Competition Data's Co Pilot 2 Systems Packages

BEST VALUE for the Road Racer

CP 2000 Base Package Includes:

- 8 Analog, 3 RPM channels plus CAN bus (expandable)
- 8 Meg Memory holds up to 8 sessions
- GPS-2 Antenna & Controller for speed & Lap Time
- Engine RPM
- Lateral & Longitudinal G
- Steering & Throttle
- Battery Voltage
- Oil & Water Temp, Oil Pressure
- Additional temperatures, pressures, & other data such as gear position, lambda, etc from engine management system*
- Complete custom made plug together harness using all teflon jacket cables and waterproof connectors.
- Track Master Software Std. version includes handling analysis.
- 2 Years of software upgrades included.

Package Price: $3495

CP 3000 Deluxe Package Includes:

Everything that is in the CP 2000 Package (above) PLUS:

- 8 more analog channels (expandable to 31 total)
- 4 Suspension / Shock Travel
- Track Master Software Pro version includes chassis, shock, and handling analysis.

Package Price: $6195

Popular Options:

• Vertical G	150
• Yaw Rate	325
• Additional wheel speed(s)	125
• Air-Fuel Ratio	375
• Brake Pressures kit (front & rear)	530
• Brake Rotor Temperature (ea)	342
• Aero Pressure (ea)	265
• Tire Temperatures (ea)	342
• 6 Tire Temperatures	1900
• 12 Tire Temperatures (Includes 15 analog, 3 rpm channel upgrade)	5700

NEW! Dynamic Corner Weights

We install strain gauges on your 4 push rods and supply amplifiers. After a simple calibration you are able to measure actual live corner weights. 3000

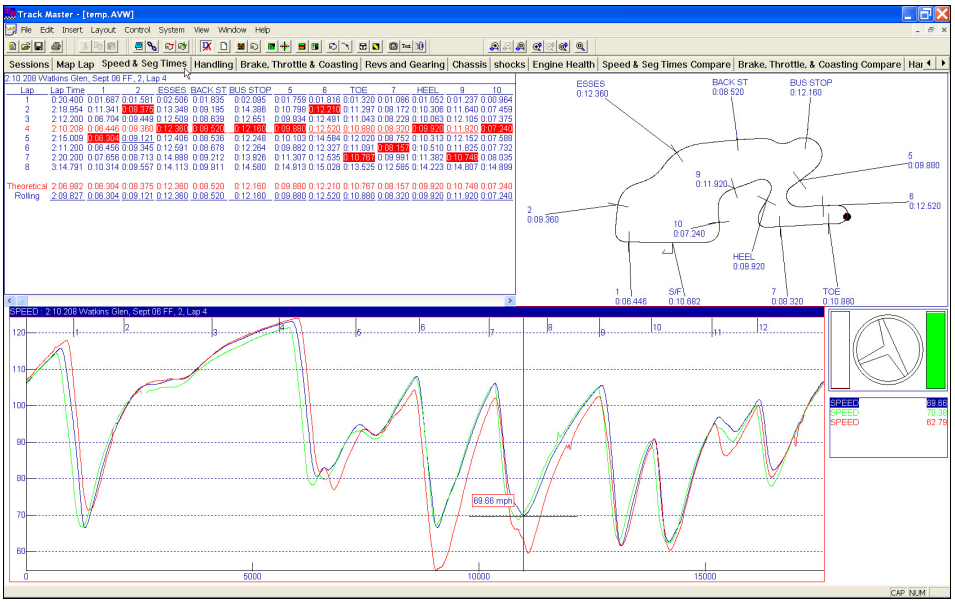
Note: *Some of the above options when combined together may require the 15 analog, 2 RPM channel upgrade.*

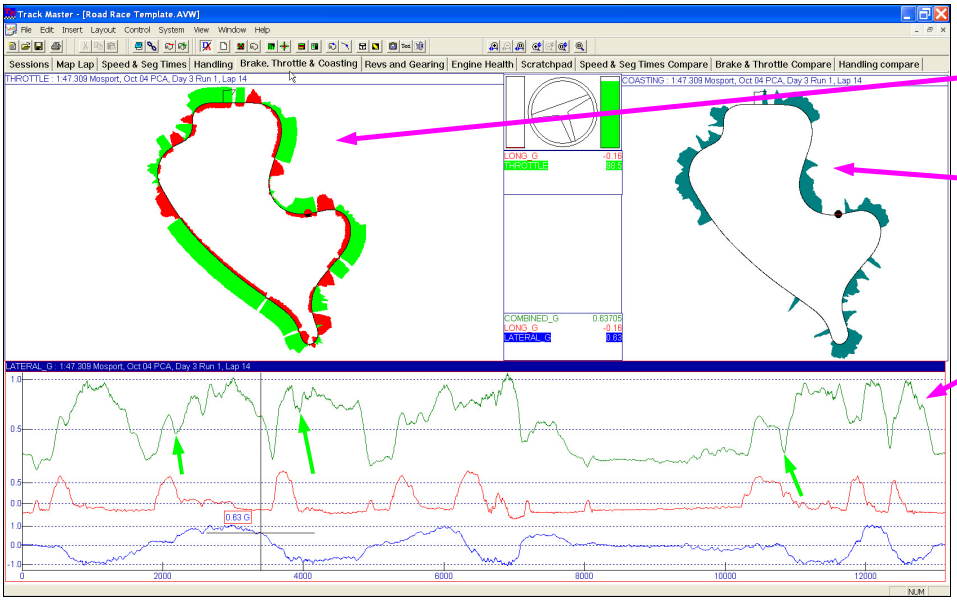
* The *CDS* System interfaces directly with many popular racing engine management systems including Honda CAN bus, Bosch CAN bus, Pectel, Life, Motec, and MBE. See our web site for the latest list of supported management systems.

Competition Data's Track Master Data Analysis Software

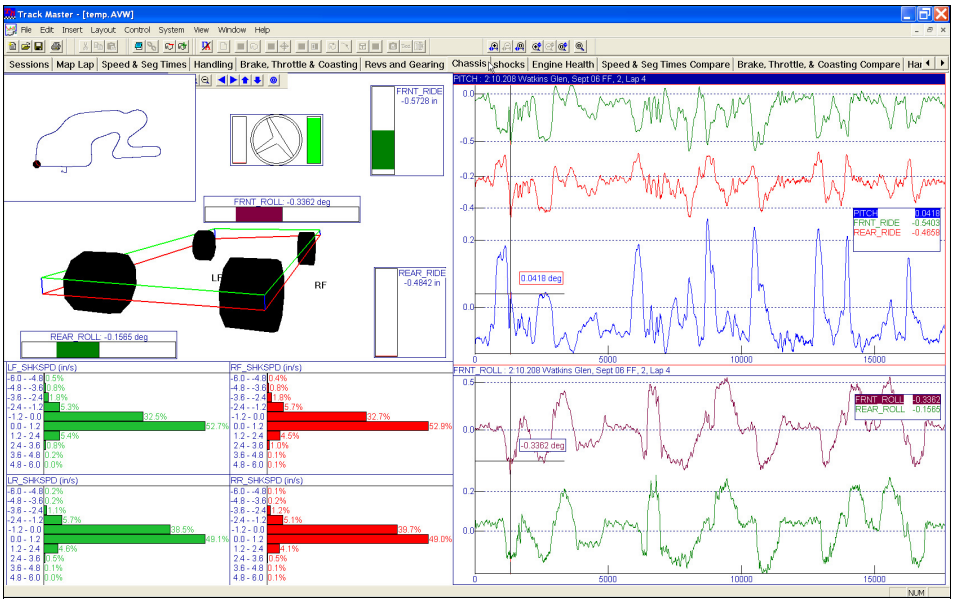
Track Master Software enables fast and easy analysis of your data. Graphic features that help you to visualize the data include:

- Track Map with data overlay
- Animated Driver Controls (steering wheel, brake and throttle bar graphs)
- Many screens or "pages" are all loaded at the same time. The user simply clicks the tab for a page to switch to it. Each page contains several plots or other "objects" neatly arranged to analyze a particular aspect of your performance.
- The SEGMENT TIMES report is used as a tool to navigate to the best examples of a segment of the track you are analyzing. If you only examine the fastest couple of laps, you may miss the best example of a critical segment!
- Segments can be named such as "ESSES" or "BUS STOP" rather than simply "seg 1, seg2". Etc.
- The pages are "linked together so that when you update 1, they all update. The cursor movement is also linked from plot to plot and page to page.
- Many pre-programmed pages are included with the software, so that you can start analyzing right away without have to do a lot of "setup"





- This map plot shows *throttle* (in green) and *longitudinal G* in red. When *longitudinal G* is on the outside of the track it indicates braking, where it is on the inside it indicates forward acceleration. This plot makes it easy to see where the driver is having problems getting on the power.
- One of Track Master's automatic calculations is *coasting,* which measures the degree to which the driver is neither on the throttle or on the brakes. A value of 0 indicates maximum *braking* or 100% *throttle.* Here is *coasting* plotted on the map along with map markers indicating average coasting in important segments. As you adjust your car and work on your driving, you seek to minimize coasting.
- *Combined G* is a calculated signal used primarily to detect areas where you can brake deeper or later. It is essentially the radius of the friction circle at any point on the track. Dips in the *combined G* after braking and before full *lateral G* indicate locations where you are not using the maximum grip available as you enter the turn.
- This graph shows *lateral G* (blue), *longitudinal g* (red), and *combined G* (green). The green arrows indicate dips that you would try to "fill in" by braking later.



The *CP 30000* package includes suspension sensors which enables you to analyze all aspects of how your chassis is working. Some of the suspension analysis features of *Track Master* are:

- "Moving Plane" animation of the chassis movement showing the change from "static" position.
- Histograms (typically for shock speeds)

Raw suspension data is automatically converted in to practical information by built-in "math channels". These include:

- All 4 shock speeds, wheel movements
- Front and rear ride height
- Front and rear roll angle, Pitch angle

CDS COMPETITION DATA SYSTEMS
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