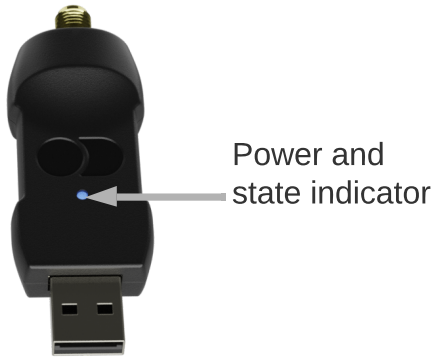
DECA Move & Dongle

Product details



Setup

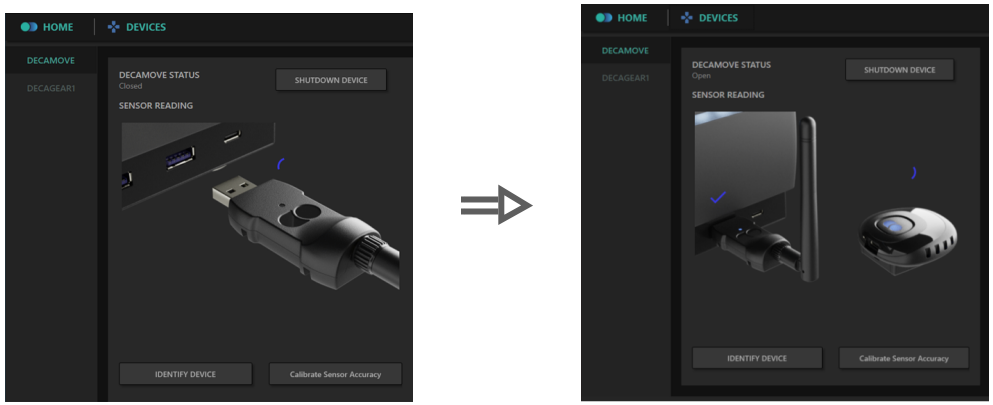
1. **Download and install deca hub**
   Requirements:
   - Steam VR
   - Windows 10

   Download and Install the DecaHub installer from this link:
   https://www.deca.net/decamove/setup
   Open the DecaHub software from your Windows Start menu

2. **Connect DecaMove dongle to PC**
   Screw-in the extended range antenna to the USB dongle and connect the dongle to your PC to any USB port.

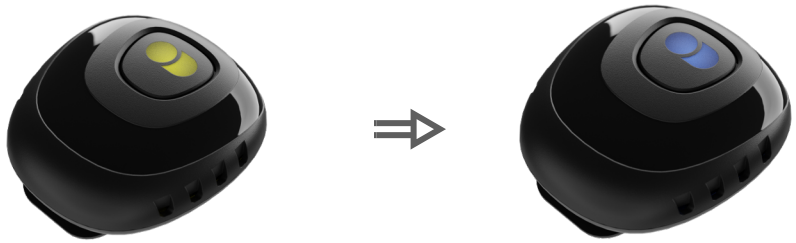
DecaHub software will show the connection status change from “Closed” to “Open”.

It is recommended to connect the DecaMove dongle to a front USB port if available.

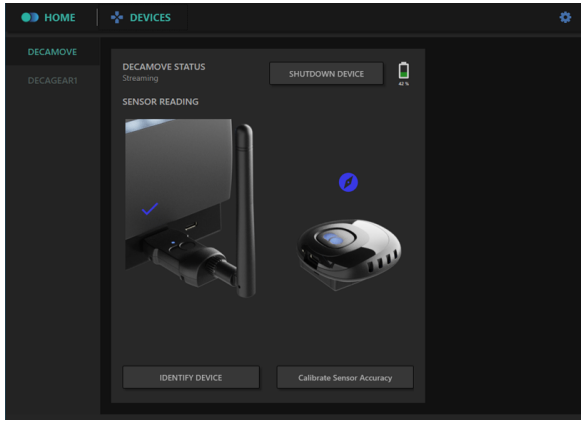


Setup

3. **Pairing**
   Turn on the DecaMove by pressing the button for 2 seconds.
   DecaMove LED will change from orange (not connected) to blue when it successfully connects to dongle.



Notice the connection status changes to “Streaming” and the compass icon rotates according to how you rotate your DecaMove.
Pairing should happen automatically once the dongle is connected and theDecaMove is switched on. Please refer to the troubleshooting section for any issue.

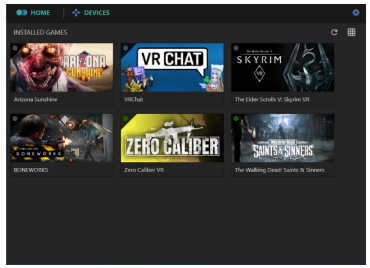


4. **Calibration**
   (For first time use only)
   DecaMove delivers precise, low latency, and high accuracy hip tracking. The device’ sensor fusion relies heavily on the magnetometer which MUST be calibrated before first use.
   Calibration is easy and should take less than 20 seconds, please forllow the instructions in this link:
   https://www.deca.net/decamove/support/decamove-magnetometer-calibration-procedure/

Setup

5. **Fit**
   The DecaMove can be placed anywhere along the waist and hip area but we recommend placing it on the sides so that it doesn't interfere with crouching down or bending forward.

6. **Launch games from decahub Launch Tab**
   In order to support many games without the need for the game developer to install the devices' SDK, it's important that you launch games from the DecaHub.
   Go to the Home tab and click the game you want to play (e.g. Pavlov VR)
   A check mark next to it means that DecaMove supports this game.



7. **In game calibration**
   Calibration is needed at the start of every gameplay session and at any time you feel the device heading has drifted.
   DecaMove's gestured calibration does not require any special settings or any pressing of buttons: Simply hold your controllers close together in front of your hips. Make sure your hands point in the same direction as your head. Then look forward and don't move for 1 second. You will see the "Calibrating…" message show up, hold the position until it's complete. That's it. You are calibrated.

Setup

8. **Game settings**
   Once the game is running, go to the game settings menu and make sure that the locomotion method is set on **continuous** and **head-oriented** and set the dominant hand to **right-handed**.
   Also, depending on the game, remove any joystick manipulation mechanism (e.g. locking the joystick in Contractors, or smoothing the joystick in Boneworks). This is a very important step. Without removing it, the movement will be wrong.
   Try pushing the left joystick forward to walk around, you will see that your movement is now relative to your hip. Enjoy the game with DecaMove!

9. **DecaMove In-Game UI**
   The DecaMove does one thing and it does it efficiently and accurately. It allows you to navigate with your hip with minimal drift so that your movement direction can be independent from your headset or hand controllers.
   It may take a bit of time to get used to this type of navigation control, especially if you are used to playing with controller-based movement, but it will give you an advantage against other non-DecaMovers.
   We add an In-Game UI that shows your hip headings and the DecaMove battery gauge.
   You can turn it On or Off by clicking on the DecaMove button.
   Visit the Tips section for more info of how to use the DecaMove properly.

Charging DecaMove
To charge the DecaMove, please connect it to a USB port on your laptop or PC using the provided USB cable.

Indicator states

1. **DecaMove** OFF: LED is off

   Dongle OFF: LED is off

2. **DecaMove** ON but not connected to dongle:
   LED is Orange

   Dongle connected to PC but not connected to DecaMove:
   - LED is steady red (com port open)
   - LED blinks red (com port closed)

3. **DecaMove** is turned on and connected to dongle:
   LED is blue

   Dongle connected to PC and DecaMove:
   - LED is steady blue (com port open)
   - LED blinks blue (com port closed)

4. **DecaMove** Battery Low/Charging:
   LED is steady red

   DecaMove Battery level extremely (<5%):
   LED blinks red

Indicator states

5. **DecaMove** Charging complete:
   LED is white

6. **DecaMove** Sleep mode:
   DecaMove connected to dongle:- LED blinks blue
   DecaMove disconnected from dongle:- LED blinks orange

7. **DecaMove** device identification:
   When device identification command is sent to deca move, LED will blink with whichever color that is on

Button operation

1. Long Press button for more than 1 second to:
   - Turn ON DecaMove if it is OFF or sleep mode
   - Set DecaMove to sleep if it is ON

2. Long Press button for more than 2 seconds to enter Device Firmware Update mode, when usb cable is connected

3. Short press button (<500ms) to send button press indication to host (PC):
   - Single press - sends single click indication to host
   - Double press - sends double click indication to host
   - Triple press - sends triple click indication to host

Problems and troublshooting

1. **DecaMove is not connecting**
- If the DecaMove dongle LED is solid red and the DecaMove LED is solid yellow it means that the dongle BLE port memory wasn't clear for some sort of reason (can happen with multiple DecaMoves in the same environment).
  Fix: Unplug the dongle, wait 3 seconds and plug it again.
- If the DecaMove dongle LED show solid blue and the DecaMove LED is solid blue it means that the device is paired and either:
  - It's not streaming quaternion data from some sort of reason: Fix - Unplug the dongle, wait 3 seconds and plug it again.
  - Or its SteamVR driver wasn't loaded: Fix - Restart SteamVR

2. **Game is not shown in the Decahub home**
- If the DecaHub does not display a game, please click on the refresh button in the DecaHub home tab

3. **DecaMove is not working**
- If the game was installed after you connected the dongle, please remove the dongle and connect it again.

Advanced user?

If you find out that something is wrong, you can always check the log. You should find the logs folder inside the installed folder (C:/Program Files/Megadodo Games/DecaHub)
If you could zip that folder and send it to us, it would help a lot!.
You can also try and debug it yourself, open the log file and try to find an error message such as ERR or FTL.

Brief technical data

DecaMove
- Transmitting/receiving frequency: 2.4GHz (BLE)
- Transmitting speed: 2Mb/s
- Working voltage: 3.7V (3.0V - 4.2V)
- Working current: 25 ~ 35mA
- Stanby current: <1mA
- Power off current: <2uA
- Transmitting distance: >5m (direct line of sight)

Dongle
- Receiving frequency: 2.4GHz (R**eceice**r)
- Working voltage: 5V
- Working current: 10 ~ 20mA
- Stanby current: <1mA

Megadodo Simulation Games PTE. LTD.
www.deca.net

For more questions or suggestions, please reach us at:

https://discord.com/invite/d7YG7qD
https://twitter.com/DecaGear

FCC Caution:

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.