

Installation and Usage Instructions
iBike® iSport™ Power and Fitness Meter
May, 2009
Firmware 310+

REQUIRED: Install iSport handlebar mount on bike

- 1) Remove battery door on back of iSport. Insert battery with + side showing. Replace door.
- 2) NOTE: in this step use supplied bulb-shaped spacer *only* if you have standard (26mm) handlebars. Place double-sticky tape on the handlebars where you want the mount to rest, one sticky on the top side of the handlebar, one sticky on the bottom. Remove green cover from each sticky. Position handlebar mount approximately level on top sticky so that the word “iBike” can be read from the rider’s seat, then place u-shaped clamp on bottom sticky. Fasten clamp to mount loosely with screws; do not tighten.
- 3) Install bike speed sensor on front fork using zip ties and grip strip. For a neat installation, wrap sensor cable around one of your brake cables.
- 4) Install spoke magnet on front wheel; tighten with screw driver. Magnet must pass within 6mm of sensor’s center.
- 5) Place iSport on handlebar mount (hold iSport at 10AM position, set on mount, then rotate iSport to noon position). Move mount until iSport looks approximately parallel to ground. Tighten handlebar mount screws so iSport cannot move. Mount and iSport must be **ROCK SOLID** tight.
- 6) Press center button of iSport to turn it on. Spin front wheel. iSport top display shows bike speed.

REQUIRED: Initial Set-up of iSport computer

- 1) Using bathroom scale measure total weight of rider, bike, water and equipment.
- 2) Optional: determine ride’s starting altitude.
- 3) **Enter iSport set-up screens by press-holding up arrow for two seconds.**
- 4) Scroll with up arrow to “**units**” menu. Click center button. Use arrows to select English or metric. Click center button to store your selection.
- 5) Set front wheel circumference. Factory setting is 2096 mm (700 x 23C), standard for most road bikes. To change value, click center button. Left, right arrows select digit; up and down arrows change digit’s value. Click center button to store. If your wheel size is different email us at technicalsupport@velocomp.com for help.
- 6) Optional: enter Total hrs logged and total odometer settings
- 7) Use up arrow to select year, date, time menus; enter current values.
- 8) Optional: set liquid crystal display (LCD) contrast. The lower the number the fainter the display.
- 9) Estimate your aerodynamic drag (CdA) with the Est CdA screen. Click center button, enter rider height, press center button, enter **rider weight only**, press center button, select riding position (hoods, drops, or TT). Press center button until you find your usual riding position, then press up arrow to select “Yes”, then press center button.
- 10) Optional: adjust rolling resistance (Crr). Factory calibration is 62 (asphalt roads). Set to 80 for rough chip sealed roads, 50 for smooth concrete roads.
- 11) Scroll to “Set Prof” (set profile). Click the center button, then select profile “1” or “2” with the up arrow. Click the center button to accept your choice. The iSport stores two separate profiles.
- 12) Note battery voltage. 275 or above is good; battery lasts 50-80 hours in warm weather, 5 hours or less in cold weather (45F or lower).
- 13) Enter total weight of bike **and** rider.
- 14) **NOTE: TO EXIT SETUP, PRESS-HOLD TOP ARROW FOR TWO SECONDS.**

REQUIRED: Perform iSport Tilt Calibration

- 1) Place iSport on handlebar mount. Make sure iSport and mount are **ROCK SOLID** tight and cannot rotate. Enter set-up mode. Scroll to “**tilt**” screen.

- 2) Find reasonably level ground and mark the exact place where your wheels touch the pavement. Wedge foot in front of rear wheel to keep the bike motionless during tilt cal.
- 3) Click center button to start calibration. During tilt calibration hold bike upright and VERY still.
- 4) When you see “**turn 180°**” turn bike around, set wheels exactly on marked places. Click center button. Hold bike upright and VERY still. When finished screen says “**turn 180°**”. Turn the bike around *again* to its original position, click center button. Hold bike upright and VERY still.
- 5) If the tilt calibration is good the message “good tilt” will flash. If the bike was wiggled during the calibration process the message “bad tilt” may flash. If bad tilt, repeat tilt calibration steps.
- 6) Exit set-up.

OPTIONAL: Coast-Down Calibration (OPTIONAL, ONLY FOR MAXIMUM ACCURACY or if you ride consistently at speeds above 19 mph)

- 1) Perform **Initial Set-up** and **Tilt Calibration** procedures.
- 2) Acclimate iSport to outdoor riding temperature.
- 15) Enter set-up mode. Scroll to “**offst**”. With the iSport acclimated to outdoor temperature and in a place with no wind, press center button. Offset number will settle near zero. **NOTE: PERFORM WIND OFFSET CALIBRATION PRIOR TO EACH RIDE.**
- 3) Wear usual biking clothes. Ride on a reasonably flat-to-uphill road, in your usual cycling position. For best results perform coast-downs when *the outdoor wind is calm and where there is light traffic*.
- 4) While in setup, go to “Coast” screen. Click center button to start coast-down. Screen says “**fast**”.
- 5) Accelerate to 20 mph, until screen says “**coast**”. Stop pedaling **immediately**. Stay in cycling position. Coast-down until screen says “**done coast**”.
- 6) If message “bad coast” appears at the end of the coast down, check tilt calibration and wind offset, then repeat.
- 7) NOTE: The “Est CdA” menu can be used at any time to override coast down results.

REQUIRED: Perform Outdoor Calibration Ride

- 1) Perform Initial Setup and Tilt Cal
- 2) Go to a road where you can ride for one mile without heavy traffic or lots of starts and stops
- 3) Enter setup, scroll to the “Cal Ride” menu
- 4) Press the center button to start the calibration ride. The screen will say “OUT”. Ride one mile at a leisurely pace.
- 5) At the end of one mile, the screen will flash “go bac”, “Turn 180°”. **SLOW DOWN TO 9 MPH OR LESS**, turn your bike around. The screen will say “bac”. If it doesn’t say “bac”, **SLOW DOWN** until it does. Ride back to your starting point. The screen will tell you when the calibration ride is ended. Exit setup. Your iSport is now ready to use!

REQUIRED: Perform Wind Offset Calibration before each ride

- 1) Enter set-up mode. Scroll to “**offst**”. With the iSport acclimated to outdoor temperature and in a place with no wind, press center button. Offset number will settle near zero.

How to use iSport Buttons

- 1) **Center button:** Click to select between two main screens: cycling computer (speed, distance, trip time) and power meter (speed, power, calories). When any other screen is shown, click center button at any time to return to main screen.
- 2) **Top arrow: Avg/Max.** Click once: average values. Click again: maximum values.
- 3) **Left arrow: Trip Totals/Lap Timer.** Click: trip kilojoules (KJ), total vertical climbed. Click again: Total odometer distance and time. Click again: aero and frictional drag coefficients. Press-hold: enter/exit Lap Timer.

- 4) **Bottom arrow: Wind/Hills/Auto-Hill.** Click: hill slope displayed continuously. Click again: wind speed. Press-hold button: Auto-Hill on-off. When “Hill Auto” is set, top screen alternates between hill slope and bike speed. Press-hold again to set to “Hill Off”.
- 5) **Right arrow: Environment/Fitness Workouts.** Click: hill slope, wind speed, current elevation. Click again: temperature, time. Click again: date, year. Press-hold: enter/exit FIT TRAIN workouts.
- 6) **Center screen, center window: PowerBar.** Your instantaneous wattage is shown graphically by a horizontal PowerBar. The scale is on the far right; a 50% full bar with a scale of 400 denotes 200W.

How to reset your ride data: Trip Reset

- 1) Press center button for two seconds. “**Trip reset**” appears. **Click again to confirm reset.**
- 2) Trip Reset starts a new trip and zeroes trip distance and time, KJ, calories, vertical climbed, all avg/max values, and Lap Timer.

How to use the Lap Timer

- 1) Press-hold left arrow for two seconds to enter Lap Timer. **Lap one begins automatically after trip reset.**
- 2) In Lap Timer, iBike shows completely separate set of stats (distance, time, avgs, etc.).
- 3) To start another lap, press-hold the left arrow for two seconds. The number of the just-finished lap will be shown. Your stats from the previous lap will be shown, then the new lap will begin.
- 4) To reset Lap Timer, perform a trip-reset: press-hold the center button for two seconds, then press again to confirm

OPTIONAL: Perform Fitness Test (Consult “Fast Fitness” book for details)

WARNING: CONSULT WITH YOUR PHYSICIAN PRIOR TO PERFORMING THE FITNESS TEST OR ENGAGING IN ANY CYCLING EXERCISE

- 1) Go to a place where you can ride hard for 20 minutes with minimum traffic and start-stops
- 2) Warm up before starting the fitness test!
- 3) Enter setup, scroll to “Fit Test”, press the center button. You’ll see the results from your prior test in the screen.
- 4) Press the center button, and enter ONLY your body weight.
- 5) Press the center button, and enter your sex (FE is female; press up arrow to select “yes” or “no”).
- 6) Press the center button to start the test. The screen will flash “Start Test”. When you’re ready to test, press the center button and start pedaling.
- 7) The screen will show average watts, current watts, and time. The bottom window will start at -10 seconds and count down to zero. When the counter reaches zero the test will start.
- 8) The top window will show your average watts and the middle window will show your instantaneous watts.
- 9) This a 20 minute test. Ride as hard as you can for 20 minutes!
- 10) If you need to pause the test (say, because of a traffic light), click the center button to pause the test; the message “Hold Test” will appear. Click the center button again to resume the test.
- 11) If you want to abort the test, press-hold the center button. The message “Abrt test” (abort test) will appear and the test will stop. Your prior results will remain in memory.
- 12) At the end of the test you will see your results: the middle window will show your watts-per-kilogram result, and the bottom window will show your fitness score, from 1 to 10 (higher is better).
- 13) Exit Setup

Fitness Workouts (Consult “Fast Fitness” for details)

- 1) Perform the Fitness Test.
- 2) Press-hold the right arrow to enter FIT TRAIN.
- 3) Use the left/right arrow to scroll to the workout you want: “Fat Burn”, “Crdo” (cardio), “Strn” (strength) or “Usr” (see below for USR interval instructions). For the workout you select, use the up/down arrow to select fitness difficulty. The higher the number the tougher the workout.
- 4) To start the workout click the center button. You’ll see three numbers: the top number will show your target watts (16₃ means your target wattage is 163W), the middle screen will show your ACTUAL watts and the number of intervals remaining in your workout, and the bottom screen will show the amount of time remaining for you to hold your target wattage.
- 5) At the end of the first interval you’ll get to recover some; the top number will change to a lower target wattage and the bottom number will change to a different time. Note also that the number of intervals remaining will decrement by one.
- 6) Repeat the intervals until the screen flashes “Done”. Workouts take about an hour; consult “Fast Fitness” for more details.
- 7) When done with the workout, press-hold the right arrow. “END TRAIN” will flash and the iSport will return to the main screen

USR Interval (User interval; useful for TT events)

- 1) Press-hold the right arrow to enter FIT TRAIN.
- 2) Use the left/right arrow to scroll “Usr”.
- 3) To start the user interval click the center button. You’ll see three numbers: the top number will show your average watts (16₃ means your average wattage is 163W), the middle screen will show your ACTUAL watts, and the bottom screen will show the elapsed time of the interval.
- 4) To end a user interval, click the center button. The iSport will end the previous interval and immediately start a new user interval.
- 5) Review results of all user intervals by clicking the up arrow. The top window shows interval number, the middle number average watts for the interval, and the bottom window elapsed time of the interval.
- 6) When done with the user intervals, press-hold the right arrow. “END TRAIN” will flash and the iSport will return to the main screen.

Troubleshooting

iSport won’t respond to button pushes

- 1) If your iSport won’t respond to button pushes, remove the battery, insert it backwards for a moment, then reinsert normally. Your iSport will function again.

Inaccurate Readings/No Readings

- 1) If watts, or wind speed, or outdoor temperature become unstable or unbelievable, most likely the problem is a weak battery. Your battery voltage (shown in the batt screen of setup) should be 275 or above prior to each ride. If your battery is bad you may see a message “Batt bad”. If you don’t see any readings, make sure your speed sensor is working. If you are using an optional cadence sensor, make sure your cadence sensor is working properly and that cadence RPM is shown in the bottom window of the power screen.
- 2) If your watts are too low, perform your tilt calibration again and check wind offset.
- 3) If your watts seem “wrong” when riding on the flats, perform a new “Est CdA” calibration or perform the optional coast down calibration.

More Information

Read the book “Fast Fitness” included with your iSport, view short videos at www.ibikesports.com/videos, or email us at technicalsupport@velocomp.com

For information about the optional upgrade of your iSport to a fully-featured iBike Pro (capable of downloadable rides, use of iBike 3 software, firmware updates, and more), or for more information about optional iSport mounts (wired cadence mount or wireless speed/cadence/HR mount) visit:

<https://www.ibikesports.com/ibikestore.html>

To learn more from other iBike owners, visit www.ibikeforum.com