



## User Guide

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*Please read the manual before use.*

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- The information in this document will not be modified or extended without any notice.
- The Swimbots device should be charged for at least 1 hour before use.
- **BE CAREFUL:** Do not charge the Swimbots with water inside the USB port.

## 1. Product specifications

- CPU MIPS M200 1.2GHz 300MHz
- Memory: RAM 4Gb
- Invensense high quality sensors: accelerometer, gyroscope and magnetometer
- Bone conduction speakers. 30g
- Touch screen 1.54" 240x240 pixel
- Size: 9.5x4.5x1.2cm
- Weight: 60g
- Bluetooth LE 4.0
- Wifi 2.4GHz WLAN IEEE 802.11 b/g/n
- Waterproof IP68 rating
- Battery LI-ION 3.7V 700mAh

## 2. Product details

### 2.1. Details



Figure 1: Swimbots details

- **Power key:** On/Off; Awaken/turn off screen.
- **Volume up/down keys:** Increase/Decrease the Swimbots application volume.
- **Touch screen:** Each graphic element will be shown and displayed on the capacitive touch screen.
- **Previous/Next keys:** Select an exercise in the Swimbots exercise list.
- **Start/Stop key:** If an exercise is not running, start the selected exercise. Otherwise, stop the current Swimbots exercise.

- **USB port:** Charging and data transfer



*Figure 2: Swimbot USB charging*

- **Bone conduction speakers:** Audio feedbacks on swimming technique and start/stop exercise function.



*Figure 3: Swimbot bone conduction speakers*

## 2.2. Setting up

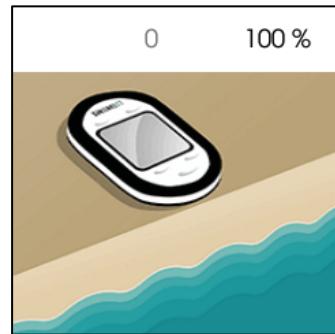
### 2.2.1. Swimbots calibration

After booting the device, the Swimbots will be in the Calibration mode. The Swimbots needs this step to recognize the orientation of the swimming pool you are swimming in.

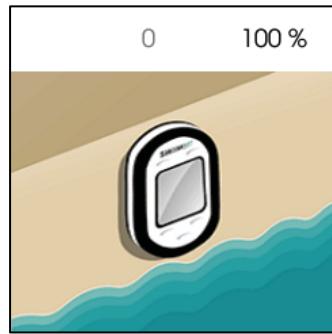
There are two consecutive phases:

- Horizontal calibration
- Vertical calibration

According to the picture displayed on the screen, place the device in the proper position and press on the “Start/Stop” button to validate the current calibration step.



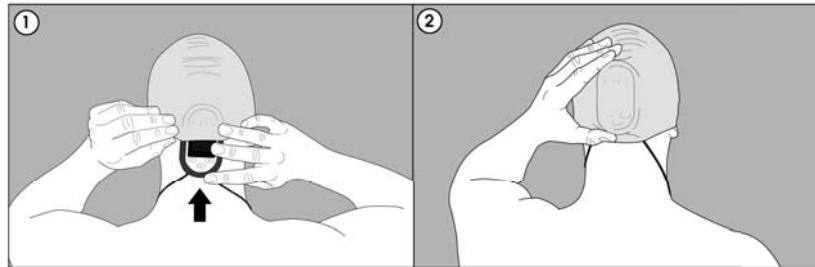
*Figure 4: Horizontal calibration phase*



*Figure 5: Vertical calibration phase*

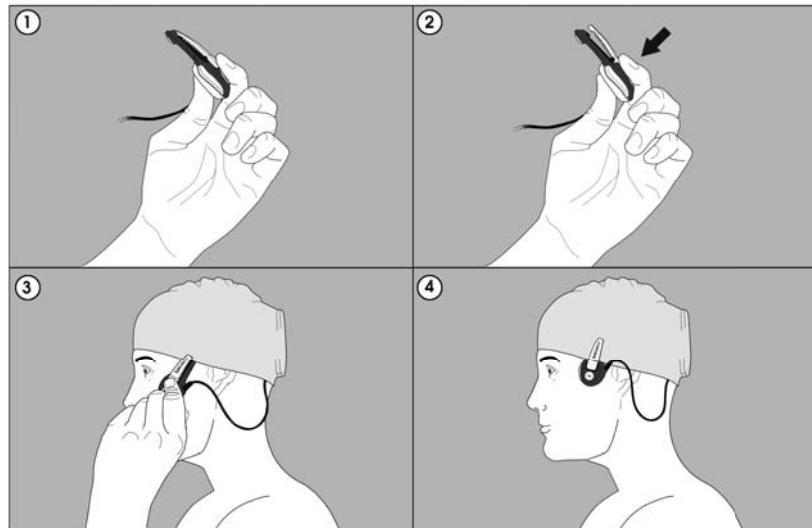
### 2.2.2. Into cap setting

- 1) Once the Swimbots is calibrated, you can place it in your swimming cap.



*Remark: The black backside should be against your head in order to access the buttons on the screen side with your fingers.*

- 2) Place the bone conduction speakers.



*Remarks:*

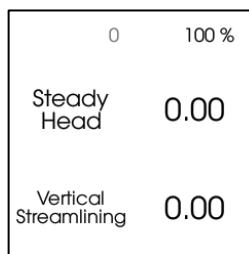
- Be careful to avoid pushing the Start/Stop button in step 2 and 3.
- For better out-of-water listening, place the speaker close to the ear.
- When swimming back crawl, the headset could be placed behind the ear for greater comfort.

### 2.2.3. Exercise selection

#### 2.2.3.1. Swimbotscore

Swimbotscore is based on 2 stroke affects that Swimbots detects in real time: keeping your head still and avoiding excessive vertical streamlining.

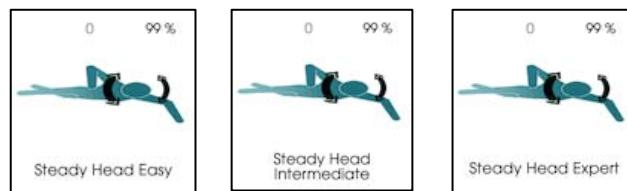
You start from 10. Each stroke defect drops your score. When you have completed the test you get your Swimbotscore. The goal is to have the best score out of 10!



#### 2.2.3.2. Steady head

Keep your head steady to optimize your streamlining. The Swimbots gives you audio feedback when your head exceeds a fixed angle. The selected level determines this angle:

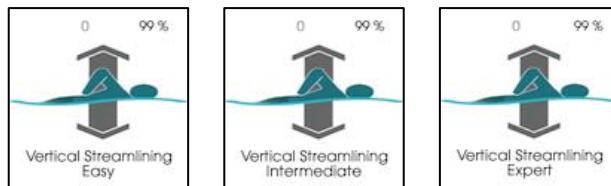
- Easy: +/- 20 degrees
- Intermediate: +/- 15 degrees
- Expert: +/- 8 degrees



### 2.2.3.3. Vertical streamlining

Learn how to reduce unnecessary vertical movements by improving body position and stroke patterns. The Swimbots gives you audio feedback when you exceed a fixed vertical acceleration. The selected level determines this acceleration:

- Easy:  $4 \text{ m/s}^2$
- Intermediate:  $2 \text{ m/s}^2$
- Expert:  $1 \text{ m/s}^2$



## 2.3. Common troubleshooting

Please refer above key functions for any problems with the Swimbots, if the problem remains unsolved; please contact us at [sav@swimbot.net](mailto:sav@swimbot.net).

### 2.3.1. Unable to turn the power on

- Pressing the power button too quickly does not work. Please press it for more than 3 seconds.
- Low battery, you must charge the device.

### 2.3.2. Shut down automatically

- Low battery, you must charge the device.

### 2.3.3. Unable to charge

- The battery's life will be reduced after several years, please check if the battery is working.
- Try to use another micro-USB cable.
- Please check if the micro-USB cable is well connected to the Swimbots USB slot.
- If it's still not working, please contact us at [sav@swimbot.net](mailto:sav@swimbot.net).

€2200

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

FCC ID: 2AIF5-EM200