wavelet

Wristband & Pod

Product Manual

VERSION 1.0

Table of Contents

Introduction

Thank you for using the Wavelet Wristband and Pod!
This user manual will help you get started using your new devices.

Overview

Your Wavelet Wristband and Pod track all of your daily activity. The Wristband records your steps, sleep, calories burned, heart rate, and blood oxygen saturation among other metrics. The Pod is useful for tracking activity and can be used in conjunction with the Wristband for full-body motion analysis.

This collected information will be available to you on your mobile device and a more detailed analysis will be relayed to your doctor and/or study coordinator. They will use this information to understand your body's overall wellbeing.
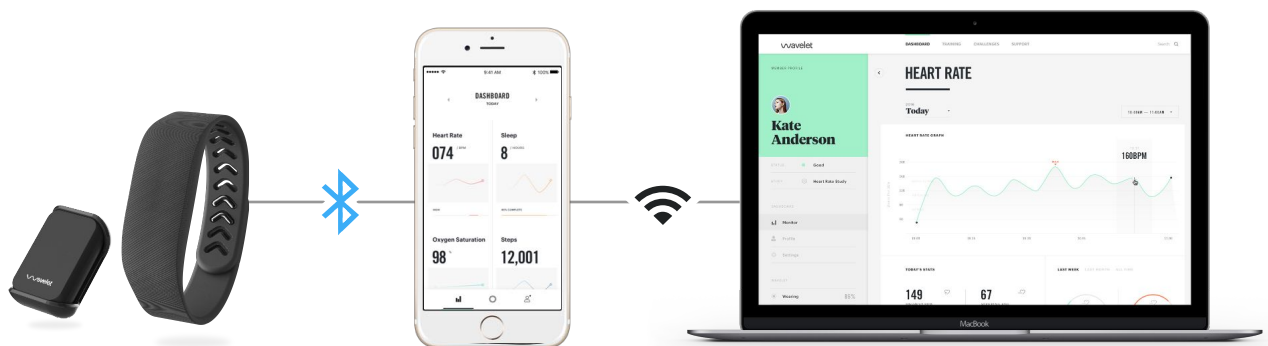
Getting Started

This section will guide you through all of the steps necessary to start using your Wavelet Wristband and Pod.

What's in the box

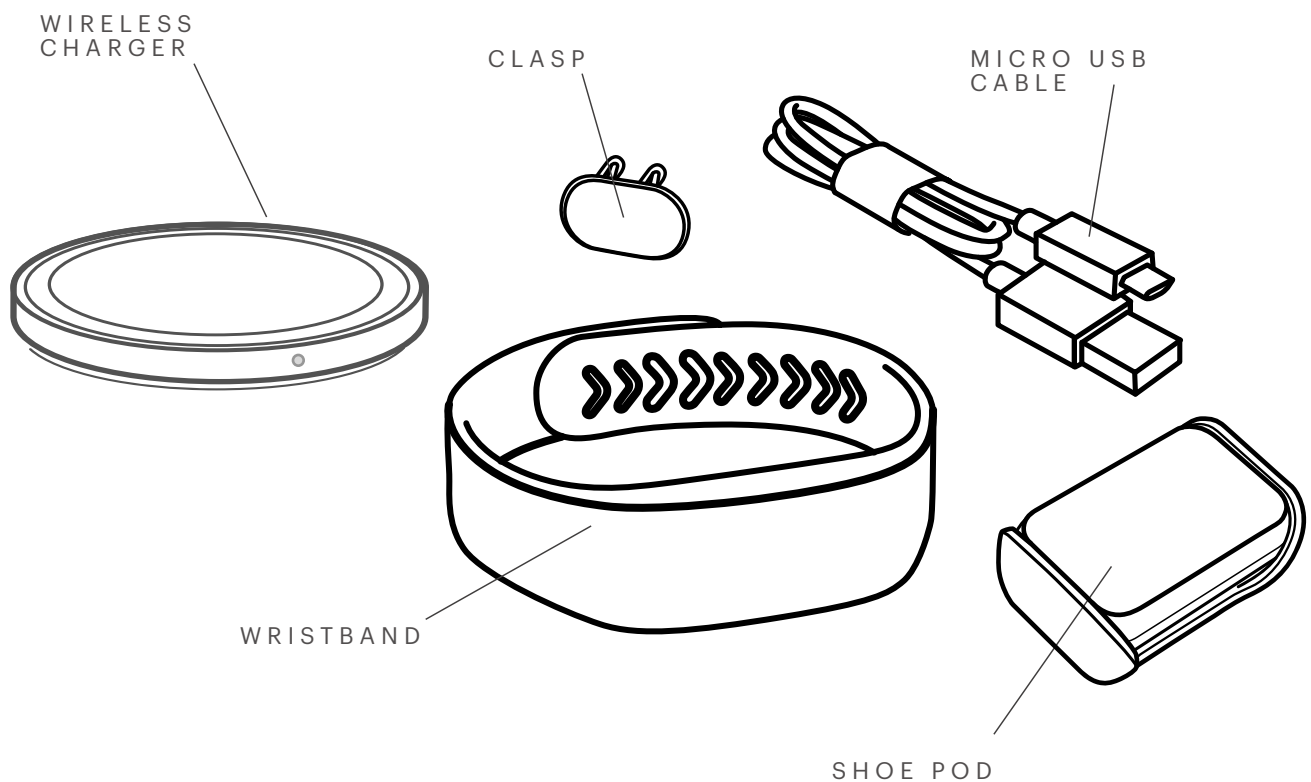Your package should include the following items. You will need all of these items to set up and use your devices.

WIRELESS
CHARGER

CLASP

MICRO USB
CABLE

WRISTBAND

SHOE POD

Charging the Wristband and Pod

Before using your device you will need to fully charge it and update its firmware.

Plug in your charger to a powered USB port and place the Wristband in the center of the charger. The orange light on the charger will turn blue when charging properly. It will blink or remain orange if it is not charging properly or if the wristband is not placed properly.

MAKE SURE THE CHARGER IS CORRECTLY POSITIONED AND IS NOT UPSIDE DOWN. THE WAVELET LOGO ON THE CHARGER SHOULD FACE UP, CONTACTING THE WRISTBAND AS SHOWN HERE.

Your device requires at least 90 minutes to fully charge its lithium-polymer battery. Once fully charged, the LED on the charger will change back to orange. It is recommended to fully charge your device as you finish the rest of the setup process. With normal use, your device should last at least three days on a single charge.
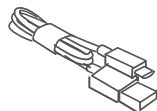
Connecting to the Wristband and Pod

The Wavelet app is your link to the Wavelet devices. Use it to interact with your Wristband and Pod, transfer data, and see your analyzed data.

You will need a compatible mobile device to use the Wavelet devices. Download the app on your iOS or Android mobile device; it will guide you through the setup process and help you connect to your Wristband.

Note that you will need an account with the applicable store to download even a free app such as Wavelet. You will need your apple ID to download from the App Store, and your Google ID to download from the Google Play Store.

To connect with you Wristband, you must turn on Bluetooth on your mobile device. This setting can be found in your mobile device's settings.

App Compatibility

The Wavelet Wristband and Pod are compatible with select iOS and Android devices, including:

iOS – iPhone 4s, 5, 5c, 5s, 6, 6+, 6s, 6s+, iPod 5th gen, iPad mini, iPad 3, iPad 4 and iPad air.

Android – Samsung Galaxy S4, S4 Mini, S4 Active, S5, Samsung Galaxy Note II, III, 10.1; the Nexus 4, Nexus 5, Nexus 7; HTC One; Motorola Moto X, Moto G; DROID MINI, Ultra, MAXX, RAZR M, HD, HD MAXX and the LG G2. All android devices must have Android 4.3 or higher.
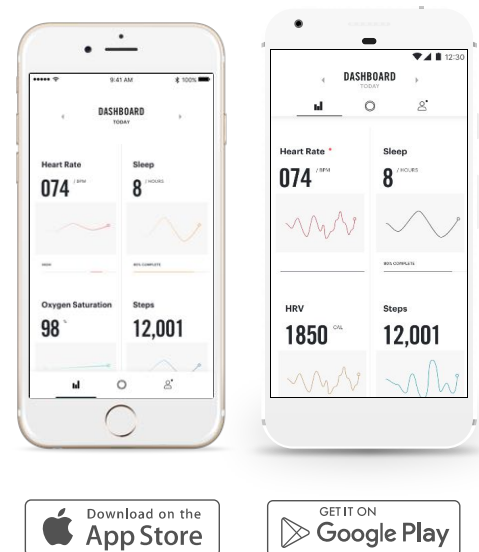
Creating a Profile

You may be asked to set up a profile including your height, and weight. Or you may be asked to input a code provided by your study administrator. Any private information is kept completely private and stored on a secure server. These measurements are helpful for getting the most out of the Wavelet devices. If provided, your height, weight, gender, and age will be used to calculate your BMR, or calories burned.

Using the Devices

Wearing the Wristband Properly

Wearing your Wristband properly is critical to getting reliable data. When worn properly, both of the teeth on the clasp should engage with the Wristband fully. The device should sit above the wrist bone (towards the elbow) as illustrated below. The sensor unit inside the Wristband should sit snug against the skin so the sensors can get an accurate heart reading. The most comfortable fit is often achieved by securing the device with some slack and then sliding it up (towards your elbow) until it is snug.
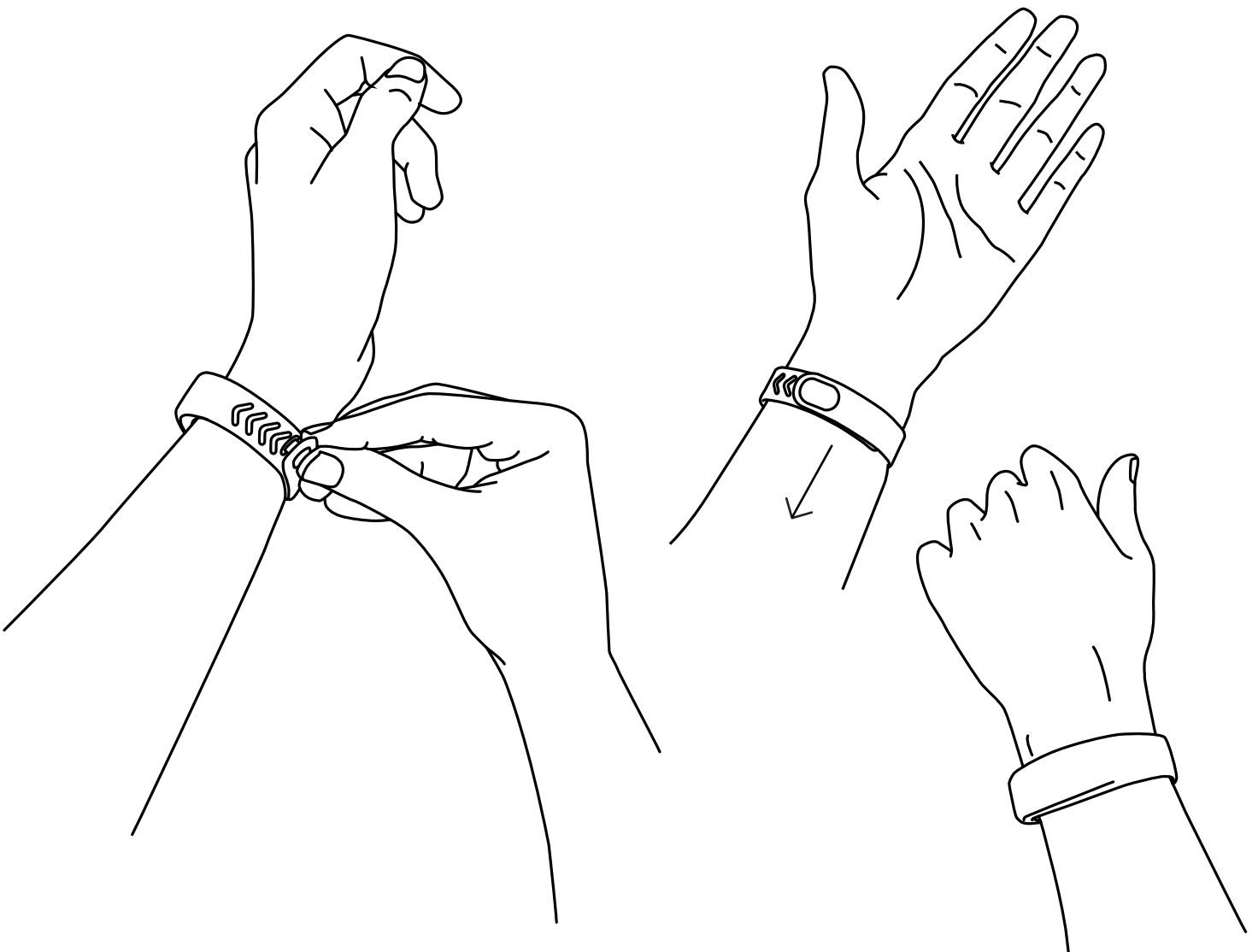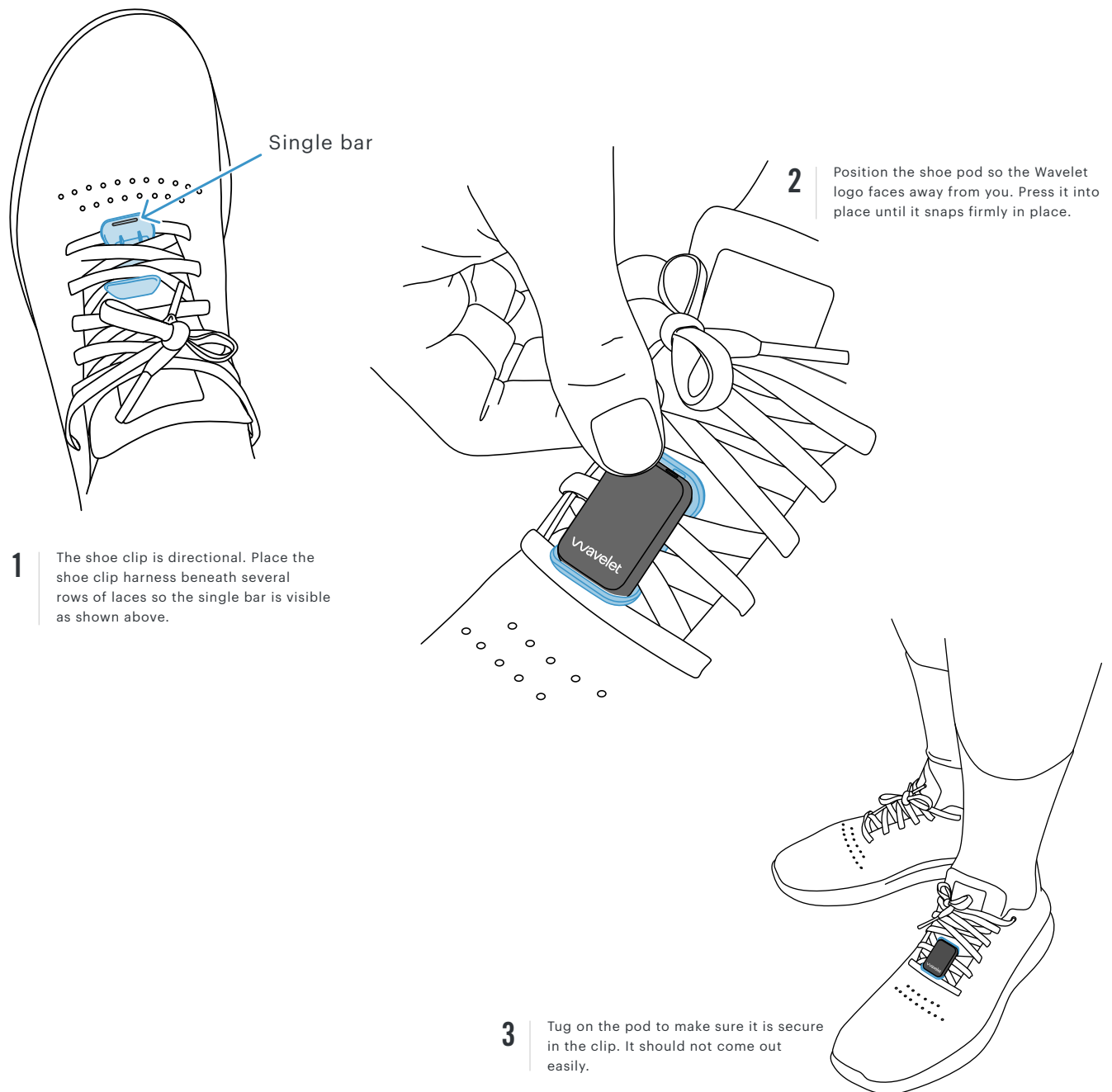
Wearing the Pod Properly

Wearing your device properly is critical to getting reliable data. When worn properly, both of the teeth on the clasp should engage with the Wristband fully. The device should sit above the wrist bone as illustrated below. The sensor unit inside the wristband should sit snug against the skin so the sensors can get an accurate heart reading. The most comfortable fit is often achieved by securing the device with some slack and then sliding it up (towards your elbow) until it is snug.

Single bar

1 The shoe clip is directional. Place the shoe clip harness beneath several rows of laces so the single bar is visible as shown above.

2 Position the shoe pod so the Wavelet logo faces away from you. Press it into place until it snaps firmly in place.

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3 Tug on the pod to make sure it is secure in the clip. It should not come out easily.

Checking the current battery level

You can check the level of your devices' batteries by visiting the profile section in the Wavelet app. See the page "The App: Profile" for more details.

Caring for the Wristband and Pod

The lenses of the Wristband should be cleaned periodically. a simple wipe with a damp cloth is sufficient to clean both devices. Do not use alcohol, harsh chemicals, or solvents on the device.

The Wristband is fully waterproof and can be left on while you bathe or shower. It is, however, recommended to remove the wristband periodically so your skin can have a break.

Updating the Devices' Firmware

When you first launch the Wavelet app and connect to your devices it will automatically update the devices' firmware. To update the firmware manually, enable the Bluetooth on your mobile device and find your devices your profile page. Select your device and tap "update firmware" and the firmware will update. You do not need to fully charge the device to update the firmware, but it is recommended to fully charge the device before use. DO NOT remove a device from the charger during a firmware update.

The Wavelet App: Overview

The Wavelet app is the link to your Wristband and Pod. All data captured on the on these devices must be transferred to your smart device for processing and viewing the gathered information.

Syncing the Wristband and Pod

It is important to sync your data to your mobile device often. Syncing occurs when you are near your mobile device that has bluetooth turned on and the Wavelet app is either open or running in the background. The app will automatically sync with your device periodically when these conditions are met. The more often your device is sync'd, the quicker each sync will be. To sync manually, pull down on the Dashboard page or select your device on the Profile page and tap "sync now".

Tracking with the Wavelet Wristband

The Wavelet Wristband tracks the following activities, and depending on your specific situation may include others:
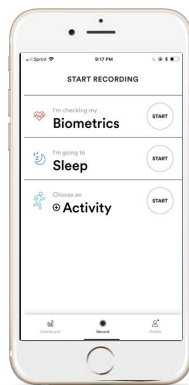
- Steps
- Sleep
- Calories Burned
- Heart Rate
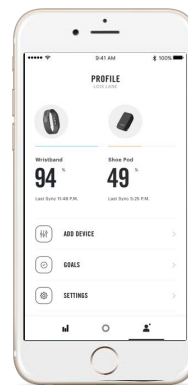- Blood Oxygen Saturation

Navigating the Wavelet App

The Wavelet app is broken into three sections: Dashboard, Recording, and Profile. This guide will show you how to navigate each of these sections.
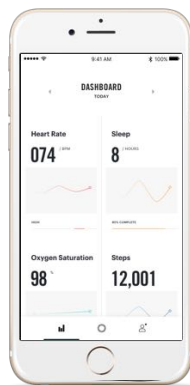
Dashboard   Recording   Profile

The App: Dashboard

The dashboard can be navigated to by tapping the far left icon in the menu (on the bottom of the screen):

This screen shows all of the metrics collected by your Wavelet Wristband. Scroll down to see additional metrics. Click on any statistic or graph to see a more detailed explanation of that metric (the metric's detail page). Your app may vary slightly from the image below.

Scroll back to previous days

Scroll forward to today's metrics

Tap any metric to see its details

Pull screen down to force sync with wristband

Dashboard icon in menu
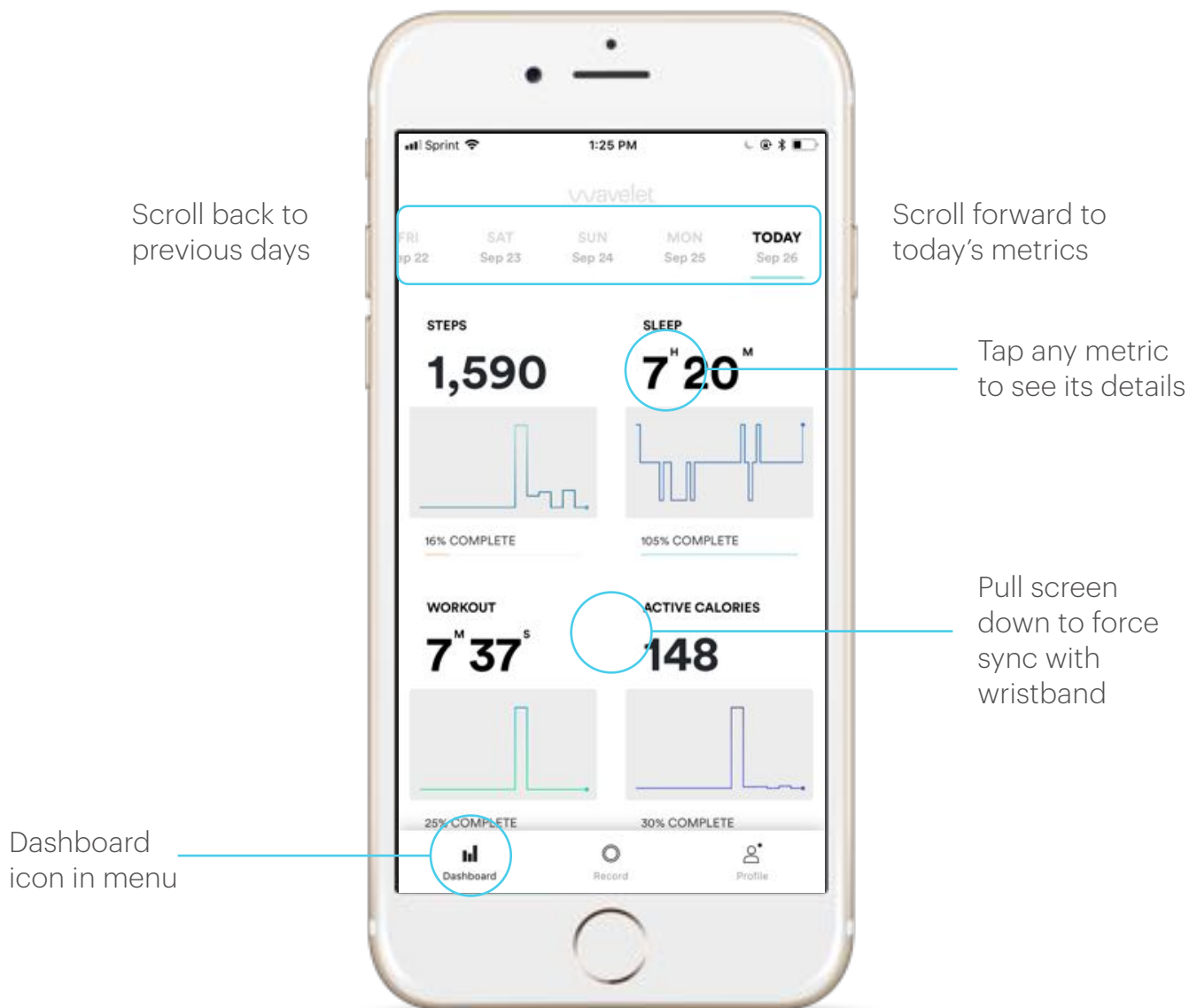
Dashboard

The App: Dashboard – Metric Details Pages

Tapping on any metric or graph on the Dashboard will show the details of that particular metric. Here you can get a deeper understanding of that metric and compare it to your averages or previous statistics.

Each metric is color coded for easy recognition. The illustration below shows the steps page as an example.

Tap here to return to your Dashboard

Toggle timeline time range

The day's total steps and goal progress. Adjust your goal in the Profile section

A timeline showing the metric's data over time.

Various statistics such as maximums and minimums

Dashboard

Tip: For more information about any metrics captured by your wristband, consult your program coordinator or associated doctor.

STEPS

TODAY   WEEK   MONTH   YEAR

710

HOURLY STEPS

900

600

300

0
12 AM   4 AM   8 AM   12 PM   4 PM   8 PM

11
Calories Burned

10 M 01 S
Total Duration

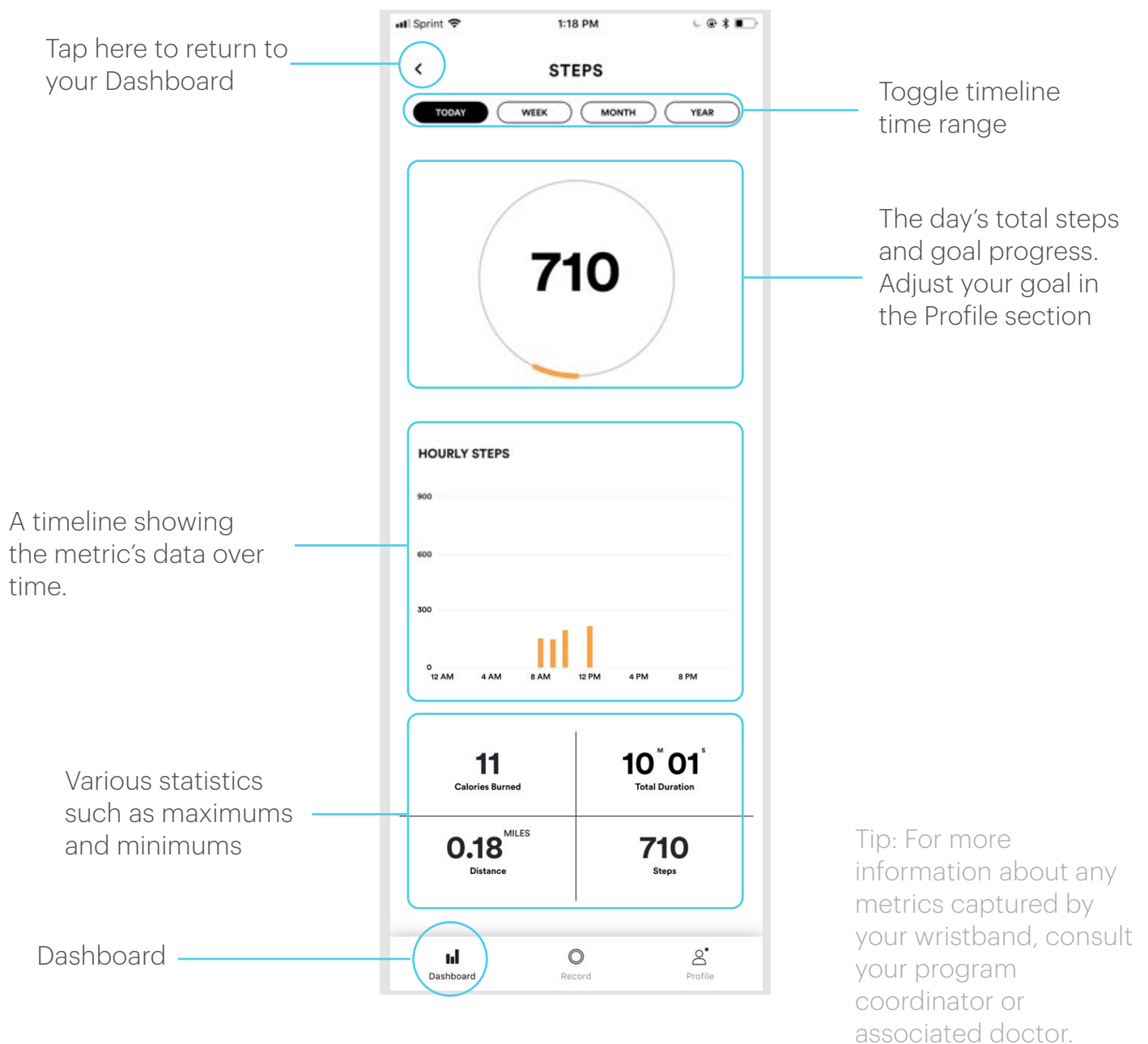0.18 MILES
Distance

710
Steps

Dashboard   Record   Profile

The App: Recording

The recording page can be navigated to by tapping the center icon in the menu (on the bottom of the screen): ◎

This page allows you to manually record data from your Wristband. This data will then be accessible on the Dashboard page. Depending on your situation, not all types of recording may be available to you. Be sure that you device is worn properly while recording. See the wearing guide (page 5) for details on how to wear your device properly.

Record health data: heart rate, heart rate variability, blood oxygen saturation, and breathing rate

Record sleep, including all biometrics

Choose an activey by pressing on the "Activity" text. Then choose your activy type: Workout, Walking/Running, or Swimming
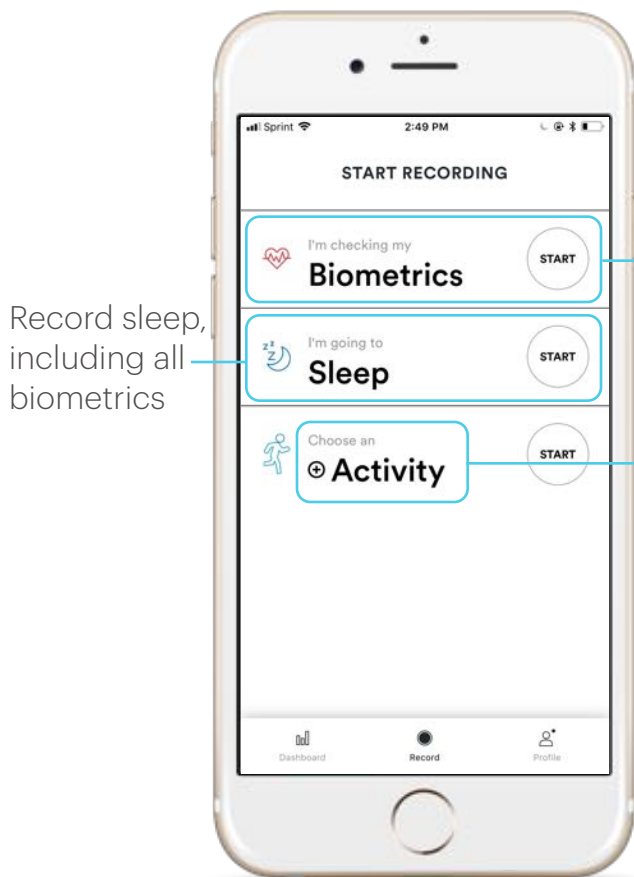
Recording Options

Recording (Select Activity)

The App: Record Sleep

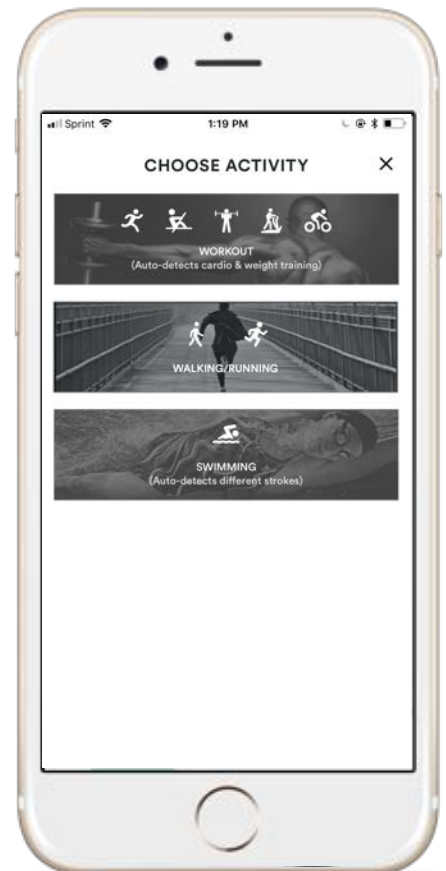The record sleep page can be navigated to by tapping the center icon in the menu (on the bottom of the screen): ◎ and selecting sleep.

Make sure that your device is more than 50% charged before recording sleep. If the device loses its charge during a recording then the data from that recording will be lost. If this happens you will need to charge your device in order to connect to it again.

Displays the time elapsed

Tap to stop recording
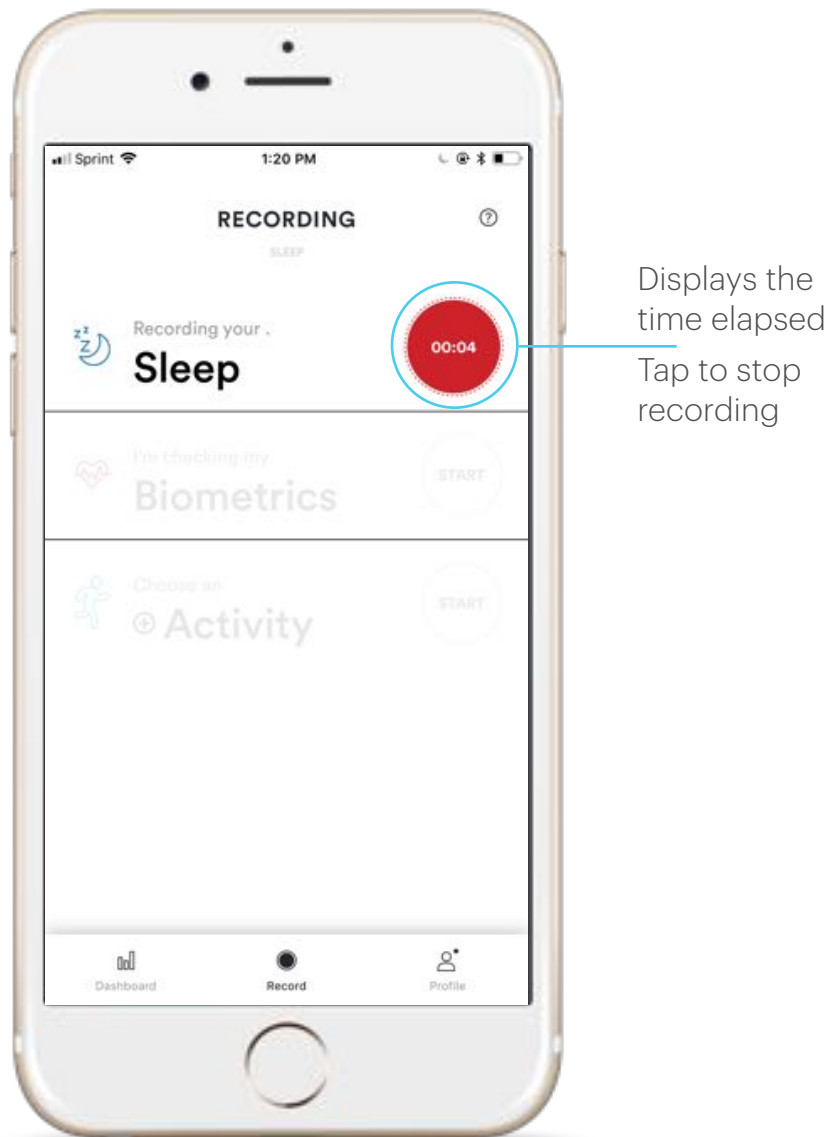
Recording

The App: Profile

Your profile can be navigated to by tapping the far right icon in the menu (on the bottom of the screen): 👤

This screen shows your basic profile and device information. It allows you to access settings, goals, and to manage your device settings.

The battery status of your Wristband and charging status. Tap here to manage device.

The battery status of your Pod and charging status. Tap here to manage device.

Add a new device. Only two devices can be connected to the app at once. To change devices, first remove a current device.

Adjust your daily goals

Logout of the app completly

Add exercises which will be automaticly classifed during workouts.

Profile tab

Profile

The App: Profile – Manage Device

From the profile screen you can tap "MANAGE DEVICES" then select your device to see and manage the device's details.

Current status of your Wristband's battery, the name and firmware version that is installed on this Wristband

Tap here to make the device's LEDs blink for 5 seconds

Tap here to choose which wrist you wear your device on

Tap here to customize your device's name

Tap here to remove your device

Tap here to reset your device

Manage Devices

Troubleshooting

Use this section to diagnose issues that you may face during setup and use of this product. If these methods prove unsuccessful, please contact support at hi@wavelet.co. For fastest support, please include photos or screen shots illustrating your problem.

Charging

Device is not charging, or the charger LED won't change color

 • Ensure that the charger is plugged in properly and that the cable is properly inserted into a computer or supported base and the charging pad.

• Ensure that the devices are placed properly as shown on page 3

• The LED is white when NOT charging; it will turn ORANGE when it is engaged. If it is flashing orange then it is not properly placed.

• The app shows the approximate battery level once you are connected to the device. The battery should last four days, depending on use.

• Contact support at support@wavelethealth.com if you are unable to properly charge your device while following these troubleshooting steps. Please include photos illustrating how you are charging the device for the fastest support.

Connecting

My device is not discoverable by the app

• Ensure that your mobile device is supported by the app.

• Ensure that the battery is not dead or nearly depleted.

• Restart your mobile device (smart phone) and try connecting again.

• If the device is not showing up after restarting your mobile device and charging the Wristband, contact support@wavelethealth.com for additional support. Please include screenshots or photos of what you are seeing for the fastest support.

Resetting the Devices

If your devices seem to be having any other issues, sometimes resetting them will help. This function can be found in the "Manage Device" , accessible by tapping on a connected device in the Profile page. Resetting a device will cause all data to be wiped from it and will restart the paired device.

FAQs

Is my mobile device compatible?

Wavelet is compatible with select iOS and Android devices.

For iOS this includes iPhone 4s, 5, 5c, 5s, 6, 6+, 6s, 6s+, iPod 5th gen., iPad mini, iPad 3, iPad 4 and iPad air.

For Android, this includes Samsung Galaxy S4, S4 Mini, S4 Active, S5, Samsung Galaxy Note II, III, 10.1; the Nexus 4, Nexus 5, Nexus 7; HTC One; Motorola Moto X, Moto G; DROID MINI, Ultra, MAXX, RAZR M, HD, HD MAXX and the LG G2. All android devices must have Android 4.3 or higher.

Are the Wavelet devices waterproof?

The Wavelet Wristband is waterproof up to 3 meters and can be worn swimming. it is recommended to remove the device periodically as anything contacting your skin for prolonged periods can cause irritation. Discontinue use and contact support at support@wavelethealth.com if irritation persists. The Wavelet Pod is also waterproof.

When should I wear my devices?

The Wavelet Wristband is designed to be effortlessly worn 24/7 (besides during charging). Wearing the device while you sleep is especially important. Be sure to wear according to the guide shown in the wearing guide. For greater accuracy, wrist placement can be specified in the "profile" page of the app. Tap "Right side" or "Left side" to toggle this setting. The Wavelet Pod can also be worn whenever you wear shoes, but is only necessary during activities that record data from the device, i.e., cycling and gym.

FAQs cont.

What is biometric detection?

The Wavelet Wristband analyzes thousands of heart beats every 24 hour period, telling you more about your health, and your body's most important organ – the heart. Wavelet can display resting heart rate, heart rate variability, blood oxygen saturation, respiratory rate, blood pressure variation and pulse pressure variations. These metrics may not be displayed to you, depending on your program's chosen options.

Wristband Specifications

Manufacturer	Wavelet
Head Office	Mountain View, CA
Origin	China
Sensor Size	2mm x 2mm
LEDs	2 red LEDs, 2 IR LEDs
Wristband Weight	23 grams
Shipping Weight	150 grams
Shipping Dimensions	70 x 70 x 95 mm
Communication Interface	Bluetooth LE
Display	Mobile device display / app
HRV Accuracy	+/- 5.9 milliseconds
Heart Rate Accuracy	+/- 3 BPM
Battery	130 mAh Li-ion
Operating Time	Up to 5 days
Operating Temperature	-20 – 150 degrees F
Water Resistance	Fully submersible 5 ATM
Band	Silicone, fully replaceable
Other components	3-axis accelerometer, temperature sensor

Pod Specifications

Specification	Wavelet Pod
Manufacturer	Wavelet
Head Office	Mountain View, CA
Origin	China / USA
Pod Weight	18 grams
Shipping Weight	150 grams
Shipping Dimensions	70 x 70 x 95 mm
Communication Interface	Bluetooth LE
Display	Mobile device display / app
Battery	90 mAh Li-ion
Operating Time	Up to 7 days
Operating Temperature	-20 – 150 degrees F
Water Resistance	Fully submersible 5 ATM
Clip	PC, interchangeable
Other components	3-axis accelerometer, Gyro