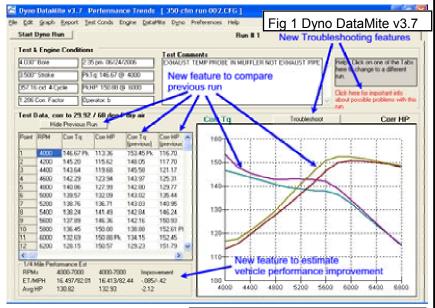
PRI 2008: Latest News



Dyno DataMite v3.7 Released. We've released a major update to our Dyno DataMite software which runs our new USB DataMites. It has several new features as shown in Fig 1 and others, including:

- Compatible with all our data loggers, including 4 channel DataMite, 30 Channel DataMite II and current USB DataMites (III and Mini).
- Full Metric capability in Pro version.
- Emailing and 1 click backup/restore features.
- Correct for Engine and Dyno Inertia effects for absorber dynos doing accelerating tests.
- Automated Coastdown tests to find frictional losses.
- Allow for separate, remote Engine Intake Air temp measurement for more accurate correction factors.
- Much more.



New DataMite III USB and DataMite Mini USB data logger have been released and are shipping. Fig 2 & 3. The III's main features include:

- 3 RPM channels, 12 analog channels, built in 3 axis accelerometer.
- 3 internal weather sensors (barometer, humidity and temperature) and recirculating fan can be added.
- 4 internal K thermocouple channels can be added for very low cost/channel.
- USB communications cable for data recording (dyno version), setting up and troubleshooting.
- 1 1000 meg SD memory card, provides hours of recording time and incredibly fast uploading to your computer for analysis. (Not in Dyno Version.)
- Lighted Start/Stop logging switch. (Not in Dyno Version.)
- Road Race/Circle Track version is GPS enabled for optional DT3-GPS allowing for GPS track mapping and lap timing. The GPS feature provides very accurate track maps, letting you compare the line taken on different laps.
- Sampling rates up to 50 Hz for Dyno version, 100 Hz for vehicle versions.
- Complete Packages are available for Drag Racing, Road Racing, Circle Track Racing and Dyno Testing, **all starting at \$699**.



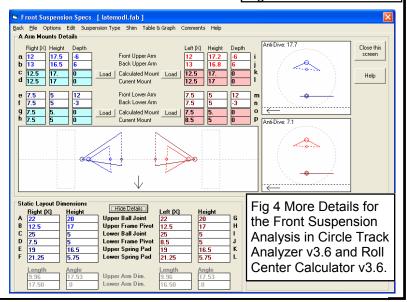


Fig 3 DataMite Mini USB

The **DataMite Mini** communicates with computer via USB to record 2 RPM channels, 2 0-5 volt analog channels (like thermocouples, pressures, torque), and optional weather sensors and fan. This is an ideal package for a small dyno, inertia or absorber (water brake, eddy current, hydraulic), engine only or chassis dyno. Other applications include retro-fitting a Power Tech ™ spring tester for using our Spring Tester software, for improved accuracy and features.

Circle Track Analyzer v3.6, Roll Center Calculator and Roll Center Plus v3.6 are being released in January 2009. The Circle Track Analyzer has several new features including:

- You can specify a rear anti-roll bar.
- You can specify front and rear lift coefficients. This allows you to see how aerodynamic mods affect



handling.

- Program now has and "Adjust" utility to let you adjust rear spoiler specs and estimate how it will affect front and rear lift, and drag coefficient.
- Double A Arm and McPhearson Strut front suspensions now allow for more detailed inputs, letting you more precisely locate the frame attachment points, and calculate Anti-Dive. (Fig 4)
- Program now provides "Big Bar Soft Spring" (BBSS) suggestions for a starting point of your suspension setup.
- Program is now calculating an "Oversteer/
 Understeer" rating for your "virtual race car" as it
 goes around the track. This new rating takes into
 consideration the wheel loads on all 4 corners
 and the vehicle's static weight distribution. These
 corner loads are based on static corner weights,
 weight transfer, banking and aero effects,

accelerating and braking weight transfer, etc. This "Oversteer/Understeer" is more detailed than the classic "Front

Lateral Load Distribution" FLLD which was released in v3.5. FLLD does not consider aero effects and static corner weight effects like cross weight. See Fig 5.

The updated **Roll Center Calculator v3.6** and the new **Roll Center Calculator Plus** v3.6 are both "thrifted down" versions of the full Circle Track Analyzer. The Roll Center Calculator is just the Front Suspension screen for CTA v3.6. The Roll Center Calculator Plus is the Front and Rear Suspension screens, plus the classis FLLD calculations for estimating front to rear roll stiffness for front to rear balance calculations.

New 4 Link Plus version of the 4 Link Calculator has been released. Fig 6. It's main features include:

- Allowing up to 15 holes on each bracket.
- Generating many holes on a straight line or arc from a few inputs.
- Because so many hole combinations are possible, you can limit the program to just finding combos within some user defined limits.
- An animation mode to watch the suspension work and instant center move.

Weather Wiz is a new program that lets you compare 2 different weather conditions for humidity, density, HP correction factor, jet changes, etc. The Weather Wiz lets you make comparisons, even if the weather measurements are done different ways. For example, you can compare an altimeter reading with wet and dry bulb measurements, to a corrected barometer with temperature and relative humidity. It has several other features not found in other weather programs.

Other Updates and enhancements have been released for several programs, including:

- Cam Analyzer v3.8 was released this spring with several new analysis options. The Plus version now has features you can use even if you don't have our Cam Test Stand.
- Port Flow Analyzer v3.5 now has more refined capability of using the Automatic Valve Opener, for completely automating tests on the SuperFlow 1020 [™] bench.
- The advanced Suspension Analyzer with Data Logger features has a new Ball Joint Wizard for more precisely locating the center of the ball joint from external measurements and ball joint part numbers. Fig 9.

