

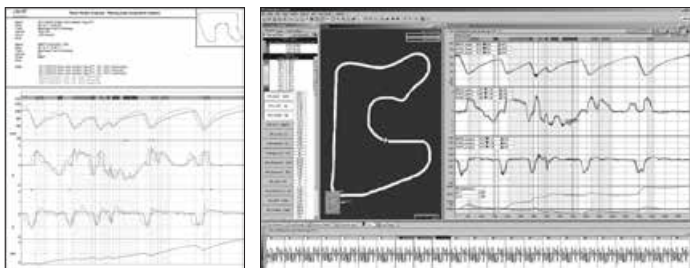
Timing and Scoring

AiM Solo2 GPS-Based On-Board Lap Timer

The AiM Solo2 is so accurate, it is used by the SCCA to monitor vehicle performance for competition adjustments. Many enthusiast magazines also use it when testing vehicles for review articles. The Solo2 is even quicker and more accurate than the original!

Solo2 Features

- Fully automatic operation, just turn it on and go
- Measures and logs position, speed, acceleration, lap time, and more
- Uses both GPS and Glonass satellites for unmatched speed and accuracy
- Internal 3-axis accelerometer (acceleration to ±5 g)
- Internal 3-axis gyroscope (pitch/roll/yaw)
- Internal 3-axis magnetometer (compass heading)
- 8 configurable pages of information
- Predictive lap timer, running lap timer, static lap timer, and more
- Configurable backlight in 7 colors
- 10 fully-configurable LED warning/shift/notification lights
- Huge 4GB internal memory for hours of data
- Review performance and graphs on-screen without a laptop
- Wi-Fi data transfer means no USB cable to forget at home
- Internal rechargeable battery means no wiring needed
- Small enough to fit on the smallest steering wheel
- Weighs just 8.5 oz complete with battery
- Waterproof (IP67 sealed, submersible to 3 feet)
- Over 3000 tracks currently in worldwide database
- Add more tracks easily, at home or at the track
- Circuit, Point-to-Point (Solo II / hillclimb), and Performance Test modes



The printed report (above left) compares a single lap by two different drivers. The screen shot (above right) compares three laps by the same driver. Both were generated using only the GPS data logged by a stand-alone AiM Solo.

The traces, from top to bottom, show speed, lateral acceleration, acceleration/braking, and the time lost or gained between specific laps. The track map (black background) shows the actual lines driven on each lap.

Living with the Solo2

Driving on established tracks: If the track is already in the worldwide database, simply use GPS Manager (included) to transmit the track to the Solo2. When you arrive at the track, the Solo2 will automatically recognize when it is within 5 km (3 miles) of a known start-finish line and will ready itself to race on that track. (In the case of multiple tracks or multiple configurations, you will have to choose which one to use.) Each time you cross the start / finish line, the Solo2 starts a new lap. You don't have to do anything but turn it on!

If an established track is not in the database, you can add it from the comfort of your own home. Find the track in the satellite view of Google Maps. Zoom in until you can pick out the start / finish line. Right-click on the line and select "What's here?" from the drop-down menu to get the GPS coordinates. Enter these coordinates in the AiM GPS Manager software and transmit the new track to the Solo2. When you arrive at the track, the Solo2 will recognize the track and you're ready to run.

Driving on new or temporary tracks: Take the Solo2 to the starting line. Navigate to the Tracks page and press OK. For point-to-point (Solo II and hillclimbs), go to the finish line and repeat. The Solo2 now knows when and where to start and stop each lap or run.

If your chosen track does not have a map in GPS Manager, you can create one by running (or even walking) a single lap with the Solo2. As you go around the track, the Solo2 will record your position 10 times a second (using powerful algorithms and other data to fill in the gaps between). Download the lap to Race Studio, and GPS Manager will let you import the track shape that was recorded on that lap. You can now use that track map on your SmartyCam's video overlay!



AiM Solo2 Lap Timer (stand-alone version)
Part No. MC-670

The ultimate lap timer - and more! You won't believe that something so easy to use can be so powerful. The amazing **AiM Solo2** uses satellite signals (both GPS and Glonass) to start and stop lap times at the start/finish line. No other equipment is required. The Solo2 automatically recognizes the track from memory, or you can add the track to the database when you arrive. Solo2 also logs extensive GPS data (exact track position, speed, acceleration rates in 3 directions, and more) for detailed analysis later. The included Race Studio software can even generate track maps and replay any two laps together for comparison. The internal rechargeable battery means no wiring connections are needed. Measures only 3.9" x 3.1" x 1.2" thick - small enough to mount directly on your steering wheel, even in a formula car.

AiM Solo2 Lap Timer, stand-alone versionPart No. MC-670 \$399.99
Includes mounting bracket, AC charging cord, DC power cord, and Race Studio software.
Note: This version can only be used in stand-alone mode. It will not connect to anything else (except vehicle power, if desired).

Suction Cup Mount for temporary windshield mountingPart No. MC-573 \$35.99
Replacement Mounting Bracket onlyPart No. MC-674 \$14.99
This is the "data box mount" required by SCCA in many competition-balanced classes.



AiM Solo2 DL Lap Timer / Data Logger
Part No. MC-671 / MC-672 / MC-673

The **Solo2 DL** has all of the features of the Solo2, but it can also log engine data! When connected to your engine, the 10 LED lights on the Solo2 DL can be configured to act as multi-stage shift lights, or as warning lights for any engine parameter coming from the ECU. You can also connect it to your AiM SmartyCam (sold separately) to overlay data on your videos. Choose your connection: K-Line to plug into your production car's OBD-II diagnostic port, CAN for hard-wiring to a racing ECU, or RPM to simply get a coil signal from a car without an ECU.

AiM Solo2 DL, with K-Line (OBD-II port) connectorPart No. MC-671 \$699.00
The K-Line connector plugs directly into an OBD-II diagnostic port, found on 1997 and later production vehicles (2002 and later outside North America).

AiM Solo2 DL, with CAN / RS232 wiringPart No. MC-672 \$699.00
The CAN/RS232 is used when no OBD port is available (typically used with racing ECUs).
Two wires must be spliced into the ECU wiring.

AiM Solo2 DL, with RPM wiringPart No. MC-673 \$699.00
If no ECU is available (or if the AiM software cannot decode the ECU protocol), this version will let you tap into the RPM signal from the coil or the ECU.

Note: The Solo2 DL can connect to the AiM SmartyCam and/or the LCU-One Lambda Controller (sold separately), but it will not connect to any other sensors or expansions. Connecting to both the SmartyCam and an LCU-One requires a Can Expansion Hub, sold separately on page 38.