**INSTALLATION**

**SpeedCoach OC Mounting Plate**

For the best mounting results, you will want to choose a spot where the mounting plate is flush to the deck. You will also want to ensure that the SpeedCoach will be clear of your paddle blade when switching hands and does not force you to look downward or over your paddle forming. After choosing a mounting location, clean this location with the provided alcohol swabs to remove all dirt and debris from the board. Allow a minimum of 5 minutes for the alcohol to evaporate from the board. Unclip the mounting plate from the SpeedCoach bracket. Remove the paper liner from the mounting plate tape. Press down and hold the mounting plate in the chosen mounting location for at least 30 seconds. **IMPORTANT!** Wait at least 12 hours before clipping the SpeedCoach bracket into the mounting plate or attaching the SpeedCoach unit. Wrap the excess lanyard around the base of the mount, making sure you leave enough slack on the lanyard to attach it to the leash mount. Mark on one side a point where you can mount the SpeedCoach bracket into the mounting plate or attaching plate in the chosen mounting location for at least 30 seconds.

**Mounting Plate Tape**

Press down and hold the mounting plate tape. Press down and hold the leash mount to install. Pull lanyard through the leash mount opening and wrap the lanyard around the SpeedCoach unit to hold in place (Fig.9).

**SpeedCoach Heart Rate Monitor**

The heart rate monitor belt connects to your unit via Bluetooth® Low Energy technology. Attach belt across the lower portion of your chest, as shown in the figure to the right and adjust the strap to fit your body snugly. To pair your strap to your unit, please see Setup Menu option.

**NOTE!** Your SpeedCoach OC DOES NOT FLOAT! To prevent a loss, keep the NK “Life savers” foam float attached to your SpeedCoach at all times. When paddling, loop the lanyard around the mounting dock. NK is not responsible in the event your SpeedCoach sinks and is lost.

**BASIC OPERATION**

**Turn On** - Hold for 2 seconds.

**Satellite Lock Indicator** - It is recommended to turn the unit on when outside and wait for this icon to go from a yellow to a solid green color. Once you have confirmed your GPS satellite coverage and can begin your row (approx. 1-3 mins).

**Start** - Press once. A checkered READY bar will appear on the screen. The READY bar will disappear and the unit will start timing.

**Stop** - Press once.

**Reset Timers** - Hold for 2 seconds until the RESET bar appears, then release. Press again to Start.

**Delay Off** - Hold for 3 seconds until TURN OFF bar appears (after STOP and RESET), then release. Your SpeedCoach OC will retain all user data for the 24 hours and save it to your workout bag or car.

**Change Flex Field Measurement** - Press up to change the bottom left flex window and press down to change the left-right flex windows. Note: You can also change the top windows through your Setup->Display Setup option (firmware 2.12 or higher). Please see the Setup section on how to change these fields.

**DISTANCE** - Accurated distance since reset in your selected units of measure.

**AVERAGE** - Average Split 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** - Current heart rate in beats per minute (bpm).

**ELAPSED TIME** - Amount of time since start of paddle.

**CAL/HR** - Average calorie burn per hour paddled.

**CAL/STROKE** - Total number of calories burned.

**Live Link indicator** - Indicates mobile device is connected and streaming.

**Live Link indicator** - Indicates mobile device is connected but not streaming.

**LIVE STREAM**

**Select Live Stream** to broadcast your SpeedCoach measurements to the cloud for public viewing. You will need to pair the SpeedCoach to a mobile phone and have the phone in range of the SpeedCoach to broadcast your data live. We recommend keeping the phone in a waterproof bag.

1. Download NK Live Link application to your mobile device.
2. Make sure Bluetooth is turned on your mobile device.
3. Open the NK Live Link App.
4. Enter a Boat ID in the Live Link application.
5. Turn Live Streaming ON/OFF on the SpeedCoach.
6. On SpeedCoach select Phone Pairing->Find New. In the LNK app, select Pair.
7. Your data will now be broadcast live. Go to the app or link.nksports.com to view live results.

**MENU NAVIGATION AND SETTING BUTTON USE**

**Access Menus/Select**

Press once to access the Main Menu. From there, you can Setup or Run Workouts, View Data Recall, use the Data Link, enter the Setup Menu or view the About screen for firmware version number and other information. On any menu, select the highlighted option to enter the submenu or enter adjustment mode. The icon moves the next menu item adjustment.

**Move/Adjust**

Use the up and down buttons to navigate within a menu or to adjust a selected value.

**Go Back/Exit**

Press to exit from any screen or menu to the previous screen.

**Odometer**

A running total of the distance paddled since last reset. These distances can be reset at any time by the user. Please note: a “Unit Odometer” is found in the About menu option. The Unit Odometer shows the lifetime distance of the unit and cannot be reset by the user.

**MEMORY**

The total memory that the unit can store is approximately 25 hours. Every stroke is stored in memory and the memory can be reviewed by 100 meter increments. Stroke by stroke details can be exported with the Link application.

**Memory Storage**

When the memory is full, the unit will stop recording data. When nearing or at full data, delete all session data to continue recording (see below). The amount of memory used can be found on the bottom of the Recall Menu. An alert message will appear when memory log is nearly full.

**Data Recall**

Select Data Recall from the Main Menu to review stored data. Recall memory will be formatted in sessions according to date and time. Just row sessions will have the JustGo prefix whereas a Workout session will just show the pieces run.

Please note: a session is not complete until: a) In Just Row, you reset the counter b) In Workout, the workout is completed or cancelled.

**Clear Memory, Erase All Data**

This selection will delete ALL memory if chosen. Sessions cannot be deleted individually.

**Viewing Sessions**

Selecting a session/workout will bring up the Workout Summary (Figure 1). This overview will provide the overall stats for all measurements during the entire session. Pressing the Details button brings up the Internal Summary page (Figure 2). An overview of the various intervals that were performed during the entire session will be shown. If you select a specific interval, the Detailed Interval Review screen (Figure 3) will be shown. This screen shows the interval breakdown by a specified period (time or distance). Select MORE TO view additional measurement values not currently shown on the screen.

**Data Link**

Select this to connect your unit to your PC or MAC for Firmware updates or uploading data to your computer. Please go to www.nksports.com/support/swimming-and-sports-support/manuals- and-downloads/ to download the Link application and follow instructions.

Please note: Bluepipe Bluetooth Low Energy dongle required.
SETUP MENU

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

Profile
Adjust the units (lb/in or kg/cm) then set your height, weight and age for accurate calorie burn information.

Display Setup
Allows you to set the top two windows to display any of the measurements available.

Accessory Setup
Select this option to pair your Heart Rate belt (HRM) with the unit. If more than one belt is found, you may need to change locations to isolate the HRM. The HRM will automatically pair if a HRM is attached to your body. Once paired, you can enter and exit the setup without losing the connection.

Speed/Distance Setup
Options are Speed or Split mode. Speed mode will display your speed in the top left window. Split mode will display distance traveled. Set the distance per split as a time to qualify the middle distance section. 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 trip, the newly calculated speed will be displayed.

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.

Auto Pause
If toggled Off, the unit will stop the timer if it does not detect a stroke within the last 6 seconds. If toggled On, the unit will not stop the timer even if no strokes are being detected. If you would like to stop the timer manually, please select the [ ] button to start and stop the timer manually. Please note: the unit will not Auto Pause during the first session of a Workout.

Auto Shutdown
When Auto Shutdown is set to 10min, the unit will automatically shut off after 10 minutes of not detecting a stroke rate. If the Auto Shutdown is set to Off, the unit will only turn off when the user manually shuts down the unit.

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 average speed.

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

ADVANCED SETUP MENU

Impeller Calibration
To change your Calibration value or run the calibration routine (see below).

GPS Spd/Smoothing, Strokes
The SpeedSmoothing feature will average the last number of strokes selected. If “Z” is selected, for example, the SpeedSpd displayed will be an average of the last two strokes, updated every stroke.

Stroke Rate Setup
Options are Start Control, Acceleration, Noise Filtering and Axis

Timer Start Acceleration
Governs the degree of acceleration that must be detected to start the stroke meter. The default value is 4. If you increase this value, a more forceful stroke is needed to start the timer. If you decrease this value, a less forceful stroke is needed to start the timer.

Noise Filtering
Governs the degree to which the accelerometer will register changes in acceleration as a stroke. The default value is 5. If you increase this value, more acceleration is needed to register a stroke. If you decrease this value, less acceleration is needed to register a stroke.

Axis
Allows you to select Front (Back-2) or Any (3). Front-Back-2 is generally recommended for rowing assuming that the unit will be mounted perpendicular to the long axis of the boat. If mounting at a non-orthogonal axis, the recommendation is to toggle to Any (3).

Time and Date
Used to change the format of the time and date displayed. Please note: only time displays on the show date. Date will be shown on data recall screen. Please note in most U.S. locations daylight savings time is ON in the summer and OFF in the winter.

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

IMPELLER CALIBRATION

Calibration is only relevant if you are using your SpeedCoach OC with a wiring harness and speed impeller. The Calibration Value is an adjustment factor that compensates for any difference between your impeller’s distance measurement and the “standard base” upon which the SpeedCoach’s calculations are based. Calibration applies only when in Impeller mode for speed and distance can average out any impact of current or tide to improve the accuracy of the calibration routine.

Entering Impeller Calibration
Select *Impeller Calibration* from the Advanced Setup Menu.

Entering a Calibration Value Manually
If you know your boat’s Calibration Value (from previous calibration, it is the same for your SpeedCoach), you can enter it manually. From the Calibration Menu, press [ ] to select the Calibration Value, then press [ ] to adjust the value, and [ ] to accept the value.

Running the Calibration Routine
The SpeedCoach OC does not need a measured course to be calibrated. Because the SpeedCoach OC knows both the GPS and Impeller distance measured, it can self-calibrate. Calibration simply involves rowing the selected distance in two directions. Your distance options are 500 to 1000M. OC knows both the GPS and Impeller distance measured, it can self-calibrate. Calibration simply involves rowing the selected distance in two directions. Your distance options are 500 to 1000M.

To run the calibration routine, press [ ] to highlight Run on the Calibration Menu, then press [ ] to select. From the calibration screen, press [ ] to start each calibration leg and follow the screen prompts. On each leg, the land distance will count down 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 speed will be displayed. Press [ ] to accept the new values and exit the routine, or press [ ] to exit the routine 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.

WORKOUTS

Run Last Workout: Runs the last workout. This is a quick way to repeat a single distance or single time workouts without setting up intervals.

NOTE: Press [ ] to ready the workout. Workout will start when first stroke is detected. Please pause a workout. Hold [ ] to cancel a workout.

Single Distance: Select this option to run a single distance-based workout at the distance shown. Press [ ] followed by [ ] to adjust the distance. Then press [ ] to run the distance.

Single Time: Select this option to run a single time-based workout for the time shown. Press [ ] followed by [ ] and [ ] to adjust the time. Then press [ ] to run the workout.

Intervals:
Select this option to create a multi-interval based workout (e.g. time, distance, and/or rest periods). You can select from the pre-loaded workouts or customize your own. Up to 6 custom workouts can be programmed. The SpeedCoach OC supports 6 default workouts, which are editable. Please note: Interval workout names are automatically generated based on the type of intervals performed.

Creating an Interval Workout
First select a pre-existing workout to edit. Use [ ] and [ ] to select a field. Press [ ] followed by [ ] and [ ] to enter your values and [ ] to exit the routine without changing your Calibration Value.

Workout Options:
- Time: Time is displayed in hours and minutes. Units are hours.
- Distance: Distance is displayed in miles or kilometers. Units are miles.
- Rest: Rest is displayed in minutes and seconds. Units are minutes.

Countdown:
When toggled ON, a countdown timer will start when the first stroke is detected. When the countdown reaches zero, the workout will begin. If toggled OFF, the workout will start immediately when the first stroke is detected.

Intervals:
Determines the number of intervals in the workout. If you select Equal, all work intervals will be equal in time and value and all rest intervals will be equal in time and value.

Work:
Defines the first work interval of the workout. Work can be time based or distance based. If more than one interval is being performed, a number will be added to this entry (i.e., Work1, Work2, Work3, etc.)

Rest:
Defines the amount of rest in between work intervals. Rest can be time based or distance based. The number shown to the right is the rest value per the unit shown. Similarly if more than one rest period is entered in a variable workout, it will be followed by a number.

Number of Sets:
Select the number of sets of the proceeding interval workout to run. For example, if you have a workout with a work and rest interval, setting this to 2 will run this work and rest interval twice.

Rest Between Sets:
Only appears if Number of Sets is greater than 1. Defines the rest period between a repeated group of intervals.

BATTERY USE AND CHARGING

A fully charged battery will provide approximately 6-8 hours of operation, depending on backlight 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 OC charger until it clicks and you see “Charging...” on the screen. The battery indicator will flash and the bars will appear until the battery is fully charged. 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 OC can only be charged with the supplied charging dock. The SpeedCoach OC is compatible with any USB charging source, including your computer an automatic USB or a cell phone standby power source. A SpeedCoach XL charger will not charge a SpeedCoach OC.

Your SpeedCoach is equipped with a safety feature that will shut down charging if the battery temperature is hot or too cold. Do not charge below 32°F (0°C) or above 115°F (45°C). If you receive a battery warning on the screen while the unit is between these temperature limits, immediately remove the unit from the charging dock and contact NK for further service. Additional charges may result in fire or permanent damage.

WARNING! LITHIUM-JON POLY BATTERY HAZARDS

Your SpeedCoach OC contains a lithium-ion poly 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 overloaded. If ignited, batteries may burn rapidly with a flash effect and may produce inebriating, corrosive and/or toxic gases, including toxic hydrogen fluoride gas, which may cause dizziness or suffocation. Corrosive battery electrolyte may be irritating to skin, eyes and mucous membranes.

- Do not 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 | 45°C.
- Do not charge below 32°F | 0°C.
- Do not discharge in contact with flammable materials.
- Do not puncture or open the unit.
- If the unit’s internal battery pack is damaged, contact your authorized distributor or retailer of the SpeedCoach OC. Do not attempt to repair the battery pack.
- Always use the SpeedCoach OC with a proper balance plug.
- Allow good air circulation around top and sides of unit while charging.

SPECIFICATIONS

- Weight: Control unit and bumper: 5.2oz (150 g)
- Dimensions: Measures 3.6X2.6X1.2 in (92x67x31mm)
- Battery: Does not use Ni-Fe transport.
- Memory: 25 hours of memory. Stores every stroke.
- Battery Capacity: One rechargeable lithium polymer battery provides up to 8 hours of battery life.
- Battery Life Expectancy: After 300 full charge and discharge cycles, expected capacity is 60% of original.
- Accuracy: Speed: ± 0.1 m/s. Distance: ± 2.5 m over any distance.