

PPC-2 Instruction Manual

PawPrints Wireless Button Sensor 2.0 Connector , PPC-2

Before using this product, please read this instruction manual carefully and keep it safe for future reference.

FCC Warning

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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.

Caution

Any changes or modifications to this device not explicitly approved by the manufacturer could void your authority to operate this equipment.

FCC Compliance

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.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 0 cm between the radiator and your body

Safety Notice/Disclaimer

To ensure your health and safety while enjoying this product, please ensure you have read and understood all the contents of this safety notice before use. Improper use of this product may cause harm to you or others, and you will be solely responsible for any resulting consequences.

Thank you for choosing the DG-LAB series products. User safety is always our top priority. This product is a sex toy; please ensure it is used safely, soberly, and voluntarily. Please keep it out of reach of minors.

Using this product signifies that you have read and accepted all terms and conditions related to this product.

Warning

1. This product is a wireless communication adapter, serving solely as an upper-layer access point for PawPrints Wireless Button Sensor 2.0, providing motion capture data transmission and related management functions. Before use, please review the specific user manual for each component to ensure the component's usage scenario matches your own situation, avoiding risks arising from ignoring component characteristics.
2. This product has a radio transmission function. People who wear pacemakers or similar medical implants should consult a professional doctor before using this product.
3. This product is strictly prohibited from use while driving or operating machinery; modification (including altering interface functions or bypassing protection mechanisms), disassembly, or use for purposes other than its intended design are strictly prohibited. Such actions may cause personal injury or property damage, and the user shall bear all resulting liabilities and losses.
4. The following places are strictly prohibited from use: flammable and explosive

places, high temperature and high humidity environments (such as bathrooms, near heating, electric blankets) and unventilated basements.

5. This product is not waterproof. Do not expose this product to humid environments. Do not use organic solvents such as alcohol to clean it (this may dissolve the printing on the product surface).

Important usage tips

1. This product needs to be connected to a PC. Before using this product, please ensure that it is securely and reliably plugged into the USB port.
2. This product is powered via a USB connector. It is recommended to plug it directly into the USB port of a PC or other device. If an extension cable is required, please ensure that the cable makes good contact and the connection is stable.
3. Before you begin using it, please scan the QR code on the back of the instruction manual or search for and download the "DG-LAB 4" APP in the app store, and install the accompanying host computer software.
4. If the product is damaged, please contact after-sales service for repair. Do not attempt to disassemble or repair it yourself.
5. This product is sold as a set. Please use it appropriately and combine the components as needed. No component may be used for any purpose other than those described in the instruction manual.

Product Disposal Precautions

This product is a general electronic product (excluding battery). Please dispose of the discarded product properly and avoid throwing it away with household waste.

Names and contents of hazardous substances

List of Hazardous Substances and Their Contents in the Product

Comp onent Name	Le ad (P b)	Mer cury (Hg)	Cad miu m (Cd)	Hexa valen t chro mium (Cr(V I))	Polybro minated biphenyl s (PBBs)	Polybro minated diphenyl ethers (PBDEs)	Dibu tyl phth alate (DBP)	Diiso butyl phth alate (DIB P)	Buty l benz yl phth alate (BBP)	Di(2- ethyl hexyl) phtha late (DEH P)
shell	○	○	○	○	○	○	○	○	○	○
metal parts	○	○	○	○	○	○	○	○	○	○
Intern al wirin g	○	○	○	○	○	○	○	○	○	○
Other access ories	○	○	○	○	○	○	○	○	○	○

This table is prepared in accordance with the provisions of SJ/T 11364.

○: This indicates that the content of the hazardous substance in all homogeneous materials of this component is below the limit specified in GB/T 26572.

×: This indicates that the content of the hazardous substance in at least one homogeneous material of this component exceeds the limit specified in GB/T 26572 (the product complies with the EU RoHS Directive environmental requirements).

(Note: The product complies with the EU RoHS Directive and related environmental requirements.)

Product Overview

This product is a wireless communication adapter, serving as a PC receiver for the PPS-2 motion capture mode (hereinafter referred to as "PPC-2"). It does not have a stimulation function itself, but only serves as a data input source for other systems.

The PPC-2 needs to be connected to PC host computer software and controlled interactively through the accompanying host computer software.

Basic parameters

Product Name	PawPrints Wireless Button Sensor 2.0 Connector
Product Model	PPC-2
Product Dimensions	54*24*11(mm) (excluding antenna)
Product net weight	≈13g (excluding antenna)
Transmission distance	Private 2.4GHz, 10 meters (unobstructed conditions)
Connection method	USB Type-A, 5V=0.3A(MAX)
Operating humidity	Relative humidity < 85%
Operating temperature	0~40℃
System Requirements	Windows 7/Windows 10/Windows 11

Packaging contents

Upon opening the package, confirm that it contains all the items listed below. If any item is missing, please contact your dealer.

1. PawPrints Wireless Button Sensor 2.0 Connector*1
2. Matching antenna *1
3. Instruction manual *1



Get started quickly

Before you begin using the app, please scan the QR code on the back of the instruction manual or search for "DG-LAB" in the app store to download the latest version of the app, and read the safety instructions carefully.

The PPC-2 supports connecting and managing up to 15 PawPrints Wireless Button Sensor 2.0 (allowing free combination of 1 to 15 PawPrints Wireless Button Sensor 2.0), offering diverse and customizable gameplay options. The following only introduces basic functions; for more usage and gameplay details, please visit the DG-LAB APP.

1. Assembly and Installation

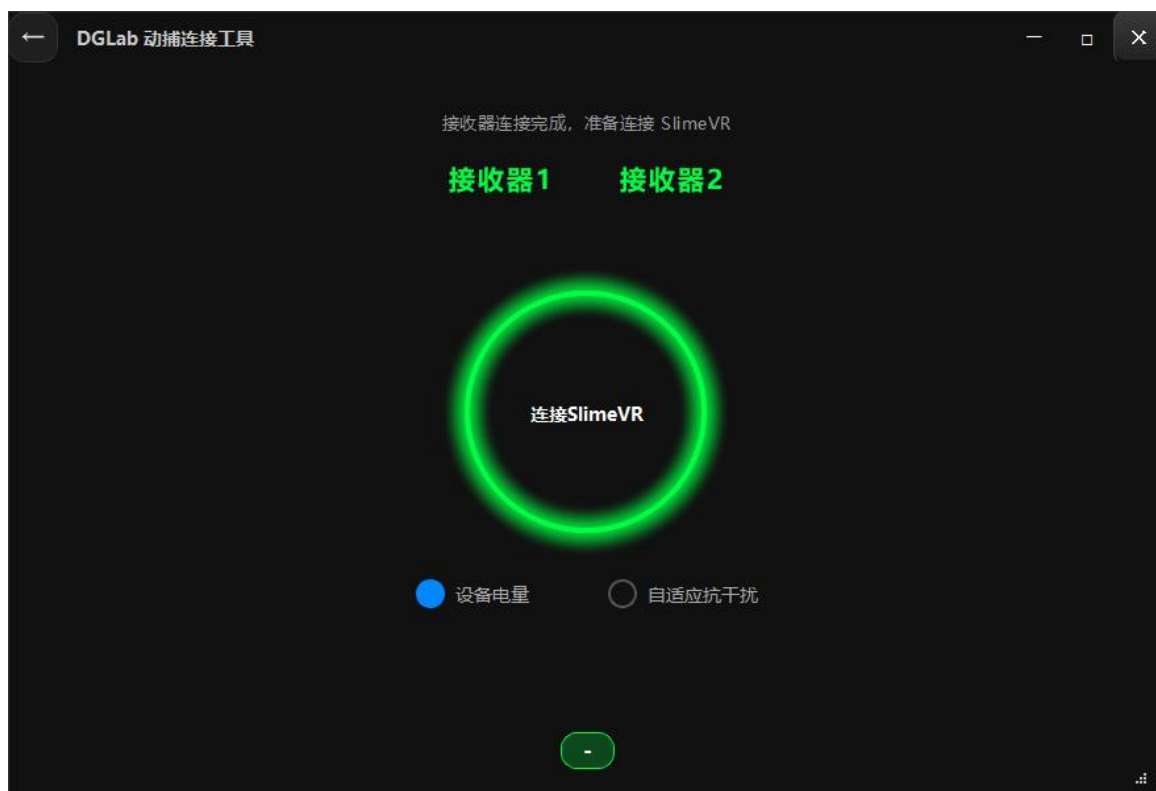
1. Confirm that the antenna has been installed and tightened as shown in the picture.
2. Insert the PPC receiver (at least one, at most two) into the USB slot on the PC.
3. After confirming that the PC-side host computer software is installed correctly, the UI interface shown in the image below should appear after launching the software.
4. Click "Search Receiver" and the host computer software will automatically detect the inserted PPC receiver. It supports both single and dual receiver modes. The software will automatically identify the insertion status and automatically configure the master and slave antennas.

2. Connecting or managing PPS-2

1. Confirm that the PawPrints Wireless Button Sensor 2.0 is powered on and in motion capture mode. Power on and switch connection modes by briefly pressing the "Power On/Off" button. Ensure the PawPrints Wireless Button Sensor 2.0 is in motion capture mode with its shoulder light flashing (alternating white and off). The PPC receiver will automatically attempt to connect to the PPS-2 in motion capture mode.
2. All pending connection attempts for PawPrints Wireless Button Sensor 2.0 devices are now listed in the host computer's UI. The default name begins with "Device." Click "Next" when finished.



Personalized settings allow you to select access options based on your personal preferences and the game scenario.



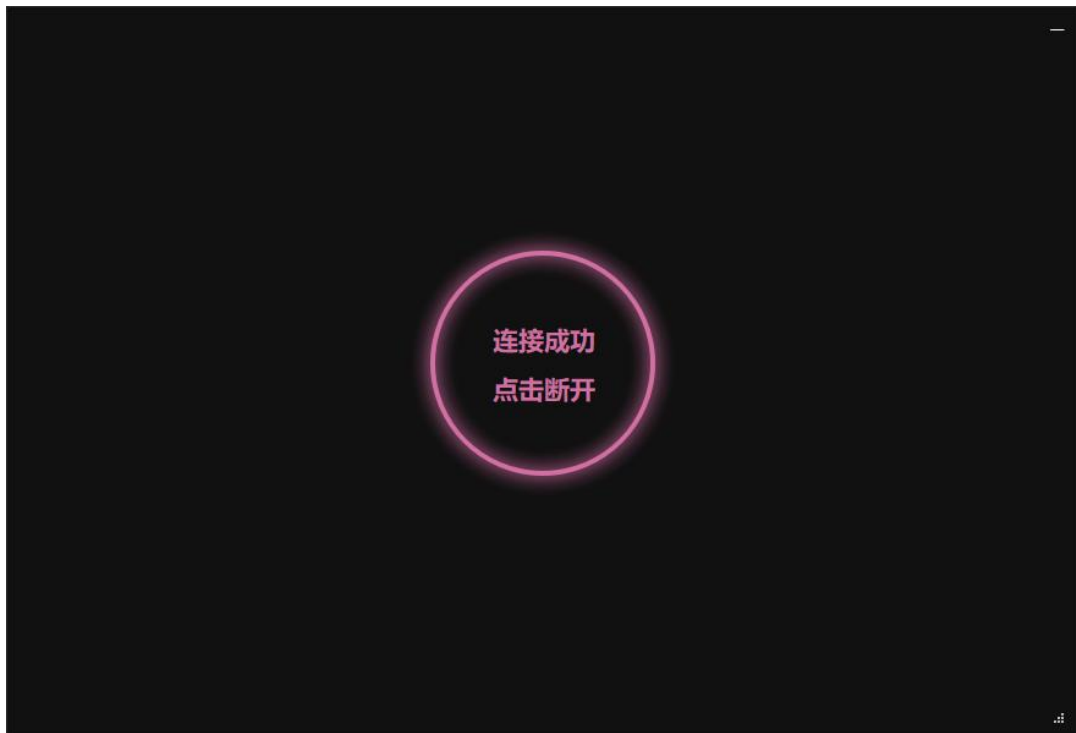
Device Battery: Choose whether to share battery data to SlimeVR; the default is enabled.

Adaptive anti-interference: Select whether to automatically shield against

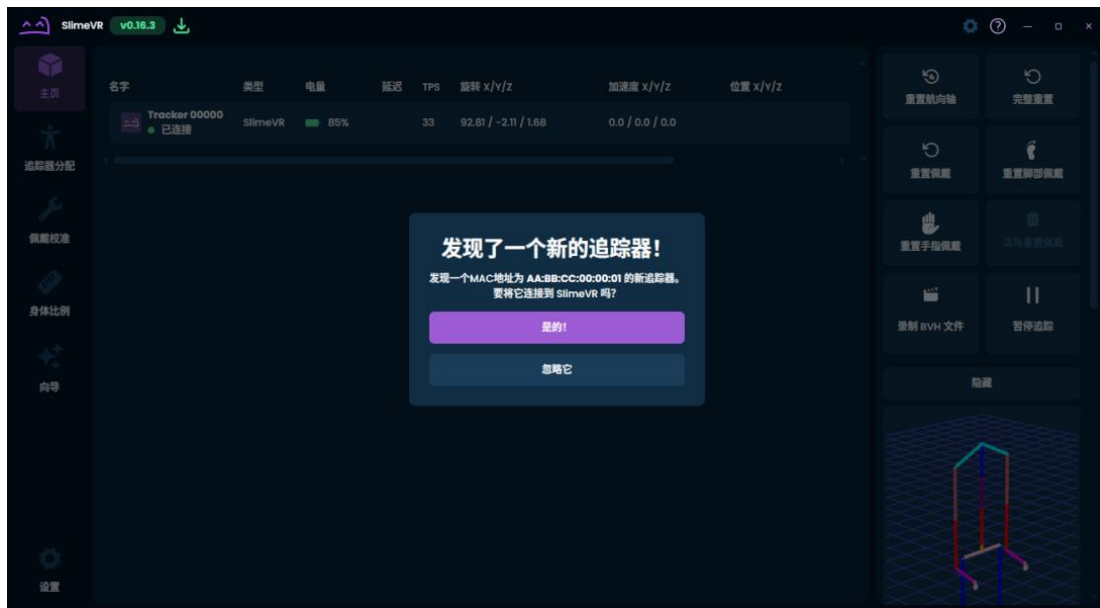
environmental magnetic field interference (but this may result in false positives); it is disabled by default.

3. Integrate with motion capture applications

3. Open SlimeVR software (third-party motion capture application, which needs to be installed separately).
4. After enabling SlimeVR, click "Connect to SlimeVR", and the message "Connection successful" will be displayed.



At this point, the SlimeVR software will prompt "A new tracker has been found." Please click "Yes."



This concludes the quick start guide. PawPrints Wireless Button Sensor 2.0 has successfully connected to the motion capture application via the PPC receiver. You can follow the prompts in the motion capture application to start playing the game.

4. End of use

1. After closing the third-party motion capture application, close the accompanying host computer software of the PPC receiver.
2. Remove the PPC receiver from the PC and store it properly in a cool, dry place out of reach of minors for future use.
3. For cleaning, wipe the product surface with a cleaning wipe or a wrung-out damp towel. Avoid liquid seeping into the product.

Precautions

1. The PPC receiver requires the aforementioned host computer software. In addition to the connection management functions of PawPrints Wireless Button Sensor 2.0 the software also provides (but is not limited to): device binding tool, firmware upgrade tool, geomagnetic calibration tool, IMU calibration tool, PawPrints Wireless Button Sensor 2.0 Connector LED color setting, and signal quality testing. For detailed descriptions of these sub-functions, please refer to the host computer software or the DG-LAB APP.
2. A single PawPrints Wireless Button Sensor 2.0 Connector can connect to any number of PawPrints Wireless Button Sensor 2.0 devices ranging from 1 to 15. However, performance may degrade (e.g., frame skipping and connection instability) when the number of connections exceeds 6 or when there is significant environmental interference. It is recommended to use two PPC-2 (dual receiver mode) and fix the two receivers at a distance of 30 cm to 1 meter. If two PPC-2 are connected, the host computer software will automatically configure the master-slave mode of the two receivers, thereby significantly improving performance and anti-interference capabilities.
3. The PPawPrints Wireless Button Sensor 2.0 Connector comes with a host computer software that provides the following by default:SlimeVRThe software's access function (only for data transfer). This involves...SlimeVR-ServerIt is a set of third-party open-source software (Apache-2.0, MIT licenses). The functionality and dependencies of these third-party software (which may also include SteamVR, etc.) are unrelated to DG-LAB. When using third-party software (e.g....) SlimeVR. When using SteamVR, please carefully verify the source and security of the software. Software from unknown sources or unofficial sources may cause unexpected consequences such as financial loss.
4. The PawPrints Wireless Button Sensor 2.0 product has undergone quality inspection and initial calibration at the factory. However, factors such as transportation and significant environmental differences may render the calibration data inapplicable (for example, the geomagnetic sensor is highly sensitive to changes in the environmental magnetic field). If you find the motion capture effect unsatisfactory, you will need to perform manual calibration. The accompanying host computer software provides relevant calibration tools (geomagnetic calibration tool and IMU calibration tool). Generally, you only need to focus on geomagnetic calibration. The geomagnetic calibration tool provides functions for acquiring, calculating, and writing soft iron, hard iron, and magnetic field parameters. Simply rotate the PawPrints Wireless Button Sensor 2.0 using the calibration tray. When the progress reaches 100%, click "Stop Acquisition" and then click "Calculate Calibration." The software will automatically calculate the relevant parameters and display the results for confirmation.
5. The PawPrints Wireless Button Sensor 2.0 Connector only supports single-receiver

and dual-receiver modes. In dual-receiver mode, the host computer needs to configure the master-slave relationship of the antennas. Therefore, please ensure that only one or two PPC-2 are inserted into the PC. Do not insert too many PPC-2 into the same PC, otherwise, the "Claw Mark 2.0" may not be found.

Frequently Asked Questions

1. Unable to connect to PC
 - (1) If the ambient temperature is abnormal, ensure that the ambient temperature is between 0°C and 40°C.
 - (2) If the extension cable is of poor quality, please use the original USB extension cable that was included with the package and avoid bending the extension cable.
 - (3) The issue is a power/interface compatibility problem. Please try using a different USB slot (if using a desktop computer, try inserting it into the slot on the back panel of the case).
 - (4) The driver is not installed correctly. Please try reinstalling the corresponding driver (CH343CDC).
2. The PC-based host computer software cannot find PPS-2.
 - (1) The PPS-2 is in BLE mode, not motion capture mode. If the PPS-2 is in BLE mode (only the eye light is displayed after powering on), it indicates that the PPS-2 is in BLE mode. (If the light is on but the shoulder light is off), the mode can be switched using the "Power On/Off Button". Specifically, after powering on, quickly press the button repeatedly. Press the "Power On/Off" button 5 times. In motion capture mode, the claw mark 2.0 should have its shoulder light flashing (motion capture mode alternates between white and off). Note the distinction: BLE connection waiting mode alternates between white and blue.
 - (2) The PPS-2 and PPC-2 are not yet bound. This may occur when the kit is used in combination with other devices, and rebinding is required. The host computer software provides a "Device Binding Tool," which can be used to try adding the binding relationship between the PPS-2 and the PPC-2 by following the software prompts.
 - (3) If too many PPC-2 are connected, please ensure that there is only one or two PPC-2 plugged into the PC. Do not plug more than two PPC-2 into the same PC.
3. The PC client software failed to connect to the SlimeVR software.
 - (1) PPS-2 is not yet connected. Please confirm in "Device version information interface" The claw mark 2.0 has been displayed below (shown as "Device XX Firmware:xxxx ROM:xxxx Battery:xx% RSSI:XX").
 - (2) The issue is with network configuration. Since forwarding access relies on the local area network (which does not consume bandwidth), please ensure that

you are not using proxy software or virtual network adapters and that your network is configured as "private" (select "private" in "Windows Settings -> Network and Internet -> Status -> Properties -> Network Profile").

- (3) The port conflict issue might be caused by other software or older programs failing to exit properly and thus occupying port 6969. You can try closing them or restarting your PC to resolve this. To close the program using the port: First, close SlimeVR. Then, open CMD (press "Win + R" to open the Run dialog box, type "cmd", and click OK). Paste and execute the following command: ``for /f "tokens=5" %a in ('netstat -ano ^| findstr ":6969") do taskkill /f /pid %a``. This will close the program using port 6969 with one command. After execution, reopen SlimeVR.

Repair service

Within one year from the date of purchase, if the "PawPrints Wireless Button Sensor 2.0 Kit" experiences quality problems not caused by human error under normal use, you can enjoy official free repair service with valid proof of purchase (such as invoice, order screenshot, etc.).

The following situations are not covered by the free warranty and will incur corresponding repair costs based on the actual damage, or warranty service may not be provided:

1. The product is out of its one-year warranty period or a valid proof of purchase cannot be provided;
2. The product was repaired, disassembled, or modified by an unauthorized third party;
3. Damage caused by force majeure events such as natural disasters and accidents;
4. Damage caused by misuse, negligence, or failure to follow the product instruction manual;
5. Damage that only affects the appearance and does not affect the core function, such as surface scratches, dents, and wear marks caused by normal use;
6. Natural wear and tear of supporting consumables, including but not limited to vibration sleeves, charging cables, and interface protective sleeves.