



__RALLYMETER 06 | blackBox

(last rev. v8.5 02/2018)

Rallymeter blackBox is a hardware device that allows to receive one or two wheel sensor data and send it to your iPad/iPhone via Bluetooth 2.0 fast and precise without any receiver.

From Ipad3, iPad mini and newer. From iPhone 4S and newer.

If two wheel probes are installed rallymeter will use by default both. We can choose to use one or two sensors from inside the app. **If we connect one sensor only we must disconnect the unused sensor from inside the app.**

Each wheel can have up to 2 magnets/metal points for a faster data refresh. Magnets provide better sensitivity. Sensors are inductive and work by metal proximity. When possible try to isolate sensor metal from car grounding. Please refer to blackBox schematic to see correct mounting. Note that the mounting distance between probe and metal is crucial, **the led in the probe does NOT guarantee correct mounting**, you have to respect the max 2mm distance to be sure it will work perfectly at higher speeds.

INSTALLATION

- blackBox RED to sensor brown
- blackBox GREY to sensor blue
- GREEN – black wire sensor #1
- BLUE – black wire sensor #2

All connections should be soldered and isolated to guarantee best performance.

INSIDE RALLYMETER APP

To connect to the blackBox:

- Be sure that the blackBox is connected to 12v
- Activate iPad/iPhone Bluetooth in case is off
- Launch Rallymeter
- Enter settings tab
- Enter **SENSOR** menu
- When we connect the device for the first time we need to press **RESET BUTTON** in the blackBox section to clear any other paired device.
- We can now activate blackBox switch and the app will search for the device.
- Future connections will not need to do **RESET** as our unique sensor ID will be stored. Only in case we need to connect to another blackBox we will need to **RESET** the device id.

INSTALLATION TESTING

- Go to a place where we can drive a distance of about 500 to 1000 meters/miles for example several times to check the assembly.
- Leave calibration to 1 for example. Now we will NOT calibrate.
- Create a fictitious stage in rallymeter with a distance greater than the one we will travel, for example 2000 meters.
- Connect the blackBox and go to the beginning of the route.
- Select the stage and start.
- We drive until the end where we stop.
- We note the distance.
- Repeat several times the same stage at different speeds.
- We should read the same distance (+/- 2 or 3 meters maximum).
- If there are differences from one pass to another higher than 8 or 10 meters/miles we have to review the setup.