# Heart Rate Monitor (HRM-3200) User's Manual



**SYSTEM**

HUMAN · HEALTH · HOME CARE COMPANY

H3 SYSTEM Co., Ltd.

# USA-Federal Communications Commission (FCC)

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna
 - Increase the distance between the equipment and the receiver.
 - Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.

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

# I. General Description

This device is to measure heart rate and being composed of main body with sensing part, arm band, battery charger and an adaptor (Optional). The measurement principle is based on the optics. The amount of the reflected light compared to the acting light is measured at the sensing part.

The change of the light reflectance is analyzed to calculate heart rate at the main body. Calculated pulses are displayed on the LCD screen of main body, and can be wirelessly transmitted to other devices, PC or smart phone. This device uses a rechargeable battery and can be charged through DC adapter.

# II. Component Description

## 1. Heart rate monitor



① Main body          ③ Arm Band          ⑤ micro-USB connecter



Charging Terminal LCD, 2 Buttons (TOP)   ④ Sensing Part(Bottom)

① Main body : The main body is central processing part  composed of LCD display, ON / OFF button, measurement button, charging terminals and a built-in communication module.
  ⓐ charging terminal : Connect the inner battery to charging terminal by adaptor
  ⓑ LCD display : LCD screen that displays heart rate.
  ⓒ "▬▬▬"(On/Off) Button : power ON / OFF
  ⓓ "▬▬▬"(Start/Stop) Button : Measurement Start / Stop, Wireless (Bluetooth) Start / Stop Button
③ Arm band : Fixtures for holding main body and sensing part to arm.
④ Sensing part : optical parts which measures PPG(Photo plethysmography) signal. It measures the amount of the reflected light compared to the acting light at the Arm
⑤ Micro-USB connecter: Put the heart rate monitor to micro-USB connecter for charging.

# Ⅲ. Using a heart rate monitor

## 1. Wearing and power-on the device

(1) Wearing heart rate monitor arm band.
  * Caution : When you wear arm band, The Arm band should be fasten tightly not to move around a arm.



(2) Press the '▬▬▬S(start)' button : displays that LCD is ON.

## 2. Heart rate measurement

(1) In order to start the heart rate measurement, press "⬤(Measurement Start)" button.

  ∗ Measuring Notes
    The initial 10 seconds are needed to initialize the measurement, it is recommended during this first 10 seconds not to move your arms,

(2) If the 10 seconds initialization is successful, the heart rate monitor displays your current heart rate at the LCD display.

  ∗ Notice
    In some cases (not usual), If it displays 'E0' for a while, It is recommended to press the '⬤'(Measurement stop) button to stop measuring and restart monitor after reworn the device.

 (3) During exercise, any of the buttons should not be pressed.

## 3. After using the heart rate monitor.

(1) "⬤(Measurement Stop)" button.

  - If The heart rate monitor will terminated successfully, then press the "⬤(stop)" button for Heart rate monitor power down. After you wear off the arm band, please be kept charged by plugging in the adapter.

(2) After measuring or end of measure, it can be automatically wirelessly transmitted to other devices, PC or smart phone.

## 4. How to store and maintenance

(1) Storage environment : Temperature 5~40 ℃, humidity is kept at less than 95%.

(2) The following points should be taken when storing.
  - not exposed to corrosive gases.
  - should be kept away from moisture and dust.
  - should be kept clean.

## 5. Precautions during use

(1) Wear the sensing part with care to avoid application of excessive force.

(2) Remain stop during 10 to 20 seconds after pressing the

" (measurement Start)" button

(3) Do not stare at the light of the sensing part since the LED light is harmful if you stare on.

(4) This device was developed for purposes described in this manual and the manufacturer is not responsible for side effects caused by an improper purpose or improper use.

(5) Before using the device and accessory, please check and confirm that there is no faulty. When in doubt, do not use and notify the manufacturer or service center immediately.

(6) This device should be repaired by an approved person and approved organizations.

(7) This device should not be repaired by user itself.

(8) Use only standardized accessories which is provided with this device.


# IV. Electrical rating

(1) The type and degree of protection to protect against electrical shock : The internal power-type equipment, BF-type mounting

(2) Electrical Rating: DC 3.7V Lithium polymer battery (240mAh)


# V. Matters

(1) The product name, model name (model): heart rate monitor (HRM-3200)

(2) the manufacturer's name and address :
  - Company Name: H3 System Co., Ltd.
  - Address       : 3rd floor, Daedeok Bldg., 397-27, Doryong-dong, Yuseong-gu, Daejeon city, Korea (republic of)
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