

PPS-2 Instruction Manual

PawPrints Wireless Button Sensor 2.0 (PPS-2) User Manual

Please read this manual carefully before using this product and keep it in a safe place 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 Instructions / Disclaimer

To ensure you can enjoy this product safely and responsibly, please make sure you have read and understood all the safety instructions before use. Incorrect 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. User safety is always our top priority. This product is an adult toy; please ensure it is used in a safe, sober, and consensual manner. Please keep it out of the reach of minors.

Use of this product constitutes your acknowledgment that you have read and accepted all terms and conditions related to this product.

Warning

1. This product is a multifunctional device designed primarily as a sensor for recording movement and posture; it does not have stimulation functions on its own. It can be used in combination with DG-LAB stimulators such as the Coyote. Before use, please review the specific user manual for the corresponding accessory to ensure that the accessory's intended use aligns with your personal circumstances and to avoid risks arising from neglecting the accessory's characteristics.
2. This product is an adult toy, and its accessories may come into direct contact with the skin. If you have any relevant medical history (such as skin injuries, nerve damage, sexually transmitted diseases, etc.), you must consult a medical professional before using this product.

3. This product contains radio transmission capabilities. Individuals with pacemakers or similar medical implants must consult a medical professional before using this product.
4. It is strictly prohibited to use this product while driving a vehicle or operating machinery; it is also strictly prohibited to modify the product (including altering interface functions or bypassing safety mechanisms), disassemble it, or use it for purposes other than its intended design. Such actions may result in personal injury or property damage, and the user shall bear full responsibility for any resulting liability or loss.
5. Use is strictly prohibited in the following locations: flammable or explosive areas, high-temperature or high-humidity environments (such as bathrooms, near radiators, or on electric blankets), and unventilated basements.
6. This product contains a built-in lithium-ion rechargeable battery. Do not disassemble, strike, puncture, crush, or expose it to fire (or temperatures above 60°C). If the product malfunctions or overheats, discontinue use immediately. If the battery swells, deforms, leaks, or shows a significant decrease in capacity, stop using it immediately and dispose of it properly.
7. This product is not waterproof; do not use it in damp environments. Do not clean the product with organic solvents such as alcohol.

Important Usage Tips

1. This product is a wearable electronic device. Before using it, ensure the environment is safe and that the product is properly and securely installed.
2. For your health and safety, do not share this product or its accessories with others.
3. It is recommended to fully charge the product before use. When charging, please use a USB power adapter that complies with national standards and has an output of at least 5V 2A.
4. Before use, scan the QR code at the back of the manual or search for and download the “DG-LAB 4” app from the app store, and install the accompanying PC software.
5. If you experience any of the following health issues, stop using this product immediately. If symptoms persist, seek medical attention immediately.
 - (1) Dizziness, nausea, fatigue, blurred vision, or a sensation similar to motion sickness
 - (2) Discomfort or pain in the eyes, ears, hands, arms, or any other part of the body
6. If the product is damaged, please contact after-sales service for repairs; do not attempt to disassemble or repair it yourself.

7. This product is sold as a set; please use the components appropriately and in combination. No single component should be used for purposes other than those described in the manual.
8. This product will automatically shut down when connected to a charger; do not use it while charging.

Precautions for Product Disposal

This product contains a built-in lithium battery. Do not crush, puncture, or expose it to fire, as this may cause a fire or explosion.

Leakage of battery chemicals not only causes environmental pollution but may also pose a risk of chemical burns to the human body. Please dispose of the product properly and avoid discarding it with household waste.

Names and Content of Hazardous Substances

Table of Hazardous Substances and Their Content in the Product

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Other Access ories										
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This table has been prepared in accordance with the provisions of SJ/T 11364.

○: Indicates that the concentration of the hazardous substance in all homogeneous materials of the component is below the limit requirements specified in GB/T 26572.

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

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

Product Overview

This product is a multifunctional sensor kit, including the PawPrints Wireless Button Sensor 2.0 (hereinafter referred to as “PPS-2”) and its accompanying accessories for wearing and mounting. It does not have any stimulation functions itself and serves solely as an input source for other systems.

PPS-2 requires connection to a host controller (such as a Coyote-030, smartphone, or PPC-2 receiver) to function; the specific interaction method depends on the connected controller.

Basic Specifications

Product Name	PawPrints Wireless Button Sensor 2.0
Product Model	PPS-2
Product Dimensions	57 x 50 x 15 (mm)
Net Weight	≈28 g
Transmission Range	Bluetooth: 10 meters (line of sight)
Battery Specifications	300mAh lithium battery
Charging port	USB Type-C, 5V=0.25A (MAX, single)
Charging Time	2–3 hours
Operating Time	15–20 hours
Operating humidity	Relative humidity < 85%
Operating temperature	0–40°C

Package Contents

After opening the package, verify that it contains all items listed below. If any items are missing, please contact your dealer.

1. PawPrints Wireless Button Sensor 2.0 Bundle*1
2. Wrist Strap Set*1
3. Type-C Charging Cable*1
4. User Manual*1
5. Carrying Case*1
6. Calibration Tray*1

Quick Start

Before use, **please scan the QR code on the back of the manual or search for “DG-LAB” in the app store to download the latest version of the app, and read the safety instructions carefully.**

As a sensor, PPS-2 can be connected to any supported host controller (e.g., Coyote, smartphone, or PPC receiver), offering versatile and customizable usage options. The following covers only basic functions; for more detailed usage instructions and features, please visit the **DG-LAB** app.

1. Assembly and Installation

1. Wear or mount PawPrints Wireless Button Sensor 2.0 according to your personal preferences and gameplay design.
2. If you need to connect to motion-capture games like VRChat, you will also need to use a PPC receiver; please refer to the PPC-2 user manual for installation instructions.

2. Powering On and Connecting

1. Briefly press the PawPrints Wireless Button Sensor 2.0 unit to wake it up. If no lights are visible, the device is not yet powered on; press the "Power Button" briefly to turn it on.
2. After powering on, the Wolf Eye light will flash (default: alternating white and yellow; colors can be customized), indicating that PawPrints Wireless Button Sensor 2.0 is in BLE mode and has not yet connected. You can switch to motion capture mode based on your gameplay needs. Within 5 seconds of powering on, quickly press the PawPrints Wireless Button Sensor 2.0 unit 5 times to switch operating modes (toggling between BLE mode and motion capture mode).
3. To enter Discovery Mode, press and hold the PawPrints Wireless Button Sensor 2.0 unit until the shoulder lights flash (white-off for Motion Capture, white-blue for BLE waiting to connect). Only PawPrints Wireless Button Sensor 2.0 units in Discovery Mode can be detected and paired by a new host device.
4. Depending on your use case, use the DG-LAB app in BLE mode or a PC with a PPC receiver in motion capture mode. Scan and connect to the PawPrints Wireless Button Sensor 2.0 device in discovery mode via the app or PC software.
5. After a successful connection, the lighting effects will change accordingly, depending on the host computer software used:
6. BLE Mode: The shoulder lights turn off, and the eye lights remain in the color

assigned by the app (yellow, red, purple, blue, cyan, green). At this point, you can follow the app's instructions to start the game.

7. Motion Capture Mode: The shoulder lights will flash white. You can now follow the instructions in the PC software for the PawPrints Wireless Button Sensor 2.0 Connector (PPC-2) to start the game.
8. This concludes the Quick Start section. PawPrints Wireless Button Sensor 2.0 is now successfully connected, and you can begin playing by following the instructions in the app or host software.

3. Ending Use

1. To power off, briefly press the "Power Button." The lights will turn off, and the device will no longer respond to button presses, indicating it is powered off.
2. While charging, the PawPrints Wireless Button Sensor 2.0 indicates the charging status via its shoulder lights:
 - (1) Red: Charging
 - (2) Green: Fully charged
3. When storing, please keep it in a cool, dry place out of reach of children for future use, and avoid pressing the PawPrints Wireless Button Sensor 2.0 main button for extended periods.
4. To clean, wipe the surface of the product and accessories with a cleaning wipe or a wrung-out damp cloth. Avoid allowing liquid to seep into the product.

Important Notes

1. This product is a sensor accessory and does not have stimulation functions on its own. It must be used in conjunction with other devices that support accessory gameplay, such as the COYOTE E-Stim Powerbox 3.0 (Coyote-030).
2. This product is powered by a built-in lithium battery. To ensure battery life, the device will not turn on when the battery is too low, and a red flashing light on the shoulder lamp will indicate that the battery is depleted. Please recharge promptly at this time.
3. When removing motion capture straps or related accessories, gently wiggle them first before applying gradual force. Avoid pulling directly to prevent damage to the accessories.
4. The PPC-2 must be used in conjunction with the aforementioned host computer software. In addition to connection management functions for PawPrints Wireless Button Sensor 2.0 the software provides features including (but not limited to): device binding tool, firmware upgrade tool, geomagnetic calibration tool, IMU calibration tool, PPC-2 LED color settings, and signal quality testing. For detailed descriptions of specific sub-functions, please refer to the host computer software or the DG-LAB app.
5. The PawPrints Wireless Button Sensor 2.0 has undergone quality inspection and initial calibration at the factory; however, factors such as transportation and significant environmental variations may render the calibration data obsolete (for example, the geomagnetic sensor is highly sensitive to changes in the ambient magnetic field). If you find the motion capture results 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 offers functions for collecting, calculating, and writing data related to soft iron, hard iron, and magnetic field parameters. Simply rotate PawPrints Wireless Button Sensor 2.0 using the calibration tray. When the progress reaches 100%, click "Stop Acquisition" and then "Calculate Calibration." The software will automatically calculate the relevant parameters and display them for confirmation.

Frequently Asked Questions

1. No Response During Charging
 - (1) Abnormal ambient temperature; ensure the charging environment is between 5°C and 35°C.
 - (2) The battery is severely drained. Charge for 10 minutes first, then try again. If the shoulder light flashes repeatedly during charging, this is a normal phenomenon caused by the device restarting due to low battery.
 - (3) Power supply/port compatibility issues: Use a power adapter that complies with local safety standards (e.g., China's CCC certification), or switch to a power bank or computer USB port for power. Clean the Type-C port and ensure it is completely dry.
2. Unable to power on
 - (1) The device has insufficient battery power. Please charge it for 10 minutes before attempting to turn it on.
 - (2) A button may be stuck or jammed. Please press all buttons several times before trying again.
3. Unable to connect to the app
 - (1) The device is not in discovery mode. This may occur during first-time use or if it is already paired with another device. Press and hold the PawPrints Wireless Button Sensor 2.0 unit continuously to enter "Discovery Mode" (the shoulder light will flash alternately white and blue).
 - (2) PawPrints Wireless Button Sensor 2.0 is in Motion Capture mode rather than BLE mode. If it was in Motion Capture mode during the last use, it can only be detected by a PPC receiver this time. You can switch modes using the "Power Button" by quickly pressing it 5 times immediately after powering on. When in BLE mode, the PawPrints Wireless Button Sensor 2.0's shoulder light should be off and the eye light should be flashing.
 - (3) PawPrints Wireless Button Sensor 2.0 has automatically entered power-saving mode. Please try turning it off and then back on.
4. The PC software cannot detect PawPrints Wireless Button Sensor 2.0
 - (1) The PawPrints Wireless Button Sensor 2.0 is in BLE mode rather than motion capture mode. If the PawPrints Wireless Button Sensor 2.0 is in BLE mode (only the eye light is on and the shoulder light is off after powering on), you can switch modes using the "Power Button." Specifically, immediately after powering on, quickly press the "Power Button" five times in rapid succession. When in motion capture mode, the PawPrints Wireless Button Sensor 2.0's shoulder light should be flashing (motion capture mode shows alternating white and off; note the difference—BLE connection waiting mode

shows alternating white and blue).

- (2) The PawPrints Wireless Button Sensor 2.0 has not yet been paired with the PPC receiver. This may occur when mixing and matching different kit combinations; you will need to re-pair them. The host computer software provides a "Device Pairing Tool"; please follow the on-screen instructions to establish the pairing relationship between the PawPrints Wireless Button Sensor 2.0 and the PPC-2.
- (3) Too many PPC-2 are connected. Please ensure that only one or two PPC-2 are plugged into the PC; do not connect more than two PPC-2 to the same PC.

Repair Services

Within one year of the product purchase date, if the "PawPrints Wireless Button Sensor 2.0 Motion Capture Kit" develops quality issues not caused by human error under normal usage conditions, you may receive official free repair services by presenting valid proof of purchase (such as an invoice or order screenshot).

The following situations are not covered by the free warranty, and corresponding repair fees may be charged or warranty service may not be provided depending on the actual damage:

1. The product is outside the one-year warranty period, or valid proof of purchase cannot be provided;
2. The product has been repaired, disassembled, or modified by an unauthorized third party;
3. Damage caused by force majeure, such as natural disasters or accidents;
4. Damage caused by misuse, negligence, or failure to follow the product manual;
5. Damage limited to the product's appearance that does not affect core functionality, such as surface scratches, dents, or wear and tear resulting from normal use;
6. Normal wear and tear of accompanying accessories, including but not limited to vibration sleeves, charging cables, and port protectors.