# amor H1 Heart Rate & Activity Recorder Manual

Rev. 1.01

Model No: 8Z31

# Leadtek Research Inc.

\* Please read this instruction before using and follow the instructions to use

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# 1.User Guide

amor H1 is a personal and portable health device that allows users to measure and record heart rate and activity value, giving users more efficient feedback and record parameters displayed in Mobile APP. The input of heart rate signal is obtained through adhesive electrode patches, Activity data is record daily movement via clip at the waist.

amor H1 has time display, measuring heartbeat (HR), activity levels, calories and exercise time and other functions, can be quantified by the APP via sync data.

# 2. Warnings and precautions

Before using amor H1, please read below information first. Warning

- Do NOT use amor H1with MRI (magnetic resonance imaging) environment.
- Do NOT use amor H1 with a defibrillator, an electro-cautery, cardiac pacemakers or other stimulators together.
- To prevent possible explosion hazard. Do not use amor H1by in the presence of flammable anesthetics.
- Follow local governing ordinances and recycling instructions regarding disposal or recycling of the device and components.
- The result is for self-feedback purpose, not as result for medical diagnosis, do not explain or judgment by yourself.
   Caution
- It's necessary to read this user's manual carefully before using this product.
- Please handle amor H1 with care. Hitting or dropping the device may stop it from working. If there is any damage resulting from abnormal use, please contact service personnel.
- amor H1 is Followed safety requirements for local country electrical

- systems.
- Portable and mobile wireless communications device (RF, radio frequency) maybe affect the amor H1.
- The amor H1 Life of one year. To ensure the life of the machine, please note that the use of maintenance.

# 3.Brief introduction of amor H1

### 3.1 Device outlook and I/O



- 1. Button
- 2. OLED Display
- 3. Buzzer Hole
- 4. 2.5mm Plug connector
- 5.Clip

### 3.2Parameter

Relevant parameter values are defined as follows.

- 1.Exercise Target •
- 2.Heart Rate Parameter : Heart Rate( HR) \( \cdot \) Heart Rate Standard deviation(SDNN (ms)) \( \cdot \)
- 3. Activity Parameter: Step · Calories · Exercise intensity ·
- 4. Autonomic nervous Index: Five Forces Index, analysis of the autonomic nervous system can be obtained through the cloud •

# 4. Specification

### 4.1Heart Rate

Input impedance : >10M Ohm Input dynamic range : +/-2 mV

CMRR: >60 dB Analog / Digital Converters: 12 bit

ECG signal: 1 Lead; Measuring frequency: 0.33-40Hz;

Sampling rate: 250Hz; Heart rate measurement range: 40-240 bpm

4.2Activity

3-axis G-sensor, plus or minus 2G

4.3Input

2.5mm phone jack Signal cable (with electrode pads used)

4.4Output

BT4.0 BLE

4.5Display

OLED display (mono)

4.6Appearance

Size : 60\*38\*9.5(mm); Weight : 39g(With battery)

4.7Classification

amor H1 protection: Internally powered  $\circ$ 

Protection Level: Type BF-Applied Part

Waterproof and dustproof: IP22

Operation type: Continues

4.8Environment

Operating Temperature :  $+41^{\circ}$ F to  $+104^{\circ}$ F  $/+5^{\circ}$ C to  $+40^{\circ}$ C

Storage and transport temperature :  $-13^{\circ}$ F to  $+158^{\circ}$ F  $/-25^{\circ}$ C to  $+70^{\circ}$ C

Operating Relative Humidity: 15 to 93% (non-condensing)

Storage and transport conditions relative humidity: 15 to 93% (non-condensing)

Atmospheric pressure range: 700 hPa to 1060 hPa

### 4.9Power Information

The device uses 135 mah lithium battery

### 4.10 APP System Requirements

Android System: 4.3or later iOs System: iphone 4Sor later

Hardware Requirements: MCU: Quad core 1.3GHz and above

RAM: 1GB or more Capacity: 2GB or more

### 4.11Part Lists

The product is shipped with the following parts as table 1. Table 1 Part lists

# Device 1 Quick User Guide 1 Heart Rate Cable 1 Charging Cable 1 Sports Electrodes (4 PCS)\* 1

<sup>\*:</sup> Sports Electrodes are for Single Use Purpose only.

# **5.Operation**

# 5.1 Appearance



OLED Display

Long push the Button: On/Off

Short push the button: change

Interface

Fig. 1:Top view



HR cable or charging cable)

2.5mm hole (for connecting

Fig. 2:Side View



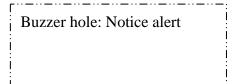


Fig. 3:I/O Interface

### 5.2 Device screen instructions

Press the device, there will be 1)Time;2)Achievement rate;3)Steps;4) Calories;5)Heart Rate;6) Exercise Time. From 1) to 6) is cycle display, But stay ten seconds on each picture off the screen, shown in Figure 4.

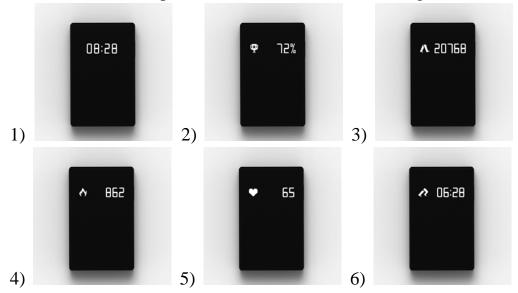


Fig. 4: amor H1 main function Flow

# 5.3Operation

From Fig.1 to Fig. 3, Turn on is long press the button, Main screen will

appear, the device signals the next hole left there, this input wire or charging cable to ECG use. Before use, the first patch fixed on the chest, connect the signal line deduction (about color and text segments). Finally, the product clip fastened at the waist and connected to cable, you can start using. Signal wire and electrode patches affixed to the suggested location, shown in Figure 5.



Fig. 5: The suggestion position of electrodes

The right for the R white, left for L Black. During the measurements, the heart rate will appear on the screen, the measurement data will be automatically saved parameters (every 10 seconds to save). Activity levels and other parameters will be presented on the screen. After data synchronization, and full information can present on the App.



Fig. 6: amor H1use position and related picture

When the end of the exercise, or do not use heart rate function, unplug the wire thread first, and then removed the electrodes from the body. After removing the Heart Rate Cable, the device can still record activity and other applications. When the device is at low battery condition(battery symbol one grid), suggest to charging. There will be a percentage of the charging battery while charging. When the percentage charged to 100%, the device screen turns off to save power. When users unplug the charging cable or press the button, the device will turn on.

# **6.App Installation and brief instructions**

# 6.1 Install App

Download amor Runner App via QR code or through the official website, Software installation will automatically display the main screen, and then, you can click Next to proceed with the installation steps • Then the installation progress reaches 100%, it means that the program has been installed. Program shortcuts displayed on the phone's desktop.

# 6.2 App Introduction

Amor Runner App can be downloaded from the product web(health.leadtek.com)or from Google Play Store, App including below items:

- 1.Login
- 2.Data overall view
- 3.Sync
- 4. Data Display
- 5. Autonomic nervous system measurement
- 6.Setting
- 7.Share

### 6.3 Maintenance

- 1. When the low-voltage display symbols, please charge Immediately.
- 2. When measuring signal is weak, the proposed replacement electrodes.
- 3. Clean method of surface of the instrument is used the dry naturally or use a clean, dry cloth.

### 6.4 Label



IC: 2969A-8Z31

MODEL: 8Z31 amor H1

Leadtek Research Inc. Made in Taiwan

Manufacturer: Leadtek Research Inc.

Address: No. 4, Lane 5, Sec 2, Lane 327, 235 District, New Taipei City

# 6.5 Issues table and Solve Handling

Table 2 Issues and Solve

Question	Reasons	How to Solve
Storage space is full	Memory Space is full	Use the App to transmit the data
		and clean the space
Can not open device	1 · Insufficient battery power	1 · Pls charge the battery
	or no power	2 · Please contact your local
	2 · Device is damaged	customer service center
Can not measure the	G-senor is abnormal	Please contact your local
activity values		customer service center
Abnormal heart rate	Signal interference	1 · Follow the operation flow
value		2 · Replace the cable
Time is not correct	1 Not sync with App	Please sync with App
	2. To long time to not use Device	

# 7. Application

# 7.1 Record personal activity status

Understand the self-condition to assist biofeedback by recording heart rate and activity.

### 7.2 Effective exercise tool

Access to relevant information about user activities, such as: sports fat burning, maximum heart rate, prompt, and effective exercise as a basis for reference.

# 8. Technical Support and Warranty

### 8.1Technical Support

If you can not resolve your problem, please contact your dealer. You can also contact us through the following technical support staff, information

1.TEL: +886 (02)82265800#810

2.ADDRESS:18F, Chien-Yi Rd., Chung Ho Dist., Ne

23511

is:

### 8.2Warranty Policy

Leadtek Research Inc. provides one year warranty, starting from the purchasing date, to the original purchaser for repairing any product failure due to fabrication error or defective parts. Within the limited range of the warranty, defective products shall be fixed or replaced by Leadtek Research, Inc. This warranty is not transferable. Damage due to negligence, accident, abuse, misapplication, modification, mailing to the seller, or repairs not made by Leadtek Research Inc., is not covered by the warranty. Within the coverage of the warranty, the delivery fee for mailing to the retail seller or the direct store is not covered within the scope of the warranty.

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## **Federal Communication Commission Interference Statement**

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.

FCC Caution: Any changes or modifications not expressly approved by the party

responsible for compliance could void the user's authority to operate this

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.

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Product Web: QR Code

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