

# Performance Box Touch

RLPBT

Racelogic's **Performance Box Touch** measures Speed, Lap & 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.



## 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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## Environmental and Physical Specifications

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

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## Diagrams

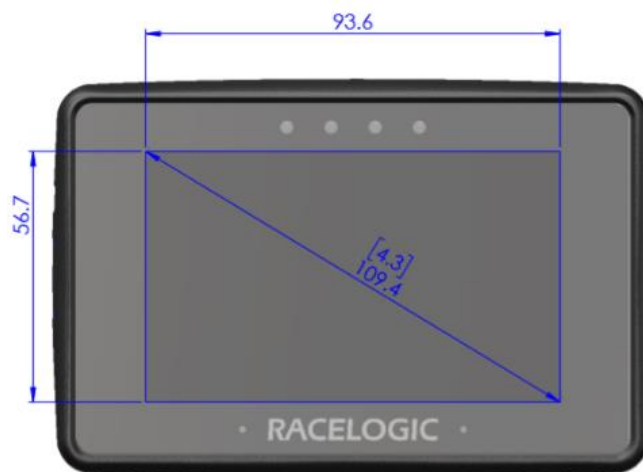
### Without Battery



### With Battery



## Screen



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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-V1	Product Code
1x Performance Box Touch unit only	PBT-V1
1x Swivel Neck Richter Suction Mount	RLACS277
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 SDHC Card (Class 10)	RLACS259

Description RLPBT/B	Product Code
1x Performance Box Touch unit only	PBT-V1
1x Performance Box Touch Battery	RLACS290
1x GPS / GLONASS Low Profile Antenna 2m cable	RLACS284
1x Swivel Neck Richter Suction Mount	RLACS277
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 SDHC Card (Class 10)	RLACS259
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](#)

