

Leadtek Research Inc.

amor H100 Cloud Gateway

(model: 8Z61)

USER MANUAL

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<http://www.leadtek.com.tw>

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Thank you for purchasing the **amor H100 Cloud Gateway**.

Please read this instruction manual thoroughly before using this device to ensure safe and accurate use.

1. General

The **amor H100 Cloud Gateway** works as a data receiver and transmitter which helps users or caregiver to manage the data easily and remotely. By using this product, the software accurately collects vital sign data in digital format that can be transmitted securely. Personal Health Record can be referred in various formats (HTTP, XML, SOAP, etc.) to an **amorRunner health cloud** which provide health manager and caregiver monitoring your health record effectively through the web-based service.

amorRunner health cloud (<https://www.amorrunner.com/amorRunnerWeb/index.jsp>) offers users better access to their health record and allows caregivers to remotely monitor the patient's health conditions via the internet. Patients, family, caregivers can easily review the health record remotely and respond efficiently.

2. Product Overview

Before using **amor H100 Cloud Gateway**, please make sure that you have all the contents listed.

2.1. Product Contents

- H100 Cloud Gateway
- 5V/1A AC Adapter
- USB Sync Cable
- User Manual

2.2. Product Features

- Portable Gateway with embedded 1500 mAh Li-Polymer Battery
- Friendly Android 4.4 system with 3.5” Digital LCD Touch Screen
- Data transmission through WiFi or 3G network
- Easy connectivity for other vital sign device with Xenon and Bluetooth 4.0 BLE protocol standard
- Simply install and vital sign will automatically upload to the Health Cloud
- Health record can be remotely reviewed on the specific Health Cloud
- Set up health event alarm such as medication, measurement, sport, etc.

2.3. Product Application

- **Tele-Homecare System**

amor H100 Cloud Gateway is a critical component of Tele-Homecare system which consists of equipment and services that support the patient's safety and health in their own home. The use of audio, video and other telecommunications and electronic information processing technologies for the transmission of vital sign information and data relevant to the diagnosis and treatment of medical conditions. It can enable or support healthcare delivery services, providing home medicine and care support to patients and their caregivers anytime, anywhere.

- **Multi-User available**

amor H100 Cloud Gateway is available for multi-user. Family member can manage personal health record by creating their own email account in one H100 device. For the use of community resident, RFID reader and tags can be easily integrated with H100's ecosystem to recognize the mass of ID information.

- **Multi-Vital Sign Meter available**

amor H100 Cloud Gateway comes with Bluetooth 4.0 BLE and a specific **Xenon** wireless protocol which can communicate with other wireless vital sign meters,

including Body Weight Scale, Blood Pressure, Blood Glucose, Thermometer, Heart Rate Variability, ECG patch, SPO₂, Sport & Heart Rate recorder, etc. User can flexibly choose the preferred combination with H100 according to the requirement of disease management.

- **Friendly User Interface**

amor H100 Cloud Gateway is developed on the platform of Android 4.4 system, it can be interacted with user through one 3.5 inch touch panel, it is a popular operation system and easy to use for elder and children.

- **Health Cloud**

amorRunner health cloud provides a web-based interactive system platform to user and health manager. Through real-time upload of H100 cloud gateway with vital signs meters, any deviation from previous results linked to abnormality can be quickly detected. Also, via the same platform health manager is able to interact with H100 user, as well as offer care support and self-care advice to the chronic patient.

Through **amor H100 cloud gateway**, users upload their vital signs every day to the **amorRunner health cloud**. The **amorRunner** will record and judge automatically whether patient data (e.g. blood pressure, glucose) achieve the alarm threshold based on the ruler (model base) early set in advance. If patient health condition is judged as being of alert value, the system will automatically send short message by cell phone to patient family and health manager. In the meanwhile, the care decisions and guidelines will be immediately provided by the health manager. In the future, medical staff could provide patients personal health suggestions to help them manage self-health based on the knowledge base stored in system: the data of patient vital signs, dietary records, and exercise records.

3. Product Specifications

3.1. Specifications

General Description	
Main Unit Size	97.15mm x 47mm x75mm
Main Unit Weight	175.5 g
CPU	SC7715 (Cortex-A7 1.2GHz Mali400)
GPS	N/A
Storage Media	512MB + 256MB
SIM Slot	Mini SIM card slot
Audio	Integrated speaker in main unit
USB Interface	Micro USB2.0
Power Requirements	
Handle Mode	5V@1A external AC Power adaptor with embedded 1500mAh Li-Polymer Battery
Operating Temp	0° to +50°C
Storage Temp	-15° to +60°C
Display	
Screen Size	3.5"
Resolution	QVGA 320 x480 pixels
Display Type	Digital TFT display
Brightness	230cd/m2

3.2. Accessories

3.2.1 Adapter

3.2.1.1 The input voltage shall be single phase within the following limits

	Min	Max
Rated Input Voltage	100V AC	240V AC
Input Voltage Range	90V AC	264V AC
Input Voltage Frequency	47Hz-63Hz	

3.2.1.2 Current

The maximum input current is 0.2A max. at 100V AC.

3.2.1.3 Inrush Current

The inrush current will not exceed 50A at 230V AC, input and Max load for a cold start at 25°C.

3.2.1.4 Stand-by Power

The input power should be less than 0.3W with No-Load.

3.2.1.2 Output Parameters

Output Data	Spec. Limit			Test Condition
	Min Value	Typical	Max Value	
Output Voltage	4.75	5.00	5.25	0~1.0A loading the voltage was measured at USB socket
Current		1.0A	-	
Ripple and Noise	-	-	120mVp-p	20MHz bandwidth 10uF Ele. Cap 0.1uF Cer. Cap, At115/230V AC input voltage and full load
Output power	-	-	5W MAX	MAX. load(1.0A) &100-240V AC

3.3. Environment Specification (Reliability Test Plan)

3.3.1. Mechanical

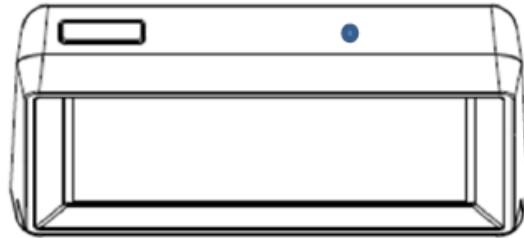
Items	Test Items breakdown	Specification
Mechanical Test	1. Transportation Package	drop 80cm

4. Drawing

About Button

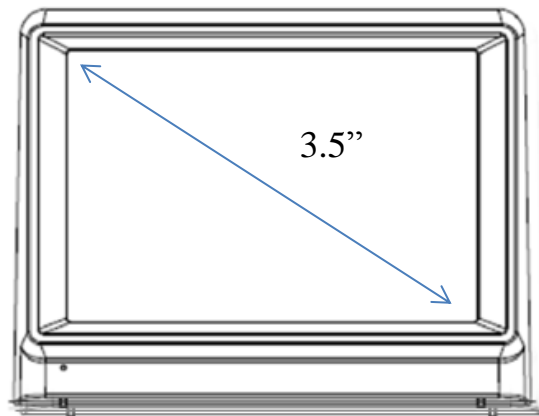
- (1) Power on / Off
- (2) Reset Hole

Power Button: On/Off Reset Hole



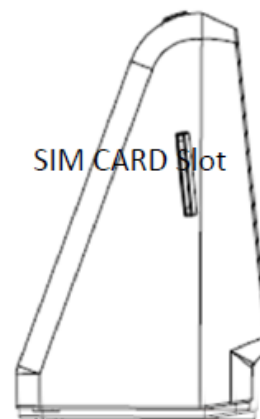
Front View

3.5" Touch Panel



Side View

3G SIM CARD Slot



Back View

- (1) Micro USB hole
(Power & OTG)
- (2) Speaker



Bottom View

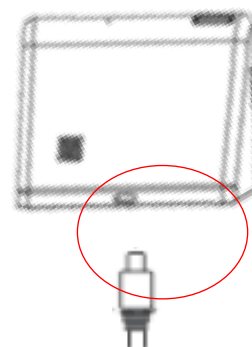
Label

- (1) Serial Number
- (2) IMEI Number



H100 ON and OFF

- (1) Long push the power button
3 ~ 5 seconds to turn on/off.
- (2) Automatically turn on when power supply
plug to Micro USB charging port.



5. Installation

5.1 Quick Installation Step

(1) Prepare your WiFi router or 3G SIM card, and make sure that it can work properly.

For the settings of WiFi router, please refer to your service carrier's manual.

(2) Open **amor H100 cloud gateway** and take out the contents.

(3) Plug power adapter into a power outlet and power adapter port on the **H100**.

(4) Turn on gateway power switch. (“O” presents as turn off, “—” presents as turn on) if the power doesn't auto on when power adapter is plugged.

(5) Please register a **USER ACCOUNT** on **amorRunner health cloud** before measuring vital sign. (<https://www.amorrunner.com/amorRunnerWeb/index.jsp>)

(6) After finishing the procedure of registration on health cloud you can add a member account on **H100**.

Congratulations! You have completed all the installation.

5.2 About Installation Location

CAUTION!

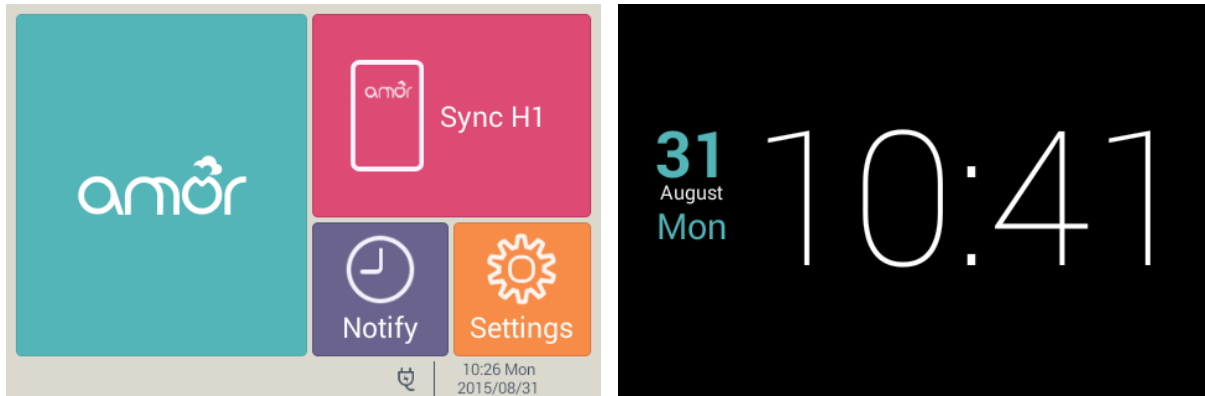
- For safety reason and to obtain the best wireless transmission efficiency, place the Gateway in a wide open area.
- To avoid the transmission interference, do NOT place the gateway in the following environments:
 - On, near, or covered by metal substances
 - Near other wireless devices
 - Near a microwave or an induction cooktop
 - In a closet or covered by other substances unable to receive signals

Please confirm the usability of AC power adapter in your country before plug to the gateway, or the gateway will be damaged.

6. Main Function

3 function options on the main menu: alarm clock, setting and fitness heart rate recorder.

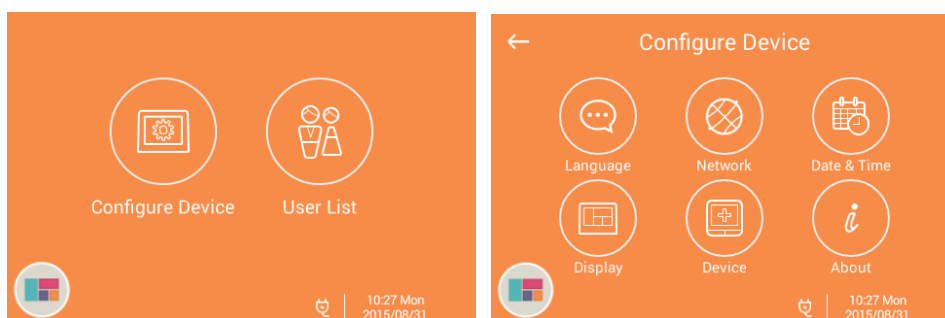
- a. Automatically turn to standby screen showing time information after 3 minutes idle (can be set.)

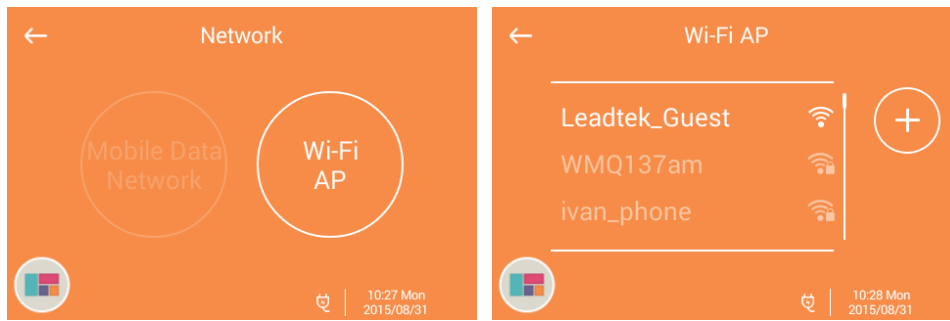


7. Network Setting

Please set the network environment while first use of **H100**. (All data required internet to upload to health cloud.)

- a. Use home Wi-Fi wireless network. (Main menu/Setting/Device setting/Internet/Wi-Fi wireless network)

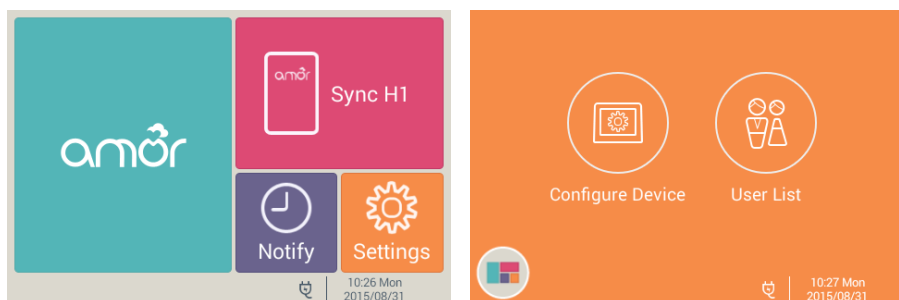


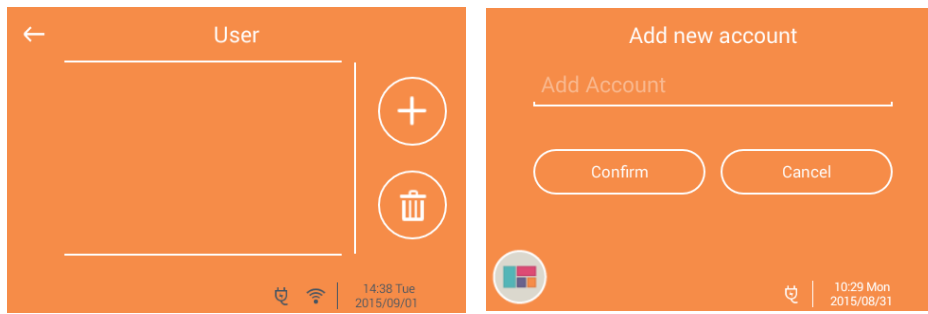


8. Adding User

Before using H100, please registration your account at Leadtek health cloud and become Leadtek free lifetime membership. All health data will stored in member's exclusive cloud health files.

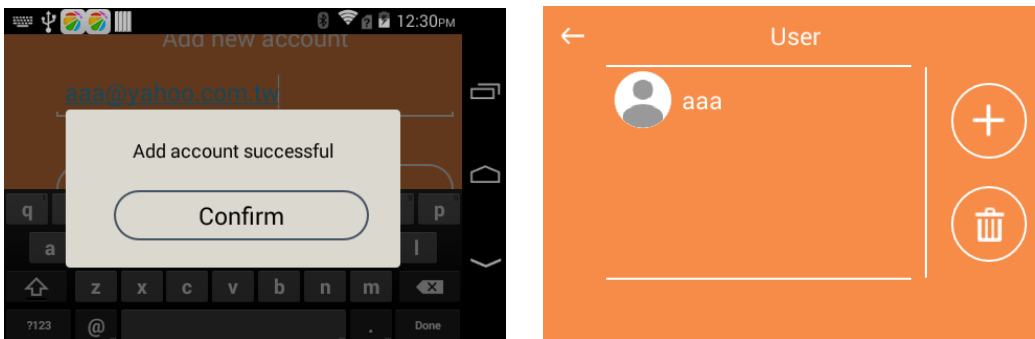
- Use IE or Google Chrome browser to enter **Leadtek Health Cloud**.
(<https://www.amorrigger.com>)
- Click "Register Now" and enter your email as an account (for example: health@leadtek.com.tw) and set a password, then click "Register."
- Enter a username you want to set (for example: aaa), Gender, Age, height, weight and click "Complete."
- After registration please go back to **H100** to add user. (Main menu/User list)



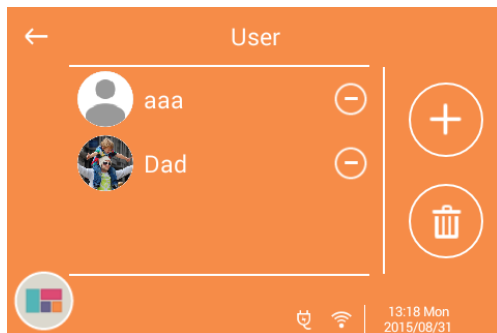


Please click “+” at the page of user list to enter your account which you just registered. (For example:health@leadtek.com.tw), then click “confirm.”

- e. **H100** will sync the account on Leadtek health cloud after account adding success. Username you set (for example: aaa) will show on the “User list.”



- f. You can follow steps from “a” to “e” to register a exclusive account for every member of your family. All username will show on the User list.



9. New Equipment

The equipment is paired for member before Leadtek products shipping. You don't have to set up you're self.

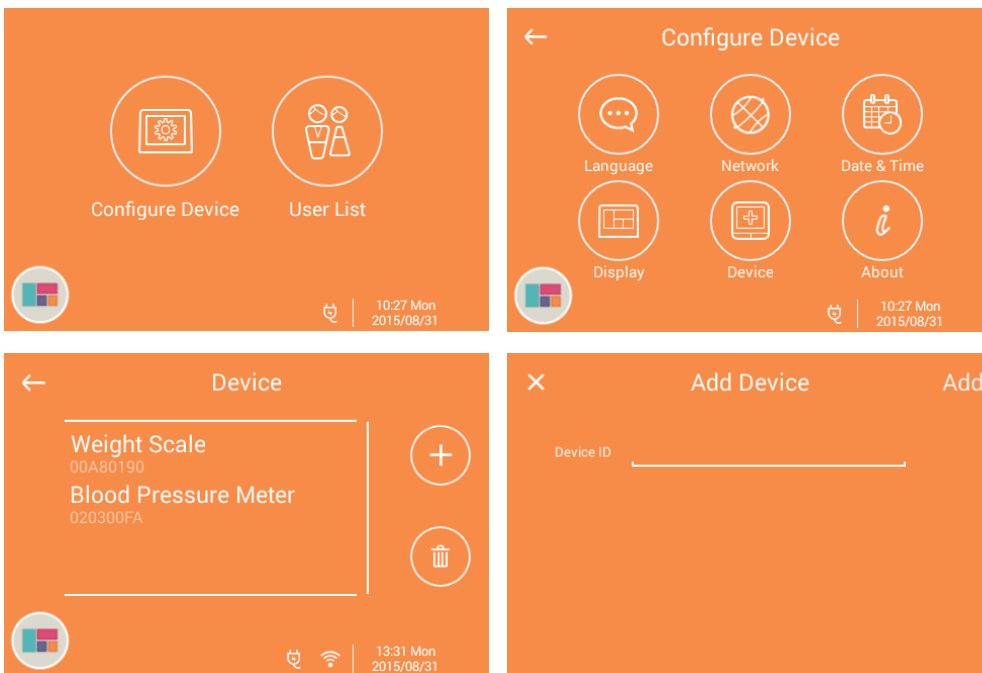
If any problems on setting the equipment, it is welcome to call: [Health Cloud Manager dedicated phone line 0800-356-999](tel:0800-356-999)

H100 can be paired to any wireless examination equipment with “Xenon wireless transform standard.”

For example: Leadtek cloud care products, cloud body weight scale, cloud blood pressure monitors, cloud multifunction monitor(glucose/ uric acid /cholesterol,) cloud forehead thermometer, cloud SPO₂ monitor, Cloud ECG monitor.

a. Adding new devices. (Main menu/Setting/Device setting/Shared device)

On the page of shared device click ”+” and enter the number of ”**Device ID**” than click “**Adding.**”



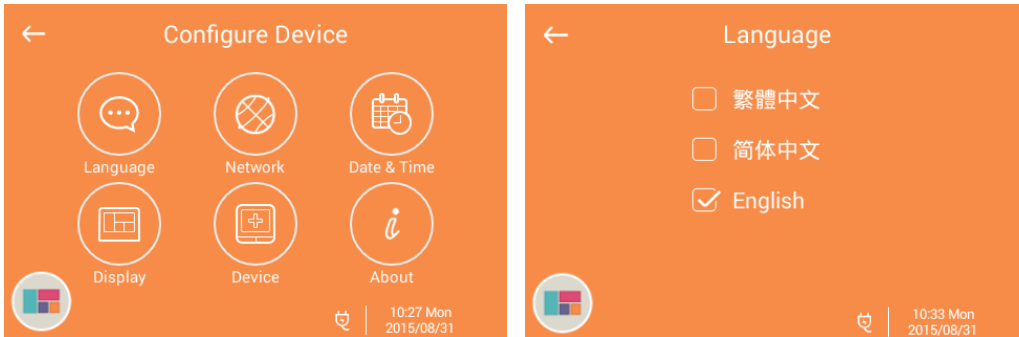
b. Device ID: Please check the ID stickers on the body weight scale and blood pressure monitor, hexadecimal digits 8 numbers. (DID+PID)



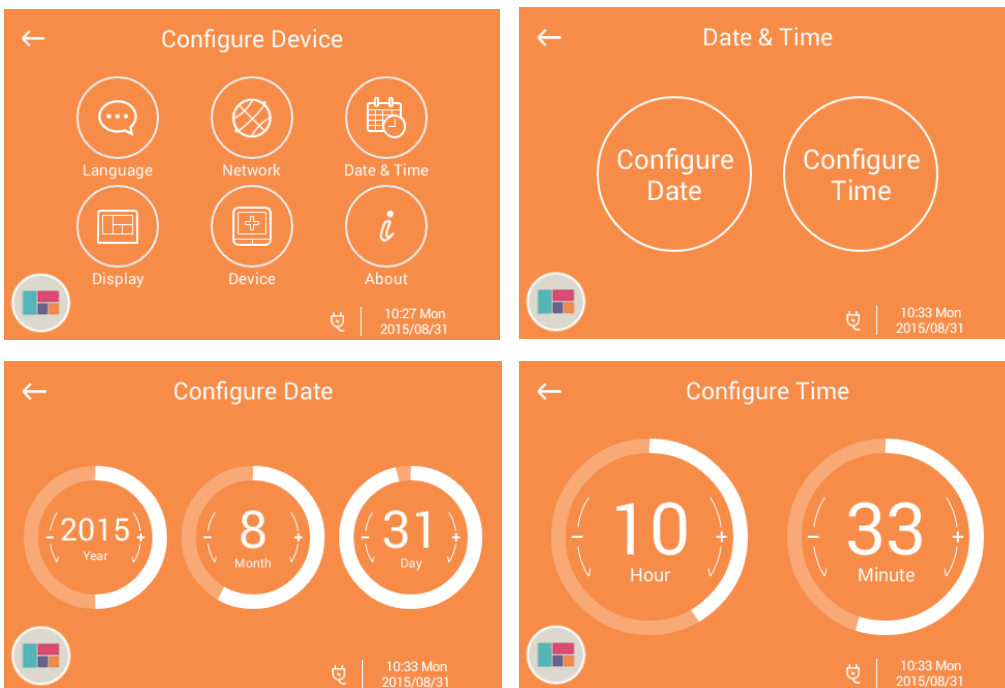
For example: enter 8 numbers **010100FA**

10. Other Settings

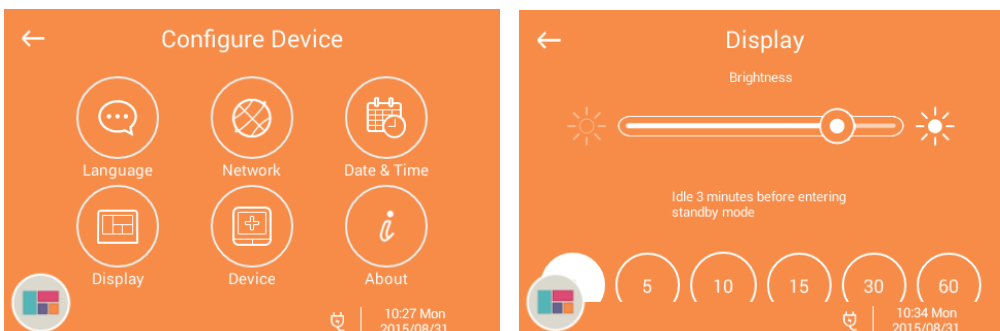
- a. Language setting (Main menu/ Setting/ Device Setting/ Language): choose traditional Chinese/ simplified Chinese/ English



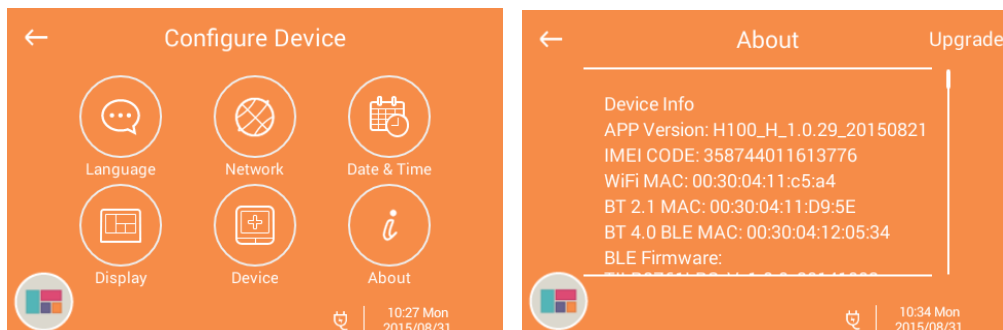
- b. Time Setting (Main menu/ Setting/ Device Setting / Time): set H100's date and time. (Please make sure to set correct time that the health data will follow the equipment time as standard of measurement time.)



- c. Display Setting(Main menu/ Setting/ Device Setting / Display): set H100 “”



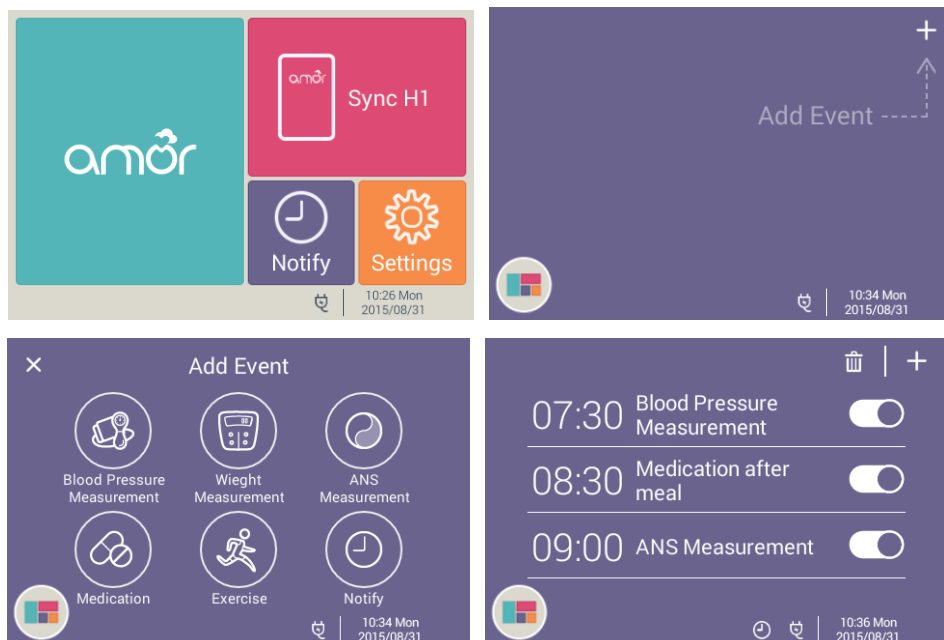
d. About (Main menu/ Setting/ Device Setting / About): see **H100**'s software and version number information, click "Software Update" to download latest version of the software.



11. Remind event

You can set event alarm on H100. For example: measure blood pressure / measure body weight / measure HRV / take medicine / work out...

H100 will remind you to do the thing you set every day at the present time.



12. Measure physiological signals

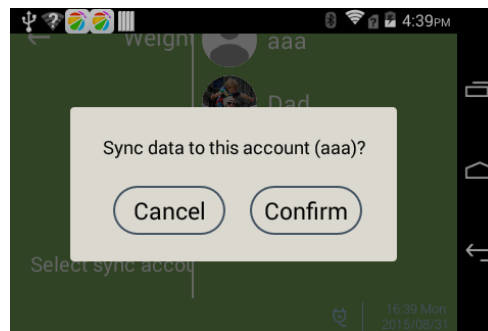
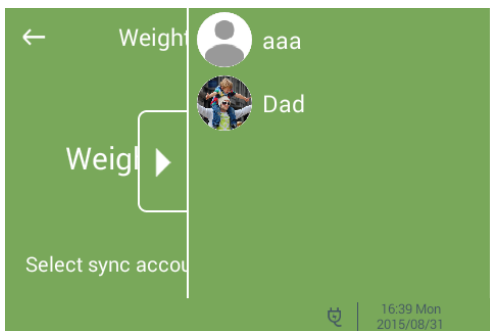
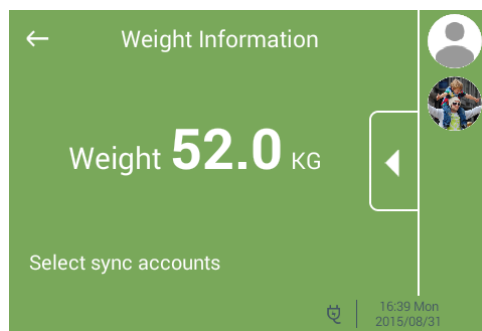
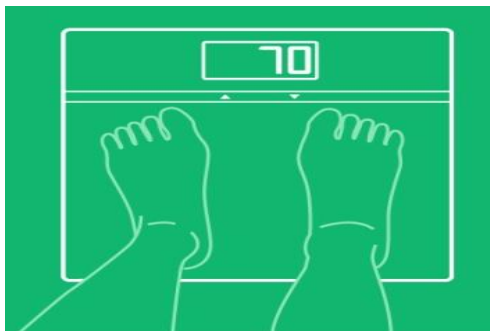
H100 cloud gateway include Xenon wireless communication module which can connect to Leadtek cloud care products. Such as, cloud body weight scale, cloud blood

pressure monitors, cloud multifunction monitor (glucose/ uric acid /cholesterol,) cloud forehead thermometer, cloud SPO2 monitor, Cloud ECG monitor. Main function is to upload equipment's data to personal account on Leadtek health cloud.

(Attention: To ensure the wireless signal receiving quality, use only one wireless measure equipment at one time.)

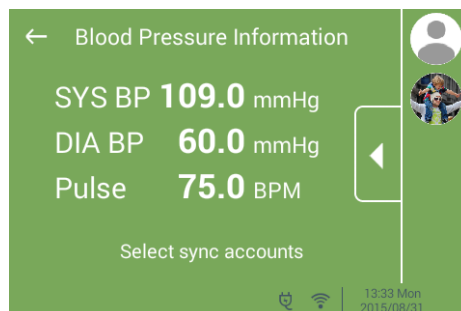
a. Measure body weight

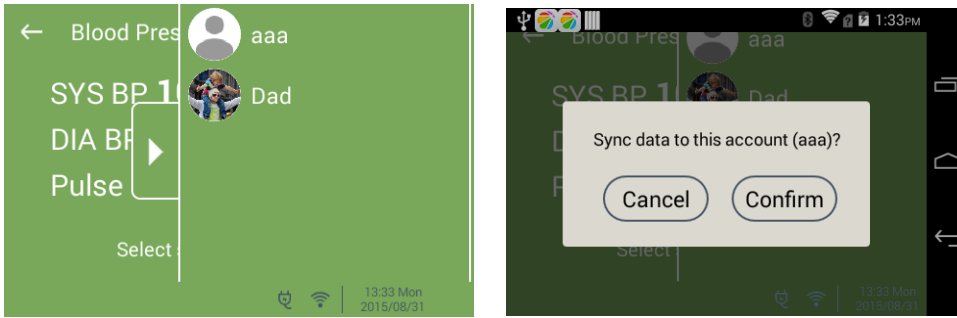
Stand on the body weight scale → H100 show the measure result → choose the account (such as, aaa) → Click “Confirm” and upload now



b. Measure Blood Pressure

Use the blood pressure monitor → H100 show the measure result → choose the account (such as, aaa) → Click “Confirm” and upload now





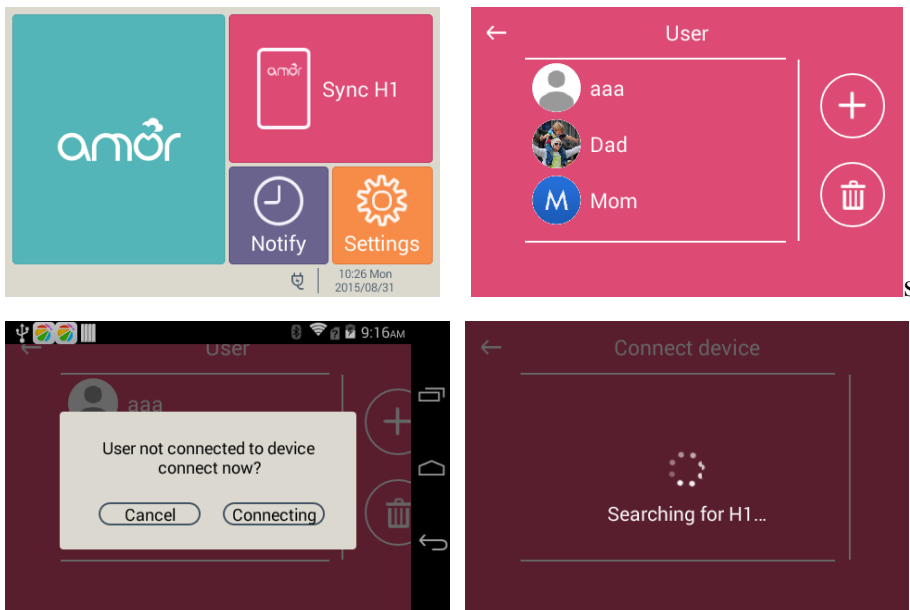
13. Using H1 Fitness Heart Rate Recorder

Before using H1, please read the instruction in the package of H1 to use and wear correctly.

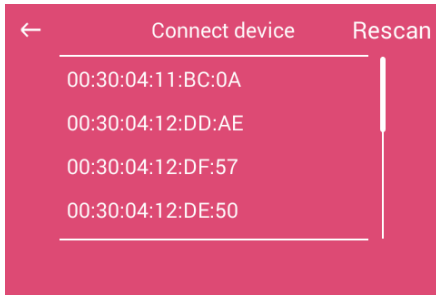
(Attention: H1 is a personal wearable device. H1 is limited to one person and the product number will bind with that person.)

a. First time using H1, process of pairing H1 and H100.

Click Fitness Heart Rate Recorder → Choose user (such as, aaa) → Pair the device → Searching for H1 →

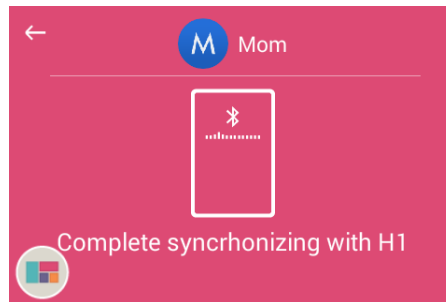
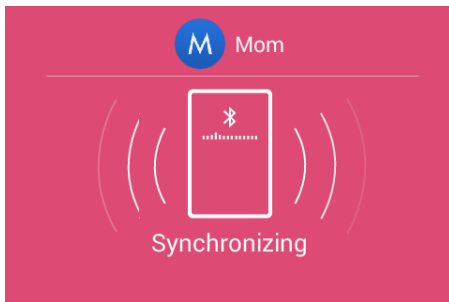
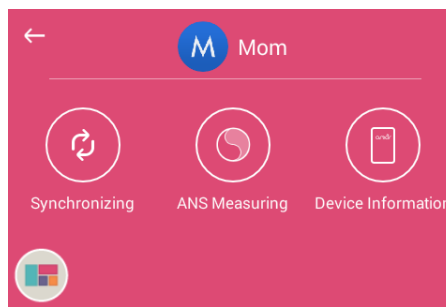
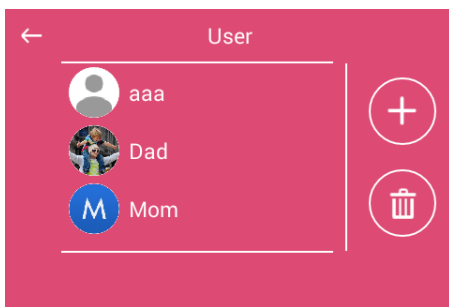


→ Choose your H1 device number → Click “Confirm” → Pairing
→ Pairing Success



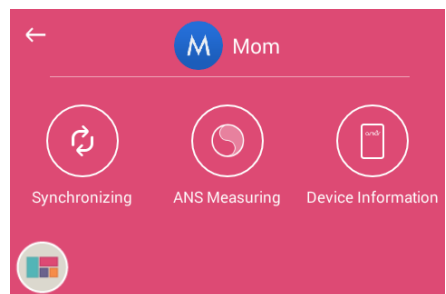
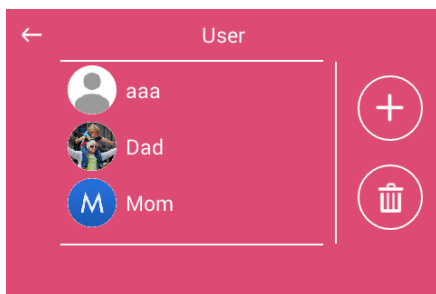
b. Sync Heart Rate and Physical Activity Data

Click Fitness Heart Rate Recorder (choose user) → Choose “Data Sync” → Sync H1 → Sync Complete

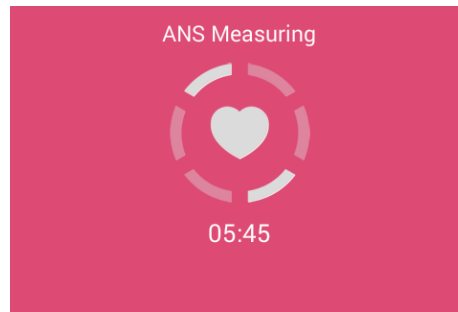
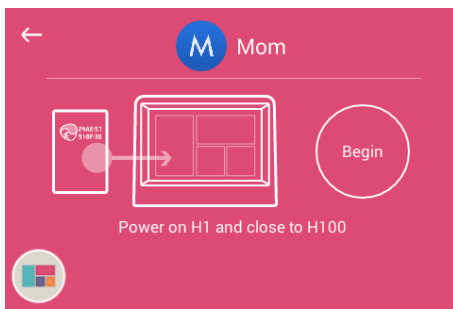


c. Measure Heart Rate Variability

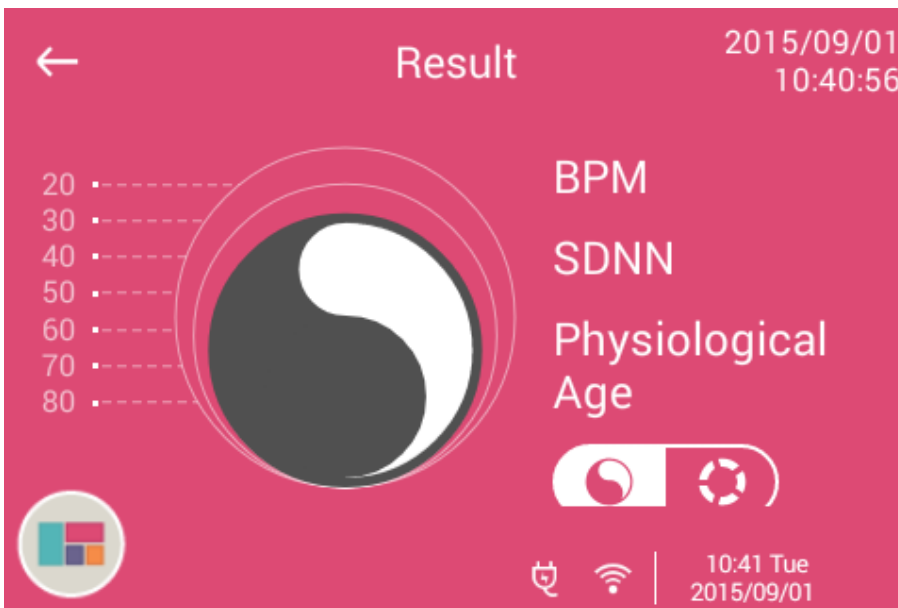
Click Fitness Heart Rate Recorder (choose user) → Choose “ANS measuring” → turn on H1 → Plug the cable on the HR patch →



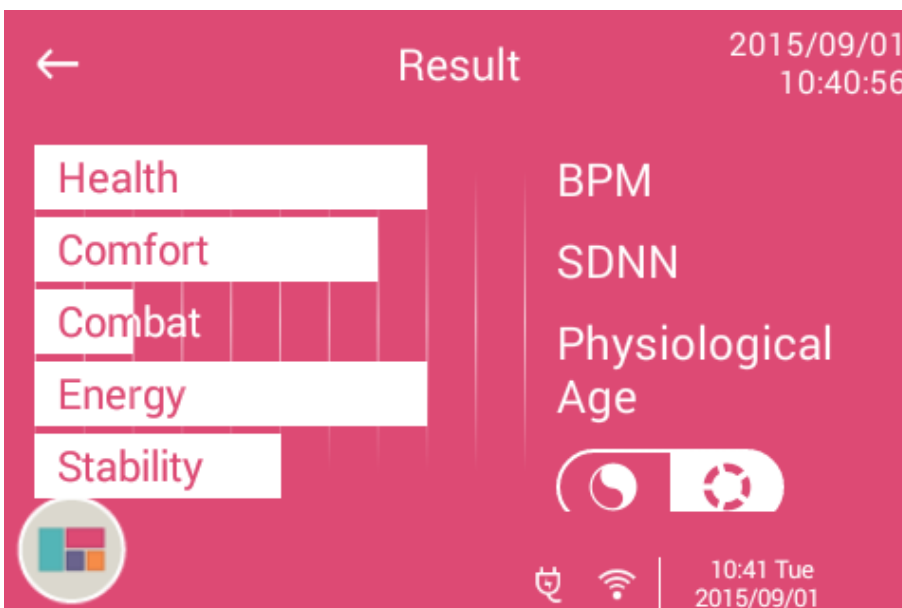
→ Put HR patch on the chest → Near H1 to H100 → Measure 6 minutes



Result: Tai Chi diagram



Result: Five tries diagram



To manage your own health, all measurement records can be slide to left or right to check health data recently.

14. Browse Data on Health Cloud

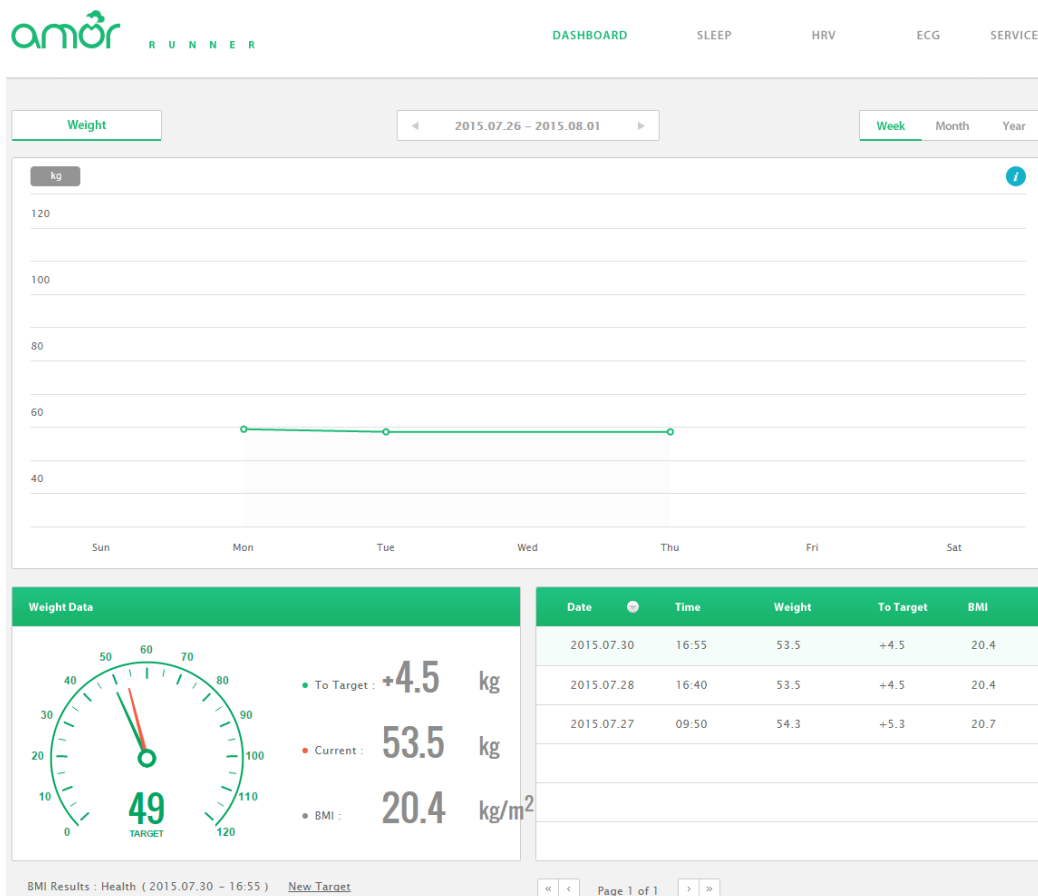
Member of health cloud manager can use their personal account to check their health records on Leadtek Health Cloud.

- Use IE or Google Chrome browser and enter **Leadtek Health Cloud** (<https://www.amorrunner.com>)
- Enter “email” account and “password” and click log in.
(Attention: If you use Gmail as your account while register, please click the red button above “Log in with GOOGLE account.”)

- Check Health Data

Following a variety of search criteria: According to item or display the trend by week/ month/ year.

Body Weight



Blood Pressure

amōr RUNNER DASHBOARD SLEEP HRV ECG SERVICE

Blood Pressure 2015.08.02 - 2015.08.08 Day Week Month Year

Time	SYS	DIA	PP	Pulse
2015.08.07 09:19	98	62	36	73
2015.08.04 08:47	110	73	37	81

Blood Pressure Data

SYS / **104** (Low, Normal, Pre-High, Stage-1, Stage-2)

DIA / **68** (Low, Normal, Pre-High, Stage-1, Stage-2)

PP / **37** (Low, Normal, High)

Pulse / **77** (Low, Normal, High)

Avg. BP Zone : Normal

« < Page 1 of 1 > »

Activity

Activity 2015.08.20 - 2015.09.05 Day Week Month Year

TOTAL STEPS: 19245 STEPS

DURATION: 06:25:40 TIME

TOTAL DISTANCE: 10.98 KM

CALORIES BURNED: 209 KCAL

RESTING HR: 65 BPM

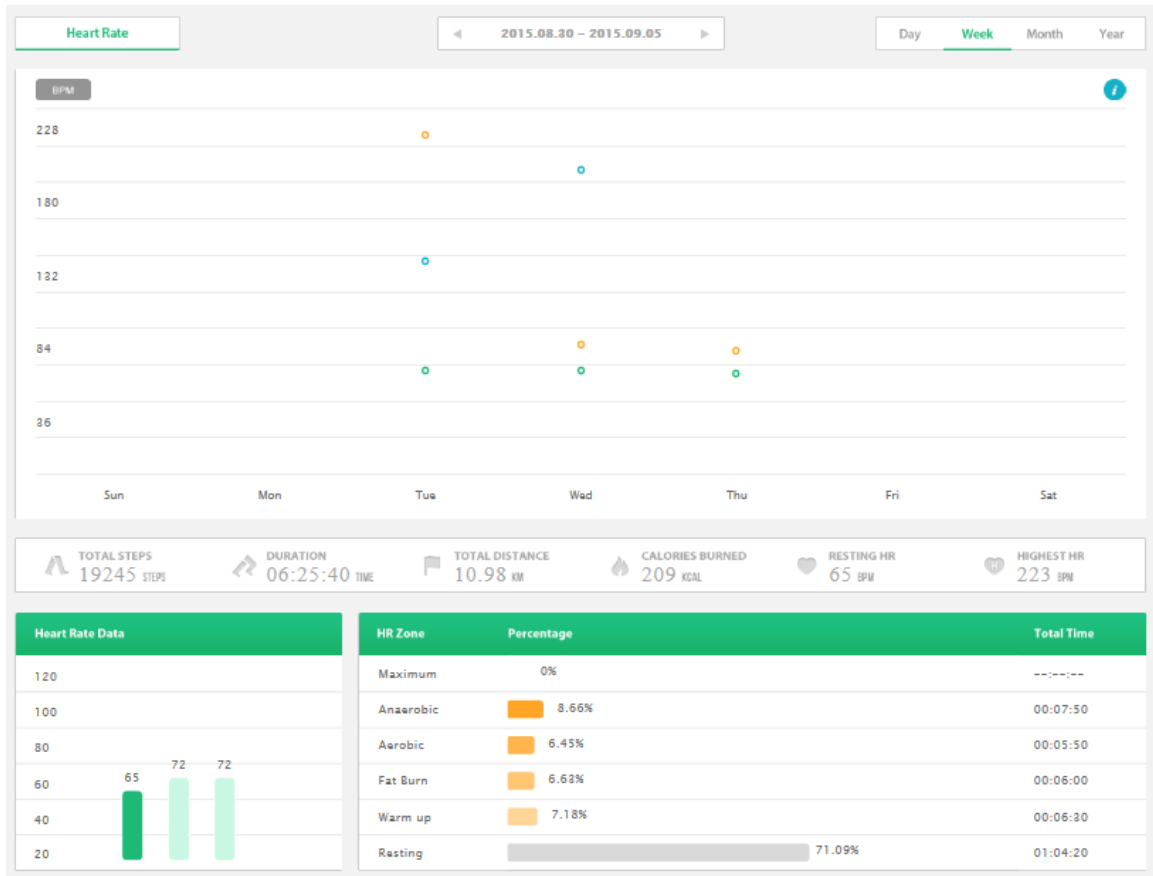
HIGHEST HR: 223 BPM

Activity Achievement

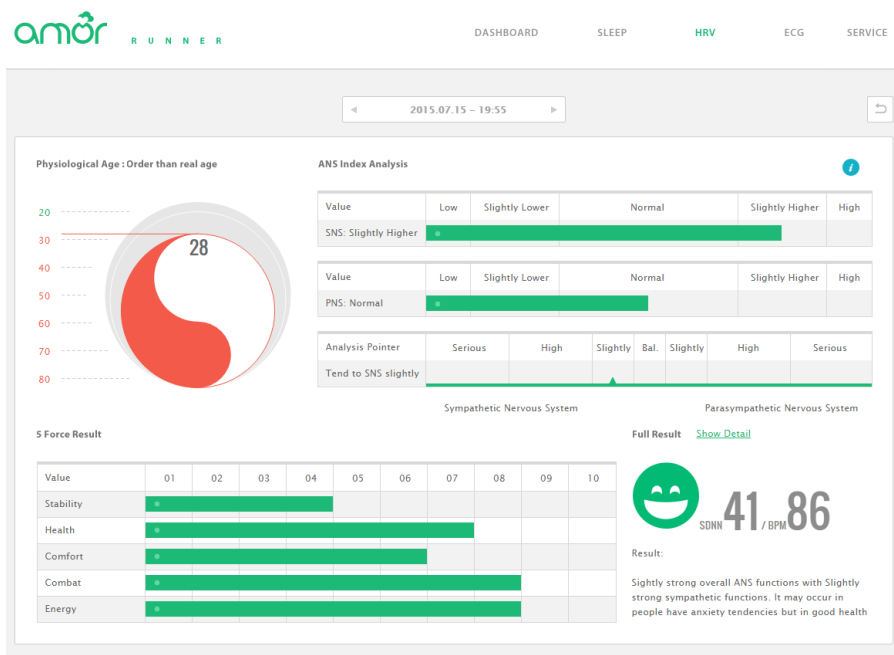
52% ACHIEVEMENT

Activities	Date	Time	Duration	Calories	Avg. Exercise HR	Highest HR
Walking	2015.09.03	07:54:45	00:56:20	0	68	68
Walking	2015.09.03	07:42:15	00:05:00	0	0	0
Walking	2015.09.03	07:34:25	00:01:00	0	0	0
Walking	2015.09.03	07:32:05	00:01:20	0	0	0
Walking	2015.09.03	07:29:45	00:01:20	0	0	0
Walking	2015.09.03	07:22:35	00:02:40	0	0	0

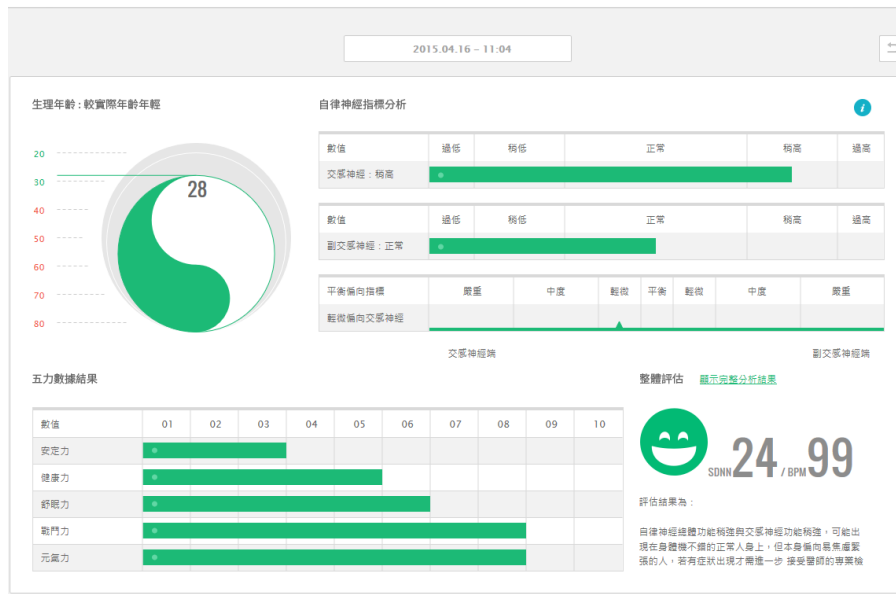
Heart Rate Distribution



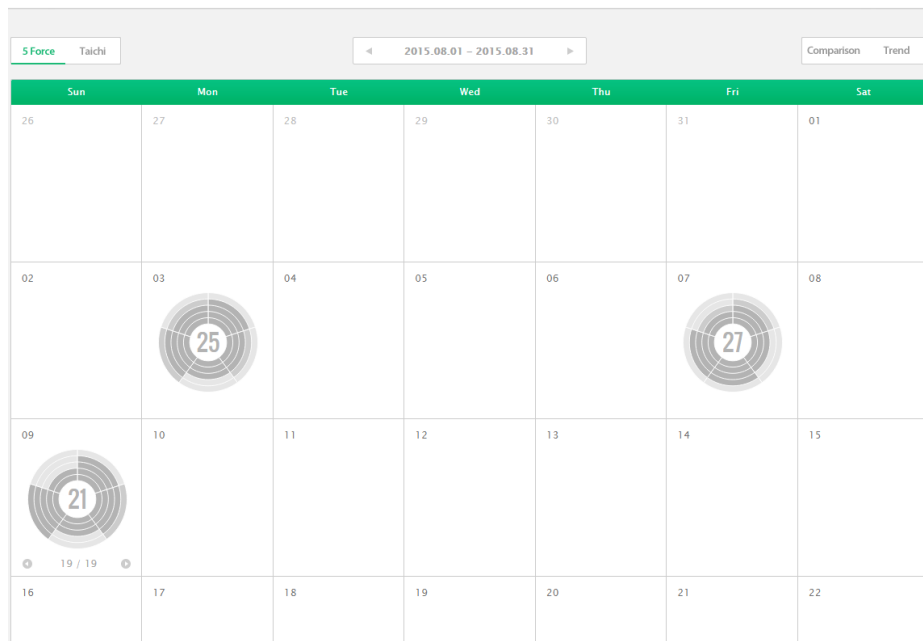
HRV: Tai Chi diagram



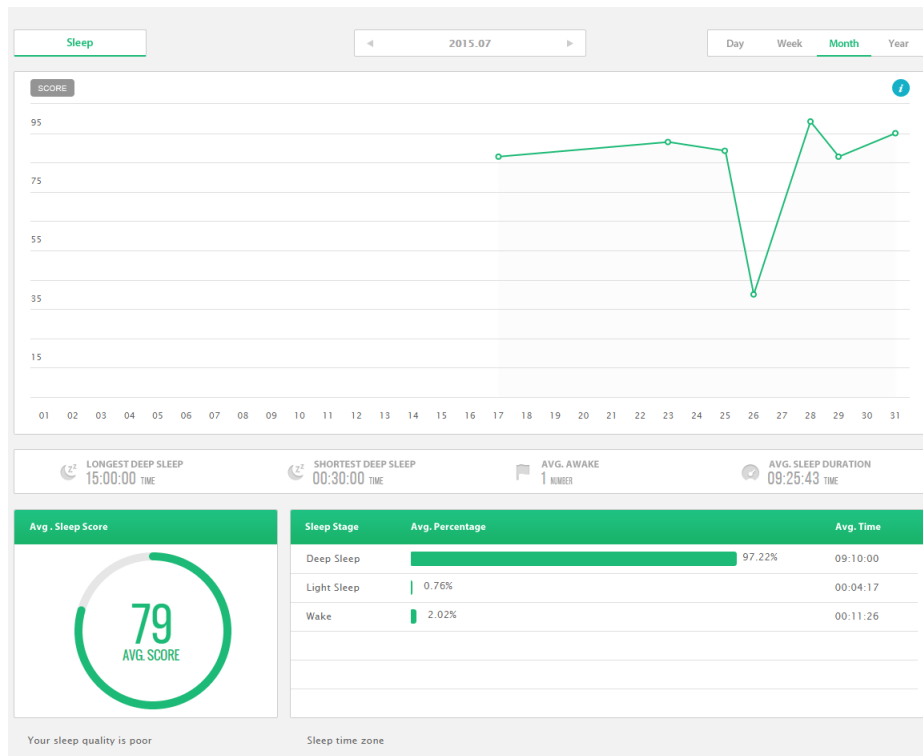
HRV: 5 Force diagram



HRV Comparison



Sleep Analysis



Federal Communications Commission (FCC) Statement

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

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 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.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.