

Predictive Lap Timer with performance meter

Practical benefits

PRACTICE

- Shows the driver the time gain/loss of taking different lines, whilst on track.
- Can show the driver where he is losing time, whilst on track.
- Instantly helps the driver establish the effect of a set up change.
- Can show the driver his best potential lap time even when traffic prevents a good flag-to-flag flying lap.
- Helps the driver find the places to over-take which minimize time loss
- Provides pacing reference for drivers running race distance simulation

QUALIFICATION

- Allows the driver to back off and save his equipment if lap is off fastest lap pace.
- Instantly tells the driver if he should continue or abort a lap after a mistake or after held up by a slower driver.
- Continually motivates the driver to go faster and to beat the lowest time he has seen on the display.



1 Best previous lap time
shows the fastest previous lap time.

2 Running lap time
shows the current lap running time.

3 Predicted lap time
shows the current prediction of the next lap time

4 Performance meter
showing graphically the time difference between the 'current' and 'best previous' lap.



This unique product uses patented technology (Patent No. 9419860.3) that is available exclusively to Stack customers.

The system continuously compares the time against track position of the current lap against the fastest previous lap. By measuring how long it has taken to get to the current track position, and by knowing the time it previously took to complete a lap from the current position, the system calculates a prediction of the next lap time. The system only requires one lap time beacon, all other positional and time data being calculated using onboard sensors. The system is currently only available as an expansion of the Stack dash display system and, when enabled, allows the driver in real time, to monitor his performance.

PERFORMANCE METER

The bar provides a graphical reference of the time difference between the 'current' and 'best previous' lap.

When the bar graph is in the centre of the display the time difference between the two laps is zero. When the bar graph moves to right of centre the 'current' lap is faster, and when it is to the left of centre the 'current' lap is slower than the best 'previous' lap.

As the Performance Meter is a graphical display it allows the driver, at a glance, to instantly gauge how much faster or slower he is running.

The bar graph also clearly shows a relative change during a lap. So if, since the last time the driver viewed the display, the bar graph has moved to the right, the driver knows that he has driven the last section of track faster than he has achieved before.

For example, the driver sees he is running 0.08 seconds behind his best previous lap. Through the next series of turns he tries a new line and when he next looks at the display he sees that he is now 0.23 seconds ahead. Therefore the driver can instantly see that the new line gave an improvement.

