Performance Box Touch

RLPBT-V1

Racelogic's **Performance Box Touch** measures speed, lap and split times, delta-T, acceleration, deceleration as well as distance and more.

All these parameters are logged to an SD card ten times per second and can be viewed on screen and analysed in detail using the VBOX Test Suite or Circuit Tools software provided.

Performance Box Touch has four operation modes available which allow you to conduct a range of performance tests and functions: Accel, Decel, Lap Timing, and Speed.

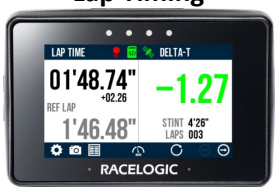
Accel

More info

Decel

More info

Lap Timing



More info

Speed

More info

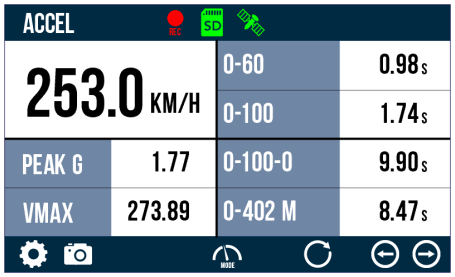
Example Screens for Acceleration Testing

See links above for more information on the other operation modes.

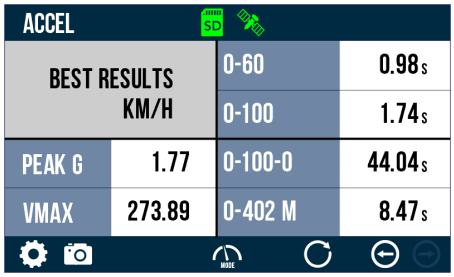
Primary Screen

- Acceleration tests including: 0–60, 0–100, 0–100–0 and 0–¼ mile.
- Custom speed, distance or 0-speed-0 tests can be configured, and other options include enabling or disabling alert at end of test, one-foot rollout and slope correction.
- Can display up to 4 concurrent test results.
- Screen displays time, run number, distance, VMAX, Peak G, and altitude difference. Units of measurement for speed or distance can be easily swapped between metric or imperial.

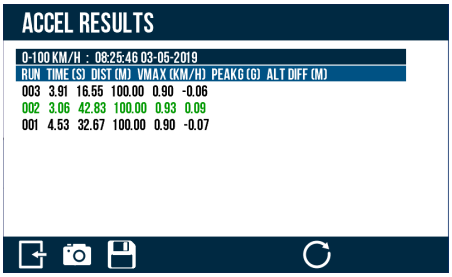
Secondary Screen



Best Result



Accel Results



VBOX MOTORSPORT

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Performance Box Touch

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Environmental and Physical

Environmental & Physical	
Input Voltage	5 V (USB compliant 4.4 V – 5.3 V)
Power consumption **(Connected to external power supply)** With Battery Without Battery	 < 7 W using 1.5 A or greater USB supply via micro-B < 3 W Using 0.9 A or greater USB supply via micro-B
Operating Temperature	-20°C to +50°C
Storage Temperature	-30°C to +80°C
Size With battery attached Without battery	 136.3 x 90.4 x 38.3 mm 136.3 x 90.4 x 36.3 mm
Weight With battery Without battery	 336 g 226 g
Battery Capacity Run time Time to charge	 11 Wh 6 hrs normal use from full charge 95% charge at 3.5 hrs, dependant on unit power demands and power supply.
Touch Screen	
Size	4.3” TFT Capacitive Touch
Resolution	480*800 pixels
TFT LCD Display Colours	262K colours (18 Bit)
Mounting	
Mount Type	Herbert Richter Mounting System
Data Storage	
Type	SD card (8 GB supplied)
Recording Time	120 hours on supplied SD card.

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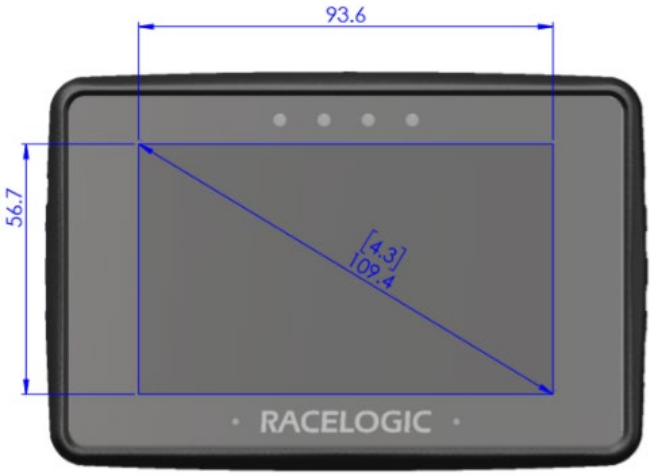
Diagrams

Without Battery

With Battery

Screen



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GPS Specifications

Velocity		Distance	
Accuracy	0.1 km/h	**Accuracy**	0.05% (<50 cm per km)
Units	km/h or mph	**Units**	Metres / Feet
Update rate	10 Hz	**Update rate**	10 Hz
Resolution	0.01 km/h	**Resolution**	1 cm

Absolute Positioning		Time	
Accuracy	±2 m 95% CEP*	**Accuracy**	0.01 s
Height accuracy	±10 m 95% CEP*	**Resolution**	0.01 s
Resolution	1 cm		
Update rate	10 Hz		

Acceleration		Heading	
Accuracy	1%	**Accuracy**	0.3°
Resolution	0.01 g	**Resolution**	0.01°
Maximum	4 g		
Update rate	10 Hz		

Definitions:

* CEP = Circle of Error Probable. 95% CEP means 95% of the time the position readings will fall within a circle of the stated radius.

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Package content

Performance Box Touch is available in two versions. There are no differences in functionality between the two, only in which peripherals are included:

Description of RLPBT	Product Code
1x Performance Box Touch unit only	PBT-V1
1x Windscreen Suction Mount	ACS318MOUNT
1x Cigar Plug USB Adaptor	RLACS184
1x USB 2.0 A to Right Angle Micro B Charging Cable 1.5m lead	USB2-007241
1x 8 GB SD Ultima Pro UHS-1 Memory Card	RLACS313

Description RLPBT/B	Product Code
Same as RLPBT, plus:	
1x Performance Box Touch Battery	RLACS290
1x GPS / GLONASS Low Profile Antenna 2m cable	RLACS284
1x Plastic Carry Case	RLACS281

Supplied software

Each Performance Box Touch is supplied with a SD card containing the VBOX Test Suite and Circuit Tools software. This software allows the user to display and analyse the information recorded by the Performance Box Touch.

Features include graphical display of logged parameters, full circuit plot, overlaid comparison laps and detailed performance analysis. More help and information available via Racelogic Support Centre.