

制作工艺：

80g书写纸；骑马钉，黑白印刷

尺寸：95\*142mm

此页不印刷



# Personal ECG Device

User Manual

# User Manual

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## 1. Introduction

It is intended to record and store electrocardiogram (ECG) rhythms, and transfer records to compatible mobile App for further research or analysis.

It is not a medical device and should not be used for any medical purposes or any medical conditions. It is intended only for general wellness use.

## 2. Warnings

- The ECG results (including regular heartbeat) do not guarantee that you are free from an arrhythmia or other health conditions. You should notify your physician of possible changes of your health.
- Do not use the device to self-diagnose heart-related conditions. Consult with your physician before making any

medical decision, such as altering your use of any drug or treatment.

- Do not continue to use the device until further instructed by a physician if your skin is irritated or inflamed around the electrodes.
- The device makes no warranty for any erroneously collected data or information from misuse or malfunction as a result of abuse, accidents, alteration, negligence, or failure to maintain the products as instructed. The results made by this device are preliminary screening of cardiac conditions, not a complete diagnosis. All interpretations should be reviewed by a medical professional for clinical decision-making.
- The device has not been tested for and is not intended for pediatric use.
- Keep the device away from young children. Contents may be harmful if swallowed.

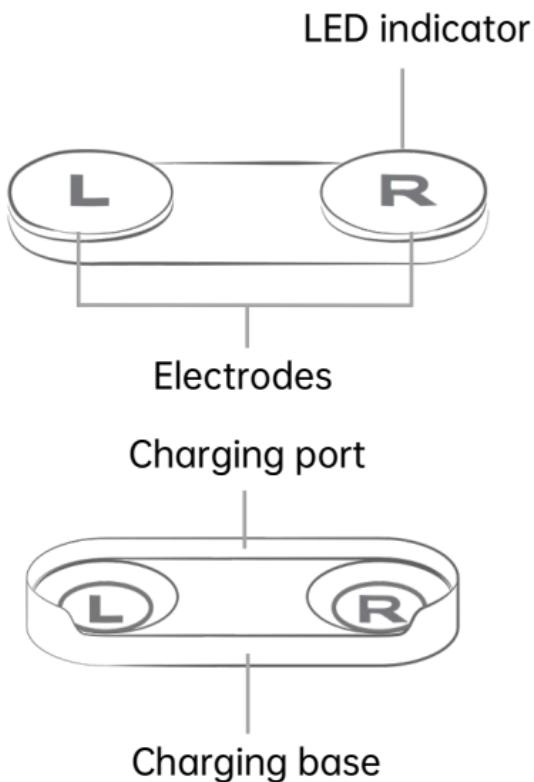
- Do not take a recording while driving or during physical activity.
- Do not store in extremely hot, cold, humid, wet, or bright conditions.
- Do not take a recording if the electrodes are dirty. Clean them first.
- Do not immerse the device in or expose the device to excessive liquid.
- Do not drop or bump with excessive force.
- Do not expose to strong electromagnetic fields.
- Do not expose the device to a magnetic resonance (MR) environment.
- Do not use with a cardiac pacemaker, ICDs, or other implanted electronic devices.
- Do not use during cautery and external defibrillation procedures.

- Do not place the electrodes in contact with other conductive parts including the earth.
- Do not use with unapproved accessories. The use of unapproved accessories or transducers and cables may result in electromagnetic emissions or decreased electromagnetic immunity of this device and result in improper operation.
- Do not use the device adjacent to or stacked with other equipment because it may result in improper operation.

### **3. Packing List**

- Main Unit
- Charging Base
- USB Cable
- Chest Strap

## 4. Guide to Parts



Indicator	Status	Description
/	OFF	<ul style="list-style-type: none"><li>• Not activated</li><li>• Out of battery</li></ul>

Green light	Flashing with the rhythm of the heartbeat	<ul style="list-style-type: none"> <li>Recording your ECG</li> </ul>
	On	<ul style="list-style-type: none"> <li>Fully charged</li> </ul>
	Flashing every 5 seconds	<ul style="list-style-type: none"> <li>In standby mode</li> </ul>
Orange light	Flashing with the rhythm of the heartbeat	<ul style="list-style-type: none"> <li>Recording your ECG</li> </ul>
	On	<ul style="list-style-type: none"> <li>Charging</li> </ul>
	Flashing every 5 seconds	<ul style="list-style-type: none"> <li>In standby mode</li> <li>Low Battery</li> </ul>
Blue light	On	<ul style="list-style-type: none"> <li>Connected to the App and ready to start recording</li> </ul>
	Flashing with the rhythm of the heartbeat	<ul style="list-style-type: none"> <li>Connected to the App and recording your ECG</li> </ul>

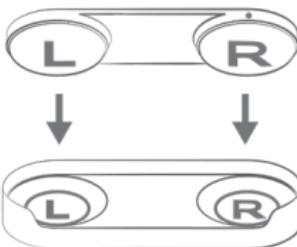
## 5. Using the Device

### 5.1 Charge and activate your device

- a) Put the device on the charging base.

**Note:**

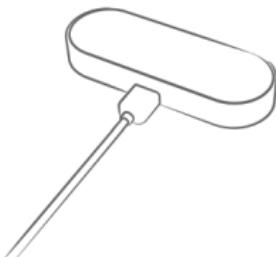
- Do not put in backwards.
- Ensure proper contact between the device and the base.



- b) Connect the charging base with power adapter by the USB cable.

**Note:**

- The power adapter is not included in the package.
- Compatible power adapter output: DC 5V, 1A
- Do not use the device while charging.



## 5.2 Download Livenpace App

- a) Download the Livenpace App from iOS App Store or Google Play Store. Or you can scan the QR code below.



**Note:** Be sure to use a compatible iOS or Android device.

- iOS: iOS 10.0 or above
  - Android: Android 7.0 or above
- 
- b) Make sure Bluetooth is turned on in Settings of your smartphone or tablet.

- c) Launch the Livenpace App and follow the instructions in the App to set up and pair your device.

**Note:**

- For more information on how to use the software, visit the website <https://livenpace.com/pages/support> or scan the QR code below.



### 5.3 Record your ECG

- a) Choose one of the following methods for recording ECG:

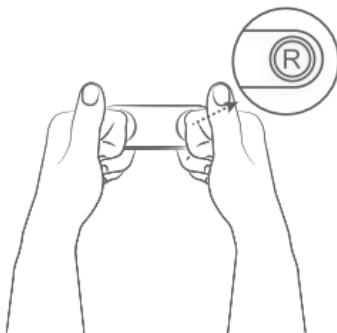
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- **Lead I**

Hold onto the device with both hands.

**Note:** If the ECG quality is poor with Lead I, please try to use Lead II.

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- **Lead II**

Hold the right electrodes with the right hand, place the left electrodes on the left leg.

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- **Chest lead**

Hold the right electrodes with the right hand, place the device on the chest (below the pectoral muscles)

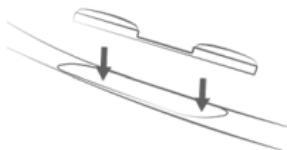
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- **Chest lead with chest strap**

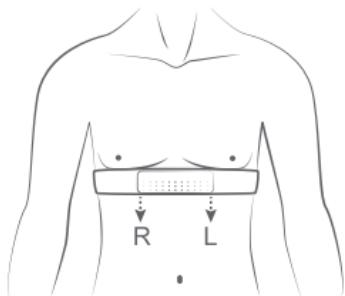
Attach the device to the chest strap.



Position the monitor across the front of the chest as shown, and ensure the electrodes are in contact with the skin.



**Adjust the strap** so that it wraps around tightly yet comfortably.



**Note:**

- Please make sure that the "R" symbol is always on the right hand or chest.
  - Do not use the electrodes on a portion of the body with too much body fat, body hair or very dry skin; otherwise, a successful recording may not be possible.
- b) Hold still for at least 30 seconds.

**Note:**

- You can turn on/off the heartbeat sound of the device in the App.
- c) When the recording exceeds 15 minutes or the electrodes lose contact with your skin, the device will automatically stop recording with a long beep.

## **5.4 View ECG measurement results**

Upon completion of your ECG recording, the records will be synced to the App. You can view the result in the App.

Result	Description
Regular heartbeat	No rhythm abnormalities were detected in your ECG.
Irregular heartbeat	Some rhythm abnormalities were detected in your ECG.
Poor signal	There is too much interference in this recording.
Slow heart rate	Your heart rate is less than 50 beats per minute, which is slower than normal for most people.
Fast heart rate	Your heart rate exceeds 120 beats per minute. This can be normal with stress or physical activity.

**Caution:** If you are experiencing any symptoms or have concerns, contact your physician.

**Note:** All historical results can be viewed, downloaded, and shared in the App.

## 6. Maintenance

No service or repair should be performed on the hardware other than the maintenance listed in this section.

It is important to keep the electrodes clean by spraying with an alcohol-based sanitizer and wiping with a soft cloth when needed.

- Do use a clean, lint-free cloth
- Do not use abrasive cleaners or materials
- Do not immerse device or expose device to excessive liquid

Exterior Visual Inspection:

- Inspect electrodes for warping, surface damage, or corrosion
- Check for any other form of damage

## 7. Troubleshooting

If you experience difficulties in operating your device, refer to the troubleshooting guide below.

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**Problem:**      **Solution**

My device is not working.      **Option:** Charge the device.

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**Problem:**      **Solution**

Poor signal.      **Option 1:** Ensure that your arms, hands and left leg remain still.

**Option 2:** Clean the electrodes with an alcohol-based sanitizer.

**Option 3:** If your hands are very dry, use a water-based lotion before recording.

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<b>Problem:</b>	<b>Solution</b>
The ECG rhythms appear upside down.	<b>Option:</b> Ensure that the right hand or chest contacts the right electrode.

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## 8. Specifications

### Operating conditions

Temperature: 5 °C to 45 °C

Relative Humidity: 15% to 95 % (non-condensing)

Atmosphere pressure: 700 hPa to 1060 hPa

### Storage / Transport conditions

Temperature: -25 °C to 55 °C

Relative Humidity: 15% to 95 % (non-condensing)

Atmosphere pressure: 700 hPa to 1060 hPa

## **Power and supply**

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Rechargeable lithium-polymer battery

Capacity: 90mAh

Rating: DC 5V, 5W

## **ECG and HR**

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Heart rate range: 30 to 250 BPM

ECG Measuring length: 30 seconds to 15 minutes

## **Others**

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Dimension: 92×32×8.2 mm (main unit)

Weight: 26.8g (main unit)

Wireless connectivity: Bluetooth® 5.1

Connector: Micro USB

Internal memory: Up to 10 ECG recordings

Applied part: Type CF (electrodes)

IP classification: IP 22

## 9. Symbols

Symbol	Description
	Indicates a medical device that is not to be disposed of as unsorted municipal waste.
IP22	Resistant to liquid ingress
FC	This product complies with the rules and regulations of the Federal Communication Commission.
	Non-ionizing radiation

## 10. FCC Statement

FCC Warning:

FCC ID: 2A728-0002

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

This device complies with part 15 of the 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 received, including interference that may cause undesired operation.

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.



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Product name: Personal ECG Device      Model: HHM2  
PN: 255-05291-00      Version: A      Date: July 18, 2022

