Epilepsy App and Wrist Monitor

In an effort to continually provide the very latest technology for our clients, we have developed Brio - the new sensor which has been designed to assist patients and their families who have been diagnosed with Epilepsy, Type1 Diabetes and a range of other long term medical conditions.

If your consultant has raised the issue and you or a family member is considered at risk then the Brio sensor could prove invaluable.

Epilepsy
We have developed Brio to detect associated symptoms that can happen at the start/ during a seizure, primarily clients who have ictal tachycardia (the increase in heart rate during a seizure) or ictal bradycardia (the reduction of heart rate during a seizure). This is specifically important if they are at risk of having a seizure when asleep or if they have been advised that they are at risk of cardiac arrest or SUDEP.

How does Brio work?

Brio has two elements: a wrist pulse monitor that permanently communicates with the Brio app via a mobile device of your choosing.

The lightweight heart monitoring sensor can be comfortably worn on either the wrist or ankle and does not interfere with the user's sleep. The sensor constantly monitors the wearer's pulse and sends data to the Brio app located in the same room. The app processes this constant data flow and will raise an alert if the user's pulse-rate falls outside the normal parameters that can be individually programmed. The Brio app stores all the relevant data which can be analysed or sent to a healthcare professional if required.

Brio is suitable for adults and children from age 2+.

Using the Brio Wrist Sensor and App

The wrist sensor

The wrist monitor uses an optical sensor which detects the volume of blood beneath your skin, and immediately applies a patented algorithm to measure your heart's rhythm and display your heart rate.

This technology gives you accurate heart rate from the wrist, without sacrificing comfort. Its soft, durable silicone strap ensures a snug and comfortable fit. And with no need for a heart rate chest strap, you'll be more comfortable when in bed.
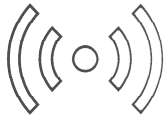
Using the Wrist Sensor

Your sensor can be worn on either your wrist or ankle, whichever is more comfortable but must have good contact with the skin. If the Children can wear the sensor above the elbow or knee if the device does not fit snuggly to the wrist or ankle – this can be a bit hit and miss

1. Once you have correctly fitted the device, turn the wrist monitor on by pressing the bumpy button on the top and holding it down until a blue light comes on.

2. The blue light will flash until a heartrate is detected.

3. When a heartbeat has been detected, the blue light will slowly pulse to show that it is active.

Connecting to the App

- Once you have located Brio on the App store/Google Play, download it to your designated device.

- Once you have launched the App, you will be asked to enter the Activation code we supplied. Once you have entered this 12-digit code the app will be open on your device.

- Launch the app by choosing the icon on your mobile device

- Once the app is open, press this icon to connect to the wrist sensor.

    NOTE: Please do not use the Bluetooth settings on your device to connect the wristband.

- Now switch on the wrist sensor. This needs to be within a few feet of the mobile app device while the app and wrist sensor connect via Bluetooth.

- When the app has connected to the wrist sensor, you will hear a ping and the centre circle will turn green. You will also see the pink heart begin to beat and display your beats per minute.

- To disconnect the app from the wrist monitor, simply press the connect icon on the app again or turn off the wrist sensor.

Sensor Settings

The sensors are individually set to an average heart rate depending on age before they are dispatched to you.

2 > 12 years 50-130 bpm

13 years > - 60-110 bpm

This is simply a guide range which is entirely separate to the settings you apply within the Brio App.

The sensors LED indicator will flash a corresponding colour to indicate where the heart rate is in association to the sensor setting:

Red – Above the average

Blue – Below the average

Green – Within average setting

Yellow – battery below 30%

Fast Blue flashing – Bluetooth connection issues

If you have any concerns you should always refer to the app to check the current rate

Setting Alarms

The limits for the BPM to trigger the alarm are adjusted by moving the sliders on the bottom of the heart. Every person has a slightly different resting heart rate, so you will need to set the limits depending on your particular needs.
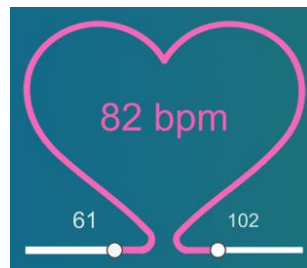
Further alarm settings are found by choosing the Alarm Icon

[need alarm icon]

Settings you can change are:

1. Deactivate the alarm

2. The frequency the alarm sounds

3. The sound of the alarm

4. Alarm Volume

Bluetooth Range

The Brio uses Bluetooth signal to work. It functions on Low Energy (LE) Bluetooth, also known as version 4.0 on device specifications.

With any Bluetooth the maximum expected range to receive a signal is 10 Meters. However, most phone/tablets will not reach the maximum range. Protective cases can affect this, as well as atmospheric conditions in the home. We would suggest you carry out a range test to be sure.

If you require additional range, you can connect your device to a wireless speaker system to relay the alerts.

Triggering the alarm

The alarm will be activated if the BPM recorded by your wrist sensor goes beyond the limits you have set within the app. A red alarm icon will be displayed on the screen as well.

To silence the alarm, simply tap anywhere on the screen. If the BPM remains above the limits set within the app, the BPM will be displayed in red, but the alarm will not sound until after 5 minutes from the initial trigger giving you time to respond to the original alarm.

After 5 minutes, the alarm will reactivate itself unless you disconnect the wrist sensor or deactivate the alarm.

Data collection and sharing

When the Brio app is connected to the wrist monitor, it is logging the heart rate data being displayed on the screen. Each session is recorded and stored within the app. The app will hold up to 60 records before it begins to remove the oldest records to make more space for new records.

Any record that contains an alarm within the data will not be auto removed however.

This feature provides you with valuable information which can be emailed to yourself or a healthcare professional for analysis.

To email the data collected, click on the Data icon

Choose which data files you want to email from the list and then tap the mail icon

Fill in the recipient email address and nay message you want included.

The tap the Mail icon

Deleting Data

You can remove recorded data by selecting the file you want to delete and then pressing the delete icon.

Charging Your Wrist Sensor

Your wrist sensor device should be charged fully every day, so when not in use, we recommend placing the device on the charger ensuring it is fully connected and the blue light is on continuously. Once it is fully charged, the blue light will go out.

Using Brio Through the Night

The app can be dimmed by pressing the 'lightbulb' icon in the upper right of the screen.

To turn the dim feature off, simply tap anywhere on the screen. Your mobile device running the Brio App will need to be kept on charge through the night to ensure the device continues to run.

Frequently Asked Questions

Here are a few questions commonly asked by Brio Users:

1) **Can I use Brio on multiple devices?**

   The activation code you are supplied with can only be used on one device. You can request a second code for an additional device. There is a charge for this. Contact us for more information on 0800 180 8833.

2) **What if my phone/tablet breaks?**

   Should you need to move Brio onto a new device, simply contact us and we will reissue the code for you to use again.

3) **Do I need the internet for Brio?**

   Yes. You require an internet connection on the device for two reasons. Firstly, to download the app. Secondly to receive any updates which may occur. These updates are to improve the service and ensure compatibility with the latest android and apple software.

4) **Can I update my phone software?**

   We would suggest turning automatic updates off on your device. This will ensure that should any compatibility issues occur within the update we can advise you before you proceed.

5) **Can I use Brio outside the home?**

We would advise against this. Due to the connection being via Bluetooth, when outside the range would be reduced dramatically and any activity would naturally elevate your heart rate.

6) **Can my child wear Brio in School?**

   Yes, we do have users of Brio who take the device to school. This would need to be discussed with them as the phone/tablet would need to be within range and a teacher/aid would take responsibility for monitoring this.

7) **Does Brio Detect Seizures?**

   No. Brio is designed to detect the associated symptoms that can help to monitor someone who may be having or about to have a seizure

8) **What is the battery life of Brio?**

   The sensors have a battery life of 8-10 hrs. We supply 2 sensors to ensure users can cover an extended period of sleep. Simply switch the device when needed.

9) **What if my band breaks?**

   The sensors are encased in a soft rubber band, which you can replace should you need to. This is at a cost of £20.00 per band (not including sensor)

10) **What does it mean when the app announces, "attempting to reconnect"?**

   This means that the Bluetooth signal, or connection to the user has been lost. Make sure the device is in range and press the connection icon. Also, ensure the band is in the correct position on the user.