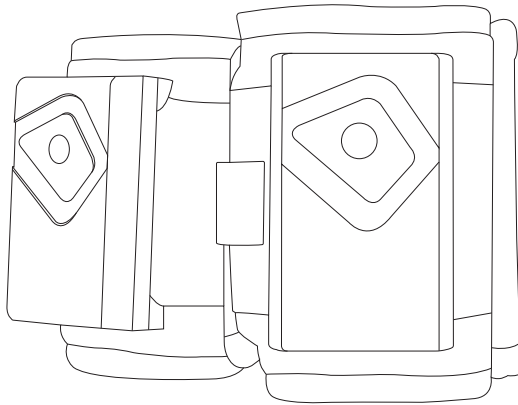




Haptics Sleeves for Arms

TACTOSY FOR ARMS



**User Manual &
Warranty**

www.bhaptics.com

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Before Getting Started

Be sure to read the user manual before using the product to ensure safe and proper use of the product.

- bHaptics devices are recommended for age 13 and older.
- By accessing and using any of bHaptics' products and services, you are agreeing to our Terms and Conditions (<https://www.bhaptics.com/legals/terms-and-conditions>) and the collection and use of Personal Information in accordance with the Privacy Policy (<https://www.bhaptics.com/legals/privacy-policy>)
- Please read carefully the bHaptics Limited Warranty before using the product.
- Do not use the product for any purpose other than the intended purpose.
- Do not attempt to modify, disassemble or repair the product.
- Do not drop the product or subject the product to other forms of strong impacts.
- Users with sensitive skin should avoid wearing the product, as it may irritate your body.
- This product is not waterproof. Store the product in a dry place free from humidity and moisture.
- The main body of the product contains electronic components and must not be washed in water under any circumstances. Should the product need to be cleaned, gently wipe it with a soft cloth. The mesh lining may be removed and machine washed with neutral detergent. (Do not use strong chemicals or strong detergents.)
- The latest user manual for the device and related software can be found at <https://www.bhaptics.com/support>

Table of Contents

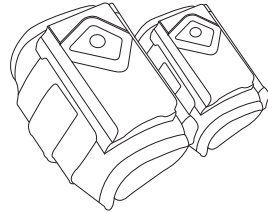
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01

Overview

TACTOSY FOR ARMS

Tactosy for Arms is a haptic sleeve for arms. Feel gun recoils and shield blocks in FPS games or bass/rhythm in Music/Movie.

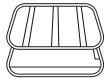


What's in the Box

Basic Components



Tactosy for Arms
(Pair)



Inner
Lining*



Bluetooth
Dongle



USB Type C
Charging Cable (Pair)



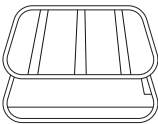
User Manual
& Warranty

**Inner Lining is attached to the device*

Additional Components (purchased separately)

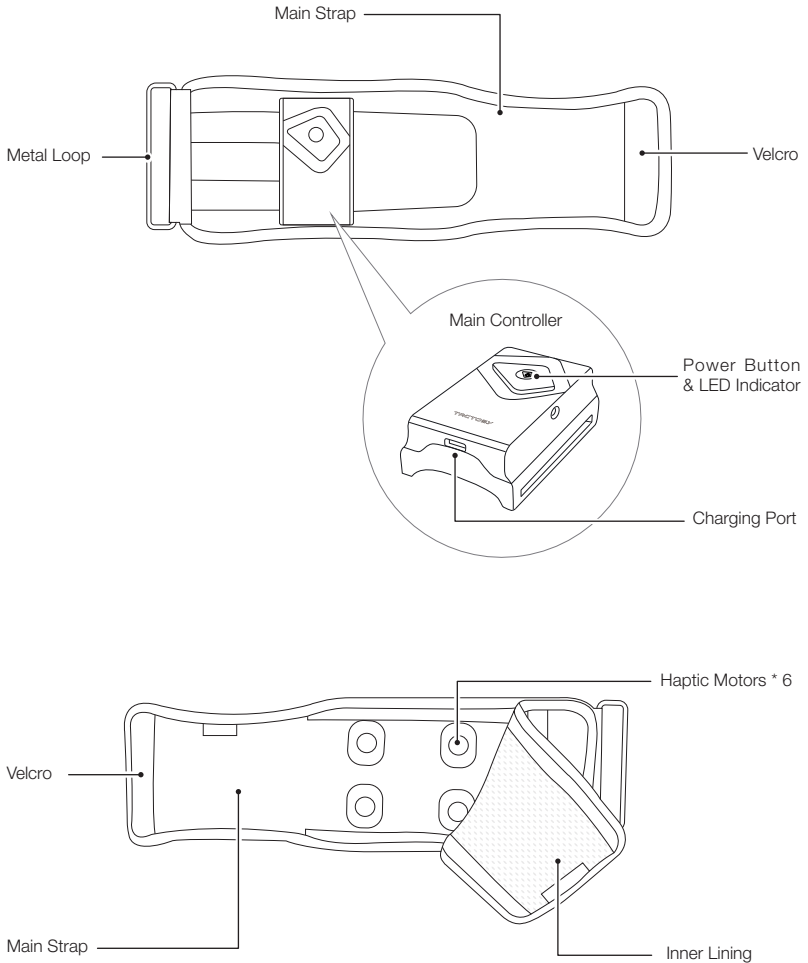
bhaptics.com/shop

Additional Components can be purchased from bHaptics online shop.











Additional Inner Lining

Part Names



This product uses 3.8V, 2900mAh, and 11Wh battery and charges to 5V (maximum 2A).

LED Indicator

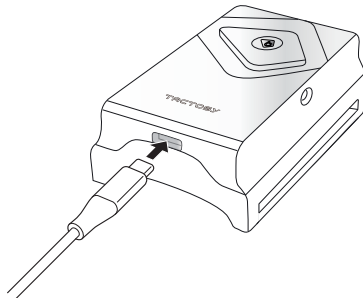
Color	State	Indication
 Yellow	Solid	Turn On (From Firmware v2.04)
 Blue	Blinking	Pairing Mode
 Blue	Solid	Paired (Left)
 Green	Solid	Paired (Right)
 Red	Solid	Low Battery / Charging
 Green	Solid	Fully Charged (From Firmware v3.00)
 No Light	Solid	Fully Charged (Prior to Firmware v3.00)
 Yellow	Solid	Ready for Firmware Update

02

Getting Started

Product Charging

Fully charge the device before using your Tactosy for the first time.



Charging



Red Solid



Fully Charged



Solid Green
(From v3.00)



No Light
(Prior to v3.00)

You can use 2A charging cable included in the package to charge the device. It takes about 1.5 hours to fully charge the device using 2A charging current. When fully charged, the LED indicator will turn off.



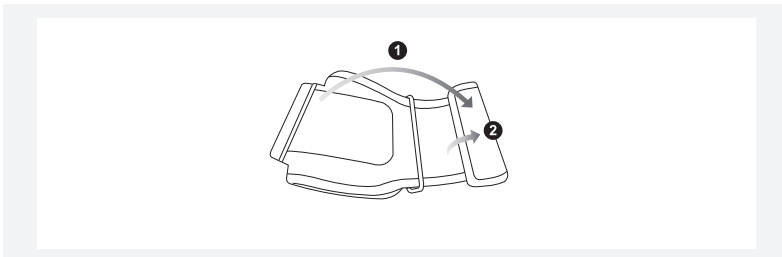
Be sure to use an authorized AC adapter and included charging cable to charge the product. Use of an unauthorized device or accessory may result in personnel injury, may cause damage of the product or your property, and may void your warranty.



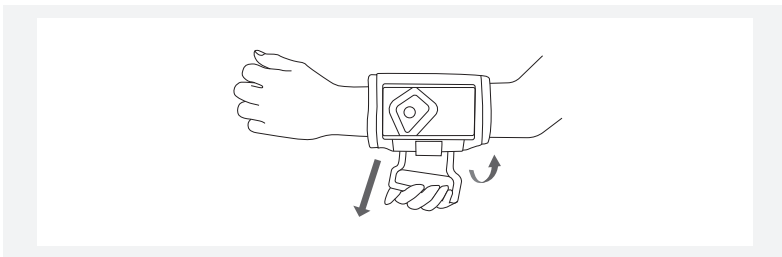
If the product is left unattended for a long time while the battery is discharged, the LED may not light even if the charging cable is connected. In this case, the light turns on again after charging for more than 1 hour.

Product Fitting

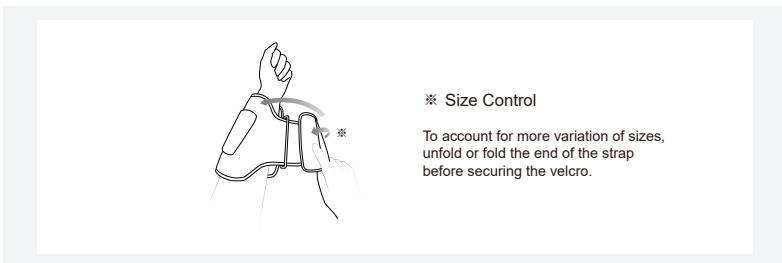
- 1 Loosen the main strap by detaching from the velcro.



- 2 Wear the device on your arm and then pull the main strap to adjust the fitting.



- 3 Attach the end of the main strap to the velcro to fasten the device around your arm.



Power On / Off

Power on

Click the power button on the main controller, the LED indicator will blink blue as it waits for pairing.



Push



Ready to be Paired
when Blinking Blue



If the Power does not turn on, check if it is sufficiently charged.

Power Off

Not Paired (Blinking LED)

A short click of the power button will turn off the device.

※ The device will be turned off automatically if it is left unpaired for 3 minutes.

Paired (Solid LED)

A long press for 3 sec of the power button will turn off the device.

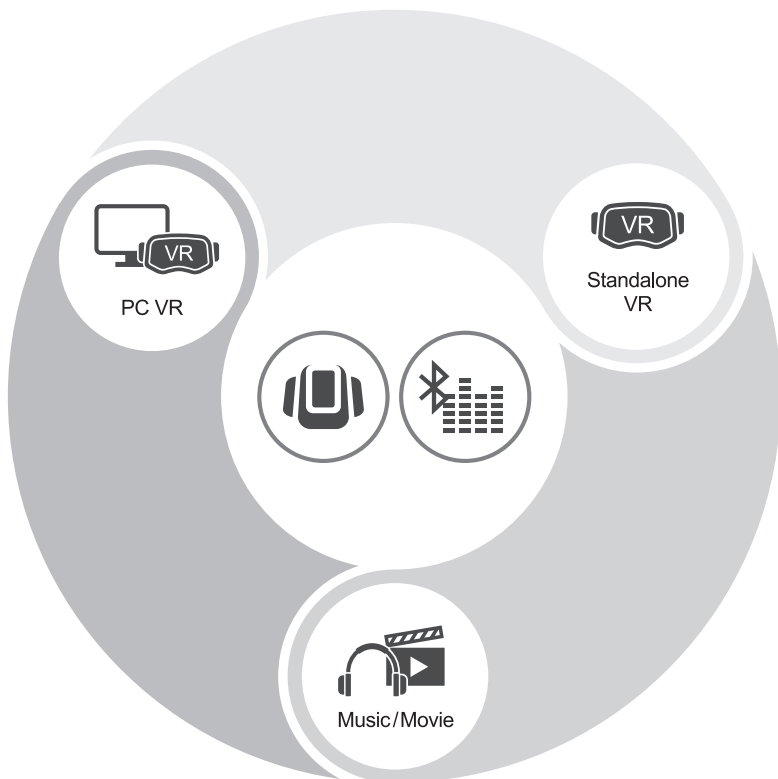
※ Once the device is turned on again, it will automatically be connected to the previously paired host device, such as VR HMD, PC, and Mobile.

※ If 'Turn off After' feature is activated, the device will be turned off automatically when there has been no vibration for a designated amount of time. The activation of the feature and the time setting can be done from the bHaptics Player software.*

**Refer to p. 21 for more details*

Enjoy

Enjoy state-of-the-art haptic feedback and seamless connectivity for VR and Movie/Music.



03

How to Play

Embedded Haptics



Playing Content with Embedded Haptics

Audio-based Haptics (Wireless)



Playing Content without Embedded Haptics



PC VR



Standalone VR



Music/Movie



Go to Setup



PC VR

Playing Content with Embedded Haptics

Embedded haptic feedback for this content will be delivered according to the events, enhancing your immersion more than ever before.

1) Pairing the Tactosy with PC

1 Install Bluetooth Driver

- Insert the provided dongle into a USB port on your Windows PC. The driver will be automatically installed.
- If you have previously installed other Bluetooth drivers, open [Device Manager] > [Bluetooth] on Windows, and disable all previously installed Bluetooth drivers except 'Generic Bluetooth Radio', 'Bluetooth Enumerator', 'Bluetooth LE enumerator.'



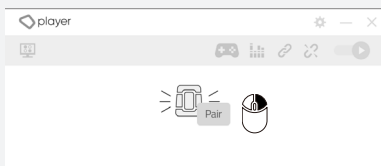
Do NOT try pairing on Windows Settings.

2 Install and run bHaptics Player

www.bhaptics.com/support/download

3 Right click the blinking device icon and click "Pair"

The blue LED indicates the left side, and the green LED indicates the right side.



Paired
(Left)

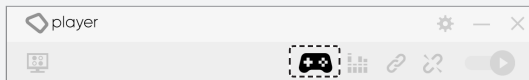


Paired
(Right)

- ##### 4 (If necessary) Right click the device icon and click "Swap to Right/Left" to swap the right and left sides of the paired devices.

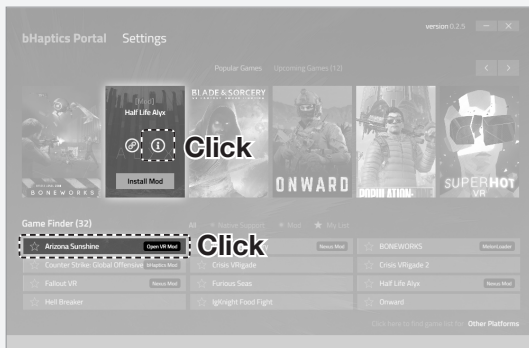


2) Open “bHaptics Portal”



Be sure to disable the "Audio-based Haptics" feature. Leaving the feature ON will deliver automatic feedback generated by the "Audio-based Haptics" function instead of the content's embedded feedback.

3) Choose the content you want to play and install it



Not all listed content supports Tactosy for Arms. Please find the supported content for each device from the official webpage (<https://www.bhaptics.com/experiences/vr>).



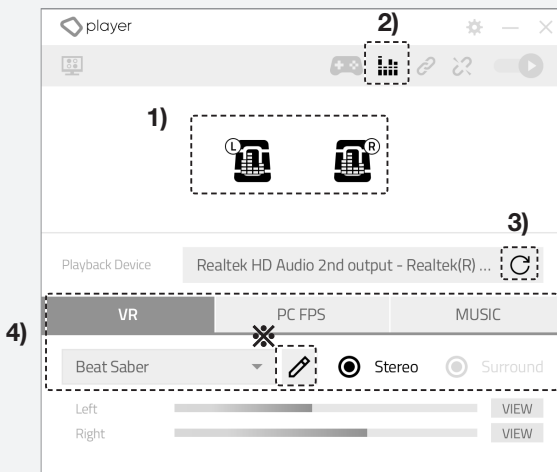
Some content requires mod tool installation.
The installation guide can be found by clicking “” icon from each game page.

Playing content without Embedded Haptics



Enjoying Audio-based Haptics (Wireless)

Audio-based Haptics feature creates haptic feedback in real time based on audio output of content. You can now enjoy all content regardless of native integration.



1) Pairing the Tactosy with PC*

** Refer to p. 12*

2) Turn on Audio-to-Haptic function

When Audio-to-Haptic function and audio signals are on, the audio signal animation will appear on the device icon.

3) Click to sync audio capturing device and playback device of Windows

4) Select Content Type (VR / PC FPS / Music) and Profile you will be using

※ Click to customize frequency, threshold, activation area using bHaptics Studio*

**Refer to p. 24 for more details*



Playing Content with Embedded Haptics

Check the Standalone VR content with embedded haptics at www.bhaptics.com/games.



Not all listed content supports Tactosy for Arms. Please find the supported content for each device from the official webpage (<https://www.bhaptics.com/experiences/vr>).

1) Pairing the Tactosy with Oculus Quest

- ① Go to oculus quest system **[Settings]**
 - ② Select **[Experimental Features]**
 - ③ Find **[Bluetooth Pairing]** menu and click **[Pair]** button
 - ④ Select **[+Pair new device]** and pair your Tactosy
- ※ You can sawp the right and left sides of the paried devices in in-game settings.

2) Run a native supported game and enjoy

Enjoy optimized haptic feedback pre-embedded in VR games.

※ You can manage more detailed settings of the Tactosy by downloading 'bHaptics player' from Oculus Quest App Lab

Please search 'bHaptics player' on the Oculus Quest store or download from our website (<https://www.bhaptics.com/support/downloads>).





Music / Movie



Enjoying Audio-based Haptics (Wireless)

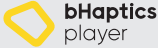
Feel the trembling bass, beats, rhythm and action with audio-based haptics.

Please refer to PC VR > Enjoying Audio-based Haptics (Wireless)*

**Refer to p. 14*

04

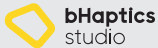
bHaptics Software



bHaptics Player

bHaptics Player is an essential software required to connect your device with PC and mobile. You can manage the play mode (Embedded Haptics / Audio-based Haptics), haptic intensity, visualization tool and access bHaptics Portal using this software.

<https://www.bhaptics.com/support/download>



bHaptics Studio

bHaptics Studio is an Audio-based haptic customization tool which allows you to create or edit the profile by selecting range of frequencies, threshold and activation area of the vest to feel the sound.

<https://studio.bhaptics.com/>



bHaptics Designer

bHaptics Designer is a web-based haptic feedback authoring tool that you can use to create haptic patterns by clicking and dragging between visualized haptic feedback points. Simply click on the "Export" button to integrate haptic patterns into your content.

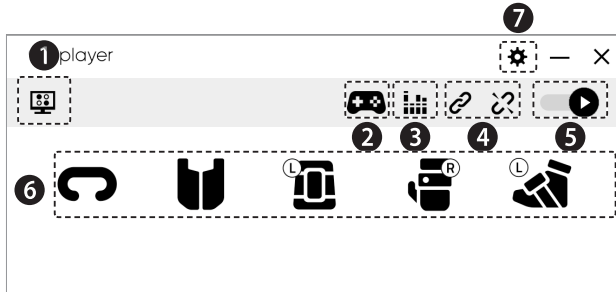
<https://designer.bhaptics.com/>



SDKs

SDKs are available for Unity and Unreal. The SDKs include a library of over 300 different haptic feedback. For more information, please refer to the manual that is provided with respective plug-in.

<https://www.bhaptics.com/support/developer/>



1 Feedback Monitoring

Monitor the haptic feedback in realtime

2 Content Portal

Find, download and install the list of games with Embedded Haptics

3 Audio-to-Haptic

Activate wireless Audio-based Haptics

4 Pair/Unpair All

Pair or Unpair all scanned or paired devices

5 Play & Pause

Play & Pause haptic feedback

6 Device Panel






List of devices which are paired and waiting to be paired
Pairs, unpairs and controls intensity of haptics for each devices

7 Settings

Manage device pairing, run feedback test, find opensource license and control settings

Device Control

Device Status

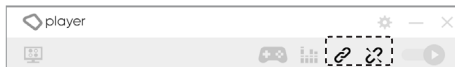
				
Scanned	Connected (Left)	Connected (Right)	Audio-based Haptics (Wireless)	Notice

Device Pairing

1 Individual Pairing : Right Click on the device icon to pair/unpair.



2 Pair All : Click on Toolbox icon to pair/unpair all devices.



Device Information

Mouse over each device icon to check the device information.

Or you can also go to **Settings** > **Device**



Scanned

Tactosy2
RSSI -47dB



Connected

Tactosy2
Status : Connected
Battery : 35%
Feedback Intensity : 40%

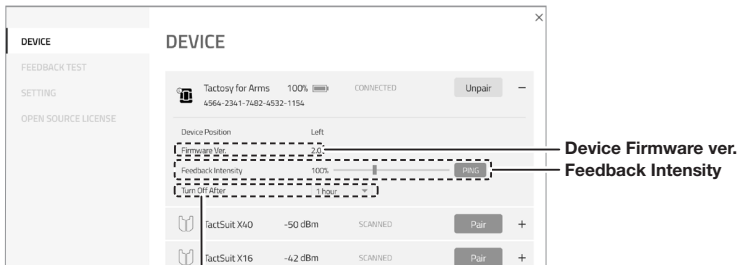
Intensity Adjustment

You can adjust the feedback intensity of each device in realtime by clicking on each device icons.



Device Management

You can check the list of device from **Settings** (gear icon) > **Device**. Here you can pair/unpair devices, check the device information, and change the devices settings.



Turn Off After

You can set the time to turn off the device automatically when there is no active haptic feedback for the set time.

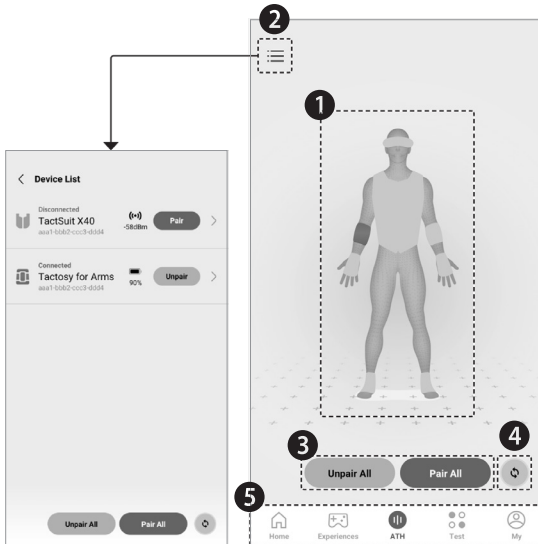


bHaptics Player (Mobile)

bHaptics Player (Mobile) is an application used to change profiles and settings when using “wired” options for Audio-based Haptics*.



<https://www.bhaptics.com/support/download>





1 Device Panel	Find devices ready to be paired, Pair the searched devices by a drag and drop, Unpair the devices by clicking the icons and selecting the unpair button
2 Device List	Check scanned or paired device information
3 Pair/Unpair All	Pair all scanned devices / Unpair all paired devices
4 Scan	Scan all active devices in pairing mode
5 Menu	Manage device pairing, configure Audio-based haptics* frequency settings, run feedback test, and manage account
6 Settings	Manage app settings and find information

**Wired Audio-to-Haptic is available for TactSuit X Series only.*

Device Control



Bluetooth  and location  setting must be activated from your mobile settings. Do not pair directly from the Bluetooth settings on your mobile phone.

Device Status



Scanned





Connected

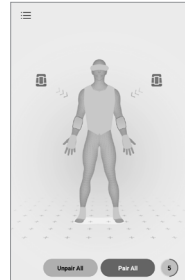


Disconnected

Device Pairing

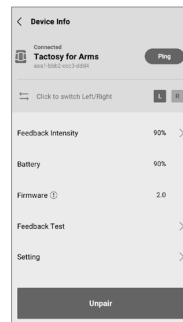
- 1 Click the Scan button  to search for TactSuit devices.
- 2 Drag and Drop the icon of the scanned device to pair.

- ※ Click the Pair All button  to pair all scanned devices.
- ※ Go to the Device List menu to selectively pair multiple devices.



Device Management

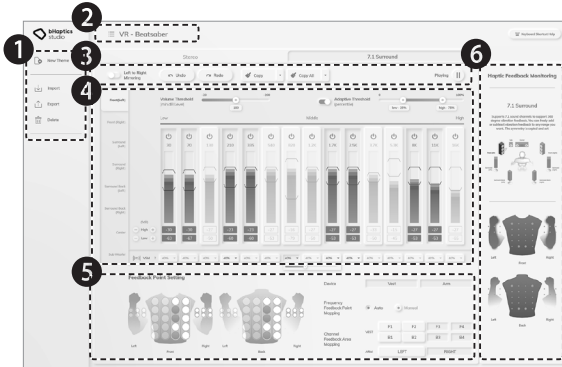
Manage more detailed settings of the paired devices from the Device List menu.



bHaptics Studio is an Audio-based Haptics customization tool which allows you to create or edit the profile by selecting range of frequencies, threshold and activation area to feel the sound.

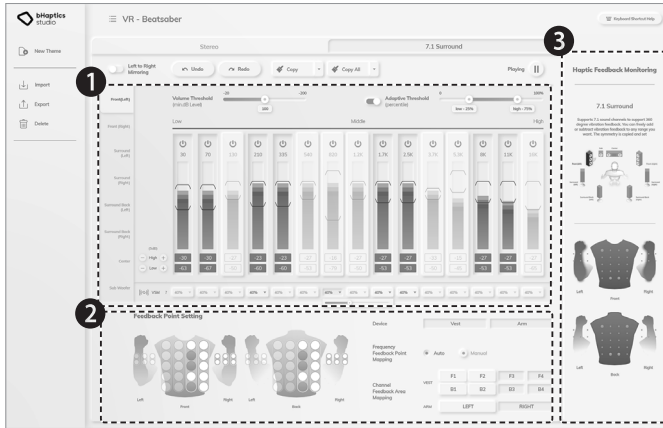


Currently bHaptics Studio only supports Windows OS.



1 Menu	Create new Profile / Import / Export / Delete
2 Profile List	Select/Edit list of profiles
3 Tools	Edit the profile using the tools
4 Frequency and Threshold Setting	Set threshold value by monitoring the dB changes of each frequencies for each audio input real-time.
5 Feedback Point Setting	When an audio signal is input, the haptic feedback point for each devices can be selected.
6 Haptic Feedback Monitoring	Monitor how the audio signal input is being converted to haptic feedback real-time.

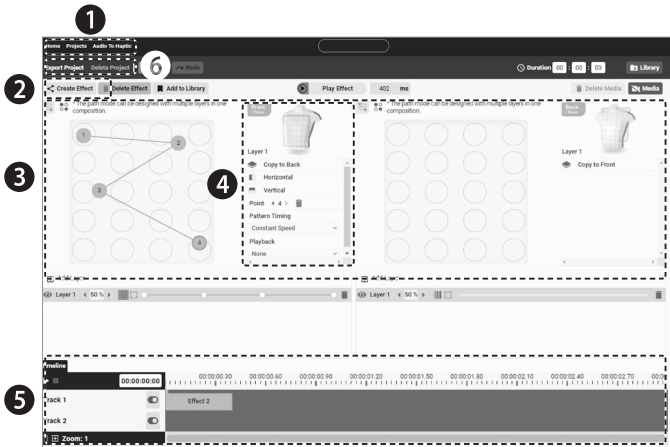
How to Use



- 1 Select frequency band using on/off button and adjust the threshold by dragging the brackets based on the decibel (dB) level on the Audio Signal Panel. The audio signal panel will show frequency response of the sound you are playing now.
- 2 Select activation area for each frequency.
- 3 Monitor activated haptics in realtime for each frequencies and feedback point.

※ Full guide video is available at www.youtube.com/bHaptics

bHaptics Designer is a web-based haptic feedback authoring tool that you can use to create haptic patterns by clicking and dragging between visualized haptic feedback points. Simply click on the “Export” button to integrate haptic patterns into your content. This tool will help you minimize development time and effort significantly.



How to Use

- 1 Projects > Create Project.
- 2 Create Effect.
- 3 Click on feedback point and drag to the next point to create path and design patterns you wish to create.
- 4 Edit more sophisticated settings such as timing, speed and directions.
- 5 Play and edit timeline of the haptic feedback pattern you have created.
- 6 Export Project and import your “.tact” files into your own engine.

※ Full guide video is available at www.youtube.com/bhaptics

05

Appendix

Product Specifications

Product Name	TACTOSY for Arms
Model Name	BHTTS0100
Main Functions	Replicate and deliver stimulation through vibrotactile feedback
Feedback Point	Total: 12 points (6 for each arm)
Size	Free (fits 5.5" to 14" wrists)
Weight	320g / 0.71lbs (each)
Operation Time	18.4 hours (Measured when all feedback points operating for 1 second every 5 seconds with maximum intensity.)
Operational Temperature	0 ~ 35 °C
Operational Relative Humidity	From 5% to approx. 95%
Wireless Frequency	2.402 - 2.480 GHz (Bluetooth LE)
Peak Output Power	0.13 mW
Connection Type	Bluetooth Low Energy (BLE)
Battery	Li-ion Rechargeable Battery (3.8 V, 2900 mAh, 11 Wh)
Charging Type	5 V, 2 A max

FAQ

Which Content(Platform) can I enjoy?

You can enjoy various content on VR (both PC-based VR and Standalone VR) and PC(Games, Music, and Movies)

Does Tactosy for Arms provide body tracking?

All TactSuit series does not provide body tracking.

What is the playtime of Tactosy for Arms?

In a *normal use, Tactosy for Arms lasts up to 18.4 hours once it is fully charged.

*When all feedback points are operating for 1 sec in every 5 sec at maximum intensity

How can I control the intensity of haptic feedback?

- P C - Pair the device using bHaptics Player on your PC. The intensity control bar will appear when you click on the paired device icon. You can click and drag the bar to adjust the intensity of haptic feedback.
- Mobile - Pair the device using bHaptics Player app on your mobile device. Feedback intensity control buttons will appear under each paired device on the Device tab.

Can I wash Tactosy?

The main part of TactSuit contains electric motors and wires and cannot be washed. In case of contamination, gently wipe the contaminated area with a soft cloth. (The mesh lining can be detached and washed)

※ More FAQ list is available at www.bhaptics.com/support/faqs.

I can't connect Tactosy to my PC. Is the Tactosy or Bluetooth dongle defective?

Open Device Manager on your PC and disable PC's internal Bluetooth before inserting the provided dongle. If you see CSR Bluetooth Radio under Bluetooth, please uninstall all software related to CSR Bluetooth, then insert the provided dongle.

I keep losing connection to the PC when I turn around or stand up.

Securing the line-of-sight between the TactSuit and the Bluetooth dongle is required for seamless Bluetooth connection. Please insert the Bluetooth dongle to the front of the PC, rather than the back.

Why does the device switch off automatically?

When the device is left unpaired (blinking LED) for 3 minutes, the device will be turned off automatically.

In addition, if 'Turn off after' feature is activated, the device will also be turned off automatically when there has been no vibration for a designated amount of time. Please check and adjust the 'Turn off after' settings from bHaptics Players.



Health & Safety Warnings

To reduce the risk of personal injury, property damage or device performance failure, please carefully read the following warnings before using the product.

Before using the product, read and follow all the instructions in this manual when setting up and operating the product.

- The product is not a toy and should not be used by children under the age of 13. The product is not sized for children and improper sizing can lead to discomfort or adverse health effects.
- Be sure to use recommended hardware, software and certified devices, accessories. Use of an unauthorized device, accessory, software, or content, or hacking the device, software, or content may result in injury to you or others, may cause performance issues or damage to your system and related services, and may cause damage not covered by your warranty.
- Do not use the product if you have a muscle ache, a headache, a cold, a hangover, stress, or if you are intoxicated or taking any kind of medicine.
- If you are pregnant, elderly, mentally ill or suffering from heart diseases or spinal/skin/muscle diseases, please consult your doctor before using the product.
- Keep the product out of the reach of children and pets. Children and pets may swallow small parts of the product, may pull on the charging cables and cause the damage of processor unit, or may wrap the cables around themselves, which may inflict injury or cause an accident or a malfunction of the product.



Always use the product in a safe environment to secure physical and mental safety and prevent damage to property.

- Never handle dangerous goods such as fire, knives, hot water, etc. while using the product, and do not use the product in situations that require attention, such as cycling, driving, or walking, or in unstable locations such as a car, train, or bus.
- Do not engage in any activities that may cause serious consequences (activities that may cause death, personal injury, or damage to property).
- You may experience reflex actions when startled by haptic feedback of the product, so please be sure to check your surroundings before using the product.
- Pay special attention when using the product with a VR headset as wearing a VR headset can completely block your perception of your actual surroundings.
- Before using the product, clean up things that may cause serious injuries, such as sharp objects and furniture, and always pay special attention while using the product.
- When using the product with an audio cable and wired headphones, the cables may become wrapped around the body which can cause a fall or strangulation. Avoid vigorous movements and pay keen attention to the location of the wires and surrounding objects that may get caught in the cables.
- Be careful that people, pets, and other obstacles do not suddenly appear while using the product.



If you have any of the following diseases, please be careful about using the product.

- **Heart Disease** If you are startled by haptic feedback from the product, it can be hard on your heart. Therefore, please consult your doctor before using the product.
- **Respiratory Disease** Excessive tightening of the side straps may cause breathing problems or seizures.
- **Spine/ Muscle Disease** When strong haptic feedback is delivered to your body, it can affect your spine and muscles. Please consult your doctor before using the product and do not use the product for too long.
- **Skin Disease** Avoid placing the product directly on sensitive or delicate skin, particularly in the case of children or individuals with sensitive skin. Direct exposure of bare skin to haptic feedback from the product may result in skin itching, rash, or swelling.

If you experience any of the following symptoms, discontinue use immediately and consult your doctor.

- Difficulty in breathing, dizziness, seizures, muscle cramps or stiffness, skin burning, excessive

sweating, headache, fatigue, involuntary movements, nausea, swelling, itching, or rashes.

- Do not use the product until the above-described symptoms are relieved. If the symptoms persist, consult your doctor, and do not use the product again without your doctor's approval.
- It is possible that you may react more sensitively when using the product with a specific type of content. In such cases, please remember the type of content you were using when you experienced the symptoms and take special care and pay attention to the symptoms when using the product with such content.

Interference with Medical Devices

The product may contain magnets or components that emit radio waves, which could affect the operation of nearby electronics, including cardiac pacemakers. If you have a pacemaker or other implanted medical device, consult your doctor or the manufacturer of your medical device before using the product.

- Do not use the product in hospitals or any transportations including aircrafts and automobiles.
- If there are any electronic devices nearby, make sure to maintain a safe distance between the product and electronic devices.
- We recommend not using the product if you or a nearby person has a pacemaker or any other implanted medical device.
- If you must use the product inevitably even though you have a pacemaker, please consult your doctor before using the product and be sure to maintain a safe distance (at least 15cm) between the product and your medical device.
- Stop using the product as soon as you experience interference between the product and your medical devices



Cautions

1 Product Usage Precautions

- Use the product only for its intended purpose.
- The recommended environments for stable operation are as follows:
 - Temperature : 32 ~ 95°F (0 ~ 35°C), Humidity : 5 ~ 80%
 - Do not use the product in dusty places
- You may get zapped when you use the product in a dry place. This is caused by static electricity, and not a product malfunction.
- Be sure to use accessories and parts that bHaptics Inc. provides, or get official approval from us before using. If not, we cannot guarantee the safety of the user and we are not responsible for any damage caused by this.
- Please follow the instructions to wear the device fitted to your body. Otherwise, you may feel discomfort and may not feel the haptic feedback properly.
- When you use the product while the charging cable is connected, be careful that the cable is not wrapped around your body or legs, and check frequently during use.
- Use of the product in a moving vehicle such as a car, bus, plane or train may increase your susceptibility to adverse symptoms due to variation in speed or sudden movement.
- We recommend that you do not share the product with others. If you must do so, please clean the device with a clean and soft cloth between each use. Additionally, we recommend periodically replacing or washing the inner mesh lining to maintain the product in hygienic conditions.
- If you use the product frequently or for a long period of time, you may experience tiredness or soreness in your muscles. Therefore, take a rest between uses, even if you do not think you need it. If you feel discomfort, take longer and more frequent breaks.



- Do not cause a strong impact to the product (do not drop the product or place a heavy object on it).
- The product contains a rechargeable Lithium-Ion battery. Please follow the instructions below for your safe usage of the product and to prevent personal injury or damage to the product:
 - Do not use external battery packs or power sources other than the included charging cable. If you want to use your own cable, please contact bHaptics Support team.
 - If you have any problems related to the battery, contact bHaptics Support team. Never open the main controller of the device and attempt to repair or replace the battery by yourself.
- Please follow the instructions below when pairing via Bluetooth.
 - When pairing, place the product near your PC, laptop or mobile. If not, the product can be connected to a different device or can fail to pair with your device.
 - To secure a stable connection, remove any obstacles between the product and your device. Also, please use the product within the Bluetooth range.
 - Bluetooth uses the same frequency band as some industrial, scientific, medical devices, and electronics, and low-power devices such as wireless LAN, which may cause electronic interference between devices. Therefore, please do not use this device in places where it can cause malfunctioning of electronic devices, resulting in serious personal injury and damage to property (e.g., hospitals, transportation, etc.).
 - The product may not be compatible with some devices, including those that are not approved by Bluetooth Special Interest Group (SIG)
 - Do not use Bluetooth for illegal purposes (e.g., pirating copies, illegal public transmission, etc.)
- Stop using the product immediately if you have an allergic reaction to the fabric or metals of the product.
- To prevent electric shock, do not disassemble, modify, or open any of the product components.

Cautions

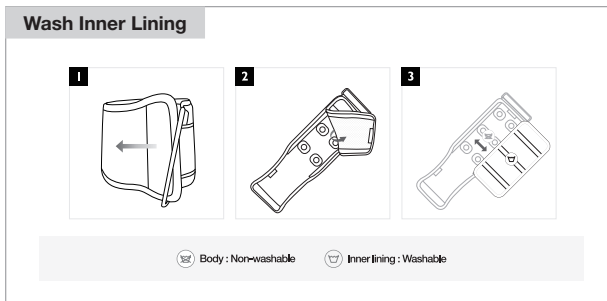
If the product is broken or damaged (especially if any cable is damaged or a wire is exposed), do not use the product, and contact bHaptics Support Team.

2 Product Care Precautions

- Keep the product in the following environment to prevent degradation of the product.
 - Keep the product in cool and dry place(Recommended storage temperatures: 32 ~ 75°F (0~24°C), 5~30% humidity)
 - Do not expose the product to dust, smoke, steam, or direct sunlight.
 - The product includes haptic motors and cables, so to prevent breakdown of the product, do not leave or store the product folded and crumpled. Put the product in the package box and store it in a safe place when not in use.
- Keep the product out of reach of children and pets for their safety and to prevent damage to the product.
 - Children or pets may swallow small parts of the product or wrap the cables around themselves, which may cause injury, accidents, or malfunctions.
 - If they swallow any parts, please consult with a doctor immediately.
- Be careful not to drop, throw, or bend the product, as this may cause damage.
 - If it happens and you suspect any damages, please contact the bHaptics Support Team.
- If the product is damaged or malfunctioning, stop using it immediately and contact bHaptics Support team. Unauthorized repair may cause further damage and void your Warranty.
- Do not allow liquid, small particles, or other foreign objects to enter the product. If this happens, stop use, turn off the product, disconnect it from the electrical outlet immediately, and contact bHaptics Support team.
- If battery leaks:
 - Do not allow the leaking fluid to come into contact with skin, eyes, or clothing. If already in

contact, DO NOT RUB; flush the affected area immediately with clean water and consult with your doctor. Take extra precautions to keep a leaking battery away from fire as there is a danger of ignition or explosion.

- The product is an electronic device and is non-washable. If it becomes contaminated, gently wipe it with a soft cloth or tissue.
 - Do not use strong chemicals such as solvents, cleaners, chemically treated cloth, etc., to clean the product and inner mesh lining. Using these on the devices will cause internal and external damage to the product.
- The inner mesh lining can be detached and machine washed with neutral detergent (note: frequent machine wash can cause deterioration).
 - If you use a drying machine, please set the temperature to "low" to prevent deterioration of the product.
 - We recommend replacing the inner mesh lining periodically to maintain the product in hygienic conditions.



- If the product or accessories need repair, please contact bHaptics Support Team.
- Do not dispose of the product in fire and never place it near heating equipment or high voltage appliances.
 - When the product or the battery overheats, it may explode.
 - Please follow all applicable laws and regulations when recycling or disposing of the product and battery. Disposal of certain electronic devices is strictly regulated in some areas.



Limited Customer Warranty

READ THIS INFORMATION BEFORE USING YOUR DEVICE. THIS LIMITED WARRANTY CONTAINS A MANDATORY ARBITRATION CLAUSE WITH A CLASS ACTION WAIVER.

BY USING YOUR BHAPTICS PRODUCT, YOU AGREE TO THE LIMITED WARRANTY INCLUDING THE MANDATORY ARBITRATION CLAUSE AND CLASS ACTION WAIVER BELOW. IF YOU DO NOT ACCEPT THIS LIMITED WARRANTY, DO NOT USE YOUR BHAPTICS PRODUCT.

INSTEAD, PLEASE RETURN IT TO BHAPTICS OR THE RETAILER FROM WHOM YOU PURCHASED IT WITHIN THE RETURN PERIOD STATED IN BHAPTICS'S RETURN POLICY (FOUND AT [HTTPS://WWW.BHAPTICS.COM/LEGALS/CANCELLATION-RETURN-REFUND](https://www.bhaptics.com/legals/cancellation-return-refund)) FOR A REFUND.

- **INTELLECTUAL PROPERTY**

All Intellectual Property, as defined below, owned by or which is otherwise the property of bHaptics or its respective suppliers relating to the Product, including but not limited to, accessories, parts, or software relating thereto, is proprietary to bHaptics and protected under international treaty provisions, country laws, federal laws, and states laws. Intellectual Property includes, but is not limited to, inventions (patentable or unpatentable), patents, trade secrets, copyrights, software, computer programs, and related documentation and other works of authorship.

You may not infringe or otherwise violate the rights secured by the Intellectual Property. Moreover, you agree that you will not (and will not attempt to) modify, prepare derivative works of, reverse engineer, decompile, disassemble, or otherwise attempt to create source code from the software. No title to or ownership in the Intellectual Property is transferred to you. All applicable rights of the Intellectual Property shall remain with bHaptics and its suppliers.

- **WHO IS THIS WARRANTY FROM?**

This limited consumer warranty (the "Warranty") is issued by bHaptics Inc. of Bldg 3 Unit 503, 70, Yuseong-daero 1689beon-gil, Yuseong-gu, Daejeon, Republic of Korea ("bHaptics", "we", "us").

- **WHO IS THIS WARRANTY TO?**

bHaptics issues this warranty to you, as a consumer who has purchased a new, covered product from bHaptics or an authorized retailer ("you"). This Warranty is not available to products that were purchased from any source other than bHaptics or an authorized retailer.

This Warranty applies only to those countries to which bHaptics ships and supports. For



information about the countries bHaptics supports, go to www.bhaptics.com/shop.

- **WHAT IS COVERED BY THIS LIMITED WARRANTY AND FOR HOW LONG?**

This Warranty covers defects and malfunctions in the new bHaptics product(s) it accompanies (the “Product”). We warrant that the Product will, under normal and intended use, function substantially in accordance with our technical specifications or accompanying product documentation (the “Warranted Functionality”) during the Warranty Period.

This limited Warranty continues for one (1) year from the date of purchase or delivery of the Product, whichever is later (the “Warranty Period”). However, if you purchase the Product from within the EU or EFTA, the Warranty Period shall be two (2) years.

If and to the extent the Product needs bHaptics software or services to achieve the Warranted Functionality, we will make and keep the software and services available during the Warranty Period. We may update, modify or limit such software and services in our sole discretion so long as we continue to maintain (or exceed) the Warranted Functionality.

This Warranty gives you specific legal rights, and you may also have other rights, which vary from country to country (or by state or province). This Warranty is in addition to and does not affect any rights you have under the laws in your jurisdiction concerning the sale of consumer goods.

- **WHAT IS NOT COVERED BY THIS LIMITED WARRANTY?**

This limited Warranty does not apply: (i) if the Product serial number, the date code or the water indicator has been removed, erased, defaced, or altered, or is illegible; (ii) to any deterioration of the cosmetic appearance of the Product due to normal wear and tear; (iii) to rips and peeling of textile elements, straps, or zippers; (iv) to protective coatings that are designed to diminish over time or batteries, unless failure has occurred due to a defect in materials or workmanship; (v) to damage caused by misuse, accident (e.g. accidental physical impact, exposure to liquid, food or other contaminants, etc.), neglect, abuse, forces of nature, or other actions beyond the reasonable control of bHaptics (including but not limited to deficiencies in consumable parts) unless the defect was caused directly by a malfunction; (vi) to damage caused by improper or unauthorized repair or other modification, tampering, or use with unsuitable equipment, devices, software, services or other unauthorized third-party item(s); (vii) to used or resold products unless they meet the conditions specified for covered Refurbished Products (as defined below); (viii) to Products purchased from sources other than bHaptics or a bHaptics authorized retailer (including nonauthorized online auctions); (ix) to use of the Product in violation of any laws, regulations or ordinances in effect where the Product is used; (x) to features or performance parameters pertaining to any software or services beyond the Warranted Functionality of the Product. This Warranty does not include any specific guarantees that the product will be error-free, or

regarding uptime or continued availability, data security features of software or online accounts, or that any software, firmware or online sites will function uninterrupted or error-free.

- **WHAT WILL BHAPTICS DO IF THERE IS A PROBLEM WITH THE PRODUCT?**

If your Product is defective or malfunctioning, we will either repair or replace that Product, or update software or services, so that the Product performs substantially according to the Warranted Functionality. The approach taken to resolve any issues will be at our sole choice. If we determine that a product should be replaced, the replacement may be a new, refurbished, or remanufactured Product. If we determine, in our sole discretion, that none of the listed means are reasonable to correct for a defect or malfunction, then we may refund to you the price you paid to purchase the Product.

Any repaired or replaced Product will continue to be covered by this Warranty for the remainder of the original Warranty Period or ninety (90) days following your receipt of the replacement or repaired Product, whichever is greater.

- **WHAT MUST YOU DO TO OBTAIN WARRANTY SERVICE?**

In the event of a perceived malfunction in the Product, please visit us at <https://www.bhaptics.com/support/contact-us> to get helpful services, the user manuals and contact information, and to submit a claim form to obtain warranty service. If it is necessary for you to send your Product in for service, we will provide you with a pre-addressed shipping label, and you will have to send the Product in an adequate container for shipping, accompanied by the sales receipt or comparable proof of purchase showing the original date of purchase by the first consumer purchaser, the serial number of the Product and the seller's name and address.

You may be required to pay the cost of shipping the Product to us, and by sending the Product, you agree to transfer ownership of that Product to bHaptics. When we receive the Product, we will determine if there is a defect or malfunction covered by this Warranty. If we find a defect or malfunction covered by this Warranty, we will repair or replace the Product to provide the Warranted Functionality, and we will send the repaired Product, if any, to you at our cost. We may not return the original Product to you.

If we are unable to verify your proof of purchase in advance, and you send us a Product without a valid proof of purchase, then we reserve the right to return the Product to you at your cost, subject to prepayment, or, if such costs are not prepaid, we will keep the Product for thirty (30) days for your pick-up before it is disposed of.

- **REFURBISHED PRODUCTS**

This Warranty also applies to Products which have been refurbished by bHaptics and purchased from bHaptics ("Refurbished Products"). The limited Warranty Period for Refurbished Products is one (1) year from the date of purchase or delivery of the Refurbished Product, whichever is later (the "Warranty Period"). However, if you purchase the Refurbished Product from within the EU or EFTA, the Warranty Period shall be two (2) years. Minor cosmetic imperfections of the Refurbished Products, if present, are not included in the Warranty coverage.

- **WHAT ARE THE LIMITS ON BHAPTICS' LIABILITY? (NOT APPLICABLE TO RESIDENTS OF QUÉBEC WHO ENTER INTO A CONTRACT TO WHICH THE CONSUMER PROTECTION ACT (CPA) APPLIES)**

TO THE EXTENT PERMITTED BY LAW, THIS LIMITED WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES, AND CONDITIONS. BHAPTICS LIMITS THE DURATION AND REMEDIES OF ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS TO THE DURATION OF THIS WARRANTY AND, AT BHAPTICS' OPTION, THE REPAIR OR REPLACEMENT SERVICES DESCRIBED BELOW. IN NO EVENT SHALL BHAPTICS BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT OR FOR, WITHOUT LIMITATION, COMMERCIAL LOSS OF ANY SORT; LOSS OF USE, TIME, DATA, REPUTATION, OPPORTUNITY, GOODWILL, PROFITS OR SAVINGS; INCONVENIENCE; INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES; OR DAMAGES ARISING FROM THE USE OR INABILITY TO USE THE PRODUCT.

Some countries and jurisdictions (states and provinces) do not allow limitations on how long an implied warranty lasts, or the disclaimer or limitation of incidental or consequential damages, so the above limitations and disclaimers may not apply to you.

- **SEVERABILITY**

If any portion of this Limited Warranty is held to be illegal or unenforceable, such partial illegality or unenforceability shall not affect the enforceability of the remainder of the Limited Warranty.

- **GENERAL**

Nothing contained in the user manual or any other document shall be construed to create an express warranty of any kind with respect to the Product. No agent, employee, dealer, representative or reseller is authorized to modify or extend this Limited Warranty or to make binding representations or claims, whether in advertising, presentations or otherwise, on behalf of bHaptics regarding the Products or this Limited Warranty.

- **AGREEMENT TO ARBITRATE DISPUTES (NOT APPLICABLE TO RESIDENTS OF QUÉBEC WHO ENTER INTO A CONTRACT TO WHICH THE CONSUMER PROTECTION ACT (CPA) APPLIES)**

PLEASE READ THE FOLLOWING SECTION CAREFULLY BECAUSE IT REQUIRES YOU TO ARBITRATE CERTAIN DISPUTES AND CLAIMS WITH BHAPTICS AND LIMITS THE MANNER IN WHICH YOU CAN SEEK RELIEF FROM BHAPTICS

- **BINDING ARBITRATION**

Except for disputes in which either party seeks to bring an individual action in small claims court, You and bHaptics agree (a) to waive Your and bHaptics' respective rights to have any and all disputes or claims arising from or related to this Limited Warranty or the sale, condition, use, or performance of the Product (collectively, "Disputes") resolved in a court, and (b) to waive Your and bHaptics' respective rights to a jury trial. Instead, You and bHaptics agree to arbitrate Disputes through binding arbitration (which is the referral of a Dispute to one or more persons charged with reviewing the Dispute and making a final and binding determination to resolve it instead of having the Dispute decided by a judge or jury in court).

- **NO CLASS ARBITRATIONS, CLASS ACTIONS OR REPRESENTATIVE ACTIONS.**

You and bHaptics agree that any Dispute arising out of or related to this Limited Warranty, is personal to You and bHaptics and that such Dispute will be resolved solely through individual arbitration and will not be brought as a class arbitration, class action, or any other type of representative proceeding. You and bHaptics agree that there will be no class arbitration or arbitration in which an individual attempt to resolve a Dispute as a representative of another individual or group of individuals. Further, You and bHaptics agree that a Dispute cannot be brought as a class or other type of representative action, whether within or outside of arbitration, or on behalf of any other individual or group of individuals.

- **NOTICE; INFORMAL DISPUTE RESOLUTION.**

You and bHaptics agree that each party will notify the other party in writing of any arbitrable or small claims Dispute not less than thirty (30) days of the date it arises, so that the parties can attempt in good

faith to resolve the Dispute informally. Notice to bHaptics shall be sent to bHaptics Inc., Bldg 3 Unit 503, 70, Yuseong-daero 1689beon-gil, Yuseong-gu, Daejeon, Republic of Korea (34047). Your notice must include (a) Your name, postal address, telephone number, the email address You use, (b) a description in reasonable detail of the nature or basis of the Dispute, and (c) the specific relief that You are seeking. Our notice to You will be sent electronically to the email address You use and will include (a) our name, postal address, telephone number, and an email address at which we can be contacted with respect to the Dispute, (b) a description in reasonable detail of the nature or basis of the Dispute, and (c) the specific relief that we are seeking. If You and bHaptics cannot agree how to resolve the Dispute within thirty (30) days after the date notice is received by the applicable party, then either You or bHaptics may, as appropriate and in accordance with this Limited Warranty, commence an arbitration proceeding or, to the extent specifically provided for above, file a claim in small claims court.

- **PROCESS**

Except for Disputes in which either party seeks to bring an individual action in small claims court, You and bHaptics agree that any Dispute must be commenced or filed by You or bHaptics within one (1) year of the date the Dispute arose, otherwise the underlying claim is permanently barred (which means that You and bHaptics will no longer have the right to assert such claim regarding the Dispute). You and bHaptics agree that the arbitration shall be according to the American Arbitration Association Commercial Arbitration Rules applicable to consumer disputes (the "AAA Rules"), except insofar as those rules would be inconsistent with any part of this Limited Warranty, including without limitation the agreement to arbitrate. For claims of \$5,000 or less, You may decide whether You would prefer to have the arbitration decided based only on documents submitted to the arbitrator, or by a hearing in person or by phone. You may litigate a Dispute in the small claims court located in the U.S. country of Your residence if the Dispute meets the requirements to be heard in small claims court.

- **AUTHORITY OF ARBITRATOR.**

As limited by the Federal Arbitration Act, this agreement and the applicable AAA rules, the arbitrator will have the authority to grant any remedy that would otherwise be available in court, provided that the arbitrator's award may not exceed, in form or amount, the relief that a United States District Court could order under the Limited Warranted; provided, however, that the arbitrator does not have the authority to conduct a class arbitration or a representative action, which is prohibited by this Limited Warranty.

- **RULES OF AAA.**

The rules of AAA and additional information about AAA are available online at www.adr.org or by calling the AAA at 1-800-778-7879. By not opting out of this agreement to arbitrate as specified below, you either (a) acknowledge and agree that You have read and understand the AAA Rules, or (b) waive Your opportunity to read the AAA Rules and any claim that the AAA Rules are unfair or should not apply for any reason.



- **APPLICABILITY OF AGREEMENT TO ARBITRATE.**

IF THE PROHIBITION ON CLASS ARBITRATIONS SET FORTH ABOVE IS DEEMED TO BE UNENFORCEABLE, THEN THE AGREEMENT TO ARBITRATE WILL NOT APPLY TO THE CLASS CLAIM.

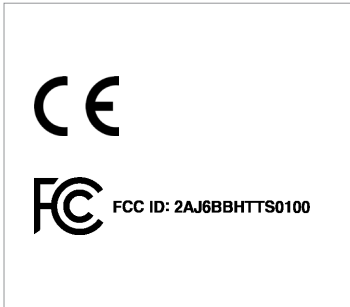
- **RIGHT TO OPT OUT.**

You may opt out of this agreement by providing notice to bHaptics no later than 30 calendar days from the date of the first consumer purchaser's purchase of the Product. To opt out, you must send notice by e-mail to support@bhaptics.com, with the subject line: "Arbitration Opt Out." You must include in the opt-out email (a) your name and address; (b) the date on which the Product was purchased; (c) the Product model name or model number; and (d) Serial Number (Please visit www.bhaptics.com/support/faqs and check General > Device Information to see how to find a serial number.) No other form of notice will be effective to opt out of this agreement to arbitrate. Opting out of this Agreement will not affect in anyway the benefits to which you would otherwise be entitled, including the benefits of the Limited Warranty.

Compliance

contact@bhaptics.com

+82-42-867-2468



Apparatus/Product Name	Tactosy for Arms
Model Name	BHTTS0100
Company	bHaptics Inc.
Manufacturer	bHaptics Inc.
Country of Origin	Republic of Korea

Bldg 3 Unit 503 , 70, Yuseong-daero 1689beon-gil, Yuseong-gu, Daejeon, Republic of Korea (34047)

Disposal and Recycling Information (European Economic Area only)

The crossed-out wheeled bin means that you are obliged by law to dispose of this equipment separately from the unsorted municipal waste collection system. Disposing of it in the residual waste bin or the yellow bin for recyclable materials is prohibited. If the product contains one-way batteries or rechargeable batteries that are not permanently installed, these must be removed before disposing of the product and be disposed of separately as batteries.



Owners of waste electrical and electronic equipment (EEE) are allowed to return them to those facilities for returning or collecting waste electrical and electronic equipment set up and provided by the public-sector waste disposal authorities, to ensure that the waste electrical and electronic equipment is disposed of correctly. For more information about where and how to drop off your EEE waste, please contact your local authorities, retailer or household waste disposal service.

(Germany only) bHaptics Inc. has registered as a manufacturer of electrical and/or electronic equipment with registration number DE69516062 at stiftung elektro-altgeräte register, Nordostpark 72, 90411 Nürnberg.

(UK Only) bHaptics Inc. has registered as a WEEE Small Producer with registration number WEE/MM1053AA and Comply Direct membership number CD01/01286.

(Netherlands Only) bHaptics Inc. has registered as a manufacturer with registration number CO00015245.

(France Only) bHaptics Inc. has registered as a manufacturer with registration numbers (UIN, Unique Identification Number) FR331561_05DQHR for WEEE, FR345372_06EVPH for battery, FR354967_01YPIC for packaging.

Federal Communication Commission Interference Statement

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 or television technician for help.

FCC Caution: Any changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate this 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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Statement

This device complies with Industry Canada license-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

European Economic Area

Hereby, bHaptics Inc. declares that Tactosy for Arms (BHHTS0100) is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: <https://www.bhaptics.com/legals>



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Trademarks

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- Not all marks are used in this manual.

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bHaptics

Any Questions?
contact@bhaptics.com