**INSTALLATION**

- **Strap Mounting**: Use the provided strap mount to attach your SpeedCoach GPS to a rigger, foot stretcher or any other convenient location in any boat you row. The mount base rotates to allow you to install the strap vertically or horizontally.

- **SpeedCoach Harness Dock Mounting**: If your boat is equipped with a SpeedCoach harness, you can mount your unit on the dock. Your SpeedCoach GPS will always use its internal accelerometer to calculate stroke rate so a seat switch and magnet are not necessary. If an impeller is present, you have the option to select "Impeller" for speed and distance input. Otherwise, the harness dock will serve as a secure holder and your unit will use its internal GPS receiver to calculate speed and distance.

- **Speed Coach Heart Rate Monitor**: The heart rate monitor belt connects to your unit via Bluetooth technology. Adjust the straps to fit your body snugly. Attach belt across the lower portion of your chest, as shown in the figure to the right. To pair your strap to your unit, please see Setup Menu option.

**BASIC OPERATION - JUST ROW!**

- **Turn On**: Hold for 2 seconds.
  - **Start**: Press once. A chequered READY bar will appear on the screen. The REAR READY bar will disappear as stroke rate, speed/split, timer and flex windows all start to run when the unit detects a stroke.
  - **Stop**: Press once.
  - **Reset Timers**: Hold for 2 seconds until the reset bar appears, then release. Press again to Start.

- **Turn Off**: Hold for 3 seconds until TURN OFF bar appears (after STOP and RESET), then release. Your SpeedCoach GPS will turn off automatically after 8 minutes of not sensing accelerometer movement. To preserve battery, be sure to turn your unit off before carrying it in your workout bag.

- **Change Flex Field Measurement**: Press up to change the bottom left flex window and press down to change the lower right flex window.

  - **DISTANCE**: Accrued distance since reset in your selected units of measure.
  - **AVERAGE**: Average speed or Speed since reset calculated as a function of the distance traveled over the elapsed time.
  - **COUNT**: Count of strokes detected since reset.
  - **DIST/STROKE**: Distance per stroke calculated on a stroke-by-stroke basis.
  - **HEART RATE**: Displays current heart rate in beats per minute (bpm).
  - **ELAPSED TIME**: Amount of time passed.

**ADDITIONAL FUNCTIONS AND OPTIONS**

**NAVIGATING THE MENUS**

- **Main Menu**: Press once to access the Main Menu. From here, you can Recall Data, Erase Data, enter the Setup Menu or view the About screen for firmware version number.

- **Move/Adjust**: Use the up and down buttons to navigate within a menu OR to adjust a selected value.

- **Select**: On any menu, select the highlighted option to enter the submenu or adjust the value.

- **Go Back/Exit**: Press to exit from any screen or menu to the previous screen.

**ADDITIONAL FUNCTIONS AND OPTIONS (CON’T)**

**USING THE MEMORY**

The SpeedCoach GPS memory stores 200 memory points at a fixed interval of 100 meters. It will also store a snapshot of your data each time you start and stop your timer during your row. At each memory point, the SpeedCoach GPS stores the distance and elapsed time as well as the instantaneous stroke rate, speed/split and distance from the last complete stroke prior to the memory point. The cumulative average speed to that point is also stored.

- **Recall Data**: Select Recall Data from the Main Menu. The display will return to the normal window arrangement with a RECALL bar displayed. The Interval count is displayed in the top right corner.

- **Step through Data**: The screen will advance to the next point with each press.

- **Change the Flex Fields**: At any data point, you may change the flex fields to see the other stored values.

**SETUP MENU**

From the Main Menu, use the V and select Setup. From there, use the menu navigation steps described above to navigate, select, adjust and exit setup options:

- **Input**: The Speed (and distance) Input setting can be set to GPS or Impeller. Please note that you will need a wiring harness and impeller to use the Impeller mode.

- **HRM Setup**: Clicking this option will automatically attempt to pair the Heart Rate Monitor (HRM) belt with the SpeedCoach unit. The HRM will turn on automatically when attached to your body. If your HRM belt is not found, place two fingers on the metal strap buckles to activate.

- **Speed/Distance Setup**: Options are Speed Mode (where you can select Speed, which is your distance for a time, or Split, which is predicted for your selected interval and Units) and Change to select which units of measure you wish to be displayed.

- **Auto Pause**: Your auto pause selection will govern whether the timer will stop rowing automatically after you stop rowing, or continue running, allowing you to time rest intervals even if you stop rowing. If Auto Pause is “ON,” the timer and other windows will all stop six seconds after that last stroke is detected. If the Auto Pause is “OFF,” the timer will keep running whether or not you are rowing. To stop the timer when Auto Pause is off, press once. To resume rowing, press once. To bring up the READY bar, the timer will restart as soon as a stroke is detected.

- **NOTE**: Average speed is calculated as a function of the distance covered in the elapsed time shown. Because the timer will continue to run while you are not rowing, turning Auto Pause “OFF” will impact the calculation of your cumulative average speed.

- **Advanced**: To access more advanced setup options, see below.

**ADVANCED SETUP MENU**

- **Impeller Calibration**: To change your Calibration Value or run the calibration routine (see the reverse side).

- **GPS Spd Smoothing, Strokes**: The Speed Smoothing feature will average the last number of strokes selected. If “2” is selected, for example, the Speed/Split displayed will be an average of the last two strokes, updated every stroke.

- **Stroke Rate Setup**: Options are Stroke Start Acceleration, Noise Filtering and Axis. Timer Start Acceleration governs the degree of acceleration that must be detected by the accelerometer to start the stroke meter. Noise Filtering governs the degree to which the accelerometer will register changes in acceleration as a stroke. The default value of 0.5 is generally the best for all types of rowing. A lower value will increase the variability of the stroke rate. The Axis option allows you to select Front-Back (2) or Any (3). Front-Back (2) is the recommended setting for rowing.

- **Time and Data**: Used to change the format of the date and time displayed. Please note: only time shows currently, date will be shown on recall screen (not currently implemented).

- **Diagnostics**: The Diagnostics screen provides information about the performance of your unit’s GPS receiver, accelerometer, HRM, clock, and charging system. This information assists NK tech support in case your unit is not functioning correctly.

**USE YOUR LANYARD** — To prevent loss of your SpeedCoach GPS with Heart Rate, make sure to locate your lanyard around any secure part of your boat. There are a lot of electronics packed into the unit and IT DOES NOT FLOAT. NK is not responsible in the event that your unit sinks.
Calibration is only relevant if you are using your SpeedCoach GPS with a wiring harness and speed impeller at a time. The Calibration Routine is an adjustment factor that compensates for any difference between your impeller's distance measurement and the “standard boat” speed impeller at times. The Calibration Value is an adjustment factor that compensates for any difference between your impeller's distance measurement and the "standard boat" speed impeller at times. The Calibration Routine requires that you row your course in both directions so the unit can average out any impact of current, tide or wind, and to improve the accuracy of the calibration result through more comparison data.

If you wish to change your calibration distance from 500M, press * to move to the distance line, * to select, then * to adjust and to accept.

To run the calibration routine, press * to highlight Run on the Calibration Menu, then * to select. From the calibration screen, press * to start each calibration leg and follow the screen prompts. On each leg, the land distance and water distance will count up until the selected distance is reached in the land distance window (bottom left). Note that there will be a three- or four-stroke delay at the start of each leg while the GPS and impeller readings are synchronized. At the end of the routine, the newly calculated value will be displayed. Press * to accept the new value and exit the routine, or press * to return without changing your calibration value. At any time while running the calibration routine, you can press * to exit the routine without changing your calibration value.

Your SpeedCoach GPS employs a high-precision 5-Hz GPS receiver. This means it receives GPS position and speed data from the GPS satellites 5 times a second. This update rate, which is five times that of any running watch on the market, is necessary to provide the data density for accurate stroke-by-stroke rowing speed. Your GPS receiver’s performance is dependent upon having an unobstructed view of the sky. After passing under a low or wide bridge, you are likely to notice erratic speed data for a stroke or two. Your unit will return to accurate values as soon as it re-established good satellite signal. A higher setting for speed-smoothing strokes will dampen both the initial error and the three- or four-stroke delay at the start of each leg. While the GPS and impeller readings are synchronized. At the end of the routine, the newly calculated value will be displayed. Press * to accept the new value and exit the routine, or press * to return without changing your calibration value. At any time while running the calibration routine, you can press * to exit the routine without changing your calibration value.

BATTERY USE AND CHARGING

A fully charged battery will provide approximately 6-8 hours of operation, depending on back-up use. Each bar on the battery indicator represents 20% of battery life, or approximately 1.2 to 1.6 hours.

To charge your unit, press it firmly into the charging dock of your SpeedCoach GPS charger until it clicks and you see “Charging...” on the screen. The battery indicator will flash and the bars will indicate the charge status achieved. The battery indicator will show full and stop flashing after 90% charge is achieved, and the display will turn off when the unit is fully charged.

The SpeedCoach GPS can only be charged with the supplied charging dock. The SpeedCoach GPS is compatible with any USB charging source, including your computer or a cell phone standby power source. A SpeedCoach XL charger will not charge a SpeedCoach GPS.

WARNING! LITHIUM-ION POLY BATTERY HAZARDS

Your SpeedCoach GPS contains a lithium-ion battery pack. Lithium-ion batteries contain flammable liquid electrolyte that may vent, ignite and produce sparks when subjected to high temperatures or when damaged or charged. If ignited, batteries may burn rapidly with a flare effect and may produce irritant, corrosive and/or toxic gases, including toxic hydrogen fluoride gas, which may cause dizziness or suffocation. Contact with battery electrolyte may be irritating to skin, eyes and mucous membranes.

• Do not ever subject to fire or temperatures above 140°F | 60°C. Note: A car in hot sunlight may exceed these temperatures!
• Do not charge, use, transport or store above 115°F | 46°C.
• Do not charge below 32°F | 0°C.
• Do not puncture or open the cell.
• If the unit’s internal battery pack is damaged, avoid contact with battery electrolyte, which may be irritating to skin, eyes and mucous membranes.
• In case of battery fire, evacuate the area to avoid inhalation of fumes. If possible, cover the battery with sand to extinguish the fire or use a dry ABC-type extinguisher.

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