

HARITORA-X Wireless

User Manual

This manual is for the Wireless.
For HaritoraX / HaritoraX 1.1, [move to there.](#)

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[Return to product page](#)

Introduction

Thank you for purchasing the HaritoraX Wireless.

Please read this manual carefully, follow the precautions, and enjoy a correct and safe FBT (Full Body Tracking) life.

Please make sure to read [[Safety Instructions/Consignes de sécurité/Sicherheitshinweise/Istruzioni di sicurezza/Instrucciones de seguridad](#)] before using.

※HaritoraX Wireless does not require Bluetooth pairing operation with a PC. It may not be possible to connect, so please do not pair it.

Setup Guide

If you set up according to the procedure, you can use HaritoraX Wireless right away.

● STEP 0

First, check the button locations and names in the "[Name of sensor parts](#)" section.

Next, move to the location where you will actually use the HaritoraX Wireless and perform [Sensor reset](#).
(Sensor reset must be performed before using HaritoraX wireless.)

*If you use the sensor at a different location, or if large appliances or metal furniture that affect geomagnetism have moved, please reset the sensor once again.

● STEP 1

Assemble the sensor and strap while watching the video below.

After assembly, turn on the power by pressing the main button of each sensor for 3 seconds and put on the sensor to the body.

Video :  HaritoraX Wireless How to assemble and put on the strap

● STEP 2

Download the Haritora Configurator application.

*HaritoraX Wireless is compatible with Haritora Configurator Ver.0.8.0 or later.

Download URL: <https://delivery.shopifyapps.com/-/a7f8b16692fc80f5/2a0f0696a0d25c23>

Video :  HaritoraX Wireless initial setup tutorial (English)

Please refer to the "[Shiftall VR Manager Online Manual](#)" for details on how to use the software with Shiftall VR Manager.

● STEP 3

Please set up "Haritora Configurator" and each part.

When using the GX dongle, please refer to the [GX6/GX2 online manual](#) to switch the communication mode before use.

Video :  HaritoraX Wireless How to assemble and put on the strap

That's all. HaritoraX Wireless is ready now.

Preparation / Before You Use

3.1.Requirements

To use HaritoraX Wireless, you need it:

- PC with Windows 10/11 running SteamVR
Windows 10 21H1 or later / SteamVR 1.17 or later
- VR headset that able to connect to SteamVR
MeganeX, Oculus Quest, Quest 2, Quest 3, Quest 3S, Quest Pro, Rift S, VIVE(1st), VIVE Pro, VIVE Cosmos, 富士通 FMVHDS1, Valve Index, HP ReverbG2, PICO 4, PICO 4 Ultra
- Bluetooth function
*This is required if your computer does not have Bluetooth.
- Operation confirmed PC built-in Wi-Fi / Bluetooth combo adapter
 - [Intel AX201](#)
- Operation confirmed USB Bluetooth adapter
 - [TP-Link UB500](#)
 - [TP-Link UB5](#)
 - [ASUS USB-BT400](#)
 - [Plugable USB-BT4LE](#)

* Dongles with CSR chips such as TP-Link UB4A and UB400 **Cannot be used with HaritoraX Wireless.**
There are many Bluetooth adapters on the market that can connect up to 5 devices, mainly some CSR

Bluetooth chips, and these cannot connect all 6 HaritoraX Wireless. Please contact the manufacturer of each Bluetooth adapter for the maximum number of connectable devices.

- USB charger with output of 5V/2.0A or more per port

Required to charge the HaritoraX wireless sensor.

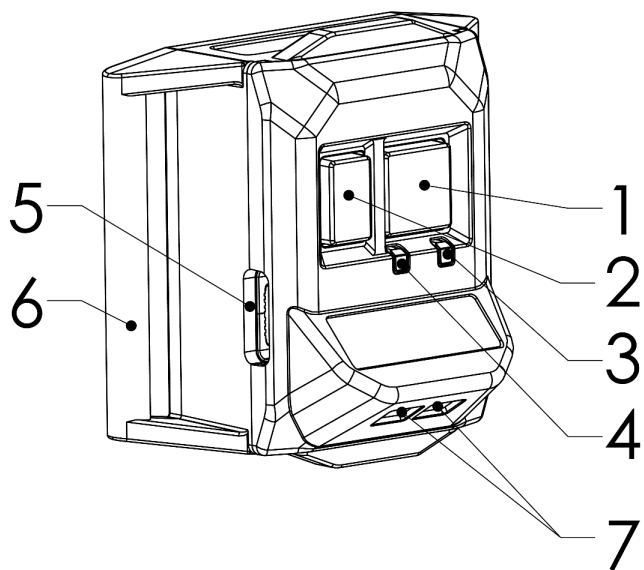
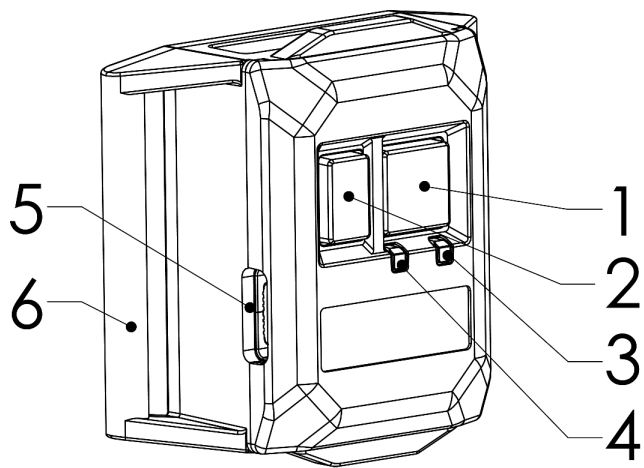
If you use a USB charger with an output of less than 5V/2.0A per port, Failure to do so may result in failure to charge the battery, malfunction, overheating, or fire of the USB charger. **Be sure to charge with a USB charger with an output of 5V/2.0A or more.**

3.2.Included items

Sensor	6
Strap	6
USB Cable for Charging (For HaritoraX Wireless only)	1
Safety Precautions/Warranty	1

3.3.Name of sensor parts

This is the name of each part of the sensor attached to the body.



1. Main button
2. Sub button
3. Red LED
4. Green LED
5. USB port for charging
6. Belt loop
7. Distance sensor

3.4.Sensor Reset

Sensor reset is a correction process to adapt the HaritoraX wireless to your environment. When using the product for the first time after purchase, be sure to move to the place where you will actually use the product and reset the sensor first. Also, If you use the sensor at a different location, or if large appliances or metal furniture that affect geomagnetism have moved.

1. Remove the strap from the sensor.
2. Turn on the sensor and place it on a hard, non-slip surface such as a desk or floor, with the button side of the sensor facing up. The reset operation cannot be performed correctly in a soft and unstable place such as a cloth, or in a place where vibration is transmitted.

3. Once the sensor is placed in a stable location, press the sub-button 10 times within 10 seconds (repeat the short press and release like a mouse click) and quickly remove your hand from the sensor.
***The order is very important. Do not press the button before placing it, but rather press the button while it is in place.**
4. Sensor reset starts, Green LED flashes twice or four times → Green LED flashes violently → The LED pattern changes in the order in which the green LED lights up.
***Do not shake or move the device for several seconds while the green LED is blinking violently.**
5. When the green LED lights up, holding the sensor, to draw a horizontal figure 8 in the air.
When drawing a figure 8, the tip is to turn the wrist to turn the device at any angle.



Keep moving it for 25 seconds, the lighting pattern will change. Green LED changed to blinking, and the sensor reset is complete. Make sure to check the geomagnetic sensor is in good condition (yellow or green) in Haritora Cofigurator.

No matter how hard you reset the sensor, there are some environments where the geomagnetic sensor does not get better (remains red). In such an environment, [Set the sensor mode to "Mode 2"](#) uselt is recommended that.

6. Do the same thing for all the sensors.

3.5.Important Safety Information

Danger: Risk of death or serious injury

- Use the supplied USB cable for charging to charge the product as specified in the online manual to avoid battery leakage, overheating, or rupture. This could result in fire or explosions and death or serious injury.
- Only use the product for its original purpose. Doing otherwise may result in damage to the equipment, accidents, or injury.
- When using the product be sure to provide sufficient play space. Using the product with clutter around may result in damage to the equipment, accidents, or injury.
- Exposing the product to water may result in electric shock. Do not use it in a kitchen, laundry room, bathroom, outside in the rain, etc. Electric shock can result in serious injury or death.
- The product contains a rechargeable battery. Do not expose it to fire. Do not charge, use, or leave it at high temperatures. Do not heat in a microwave, oven, or dryer. Overheating may cause the battery to catch fire or explode.
- The USB cable for charging is only for the product. Do not use it for any other purpose. Doing otherwise may cause accidents due to damage or malfunction to the cable or connected equipment.

Warning: Risk of death or serious injury

- In the event of the following abnormalities or malfunctions immediately unplug the USB cable for charging and discontinue use. If you continue to use the product it may cause a fire or electric shock. If there are any problems with the product contact the Shiftall support desk.
Beware of:
 - Smoke or unusual smells or sounds.
 - Water or foreign matter inside the product.
 - Damage to the sensors or USB cable for charging.
- Do not damage or modify the USB cable for charging or charging connector.
Do not forcibly bend, twist, pull, or place heavy objects on cables. Do not allow cables to overheat. Using cables in a damaged condition may cause a fire due to short-circuiting.
- Do not disassemble or modify the product.
Modifications, including placing metal objects inside the product, may result in malfunction, burns, or fire.
- Use a USB charger that can output 2.0A or more when connected to the USB cable for charging. Insufficient output may cause failure of charging, malfunction/overheating of the USB charger or fire.
- Do not allow foreign objects, including water and other liquids, to enter the product. A short circuit or overheating may cause a fire, electric shock, or malfunction. Be especially careful with children.
- Do not use the product near automatic control devices such as automatic doors or fire alarms. Radio waves from the product may affect the automatic control devices causing accidents due to malfunction.
- Do not use it in hospitals or places where electrical medical equipment is located. Radio waves from the product may affect electrical equipment causing accidents due to malfunction.
- The radio waves from the product may affect the operation of cardiac pacemakers. Please keep the product at least 15 cm (6 inches) away from any pacemaker.

Caution: May result in minor injury or property damage

- Do not use the product in any place with high humidity, steam, oil smoke, or dust. Doing so may cause fire or electric shock.
- Do not place heavy objects on top of the product or the USB cable for charging. It may fall and cause injury.
Also, it may deform the outer case or the plug of the cable and damage the internal parts and cause a fire or malfunction.
- Do not use the product while sleeping. Doing so may result in damage to the equipment, accidents, or injury.
- Wear the product over clothing or underwear to avoid direct contact with the skin as it may cause irritation or rashes.
- Do not place the product where infants or children can reach it. It may cause unexpected accidents or injury.
- Do not leave the product in a place where the temperature is abnormally high. Do not leave it inside of a car or the trunk of a car, especially in hot weather. Doing so may result in a fire. Undue heat may cause deterioration of the outer case and internal parts.
- Over-tightening the straps may cause blood congestion. Be careful not to tighten the straps too much when wearing the product for a long time.
- Be careful not to let the hook-and-loop fastener (nylon tape) touch your clothing. If the hook-and-loop fastener touches clothing such as knitwear, it may damage the fabric.
- Since the strap is elastic, be careful that the sensor or hook does not hit surrounding objects or people due to the force of contraction when it is released.

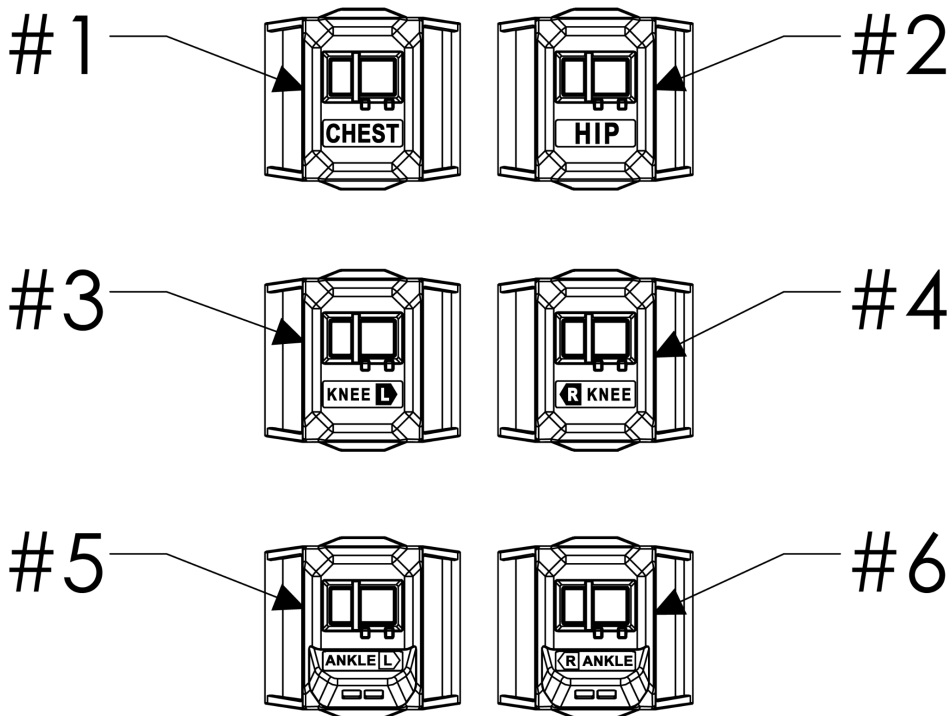
Put on the HaritoraX Wireless

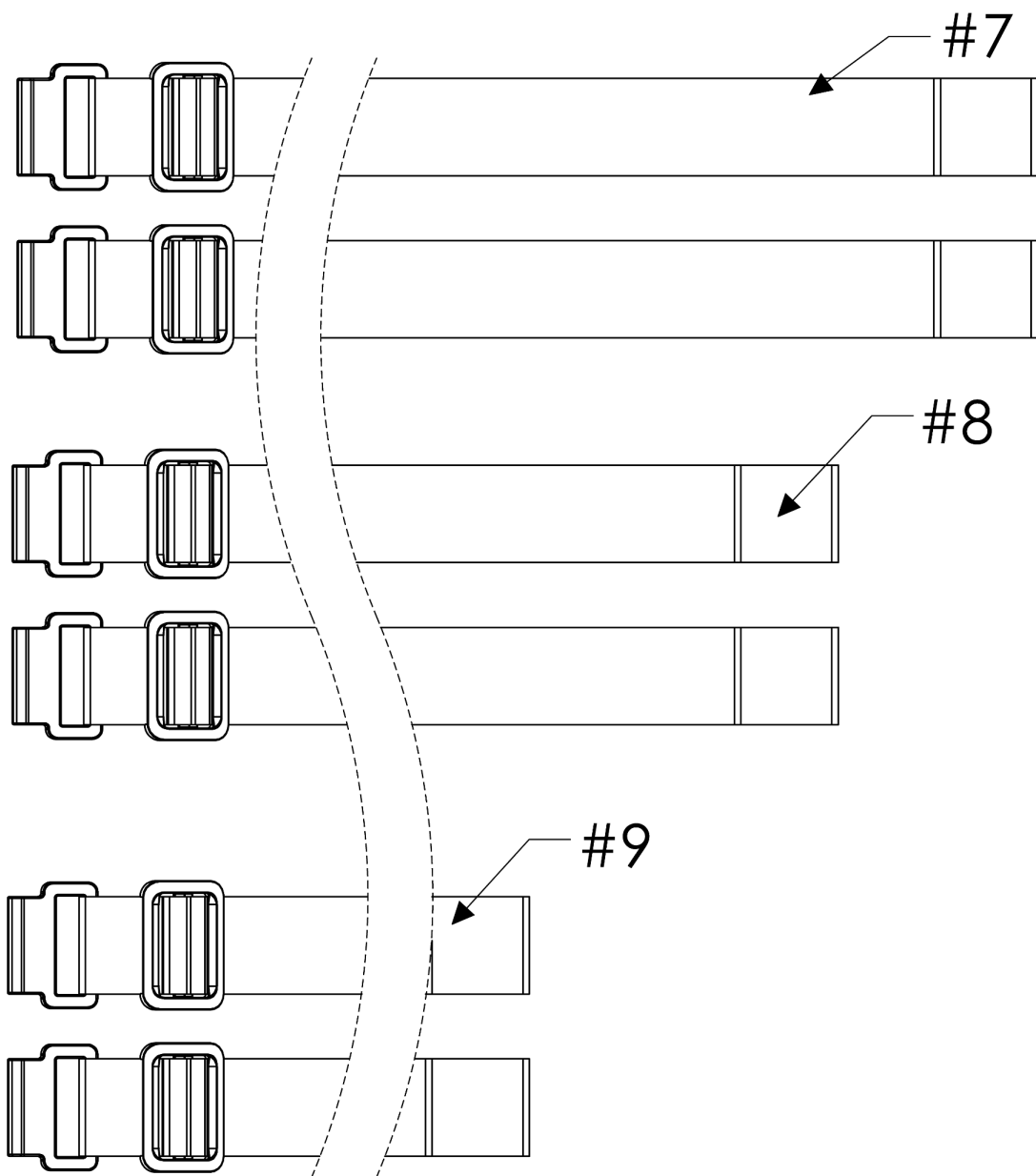
Be sure to attach the sensor to the strap before put on his product . This chapter describes how to assemble the strap and how to put it on your body.

*Video explanations are also available.

Video:  HaritoraX Wireless How to assemble and put on the strap

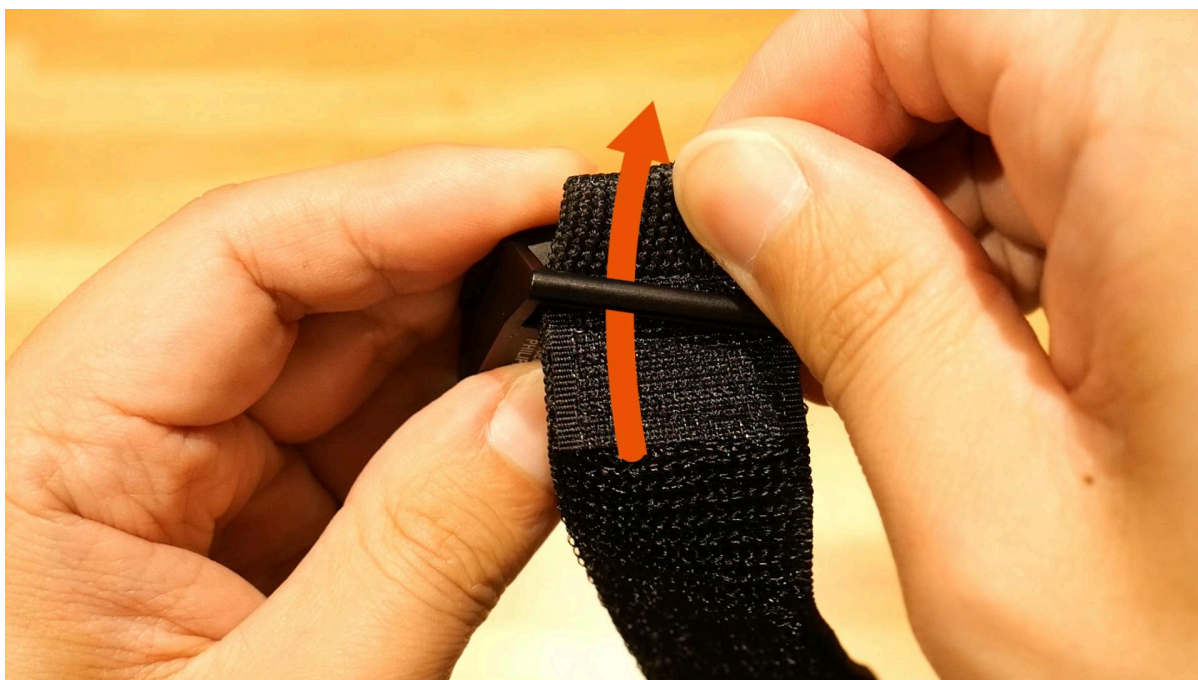
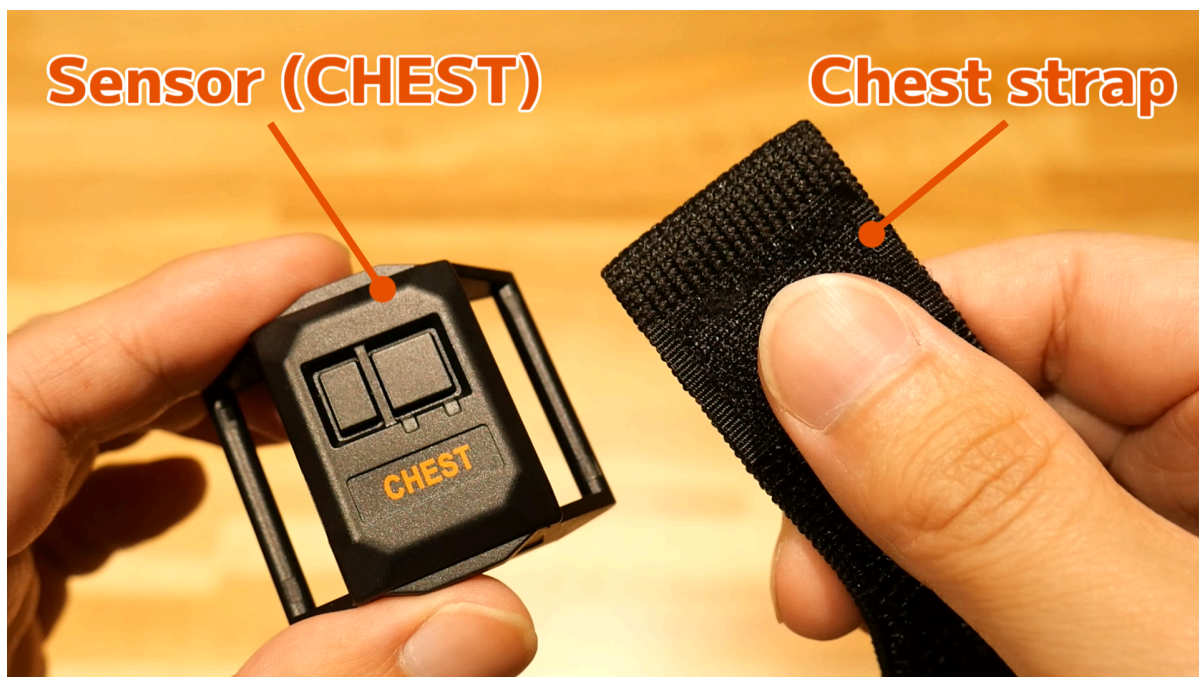
4.1.Put the straps through the sensors





No.	Name	Quantity
#1	Sensor (CHEST)	1
#2	Sensor (HIP)	1
#3	Sensor (KNEE L)	1
#4	Sensor (KNEE R)	1
#5	Sensor (ANKLE L)	1
#6	Sensor (ANKLE R)	1
#7	Chest strap/Hip strap (Common)	2
#8	Knee strap	2
#9	Ankle strap	2

1. Pass the longest straps (Chest strap/Hip strap) through the chest and hip sensors. Pass the strap through the belt loop on the right side of the sensor (the side opposite to the one with the charging terminal). Pass the strap from the back of the sensor with the hook-and-loop fastener side facing outward.





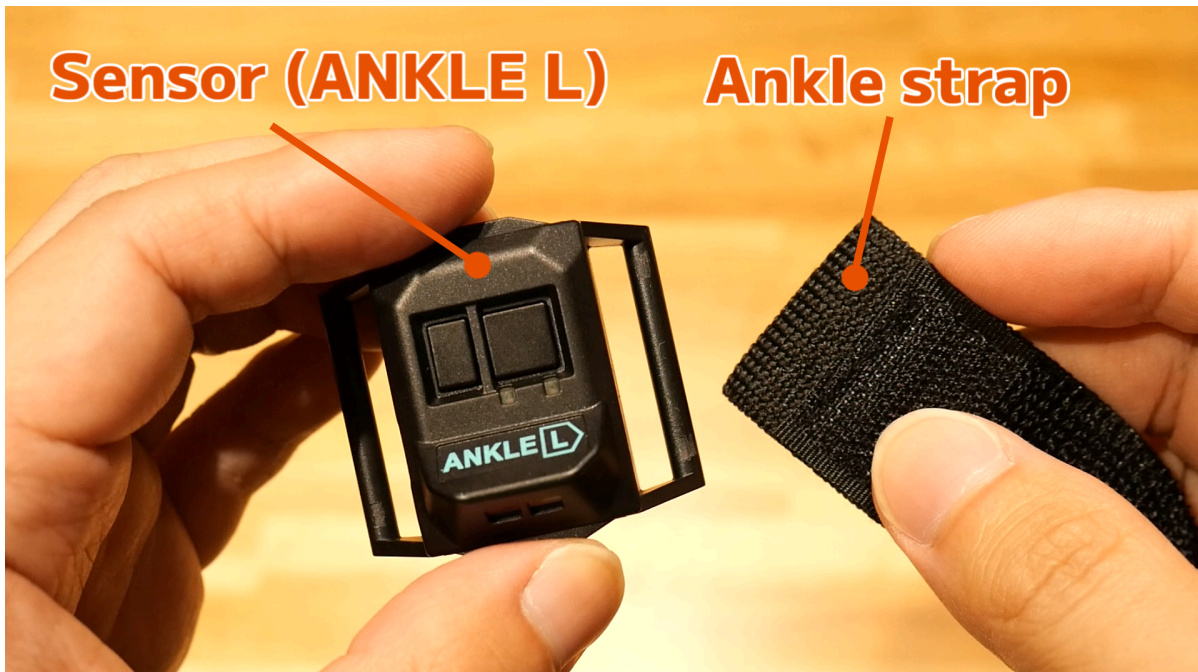
2. Pass the middle length straps (Knee straps) through the knee sensors. The position and direction of passing the strap are the same as above.



3. Pass the shortest straps(Ankle straps) through the ankle sensors. The position and direction of passing the strap are the same as above.

Sensor (ANKLE L)

Ankle strap



[Completed sensors & straps]



4.2. Power on the sensor

Press and hold the main button (large button) on the sensor for more than 3 seconds to turn on the power. The red LED and green LED light for 2 seconds. After that, the green LED starts blinking slowly. It will be in "Connection standby mode".

4.3. Put on the sensors

Video : [YouTube: HaritoraX Wireless How to assemble and put on the strap](#)

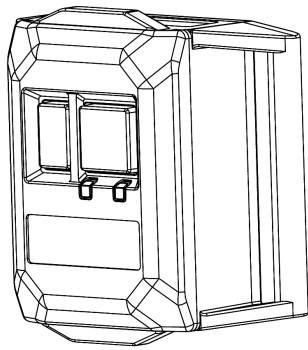
Attach the strap with the sensor that was assembled from the "[Put the straps through the sensors](#)" section to your body.

1. Prepare the strap belt from the "[Put the straps through the sensors](#)" section. Adjust the length of the strap with the adjuster according to your body size.

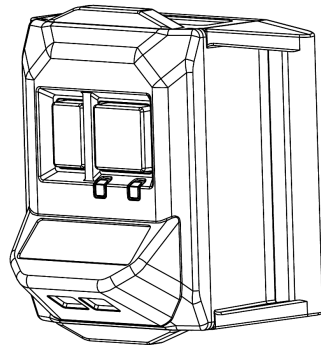


2. Put on each sensor on your body. The sensor has an installation position and a vertical direction. Please note that it will not work properly if you put it on by wrong direction or position.

↑
UPSIDE



↑
UPSIDE







Place the chest sensor as high as possible, and the hip sensor as close to the pelvis as possible.



The knee sensor will not operate properly if it slips down and rests on the knee. The knee sensor can be put on anywhere between the inseam and above the knee. Please look for the best location related to your body where it will not slip down easily.

The height should be about the same on both sides. It does not have to be very strict.



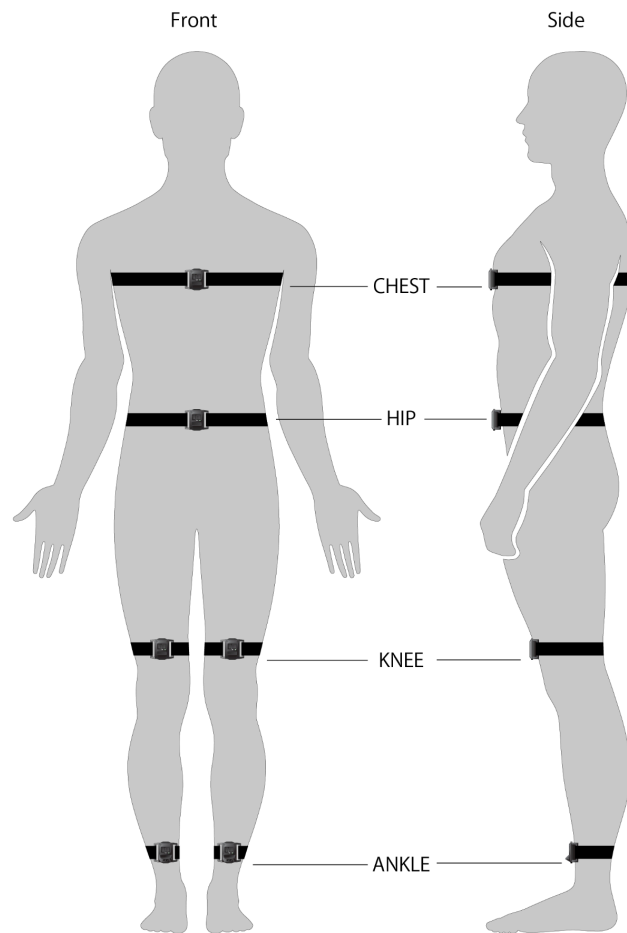
The ankle sensors can be placed anywhere from the knee to the ankle, but when using the ankle motion detection function, it must be lowered very close to the ankle joint.

Make sure that the heights of the left and right sides are the same. It doesn't have to be very strict.

***The ankle sensors have a distance sensor to detect the movement of the ankle. Ankle motion detection may malfunction if objects such as trouser hems, shoelaces, or slippers are between the top**

of the foot and the sensor.

[Picture with all sensors put on]



3. If the strap is loosely tightened, hold down the sensor and the hook part, peel off the hook-and-loop fastener on the other side once and pull it, adjust the strap tightening and fix it again.





*** Notice ***

If the hook is removed while the strap is tightened, or if the hook part is pushed in while the strap is being worn, the tension of the strap may cause the sensor to come off forcefully, which may lead to injury or damage to the sensor. When removing the strap, loosen the hook-and-loop fastener and slowly remove the hook.

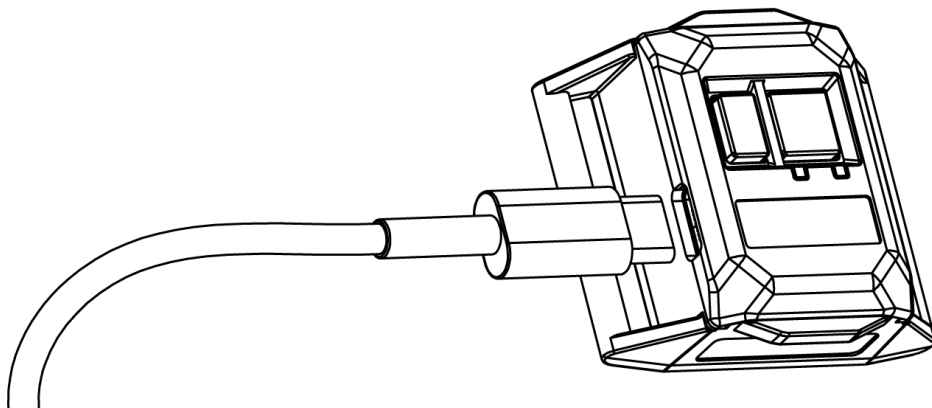
How to use

Instructions on how to use the sensors.

5.1.Charging

Please charge the battery before use.

Use the included USB charging cable to charge the sensor.



- Red LED lights up while charging.
- It takes about 1 hour and 40 minutes from empty to fully charged (with power off).
- Red LED turns off when charging is complete.

[Notes about USB cable]

- Hold the USB plug in your hand and insert/remove it straight.
- If you use a USB charger with an output of 5V/2.0A or less per port, it may not be able to charge, or may cause the USB charger to malfunction, overheat, or catch fire. **Be sure to charge with a USB charger with an output of 5V/2.0A or more.**

[Notes when charging]

- Charge the battery in a location with an appropriate ambient temperature (10°C to 30°C / 50°F to 86°F).
- Please read [[Safety Instructions/Consignes de sécurité/Sicherheitshinweise/Istruzioni di sicurezza/Instrucciones de seguridad](#)] also.

5.2.How to operate the sensor

5.2.1. Power ON

Press the main button of the sensor for 3 seconds or more, and turn the power on. Red LED and Green LED lights up for 2 seconds. After the green LED starts blinking slowly. It will be in "waiting for connection" state.

Video: <https://youtu.be/XeZru6vBuXw>

When the connection is established, the green LED will quickly blink twice in succession and then turn lights off for 1 second.

Video: <https://youtu.be/5fD0Acpy8IE>

5.2.2. Power OFF

If you press and hold the main button for more than 3 seconds, the power will turn off.

Video: <https://youtu.be/eON2UULv8sQ>

*If the sensor unit is not connected to the Haritora Configurator and left on for 20 minutes, the sensor unit will automatically turn off.

2.3. Power OFF (Forced shutdown)

If you press and hold the main button for more than 15 seconds, the power will be forcibly turned off.

If the device is forced to shut down while it is being charged via USB, remove the USB charging cable and then turn on the power again.

2.4. Check the communication mode

Click the sub button once during power on.

It is possible to check the current communication mode by the number of times the green LED flashes.

- When it flashes 2 times, it means "Bluetooth communication mode"
- When it flashes 4 times, it means "GX Dongle Mode"

Press the sub button once.



Bluetooth, flashes 2 times
GX Dongle, flashes 4 times

2.5. Switch the communication mode

Click the main button and the sub button alternately a total of 12 times to switch between Bluetooth communication mode and GX Dongle mode.

Press alternately 12 times to switch.

⚠ DO NOT PRESS BOTH



5. Windows PC Settings

This is a description of the settings for using HaritoraX Wireless with a PC.
A video explanation is also available.

Video : [HaritoraX Wireless initial setup tutorial \(English\)](#)

HaritoraX Wireless supports Haritora Configurator Ver.0.8.0 or later.

If you are already using HaritoraX series, please update to Ver. 0.8.0 or later and read from "[Bluetooth Setting](#)".

6.1.Steam and SteamVR

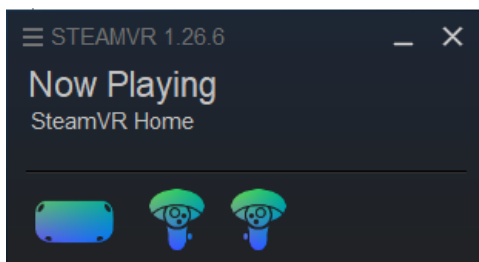
Software provided by Valve that is required when connecting HaritoraX Wireless and VR headsets to a PC. For Steam/SteamVR operation, please contact Valve.

6.1.1. Install Steam

1. Access the website and create an account.
2. Download the Steam installer.
3. Run the downloaded file and install Steam.

6.1.2. Install SteamVR

1. To start Steam, search for "SteamVR" in the App Store and install it. Windows MR users should install Windows Mixed Reality for SteamVR.
[NOTE] Oculus Quest users should configure the Quest Link and Air Link settings.
2. Start SteamVR and make sure your VR headset and controller icons are visible and recognized in the SteamVR window as shown.

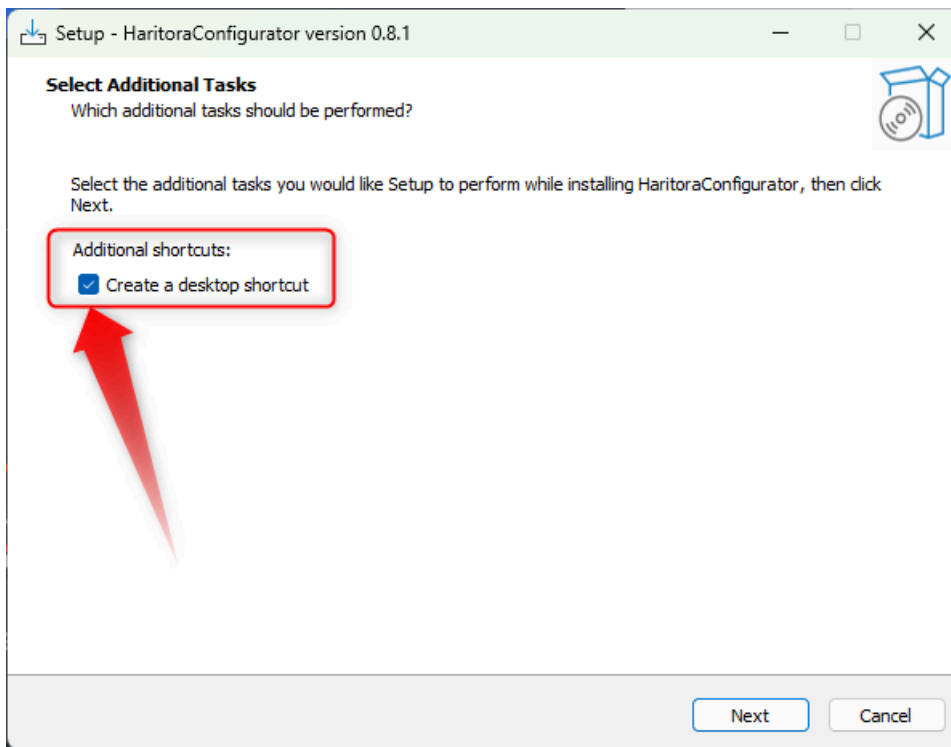


6.2.Haritora Configurator

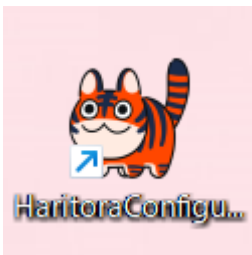
This software is required to use HaritoraX Wireless.

6.2.1. Install Haritora Configurator

1. Download "Haritora Configurator" from the [Shopify store page](#).
2. Launch the downloaded "HaritoraInstallerXXXX.exe".
3. Check "Create an icon on the desktop", go to next, and click "Install".



4. When the installation is complete, check that the "Haritora Configurator" icon is on your desktop.

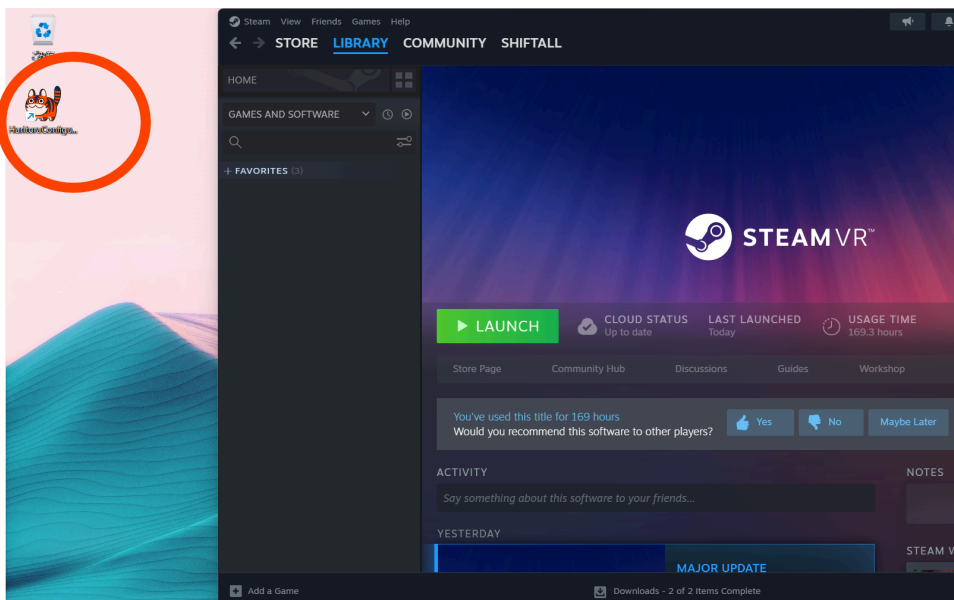


5.2.2. Starting and Initializing the Haritora Configurator

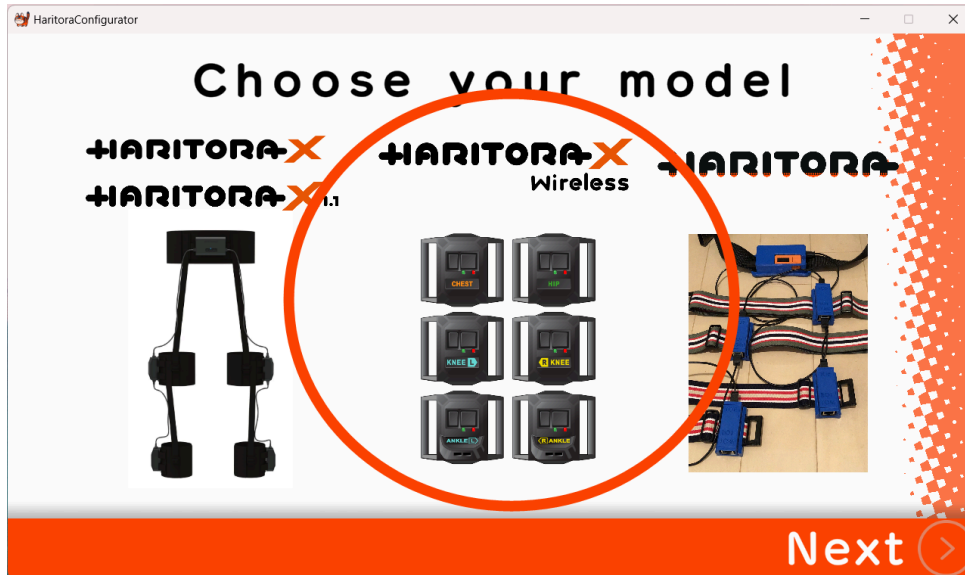
1. Double-click the Haritora Configurator shortcut to launch it.

*If Windows Defender gives a warning, select More Information > Run.

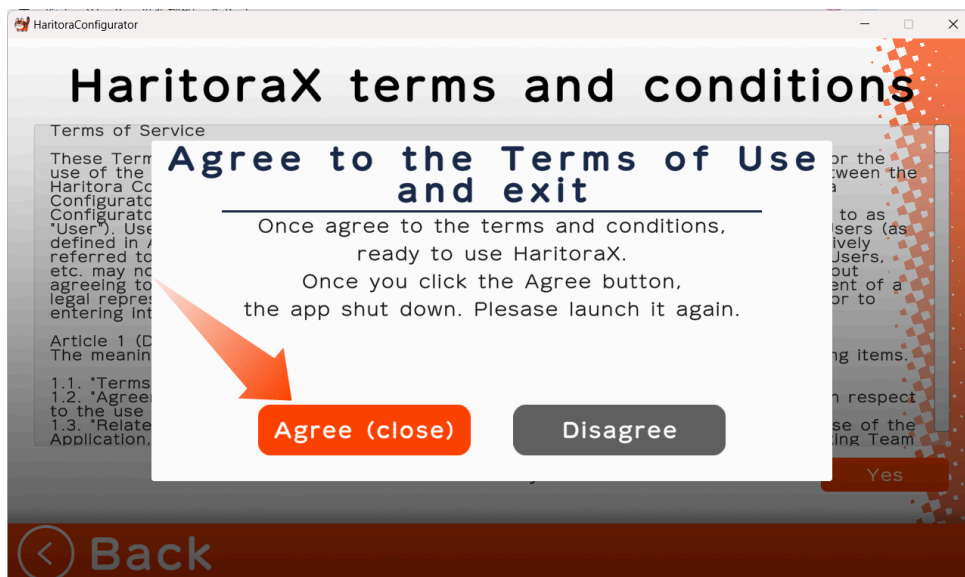
*If not, right-click and select "Run as administrator" from the menu to start.



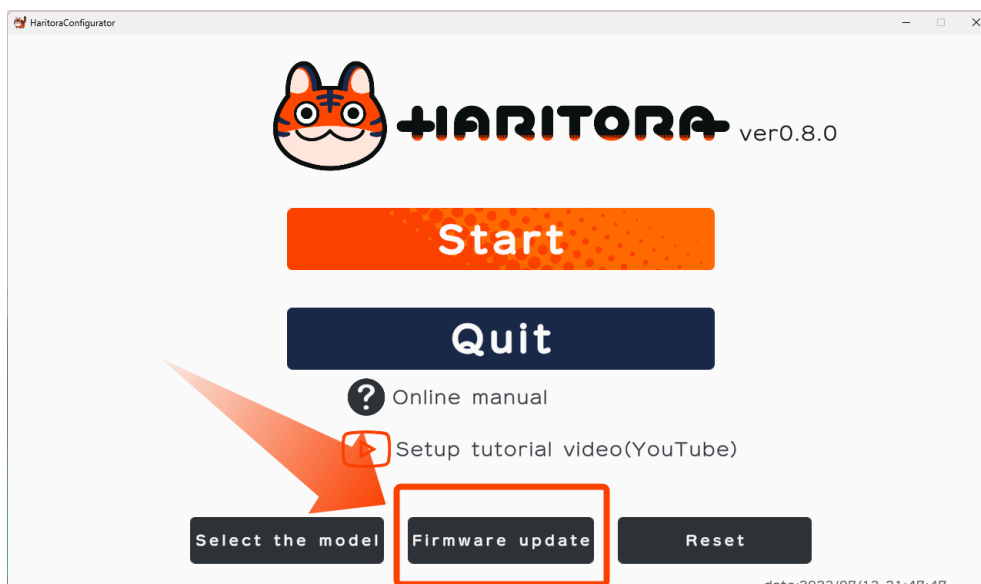
2. After selecting the language, Select "HaritoraX Wireless" on the model selection screen.



3. Haritora Configurator will close after agreeing to the terms of use.



4. Start Haritora Configurator again and select "Firmware Update" on the start screen.



5. Your browser will display the firmware update page. Please see the update method at the bottom of the page and update.

Be sure to power on just one unit at a time, update, and power off. Please repeat this operation for each sensor.

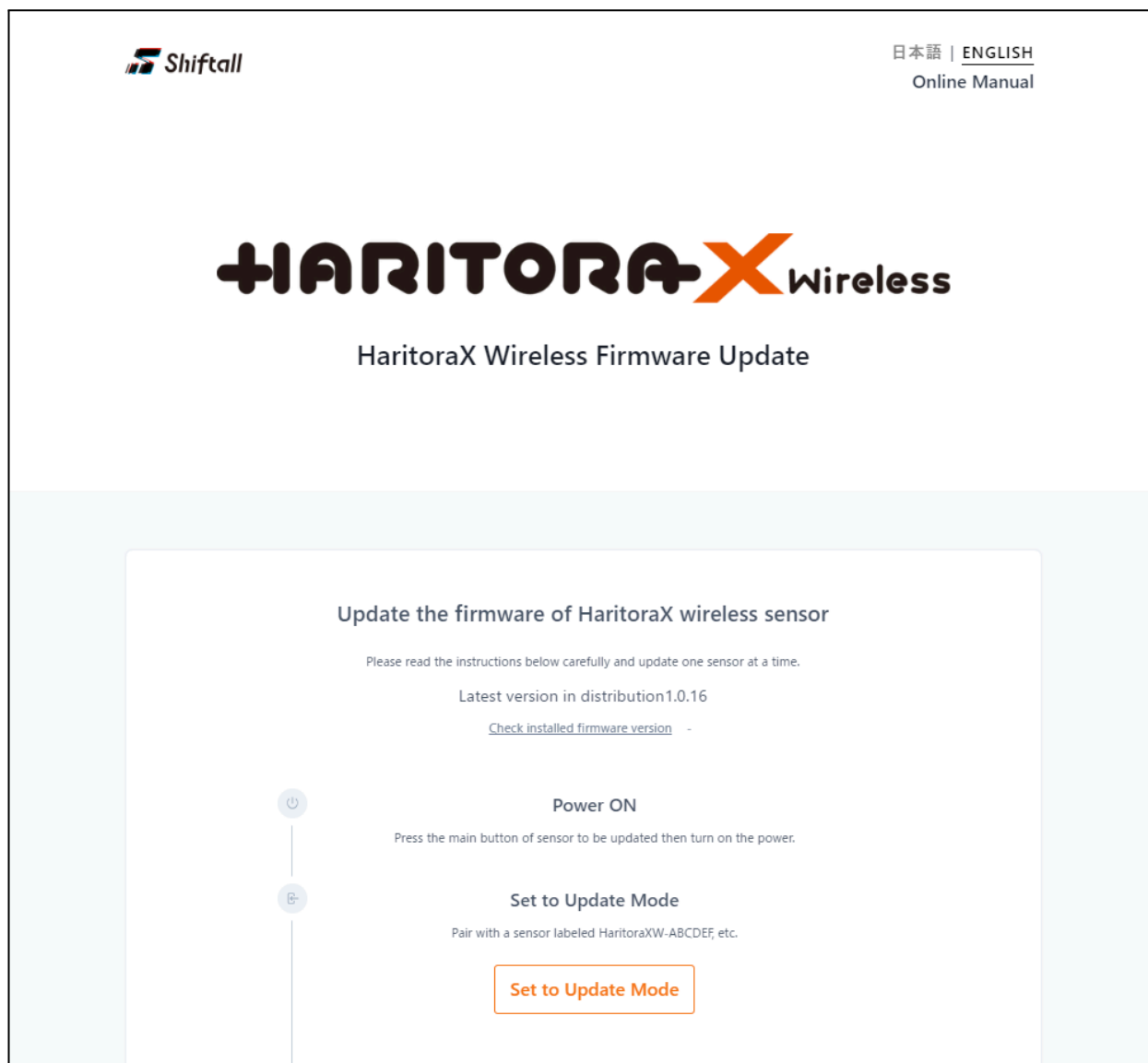
Notes on updating the firmware

- Exit Haritora Configurator.
- Do not start Haritora Configurator while updating.
- Use a PC's built-in Bluetooth adapter or a USB Bluetooth adapter that has been tested and confirmed to work by our company to update the firmware. Please note that firmware update cannot be performed with the dedicated communication dongle GX6/GX2.
- Please be sure to set the sensor mode to "Bluetooth communication mode". The update cannot be performed in "Dedicated communication dongle mode."
- Please open the firmware update page using "Chrome" or "EDGE". (Some browsers may not be able to use this function.)
- Please close your browser when you start Haritora Configurator.

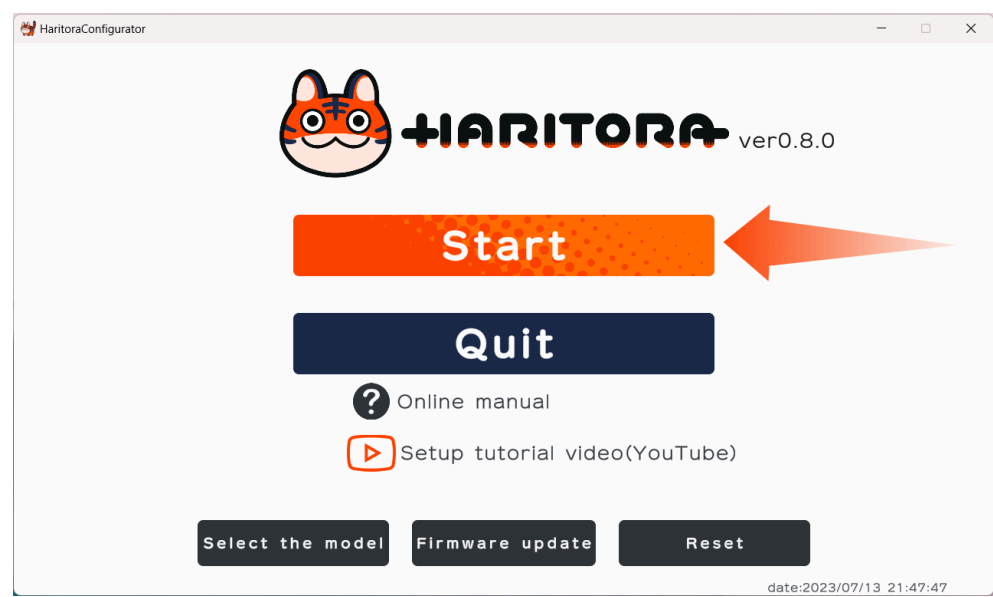
[Firmware update page](#)

Firmware is software that is built into the sensor.

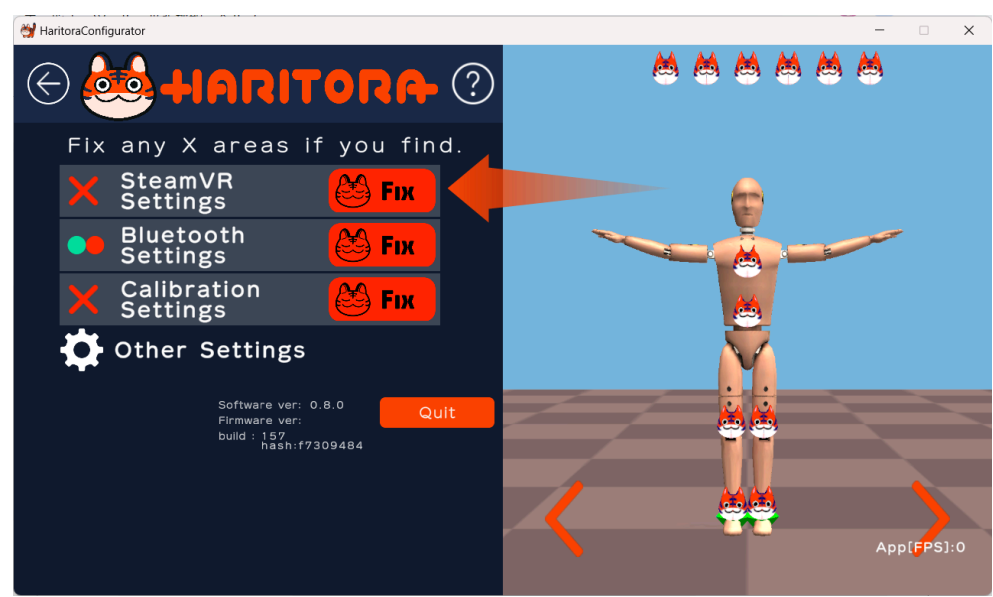
Please use the latest firmware version. And also use the latest version of Haritora Configurator.



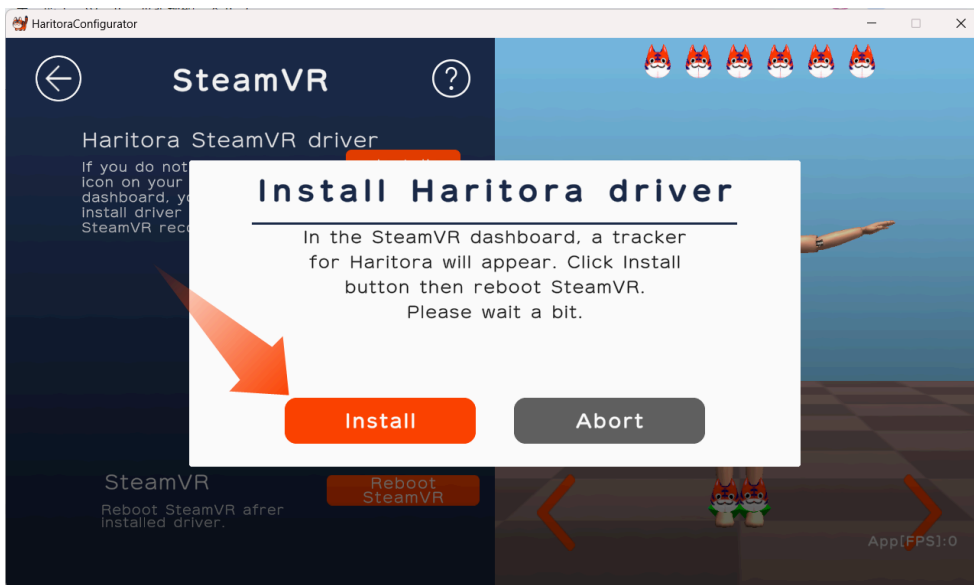
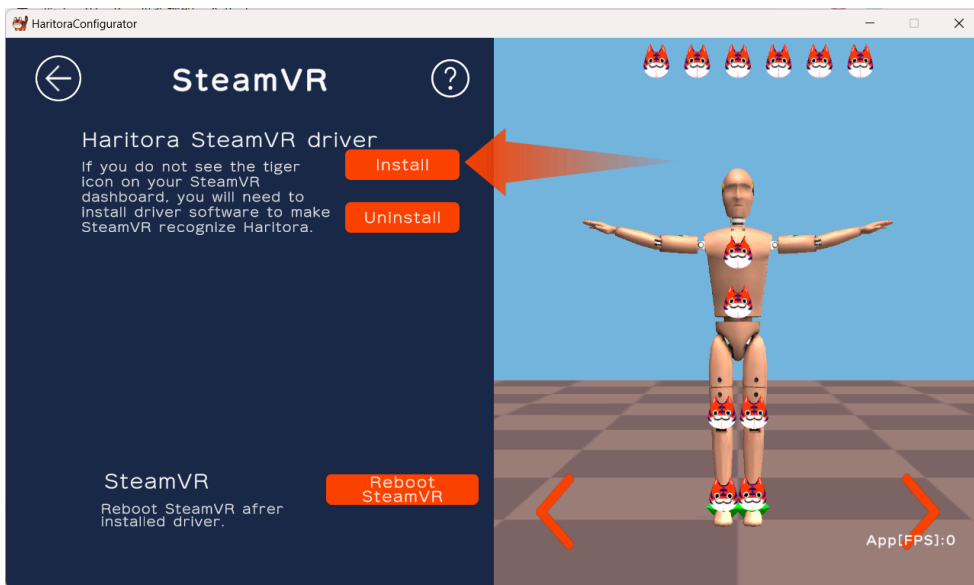
6. When all sensor firmware updates are complete, close the firmware update page, launch the Haritora Configurator again, and select "Start" from the start screen.



7. Open the "SteamVR Settings" screen.



8. Select "Install Driver" to install the Haritora driver.



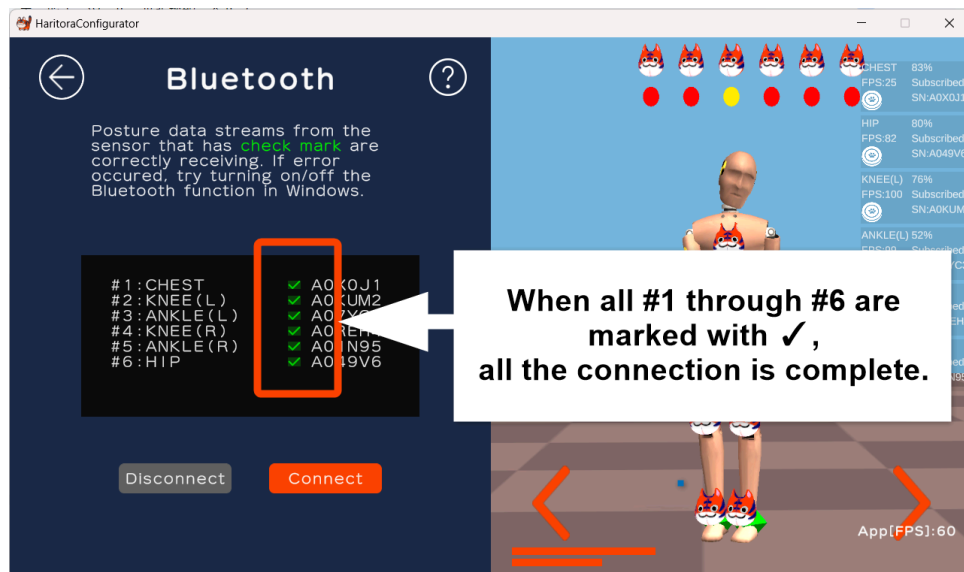
9. After the driver installation is complete, SteamVR will restart. Please wait 10 to 20 seconds.

2.3. Bluetooth Setting

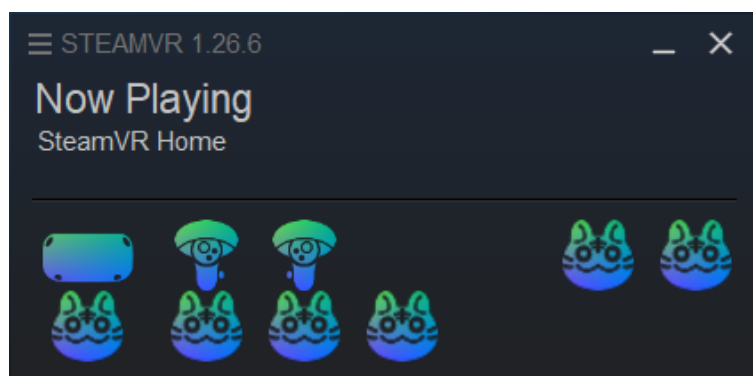
1. Open the "Bluetooth Settings" screen.



2. Select "Connect" to establish a Bluetooth connection, as shown in the image below. Once connected, 6 green check marks "✓" will be displayed. And then it means connected if Tiger icons of HaritoraX Wireless are displayed on SteamVR.



[NOTE] If the sensor information is not displayed even if you select the connection, If you don't see 6 green check marks "✓," please click "[here](#)" and recheck if HaritoraX Wireless is connected properly.



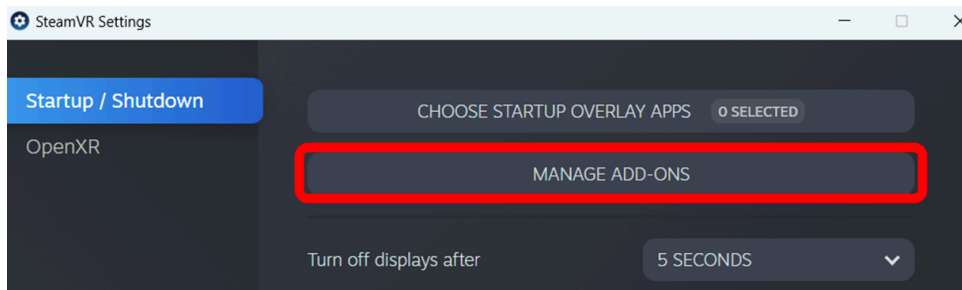
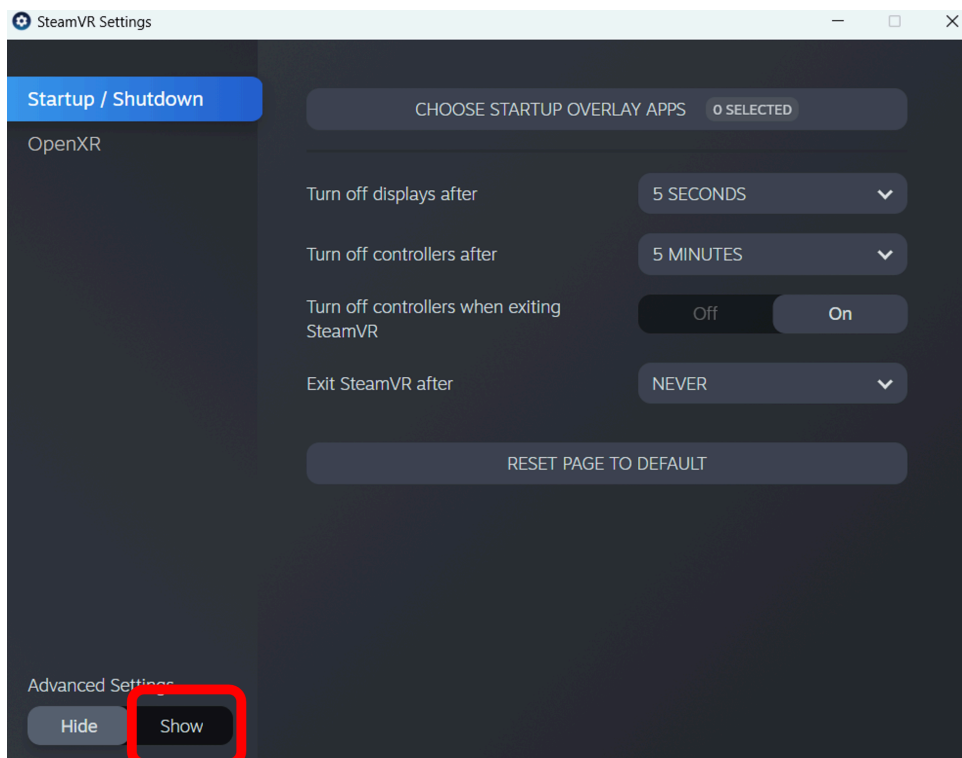
If you see six tigers on the SteamVR dashboard, your Bluetooth connection is complete.

[If the tiger icon is not displayed]

In case the VR headset and SteamVR are not connected, or if the driver is blocked on SteamVR, the tiger icon may not be displayed.

It will take about 30 seconds to install the Haritora driver and for SteamVR to restart, so please do not perform any other operations during the process.

If "haritora" is not listed in the add-on list of SteamVR, the installation has not been completed. Please install it again.

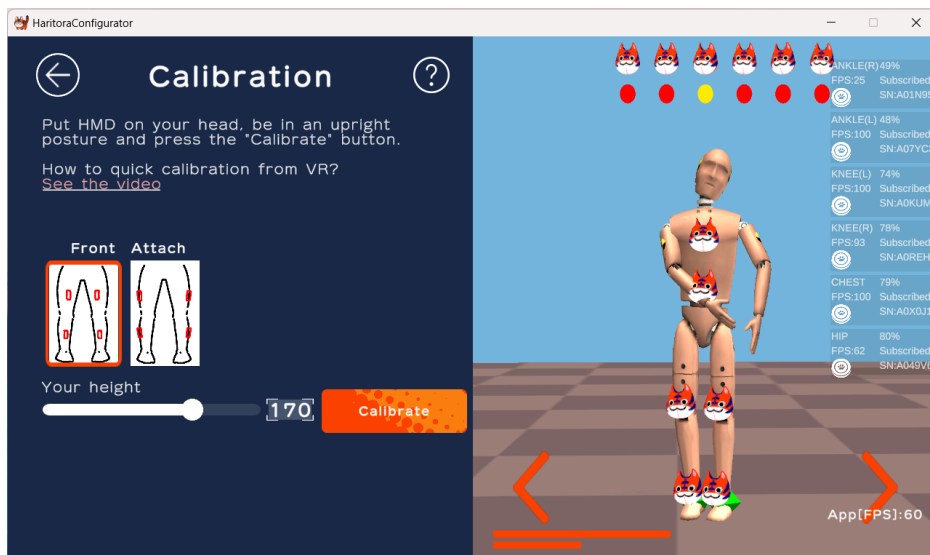


2.2.4. Setting of the put on sensor position and height

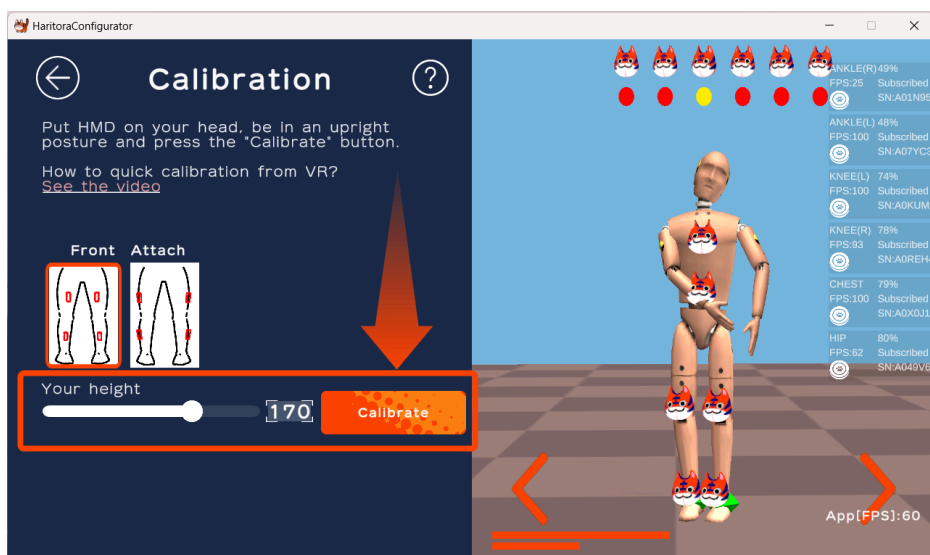
1. Select "Calibration".



2. Ensure you select the correct knee/ankle mounting position. If it's incorrect, it does not work properly, so be sure to choose the same position as the installation location. When using the ankle motion detection function, it will not work properly unless it is worn on the front.



3. Set your height. Please set the height of the user, not the avatar.



For details on how to calibrate, see "[Calibrate](#)".

Calibration

Calibration is an action to reset the correct azimuth with the direction of the device, that is required for IMU full body tracking devices. Calibrations using the Haritora Configurator should be done frequently (once every few minutes to several tens of minutes) while using a VR application.

*The frequency varies depending on the environment.

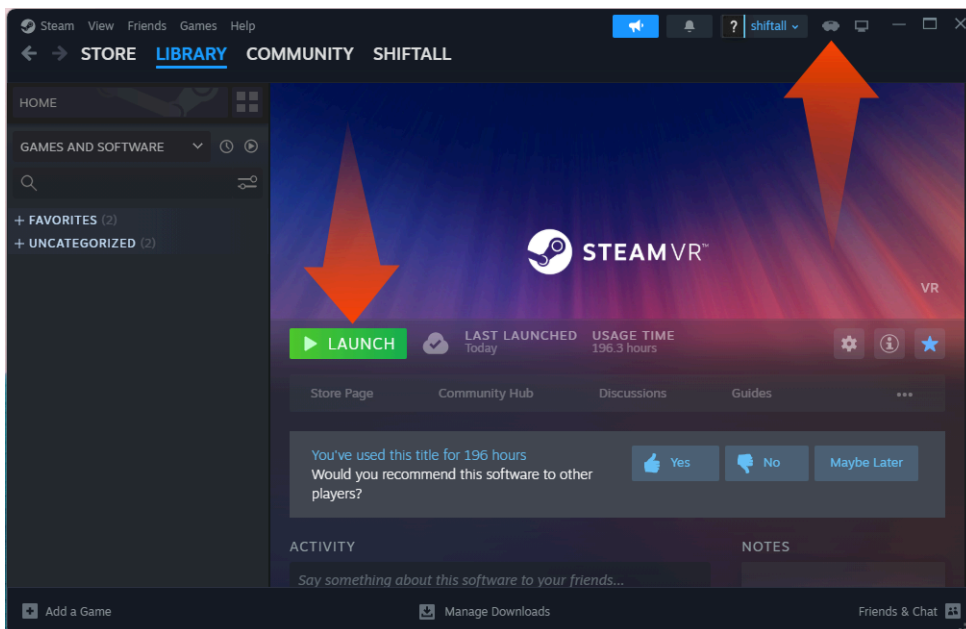
This is an explanation of the calibration method.

HaritoraX is used in the video, but you can calibrate with HaritoraX Wireless as well.

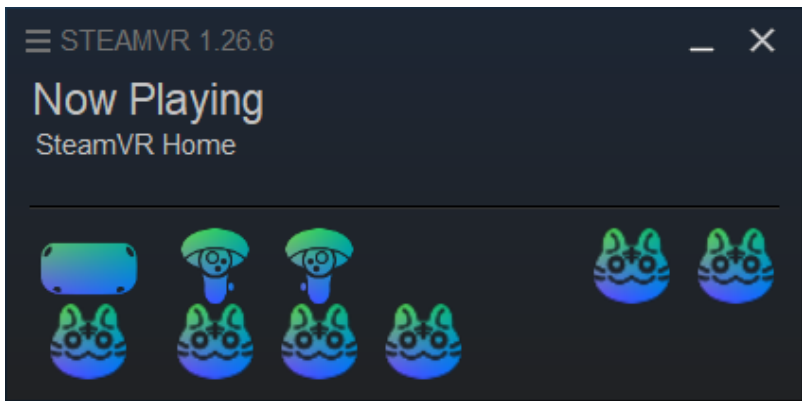
Video : <https://youtu.be/SnGAhequad8>

7.1.Prepare for calibration

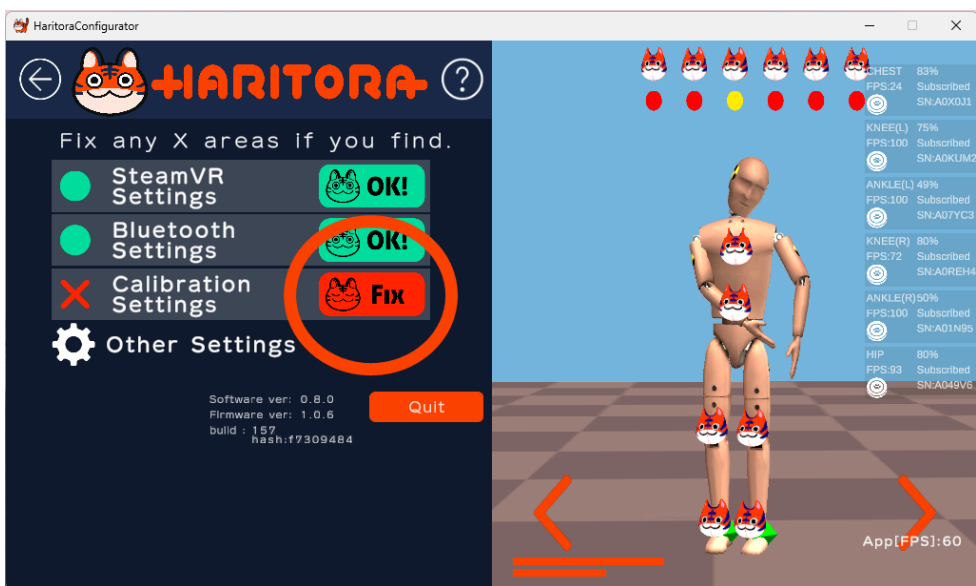
1. Launch SteamVR from the top right of the Steam window or from the library.



2. Make sure your VR headset and HaritoraX are recognized in the SteamVR window.



3.Start the Haritora Configurator and select “Start”. Make sure all items except Calibration are set to "OK!", then select Calibration.



7.2.Calibrate

Equipped with HaritoraX Wireless and a VR headset, it will be carried out in a VR application such as VRChat. Please note that it does not work when displaying the Steam menu or Oculus menu within the VR view.

Calibration is done by performing the following two operations consecutively.

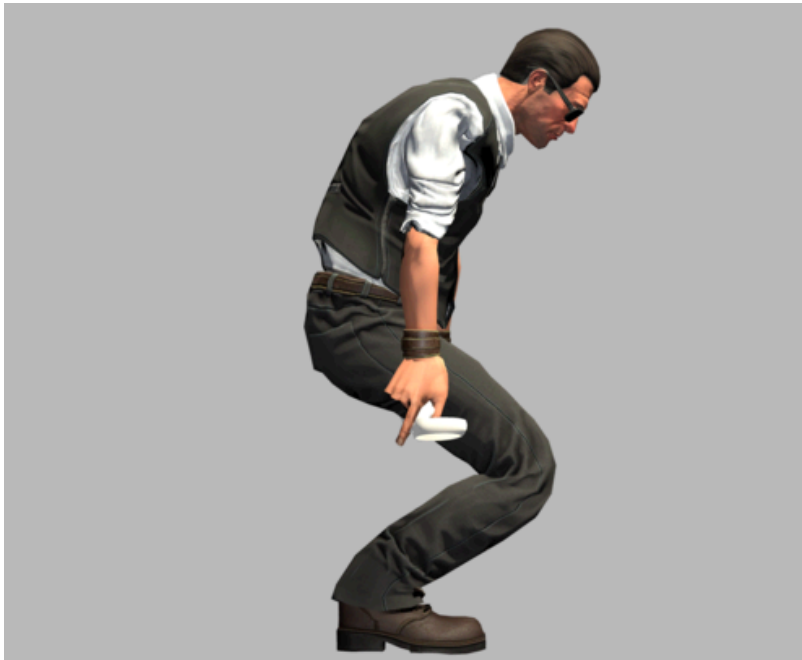
1. With feet together and legs straight, hold the left and right controls straight down and press the trigger with the index finger on one control 5 to 7 times in a row. If successful, you will hear a “meow” sound.

- Do not press both left and right triggers at the same time.
- The controller must point straight down. The ring is downward the same as in the below picture.
- If you don't hear a sound, adjust the speed by which you press the trigger.

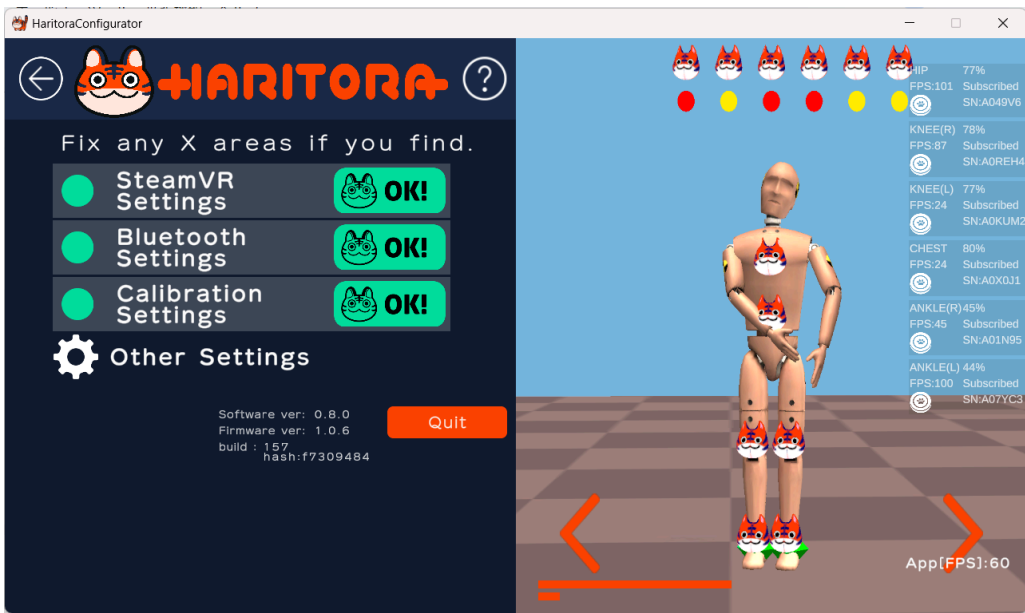


2.Immediately bend your upper body and keep your knees together, then press the trigger with the index finger on one of the controls 5 to 7 times in a row. Bending your body by about 30 to 40 cm(1 to 1.3 ft) is sufficient. If successful, you will hear a different squeal sound than the previous one.

[NOTE] Calibration in an upright position can cause you to become bow legged or cause your knees to become crossed when doing such things as sitting in a chair. Make sure that you perform two calibrations.



In the Haritora Configurator, check that the dummy model reflects your actual movement.
 [NOTE] If the tracking is not correct, perform the calibration again.

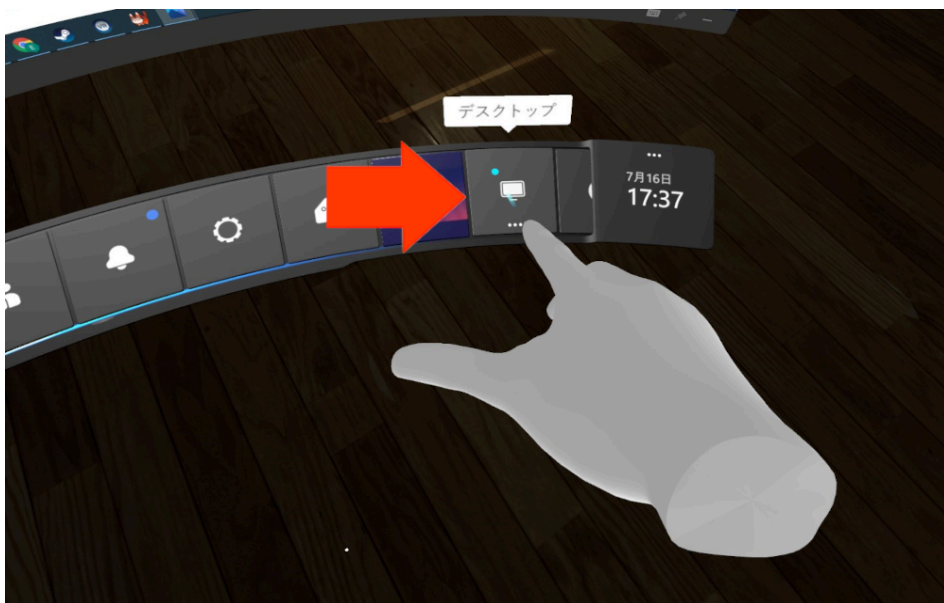


7.3.Calibrate on the desktop screen in VR space

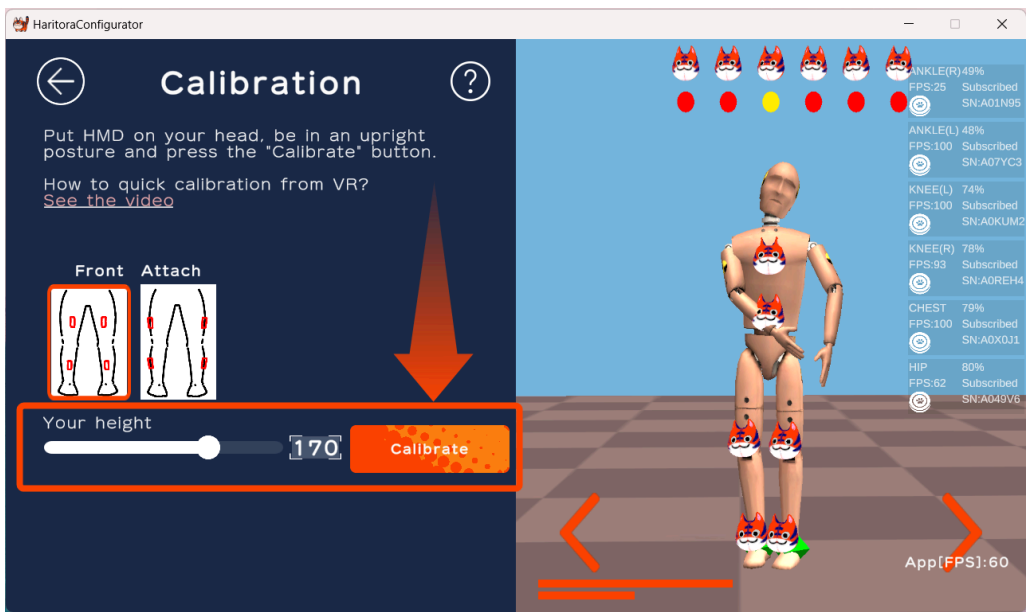
In some situations, calibration with the controller (pressing the trigger 5 times continually) may not be possible. In that case, use the method below to display the desktop in the VR space and perform the calibration by tapping the button on the screen.

[NOTE] Here's how to use the Oculus Quest 2 controller. If you are using a different controller, check the location of the menu button in the controller's operation manual.

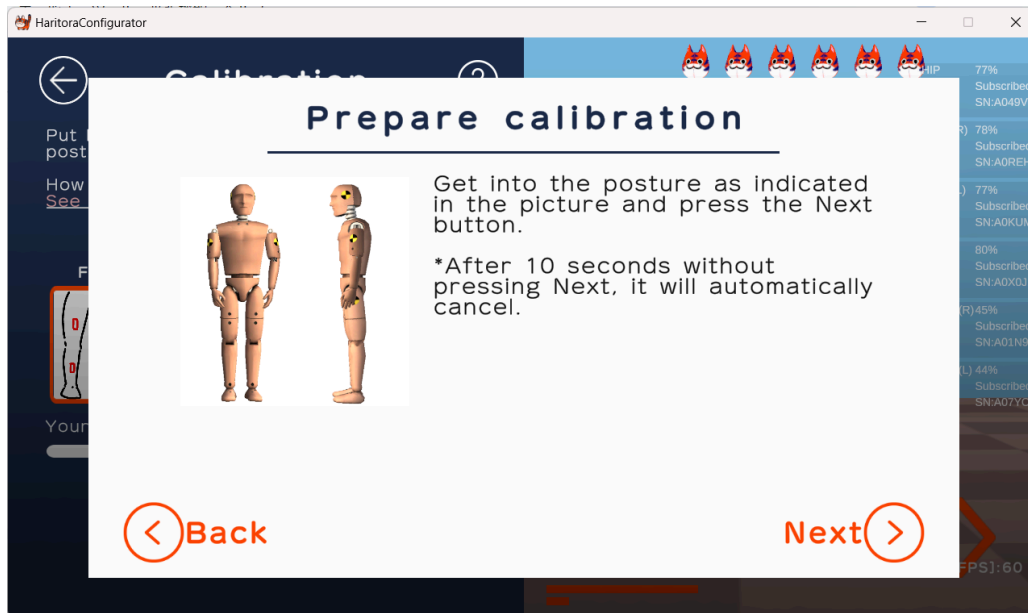
1. Press the "Menu button" or "Oculus button" on the controller.
2. If you press the "Menu button", select "Desktop" from the Steam menu. If you press the "Oculus button", select "Desktop" from the Oculus menu.



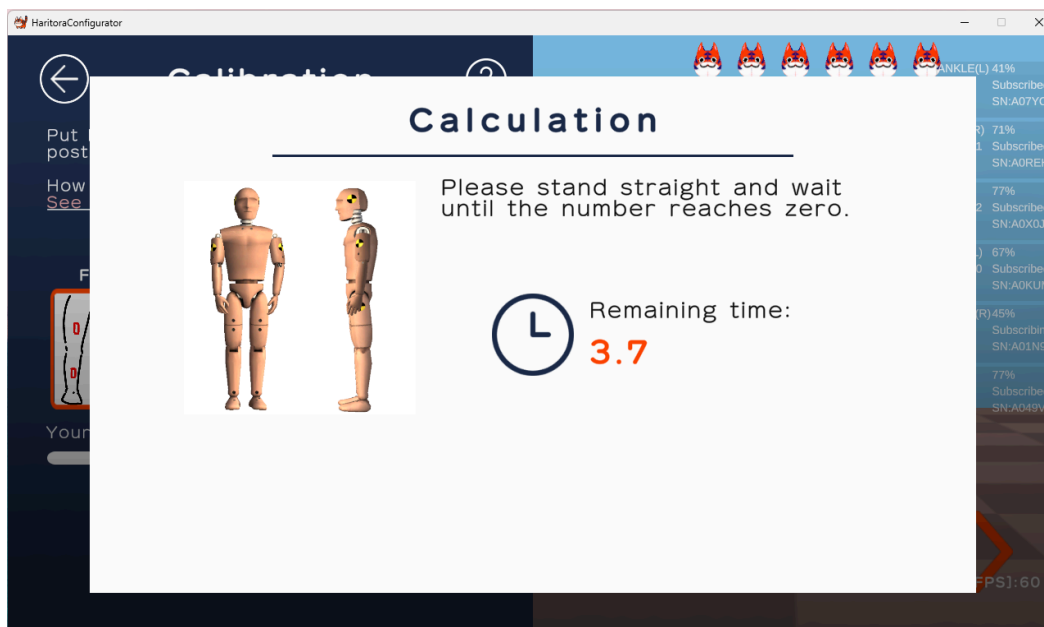
3. When the desktop screen is displayed in the VR, select "Perform calibration" on the Haritora Configurator screen.



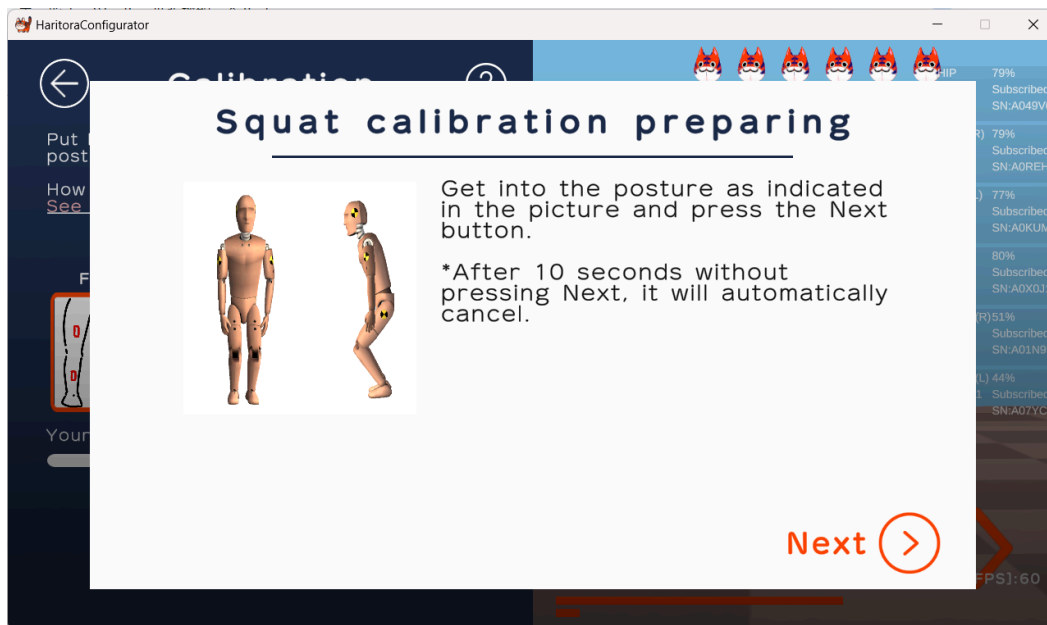
4. Select "OK" to start calibration. Stand up with your feet together and your arms straight, select "Next".



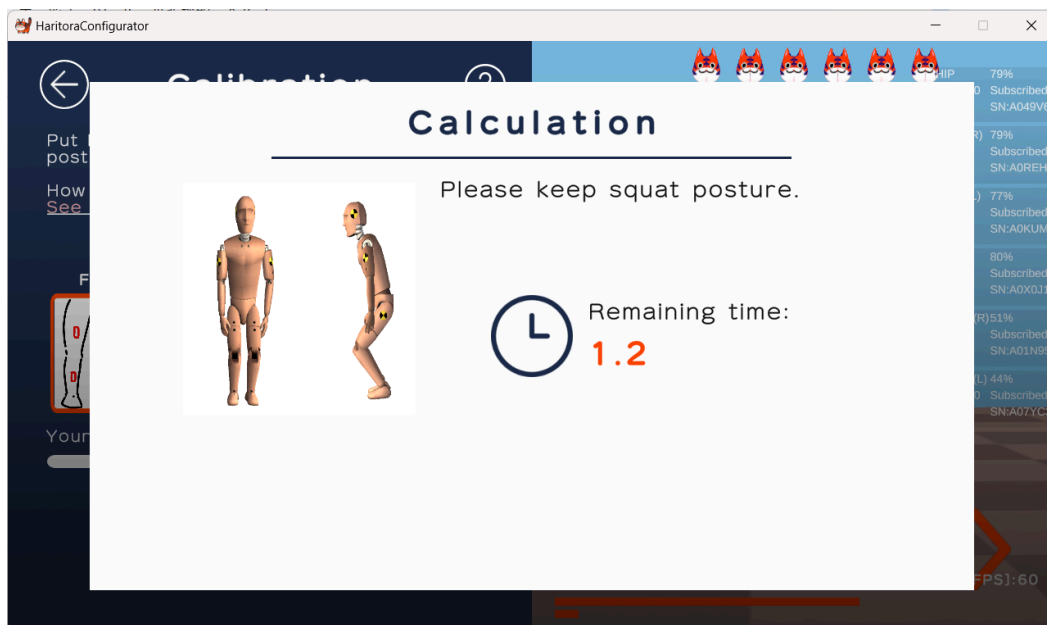
5. Hold that position for 5 seconds. If successful, you will hear a sound.



6. Bend your upper body, keep your knees together and bend your hips down about 30 ~ 40 cm, then select "Next" on the right side of Forward.



7. Hold the position for 5 seconds. If the calibration is successful, a second sound will play and the calibration is complete.



8. Use in VR applications

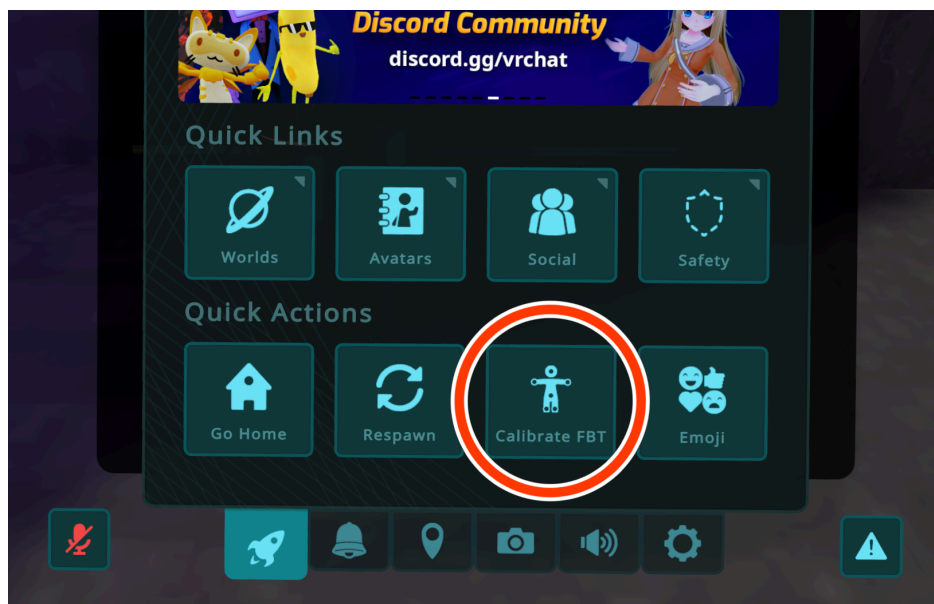
8.1. Use with VRChat

8.1.1. Start VRChat

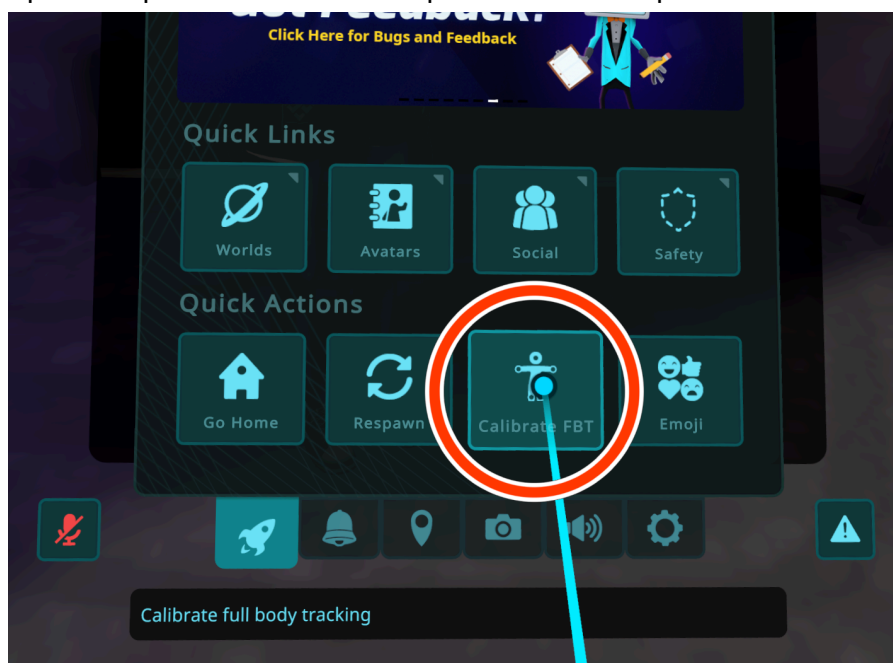
1. Download and install "VRChat" from Steam "Store".
2. Start "VRChat" with the HaritoraX wireless installed and the connection with the Haritora Configurator completed.

0.1.2. Calibrate within VRChat

1. Open the Quick Menu and make sure that "Calibrate FBT" is displayed in the image position.
[NOTE] If "Sit / Stand" is displayed, HaritoraX may not be properly recognized by SteamVR, please check if the settings in SteamVR and Haritora Configurator are correct and restart VRChat.



2. Move to the front of the mirror to [calibrate](#) it.
[NOTE] VRChat allows you to use quick calibration (set of 5 triggers standing up and 5 triggers squatting down)
3. Open the quick menu in the completed calibration posture and select "Calibrate FBT".



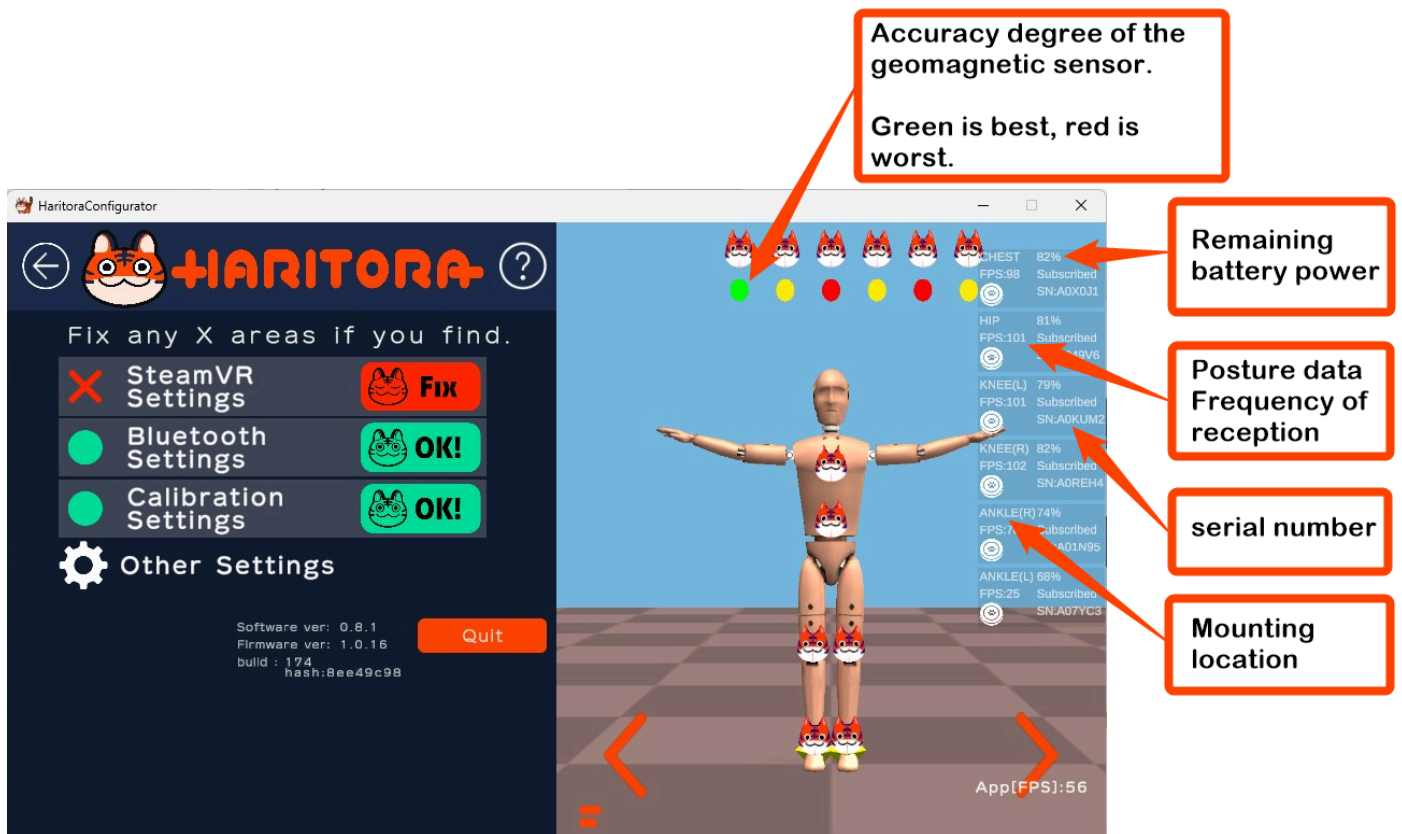
4. Calibrate the avatar. Position the white ball so that it is around the avatar's waist and the instep of the left and right foot, open the legs slightly, and press the index finger triggers on the left and right controllers simultaneously.
If you close your legs tightly, the avatar's legs may stick together.



9. Explanation of each screen and function of Haritora Configurator

9.1. Haritora Configurator main screen

When you press "Start" on the Haritora Configurator start screen, the following screen appears. This is called "main screen". The main screen displays links to various settings and numerical values for each status.



On the right side, the whole body movement calculated by Haritora Configurator is displayed as a dummy. The avatar on the VR application moves according to the posture of this dummy.

If all the buttons on the main screen are green "OK", or if only the calibration is orange, all settings have been made successfully. Calibration is [Documentation here](#) as you can see, it can also be run from within the VR application.

If there are others marked with an orange "Fix", the settings were not successful. Please press the Fix button of the corresponding item to solve the problem.

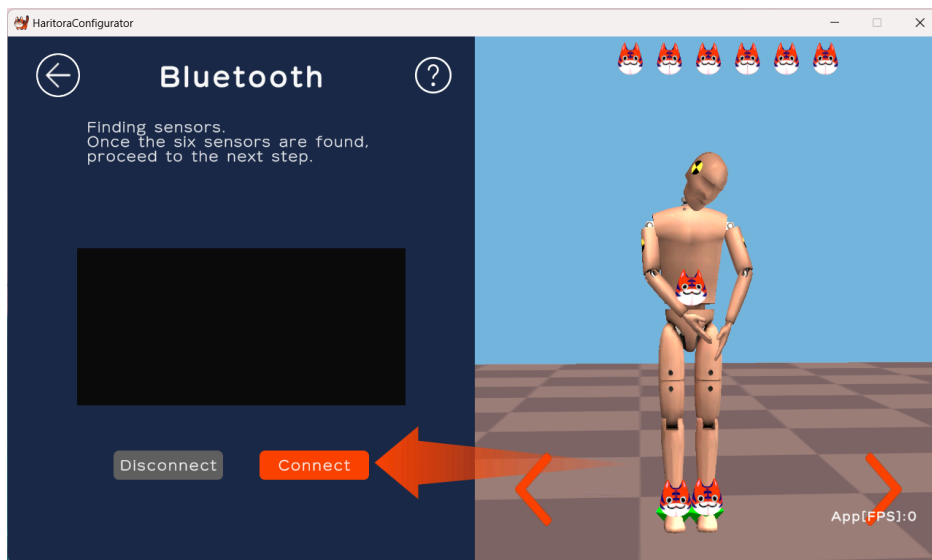
9.2. Bluetooth setting screen

The Bluetooth screen. This is the screen for connecting HaritoraX wireless and Bluetooth.

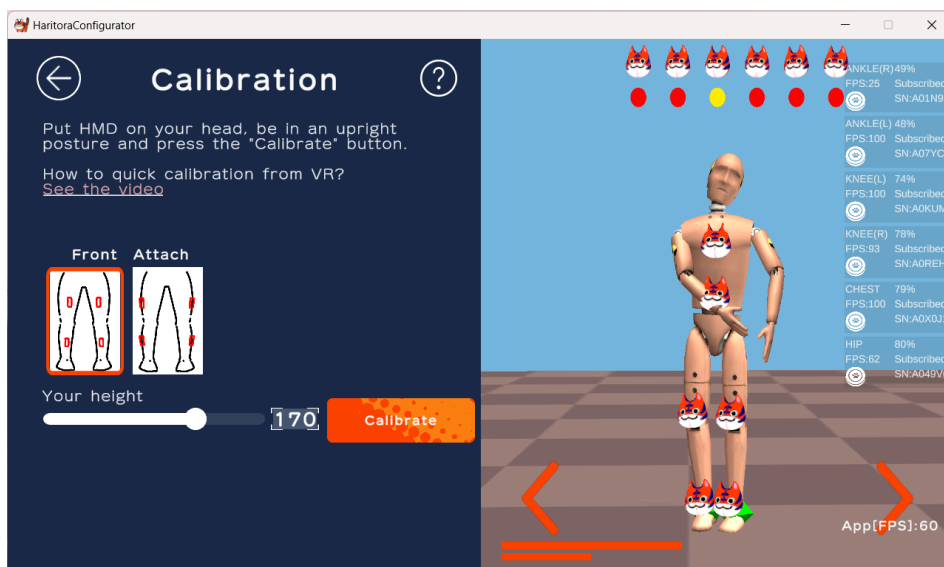
Press the connect button to start the connection. It takes about 10 to 20 seconds to connect with all sensors, so please wait for a while.

In addition, Bluetooth pairing operation with a PC is unnecessary.

If the Bluetooth connection does not go well, Please refer to "[here](#)" and take appropriate measures.



9.3. Calibration screen



9.3.1. Height setting

This menu is used to set the height of the player. Set the height of the player, not the avatar. It is located from the ground to the head, so if you are wearing high shoes (platform shoes, etc.), please set the actual height with the thickness of the shoes.

9.3.2. Mounting position setting

Knee and ankle sensors can be attached to either side or front of the legs. When it is attached to the side, it is easier to sit on your legs or cross-legged, and when it is attached to the front side, it is easier to sit sideways. Note that it is not possible to attach only a part of the sub unit sensor horizontally or partially in front.

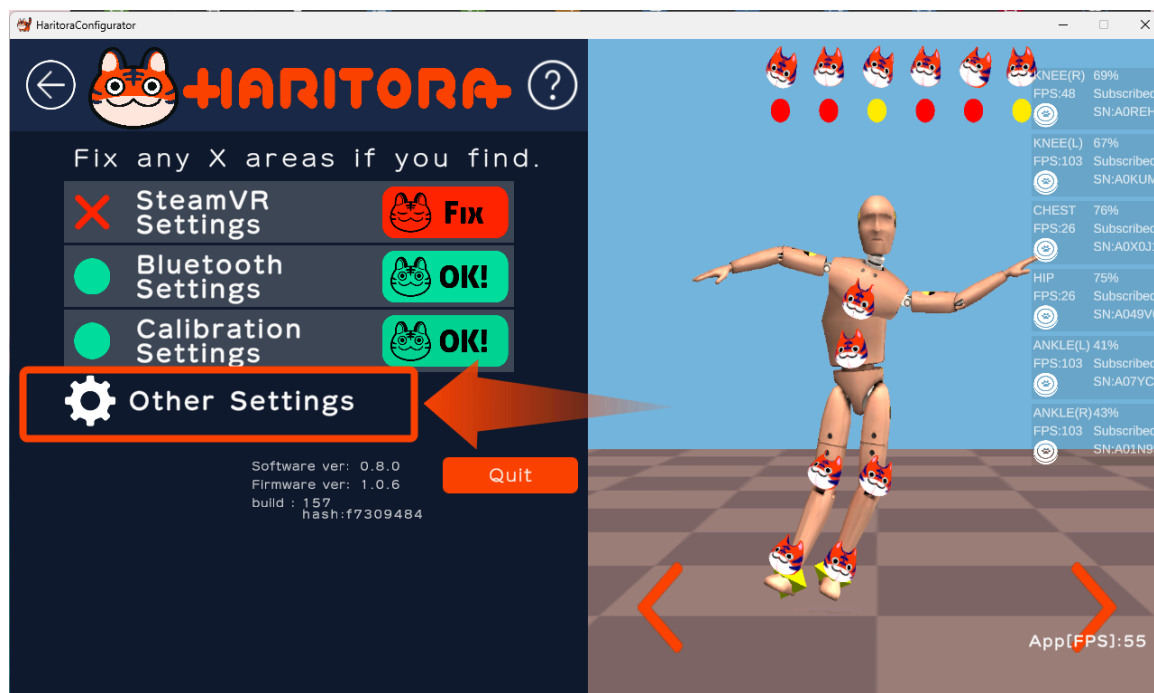
For this mounting position setting, this menu selects the correct mounting position. Be sure to specify the actual mounting location. If the wrong mounting position is used, it will not operate properly.

9.3.3. Calibration button

Typically, It uses the controller's trigger five-times-continuous input calibration (Following is Quick Calibration), but some non-VR applications may not support quick calibration. In this case, use this button to perform calibration. Please refer to "[Calibrate on the desktop screen in VR space](#)" for details on how to.

Calibrating in VR applications such as VRChat is easy and quick with quick calibration ("[Calibrate](#)") is recommended. There is no difference in tracking performance regardless of which of these calibrations is performed.

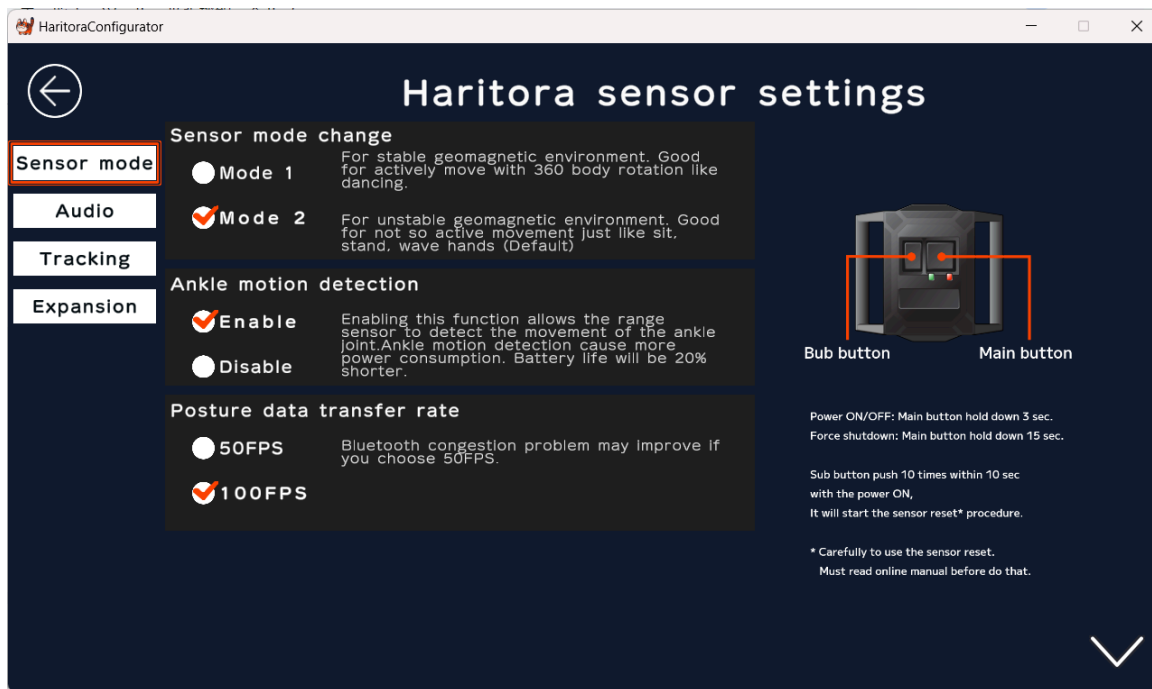
9.4.Other settings screen



9.4.1. Sensor mode

You can select the operating mode of the sensor. There are two types of modes, which can be selected according to the usage environment. After changing the mode, perform calibration again. Also, it can only be changed after connecting HaritoraX Wireless and Bluetooth. For the characteristics of each mode, please refer to the explanation in Haritora Configurator.

[NOTE] "Mode 2" is the default setting.



4.2. Ankle movement detection function

This is a feature that uses a distance sensor to reflect the movement of the ankle.

[How to setup the ankle motion detection](#)

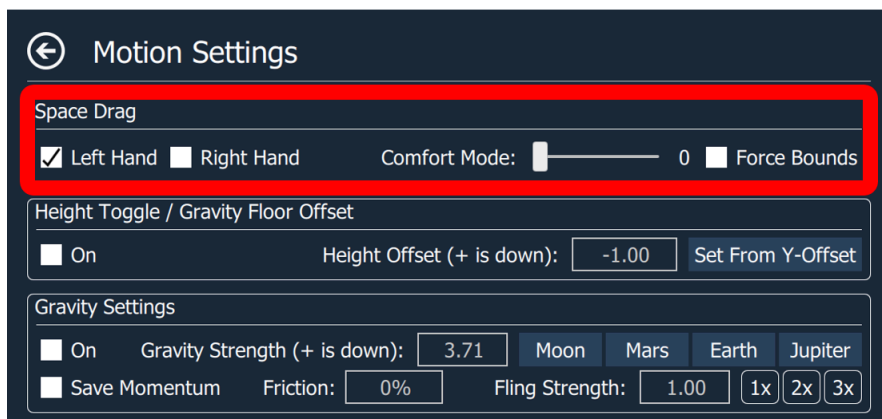
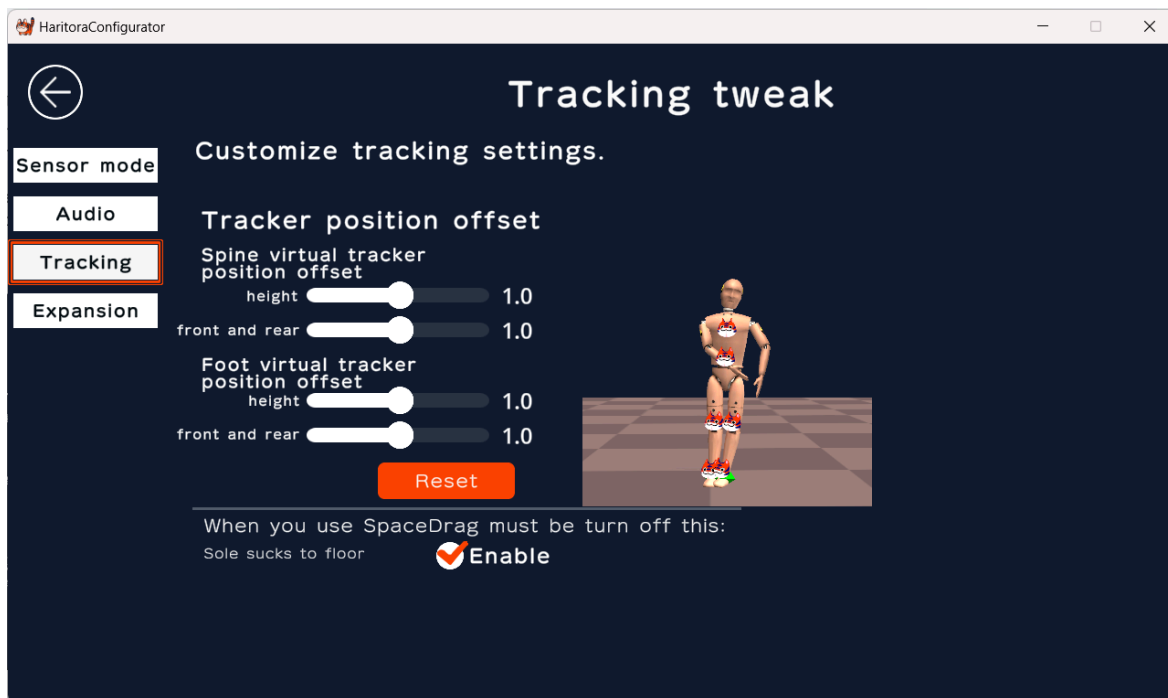
4.3. Audio

You can adjust the volume of the sound effect that sounds when calibration is completed, etc.

4.4. Setup to "Sole sucks to floor"

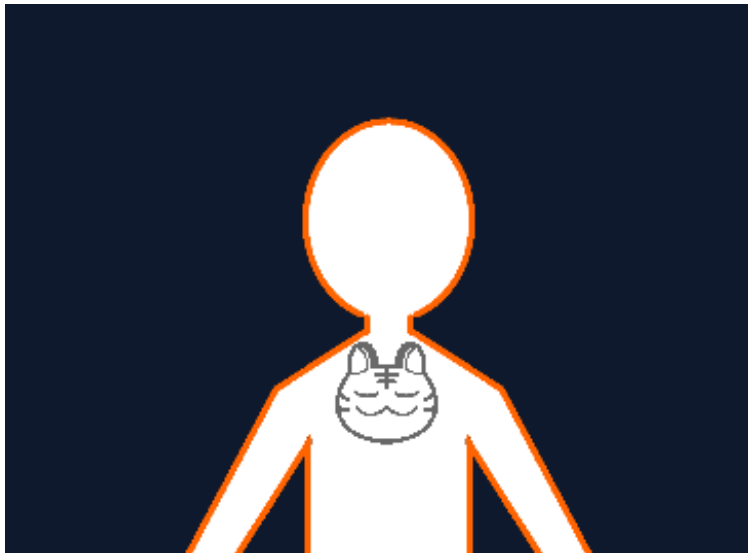
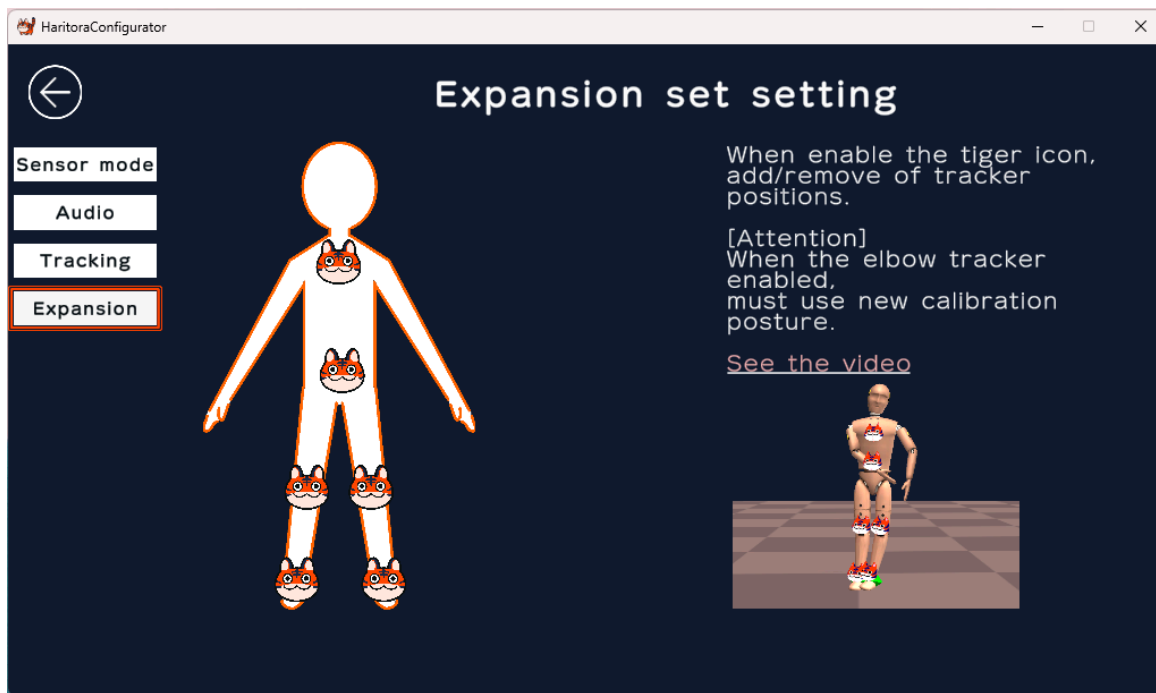
It is a function to correct the ankle not to be buried in the ground when squatting. It is recommended to use it in the ON state to prevent the foot from being buried in the ground, but the Space Drag function (formerly called Play space mover) of OVR Advanced Settings restricts the Space Drag operation in the direction of equal height to be buried in the ground.

[NOTE] They don't get buried, they crawl to the ground.



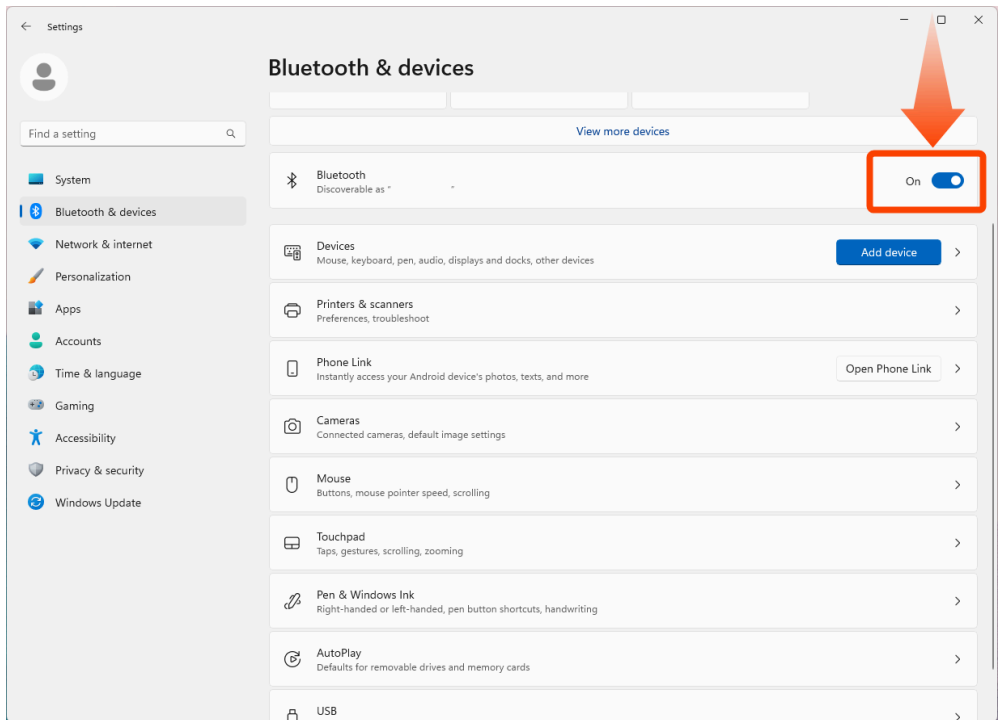
4.4.5. Expansion set

This screen confirms that the sensor is enabled. If the tiger icons are sleeping, click the corresponding tiger to wake it up. Click again to put the tiger to sleep and disable the tracker.



FAQ・Troubleshooting

Questions/symptoms	Answers/Causes and countermeasures
What is the product warranty period?	The warranty period for this product is one year from the date of purchase. If you have made a reservation purchase, it is one year from the date of shipment of the product.
There is no store name or other information on the warranty card, is that okay?	If you purchased from the Shiftall website, we know the date of purchase, so we do not fill in the warranty card. If you purchased at a store, etc., you can receive a warranty within the warranty period without entering the store name and purchase date by presenting a document that proves the date of purchase.
can not turn on	The battery may be empty. Connect the charging USB cable and press the main button for about 3 seconds while the red LED lights and charging starts.

	Also, after performing a forced shutdown (press and hold the main button for 30 seconds), connect the USB charging cable again. If the power does not turn on after forced shutdown, remove the USB cable and then turn on the power. If the above method does not improve the symptoms, please contact support.
It takes a long time to charge	If you use a USB charger with an output of 5V/2.0A or less per port, It may not be able to charge, or may cause the USB charger to malfunction, overheat, or catch fire. <u>Be sure to charge with a USB charger with an output of 5V/2.0A or more.</u>
Red LED does not light up while charging	Is the USB charging cable firmly connected? Please check "Charging". Charge the battery at a room temperature of 10°C to 30°C (50°F to 86°F). When charging is complete, the red LED will turn off. If the above method does not improve the symptoms, please contact support.
Red LED flashes fast while charging	The sensor's charging system or battery may be malfunctioning. If symptoms occur frequently, please take a video showing the sensor status and contact support.
Shorter operating time	If the charging time and operating time become shorter, the internal battery may be exhausted.
Power turns off by itself	If the power of the sensor unit continues for 20 minutes without being connected to the Haritora Configurator, the power of the sensor unit will automatically turn off.
Bluetooth connection is not possible	Please turn off Bluetooth once from Windows settings and turn it on again. 15 seconds after turning it on, try connecting with Haritora Configurator.  If you still can't connect, try restarting your PC once. When the Bluetooth surroundings are unstable, restarting is the best. If this does not solve the

	problem, we have prepared a troubleshooting page for when Bluetooth connection is not possible. Here Please read.
Bluetooth connection is possible, but it is easy to break off. immediately disconnected	If the distance between the PC and the Bluetooth USB adapter is too close, the Bluetooth connection may be easily interrupted depending on the environment. Use a USB extension cable like the one below and keep the Bluetooth USB dongle away from your PC. USB extension cable here. Also, the Bluetooth connection may be interrupted in the following cases. • The body is positioned to cover the sensor • The Bluetooth USB adapter is covered by an object, or there is a metal object nearby. • Multiple other Bluetooth devices are connected at the same time Connect the main unit to the Haritora configurator with the main unit close to the Bluetooth adapter without wearing it on your body, and check if the same symptoms occur.
Bluetooth connection with Haritora Configurator cannot be established	Regarding Bluetooth connection, we have a separate troubleshooting page, please refer to "here" and take countermeasures.
I don't know the startup order of each application	The order in which the applications are started does not matter, but it is recommended to start the Haritora Configurator after the VR headset is recognized by SteamVR, connect Bluetooth, and then start the final application (VRChat, cluster, etc.). You can also launch VRChat, enter the instance in VR mode, and then launch the Haritora Configurator to become fulltra. It's useful to remember in case you need to enter the instance in a hurry.
Can HaritoraX Wireless coexist in an environment where Quest (Quest2) and Vive controller (Index controller) are used together?	Haritora Configurator has a coexistence correction function with OpenVR Space Calibrator, so coexistence is possible. Coordinates must be adjusted in the calibration setting menu of Haritora Configurator.
Can't calibrate with controller trigger.	HaritoraX Wireless can be calibrated only within VR applications such as VRChat. Please note that calibration cannot be performed while the SteamVR menu or Oculus menu is displayed. Please do the following within your VR application: With both hands holding the controller facing vertically downward, press the trigger on the controller 5 to 7 times in a row (calibration). Instructions in the video here.
Your legs and hips keep spinning in a certain direction after	"Drift" is the rotation of sensor tracking over time. The drift phenomenon can be suppressed by the sensor reset function and/or selecting appropriate tracking

only a few minutes of use	mode. About the sensor reset function here For information on how to change modes here Due to the characteristics of the IMU type tracking device, drift cannot be reduced to zero. Also, depending on your location, there are environments where drifting is likely to occur and environments where drifting is difficult to occur. If the accuracy of the geomagnetic sensor that is lit at the top of the Haritora Configurator window (decreases in the order of green → yellow → red) is  or , mode 1 can be used. If this color quickly becomes , mode Try 2.
Lights up at the top of the Haritora Configurator window Accuracy of the geomagnetic sensor Everything stays the same . mode1 can't be used?	Before using this product or if you change the place of use sensor reset must be done. If you have not done so, please do so. If you have already performed a sensor reset, click [Negative environment/Environnement négatif/Nachteiliges Umgebung/Ambiente sfavorevole/Entorno negativo], and if there is any applicable condition, please avoid the condition as much as possible. Depending on the environment, Mode 1 may not work. If the above does not improve the situation, please use Mode 2.
The dummy on Haritora Configurator is working, but the virtual tracker on SteamVR is not working	Communication between Haritora Configurator and SteamVR may be blocked by a firewall, etc. Launch the bat file "haritora_firewall.bat" in the Haritora Configurator folder to remove the block. "haritora_firewall.bat" is in the following location. (if installed in default location) C:\Program Files (x86)\Haritora Configurator\haritora
Ankle motion detection does not work	Please make sure you have the latest firmware. Please disable the ankle motion detection function once and then enable it again. If the above method does not improve the symptoms, please contact support.
The operation of the ankle motion detection function is not stable	For troubleshooting the ankle movement detection function, We have prepared a separate page here Please read.
When I take a posture with my legs thrown forward in VRChat, my legs bend and I end up in a sitting posture.	The height setting of the player is the basis, but in such a situation By adjusting the height setting in VRChat and the height setting in Haritora Configurator (in the Calibration section), you can stretch your legs beautifully. However, this method will not work properly if the "ankle movement detection function" is ON. The manual on how to set up the ankle motion detection function is "here". Since it is affected by the avatar's leg length (strictly speaking, the head and body), it is necessary to readjust the values when using an avatar with a different head and body. [Reference figures]

	<table border="1" data-bbox="489 91 1431 385"> <tr> <td>Avatar</td><td>MERINO chan https://booth.pm/en/items/2351859</td></tr> <tr> <td>Player's height</td><td>174cm</td></tr> <tr> <td>VRChat height setting</td><td>162</td></tr> <tr> <td>Configurator height setting</td><td>150</td></tr> </table> If you sit with your legs thrown out with the above settings, your legs will stretch out beautifully like this. 	Avatar	MERINO chan https://booth.pm/en/items/2351859	Player's height	174cm	VRChat height setting	162	Configurator height setting	150
Avatar	MERINO chan https://booth.pm/en/items/2351859								
Player's height	174cm								
VRChat height setting	162								
Configurator height setting	150								
Want to know the length of the belt and the corresponding body size.	The data of belt length itself is not disclosed because it is meaningless because the corresponding body size depends on the length of the sensor body, size adjuster portion and hook and loop fastener sewn portion (no stretch here) and an elastic belt part. The belt can be stretched to about 1.8 to 2 times its length, so it can be used for a wide range of body size. Please note that if you use the belt in a size close to maximum length, you may feel a little tight and uncomfortable, depending on the individual. Chest (CHEST) max. 150 cm Waist (HIP): 150 cm max. Up to 100 cm above the knee Below the knee (LEG) about 50 cm maximum								

For all other inquiries, please contact Shiftall Customer Support.

Shiftall Support Contact Form
<https://forms.gle/WMU54Jz6RN5dU84XA>

Haritora Configurator Release Notes

- 2023/7/13 Version 0.8.0
 - Compatible with HaritoraX wireless.
 - Bluetooth LE communication is now available for HaritoraX / HaritoraX 1.1.

- As a HaritoraX 1.1-only feature, the user can now adjust (individually turn on and off) the factory-fixed "automatic correction of each sensor" parameter. We will announce how to use it separately.
 - Expanded the adjustable range of tracking correction/adjustment items.
 - Fine adjustment of UI and wording such as setting screen UI change.
 - Product code authentication is no longer required at first startup.
- 2023/7/28 Version 0.8.1
 - Updated Terms of Use.
 - (For HaritoraX Wireless users) Corrected the estimated operating time when the ankle motion detection function is turned on.
 - (For HaritoraX Wireless users) Fixed an Ankle movement problem that was not correct ankle angle when the ankle motion detection function was enabled and there was nothing within 2 meters from the ankle detection sensor.
 - Other minor fixes.
- 2023/8/25 Version 0.8.2
 - Supported HaritoraX button triggered calibration.
 - Enabled Sensor Auto Correction on HaritoraX Wireless.
 - English UI brushed up.
 - Other small changes.
- 2023/10/30 Version 0.8.4
 - Supported GX6 communication dongle.
 - Other slight modifications.
- 2023/12/5 Version 0.8.6
 - Support for HaritoraX Wireless Expansion set for Elbow Tracking.
 - Support for GX2 Communication Dongle.
 - Other minor modifications.
- 2024/7/1 Version 0.8.7
 - Fixed a case where a "Firmware versions not aligned" error message was displayed when using HaritoraX wireless, even if the firmware versions of all sensors matched.

HaritoraX Wireless Firmware release notes

- 2023/06/19 Version 1.0.0
 - Release
- 2023/06/29 Version 1.0.3
 - Added auto power off function
 - Fixed a bug where after charging with the power off, the power consumption was slightly high, and the power turned off unintentionally when the power was turned on.
 - Fixed a bug that the sensor reset function by button operation did not work properly.
 - Fixed a bug that the power could not be turned off while charging.

- 2023/07/10 Version 1.0.4
 - Fixed a bug that when the power is turned on, it works with the fixed settings regardless of the saved settings.
- 2023/07/14 Version 1.0.6
 - Fixed a bug that caused the ToF sensor to turn off when the power was turned on.
- 2023/07/28 Version 1.0.13
 - Fixed a problem in which the remaining battery capacity display was sometimes out of sync with the actual remaining battery capacity.
 - Improved battery life when the ankle motion detection function is enabled (from about 8 hours to about 10 hours)
 - Other minor modifications.
- 2023/10/30 Version 1.0.18
 - Supported GX6 communication dongle.
- 2023/11/30 Version 1.0.22
 - Fixed a bug that the settings of attach location(CHEST, HIP, etc.) were rewritten.
 - Other minor modifications.
- 2024/07/28 Version 1.0.25
 - No change in functionality or performance under normal use.
- 2025/06/03 Version 1.0.28
 - It is now possible to change the attachment point for all previously sold “HaritoraX Wireless Elbow Expansion Sets.”
For example, you can change from Elbow → Foot or Elbow → Wrist.
Other minor improvements.

Open source software license credit

License credits for various open source software used in the product are [here](#).

All company names, system names, and product names mentioned in this manual, with the exception of Shiftall and HaritoraX, are registered trademarks or trademarks of their respective companies, and are not the property of our company.

In principle, "TM" and "®" are omitted in the text and figures.



Shiftall Inc. 2023-8