

# **User Guide**

Non-invasive continuous bio-monitoring system

Version 1.0



Mobile App		How the watch tracks your health	21
Download the LIFELEAF app	5	Health	
Turn your watch on	4	Home faces	18
How to install/remove the strap	3	Selecting your Home face	17
Watch body and bio-sensors	2	Overall gestures	16
What's in the box	1	Basic navigation	14

Connect your watch with mobile app

Supported health metrics

12

**Getting Started** 

LIFELEAF Sign Up

Health metrics bounds	23	Accessing Basic Apps	40
Health metrics overview	27	Steps	40
Health metric detail views (watch)	28	Notifications	41
Health metric detail views (app)	30	Alarm clock	41
Automatic measure	34	Stopwatch	42
Manual measure	35	Weather	42
Calibration	36	Settings	
Health metric alerts	37	Accessing Settings	43
Basic Apps		Brightness	43

Watch faces	44	Watch firmware update	50
Vibration	44	Updating the watch firmware later	52
Bluetooth	45	Updating the watch firmware	53
Auto-Measure	45	Firmware update completed successfully	56
Confirm Meals	46	Firmware update failed	57
Notifications	46	Sharing Health Data	
About	47	How to share data	58
Factory reset	47	Adding contacts	59
Basic Mobile App Settings	48	Adding meal information	60

Troubleshooting and alerts		Watch technical specifications	70
Cannot connect app with the watch	63	Certifications	77
Watch not worn properly	64	For Q&As please go to www.lifeplus.ai/QAs	78
Battery too low	64		
Pair your watch	65		
Firmware update failed	65		
Cannot measure	66		

How to get support and services

62

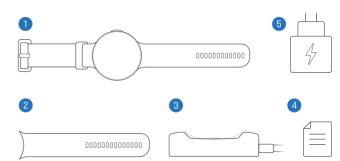
Adding health symptoms

**Support and Services** 

#### **Getting Started**

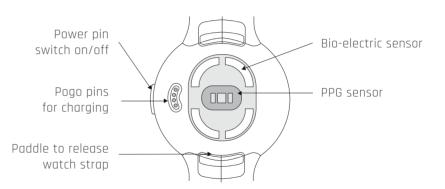
### What's in the box

- Smartwatch and one strap (18cm strap)
- 2 Second strap (22cm)
- 3 Chager base
- 4 User guide
- **5** USB adapter (5V == 1A ONLY)



# Watch body and bio-sensors

The watch incorporates three sensors - an optical (PPG) sensor, a bio-electric sensor in the form of four metal pads on the back of the watch, and a motion sensor. The bio-electric pads evaluate and ensure a proper touch for the optical sensor with the skin to record a measurement.



## How to install/remove the strap



#### Removing the strap

Reach below the paddle with your finger nail or coin as indicated and pull vertically up to release the strap.



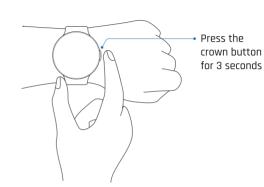
#### Installing the strap

Position the strap metal connector on the paddle side and gently push vertically towards the watch.

3 I Getting Started

# Turn your watch on

Press the crown button of your watch for three seconds to turn the watch on. This is also how you turn the watch off.



# Download the LIFELEAF app

To activate your watch, you'll need to pair it with your smartphone through the LIFELEAF mobile app.

The LIFELEAF app is available for both iOS and Android in the App Store and Google Play Store, respectively.

AppStore & GooglePlay download available only in countries where LIFELEAF is approved. Contact www.lifeplus.ai for countries where LIFELEAF is not yet approved.

**5** I Getting Started

# Mobile App LIFELEAF Sign Up



#### Basic Setup STEP 1

Proceed to sign up once the LIFELEAF App is installed. Please follow the instructions in this YouTube video: https://www.youtube.com/watch?v=X1WM8b2Wh6s





### STEP 2:

Email confirmation



#### STEP 3:

Read and confirm terms of service and privacy policy.



# Personal Information STEP 4

Your demographic input plays an important role in improving accuracy of the measurements. Please fill in this section as accurately as possible.



Under the following categories:

- 1. Date of birth
- 2. Gender
- Male,
- Female,
- Other,
- Decline to specify
- 3. Ethnicity

3.1. American Indian or Alaska Native.

A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

# 3.2. Asian. A person having origins in any

of the original peoples of the

and Vietnam.

**9** I Mobile App

- Far East, Southeast Asia, or the
- example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan,

the Philippine Islands, Thailand,

Indian subcontinent including, for

the black racial groups of Africa.

3.3. Black or African American.

- A person having origins in any of
- A person of Cuban, Mexican,

Latino."

- Puerto Rican, South or Central

3.4. Hispanic or Latino.

- American, or other Spanish cul-
- ture or origin, regardless of race.
- The term, "Spanish origin," can be
- used in addition to "Hispanic or

3.5. Native Hawaiian or Other Pacific Islander.

A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands, and Vietnam.

3.6. Caucasian or White.
A person having origins in
any of the original peoples of
Europe, the Middle East, or North
Africa.

3.7. Mixed Race

3.8. Decline to specify.

4. Height 5. Weight

6. Country

7. Skin type

All fields required. Only select valid entries for each item.
Clicking 'Continue' takes the user to Connect Watch screen.

#### Guidance to select correct skin tone.

It is vital to select the correct skin tone to achieve a better accuracy of biomarkers in our LIFELEAF smartwatch. For example, a person with a skin tone 4 who has entered skin tone 1 in the mobile app will result into inaccurate blood glucose and blood pressure readings.

#### Fitzpatrick Scale Explained



# Connect your watch with mobile app

The watch is equipped with a Bluetooth device to be used to comunicate with the LIFELEAF app installed on your smartphone.

Please note that watch to phone pairing is only through the LIFELEAF mobile app and not through the smartphone Bluetooth settings.

Follow instructions in the video below to pair your watch and your LIFELEAF App on your smartphone: YouTube link: https://www.youtube.com/watch?v=TRMYzXptx1M



# Here are the steps to pair the watch and mobile app:

- Make sure watch is close to your phone, and watch's Bluetooth is on (check on the watch: Settings -> Bluetooth, more detail in the provided video).
- 2 Navigate to the mobile app window to enter the MSN (Manufacturer Serial Number) of watch in the mobile app as indicated below.

#### Other apps



- 4 Scroll the list till "About".
- 5 Tap "About".
- "Serial Number" XXXXXXXX.



Ahnut

A70D21



- Accept the pairing request popup on your mobileApp (depending on the smartphone, you might have to approve the pairing request multiple times).
- Upon successful completion of pairing, a check mark will appear on the watch logo at the top right corner of the mobile app Home screen.

# **Basic navigation**



Swipe left
Swiping left from
timer face takes you
to Health Overview.







**Swipe right**Swiping right from timer face takes you to **Basic Apps.** 





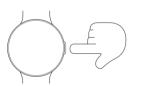
#### Swipe up and down

Some faces have either arrows or fade-out text at the bottom to indicate that there is another face below. Swipe up and down to move between the faces.





## Overall gestures



Pressing crown button once will take you to the home face of the respective segment (Health Overview or Basic Apps).

Pressing crown button twice will take you to the timer face.



#### Tap

Tapping an icon will take you to a watch face associated with that icon.

# Selecting your Home face

#### To select a different Home face from the default:

- Swipe right to view Basic Apps.
- Tap the settings icon to view Settings.
- In Settings, tap Watch Faces.
- Swipe left or right to browse, and tap to select your preferred Home face. This will be your new default face when you power the watch on.





#### Home faces

#### Simple Elegance

This is a classic timer face that also shows the current day of the week and date, as well as the battery percentage.



#### Chronograph

This is chronograph face that has multiple sub-dials to show the current hour of the day, current month, battery percentage as well as local weather feed.



#### Home faces

#### **Health Monitor 1**

This is a digital timer face that provides a small snapshot of three health metrics. You can customize which health metrics to display from within Watch Faces in Settings. It has access to Alerts as well.



#### **Health Monitor 2**

This is an analog timer face that provides a small snapshot of three health metrics. You can customize which health metrics to display from within Watch Faces in Settings. It has access to Alerts as well.



**19** I Mobile App

#### Home faces

#### **Health Monitor 3**

This is a digital face that provides a larger snapshot of three customized health metrics. Also has access to alerts. This face could be particularly useful during workout or other sports.



#### **Steps Monitor**

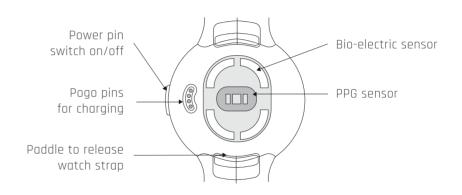
This is a digital timer face that compares your steps progress to your daily goal. It has access to Alerts and Steps.

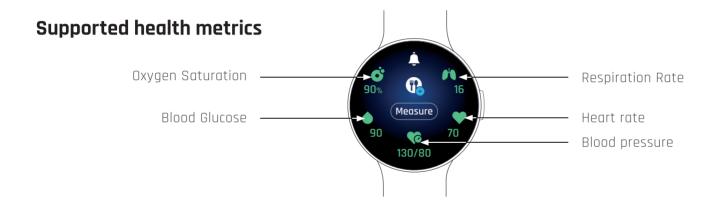


#### Health

# How the watch tracks your health

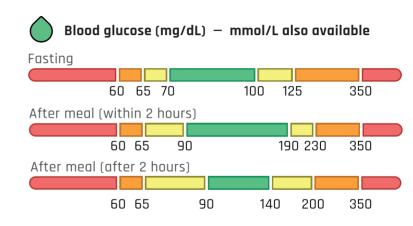
The optical (PPG) sensor on the back of the watch measures five different health metrics, which are listed in the next section. The bio-electric sensor ensures a proper touch for the PPG sensor to the skin.

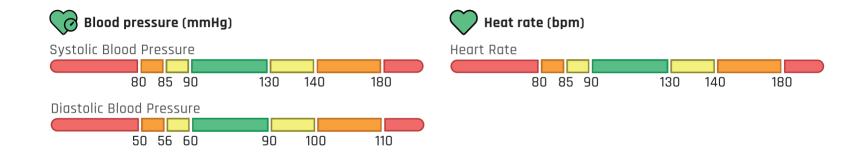


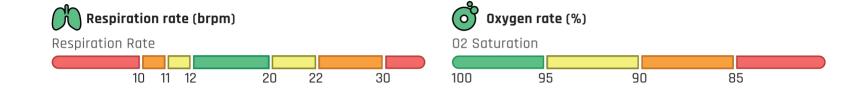


### **Health metrics bounds**

The watch tracks the following health metrics using the ranges listed:







In addition to these health metrics, the watch also tracks your steps. Learn more about Steps in the Basic Apps section of this document.

The colors related to health metric ranges mean the following:

- **Green:** Reading is in range.
- Yellow: Reading is borderline low or high. This will trigger an alert.
- **Orange:** Reading is low or high. This will trigger an alert.
- Red: Reading is too low or too high.
  This will trigger an alert.

#### Health metrics overview

The **Health Overview** face has the latest readings for the different health metrics. Tap any health metric icon and number to view the details. If there is an alert, the color and trend arrow indicate so. From this face, you can also access all alerts, add meals, and initiate a manual measurement.





# Health metric detail views (watch)

Tap any health metric icon from the Health Overview face or one of the Health Monitor Home faces to view the details for the latest reading.



Swipe up to scroll down and view a graph with today's readings. The graph includes the following:

- There are individual readings for a zoomed-in portion of the day (latest 4 hours), with colors to indicate where those readings fall with respect to the target range.
- Solid vertical red lines above and below the reporting range indicate readings either "too high" or "too low" — beyond the numerical reporting range of the device.
- For blood pressure only, there are two dots for every reading to show the systolic and diastolic blood pressure readings.



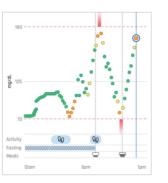
Swipe up again to scroll down and view a plot for the week. This plot shows the total percentage of readings that were "in range" (green) over the course of the previous seven days.

- For blood glucose, time in range (TIR) is the percentage of time that blood glucose stays in a target range. The range will vary depending on the person, but general guidelines suggest starting with a range of 70 to 180 mg/dL. For people with type 1 or type 2 diabetes, experts recommend aiming for at least 70% of time in range each day. The graph shows 70% as a benchmark number.
- For blood pressure, there are two plots for the week view: one for systolic blood pressure and one for diastolic blood pressure.

## Health metric detail views (app)

The mobile app provides more health metric details than the watch. To view these details, tap any health metric tile from the app Home screen.

View data by day, week, month, or year.



#### Day plot

Similar to the watch, the day plot contains individual readings. For additional context, it includes the following (on next page):



#### Activity:

Your watch tracks when you are physically active based on your movement sensed by the motion sensor, and it records the duration of each session to display on the app day plot.



#### Meals:

Recorded meals display on the app day plot. The icon appears nearly empty for small meals, half-full for medium-size meals, and full for large meals based on the selection of the meal portion by the user.



#### Fasting:

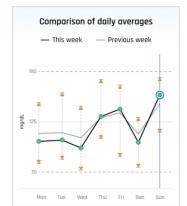
There is no user input required for the fasting feature. Fasting is determined by consecutive, consistent blood glucose readings. After a meal, if your blood glucose goes up for multiple readings, your watch will detect this and end the fasting period.

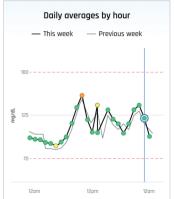
#### Week/month plot

Similar to the watch, there is a bar chart to track time in range for each day.

The second plot shows the average, highest, and lowest readings for each day and a comparison to the averages for the previous week/month.

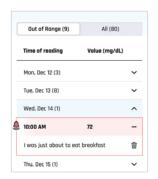
The third plot shows what an average 24-hour day looks like for that week/month by showing the average reading per hour on a 24-hour period.





#### Year plots

Year plots follow the same format as week and month, except individual days are replaced with monthly averages.



#### Table of all readings

All health metric detail views contain a table of individual readings for that time period. Add your own notes to any reading for additional context at the bottom of the page. The unsuccessful measurements are also recorded on these tables with the respective time stamp and a blank entry for the corresponding reading.

## **Automatic** measure

By default, measurements for all five health metrics are recorded automatically every 10 minutes while you're wearing the watch.



You can turn
auto-measure
off in Settings on
the watch or the
mobile app.
Settings -> Watch
Settings



You can also change the default 10-minute measurement interval on the mobile app settings to other allowed intervals.

#### Manual measure

Measurements can be triggered manually at any time. The Health Overview face and Health Metric faces all have a Measure button. Tap that button to initiate a measurement.



You can also tap the Measure Now button on your mobile app from either the Home screen or any of the health metric detail screens.

The watch will indicate if the measurement cannot be performed for a specific reason.

## Calibration

Using the Calibrate feature of the mobile app, you can manually input measurements from home-use reference devices, such as, fingerstick glucometer, BP cuff or pulse oximeter to improve accuracy of future readings from the watch. You don't have to add a reference reading for every health metric on the form — just the ones you've measured.



Health I **36** 

#### **Health metric alerts**

Tap the bell icon, which appears on various Home faces and the Health Overview face, to open the Alerts face.



If a reading is out of range, it will trigger an alert. When an alert is triggered (turn to next page):



The bell icon will display a dot that indicates an unread alert. The color of the dot will match the color of the furthest-out-of-range unread alert at the moment.



The reading will display on the Alerts face along with a message about how far out of range that reading was. The color will match the range-related colors from the previous section. In addition to the color, there is a bell icon. The number of lines under the bell matches the severity of the alert. The most critical alerts (red), have three lines under the bell. The alerts are displayed in reverse chronological order, with the most recent alert on the top. Alerts disappear from the watch after 6 hours.

Any out-of-range reading has an arrow to indicate if that health metric is trending up or down.

The watch will vibrate if vibration is turned on. Vibration is on by default but can be turned off within Settings.

On the Alerts face, a blue dot will indicate that an alert has not been read.

Alerts also show up on the mobile app with additional context. Mobile app alerts include recommended steps you should take in order to address the alert.

#### **Basic Apps**

## **Accessing Basic Apps**

To access Basic Apps on the watch, swipe right from Home face. Tap any app icon to open that specific app.



The watch records your steps and tracks your progress against a daily steps goal. To view Steps Walked, tap the steps icon from Basic Apps or the Steps Monitor Home face — or swipe left twice from Home. Swipe up to scroll down from the Steps Walked face and see how many steps you've taken every day for the past week. To adjust your daily steps goal, open the profile section of the mobile app.



View the same notifications on your watch (such as, incoming call, text messages and upcoming calendar events) as you see on your phone. There is a toggle on the Notifications screen within Settings where you can turn this off.



Set one or many alarms. For each alarm, select the frequency with which it should repeat and whether or not you want snooze capability. By default, snooze is turned on. When an alarm goes off, the watch will vibrate unless vibrate is turned off in Settings.



Access a stopwatch and add any number of laps as the clock runs. Tap to stop. Tap again to reset.



Get in-depth details about weather based on your location. Swipe up to scroll down and see temperature forecasts, precipitation percentage, UV index, and wind.



## Settings Accessing Settings

To access Settings on the watch, swipe right from Home to get to Basic Apps. Then tap the settings icon.



## **Brightness**

There are 4 levels of brightness with 4 being the brightest. By default, brightness is set at 2. If there is no activity for at least 60 seconds, the watch will go to a light sleep mode where the brightness is reduced to the lowest brightness level. 1.



#### Watch faces

All Health Monitor Home faces are customizable. Swipe left or right to view different watch faces and tap Customize to make edits. From there, tap on a specific health metric, and swipe left or right to choose a different health metric for that display area. Tap "done" when you're finished.



## **Vibration**

Vibration is turned OFF by default to save on power. The watch will vibrate whenever there is an alert, an alarm, or a notification, if turned ON.



#### Bluetooth

Bluetooth is turned on by default. The watch will not be able to sync with the mobile app if Bluetooth is turned off. If the watch and app are not connected for 24 hours, the watch will no longer automatically update your health metrics. To address this, reconnect the watch through the app.



#### **Auto-Measure**

Auto-Measure is turned on by default. Open the Settings section of the mobile app to edit the frequency of automatic measurements.



## **Confirm Meals**

Confirm Meals is turned on by default. While tracking your blood glucose, if there is a continuous increase. vour watch will confirm if this is due to a meal. This makes it easier to record meals, but you can turn it off to avoid the notification.



## **Notifications**

Notifications are turned on by default. Receive notifications, such as incoming calls, text messages and calendar events that you see on your phone under the watch Basic Apps -> Notifications app. The notifications are presented in reverse chronological order with the latest notification on top. Notifications disappear from the watch end of every day.

Settings I 46



## **About**

View the MSN and current firmware version for this watch. Also confirm that the right phone is connected. You can delete this phone to connect to a different one.



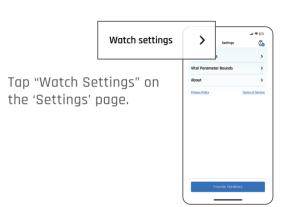
## Factory reset

If you select and confirm the Factory reset option, your saved user profile and historical measurement records get erased from the watch memory.

## **Basic Mobile App Settings**

Tap the Settings Icon on the top left of the 'Health Overview" page.







#### On the 'Watch Settings' page:

Tap on the 'Auto-Measure' radio button to turn it on in case it is not already on. ON is when the left side of the radio button is blue. It is OFF when the right side of the radio button is black.

• Auto-Measure Interval is set to 10 minutes, meaning that Measurement is launched every 10 minutes by default. You may scroll down the Auto-Measure Interval to select any other time interval for automatic measurement schedule.

- Select the **blood glucose** unit. The options are mg/dL (mostly used in the USA) and mmol/L (mostly used in Europe and certain parts of Asia).
- Select the **"Weather Unit"**. The options are "Imperial (Fahrenheit / Mile)" (mostly used in USA) and "Metric (Celsius / Kilometer).

**49** I Settings

## Watch firmware update

Before downloading the firmware, please make sure that your smartphone has enough space.

The watch firmware typically needs less than 10 Mega Bytes of storage.

#### iOS storage check:

Use your iPhone to check its storage. Go to Settings > General > iPhone Storage. The top section of this page will show you the currently available storage on your iPhone.

#### Android storage check:

- From the home screen, choose Apps or swipe up to access your apps.
- Choose Settings.
- Choose Device maintenance or Device care. ...
- Choose Storage (you may need to scroll down a little)
- This will show your currently availa ble storage on your Android device.

The firmware is pushed from the backend cloud to your mobile app. The prerequisites for firmware updates are:

- **a)** Watch and mobile app must be paired.
- **b)** Open the mobile app on your phone. Once a new firmware is available, a message will popup requesting to confirm the firmware update on your watch.
- **c)** You may choose "Update", or "Do it later".

If you select "Update", move to Page 53. If you select "Do it later", the update notice will move to the watch icon on top right corner of the app dashboard page as a blue downward arrow on the watch logo (top right corner). You may tap on the blue arrow (Figure on the right) anytime to start the update.





## Updating the watch firmware later

If you have selected "Do it later", you can always update the watch firmware anytime later by clicking the watch icon with the blue downward arrow icon located on the top right corner of the app dashboard.



On tapping the watch icon with blue arrow, you will be taken to the Watch Settings page, where at the top of the page, you will find information about available firmware updates and an "Update now" button.

## Updating the watch firmware

When you start the firmware update, the flow will take you through a sequence of steps with clear guidance and minimal involvement from your end. The process will start with preparing the firmware file to be downloaded.



#### STEP 1

Make sure you won't need your phone or the watch during the update. The firmware update process takes about an hour.



#### STEP 2

Place your watch on the charger. Keep your phone within 3 feet of the watch during the update. We also recommend keeping your phone on the charger as well during this process.



## STEP 3 (For iPhone users only)

Go to the Bluetooth settings on your iPhone and tap to "Forget This Device" for your watch. Then return to this mobile app and tap "Next" button.

For Android phone users, this step will automatically pass to the next step.



Settings I **54** 

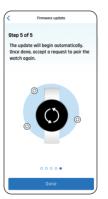
#### STEP 4

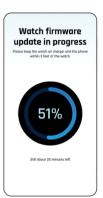
Please ensure your phone's Bluetooth is ON. Accept your watch's new pair request and tap on Next.



#### STEP 5

The update will begin automatically, and you will see a live update of the progress.





# Firmware update completed successfully

After the firmware update progress reaches 100%, you will be taken to the page to connect back to the watch. On the Watch Connect page, you press the "Connect" button and it will connect the app back with your watch.



After successfully connecting back to the watch, the process will end with a success message as shown on the figure.

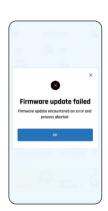


## Firmware update failed

Firmware update may encounter an error and the process may get aborted. A few sources of error could be a Bluetooth connection failure between the watch and the mobile app, or a corruption of the firmware file.

If a firmware update fails, the watch will roll back to the current firmware, and you will have to restart the firmware update from Watch Settings (follow steps from Page 52: Updating the watch firmware later).



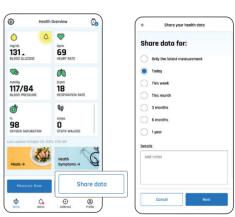


## Sharing Health Data

## How to share data

It's easy to keep other people informed about your health. You can share your health data with friends, family, and medical professionals using the mobile app. This functionality does not exist on the watch.

At the bottom of the Home screen of the app, there is a Share Now button. Select the time range you want to share, and then select the contacts you want to share the data with. Your selected contacts will receive a link to view your data.



Sharing Health Data I 58

## **Adding contacts**

To share data, you need to add contacts. You can do this through the share data flow described in section 15, or you can add contacts in the profile section of the app.



- From Share Data Contacts page, tap on "Add new contact".
- Add the contact's full name.
   On the New Contact page:
  - Select the type of contact from the dropdown.
  - Add at least one of either email or phone number.
  - This is how the contact will receive your data.

Whenever you share your data, all of your contacts will be preselected for you. Deselect any that should not receive that data.

## Adding meal information

You can record a meal at any time from the Health Overview face. Tap the meal icon and then select the size of the meal to record it.





To view meal details, go to the meals section of the mobile app from the Home screen. Add or edit notes and times for each meal. You can record meals here as well.

Recorded meals also appear on the mobile app as part of the day graphs within each health metric detail screen.

## Adding health symptoms

You can record health symptoms on the mobile app. Go to the health symptoms section from the Home screen. Add or edit notes and times for each symptom. Health symptoms cannot be recorded on the watch.







Sharing Health Data I **62** 

## Troubleshooting and alerts

## Cannot connect app with the watch

To connect the watch with the app, make sure all of the following are true:

- The watch is on and close to the phone, within 10 meters.
- The watch has at least 10% charge.
- The Bluetooth on the phone and the watch are on.

 MSN on the watch is the same as that entered on the mobile app.

If all of the above are true and the app will not connect, please restart the watch and the phone, and open the app on the phone and try again. If the issue still persists, you may have to delete the paired phone from watch Settings -> About and the paired watch from the phone's Bluetooth paired device list and try to reconnect from the mobile app.

**63** I Troubleshooting and alerts

## Watch not worn properly

If the sensor is not in direct contact with your skin while trying to measure, you'll get a notification that you're not wearing the watch properly.



## Battery too low

To prevent possible damage of watch internal components, the watch will only measure if it has at least 10% battery remaining.



## Pair your watch

Before triggering a Measure, you need to ensure your watch was paired and connected with your mobile app at least once before.



## Firmware update failed

If the firmware update fails for any reason, we need to restart the process from the app by placing the watch on charger and keeping the app close to the watch and paired.



**65** I Troubleshooting and alerts

#### Cannot measure

If you tap to measure and the measurement fails, you'll receive a notification on the watch. To successfully measure, ensure that all of the following criteria are met:

- The watch is on.
- The watch is touching your wrist properly.
- The watch has at least 10% charge.
- The watch is connected with the mobile app.



#### Support and Services

## How to get support and services

Email support@lifeplus.ai

# When and how you can return the watch and get a replacement

Any watch with a manufacturing defect can be replaced with the basic and premium plans within the warranty period. Lost, stolen, or damaged watches can be purchased at a reduced price within the premium subscription plan. Contact the support center to report issues with the watch. See the warranty support table for more specific information.

Manufacturer warranty	1 year	Manufacturing defects	Replacement and Refurbishment	No costs	15–30 days (faster with extra supply at Warehouse)
Extended Warran- ty for repair and	2–3 years	Manufacturing defects	Replacement and Refurbishment	Covered by warranty	~30 days (faster with extra supply at Ware-

Replacement Policy

Costs

**Warranty Type** 

replacement

Duration

Defects Type

Support and Services I 68

Turnground Time

house)

Premium Service	1 year	User caused de- fects (not cosmet- ic fixes)	Replacement (limita- tion TBD)	Covered by premium service	15–30 days (faster with extra supply at Ware- house)
Post-warranty support		All types	Repair at scheduled cost (certified repair	Depends on the issue	Depends on the issue

house)

Replacement Policy

Costs

**Turnaround Time** 

**Warranty Type** 

**69** I Support and Services

Duration

Defects Type

## **Watch technical specifications**

ITEM	DESCRIPTION
Watch case	Circular shape (44mm); Weight: ~39g (watch only, no strap) Thickness: 12.7mm Water resistant, IP67 Case material: aluminum (back of watch is hard plastic in silver) Case Color: silver

Strap	Material: medical silicone (biocompatible), Interchangeable Sizes: small (18cm), large (22cm), 2 straps added per box Strap colors: white			
Touch screen	1.3" display diameter, 360x360 resolution			
	Capacitive touch screen			
	3D touch display AMOLED			
	16M colors			

ITEM

**71** I Support and Services

ITEM	DESCRIPTION				
Watch cover glass	Sapphire crystal cover glass (high-end, less prone to scratches)  Rechargeable lithium ion battery ~390mAh  Battery life (active): ~15 hours depending on the usage modes. Battery life (shutdown): ~2-4 days				
Battery					
Charger	Li-Polymer Charge Management Controller USB2.0 Magnetic pogo pin connector also used for data transfer (with 5V == 1A adapter only) External charger color: black				
Power Adapter:	5V == 1A ONLY. Other adapters with higher voltage or current will damage the watch				

Support and Services I 72

Bluetooth	BLE 5.0 (part chip set), supports BLE4.0-5.0 at mobile App side
OS	freeRTOS (Android and IOs compatible at the app level)
CPU	PSoC63 with BLE (Amazon freeRTOS) from Cypress
Storage	64MBytes+ flash (embedded and/or by external SPI extension)

24MBytes SRAM (volatile, embedded and/or external)

ITEM

Memory

**73** I Support and Services

PPG Sensor	OSRAM SFH7072
Analog frontend	TI AFE4420 with built-in ADC (sigma-delta)
Vibration system	Vibration system triggered by alters interrupts
Pedometer	automatically running, including Step records, Distance [miles/meters]

ITEM

Other functions	Clock, notification, stop clock, timer, weather, temperature (synchronized from app) Wakeup mode: watch goes to sleep after 60s, comes back with screen touch/tap on the watch screen or hand gesture		
IMU (6-axis)	InvenSense ICM40608, 3-axis Accelerometer, 3-axis gyroscope for motion detection		
Watch crown(s)	Long press used for power off and on of the watch		

**75** I Support and Services

DESCRIPTION

Gentle press used to return to Home face

ITEM

Bioelectric Imped- ance	Bioelectric impedance at the back of the watch. Primarily used to detect skin contact	
Certifications	Prioritized for release: USA FCC, USA HIPAA, EUROPE CE, Biocompatible straps Planned not tied to first release: ISO 13485 for MEDICAL DEVICES, California standard for wearable devices (CA Prop 65), full Biocompatibility	

ITEM

#### **Certifications**

#### US FCC (FCC ID: 2A33U-LPLFV01)

CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109

# EUROPE CE (safety) EN300328 V2.2.2:2019

EN301489-1 V2.2.3:2019 EN301489-17 V3.2.4:2020

EN IEC 61000-6-1:2019 EN IEC 61000-6-3:2021

EN 62479:2010 EN62368-1:2014+A11

2368-1:2014+A11 **stra** 

#### Waterproof:

IP67: IEC 60529:1989+A1:1999+ A2:2013

#### **Battery Certifications:**

UN/DOT 38.3 & IEC 62133

FDA certified biocompatible straps

#### For Q&As please go to www.lifeplus.ai/QAs

My watch manufacturer's serial number

My doctor's phone number \_\_\_\_\_

My notes			

My notes		

My notes			

My notes		

My notes			