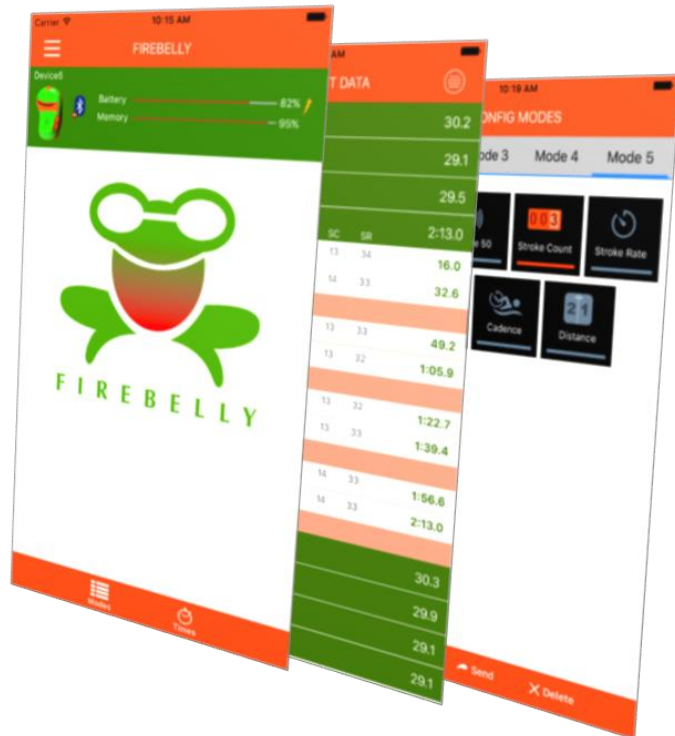




FIREBELLY

SWIM PERFORMANCE MONITOR



PRODUCT MANUAL

Table of Contents

Getting Started	1
What's in the Box.....	1
Firebelly App	1
What's in this Document.....	1
Additional Learning Information.....	1
Setting up your Firebelly Device	2
Device Overview	2
Configuring Performance Feedback	3
Smart Cadence.....	5
Head Position.....	6
Other Configuration	7
Performance Feedback While you Swim	8
Getting Ready	8
Swimming.....	8
Accuracy Tips	9
Viewing Swim Data.....	10
Total Distance Swum with the Device	10
Data Stored on the Device	11
Data Synced on Phone or Tablet.....	13
Managing your Firebelly Device with the Firebelly App	14
Device Status Bar	14
Updating your Firebelly Device	15
Device Care	16
Battery and Charging.....	16
Daily Care	16
Protecting your Firebelly Device	17
Troubleshooting.....	18
General Info, Regulatory, and Safety Information	19
Health Warning.....	19
US Federal Communications Commission (FCC) Declaration of Conformity	19
Additional Information Available Online	19
Glossary of Terms	20

Getting Started

Welcome to the Firebelly Swim Performance Monitor!

What's in the Box

Your Firebelly box includes:

- Firebelly swim device
- USB charging cable
- Quick Start Guide



Swim device



USB charging cable

Firebelly App

The Firebelly App is available for Android and Apple mobile devices through the App Store and Google Play. Firebelly App uses Bluetooth to communicate with the Firebelly device in order to program the device and view workout data. Note that your mobile device must have Bluetooth LE to work with the Firebelly device.

What's in this Document

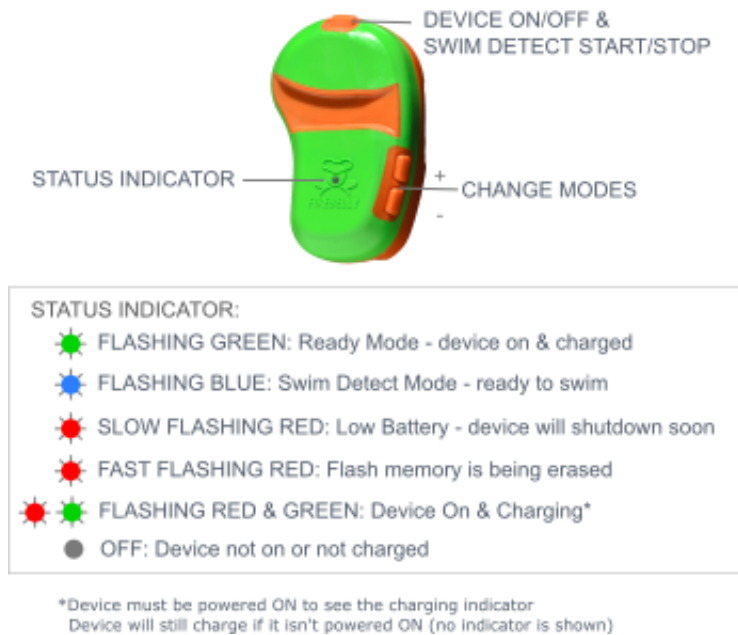
The Quick Start Guide gets you started using Firebelly and getting real-time feedback while you swim. This manual picks up where the Quick Start Guide leaves off and will walk you through how to use each of the Firebelly device and Firebelly App features. Specifically, the document will cover how to setup the device and customize the performance feedback, how to use it when you swim, how to view the recorded time data, and how to manage and care for the device.

Additional Learning Information

The Firebelly App has the ability to view short training videos that walk you through aspects of the device usage such as putting the device on, getting performance feedback, accuracy tips, etc. The option that accesses the list of training videos is available from the sidebar menu on the main app screen (with the Firebelly logo). To access this menu on Android, swipe from the left side of the screen to right. On iOS click the 3 lines button in the upper left corner of the main screen.

Setting up your Firebelly Device

Device Overview



Turn the device on by pressing and releasing the top button once. The green led should blink telling you the device is on and charged. If the device flashes red that means that it needs to be charged.

Press and release the same button again to put the device into swim detect mode. The device will now flash the blue led. In swim detect mode, the device will automatically sense your swimming motions and give you real-time performance feedback. Pressing and releasing the top button again stops swim detect mode and returns the device to ready mode (flashing green)¹.

The two buttons on the side are used to scroll through the mode options configured on the device. Pressing the top button increases the mode (i.e. "Mode 1" => "Mode 2" ...) and pressing the bottom button decreases the mode (i.e. "Mode 2" => "Mode 1" ...). The selected mode is announced via audio when the button is pressed. Note that the mode can be changed while in swim detect mode without stopping swim detect mode, e.g. to quickly change the type of feedback during a set.

¹ Note that for device software release v1.3.6 and later, you need to press the top button twice within a couple of seconds to stop swim detect mode. This prevents unintentionally stopping swim detection mode.

Configuring Performance Feedback

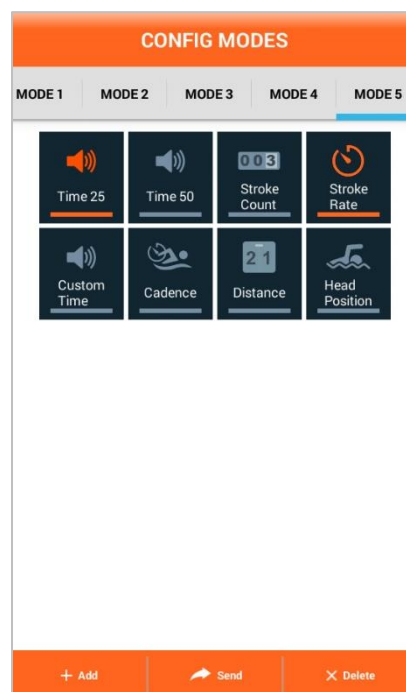
Firebelly operation is based on the concept of something called “modes”. A mode is used to select the type of performance feedback that you receive when you swim, for example hearing your splits or hearing your stroke count (or both!). The device is preconfigured with four default modes, shown in **Figure 1**. These modes cannot be changed.

Figure 1

1	TIME - OPTION 1	SPLIT TIME: Every Length and Each 50 CUMULATIVE TIME: End of Swim
2	TIME - OPTION 2	SPLIT TIME: Every Other Length CUMULATIVE TIME: Each 100 and End of Swim
3	STROKE COUNT	SPLIT TIME: Every Length CUMULATIVE TIME: End of Swim STROKE COUNT: Every Length
4	STROKE RATE	SPLIT TIME: Every Length CUMULATIVE TIME: End of Swim STROKE RATE: Every Length

Using the mode configuration function of the Firebelly App you can configure additional custom modes on the device. Note that if the device isn't licensed for a particular feature or the Firebelly App isn't connected to the device, “No License” will appear above the feature and you will not be able to add it to a mode setting.

Figure 2



Custom modes can be created based on combinations of the following features:

- Announce split times: every length, every 2 lengths, every 4 lengths
- Announce cumulative times: every length, every 2 lengths, every 4 lengths
- Announce stroke count every length
- Announce stroke rate every length
- Announce distance swum: every length, every 2 lengths, every 4 lengths, or custom setting
- Smart Cadence tempo training (described in the next section)

The mode settings that are sent to the device are stored by the Firebelly App and are displayed for editing the next time you edit the mode configuration. If you make changes to the mode settings but don't send them to the device, they will not be saved by the app. Note that the saved settings are stored in the Firebelly App on your phone/tablet so if you program the device with a Firebelly App on a different phone/tablet, the settings displayed on your app will not reflect what is currently in the device.

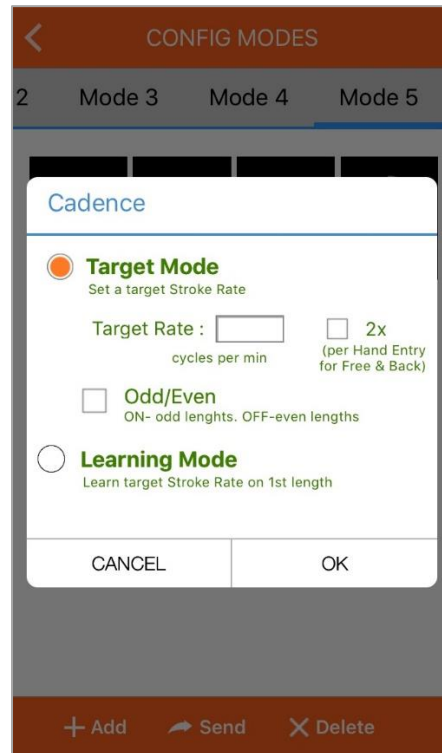
After the modes are programmed in the device, you can use the side buttons to scroll through them. When scrolling through the modes using the side buttons, the device announces the mode number of the current mode. When scrolling is stopped for several seconds, the device announces a brief description of the mode – e.g. “time 25” for Mode 1 (in a short course pool). This provides a reminder of what each mode is configured to do².

² Note that this feature requires version 1.4.37 or later of the device and the latest version of the Firebelly App.

Smart Cadence

Smart Cadence is a collection of cadence training features that enhance traditional tempo training. This section describes the Smart Cadence configuration option shown in **Figure 3**.

Figure 3



Smart Cadence can be setup to provide cadence beeps at a particular target rate (set in cycles per minute, seconds per cycle, strokes per minute, or seconds per stroke). An optional setting to double the rate is available if it is desired to beep per hand entry, e.g. in freestyle or backstroke.

Additionally, Smart Cadence can be setup to turn the cadence tones on for the odd lengths and off on the even lengths of your swim. This encourages swimmers to learn what a particular stroke rate feels like while they have the guidance and then try to replicate it on their own when the guidance is turned off.

Smart Cadence also includes a special Learning Mode where the swimmer's stroke rate is calculated on the first length and then the target cadence is set to provide cadence beeps at that rate for subsequent lengths. This encourages the swimmer to establish and maintain a consistent stroke rate for their swim.

Smart Cadence is especially powerful when combined with stroke rate feedback. The swimmer receives the cadence guidance targeting a particular rate during the length and then at the end of the length hears what their actual stroke rate was. Again, this encourages the swimmer to establish their "feel" for swimming at a particular rate.

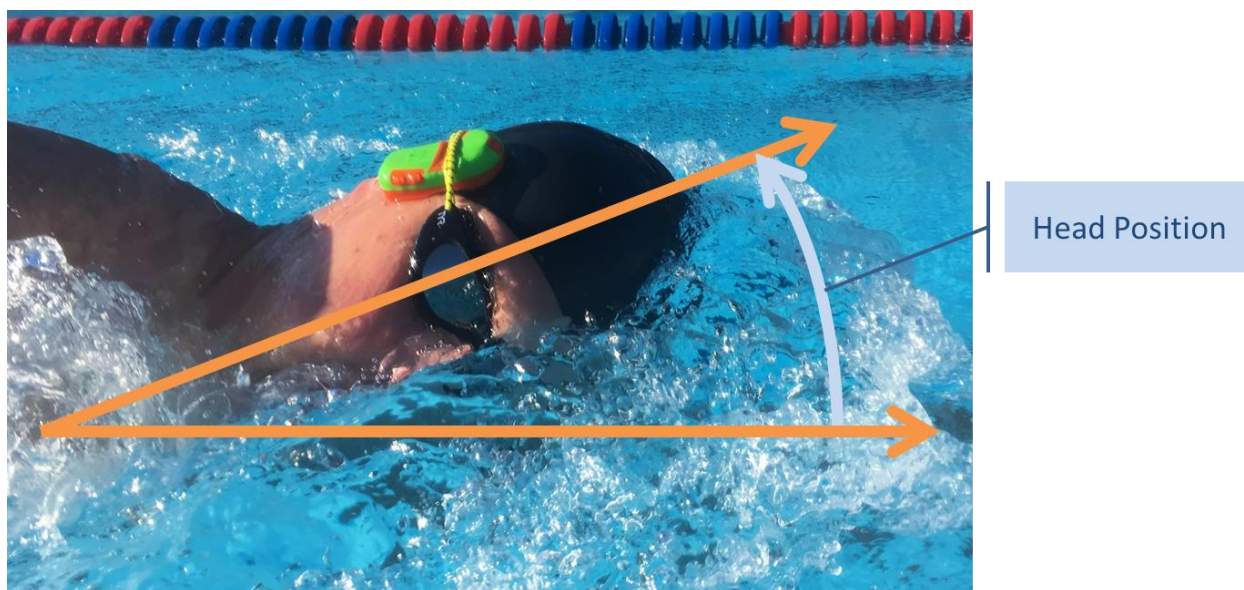
The configured cadence tempo can be changed directly from the device. With the device in swim detection mode (blinking blue) and a cadence mode selected, press and hold either the up or down side button for 3 seconds. After 3 seconds, the tempo will change - either increase or decrease depending on which button is pressed. Keep pressing the button to continue changing the tempo or release it and single click the buttons to go step by step. If no buttons are pressed for 3 seconds, the side buttons will return to changing the mode (rather than the cadence tempo). Note that the starting value for the tempo reverts to the value programmed for the mode every time detection mode is entered or when the mode is changed to a different mode.

Head Position

A lower head position helps elevate a swimmer's hips and feet, reducing drag and improving efficiency which results in increased speed. Firebelly offers an optional Head Position feature³ which gives immediate audio feedback on head position every two strokes or can be set to alert swimmers when their head position exceeds a configurable threshold.

The head position readout is a measure of the angle of the swimmer's head vs the surface of the water (see **Figure 4**). The lower the head is kept, the lower the number will be.

Figure 4



Note that the number may vary from swim to swim depending on the orientation of the Firebelly device on the swimmer's head. If the goggle strap is placed through the goggle strap slot on the front of the device (versus under the cap), more consistent results can be obtained. We suggest swimming to find a head position value that corresponds to a neutral head position for that swimmer and that stroke. This number can then be used as a target to try to maintain as the device reads out the head position number. Alternatively, the number can be used to set a threshold as described next.

³ An additional feature license must be purchased to configure and use the head position feature on a Firebelly device.

Instead of reading out every two strokes, a threshold mode can be configured to only turn on head position feedback when the swimmer's head position exceeds a preset target. The swimmer hears a tone when their head position goes above the threshold, followed by the read out of the head position number every two strokes. When their head position goes back below the target, they will hear a positive "ding" tone and will no longer hear the periodic read out.

Other Configuration

There are three additional parameters for the device that can be configured by the Firebelly App: preferred stroke rate units, pool length, and automatic detection of breakouts. These configuration options are shown when selecting the "Modes" configuration button from the home screen of the app. Note that you must configure the device with a new mode setting for these to take effect on the device.

Stroke Rate Units: Use of Cycles per Minute, Seconds per Cycle, Strokes per Minute, or Seconds per Stroke for all stroke rate information is selected here. This setting determines what will be heard on the device when stroke rate feedback is selected, e.g. "thirty five" (cycles per minute) vs. "one point seven" (seconds per cycle). Note that this setting also determines the units for stroke rate display in the workout data in the Firebelly App.

Pool Length: The pool length is selectable and you can choose 25 yards, 25 meters, or 50 meters. This setting affects the feedback given – e.g. mode 1 will provide split times every 25 in a 25 yard or 25 meter pool and every 50 in a 50 meter pool. It also affects the display of distances when viewing the workout data in the app. Note that this is stored with the workout data and will be displayed based on how it was set in the device at the time the workout was performed.

Breakout Detection: The "detect breakouts" setting determines whether the device will automatically detect the breakout after a turn or if it will use a default 2 second timer to conclude the breakout period. Automatically detecting breakouts is the best way to get an accurate stroke count and stroke rate calculation. If for some reason the device is having difficulty consistently detecting the breakout, you can turn off automatic detection. Note that if the breakout isn't detected, stroke count and stroke rate will be 0 for that length.

Performance Feedback While you Swim

The Firebelly device provides you with the performance feedback you need when you need it. Feedback primarily takes the form of spoken announcements. For example, if you have configured the device to announce your split time every 2 lengths you would hear the device announce your time after you make your turn (e.g. “thirty two point six”) and start swimming length number 3.

Getting Ready

After turning the device on (top button), make sure the device is on and charged – i.e. blinking green. Select the optimal location to wear the device based on your stroke style and comfort (see **Figure 5**). Under the goggle strap and in front of the ear is the preferred location. Due to the bone conduction capabilities of the device, it also works well behind the ear. Make sure wherever it is located that it is straight up and down in order to get accurate performance.

Note it is recommended you put the device on in while the pool to avoid extreme shocks (e.g. dropping the device)⁴.

Figure 5



Swimming

You can press top button to put the device into swim detect mode any time. The device will be flashing blue. Generally it is better to wait until the device is in place and you are ready to start the set so Firebelly doesn't detect your preparation actions as swim motions (e.g. adjusting goggles, cap, etc.). About 5 seconds after entering swim detect mode you will hear “Start when ready!”, after which you can start swimming any time. If you wish to change the mode, use the + / - buttons on the side to select the mode you want. Mode can be selected either before or after entering swim detect mode.

Now just swim as you always do and the Firebelly device will give you the appropriate audio feedback based on the mode selected. Once in swim detect mode, all detection of starting, stopping, rest periods, etc. is automatic – you do not need to press any buttons to stop the clock.

⁴ Damage due to dropping the device is not covered by the product warranty.

After you push off the wall to start your swim, you will hear a beep tone similar to the starter horn in a swim race. This indicates that the Firebelly device successfully detected the start. The timer clock starts when you drop your head to push off and streamline off the wall (not when you hear the beep). Typically you will hear the start beep 1-2 seconds after you start.

Occasionally the device will detect your movements during a rest period as a start (e.g. dipping your head to rinse your goggles). This is called a "false start". When this happens, simply bring your head back up and hold it level and still for a second or two and Firebelly will automatically reset and be ready for your next swim. When Firebelly resets from a false start it will sound a double beep to let you know it has reset and is ready to go.

When you are done using Firebelly for the set or for the workout, simply hit the top button twice within a couple of seconds to exit swim detect mode⁵. This will return the device to ready mode (flashing green). Note that if the device does not detect any swim motions (e.g. starts or turns) for 5 minutes it will automatically exit swim detect mode. This assures conservation of battery life.

The device will automatically turn off after 10 minutes or alternatively you can manually turn the device off. To turn off the device press and hold the top button for 5-6 seconds while the device is in ready mode. When the device flashes red release the top button and the device will turn off.

Accuracy Tips

The Firebelly device has advanced 3D sensors and swim detection algorithms to detect your swim activity. There are some things you can do that will improve the accuracy and performance of the device.

- Make sure the device is straight up and down on your head. This is really important for accurate detection! The goggle strap slot should orient it properly. If you are using the device under a cap, try to keep it in the same orientation as it would be under the goggle strap.
- It helps to keep your head still and in a neutral position right before starting a swim. The device may detect a drop of your head (e.g. to rinse your goggles) right before you push off as a start, thus starting the clock too early.
- Get a good, head-down streamline on your push offs. The start should be one quick, continuous motion from start of head movement to head drop to push off and streamline.
- The finish should be with your head down, without lifting your head – just like in a race. Lifting your head early and gliding into the wall will cause the device to incorrectly detect the finish time. Swimmers often lift their head early when finishing in practice settings, e.g. to look at the clock. Firebelly encourages good race-like finishes during practice.
- After you finish your head should stay in a neutral position and still until you begin to hear your time announced (i.e. don't drop your head down or bob around until the finish has been successfully detected).
- The device requires about 5 seconds to reset detection between intervals. Any less than that and it will likely register them as the same swim (it will continue to work it just won't log the correct distance or time for that particular interval).

⁵ Note that for device software release v1.3.5 and earlier, you only need to press the top button once.

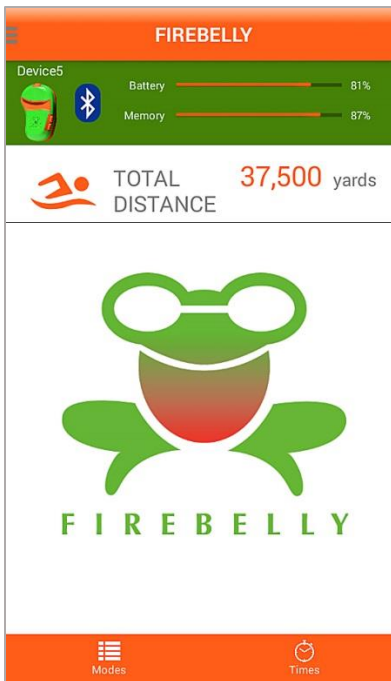
Viewing Swim Data

Total Distance Swum with the Device

The Firebelly App shows the total distance that has been swum with the Firebelly device as shown in **Figure 6**. The distance is shown when the device is turned on, Bluetooth is enabled on the mobile device running the Firebelly App, and the Firebelly device is in range of the mobile device.

The yards or meters units used for the distance is selected based on the pool distance configuration selected during Mode configuration (see **Other Configuration**). The distance total continues to increase even if the workout data is deleted, similar to the odometer on a car.

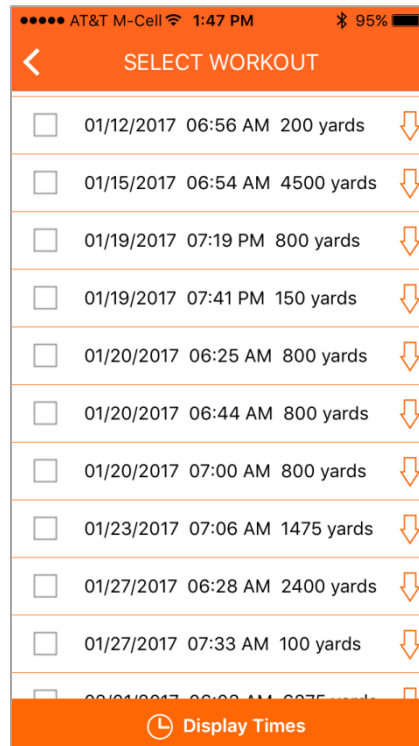
Figure 6



Data Stored on the Device

After your workout you can use Bluetooth to pair the device with the Firebelly App and review your workout data. When selecting the “Times” button from the main app screen, the Firebelly App will connect with the device if it is not already connected. Once connected, the list of workouts stored on the device is displayed as shown in **Figure 7**⁶.

Figure 7



⁶ Note that if the device discharges completely it will lose the date & time setting and any subsequent workouts will display 'UNKNOWN' for the date & time. The current date & time is automatically set each time you connect the device with the Firebelly App.

Select one or more workouts to view and then press the “Display Times” button. The workout will be retrieved from the device and the detailed workout information will be displayed (shown in **Figure 8**).

Figure 8

The screenshot shows a mobile application interface titled "WORKOUT DATA". The top status bar displays "Carrier", signal strength, "10:16 AM", and battery level. The app header is orange with a back arrow on the left and a menu icon on the right. The main content is a list of swim repeats, each with a distance and time. A 200m repeat is expanded to show a detailed table with columns for distance, time, SC, and SR. Split times for 50m intervals are shown in orange rows.

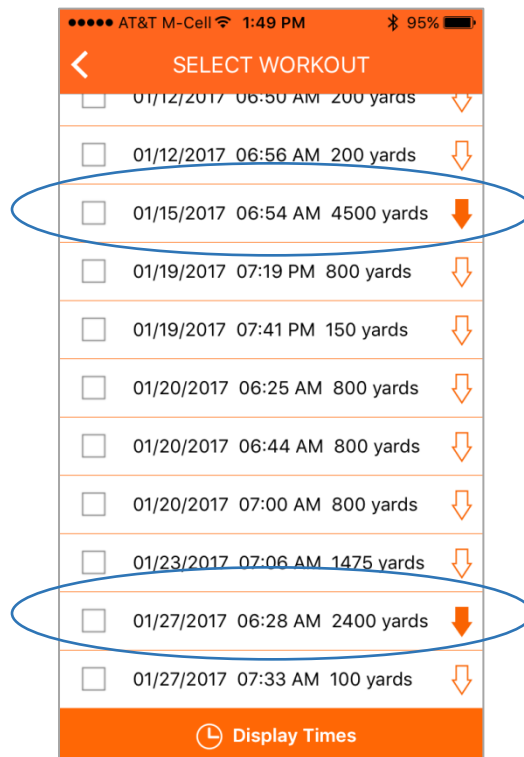
Distance	Time	SC	SR	Total Time
50	30.2			
50	29.1			
50	29.5			
200	2:13.0			
25	16.0	13	34	16.0
50	16.7	14	33	32.6
50 SPLIT	32.6			
75	16.6	13	33	49.2
100	16.8	13	32	1:05.9
50 SPLIT	33.3			
125	16.8	13	32	1:22.7
150	16.8	13	33	1:39.4
50 SPLIT	33.5			
175	17.2	14	33	1:56.6
200	16.4	14	33	2:13.0
50 SPLIT	33.6			
50	30.3			
50	29.9			
50	29.1			
50	29.1			

The distance and time for each swim repeat is shown on the screen (rest intervals are excluded). Select one of the repeats to see information about each length of the repeat. Additionally, using the menu accessible from the upper right corner you can choose to view split times for each 50, 100, or 50 & 100.

Data Synced on Phone or Tablet

Once a workout has been transferred from the device and viewed on your phone or tablet, that workout data is stored locally and doesn't need to be retrieved again from the device. Workouts that have been synced are indicated with a solid orange down arrow next to them in the workout list as shown in **Figure 9**. If you are connected to the device, viewing a synced workout will use the local data rather than retrieving it from the device.

Figure 9



If no devices are connected or in range when the “Times” option is selected from the home screen, the Firebelly App will present a list of devices that have synced workout data. Selecting a device will present a list of the available synced workouts for that device.

To delete workout data, select “Delete Data” from the “Manage Device” screen. From the “Delete Device Data?” dialog you can choose to delete either TIME or SENSOR data. Sensor data is not common and is only used for troubleshooting the device. Selecting SENSOR will delete all recorded sensor data files.

Selecting the TIME option displays another dialog that allows you to choose to delete either both DEVICE & APP data or just the DEVICE data. Select DEVICE & APP to delete all workout data stored on the Firebelly device and synced in the Firebelly App or select APP ONLY to delete just the synced workout data in the Firebelly App.

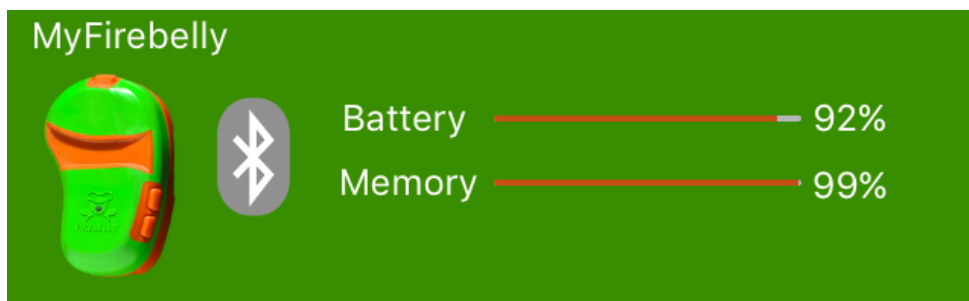
Managing your Firebelly Device with the Firebelly App

Device Status Bar

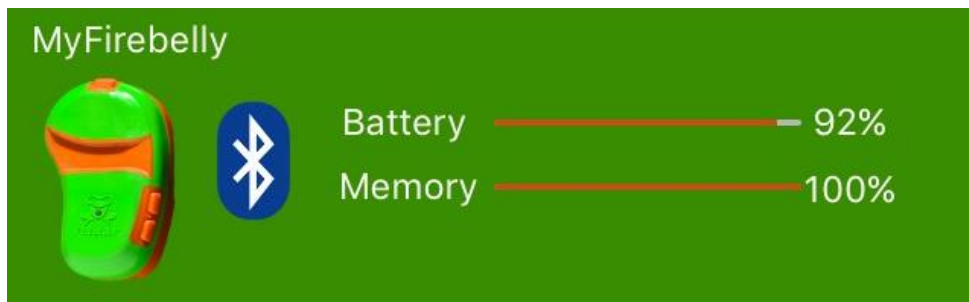
The green bar at the top of the main app screen allows you to see the current status of your Firebelly device and control communication with it.

If the device is turned on, the battery and memory levels of the device are shown without needing to connect to the device. This allows for a quick status check, e.g. before a workout. The Firebelly App will automatically connect to the device when it needs to, e.g. to configure the device or retrieve workout information. You can manually request to connect or disconnect from the device by clicking the Bluetooth icon on the device status bar.

Device on, Firebelly App not connected to device



Firebelly App connected to device



When the device is connected, clicking on the device picture will bring up a text edit box that allows you to change the device name. This is especially helpful if you have multiple devices and would like to uniquely identify each one.

You can also turn the device off using the Firebelly App by swiping from left to right on the Firebelly device status bar at the top of the screen (device must be connected).

Updating your Firebelly Device

From time to time updates to your Firebelly device firmware may be made available in order to fix issues or provide feature enhancements or new features. We recommend that you either charge your device fully or plug in the charger to make sure your device has enough power for the entire software update.

To update your Firebelly device using the Firebelly App:

1. Have your device turned on (flashing green), charged, and near your phone or tablet
2. Open the Firebelly App and navigate to the Manage Device screen. On Android to see the menu with the Manage Device option, swipe from the left side of the screen to right on the main screen (with the Firebelly logo). On iOS click the 3 lines button in the upper left corner of the main screen.
3. Click the “Update Dev” button at the bottom right of the screen. The app will connect with the Firebelly device if it isn’t already.
4. Enter the software key given to you by your sales person or support in the box that pops up.
5. The Firebelly App will download the new device software from the cloud (note that your phone/tablet must have access to the internet for this step).
6. After retrieving the new device software from the cloud, the Firebelly App displays a progress indicator that shows the device software update is in progress. Keep your Firebelly device close to your phone/table during the update.
7. The Firebelly device will automatically restart once the download is complete and the Firebelly App will reconnect with the device. While restarting, the device led will be purple while it is loading the new software.
8. Once the device reconnects with the app, verify that the version number shown matches the updated software version that you were expecting.

Device Care

Battery and Charging

The Firebelly device has a rechargeable lithium-polymer battery that is designed to last the life of the device. From a full charge you should be able to swim for 6-8 hours depending on the type and frequency of feedback (more frequent audio feedback uses more battery power).

You can determine the battery level from both the device and the app. When the device turns on it plays a startup tone and then it announces the battery level – high (80-100%), medium (30-79%), or low (0-29%). If the device is on when the battery level gets low you will hear an audio warning (“low battery”) and the led on the device will blink red. The battery level can also be viewed from the Firebelly App with the exact battery level shown on the display on the device status bar.

The device is charged using the supplied USB charging cable. The USB charging cable can be powered by any certified USB wall charger, hub, or computer port. The cable uses two magnets to secure itself to the device. Check the orientation to make sure the charging pins on the cable seat properly on the charging terminals on the device. Make sure the device and charging pins are dry before charging and that the charging terminals are clean (see Daily Care section for more information).



When the device is turned on and the charging cable is attached and the device is charging, the red led will alternate with the green led. Although the device will charge when it is not turned on, to make sure it there is good contact between the charging cable and the device it is best to have the unit on while charging. Additionally, a charging icon is displayed on the device status bar on the Firebelly App next to the battery level indicator. The device requires about an hour to fully charge. Once the device is fully charged it will return to just flashing green.

Daily Care

It is important to clean and dry your Firebelly device after each use. After using the device in the pool, rinse it under cold water and dry it thoroughly - especially the charging terminals. Occasionally the charging terminals may become coated with a light film from the pool water. You can use a wooden toothpick and optionally alcohol to gently scrape the charging terminals. Do not use anything sharp to scrape the terminals as it can cause corrosion and prevent proper function of the charger.

Protecting your Firebelly Device

Your Firebelly device contains sensitive electronic and bone conduction technology. Following these important safety instructions will keep your Firebelly working well and giving you great swim performance feedback for many years to come.

- Do not drop the device or expose it to sudden shocks; it is advised you put the device on while in the pool to prevent unexpected drops onto the pool deck
- Do not expose the device to extreme temperatures, e.g. a hot car interior in summer or a cold trunk in the winter
- Do not leave the device in direct sunlight for an extended period of time, e.g. on a pool deck
- Do not leave the device near open flames
- Do not dispose of the device in a fire (the battery could explode)
- Do not attempt to disassemble the device, there are no serviceable components
- Do not expose the device to harsh chemicals such as cleaners or sunscreen
- Do not use the device in salt water as it may cause corrosion of the charging terminals
- Do not use sharp objects to clean the device, especially the charging terminals
- Only use the supplied USB charging cable to charge the device
- Do not use "fast" or "quick" USB chargers with your device; these chargers can damage your device and battery

This product contains a lithium-polymer battery and should be disposed of properly in accordance with local laws and regulations.

Troubleshooting

If you are having trouble connecting to or communicating with the device, try restarting both the app and the device. Restart the device by turning it off, e.g. by pressing and holding the top button for five seconds until you see it flash red, then release. Turn the device back on and try again. Please refer to the product documentation for your iOS or Android device for specific instructions on how to restart the application.

If for some reason your device stops responding to button presses, first make sure that the device is charged. If the device is properly charged and is still not responding, you can force it to reset by pressing and holding the two side buttons at the same time for about ten seconds (make sure to depress them at exactly the same time). Release the buttons when you see the led turn on a solid yellow (not flashing). Press and release the bottom button one more time and the device should restart normally.

For additional information or to contact Customer Support, please visit:

www.firebelly.me/index.php/support

General Info, Regulatory, and Safety Information

Health Warning

Consult your doctor before using Firebelly, engaging in an exercise program or changing your diet. If you experience a medical emergency, stop using Firebelly and consult with a medical professional.

US Federal Communications Commission (FCC) Declaration of Conformity

Model Name: FIREBELLY-1

This device contains FCC ID: T7VPAN10

This device complies with FCC part 15 FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

FCC Warning

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.

This device meets the FCC and IC requirements for RF exposure in public or uncontrolled environments.

Additional Information Available Online

- Terms of Sale (including return policy and warranty): www.firebelly.me/index.php/terms-and-conditions
- Privacy Policy: www.firebelly.me/index.php/privacy
- Support: www.firebelly.me/index.php/support

Glossary of Terms

Split Time: an intermediary time calculated for a given distance; for example, a per 25 time or per 50 time

Cumulative Time: the total elapsed time up to that point in a swim from the start

Stroke Count: a count of each hand entry; in breast and fly this is the same as stroke cycle count; in free and back there are two hand entries per stroke cycle and thus stroke count is double the stroke cycle count

Stroke Rate: the rate at which either an individual stroke or a full stroke cycle is achieved (hand entry to hand entry); stroke rate is the measured time that it takes for an individual stroke or stroke cycle (i.e. seconds per stroke/seconds per cycle) or the number of strokes or stroke cycles in a minute (strokes per minute/cycles per minute)

Mode: mode is the label given to a particular set of feedback configured on the device; modes are used to select the type of performance feedback that is given, e.g. split times, stroke count, etc.

Breakout: the time spent underwater before the first stroke after the push off on a start or turn