

제품상세

Wireless Connection	Bluetooth Profile	BLE 4.0 HFP
Basic Specification	Size (W X D X H) Weight Port Sensor Type Materials(Upper) Colors	62mm x 62mm x 35mm, 40g 53g Micro USB, 3.5 Ø Audio Jack MEMS Rubber Baby Pink, Baby Blue
Battery	Power Source Battery Type Recharging Time Hour of Battery Use	Battery Built-in Rechargeable Lithium-Polymer Battery About 80Min. by Micro USB Cable About 8 Hours (Measurement)
Compatibility	Android Models iphone Models	안드로이드 4.1.2 이상 버전 지원 iphone 5 이상 버전 지원

문의처

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SKEEPER is a Precise Home Smart Stethoscope.

Linked with SKEEPER Apps (Skeeper mama, Skeeper baby, Skeeper heart), the product provides individual heart rate (BPM: Beats Per Minute, Heartbeat Regularity, Heartbeat Waveform, Heartbeat Sound, etc.) in real time and enables you to manage individuals' or family members' cumulative records easily and conveniently. Also, you can connect a wired earphone/headset directly to the product for use.

The product reads you and your family members' heart in three dimensions.

It analyzes heart sounds using "Sound Process Technology," which is SKEEPER's patent technology, and provides multiple measurement results. Through this, you can check and monitors the changes in heart state according to individual life patterns such as walking, running, and exercise. Also, you can manage heart records according to family members' lifestyle such as sleep state, activities, rest-activity cycles and diet fatigue.

You can hear fetal heart sound.

You can find and hear the fetal heart sounds (After 25 weeks into the pregnancy, varies depending on individuals). Through this, you can sensitively and naturally commune with your adorable baby before birth.

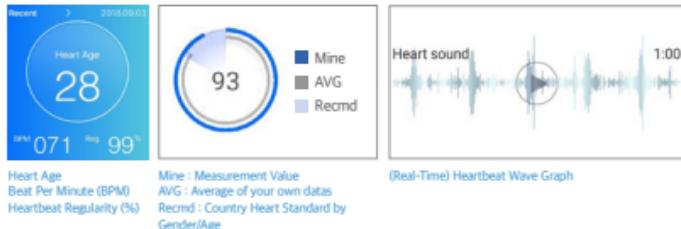
※ This product is for home use and cannot be used for treatment or medical use.

Cautions**※ Safety Rules**

- ❶ Follow the use methods of the manual for safety.
- ❷ Do not remodel, repair, or disassemble the product. It can cause unexpected electric shock or damage. The problems caused by the carelessness of users are not included in the range of compensation of our company.
- ❸ Do not use any liquids for cleaning the product.
- ❹ Do not use the product in a dangerous or noisy environment.

Measurement Results That You Can Easily Understand (Easy Display)

By showing the measurement results as quantified figures or graphs, it enables people of all ages to understand them easily.



Safety

It does not input methods that can be harmful to human body, such as ultrasonic waves or electric current, but collects human body's sound signals (sound waves) using the MIC sound collecting principle and processes the sound signals with SKEEPER's own specialized "Sound Process Technology" and wireless transmission methods. Since it has an electromagnetic waves grade that is harmless to human body, so young children, the sick and elderly can all use it with an easy mind.

Provision of Analysis Function Through Dedicated Apps

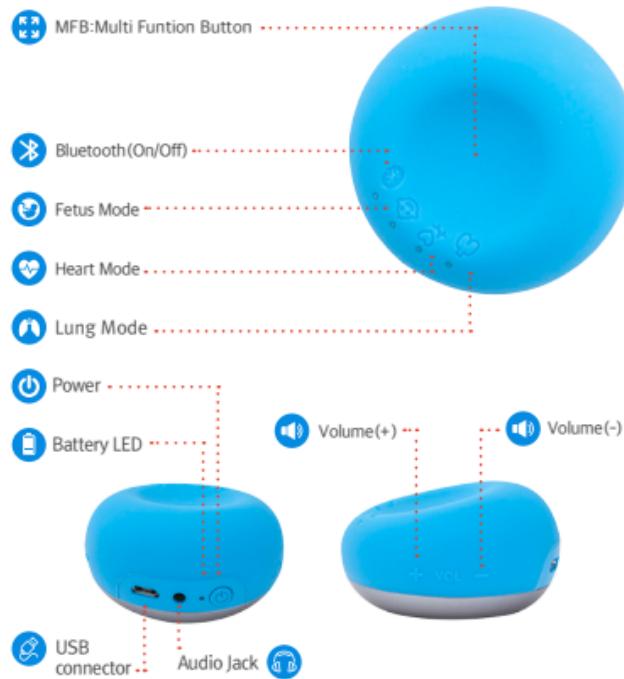
The measurement results can be recorded and analyzed through SKEEPER Apps. Also, effective management is possible through diary functions and the results can be sent through SNS or e-mail (Available both in Android and iOS versions)

- ▶ The "Age/Gender Heartbeat Health Standard" suggested by the American Heart Association was applied to the product, so you can compare the measured heart health state objectively.
- ▶ Using History Function, you can record the measurement results by types (date, gender, age, and measurement state) and easily manage the cumulative records of individuals and family members.
- ▶ The measurement results can be shared with family, relatives, and friends through e-mail or various SNS.

Convenience through Wired/Wireless Connection

You can hear various human body sounds, such as fetal heart sound (Fetus Mode), heart sound (Heart Mode), and lung sound (Lung Mode) by connecting an earphone or headset to the main body of the product. The product also supports functions by dedicated apps after connection with a smartphone and Bluetooth.

SKEEPER Body, USB Charging Cable, Extra Accessory (Diaphragm), User Guide (Each 1EA)



Before the initial use of the product, or when you have not used the product for a long time, it is recommended to charge the product fully before use.

- ❶ Connect the USB charging cable, which is included in the product package, to the product's charging terminal.
- ❷ Connect the opposite side of the cable to the USB port where electricity is supplied.
- ❸ Red LED is turned on during charging and Green LED is turned on when charging is completed.
 - When the product is discharged, it takes about one and a half hours to fully charge. The charging time varies depending on the amount of remaining power.
 - The continuous use time of the product when the battery is fully charged is about 8 hours.

※ Cautions

- Use a certified charger for safe use of the product.
- Charge the product regularly (every 3 months) for the life of the embedded battery when you do not use the product for a long time.
- Product cannot be used during charging.
- Remove the charging cable before use.

Turn the power On/Off by pressing the power button.

- ❶ Power On: Press the power button for one second when the power is off. Four LEDs are turned on and then only the heart mode LED and Bluetooth LED, which are the default mode, are turned on. The product is now ready for use.
- ❷ Power Off: Long press the power button when the power is on. Four LEDs are turned on and then power is turned off.

App Download and Use methods

- ❶ Search "Skeeper" (in English) or "스키퍼" (in Korean) at smartphone app market (Playstore, Appstore, etc.)
- ❷ Download and install app by selecting "Install" on app guide page.
- ❸ Activate the Bluetooth function on smartphone and turn on the "Skeeper"
- ❹ Run the downloaded SKEEPER app and press the start button on the measurement screen. The product is connected automatically.
- ❺ Enjoy SKEEPER's contents.

※ After downloading the app, sign on the consent form for collecting and utilizing personal information and input individual profile, the app is now ready for use.

Function	Operating Methods
Hearing Sounds	Connect an earphone to the audio jack to hear sounds through the product in real time. Use the SKEEPER app to save and analyze the measurement results and share them through SNS.
Changing Mode	There are three modes: General (heart), lung, and fetus. The product's default setting is the general (heart) mode. The mode is converted in order of fetus, general (heart) and lung. Short press the Multi-Function Button on the center of SKEEPER to change the mode.
Volume (Up/Down)	Volume changes are noted with a short beep through the earphone and two beeps indicate the volume has reached its maximum or minimum.
Battery Warning	Red battery LED flickers and battery warning sound is heard through the earphone.
Charging Alarm	Charge the product using the provided USB charging cable. Red LED is turned on during charging and Green LED is turned on when fully charged.

General (Heart) Mode Measurement

General (heart) mode is for measuring general heart sounds. Refer to fetus mode for fetal heart sound measurement.

- ① Place and turn on the product.
- ② Set the product to general (heart) mode (See below figure).
- ③ Lightly press the "diaphragm" of the product to a location near heart.
- ④ Press the App's "Start Button" (on each of Auscultation pages) and measure for 1 minute or 30 seconds.



Put the SKEEPER's diaphragm on the Heart and press gently.



Press the App's "start button" and measure for one minute. If you want to stop in midstream, please press the same position again.

Lung Mode Measurement

Lung mode is for measuring human body's breathing sounds or movement sound of intestine.

- ① Place the product and connect it with an earphone/headset.
- ② Set the product to lung mode.
- ③ Lightly press the "diaphragm" of the product to an area under the left and right clavicle or under the left or right armpit and then breathe in and out deeply.

※ Currently, lung mode app is not supported but will be applied later.

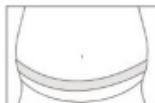
Fetus Mode Measurement

Fetus mode is used when mothers reach 25 weeks (varies depending on individuals) and more into the pregnancy or when family members want to hear a fetal heartbeat.

- ❶ Place the product and connect it with an earphone/headset. And wear SKEEPER band (belt).
- ❷ Set the product to fetus mode. Put the diaphragm of the product on the bare skin of mothers' belly, and determine the location of the fetus.
- ❸ After finding the location of the fetus (Refer to cautions for fetus mode below), secure the product using SKEEPER band (belt), and start measurement.

※ Cautions (Fetus Mode)

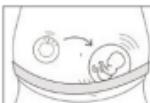
- Fetal heartbeat sound is very low. Therefore, measurement is more accurate when you measure in a quiet place.
- When using the fetus mode, do not hold the diaphragm by hand but place it on bare skin using the belt. (Holding the diaphragm by hand can interrupt the fine heart sound of fetus, so a Skeeper band(belt) is recommended.)
- A fetus is usually located in the left or right side under the navel. If the sound is too low, move the diaphragm to another location and listen again.
- Fetal heartbeat is twice as fast as mother's. (BPM: About 120 - 160 beats)



For accurate heart rate measurements, please sit in a comfortable position and wear the belt in the quiet place.



Put the SKEEPER's diaphragm on the stomach's skin and find the fetus with the sound from earphone.



Normally, the fetus is located around the belly button. If the sound is weak, find the other location and listen the other location and listen the sound from earphone.



Press the App's "start button" and measure for one minute. If you want to stop in midstream, please press the same position again.

Common Use Methods



Consent form of collecting, utilizing and providing personal information to others

After downloading the app, you need to agree once to the consent form regarding collecting, utilizing and providing personal information to others. If you do not agree, you cannot use the app.

* As of now, it is just applied in Korean Languages (Korea). But in the near future, it will be applied in other languages (countries) too.



Profile Generation

Generate user profile through this screen.

- ▶ In the case of SKEEPER BABY app, multi-profile generation and management are available.
- ▶ Measurement analysis and record management are available according to generated profile information.
- ▶ Profile input item: Photo, name, date of birth, gender, height, weight, etc. (The items can change later.)



Medical Examination by Interview

- ▶ Input individual health status information
- ▶ More precise health state analysis and management are available through the medical examination by interview.



Menu

- ▶ Perform multiple functions through the menu buttons in the upper left corner of each screen.
- ▶ Access profile, auscultation, records, medical examination, product description, setting, etc., through the menu.



Measuring

- ▶ Select "Auscultation," and then select general auscultation, stress auscultation, special auscultation, or fetus auscultation. Position this product on the appropriate location (Refer to 3-2 measurement) and start measurement by touching the "start" button.
- ▶ Measurements: BPM (Beat Per Minute), Heartbeat Regularity, Decibel



Measurement Results and Save

- ▶ Measurement results of general mode are BPM, heartbeat, decibel, and prescription (exercise and dietary).
- ▶ Data includes your heart age, measurement index, average heart level and recommended values according to the measurement results through your profile and information from medical examination by interview. (Refer to 1-2 Product Features)
- ▶ Touch the "Save" button in the lower right corner and select the activity state and input some memos.
- ▶ Saved information can be shared through Email or SNS.



See Records

- ▶ Health status information is displayed with digitalized indices for easy monitoring of health changes.
- ▶ Measurement results are displayed according to date and saved status.
- ▶ Select a period to display the trend graph and measurement result list of that period.
- ▶ Touch "list" to display the health status record table and touch "edit" in the upper right corner to modify or delete the data.

Providing Apps for the Health Management of All Family Members

We provide smart apps (Smart Algorithms) by purpose of health management of users at home.

- ▶ Health management of pregnant women/fetuses (Skeeper Mama)
- ▶ Health management of infants/toddlers/children (Skeeper Baby)
- ▶ Health management of adults/seniors/cardiovascular patients (Skeeper Heart)



Skeeper Mama systematically manages the health of pregnant women and fetuses.

❶ Personalized Health Management for Pregnant Women

As a personalized health management for pregnant women which has been co-developed by Smartsound Corporation and the world's best medical experts, this is a total solution for having a healthy baby. Pregnant women participate in a 5-steps coaching program and systematically manage their healthy pregnancy both mentally and physically.



❷ Auscultation of Fetal Heartbeat Sound

Hear fetal heart sounds through SKEEPER from 25 weeks into the pregnancy (varies depending on individuals) and check that the fetal heartbeat is within the normal range. The results can be shared through Email or SNS.

- ▶ When you want to commune with your baby inside you
- ▶ When you suddenly wonder if your baby inside you is well
- ▶ When you share the sounds of your baby inside you with people far away



❸ Stress Management of Pregnant Women

Measure the health of pregnant women once or twice daily through SKEEPER for tracking mental and physical health status. The BPM, regularity, stress index, exercise, and dietary information are provided and changes in health state can be monitored by referring to history management.



❹ Production of Mom's Heart Sound Music (Prenatal music & Birth cheering song)

SKEEPER mixes mom's heartbeat sounds with general tunes for soothing prenatal music. Patented technology helps to develop the fetal brain.

❺ How to Produce Mom's Heart Sound Music

Touch "Mom's Lullaby" in side menu. → Touch  in the lower right corner. → Touch the heart sound that you want your baby to hear and  in the right side of the music. → Select heart sound and the music saved on the smartphone and touch the "Done" button in the upper right corner. → After touching imported heart sound and music, touch the "Save" button in the upper right corner. → Enter the title of your own lullaby, adjust the balance between heart sound and music, and touch the "Done" button in the lower right corner.

* Music must be saved in your smartphone.



SKEEPER BABY is a smart application for your adorable baby's healthcare

① Multi-profile Management

Manage multi-profile with SKEEPER BABY app.

Create a profile of your lovely baby by touching the image file shown in the upper area of the left side of the menu and then touching below ① to change the profile during the health check and management.



② Mom's Heart Sound Lullaby

Mom's heart sound lullaby helps brain development of infants, sentiment and sleep stability. (It's the same as producing mom's heart sound music of SKEEPER MAMA.)



③ Auscultation of Baby Heart and History Management

Check your baby's health status using SKEEPER, which displays a digital index, heartbeat sound and graph in real time. The measurement results are recorded by state and time for management, and health changes and distribution are also provided.



SKEEPER HEART is a smart application for your precious family's healthcare

① General Auscultation

SKEEPER enables heart management with an experts' level through an optimized "Smart Algorithm" which has the precision of an electronic stethoscope for medical use. SKEEPER precisely reads and analyzes the changes and regularity of heart sounds from the human body.



② Auscultation of Stress

Check and manage individual stress through SKEEPER. The individual data, which was measured through general auscultation, were averaged and compared with stress measurement. Analysis data includes burn-out index, BPM, regularity, and medical examination through interview score.



③ Special Auscultation

Special auscultation has three functions.

- "Heart recovery auscultation" checks and manages the heart after exercise
- "Caffeine sensitivity auscultation" checks your sensitivity to caffeine after drinking coffee
- "Alcohol sensitivity auscultation" checks your sensitivity to alcohol after drinking

Specification

Wireless Connection	Bluetooth Profile	BLE 4.0 HFP
Basic Specification	Size (W X D X H) Weight Port Sensor Type Materials(Upper) Colors	62mm x 62mm x 35mm, 40g 53g Micro USB, 3.5 Ø Audio Jack MEMS Rubber Baby Pink, Baby Blue
Battery	Power Source Battery Type	Battery Built-in Rechargeable Lithium-Polymer Battery
	Recharging Time Hour of Battery Use	About 80Min. by Micro USB Cable About 8 Hours (Measurement)
Compatibility	Android Models iphone Models	Support Android 4.1.2 or later version Support iPhone 5 or later version

Inquiries

If you have any problems or inquiries during the use of the product, you can receive information and service from the homepage of our company (www.ismartsound.com). Regarding failures that occur within three months after purchase during normal use, you can receive free exchange service after confirmation of your purchase details (However, failures caused by carelessness of consumers or arbitrary disassembly shall not be included in the range of compensation of our company).

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.

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

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