

## 09 FCC Statement

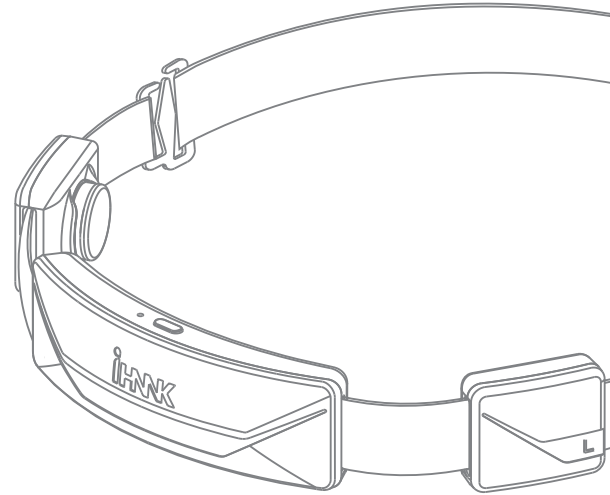
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.



## User Manual

**SereniBrain**

Biosensing Headband

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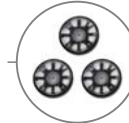
Thank you for using the SereniBrain Biosensing Headband. This product is composed of an electroencephalogram (EEG) signal acquisition headband and the "SereniBrain" App. It can collect and decode EEG signals to assess your level of mindfulness meditation and provide visual and auditory biological/neural feedback. It then uses this feedback to change the visual and auditory scenes displayed on your mobile phone, tablet or other terminal device, bringing you an immersive and interactive practice experience which helps you to enter the state of mindfulness meditation.

### 01 Packing List

Headband : 1



Electrodes : 2 sets,  
3 pcs in each set



Charging Cable : 1



User Manual : 1



Storage Box : 1



Note: In addition to the above devices, you will also need to provide a mobile phone, tablet or other terminal device and a set of headphones (make sure that the headphones are connected to the phone/tablet/device).

## 02 Headband Overview

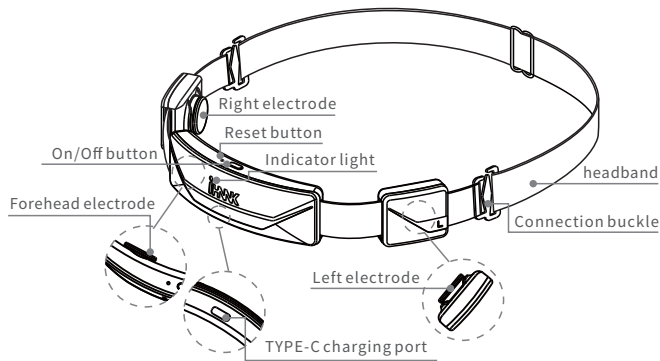


Fig. 2-1: Headband structure

1. As shown in Fig. 2-1, install the forehead electrode, left electrode and right electrode and check whether the headband is properly connected. If you have any questions, please contact customer service.
2. When you need to replace an electrode, pull it out with your fingers and install the new electrode.
3. The sound and light state of the headband in various working statuses is as shown in Table 2-1:

Table 2-1: Description of sound and light state

| Status | ON            | OFF            | Awaiting Bluetooth connection | Bluetooth connection successful | Low power            | Charging                  | Fully charged   |
|--------|---------------|----------------|-------------------------------|---------------------------------|----------------------|---------------------------|-----------------|
| Light  | Blue light on | All lights off | Blue light flashing           | Blue light constantly on        | White light flashing | White light constantly on | Green light off |
| Sound  | One beep      | —              | —                             | One beep                        | Three beeps          | —                         | —               |

4. The main parameters of the headband are as shown in Table 2-2:

Table 2-2: Main parameters of headband

|                           |                             |                               |                               |
|---------------------------|-----------------------------|-------------------------------|-------------------------------|
| Signal acquisition type   | Bioelectricity              | Bluetooth version             | V5.0                          |
| Battery life              | About 8 hours               | Bluetooth communication range | Within 5 meters               |
| Battery type              | Polymer lithium-ion battery | Battery standard voltage      | 3.7V                          |
| Full charging time        | About 2 hours               | Charging source               | DC 5V/500mA                   |
| Maximum power consumption | 85mW                        | Operating environment         | -10°C~38°C                    |
| Main materials            | ABS+PC                      | Mass                          | Approximately 50 g            |
| Length of charging cable  | Approximately 0.8 m         | Dimensions                    | Approximately 180*150*26 (mm) |

## 03 Instructions for Use

### 1. Software installation

- (1) For iPhone and iPad users, please open the AppStore, search for "SereniBrain" and install the software, as shown in Fig. 3-1.
- (2) For Android mobile phone/tablet users, please open Google Play, search for "SereniBrain" and install the software, as shown in Fig. 3-1.
- (3) For HarmonyOS mobile phone/tablet users, please open Huawei App Market, search for "SereniBrain" and install the software, as shown in Fig. 3-1.

**Note:** If permission is required during the installation, please click "Allow".

- (4) The icon of the "SereniBrain" App is as shown in Fig. 3-1.



Fig. 3-1: "SereniBrain" App icon

### 2. Turning the headband on/off

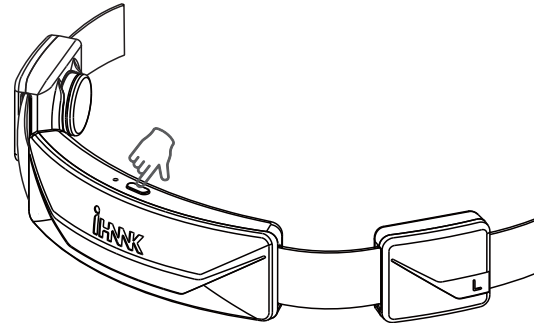


Fig. 3-2: Turn headband on/off

- (1) In the OFF status, as shown in Fig. 3-2, hold down the ON/OFF button for more than 3 seconds to turn on the headband.
- (2) In the ON status, hold down the ON/OFF button for more than 3 seconds to turn off the headband.
- (3) In the ON state, if the headband is not connected or not worn within 10 minutes, it will automatically turn off.
- (4) When charging, the headband will automatically turn off.

### 3. Wearing the headband

Adjust the tightness of the headband, put it on your head and slide the left and right electrodes according to the shape of your head to ensure that the three electrodes are stably fitted to the skin without hair trapped between.

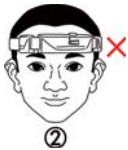
**(1) Correct ways to wear the headband:  
as shown in Fig. ① on the right.**

- a. Align the ON/OFF button with the center line of the bridge of the nose.
- b. Keep the lower edge of the front of the headband near your eyebrows.
- c. Fit the left and right electrodes to the center as much as possible.
- d. If wearing glasses, keep the headband close to the arms of the glasses.



**(2) Common incorrect ways to wear the headband:  
as shown in the figure below**

- a. As shown in Fig. ②, the ON/OFF button is not in the middle.
- b. As shown in Fig. ③, the headband is worn too high, away from the eyebrows.
- c. As shown in Fig. ④, hair is trapped between the electrodes and the skin.



Note: Please ensure that the electrodes make contact with clean skin and do not allow hair or other substances in between, otherwise it will reduce the effectiveness of the device. The ideal wearing position is as shown in Fig. 3-3:



Fig. 3-3: Ideal wearing position

**4. Connecting the headband**

- (1) After the "SereniBrain" App is opened, the main interface is as shown in Fig. 3-4. The headband icon in the upper right corner indicates the headband status, as shown in Fig. 3-5. Click the headband icon or headband guide button in the center of the homepage to enter the headband connection interface.

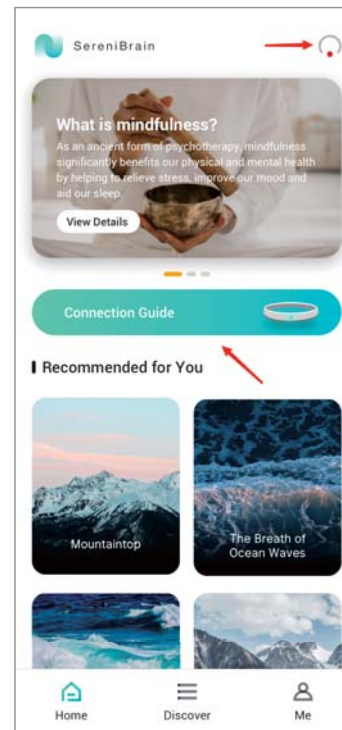


Fig. 3-4: App homepage

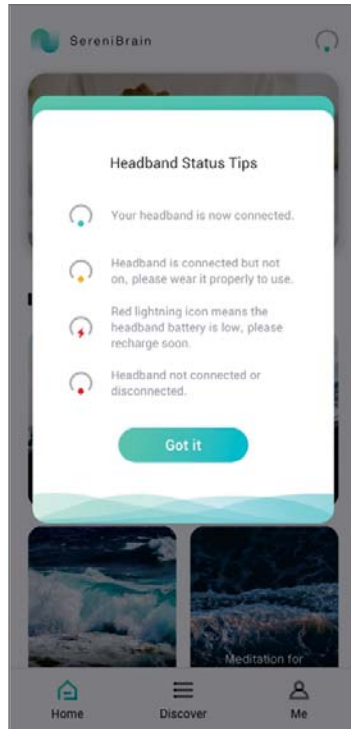


Fig. 3-5: Headband status

(2) The connection interface of the headband is as shown in Fig. 3-6. Open the headband, view the pairing code on the housing and click to connect automatically. If permission is required to enable Bluetooth during the connection process, please click "Allow". If the headband is not found during Bluetooth connection, please click "Refresh" or confirm that the headband is in a normal state (blue light flashing), or that the phone's location function is enabled.

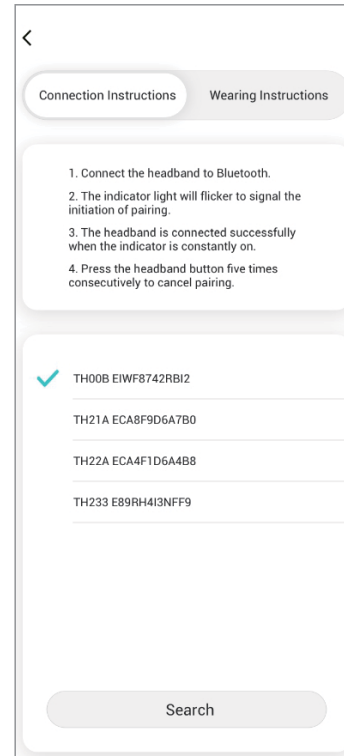


Fig. 3-6: Connection interface of headband

- (3) After the headband is successfully connected, wear it correctly according to the App tips or the instructions in the Manual before using it.
- (4) After the headband is successfully connected, it will connect automatically when subsequently using the software. If you wish to cancel automatic connection, press the headband ON/OFF button five times successively.

## 5. Viewing the EEG signal waveform

- (1) This product must be used on the premise that the headband is worn correctly and the EEG signal is stable. After the headband is worn correctly according to the wearing instructions (the headband icon on the homepage is green), click the headband icon as shown in Fig. 3-7 to view the EEG signal waveform.

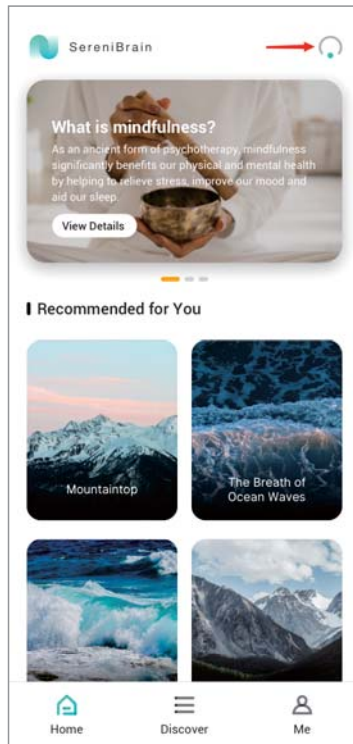


Fig. 3-7: Correct wearing of headband

- (2) For a short period of time after the headband is worn, the electrode will be polarized, so the waveform will be unstable and the lines will change greatly, as shown in Fig. 3-8. This is normal. If it does not become stable after more than 30 seconds, this indicates that the headband is worn incorrectly or there is a barrier between the electrode and the skin. Please wear it correctly or remove the barrier.

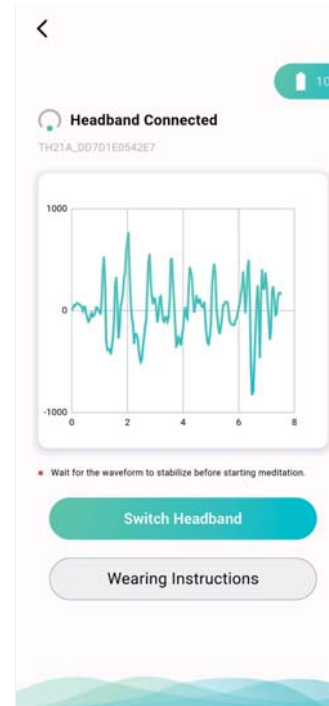


Fig. 3-8: Unstable waveform

- (3) After about 30 seconds, the waveform will become basically stable and the lines will become basically steady. The waveform should be as shown in Fig. 3-9, indicating that the headband is worn correctly, and you can start mindfulness meditation practice.

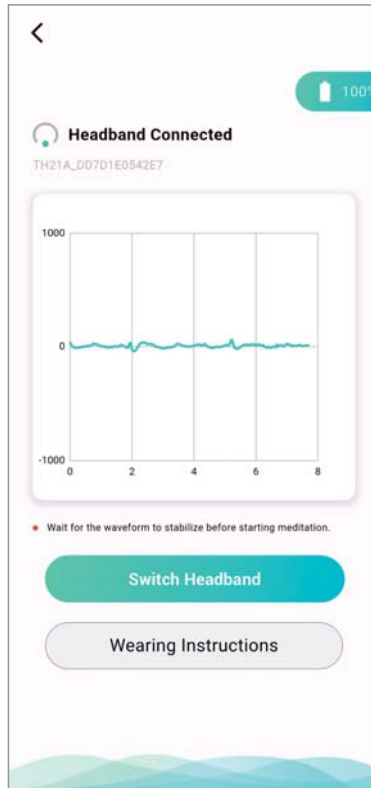


Fig. 3-9: Stable waveform

## 6. Starting practice

- (1) After ensuring that the headband is worn correctly and the EEG signal is stable (the headband icon on the homepage is green), you can choose a certain practice icon according to your preference, as shown in Fig. 3-10, and start mindfulness meditation practice with the brain-computer interface.

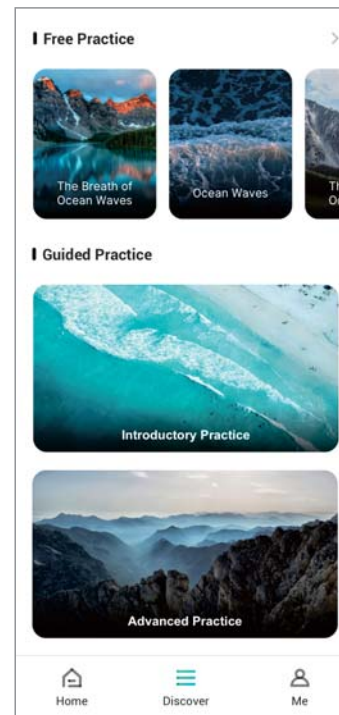


Fig. 3-10: Practice content page



- (2) Before starting the practice, select Practice Settings as shown in Fig. 3-11 and click "Start" (by default, the practice difficulty is set to "low" and the practice duration is set to "10 minutes").

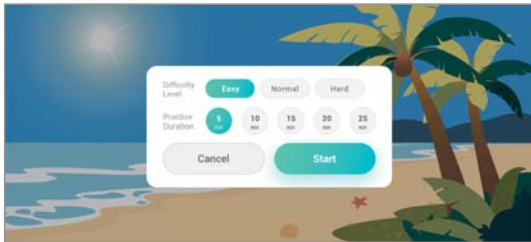


Fig. 3-11 Practice Settings

- (3) After starting the practice, you can monitor your current meditation state through the "mindfulness meditation score", "visual feedback" and "auditory feedback", and make real-time adjustments to your concentration level to obtain better mindfulness meditation effects.

Mindfulness meditation score: The higher the score, the better the current mindfulness meditation state; the lower the score, the worse the current mindfulness meditation state. The comparison table of mindfulness meditation scores and meditation states is shown in Table 3-1:

**Table 3-1 Meditation scores and corresponding states**

| Meditation score | Meditation state |
|------------------|------------------|
| 0—39             | Active           |
| 40—69            | Relaxed          |
| 70—100           | Calm             |

Each practice scenario has its own visual and auditory feedback. Take the Candlelight Meditation scenario as an example: the better the meditation state, the clearer the picture, the brighter the candlelight and the clearer the background music, as shown in Fig. 3-12. The worse the meditation state, the blurrier the picture, the dimmer the candlelight and the fuzzier the background music, as shown in Fig. 3-13:



Fig. 3-12 Candlelight Meditation practice (calm state)



Fig. 3-13 Candlelight Meditation practice (active state)

## 7. Practice skills

If you have no experience in mindfulness meditation, please focus, relax, follow the guidance, accept your physical discomfort with a non-judgmental attitude and do not feel anxious about a low score. Follow the guidance and feel your breath, and naturally, you will be able to achieve better mindfulness meditation results.

If you have some experience in mindfulness meditation, please carefully understand the meaning of the guidance, try to further clear your mind, focus on the real feeling of the moment and actively identify and relieve your stress and anxiety so as to extend the duration of your concentration.

If you have rich experience in mindfulness meditation, please try to broaden your focus to incorporate the flow of perception, thought, emotional content and subjective awareness so as to enter into a deeper state of meditation.

During practice, you can close your eyes completely or slightly and focus only on the sound changes (auditory feedback), or you can open your eyes and focus on both the image changes and sound changes (visual and auditory feedback). You can choose whichever mindfulness meditation mode you are most comfortable with.

## 04 Configuration Requirements

1. Network requirements: The headband needs to be connected to the network during use.
2. Configuration requirements for mobile phones and tablets:  
System versions: iOS 14 and above; Android 10 and above; HarmonyOS 3 and above.  
Memory requirements: iOS 6G and above; Android 8G and above; HarmonyOS 8G and above.

## 05 Precautions

### 1. About brain-computer interface mindfulness meditation

- (1) If you are a beginner, please use this product to practice mindfulness meditation 3 to 5 times indoors until you master the basic methods of mindfulness meditation based on this product (for example, when you can easily reach a mindfulness meditation score of more than 80 points).
- (2) When you practice brain-computer interface mindfulness meditation, you can sometimes close or slightly close your eyes and focus only on the sound changes (auditory feedback), and sometimes focus on both the image changes and sound changes (visual and auditory feedback). You can choose whichever mindfulness meditation mode you are most comfortable with.
- (3) If you fall asleep during brain-computer interface mindfulness meditation, then just have a good sleep and do not worry about whether the system is turned off.
- (4) Prolonged and uninterrupted meditation may lead to fatigue, so you may freely switch between meditation and rest. For example: ① In the process of meditation, you may click the "Pause" button to rest; after a break, click the "Start" button to continue the meditation; ② After meditation for a period of time, you may rest for a while, then choose another scenario to continue the meditation, depending on your state.
- (5) In the process of meditation, do not strain your nerves; just focus on the animation or sound of the scene, relax and follow the breathing exercise guidance.

- (6) Keep the system in working condition at all times and provide sufficient power and smooth device connection, enabling you to practice mindfulness meditation whenever you want.
- (7) The headband may cause discomfort during use. Please adjust the tightness or remove the headband until you feel normal.

## 2. About the device

- (1) It is recommended to replace the electrodes every three months. If the device is not used for a long time, please put the electrodes back in the sealed bag for storage.
- (2) Please do not wash the electrodes in water but wipe them with a wet tissue or normal saline. Grease and cosmetics on the electrodes will affect the effect and quality of signal acquisition.
- (3) If the device is worn correctly but the waveform is not stable for a long time or there is clutter or other waveform problems, you may try to wipe the skin and electrodes with alcohol or normal saline. If there is still no improvement, please replace the electrodes with new ones.
- (4) The battery is flammable and explosive. Never charge the device while wearing it!
- (5) If you need to clean the entire device, please do not wash it in water but wipe it gently with a wet tissue or alcohol for disinfection.
- (6) During use, stay away from harsh environments including high temperatures, low temperatures, humidity, smoke, strong electromagnetism, etc.

## 06 Frequently Asked Questions

- 1. What should I do if there is no signal in the waveform window and the meditation score is always 0?**  
Answer: Turn the headband off and restart the software.
- 2. What should I do if there are abnormal problems in meditation scenarios such as stalling or invalid pause?**  
Answer: Click to end the practice and exit the scenario, then restart the software.
- 3. What should I do if the software stalls, responds slowly or freezes despite clicking?**  
Answer: Restart the software.
- 4. What should I do if there is no sound when I enter a scenario after I start the software before plugging in the headphones?**  
Answer: Restart the software and it will return to normal.

## 07 After-sales Regulations

### 1. Need help?

If you have any questions about the use of this product, please send an email to [customer@ihnnk.tech](mailto:customer@ihnnk.tech) and we will respond within 24 hours.

### 2. Non-warranty regulations

- (1) The 1-year warranty period has expired or the purchase record and other relevant purchase vouchers cannot be provided.
- (2) Product failure, parts damage or appearance damage caused by human factors.
- (3) Normal wear of the product, such as consumables, natural aging of housing and components, etc.

- (4) Product failure or damage caused by failure to use, maintain and/or store the product in accordance with the instructions.
- (5) Product failure or damage caused by transportation and handling during the customer's return for repair.
- (6) Product failure or damage caused by force majeure factors such as earthquake, fire, flood, lightning strike, etc.
- (7) Other product failure or damage caused by problems other than the design, technology, manufacturing and quality of the product itself.
- (8) The electrodes are consumables and are not covered by the above warranty regulations.

## 08 Declarations

1. The Company is only responsible for the warranty and repair of problems existing in the product, and is not responsible for failure or damage caused by misoperation, self-repair or other accidents, nor for any losses caused thereby.
2. This product is developed by iHNNK Inc. and the Company has the right to upgrade the software and hardware of this product without any declaration.
3. The data in this Manual is based on theory and provided by the R&D Department of iHNNK Inc. During actual use, the data may vary slightly due to individual differences between products, software versions, use conditions and environments, etc. Please refer to the relevant data in actual use.

4. The diagrams in this Manual are for illustration only, and the products, images and contents displayed herein are for reference only. With the optimization and upgrade of the product, the product's actual image and content description (including but not limited to its appearance, color, dimensions, functions, etc.) may be slightly different.
5. Minors should only use this product under the guidance of their guardians.
6. The use of this product may cause physical discomfort (such as dizziness, headache, depression, irritability, etc.). In this case, please remove and stop using the product in time until the body returns to normal.
7. This product is not suitable for people with consciousness disorders and cognitive disorders. Please use it with caution.
8. During the use of this product/service, if a third-party software or system is involved and "Administrator Permission" pops up, the "Confirm" and other consent or approval actions will be automatically done by default. If you do not consent, please stop using the product/service. If you have any objection, please raise it to the customer service of iHNNK Inc. in time. If you continue to use the product, you will be deemed to have given consent to the aforementioned action and should bear the relevant legal liabilities or losses caused thereby.
9. This product is not a medical device and does not have any function of disease diagnosis or treatment. Special declarations: iHNNK Inc. reserves the right of final interpretation of this User Manual. The product and User Manual are subject to change without prior notice or reissue.