

myBeat Heart rate sensor WHS-2

Operation Manual Warranty

Please be sure to read this manual before using the product.



- a. LED Lamp
- b. Power Button
- c. Electrode pad
- Mounting hook

The set includes:

Heart rate sensor WHS-2 1unit, micro-USB cable (for charging) 1pc, Storage bag 1pc, myBeat Disposable electrode 1pc, Operation Manual 1pc

Thank you for purchasing our products.

This product is a **Bluetooth®** Smart heart rate sensor of the type used by pasting directly unto the chest of a person using the electrode pad.

It can detect heart rate (RR interval or cardiac waveform), body surface temperature and three-axis acceleration of a person.

By utilizing relevant applications installed on smart phones and tablets, it is possible to observe daily biological information.

- ☐ **This product is not a medical equipment. It is not an instrument for the purpose of diagnosis, treatment, or prevention of disease.**
- ☐ Please prepare an electrode pad when using this product. [Recommended : myBeat Disposable electrode]
- ☐ Please do not duplicate, reprint, or reform this product, including accessories without permission.
- ☐ For the purpose of product improvement specifications of this product including accessories may change without prior notice.
- ☐ The life expectancy of this product is six years.
- ☐ Never detach the seal that is attached to sensor body. Inability to confirm the contents of the seal can lead to punishment following the Radio Law, or you may be refused product repair or warranty.

◆ Safety Precautions Please read carefully to use the product correctly and safely.

⚠ WARNING

NEVER attach this product to the body during charging. There is a risk of electric shock.

Please do not use (including health appliances) medical equipment that could be sensitive to electromagnetic wave, such as implantable cardioverter defibrillators and implantable cardiac pacemakers. That may cause malfunctioning of such instruments.

This product has a built-in lithium-ion battery. Please do not wet the product with water and other liquids, bring it close to fire, or subject it to violent impact. That may cause of overheating, rupture or ignition of the battery.

If you feel heating or abnormal odor when using, charging or storage of this product, please disconnect it from the surrounding and stop using it.

⚠ CAUTION

Please do not use for any purpose other than the originally intended as that may cause damage to the product.

Please store in a place out of the reach of children.

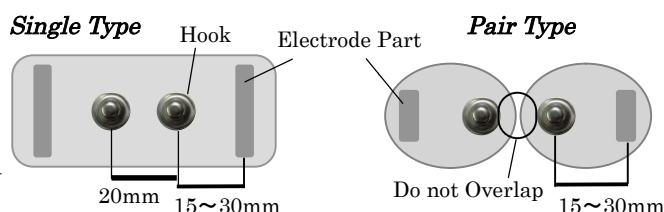
micro-USB Please connect or disconnect the cable holding the sleeve portion with a dry hand.



◆ Before Using The Product

- ☐ Battery will drain even when power is OFF. After unwrapping the product, please charge the battery immediately.
- ☐ It is necessary to ensure that a device that communicates with the product corresponds to the **Bluetooth®** v4.0.
- ☐ Prepare either of the electrode pads on the right.

— Electrode Specification —




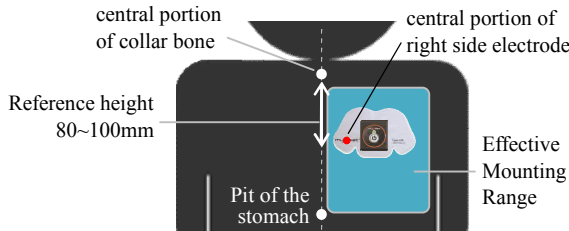
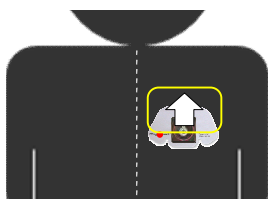
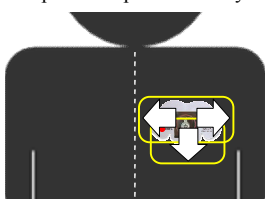
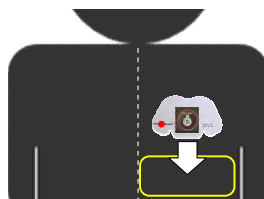

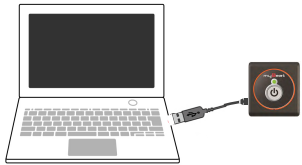
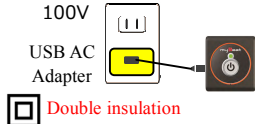
◆ LED Lamp Display

● Green Light ON * ¹	Cardiac waveform mode start up or measurement in progress. Starting RR interval mode (No Biological Signal)		
● Green Light Blink * ¹ * ²	RR interval mode measurement in progress (Biological Signal present)	● Green Fast Blink * ¹ * ³	Biological Signal Saturation
● Yellow Light ON	Starting Setting mode	● Blue Light ON	Charging Battery
● OFF	Power Off	● Red Light Blink or Red Light ON	Battery is Low

*¹ Displays only for 60 seconds after the power button is pressed, and intermittent lighting every 5 seconds thereafter. When you press the power switch to intermittent lighting, and displays for 60 seconds operating state again. *² Lighting once every 2seconds. *³ Lighting 5 times every 2seconds.

※When disconnecting micro-USB cable from the sensor, the LED Lamp may blink for a moment.

◆ **How to Use** If you notice any skin trouble after attaching the product, stop using immediately and consult a doctor.

Power Operation	<p>Power ON Press Power button (less than 3 seconds), LED Lamp turns on</p> <p>Power OFF Power button for more than 3 seconds, LED Lamp turns off</p>
Attaching The Product	<p><i>Before wearing the product, see the Operation Manual of the electrode pads you are using, please use it to confirm how to use.</i></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>I. >>> Attach the Electrode pad to the sensor.</p>  </div> <div style="width: 30%;"> <p>II. >>> Turn Power On and confirm that the LED lamp lights up in green color. From the app or LED lamp, confirm that there is enough battery power left.</p> </div> <div style="width: 30%;"> <p>III. >>> Peel off the protective sheet of electrode pads, and paste the adhesive surface of the electrode pad directly unto the left chest. At this time, please make sure that the LED lamp is blinking green. As a measure of the height, distance to the central portion of the electrode on the right side from the middle of the collarbone, please refer to the following values. Height <u>less than 170cm:80mm</u> <u>more than 170cm:100mm</u></p>  </div> </div> <p>When the LED lamp does not blink green, please change the mounting position by referring to the following.</p> <div style="display: flex; justify-content: space-around;"> <div style="width: 30%;"> <p><u>LED lamp when the Green Fast Blink</u> Please move up the mounting position.</p>  </div> <div style="width: 30%;"> <p><u>LED lamp when the Green Light ON with RR interval mode</u> Please move down or move to the left and right to the extent that the central portion of the electrode on the right side does not protrude past the body center line.</p>  </div> <div style="width: 30%;"> <p><u>Still LED lamp when the Green Light ON</u> Please move to the height of pit of the stomach, and to the left and right to the extent that the central portion of the electrode on the right side does not protrude past the body center line.</p>  </div> </div>
Measurement	<p>Download the right application for your terminal, Please operate according to the method of operation of the application.</p> <p>Standard App 「myBeat」  Download from App Store or Google play® free of charge. Measurement data can be saved to CSV and exported.</p> <p>*4 Operation confirmed models of Android: Nexus7 2013, Nexus5, GALAXY SIIIα SC-03E, GALAXY J SC-02F Cannot guarantee the operation of models other than the confirmed models.</p>
Battery Charging	<p>Please charge through one of the following.</p> <p>Blue Light ON: Charging Battery Light OFF: Complete</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>I. Charge from Computer</p>  <p>Using a micro-USB cable, connect the micro-USB connector to the sensor, insert the USB connector unto the computer.</p> </div> <div style="width: 45%;"> <p>II. Charge with USB AC Adapter (Sold Separately)</p>  <p>Use a micro-USB cable to connect the micro-USB connector to the sensor. insert the USB connector unto the AC adapter.</p> <p><i>It is recommended to use a double insulated AC adapter.</i></p> </div> </div>
Application Development	<p>Depending on the intended use of this sensor, you can create a dedicated application on your own. If you wish to develop the application, please refer to the dedicated information site:【https://github.com/myBeat】</p> <p>※Knowledge of application development is required.</p>

◆ Maintenance and Storage

- ❑ Wipe it with dry cloth on a regular basis, and always use it in clean condition.
- ❑ Storage Environment: Temperature $-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$, Humidity 30%~80%RH (Non-condensing)
- ❑ For long-term storage, please keep it in a well-ventilated place and avoid direct sun rays.
- ❑ Even when not using for a long-term, to avoid battery over discharge, Charge the battery fully once a month.
- ❑ Please dispose of in accordance with the provisions of local regulations.

◆ Specifications

Measurement Item	Cardiac waveform or RR interval(Heart rate), Body surface Temperature, 3-axis acceleration ($\pm 4\text{G}$)
Dimensions, weight	H 41×W 37.5×Thickness 10 (mm), 13.7g
Communication	Bluetooth® Smart
Internal Battery	Rechargeable lithium-ion battery charging time: 3 hours
Battery Life	Cardiac waveform measurement 20 hours, RR interval measurement 40 hours
Use Environment	Temperature $+5^{\circ}\text{C} \sim +45^{\circ}\text{C}$, Humidity 30%~80%RH (Non-condensing), Splash-proof construction

		Cardiac waveform	RR interval
Heart rate	Sampling frequency	40Hz	1000Hz
	Data update rate	25ms	On each Heart rate
Acceleration	Sampling frequency	40Hz	31.25Hz
	Data update rate	25ms	On each Heart rate
Body surface Temperature	Sampling frequency	1Hz	1Hz
	Data update rate	1sec	On each Heart rate
Data transmission rate		50ms	On each Heart rate

◆ Regulations

❑ FCC FCCID:2ACS48600043

- 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 CAUTION : Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 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 transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption ratio (SAR).

❑ EU

- UNION TOOL declares that this Heart rate Sensor is in compliance with the mandatory requirements and other relevant provisions of the R&TTE Directive.

◆ Limited Warranty

In case of damage, please check the contents of the warranty certificate and contact the place you bought the product from, or the contact address stated below.

Warranty Certificate	
Warranty Period	On year from date of purchase
Date of Purchase	Y / M / D
Object of Warranty	Heart rate sensor WHS-2 main instrument
Terms of Warranty	<p>■ If within the warranty period, the product has been used correctly as stated in this manual or as described in the application of purpose, but the product gets damaged, we will repair or exchange the product free of charge.</p> <p>■ The product repair may entail the use of alternate parts, or in some cases where the repair is difficult, it can be replaced with equivalent products.</p> <p>■ The holding period of (parts required to maintain the function of the product) repair parts, is at least six years from when the sale of this product is discontinued. The product will only be repaired within this holding period.</p> <p>■ Even if within the warranty period, the warranty will be void in the following cases: ○Damage resulting from inappropriate handling at the time of movement or transportation after the product is purchased. ○Damage resulting from unlawful remodeling or repair of the product. ○Damage resulting from battery leakage. ○Damage due to fire, earthquake, flood, and other natural disasters or due to abnormal voltage. ○The warranty certificate is not presented, or the necessary information is not specified in the certificate warranty, or if the text has been rewritten.</p>
Dealer Point of Purchase	Shop Name : Address : TEL : FAX :
Buyer Information	Name : Address : Contact :

FOR PRODUCT INQUIRIES

MAIL <http://www.uniontool.co.jp> >Contact us >For Products Information

FAX **81-3-5493-1014**



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