Fig A9.9.

Made provision for using "Other RPM" for measuring engine crankshaft position when measuring Spark Advance, when using dyno RPM which is not measuring engine RPM, like on a Chassis Dyno, or any dyno which is not a direct drive connected to the engine. Dyno Enterprise Edition only.

The program has a new Preference for using US time format (mm/dd/yyyy) or European time format (dd/mm/yyyy) for dates.

Program now will display maximum chassis dyno MPH or KPH at end of the run, and the test run time for all dyno runs. Test Time and Chassis Dyno Max MPH or KPH now appears in Test Summaries for both printed reports and graphs. Fig A9.10.

## File Handling

Files and folders you delete now are actually sent to the Recycle Bin so they can be recovered later if you want. The program now displays a proper message when aborting the deleting of a file if you cancel out of sending to the Recycle Bin. Fig A9.11.

Field to display Folders (customers) when opening a new test has now been enlarged so you can completely view long folder names. Fig A9.11.

If you make a copy of a folder and the folder already exists, the program asks if you want files from folder being copied from to be *added* to the existing folder. Fig A9.11.

Program is now better at ensuring the config file is not corrupt when it is being written. This should avoid problems where you could open the program and it does not remember your Reg Name or Reg Code or any other settings.

Fixed some bugs in the "Filter" feature for finding and opening an old test file to work more reliably.

Now when you open a file which has a Graph Name specified in the History Log, that Graph Name stays with the file. Previously it was restored to the default as being the File Name.

Program has a new Preference of "Use Alternate Location for Data Files" to allow you to more easily share data files on a network.

Figure A9.1 New, 12 bit DataMite III and 4 and Controller Features

New 4.2 can take advantage of new controller features in firmware v1.80 and later. Refer to controller instructions for details.

New 12 bit DataMite III and DataMite 4 with improved weather sensors and digital outputs (DataMite 4 only)



12 or 10 bit identified here in DataMite specs screen.

**Data Mite Specs**

Back File DataMite USB Options Current Readings Weather Station Cal. Troubleshoot Help

Type of: DataMite 4 USB Com 10 Find Weather Station: Internal Sensors

Sampling Rate, samples/sec: 50 12 Bit

Show Multipliers

#	Channel	Used?	Data Name	Sensor and Calibration
1	Engine RPM (RPMs A, 1)	Yes	ENG RPM	1 Cylinder, 2 Stroke
2	Frequency 2 (RPMs B, 1)	Yes	Dyno RPM	Dyno Wheel RPM, 2 Magnets
3	Frequency 3 (RPMs B, 2)	Yes	Fuel 2	Fuel Flow (x .87)
4	Analog 1 (Analog A green)	Yes	Torque	DynoTrq: 5-2 14 (5v) = 0-612 Torque (corr: 6 195)

Figure A9.2 Better Explanation of RPM Calibrations and New Fuel Options

DataMite Enterprise v4.2 Performance Trends [ DataMite 4 Absorber w Fuel.CFG ]

Data Mite Specs

Type of: DataMite 4 USB Com 6 Find Weather Station

Sampling Rate, samples/sec: 50

Channel #	Channel Name	Enabled	Units	Calibration
1	Engine RPM	Yes	rpm	1 Cylinder, 2 Stroke
2	Fuel Flow	Yes	gph	Fuel Flow (x .87)
3	Frequency 3 (RPMs B, 2)	Yes	Fuel 2	Fuel Flow (x .87)
4	Analog 1 (Analog A green)	Yes	torque	DynoTq .5-2.14 (5v) = 0-612 lb-ft
5	Analog 2 (Analog A white)	Yes	A/F 1	DT3-AF1 A/F Sensor-Gasoline
6	Analog 3 (RPMs A)	Yes	an 3	Std 0-5 Volts
7	Analog 4 (RPMs B)	Yes	A/F 2	DT2-AFG A/F Gauge-Gas
8	Analog 5 (Analog B red)	Yes	Vac/BOOST	Cstm 1.289-4.5 (5v) = 0-60 Vac
9	Analog 6 (Analog B yellow)	Yes	OIL PSI	100 PSI MSI600 Sensor
10	Analog 7 (Analog B blue)	Yes	FUEL PSI	100 PSI MSI600 Sensor
11	Analog 8 (Analog B green)	Yes	Eng./Water	Cstm .5-4.5 (5v) = 61-210 Eng
12	Analog 9 (Analog B white)	Yes	Tower Temp	Cstm .5-4.5 (5v) = 61-210 Tow
13	Analog 10	Yes	Board Temp	Board Temp (.01)
14	Analog 11	Yes	Power Volts	Box Power Volts

Tip: Click on most anything in the Channel Settings grid to see the current settings.

Help: Click on the down arrow button to see what specs are enabled or disabled.

More Notes explaining various options.

Explanation of number of pulses per revolution the program expects for your choice.

Engine RPM Specs

Calib: 1 Cylinder, 2 Stroke

RPM sensor sees 1. pulse every rev

Engine Specs

# Cylinders: 1

Engine Type: 2 Stroke

Use Ign. Pulses: All pulses

Notes:

Pick the # cylinders in the engine and 2 or 4 stroke operation. For special ignition systems like "distributor less" or small "4 cycle" engines, you may have to adjust these specs for accurate RPM readings. For example, a 'Briggs' motor fires every revolution like a 2 stroke, so call a Briggs a '1 Cyl. 2 Stroke'.

Program assumes you attached sensor to the COIL wire and see all engine firings. If you attach to a PLUG wire (or CDP) you should specify this as a '1 cylinder' engine.

Change 'Use Pulses' from 'All pulses' for uneven firing engines, or to create smoother Engine RPM data on multi cylinder engines at higher RPM (like V-8s). For example, for uneven-firing Harley Davidsons, pick 'Every 2nd pulse'.

If you need 'Dyno RPM' on this channel, you must set the 'Type' in Dyno Specs to 'Engine, no clutch'.

Keep Calib. Help Cancel Print

Other RPM Specs

Calib: Fuel Flow (x .870)

RPM Sensor Specs

Sensor: Fuel Flow

Flow: Fuel To Engine

Multiplier: Fuel To Engine

Data Name: Fuel 2

Analog Sensor Specs

1st Value, Engineering Units: [ ]

1st Value, freq (hz): [ ] Read

2nd Value, Engineering Units: [ ]

2nd Value, freq (hz): [ ] Read

TC Corr. (add this to): [ ] Read

When entering a Fuel Flow sensor calibration, you now have a choice if this is fuel to the engine, or Fuel Return. If you have 2 fuel flow sensors both marked Fuel to Engine, these fuel flows will be added together for BSFC and "Total Fuel" calculations. If you have 2 fuel flow sensors, one marked Fuel to Engine on one Fuel Return, the Fuel Return is subtracted from Fuel To Engine for BSFC and "Total Fuel" calculations.

Figure A9.3 Setting Graph Scales on Main Screen

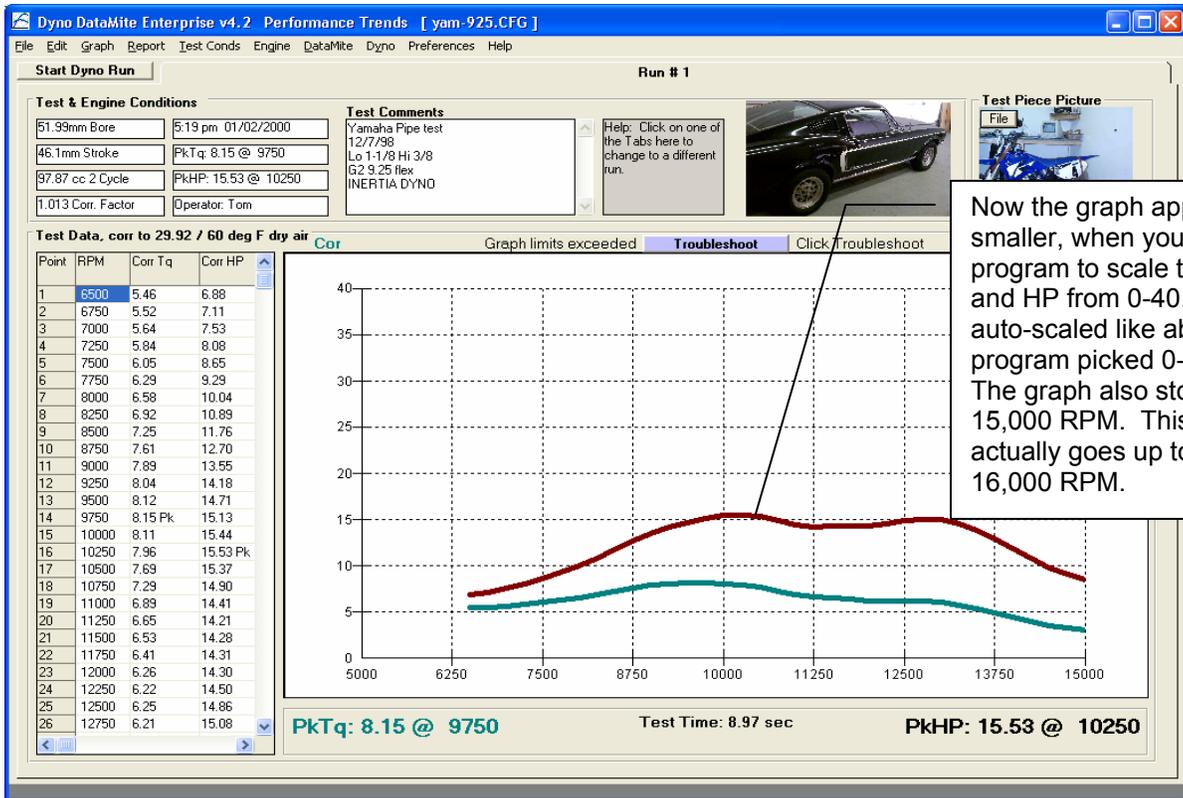
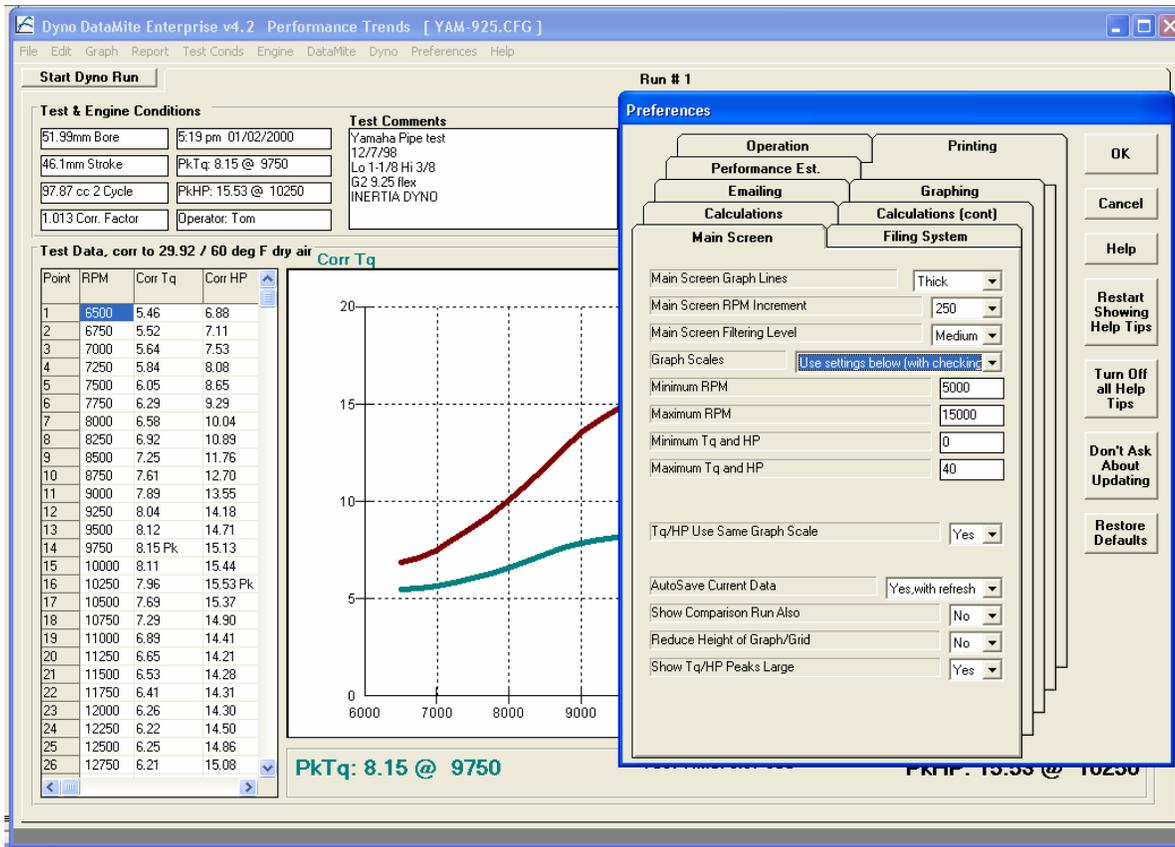
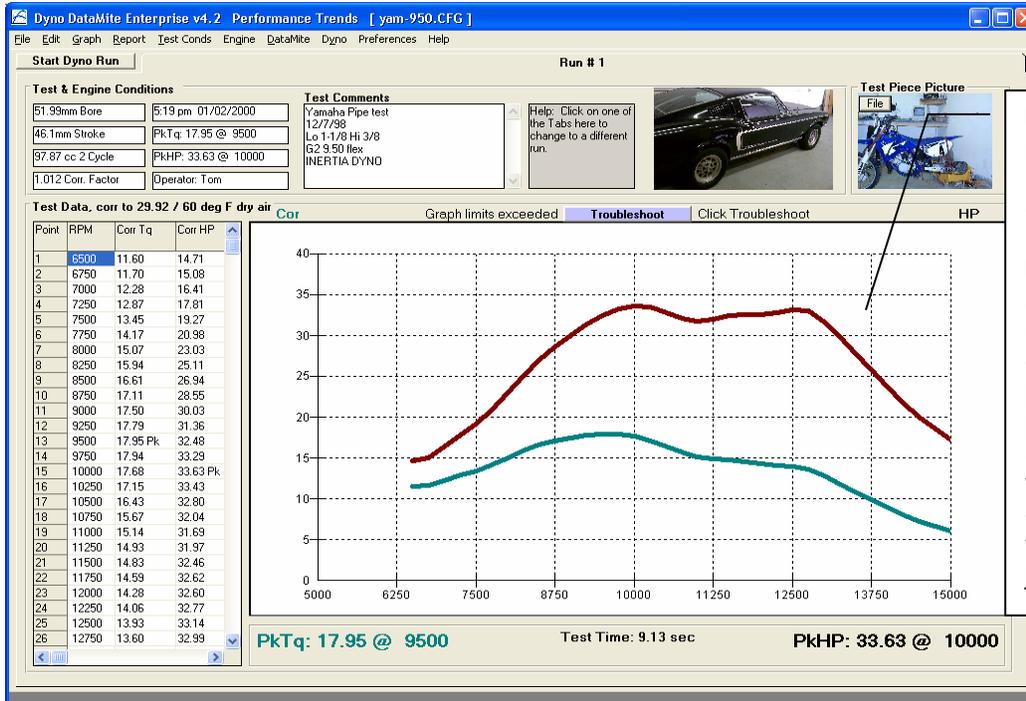
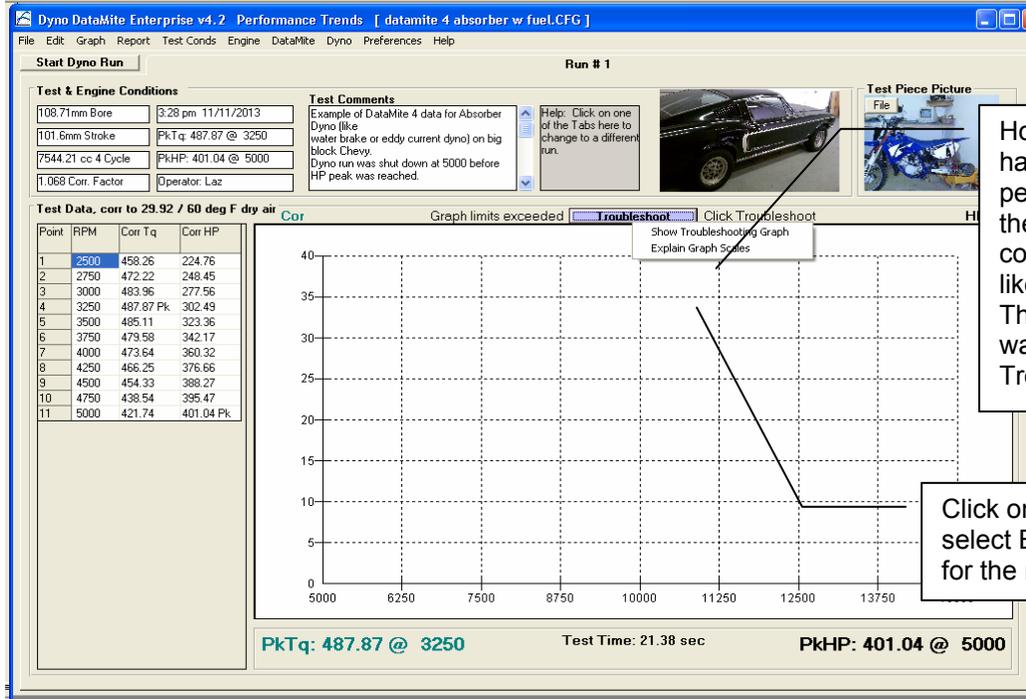


Figure A9.4 Setting Graph Scales on Main Screen, cont



Here's an example power curve from an engine producing about double the power of the engine in Figure A9.3. Because the graph scales have stayed the same, it is immediately obvious this engine produces a lot more power. If it was "auto-scaled" both graphs would completely fill the graph and the difference would not be obvious by just looking at the graph.



However, if the graph has very much different performance than what the limits expect, you could see no graph at all, like this V8 produced. Then you could see warnings next to this Troubleshoot button.

Click on Troubleshoot and select Explain Graph Scales for the message box below.

**DataMite Analyzer**

You have selected to set the scales for this graph in the Preferences menu under the 'Main Screen' tab. However, it appears that the current power curves may be outside the limits you have set and the graph does not appear.

To fix this, go into Preferences, then 'Main Screen' tab and set the 'Graph Scales' to 'Auto-Scale' or change these limits.

If you do not want this warning message displayed, but still want to set the graph limits, choose the 'Use Settings Below (no checking)' in Preferences.

OK

Figure A9.5 Showing or Hiding Graph Multipliers

**Data Mite Specs**

Back File DataMite USB Options Current Readings Weather Station Cal. Troubleshoot Help

Type of: DataMite 4 USB Com 10 Find Weather Station Internal Sensors

Sampling Rate, samples/sec: 50 12 Bit

Show Multipliers

#	Channel	Used?	Data Name	Sensor and Calibration	Graph Multiplier
1	Engine RPM (RPMs A, 1)	Yes	ENG RPM	1 Cylinder, 2 Stroke	
2	Frequency 2 (RPMs B, 1)	Yes	Dyno RPM	Dyno Wheel RPM, 2 Magnets	
3	Frequency 3 (RPMs B, 2)	Yes	Fuel 2	Fuel Flow (x .87)	
4	Analog 1 (Analog A green)	Yes	torque	DynoTq .5-2.14 (5v) = 0-612 torque (corr: 6.195)	
5	Analog 2 (Analog A white)	Yes	A/F 1	DT3-AF1 A/F Sensor-Gasoline	
6	Analog 3 (RPMs A )		an 3	Std 0-5 Volts	
7	Analog 4 (RPMs B )	Yes	A/F 2	DT2-AFG A/F Gauge-Gas	
8	Analog 5 (Analog B red)	Yes	Vac/BOOST	Cstm 1.289-4.5 (5v) = 0-60 Vac/BOOST PSI	60
9	Analog 6 (Analog B yellow)	Yes	OIL PSI	Cstm 0-4 (5v) = 40-53 OIL PSI	
10	Analog 7 (Analog B blue)	Yes	FUEL PSI	Cstm 0-5 (5v) = 11-14 FUEL PSI	
11	Analog 8 (Analog B green)	Yes	Eng.Water	Cstm .5-4.5 (5v) = 175-210 Eng.Water Temp	
12	Analog 9 (Analog B white)	Yes	Tower Temp	Cstm .5-4.5 (5v) = 185-210 Tower Temp	
13	Analog 10	Yes	Board Temp	Board Temp (.01)	
14	Analog 11	Yes	Power Volts	Box Power Volts	

**Tip**  
Click on most anything in the Channel Settings table to select the type of DataMite you are using. You choice here will affect which specs are enabled or disabled in this menu. p 53

Graph Multiplier column is shown.

**Data Mite Specs**

Back File DataMite USB Options Current Readings Weather Station Cal. Troubleshoot Help

Type of: DataMite 4 USB Com 10 Find Weather Station Internal Sensors

Sampling Rate, samples/sec: 50 12 Bit

Show Multipliers

#	Channel	Used?	Data Name	Sensor and Calibration
1	Engine RPM (RPMs A, 1)	Yes	ENG RPM	1 Cylinder, 2 Stroke
2	Frequency 2 (RPMs B, 1)	Yes	Dyno RPM	Dyno Wheel RPM, 2 Magnets
3	Frequency 3 (RPMs B, 2)	Yes	Fuel 2	Fuel Flow (x .87)
4	Analog 1 (Analog A green)	Yes	torque	DynoTq .5-2.14 (5v) = 0-612 torque (corr: 6.195)
5	Analog 2 (Analog A white)	Yes	A/F 1	DT3-AF1 A/F Sensor-Gasoline
6	Analog 3 (RPMs A )		an 3	Std 0-5 Volts
7	Analog 4 (RPMs B )	Yes	A/F 2	DT2-AFG A/F Gauge-Gas
8	Analog 5 (Analog B red)	Yes	Vac/BOOST	Cstm 1.289-4.5 (5v) = 0-60 Vac/BOOST PSI
9	Analog 6 (Analog B yellow)	Yes	OIL PSI	Cstm 0-4 (5v) = 40-53 OIL PSI
10	Analog 7 (Analog B blue)	Yes	FUEL PSI	Cstm 0-5 (5v) = 11-14 FUEL PSI
11	Analog 8 (Analog B green)	Yes	Eng.Water Temp	Cstm .5-4.5 (5v) = 175-210 Eng.Water Temp
12	Analog 9 (Analog B white)	Yes	Tower Temp	Cstm .5-4.5 (5v) = 185-210 Tower Temp
13	Analog 10	Yes	Board Temp	Board Temp (.01)

**Tip**  
Click on most anything in the Channel Settings table to select the type of DataMite you are using. You choice here will affect which specs are enabled or disabled in this menu. p 53

Graph Multiplier column not shown

Figure A9.6 New 'Real Time' Graph, Enterprise Edition Only

**Current Readings**

Close (back / escape) Options Trace Recorder DataMite Commands Help

Not Recording

Update Rate (currently 3 per sec)  
Gauge Settings (round dials)  
Bar Gauge Settings  
Bar Gauge Settings  
Exhaust Temp Scale  
Color Warning Settings  
Analog Filtering  
Engine RPM Filtering  
Show Demo  
Tq/HP Graph  
Save Settings  
Open Settings

Raw Recorded Data 200

12.98

ENG RPM 224

Dyno RPM 1689

113 torque 600

HorsePower 120

USB Communications Established, Com Port # 10

RPM x 1000 3. 4.

**Real Time Graph**

Real Time Graph Options Yes

Real Time Tq/HP Graph

Display Graph Yes, thicker lines

Location Replace EGT Graph

RPM Range User Specified

User Specified Max RPM 8000

User Specified Min RPM 2000

Maximum Tq/HP to Display 200

Minimum Tq/HP to Display 0

Note:  
Pick one of the DataMite channels to be displayed on either Gauge #1 or #2. Then select the Range for the display, either a 'pre-programmed' range or you can enter your own custom range by choosing 'User Specified', the first choice for Range.

Keep Settings Help Cancel Print

1689 Dyno RPM RPM 4177 Exh #3 °F 4372 Exh #4 °F

0 Fuel 2 Fuel (sg. 7) 4093 Exh #5 °F 3887 Exh #6 °F

4016 Exh #7 °F 4143 Exh #8 °F

4290

4362

New option of real time Tq/HP Graph to be made when recording data.

Real Time Graph screen gives options for producing the graph, location, thin or thicker lines and graph scales.

If you had set "Location" to Replace Right Dial Gauge, the graph would be drawing over this "Dyno RPM" gauge.

Recording: Yes

Stop F2

ENG RPM 6970

Dyno RPM 3272

10.1 A/F 2 20

HorsePower 31.98 120

USB Communications Established, Com Port # 10

Raw Recorded Data 200

14.32 Power Volts 120

29.33 Baro Pres 35

40.16 OIL PSI 100

11.03 FUEL PSI 20

171 Eng. Water 240

182 Tower Temp 240

Current Sensor Readings

RPMs, Internal TCs, more Std Analog Channels Accels, GPS, more

46.76 Humidity

1.073 Corr Factor

2909 Dry Dens Alt

RPM x 1000 3. 4. 5. 6. 7. 8.

Real time graph of the raw torque and HP readings. Graph of previous test is graphed in gray. It is important to understand that these readings are "raw", without the refinements of better averaging, inertia corrections, weather corrections, etc. They will let you see trends, like if the HP has peaked, but will not exactly match the final power curves produced.

Figure A9.7 6 Six New Bar Graphs, Enterprise Edition Only

Select to set up new bar gauges 3-8, which appear down the right side of the screen.

These original bar gauges are Gauges 1 and 2.

Current Readings

Close (back / escape) Options Trace Recorder DataMite Commands Help

Not Recording

Update Rate (currently 10 per sec)  
Gauge Settings (round dials)  
Bar Gauge Settings  
Bar Gauge Settings  
Exhaust Temp Scale  
Color Warning Settings  
Analog Filtering  
Engine RPM Filtering  
Show Demo  
Tq/HP Graph  
Save Settings  
Open Settings

Gauges 1 and 2  
Gauges 3 and 4  
Gauges 5 and 6  
Gauges 7 and 8

Raw Recorded Data

200  
150  
100  
50

RPM x 1000

3 4 5 6 7 8

10.09 A/F 2  
0 20

.00 Corr HP  
0 120

USB Communications Established, Com Port # 10

Current Sensor Readings

RPMs, Internal TCs, more  
 Std Analog Channels  
 Accels, GPS, more

Vac/BOOST PSI 33  
OIL PSI 3  
FUEL PSI 11.02  
Eng/Water Temp 171

Tower Temp 182  
Board Temp 79.25  
Power Volts 14.46  
Baro Pres "Hg 29.33

Humidity 60.28  
n/a  
Corr Factor 1.070  
Dry Dens Alt 2682

14.46 Power Volts  
0 120

29.33 Baro Pres  
25 35

40.13 OIL PSI  
0 100

11.02 FUEL PSI  
0 20

171 Eng Water  
0 240

182 Tower Temp  
0 240

Real Time Options

Bar Gauge #3

Channel 14 Power Volts

Range 0 - 120

User Specified Max

User Specified Min

Bar Gauge #4

Channel 15 Baro Pres

Range User Specified

User Specified Max 35

User Specified Min 25

Note:  
Pick one of the DataMite channels to be displayed on either Gauge #3 or #4. Then select the Range for the display, either a 'pre-programmed' range or you can enter your own custom range by choosing 'User Specified', the first choice for Range.

Keep Options Help Cancel Print

Here you select which channels you want displayed on the bar gauges, and the range you want to see.

**IMPORTANT NOTES:**

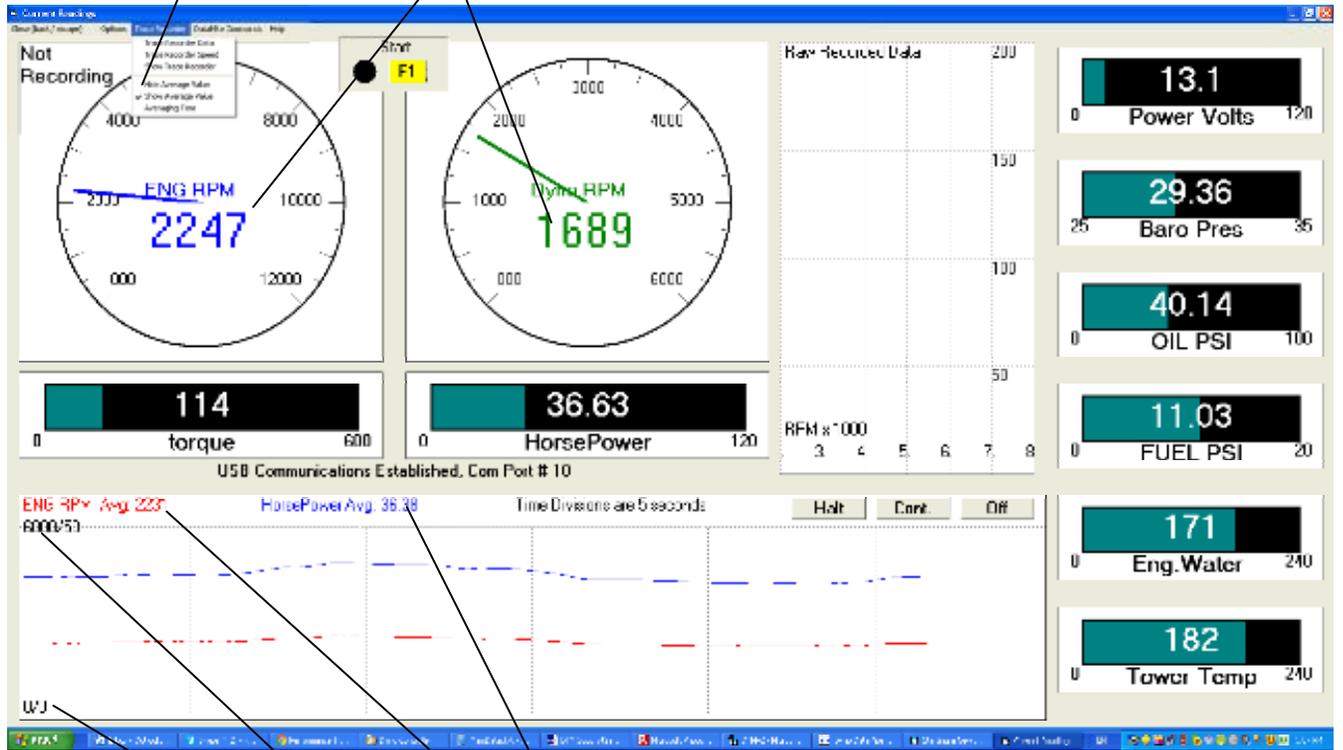
These extra 6 bar gauges can only display raw data, like pressures, temperatures, etc. They can not display calculated numbers like HP, or slip.

If you have selected to display the same data on more than 1 bar gauge, only the first bar gauge will display it. The 2<sup>nd</sup> bar gauge will not update with the data you have requested.

Figure A9.8 Trace Recorder now shows Average Readings and Numbers on Round Gauges

Click on Trace Recorder for these options to include or hide the average readings. Increase the Averaging Time to produce more stable numbers, but at a slower update rate.

Numbers now displayed on round gauges.



Average Readings are shown here.

The high and low range for the trace recorder for both channels is shown here. Without the Average Readings, the range is shown where the Average Readings are displayed.

Figure A9.9 New "Improvement" Option for Reports

Dyno DataMite Enterprise v4.2 Performance Trends [ datamite 4 absorber w fuel002.CFG ]

Back Print Report Types File History Log Single Test Multiple Tests Help(F1)

Operator: Laz  
Eng #: 00007  
Customer: Peterson

- Show Data Only
- Show Data and Difference
- Show Data and Improvement (negative - difference)

	datamite 4 absorber w fuel002.CFG Run 1	datamite 4 absorber w fuel001.CFG Run 1	
RPM	Corr Tq	Corr Tq	Dif.
1000	157.88	228.39 Pk	70.51
1250	169.39	227.70	58.31
1500	188.36	220.13	31.77
1750	195.47 Pk	208.54	13.07
2000	192.63	197.95	5.32
2250	186.18	188.16	1.98
2500	179.20	178.47	-0.73
2750	170.82	168.84	-1.98
3000	160.93	158.70	-2.23
3250	150.98	148.60	-2.38
3500	142.84	140.16	-2.68
3750	135.10	132.00	-3.1
4000	126.51	123.44	-3.07
4250	117.43	114.23	-3.2
4500	106.84	104.47	-2.37
4750	95.46	94.85	-0.61
5000	85.55	85.33	-0.22

Choose the standard "Difference" to see a Difference column like in previous versions.

Dyno DataMite Enterprise v4.2 Performance Trends [ datamite 4 absorber w fuel002.CFG ]

Back Print Report Types File History Log Single Test Multiple Tests Help(F1)

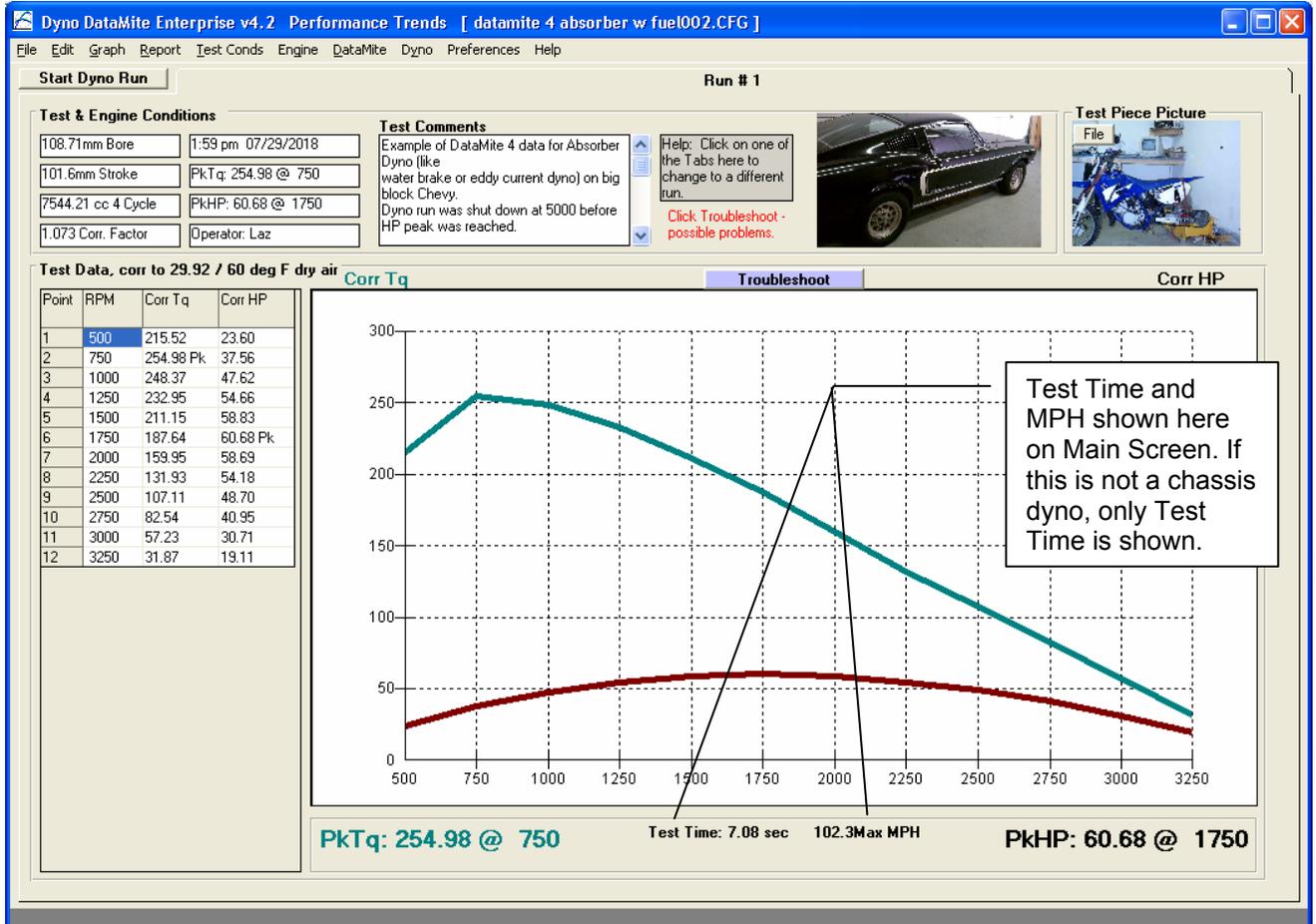
Operator: Laz  
Eng #: 00007  
Customer: Peterson

- Show Data Only
- Show Data and Difference
- Show Data and Improvement (negative - difference)

	datamite 4 absorber w fuel002.CFG Run 1	datamite 4 absorber w fuel001.CFG Run 1	
RPM	Corr Tq	Corr Tq	Improv.
1000	157.88	228.39 Pk	-70.51
1250	169.39	227.70	-58.31
1500	188.36	220.13	-31.77
1750	195.47 Pk	208.54	-13.07
2000	192.63	197.95	-5.32
2250	186.18	188.16	-1.98
2500	179.20	178.47	0.73
2750	170.82	168.84	1.98
3000	160.93	158.70	2.23
3250	150.98	148.60	2.38
3500	142.84	140.16	2.68
3750	135.10	132.00	3.1
4000	126.51	123.44	3.07
4250	117.43	114.23	3.2
4500	106.84	104.47	2.37
4750	95.46	94.85	0.61
5000	85.55	85.33	0.22

Choose Improvement and you see the opposite of Difference, or the amount the current test (left column) is higher than the comparison test column.

Figure A9.10 New Test Time and Chassis Dyno MPH (or KPH) Outputs



**Dyno DataMite Enterprise v4.2 Performance Trends [ datamite 4 absorber w fuel002.CFG ]**

Back Print Report Types File History Log Single Test Multiple Tests Help(F1)

**Comments**

Operator: Laz	1:59 pm 07/29/2018	Pk Tq 248.37 @ 1000	108.71 Bore	Test Time: 7.08 sec
Eng #: 00007	Corr. To: 29.92/60 dry	Pk HP 60.68 @ 1750	101.6 Stroke	Chassis Dyno
Customer: Peterson	Corr. Factor 1.073	7544.21 cc 4 Cycle	8 Cylinders	102.3 Max MPH

RPM	Corr Tq	Corr HP
1000	248.37 Pk	47.62
1250	232.95	54.66

Test Time and MPH shown here on header for Reports.

**Dyno DataMite v4.2**

Eng: datamite 4 absorber w fuel002.CFG

Calculated Test Results

Your name / company name can go here. See Preferences.

Performance Trends (C) 2018

This Report Printed: 5:54 pm 07-30-18 Page: 1

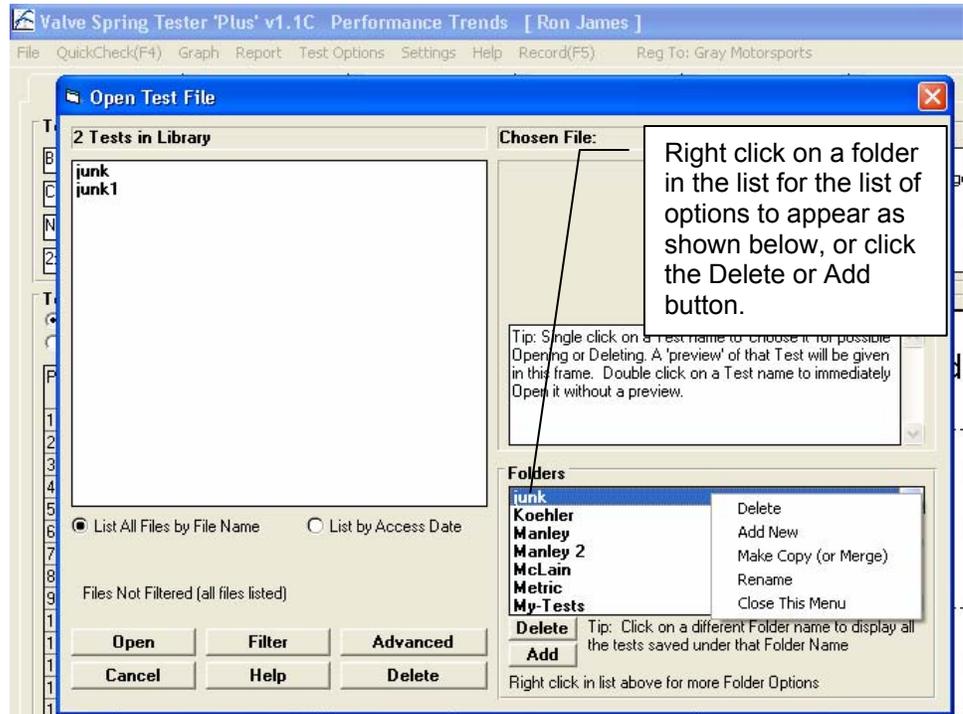
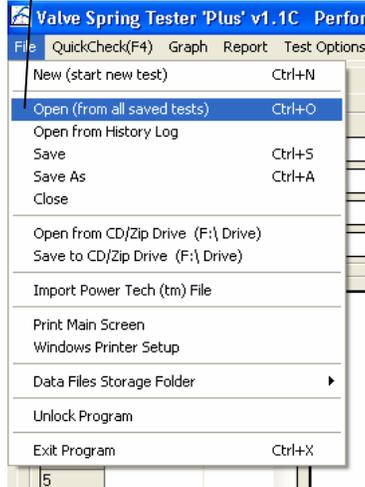
Operator: Laz	1:59 pm 07/29/2018	Pk Tq 248.37 @ 1000	108.71 Bore	Test Time: 7.08 sec
Eng #: 00007	Corr. To: 29.92/60 dry	Pk HP 60.68 @ 1750	101.6 Stroke	Chassis Dyno
Customer: Peterson	Corr. Factor 1.073	7544.21 cc 4 Cycle	8 Cylinders	102.3 Max MPH

RPM	Corr Tq	Corr HP
1000	248.37 Pk	47.62
1250	232.95	54.66
1500	211.15	58.83
1750	187.64	60.68 Pk
2000	159.95	58.69
2250	131.93	54.18
2500	107.11	48.70
2750	82.54	40.95
3000	57.23	30.71
3250	31.87	19.11

Test Time and MPH shown here on printouts, both for Reports and Graphs.

Figure 9.11 New Features Deleting, Adding, etc Files and Folders

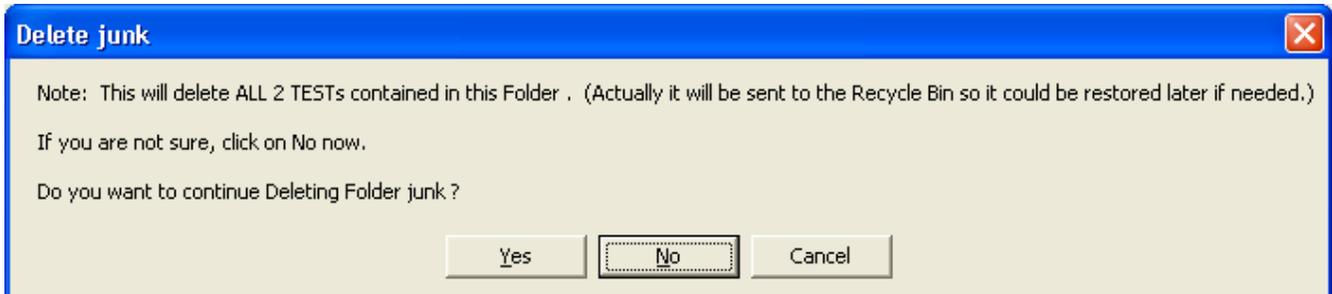
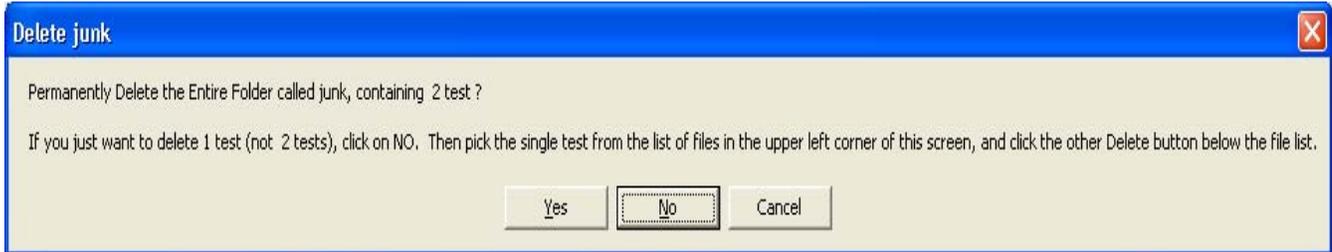
These features are available when you click on File, then Open (from all saved tests) on the main screen.



Right click on a folder in the list for the list of options to appear as shown below, or click the Delete or Add button.

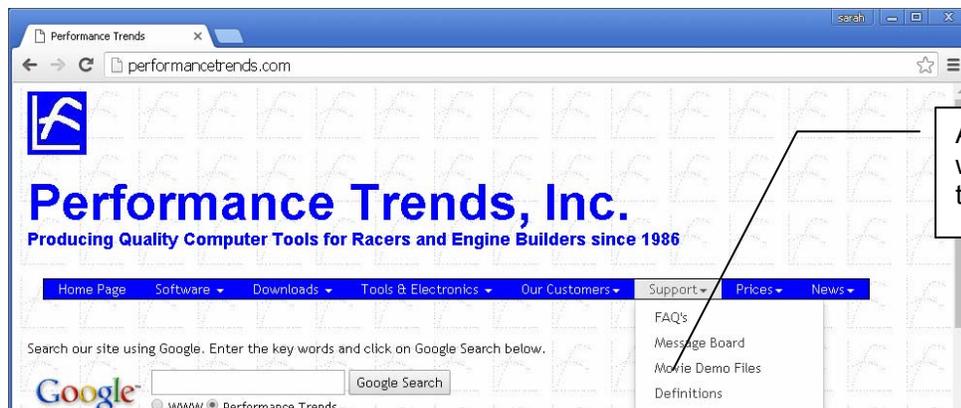
Tip: Single click on a Test name to choose it for possible Opening or Deleting. A 'preview' of that Test will be given in this frame. Double click on a Test name to immediately Open it without a preview.

Tip: Click on a different Folder name to display all the tests saved under that Folder Name  
 Right click in list above for more Folder Options

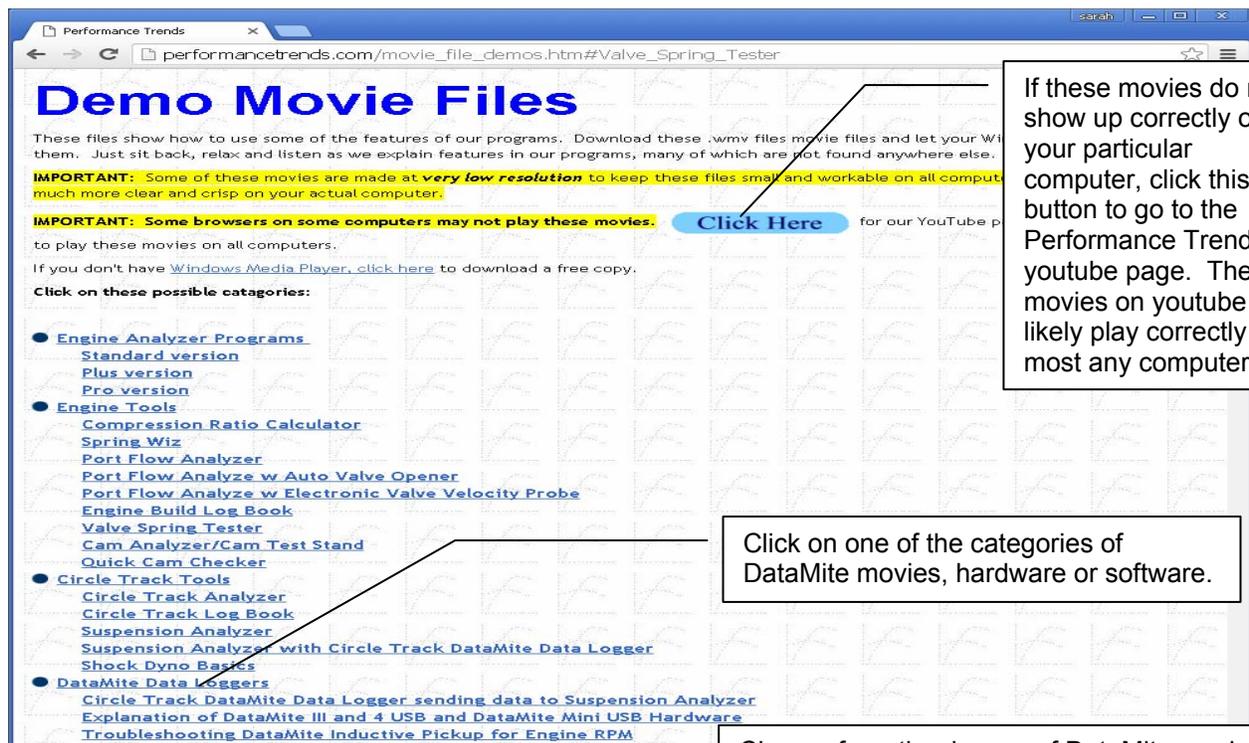


Folders and test files you delete are now sent to your computer's Recycle Bin, so they can be recovered if need be.

Figure 9.12 Video Movies to Demo the DataMite Features



At the Performance Trends website, click on Support, then Movie Demo Files.



If these movies do not show up correctly on your particular computer, click this button to go to the Performance Trends youtube page. The movies on youtube will likely play correctly on most any computer.

Click on one of the categories of DataMite movies, hardware or software.

Choose from the dozens of DataMite movies.

