

Sehawei T16 Pro V2

Sehawei Haute42 T16 Pro V2 Arcade Controller User Manual

Model: T16 Pro V2

1. INTRODUCTION

This manual provides instructions for the Sehawei Haute42 T16 Pro V2 Arcade Controller. It covers product features, setup, operation, and technical specifications to ensure optimal performance and user experience.

The T16 Pro V2 is an all-button arcade stick designed for fighting games, featuring a low-profile design, customizable RGB lighting, and hot-swappable switches. It is compatible with multiple platforms including PC, PS3, PS4, Switch, and Steam Deck.

2. KEY FEATURES

- **System Compatibility:** Supports Windows 10+, Steam Deck, PS3, PS4, Switch, Raspberry Pi (Lakka, RetroPie, Recalbox, Batocera), MiSTer, Android, Linux, iPadOS, and macOS (Keyboard mode only). PS4/PS5 connection may require specific setup or a converter (not included).
- **Ultra-Low Latency:** Features a 40nm process node manufacturing for low dynamic power consumption and leakage, achieving 1ms delay with a frame leakage rate above 95%. Supports firmware updates.
- **Hot-Swappable & Customizable:** Utilizes hot-swappable technology for easy replacement of mechanical switches without soldering. The small display supports DIY customization for personalized patterns.
- **Custom RGB Design:** Constructed with transparent acrylic material and integrated RGB lighting effects, offering an enlarged 16-button arcade keyboard layout.
- **Product Functions:** Offers 5 controller modes (X-input, Switch, PS3/D-input, PS4, Keyboard). Includes multiple SOCD cleaning modes, turbo functions, built-in embedded web configuration, button layout swap, EXT port, and M1/M2 custom keys.

Kailh Crystal Low Profile Switch

Cross Button Mechanical Axial Ultra-Thin Design



Image: Top view of the Sehwai Haute42 T16 Pro V2 Arcade Controller, showcasing its button layout and transparent acrylic design.



Image: Diagram illustrating the components of the Kailh Crystal Low Profile Switch used in the controller, including the cover, keystone, spring, and terminals.

3. SETUP AND CONNECTION

3.1 Initial Connection

Connect the controller to your desired gaming platform using the provided USB-C cable. The device is plug-and-play for most supported systems.

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Video: Demonstrates connecting the Sehawei T16 Pro V2 Black Arcade Controller via USB-C and its immediate functionality with RGB lighting.

3.2 Platform Specific Setup

- **PC/Steam Deck/Switch:** Connect directly via USB. The controller will be recognized automatically.
- **PS3/PS4:** For PS4, refer to the official website or manual for specific setup instructions. For PS5/Xbox Series X/S, an additional converter (not included) is required for compatibility.
- **Raspberry Pi/MiSTer/Android/Linux/iPadOS/macOS:** Connect via USB. Note that macOS, iPadOS, and Linux support keyboard mode only.



Image: Visual representation of compatible platforms including PC, Switch, PS4, Android, Arcade, Steam, and PS3. It also indicates that PS5/Xbox Series require a converter.

3.3 EXT Port Usage

The EXT. port is designed for extension functions, such as connecting converters for PS4/PS5 compatibility. **Do not connect your game console directly through this port.**



Image: Close-up view highlighting the EXT port and the Type-C interface on the side of the controller, indicating their respective uses.

4. OPERATION

4.1 Button Layout

The controller features a precise quad movement button layout, replacing traditional joysticks with four directional buttons for clean and accurate input.



Image: Detailed diagram of the controller's button layout, labeling the OLED screen, Turbo, Type-C port, Home, Back, Start, and EXT. Port, along with the main action and directional buttons.

4.2 Controller Modes

The controller supports various modes to suit different platforms and preferences:

- X-input mode
- Switch mode
- PS3 / D-input mode
- PS4 mode
- Keyboard mode

Mode selection typically involves holding a specific button combination during connection or using the embedded web configuration interface.

4.3 Customization and Advanced Functions

- **RGB Lighting:** Customize the RGB lighting effects through the embedded web configuration.
- **SOCD Cleaning Modes:** Multiple modes are available to prevent simultaneous opposite cardinal directions input, ensuring fair play in competitive settings.
- **Turbo Functions:** Enable turbo functionality for rapid button presses.
- **Button Layout Swap:** Reconfigure button assignments to match personal preferences.
- **M1/M2 Custom Keys:** Utilize dedicated custom keys for additional functions.



Image: A user's hands on the controller, demonstrating the customizable RGB lighting effects around the buttons during gameplay.

5. MAINTENANCE

5.1 Cleaning

To clean the controller, use a soft, dry cloth. For stubborn dirt, a slightly damp cloth can be used, ensuring no moisture enters the internal components. Avoid abrasive cleaners or solvents.

5.2 Storage

Store the controller in a cool, dry place away from direct sunlight and extreme temperatures. Protect it from dust and physical impact.

5.3 Switch Replacement

The hot-swappable design allows for easy replacement of mechanical switches. Gently pull out the existing switch and press in the new one, ensuring it is properly seated. No soldering is required.



Image: Underside view of the controller showing the four silicone anti-skid pads designed for stability and shock absorption.

6. TROUBLESHOOTING

6.1 Connection Issues

- **Controller not recognized:** Ensure the USB-C cable is securely connected to both the controller and the device. Try a different USB port or cable.
- **Incorrect mode:** Verify the controller is in the correct mode for your platform. Refer to the operating instructions for mode selection.
- **PS4/PS5 compatibility:** Remember that PS4 may require specific setup, and PS5 requires an external converter.

6.2 Button Malfunction

- **Unresponsive button:** Check if the hot-swappable switch is properly seated. If not, remove and reinsert it. If the issue persists, consider replacing the switch.
- **Sticky button:** Clean around the button cap with a soft, dry cloth.

6.3 Firmware Updates

The controller supports firmware updates. Visit the official Sehawei website for the latest firmware and instructions on how to update your device.

7. SPECIFICATIONS

Feature	Detail
Brand	Sehawei
Model	Haute42 T16 Pro V2
Color	Black
Compatible Devices	PC, Steam Deck, PS3, PS4, Switch, Raspberry Pi, MiSTer, Android, Linux, iPadOS, macOS
Controller Type	Gaming (Arcade Stick)

Connectivity Technology	Wired (USB-C)
Button Quantity	16
Latency	1ms
Switches	Kailh Crystal Low-Profile (Hot-Swappable)
Main Control Chip	Raspberry Pi RP2040
Dimensions (Approx.)	296mm (Length) x 196mm (Width) x 12.5mm (Height)

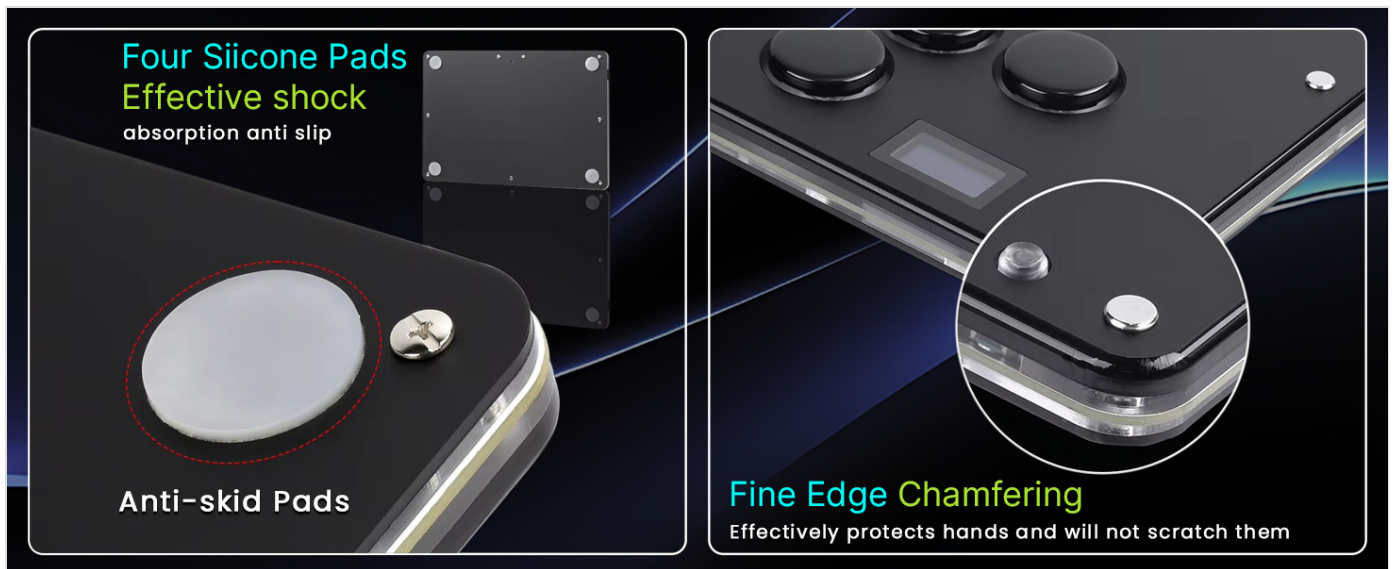


Image: Diagram showing the approximate dimensions of the controller: 296mm length, 196mm width, and 12.5mm height, with a button diameter of 25.8mm.



Image: Illustration of the Raspberry Pi RP2040 main control chip, highlighting its features such as dual-core ARM Cortex-M0+, 1ms delay, and firmware update support.

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Sehawei website or contact their customer service directly. Specific warranty terms may vary by region and retailer.

