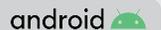


Beatsgear

User Guide

Please read and understand the instructions carefully to properly use the product.



Beatsgear supports the following OS and devices.

Table of Contents

Important Safety Information	—————	1
Supported OS and Devices	—————	2
Product Overview	—————	2
Beatsgear User Guide		
Product Standard	—————	3
Product Package	—————	3
Control Panel	—————	4
Product Cover	—————	4
First-time Use with Android Devices	—————	5
First-time Use with Windows 10 PC	—————	8
Beat Latency Setup	—————	12
Operation Mode Selection	—————	13
Notes on Using Beatsgear		
Connecting Beatsgear Hardware to Beatsgear App	—————	15
Windows and Android App	—————	16
Android App	—————	16
Windows App (Supports Windows 10 only)	—————	17
External Battery Requirements		
External Battery Safety Information	—————	18
Troubleshooting	—————	19

Important Safety Information

Be sure to read the safety information below and use the product appropriately for your safety.



Beatsgear needs a 12V DC input to operate. Please use the included power adapter or an adapter that supports 12V output, and 1.5A or higher. If you want to use a vehicle cigar jack adaptor for the power, be sure to check that the output voltage is 12V. 24V power is not available.



When connecting the power adapter to an outlet, make sure to plug in all the way and do not touch with wet hands.



Do not apply excessive force on the wire of the power adapter. Be careful not to insert the power cable into corners or gaps.



For safe operation of the product, use at temperatures between 32F and 100F.



If you use Beatsgear on high beat power for an extended amount of, you may experience physical side effects such as indigestion and headaches. Be sure to set the beat power to an appropriate level for you.



Don't sit on the product, step on it, throw or apply excessive force. Parts inside the product may be damaged.



Beatsgear is not water resistant. Do not use or store in humid areas such as toilets or bathrooms.



If the device gets wet with water or liquid, stop using immediately, unplug the adapter, and turn off the power. Use the product after thoroughly drying.



Do not disassemble and modify power adapters or power lines.



Do not disassemble or modify the device. We are not responsible for any accidents or problems caused by the disassembly or modification of the device, and service for a modified device will be denied.



Turn the power switch off when the device is not in use.



If you will not be using the device for a long time, please be sure to unplug the power adapter from the outlet and store it.



Do not store or use flammable gases or materials near the product.



Avoid direct sunlight when storing and do not use or store near heaters.

Supported OS and Devices

Beatsgear supports the following devices and OS.

	Mobile Device Supports mobile devices with Android 8.0 (Oreo) or higher.
	Bluetooth-enabled PC Supports Windows 10 only. If your PC does not have Bluetooth capability, you must use a separate Bluetooth dongle (purchased separately).

Beatsgear app may not work smoothly if your device has a weak CPU.

iOS is not supported with Beatsgear due to the OS restrictions on audio output.

Product Overview

Beatsgear is a haptic VR device working with Android or Windows apps. Beatsgear analyzes all sounds played on Android mobile devices or Windows 10 PCs in real time using high-performance algorithms built into Beatsgear app to produce matching vibration signals. The generated vibration signal is wirelessly transmitted to the device, and the beats are expressed using vibration units built into the device. You can experience the sound with your body as well as your ears by using Beatsgear when listening to music, playing games, and watching movies.

Beatsgear device cannot work alone and requires an Android mobile device or Windows PC. Connecting Beatsgear directly with a TV is not possible. If you connect an Android device or PC to your TV as an external monitor, and connect Beatsgear to the PC or Android device, you can enjoy your content on TV with Beatsgear.

Beatsgear User Guide

Product Standard

Product Name	Beatsgear
Model Name	bgear-LS1100
Product Size (Length x Width x Height)	380 x 460 x 80 (mm)
Weight	1.2kg
Electricity Rating	DC Adapter : 100~240V, 50/60Hz
	Beatsgear : DC 12V, 1.5A
FCC ID	2AYWB-BGEAR-LS1100

Product Package

Basic Components



Beatsgear Hardware



12V 1.5A Power Adapter



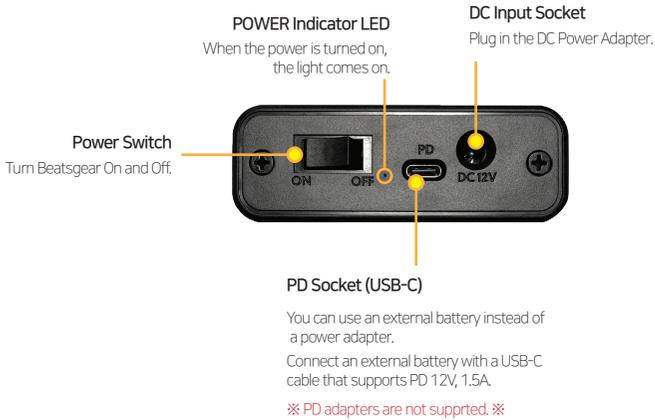
DC Power Extension Line



12V Adapter for Vehicle

Control Panel

<Control Panel Detail>



Product Cover

※ If the surface of the product is stained, wipe it with wet wipes or soft wet towels. Do not use bleach, detergent, or organic solvents such as thinner.

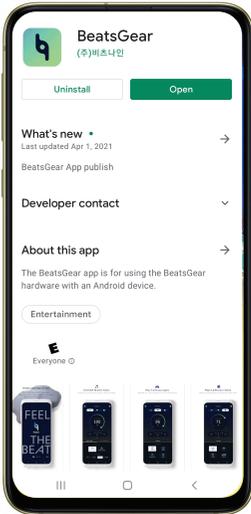


※ Beatsgear cover is made of synthetic PU leather, and as a result, some wrinkles or bends may occur on the surface of the product.



First-time use with Android devices

1. Search for Beatsgear in Google Play Store or scan the QR code below to download Beatsgear app.

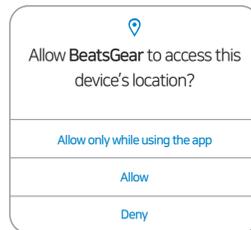
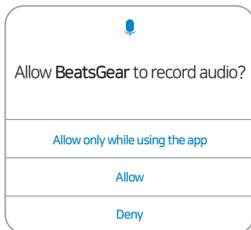


Beatsgear app



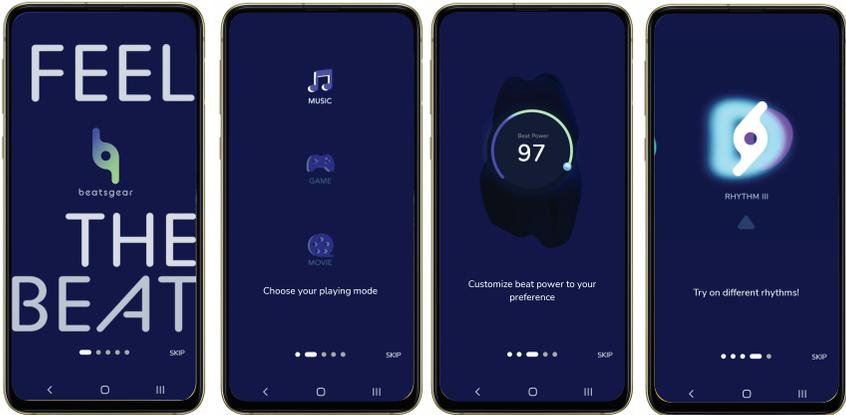
Mobile app download QR code

2. After activating Bluetooth on your device, launch beatsgear app. Two permission requests will be made. Please select 'Allow only while using this app' or 'Allow'.

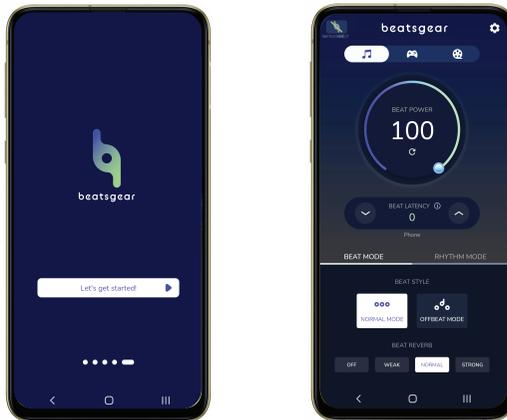


- Audio Recording : Used to analyze sound output from other apps and generate beats
- Device Location : Used for Bluetooth services to connect to Beatsgear

3. Check tutorial screens step by step.



4. After going through the tutorial screens, the main menu will open.



5. Connect the power adapter to an outlet, and connect the DC connector to the DC connector socket on the control panel. Stand Beatsgear against the seat or sofa back, and sit close to your back in a comfortable position.



6. Turn up the power switch on the control panel.



7. After a while, Beatsgear and Beatsgear app are automatically connected via Bluetooth. The upper left-hand icon on the screen is activated and the welcome vibration is turned on.



8. Select the mode you want to use: Music, Game, Movie at the top of Beatsgear app screen, and go back to the home screen on your device.



9. Play music, game, or video from another app. Increase to the proper volume and vibrations will produce from Beatsgear.

10. If the beat feels too strong or too weak, change the beat power level on Beatsgear App.



Beat Power Adjustment Knob

When using the device's built-in speakers, poor sound quality causes poor vibrations. In the game mode, vibration is not output when using a wired audio device (earphone/headphone/speaker) in most of android devices. It is recommended to use Bluetooth audio devices (earphones/headphones/speakers).

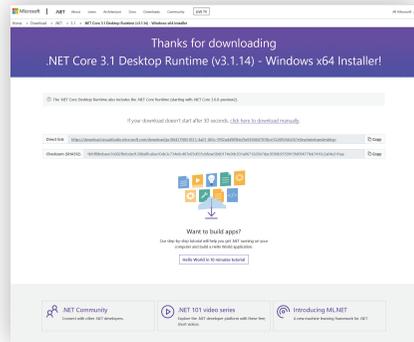
First-time Use with Windows 10 PC

To use Beatsgear, your PC or laptop must have Bluetooth function. If your PC does not have Bluetooth, please purchase and install the USB Bluetooth dongle.

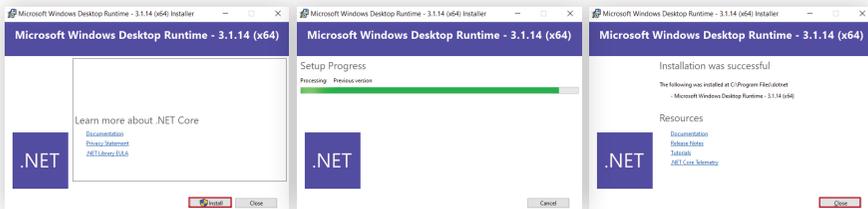
1. Open the Chrome web browser enter the address below in the address bar to access Beatsgear homepage.

Web Site Address : www.beatsgear.com

2. Move to the 'Download'. Click the download button 'Microsoft .NET Core 3.1 Desktop Runtime', and download and install the program.

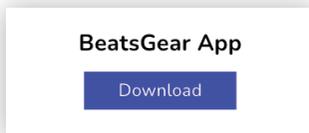


3. Press the 'Install' button to install Microsoft Windows Desktop Runtime. After installation, press the 'Close' button on the following screens.

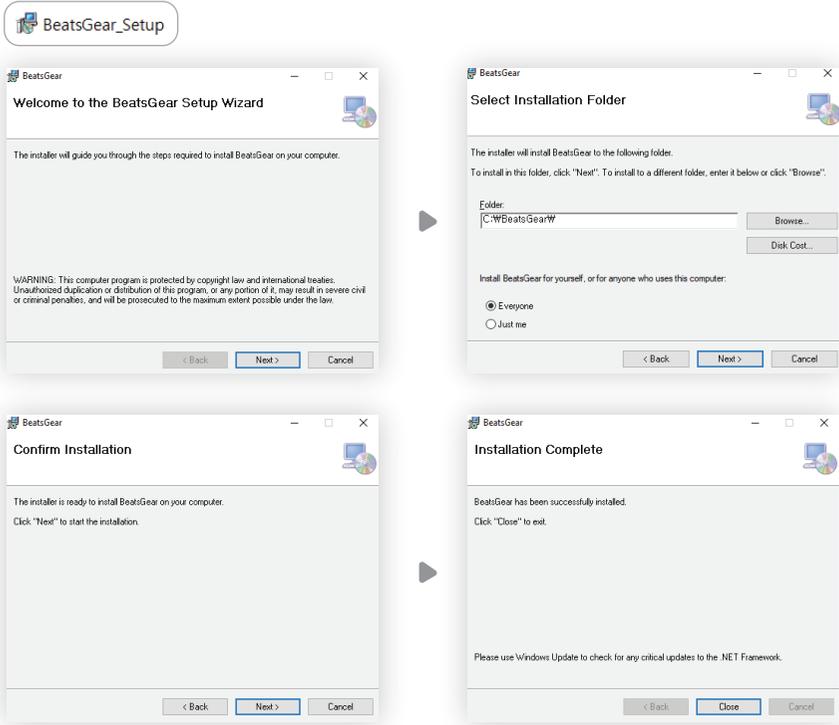


4. Return to the home page and click the download link for beatsgear app to download and install it.

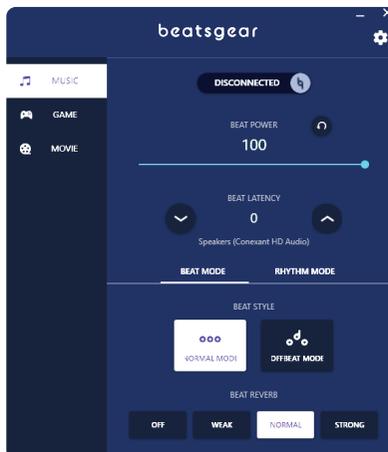
Web Site Address : www.beatsgear.com



5. Run the downloaded BeatsGear_Setup.msi file to install Beatsgear app.



6. When the installation is complete, turn on Bluetooth on your PC and run Beatsgear app.



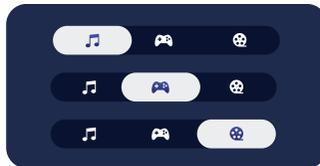
6. Turn up the power switch on the control panel.



7. After a while, Beatsgear and Beatsgear app are automatically connected via Bluetooth. The upper left-hand icon on the screen is activated and the welcome vibration is turned on.



8. Select the mode you want to use: Music, Game, Movie at the top of Beatsgear app screen, and go back to the home screen on your device.



9. Play music, game, or video from another app. Increase to the proper volume and vibrations will produce from Beatsgear.

10. If the beat feels too strong or too weak, change the beat power level on Beatsgear App.



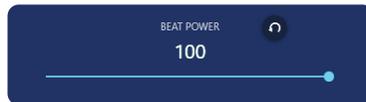
Beat Power Adjustment Knob

When using the device's built-in speakers, poor sound quality causes poor vibrations. In the game mode, vibration is not output when using a wired audio device (earphone/headphone/speaker) in most of android devices. It is recommended to use Bluetooth audio devices (earphones/headphones/speakers).

11. Play music, game, or video from another app. Increase to the proper volume and vibrations will produce from Beatsgear.

Make sure to use 'Windows Media Player' or 'Movie and TV Apps' for your video player.

12. If the beat feels too strong or too weak, change the beat power level on Beatsgear App.



Using a built-in speaker or wired audio device(earphone/headphone/speaker) on a PC or laptop may cause poor rhythm detection in music mode. Also, when you use your laptop's built-in speaker in movie or game mode, it doesn't feel good. It is recommended to use Bluetooth audio devices(earphones/headphones/speakers) whenever possible.

Beat Latency Setup

When using a Bluetooth audio device(earphone/headphone/speaker) for sound output, the sound and beat may not match due to the delay in sound transmission. In this case, adjust the beat latency setting to match the beat to the sound. In particular, when using music mode, a mismatch between beats and sounds can interfere with listening to music.



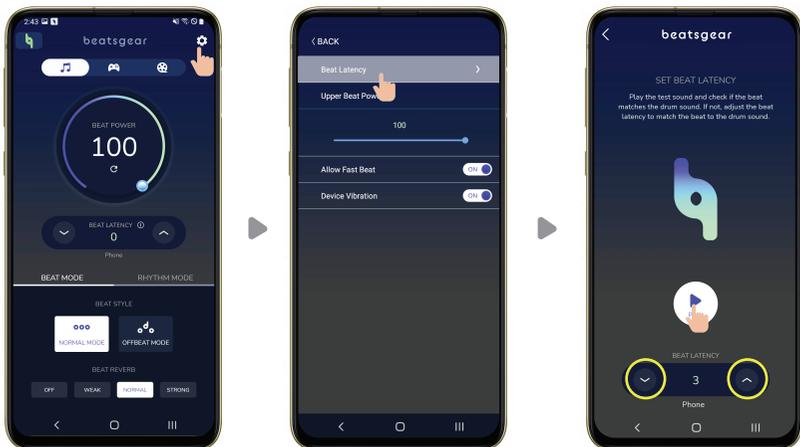
Bluetooth Headset



Bluetooth Speaker

If the sound and beat do not match, try changing the beat latency using the beat latency times settings button. If it is difficult to set the beat latency using the button, enter the beat latency on the setting screen. Play the sample sound to match the beat and sound accurately through the settings button. Touch the 'Play' button and play the sample sound to match the beat and drum sound accurately through the settings button.

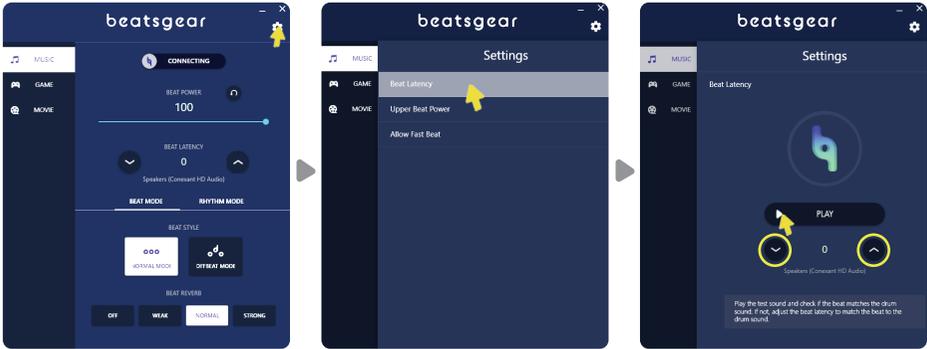
For wired audio devices, set the beat latency value to 0. For bluetooth audio devices, it is usually set to between 3 and 13. For some car audio, you may need to set it to 20 or higher.



Beat Latency Setting Steps in Android

If the beat is faster than the drum sound : Press ▲ button to increase the beat latency.

If the drum sound is faster than the beat : Press ▼ button to reduce the beat latency.



Beat Latency Setting Steps in Windows

If the beat is faster than the drum sound : Press ▲ button to increase the beat latency.
 If the drum sound is faster than the beat : Press ▼ button to reduce the beat latency.

If the beat latency setting value is changed by the user, the changed value is automatically saved based on the audio device currently in use. The next time the device is connected again, it is automatically set to a previously set latency value.

Operation Mode Selection

Beatsgear provides three operation modes: **music, games, and movies**, depending on the purpose of use. Please select the operation mode that matches the app you are currently using.

🎵 Music Mode

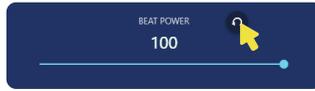
Beatsgear analyzes the currently playing music in real time to detect rhythm and outputs the beat to provide users with a more exciting music experience. Please use it when playing up - beat music for the best experience.

Beatsgear detects rhythm using the low-frequency drum sound. Therefore, if a song does not have a low frequency drum beat, the rhythm cannot be detected properly. In this case, beats may be out of sync with the actual song rhythm.

When switching from one song to another, the beat detection module should be initialized to quickly detect the exact rhythm and beat of the new song. Beatsgear app automatically initializes the beat detection module when there is a soundless interval for about a second, indicating that it has been converted to a new song. If the soundless interval between songs is very short, the beat detection module cannot be initialized, and the previous rhythm is maintained. In this case, you can manually reset the beat detection module by touching or clicking the reset button as shown below.

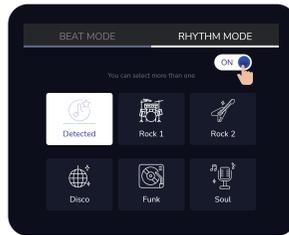
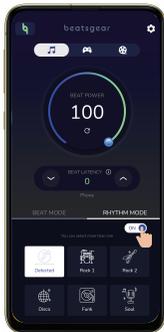


Reset Button
(Android)



Reset Button
(Window)

In music mode, you can choose a type of beat mode. Additionally, you can choose multiple rhythm styles and let them play in repeat. You need to set the beat latency so that the beat and music match precisely.



Rhythm mode On/Off
(Android)

To provide a more immersive experience while listening to music, we have changed how the beats are extracted from the Music Mode. You can freely control the rhythm through the original music rhythm mode. Simply switch the on/off button to change the rhythm extraction method.

Rhythm Tracing OFF: Detects low-pitched beats in real time from the music being played and generates vibrations according to the beat timing.

Rhythm Tracing ON: Rhythm is detected in real time from the music being played and vibration is generated according to the rhythm.

Game & Movie Mode

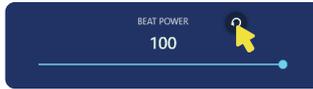
Beatsgear analyzes the sound from the game or movie you are playing in real time and outputs the appropriate vibrations. You can experience vibrations with your body along with the sound of games or movies. You can further enhance your sense of realism and immersion in games or movies. There are our different vibration themes available for each game/movie mode. Choose a vibration theme that suits your taste and enjoy.

When using the built-in speaker or wired audio device, there may be no vibration in the game mode. In this case, please use the Bluetooth audio device (earphone/headphone/speaker).

Changing the game and video source and adjusting the volume can cause a small vibration. In this case, touch the reset button as shown in the picture below. The vibration intensity will then be read just depending on the current sound volume.



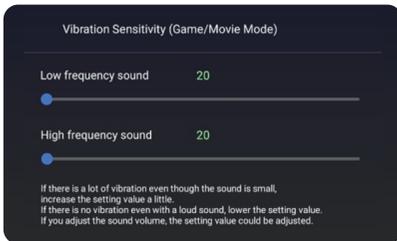
Reset Button
(Android)



Reset Button
(Window)

When using the game mode, the vibration caused by the sound of the game's effects and the vibration caused by the background music occur simultaneously. If you do not want vibrations the background music, reducing the volume of background music by 50% in the sound settings of the game app that you are playing will greatly reduce the vibrations from the background music.

Vibration Sensitivity Control(game/movie mode)



Vibration Sensitivity Control
(Android)



Vibration Sensitivity Control
(Window)

When operating in game/movie mode, you can raise or lower the standard for vibration in the low frequency range. Decreasing the sensitivity will cause the beatsgear to vibrate more often, and increasing it will make the beatsgear less likely to vibrate.

When operating in game/movie mode, you can raise or lower the standard for vibration in the high frequency range. Decreasing the sensitivity will cause the beatsgear to vibrate more often, and increasing it will make the beatsgear less likely to vibrate.

Notes on Using Beatsgear

Connecting Beatsgear hardware to Beatsgear App

Beatsgear device and Beatsgear application connect wirelessly via Bluetooth. Once the application is launched, Beatsgear application automatically detects Beatsgear hardware and connects without an initial pairing or set up. Beatsgear emits a vibration once the device and application are connected. You can disconnect or reconnect the device and application by clicking Beatsgear icon on the top left(Android app) or top center (Windows app). If the connection icon shows the disconnected status, tap or click on it to reconnect.

Android



Disconnected

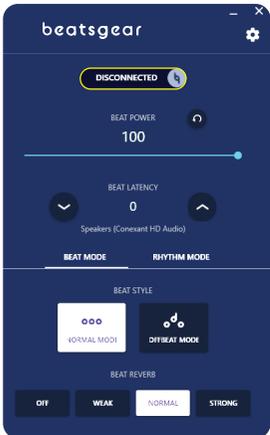


Connection In Progress

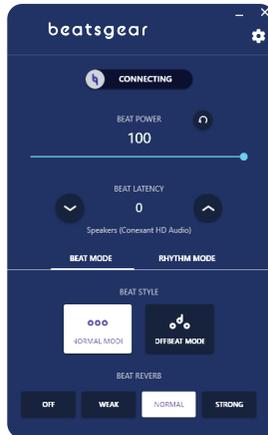


Connected

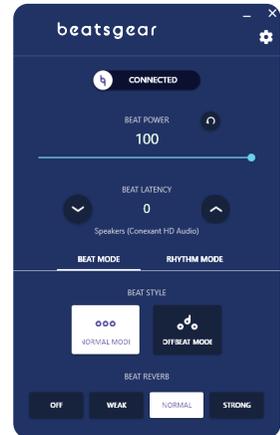
Window



Disconnected



Connection In Progress



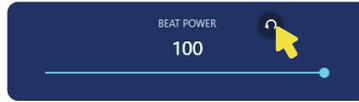
Connected

You can connect up to two Beatsgear devices to one Beatsgear app at the same time. After powering on both Beatsgear devices, you can connect them sequentially by starting Beatsgear app. Enjoy music or movies with your friends and family using Beatsgear.

Windows and Android App



Reset Button
(Android)



Reset Button
(Window)

If the rhythm does not match after switching to another song in **music mode**, touch or click the reset button in the picture above to manually reset the beat detection module.

If you change the master volume to a smaller volume or play a file with a smaller sound when using **movie mode**, a small vibration may be outputted. In this case, touch or click the reset button in the picture above.

Android App

While using Beatsgear with Beatsgear app, make sure the music, game, or movie app you are using is in the foreground and Beatsgear app is in background state. If you need to make changes in beatsgear app, make changes it to foreground state.

When using the device's internal speakers, poor sound quality causes poor vibrations. In addition, vibration may not be outputted when using a wired audio device (earphones/headphone/speaker) in most smart device models. It is recommended to use Bluetooth audio devices (earphones/headphones/speakers) whenever possible.

In the music mode, some music player apps that include equalizer may experience poor beat detection. If the beat detection is not successful, please try another player app.

Depending on the smart device model, vibration might not be output properly if the sound volume setting is too small. In this case, please set it to a moderately large volume. When using Bluetooth audio devices, if the volume of Bluetooth and the volume of the smart devices are adjusted independently, increase the volume of the smart devices, and adjust the sound appropriately using the volume button on the Bluetooth devices.

Some of devices only support low sound sampling rates. In this case, the sound detection performance could be degraded, and Beatsgear might produce inconsistent beats in music mode.

Windows App (Supports Windows 10 only)

Beatsgear is optimized for Windows Media Player, Movie, and TV app. The vibrations can be quite awkward when playing with other movie players.

If the video player's sound volume setting is too small, Beatsgear will not output vibration. Please set the player's volume to 100% and use the master volume on your PC to set the volume appropriate for listening.

If you play high-resolution videos or high-quality games such as 4K videos on your PC, Beatsgear app may not operate smoothly due to the increase in CPU usage, and the vibration may not be outputted normally from Beatsgear.

In the case of laptops, Windows automatically limits CPU performance when operating with batteries. Please use it with power connected to your laptop.

When using a built-in speaker on a PC or laptop, the vibration may be worse due to poor sound quality. Please use Bluetooth audio device (earphone/headphone/speaker) whenever possible.

External Battery Requirements

You can use an external battery that supports PD 12V instead of the included power adapter. External batteries are not included in the product package and must be purchased separately. For your safety, please use reliable brands and products.



The external battery must meet the following conditions

- ✓ PD(Power Delivery) version 3.0 or above
- ✓ Supports 12V 1.5A output or higher
- ✓ USB Type-C cable

External Battery Safety Information

If the device is kept on for an extended amount of time with the external battery connected, the battery may be turned off automatically. If this happens, turn the device off and on to restore the battery power immediately.

If the external battery is at less than 30% charge, Beatsgear may not function properly depending on the battery. In this case, disconnect the battery from Beatsgear and charge the battery before use.

If you will not use Beatsgear for an extended amount of time, please disconnect the external battery before storing.

If you leave your vehicle with an external battery inside during hot weather, there is a risk of fire due to high vehicle interior temperature. Do not leave the external battery in the vehicle during hot weather.

※ We are not responsible for any damage to the product due to excess voltage or current from an external battery, or fire caused by an external battery. ※

Troubleshooting

LED light on the side panel is not turning on

- Make sure that the power adapter is plugged in correctly into the outlet.
- Check that the DC plug of the adapter is properly connected to the socket on the wside of Beatsgear.
- Check that the power switch on the side of Beatsgear is ON.

The connection icon on Beatsgear app is in the disconnected state.

- Touch or click the upper left(Android) or top (Windows) connection icon on Beatsgear app.
 - Turn the power switch on the side of Beatsgear off and on.
- ▶ When Beatsgear and Beatsgear app are connected successfully, Beatsgear will emit a welcome vibration.

There is a sound but the device does not emit vibration or vibration is too weak. (Android)

- Increase the volume of the device by using the device volume controls, or increase the sound using the settings menu of the app you are using.
 - Return to Beatsgear app and increase the beat power.
 - Click the reset button on Beatsgear app. (p.16)
 - Some apps do not output beats or vibrations due to compability issues. In this case, please use another similar type of app.
- ▶ When using built-in speakers or wired audio device, there may be no vibration in game mode. In this case, pelase use a Bluetooth audio device. (earphone/headphone/speaker).

There is a sound but the device does not emit vibration or vibration is too weak. (Windows)

- Increase the volume on your media player to 100% and set your PC's master volume appropriately.
- Return to the Beatsgear app and increase the beat power.
- Touch or click the reset button on Beatsgear app. (p.16)

The music and vibration are not well-synchronized in music mode.

- Verify that the curent operation mode is the music mode.
- Try to set the beat latency again to match the beat and sound of the music. (p.12-13)



beatsgear
beatsgear.com

Beatsgear

Input Power : 12V 0.2A average

Dimension : 380x473x80 (WxHxD), 1.2kg

KC ID : R-R-bgl-BGEAR-LS100

FCC ID : 2AYWB-BGEAR-LS100

Beatsnine Inc.

FCC Warning Statement

FCC Part 15, 19

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 Part 15, 21

Any changes or modifications (including the antennas) th this device that are not expressly approved by the manufacture may void the user's authority to operate the equipment.

FCC Warning Statement

This equipment complies with FCC Radiation exposure limits set forth an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.