STORY: DEAN EVANS

TIME TO GO!

We take a detailed look at RaceChrono, Australian for *easy lap timing*.

Forget about the stopwatch, the trackside beacon or hardwiring a go-kart timer, RaceChrono's TouchScreen GPS Lap Timer has them all licked.

An all-in-one piece of Australia-made electronic trickery, the RaceChrono is primarily a simple-to-use lap timer, but is so much more.

About the size of an iPhone or Blackberry, the RaceChrono uses a 3.5-inch colour touch screen and comes in a very comprehensive kit. Along with the unit, the box includes a windscreen mount, two 12v power cords, two 240v chargers, USB computer cable, high strength adhesive 3M dual lock, battery and Micro SD card. The Pro kit opens up more opportunities as it includes a remote Bluetooth GPS receiver, that can be mounted anywhere on a vehicle that can see the sky, allowing the lap timer to be mounted in the dash, discretely in a console or away from prying eyes, to record lap times and data.

But keeping it visible is one of the key elements to the RaceChrono, which comes pre-loaded with 30 Australian racetracks, including Bathurst, Broadford, Collie, Maryborough Sprint, Perth RAC and Haunted Hills, to name a few of the more unexpected circuits. This allows you to simply turn up and drive, without the need to set a start/finish line or split points, particularly useful for tracks like Bathurst where every lap counts. Of course there's the ability to set up custom tracks too.

Recording lap times in large numbers is what it does best, but it also flashes up a red or green screen showing if you're over or under your session's previous best lap time. It also has split points which give the same data allowing you to push/ease as appropriate, and even a toggle button where the screen can show either the last or best lap.

While that main live timer screen is designed to be visible during track driving, there's a whole world of data available to view, download or export.

With a few presses, a lap overview comes up on screen with the maximum and minimum speeds throughout the track, along with the split times, which can then switch to an overlay mode, where a speed trace can compare your best to second best, or another driver's lap time. Which is made easy by being able to input the driver, car and other notes during each test.

There's also a screen which shows the best split times, allowing the best theoretical lap time to be calculated.

Full track maps can be analysed on screen, or like all of the data, it can be transferred via MicroSD card to a computer for more detailed analysis.

But as if that wasnt enough, the RaceChrono is also a performance meter, with 12 pre-set tests recording acceleration, from 0-60mph, 0-100km/h to 0-400m, quarter-mile, eighth-mile, 0-1000m, 80-120km/h and more. And tested against our VBOX, it's pretty much dead-on, though it does require the GPS receiver to be set to the faster sampling more for improved accuracy – as simple as flicking a switch.

With the ability to export files to Google Earth for track overlays, and the ability to monitor an OBD-II Reader, inputs such as revs, speed and throttle position can be co-related. Heading overseas? The RaceChrono has 200 tracks in 400 countries already available for download.

Using its own internal battery, it can be used on anything from a mountain bike, snowboard, go-kart to a greyhound – mount the remote receiver externally and tuck the unit away in a pocket or backpack, and it's ideal for viewing or analysis after the run.

On the downside, the screen can be a little over sensitive when scrolling, but the included stylus helps. RaceChrono has recognised this and assured the problem is being fixed.

Starting at $429 for the basic system, the $549 Pro system adds the remote GPS receiver which works at five times the speed of the display unit, necessary for performance times, but not mandatory for basic lap timing.

For price, convenience and ease of use, the RaceChrono is a very impressive package and if you're a track day regular after hassle-free timing, it's a must-have.
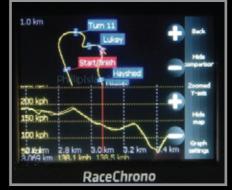
Contact: www.racechrono.com.au

RaceChrono.com.au

Pro system adds the remote GPS receiver but even in basic form the kit is comprehensive.

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Lap	Full	VMax	VMin	VAvg
Opt.	1:44.6	255	55	152
1	1:46.5	252	63	150
2	1:46.2	254	63	150
3	1:46.0	254	61	151
4	1:49.8	257	49	146
5	1:45.7	255	55	151
6	1:46.3	255	59	150
7	1:45.6	256	54	152
8	2:18.9	250	24	113

Lap times can be corelated to minimum and maximum speeds. Not the use of contrasting colours to highlight them.

Lap	Full	Diff.	Sector 1	Sector 2
Opt.	1:44.6	-1.0	14.2	14.2
1	1:46.5	+1.0	14.6	14.4
2	1:46.2	+0.7	14.4	14.5
3	1:46.0	+0.4	14.6	14.2
4	1:49.8	+4.2	14.2	14.6
5	1:45.7	+0.1	14.2	14.2
6	1:46.3	+0.7	14.2	14.3
7	1:45.6	+0.0	14.2	14.3
8	2:18.9	+33.3	14.3	14.4

Though the best lap time of 1:45.6 was recorded on lap 7, with splits from 5 and 6 the optimal lap time is 1:44.6.

Map and speed trace help analyse where to go faster, along with top speeds on every straight.

Unit was originally designed for motorcycles, hence the ultra compact size. Screen is designed to work through gloves.