

“Fast Start” Setup and Instructions Summary iBike® iSport®/iPro®/iAero® Wireless Power Meter June, 2009

“Fast Start” is the quick and easy way to set up your iBike:

- Install the mount and sensors on your bike.
- Complete the **Fast Start** sequence. Your iBike screens will guide you through six easy steps. If your iBike was installed by your bike dealer, the dealer will complete these steps with you.
- Perform a 2-mile-long calibration ride.

1. Install wireless mount and sensors

- 1) Remove iBike battery door. Insert battery with + side showing. Replace door.
- 2) While standing behind the bike, place mount on the stem/handlebar so the gold pins look like this:

o o
o o
o o

If the mount is positioned incorrectly the iBike will point backwards when connected to the mount.

- 3) *Stem mount*: position mount so that iBike’s wind sensor is located just behind the front edge of stem.
- 4) *Handlebar mount*: Locate mount so cables won’t block front wind port. Check to see that handlebar mount is reasonably level. Use supplied bulb-shaped adapter with standard (26mm) handlebars.
- 5) Peel off one side of each green sticker. Position one sticker on the top of the stem/handlebar where mount will rest, and the other sticker on the bottom of stem/handlebar, where u-shaped clamp sits under the mount. Peel off the other protective cover of each sticker.
- 6) Lightly set mount on the top sticker, making sure gold pins are oriented as in step 2.
- 7) Connect u-shaped clamp to mount with 2 screws supplied; *do not tighten screws*.
- 8) Install iBike on mount, rotating iBike from 10PM to 12PM position. With iBike in the position you want, tighten mount screws so that iBike and mount **cannot move at all**. Do not over-tighten screws.
- 9) Next, mount wireless sensors. Each wireless sensor’s magnetic area is located at the black vertical notch, found in the upper right corner of the side of the sensor with white lettering.
- 10) The wireless cadence sensor has a round white sticker with the letter “C” on it. Make sure cadence sensor’s white lettering faces outward so that the cadence magnet will sweep by the magnetic area of the cadence sensor. Using zip ties, loosely fasten wireless cadence sensor on chain stay *opposite* the chain.
- 11) Position wireless speed sensor on front *or* rear wheel, *near the rim* (outside edge) of the wheel. Make sure speed sensor white lettering faces inwards, towards spokes. If speed sensor is located on rear wheel, install speed sensor on the chain stay closest to chain. Speed and cadence sensors must NOT be mounted on the same chain stay! Use zip ties to loosely fasten speed sensor to bike fork/chain stay.
- 12) Position black, rectangular cadence magnet on inside of crank, near pedal, so that magnet sweeps by the vertical notch of the cadence sensor. Fasten cadence magnet to crank with zip tie. Position cadence sensor so that cadence magnet passes within 6 mm of cadence sensor. Tighten zip ties.
- 13) Position silver spoke magnet on spoke near rim so that magnet sweeps by the vertical notch of the speed sensor. Tighten spoke magnet with screw driver. Position speed sensor on stem/fork so that spoke magnet passes within 6 mm of speed sensor notch. Tighten zip ties.
- 14) Check all zip ties to be sure they are tight, then cut excess material.
- 15) Wake-up wireless sensors by spinning wheel, turning crank and fastening HR strap to chest. Click center button of iBike to wake up. Click center button again to start sensor pairing. Top window flashes 0₀ until messages SPD FOUND, CAD FOUND, HR FOUND appear. Spin wheel; top window shows bike speed. Spin crank; cadence and HR appear in bottom window of Power Screen. If WLS FAIL appears, make sure iBike is fully locked on to mount (when locked-in a click will be felt), battery is installed in mount *and* iBike, then try again.

2. Perform One-Time “Fast Start” Sequence

- 1) Determine *total weight* of rider, bike, water and equipment.
- 2) Determine front wheel circumference (default is 700x 23c wheel, 2096mm). See manual on CD for other wheel sizes, or email us at technicalsupport@velocomp.com
- 3) Enter iBike “Set Up” mode by press-holding UP arrow for two seconds (UP arrow for set-UP).
- 4) After entering setup you will see the screen “Yes Fast Start”. If you do not see this screen, remove the iBike from your mount, remove the iBike’s battery, insert it backwards momentarily, reinsert it normally and replace battery cover. Place iBike on mount and then enter setup.
- 5) The screen “Yes Fast Start” will appear. To enter the Fast Start sequence, *click the up (or left) arrow*.

NOTE: IF YOU CLICK THE DOWN ARROW THE SCREEN “REL 400” APPEARS. CLICK THE UP ARROW TO RETURN TO “YES FAST START”. THEN, CLICK THE UP OR LEFT ARROW TO ENTER THE FAST START SEQUENCE.

- 6) After clicking the up arrow the “UNITS” screen appears. To select English or metric units, click the center button. The units screen will flash. Click the up arrow to select metric units (km/h will flash in the top window). Click the up arrow again to select English units. When the screen flashes your desired choice, click the center button. The message “done” flashes, indicating that your choice has been memorized. The screen automatically advances to “WHL CIRC”.

NOTE: DO NOT SKIP ANY CALIBRATION STEPS. FOR EACH STEP, CLICK THE CENTER BUTTON TO CHECK OR CHANGE THE SETTING, THEN CLICK AGAIN TO ACCEPT. “DONE” WILL FLASH AND YOU’LL MOVE ON IMMEDIATELY TO THE NEXT STEP.

- 7) “WHL CIRC” (wheel circumference) is pre-set to 2096mm (700 x 23C wheel). Click the center button to check and enter the correct wheel circumference. If needed, enter the circumference of your wheel in mm, using the left/right arrows to select the flashing digit to change, and the up/down arrows to change the value of the digit. To save your entry, click the center button. The screen flashes “done” and advances to the next step, “TOT WGHT”.
- 8) Enter the *total weight* of you, your bike, and your equipment. Click the center button. The left digit flashes. Use the up/down and left/right arrows to enter your correct total weight, then click the center button to accept. The screen flashes “done” and advances to the next step, “EST AERO”.
- 9) To start the “EST AERO” (Estimate aerodynamic drag) steps, click the center button. Enter your height (in inches or cm, depending on Units choice), then click the center button to accept. Next, enter your body weight. Next, select your NORMAL riding position, the position you ride in most often. Choose between Hoods, Drops, and TT. The first choice is “Hoods”. The word “No” flashes. If you normally ride on the hoods, select “Yes” with the up arrow, then click the center button. If you do NOT normally ride on the hoods, then click the center button to select “Hoods No”. You will see “Drop No”; select your choice with the up/down arrow, then click the center button to accept. The final choice is “TT” (time trial); select Yes/No. As soon as you select “Yes” for one of the three available choices, your aerodynamic drag will be estimated automatically for the ride position chosen, “done” will flash, and the screen will advance to the “TILT” calibration.

NOTE: IF YOU HAVE PREVIOUSLY CALIBRATED YOUR IBIKE, YOU CAN SKIP THE EST AERO STEP BY CLICKING THE UP ARROW, OR BY SELECTING “NO” FOR ALL THREE EST AERO CHOICES. YOUR PREVIOUSLY-DETERMINED AERO AND FRIC NUMBERS WILL BE UNCHANGED.

NOTE: “FAST START” ESTIMATES YOUR DRAG COEFFICIENTS. SEE YOUR OWNER’S MANUAL FOR EVEN HIGHER-ACCURACY COAST DOWN CALIBRATION METHODS.

10) Tilt Calibration

- A) Make sure your iBike is fastened to your mount and that your mount is ROCK SOLID tight.
- B) Mark the exact places where your bike wheels rest; *the ground does not need to be level but the surface should be smooth* (no rocks or pavement cracks).
- C) Lock your foot in front of the rear wheel so that the bike can't move forwards or back. Point front wheel straight ahead. With the screen saying "**TILT**", click center button to start tilt calibration. During calibration hold bike upright and VERY still.
- D) When you see "**turn 180**" turn the bike around and set wheels exactly on marked places. Lock foot in front of rear wheel. Point front wheel straight ahead. *Click center button to continue.* Hold bike upright and VERY still.
- E) When you see "**turn 180**" turn bike around a *second time, back to its original position*, with wheels on marked places and front wheel pointed straight. *Click center button.* Hold bike upright and VERY still. When finished screen says "**good tilt**" if calibration is good, or "**Bad Tilt**" if bike was moved. If "**bad tilt**" repeat steps A-E.
- F) When the tilt calibration is "Good" the screen automatically advances to "**CAL WIND**".

IMPORTANT: WHEN YOU'RE UPGRADING FROM AN OLDER VERSION OF IBIKE FIRMWARE, YOU MUST REPEAT THE TILT CALIBRATION.

11) Wind Calibration

- A) Find a non-windy place, or cup your hands over front wind port to block wind.
- B) With the screen saying "**CAL WIND**" click center button. The number at top of screen will drift to (approximately) 00, the "**Done Wind**" message will flash and the iBike will automatically exit Setup.

Repeating the Fast Start Sequence

After completing the Fast Start sequence, if you enter Setup again and scroll to "Fast Start" the screen says "No Fast Start" (NOTE: USER and RACR are other, optional sequences). *When a sequence is set to "No," the sequence's steps are hidden.*

To reveal the hidden steps and perform the Fast Start sequence again, click the center button while on the Fast Start screen. The word "No" flashes. Click the up arrow so the screen says "Yes Fast Start". Click the center button to accept the choice "Yes Fast Start". Now, *when the up arrow is clicked*, the Fast Start sequence steps will be shown.

The above procedure applies to all sequences (FAST START, USER, AND RACR).

NOTE: AFTER STARTING A SETUP SEQUENCE (FAST START, USER, OR RACR), THE ONLY WAY TO EXIT THE SEQUENCE IS TO CLICK THE UP ARROW UNTIL ALL STEPS ARE COMPLETED, OR TO EXIT SETUP COMPLETELY (PRESS-HOLD UP ARROW).

IMPORTANT: IF YOU HAVE MORE THAN ONE BIKE, YOU'LL NEED TO PERFORM THE WIRELESS PAIRING AND FAST START SEQUENCE FOR EACH BIKE. SEE DETAILED INSTRUCTIONS FOR SETTING AND CHANGING PROFILES AND FOR SENSOR PAIRING.

CRITICAL: AFTER COMPLETING THE FAST START STEPS, YOU MUST DO A 2-MILE CALIBRATION RIDE.

3. Calibration Ride

The calibration ride fine-tunes the iBike sensors and settings and YOU **MUST** PERFORM THE 2 MILE OUT-AND BACK CALIBRATION RIDE.

- 1) If you haven't done so already, perform the Fast Start sequence prior to doing the Cal Ride.
- 2) Wear your usual biking clothes and remain in your normal ride position for the entire Cal Ride.
- 3) Place iBike on mount. Ride to the place where you'll do your Cal Ride; the iBike will automatically detect the wireless sensors.
- 4) Press-hold the top arrow to enter setup. Click the up arrow twice to select "**CAL RIDE**". Click the center button to begin the Cal Ride steps.
- 5) If you performed Tilt and Cal Wind steps more than 30 minutes before starting the Cal Ride, you must perform the Tilt and Cal Wind steps again; the iBike automatically guides you through these two calibrations.
- 6) When your iBike is ready for the Cal Ride the word "Start" will flash. Click the center button to start.
- 7) The top window shows speed, middle window shows distance traveled, and bottom window says "**Out**".
- 8) Ride out for one mile at a leisurely pace. The center window shows the distance you've traveled.

NOTE: It's OK to stop during the Cal Ride but try to do the Cal Ride in light traffic and small winds.

9) Once you have traveled a little over 1 mile, the iBike flashes "**go bac, turn 180°**". SLOW DOWN TO 10 MPH OR LESS and turn around safely. The iBike says "BAC" without flashing. *Ride back to your starting point on the same route.* As you ride back the center window will count down until zero distance is remaining. At the end of your iBike will return to "**CAL RIDE**". Press-hold the up arrow to exit Setup.

NOTE: IT'S OK TO RIDE MORE THAN ONE MILE BEFORE TURNING AROUND. THE "**GO BAC, SLOW DOWN**" MESSAGE WILL FLASH CONTINUOUSLY UNTIL YOU SLOW TO 10 MPH.

Your iBike is now ready to ride. Consult the "iBike Detailed Instructions" on the many features of your new iBike, as well as "USER" and "RACR" sequences that can fine-tune your iBike's performance even more.

"USER", "RACR" SEQUENCES, AND DAY-TO-DAY SETUP SCREENS

In addition to the "FAST START" sequence, your iBike setup also includes specialized "USER" and "RACR" (racer) sequences.

The USER sequence includes date, time, absolute wind, and display settings, as well as coast down, fitness test, and indoor trainer settings. *Performing the USER sequence is optional but recommended.*

The RACR sequence includes ESTIMATE CRR, TSS/IF/NP display, FTP configuration, CDA display, (iAero only) and TOTAL HOURS and DISTANCE log. *Performing the RACR sequence is optional.*

For your daily riding, in setup you can conveniently and immediately access CAL WIND, TILT, CAL RIDE, BATT VOLTAGE, ALTITUDE, TOTAL WEIGHT, WLS CFG (WIRELESS CONFIGURATION), SET PROFILE, RECORD INTERVAL, ERASE DATA, AND FIRMWARE VERSION SCREENS.

USING YOUR WIRELESS IBIKE

At the Beginning of Each Ride

Set your iBike on your wireless mount. Make sure the iBike fully locks into position.

Wake up your iBike from sleep. The iBike performs an “Auto Cal Wind” calibration. CUP YOUR HAND OVER THE WIND PORT during this calibration so that wind won’t strike the wind port.

TIP: THE “CAL WIND” STEP CAN ALSO BE PERFORMED QUIUCKLY AT ANY TIME. ENTER SETUP; “CAL WIND” APPEARS. CUP YOUR HAND OVER THE SENSOR, THEN CLICK THE CENTER BUTTON. “DONE” FLASHES AND THE IBIKE EXITS SETUP AUTOMATICALLY.

When you start pedaling the iBike automatically detects the wireless sensors. If you disconnect your iBike from your mount and later reconnect it to your mount, the iBike will redetect the sensors automatically.

You’re ready to ride!

iBike Buttons

- 1) **Center button:** Click to alternate between bike computer (speed, distance/watts, trip time) and Power Meter (speed, power, cadence/heart rate).
- 2) **Top arrow: Avg/Max.** Click: 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: % ride memory usage (100% is full). Click again: total distance and time of all rides. Click again: aero and frictional drag. Optional (from Racr setup): NP/IF/TSS measurements. Press-hold: Lap Marker and lap stats.
- 4) **Bottom arrow: Wind/Hills/Auto-Hill.** Click: hill slope displayed continuously. Click again: wind speed. Press-hold: Auto-Hill on-off.
- 5) **Right arrow: Environment/Fit Train.** Click: hill slope, wind speed, current elevation. Click again: temperature, time. Click again: date, year. Press-hold: Fitness Training. See below for details.

Trip Reset

- 1) Press-hold center button. “**Trip reset**” appears. **Click center button to confirm reset.**
- 2) Trip Reset starts a new trip and zeroes trip distance, trip time, KJ, calories, vertical climbed, Lap Timer, and all avg/max values. New ride file begins for transfer to PC/Mac.

Erase All Ride Data

- 1) Use PC/Mac iBike 3 software to erase ride memory from your iBike. Consult iBike 3 instructions on the CD.
- 2) **OR**, on your iBike go to Setup/Eras Data. Click center button, select “yes” with up arrow then click center button. Wait until “Eras Data” returns. If you do not want to erase data, select “no” then click center button.

Lap Timer

- 1) Lap 1 begins automatically after a Trip Reset is performed.
- 2) Press-hold left arrow to end current lap and start immediately a new lap.
- 3) With each left arrow press-hold, the iBike shows the lap number just completed, then average speed, average watts, and time length of the just-ended lap. After a few seconds the main screen returns.
- 4) At the end of your ride, to reset Lap Timer to “Lap 1”, perform a Trip Reset.
- 5) Markers are placed in the ride file for each lap.

Fitness Test

- 1) Enter Setup, scroll with up arrow to “**User No**”. Click center button, use up arrow to select “**User Yes**”. Click center button to accept. Scroll to “**Fit Test**”.
- 2) Click center button. Previous test results are shown: W/KG score, 1-10 fitness rating. Click center button to start new test.
- 3) Enter body weight ONLY. Click center button to continue.
- 4) Choose sex: “**FE NO**” is male (female “no”); “**FE YES**” is female “yes”. Click center button.
- 5) Screen flashes “**test start**”. Warm up, then click center button to start test.
- 6) *Cycle as hard as you can for 20 minutes.* Average and instantaneous watts are shown during test.
- 7) To “**Hold Test**”, click center button. Click again to resume. To cancel test, press-hold center button; “**ABRT TEST**” (abort test) will flash.
- 8) At end of test your W/KG score and 1-10 fitness rating will be shown. Press-hold top arrow to exit.

Fitness Workouts

- 1) Perform Fitness Test, or enter your known FTP number in Racr screen (Setup/Racr/Yes/FTP CFG).
- 2) While in main screen press-hold right arrow to enter fitness workout “**FIT TRAIN**”.
- 3) Select workout type with left/right arrows (“**Fat**” burn, “**Cardio**”, “**Strength**”, “**User**”, “**iB3**”). Select workout intensity with up/down arrows. Click center button to start workout.
- 4) Target wattage for each interval is shown in top window (14₃ is 143 watts), actual wattage and intervals remaining are shown in middle window, time remaining for current interval is shown in bottom window.
- 5) Pedal bike so that actual watts are close to target watts; center bar will show if you’re above/below target wattage. Hold target wattage until timer counts down to zero.
- 6) At the end of the first interval the targets for the next interval will be shown. Intervals remaining will decrease by “1”. Continue workout.
- 7) At the end of the final interval the screen will say “**done**”.
- 8) Depending on workout selected, workouts will last 40-80 minutes
- 9) To exit Fit Train, press-hold right arrow.

Customized iB3 Workouts created with iBike 3 Software

- 1) Create interval set on PC/Mac using iBike 3 software. Upload interval set to iBike.
- 2) Press-hold right arrow to enter “**FIT TRAIN**”.
- 3) Click left/right arrow to select “**iB3**”. Your customized workout will be selected.
- 4) To start workout, click center button.
- 5) To exit Fitness Training, press-hold right arrow.

User Workouts (great for Time Trials)

- 1) Select “**User**” in the “**FIT TRAIN**” screen
- 2) To start the User interval, click the center button
- 3) Average watts are shown in top window, actual watts in middle window, elapsed time in bottom window
- 4) To start a new user interval, click the center button. To pause the interval, click the left arrow. To resume the interval, click the left arrow again.
- 5) To review results from earlier User intervals, click the up arrow.
- 6) To reset User intervals, perform Trip Reset.

Obtain iBike Serial Number

- 1) Connect your iBike and USB Adapter; launch iBike 3 software. Go to *Device/iBike SN & FW version...*

You’ll find detailed instructions on your iBike CD for everything explained in this summary, as well as a description of additional features contained in the User and Rac(e)r Sequences.