iCode Arcade Spinner Ultimate

User Guide

Introduction

The iCode Arcade Spinner Ultimate is a high-precision controller for PC, Raspberry Pi, and Android. It features dual Mouse plus Gamepad modes, on-the-fly sensitivity adjustment, four selectable USB emulation modes, on-device presets plus an unlimited Cloud Vault via iCode Hub, and lag-free response.

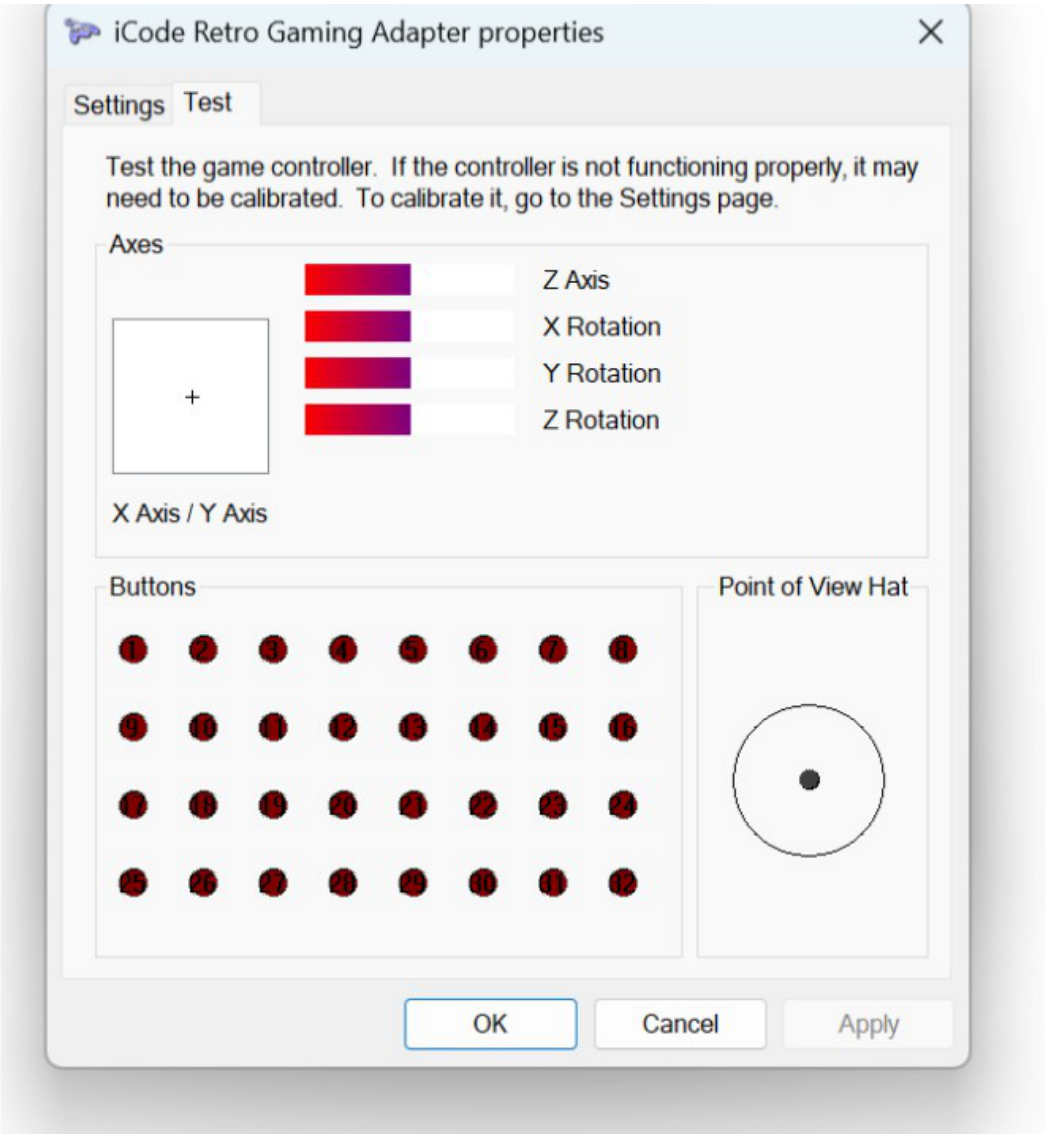
Installation Verification

Connect the unit to your computer using the provided USB cable. Your system will automatically recognize it as a composite device (both a Gamepad and a Mouse).

Windows 11 Verification: Go to **Settings > Bluetooth & devices**. You should see "Spinner" listed under Input Devices.

To verify the spinner is working correctly as a game controller:

1. Open the Windows Start Menu and search for **"Set up USB game controllers"**.
2. Select the controller from the list and click **Properties**.
3. **Check your Mode:** Ensure the device is currently set to Gamepad Mode (see *Mouse Emulation vs. Gamepad Emulation* later in this manual).
4. **Test:** Rotate the spinner or press the buttons. You should see the corresponding axis bars move and button indicators light up on the screen in real-time.



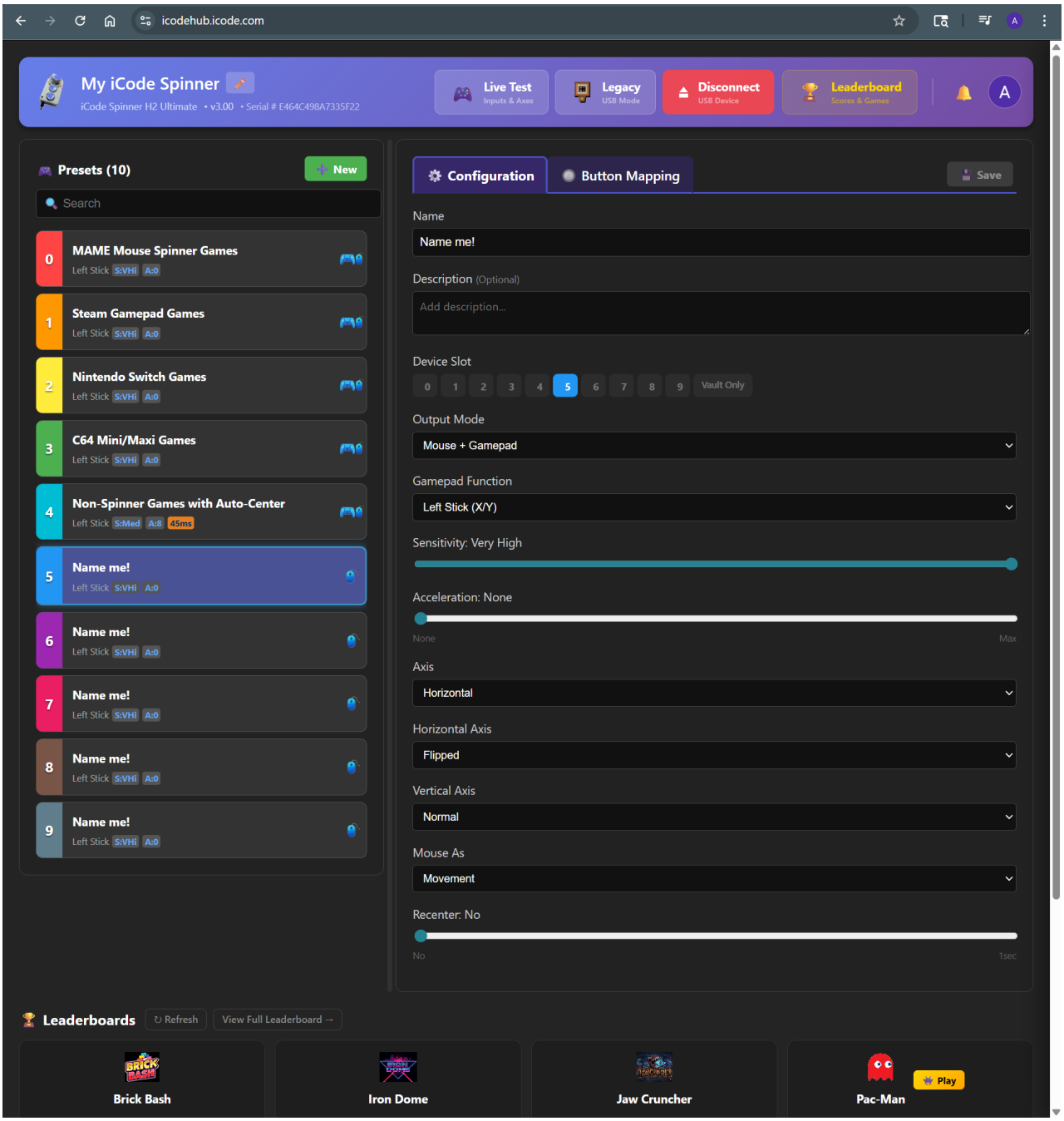
iCode Hub

Browser-based device manager via WebHID — no install needed. Requires **Chrome or Edge**. Free, no account required to start.

Features: Preset editing, Cloud Vault (100+ presets), one-click firmware updates, leaderboards, preset and device naming, USB emulation mode switching, smart button validation per emulation mode, and device transfers.

Setup:

1. Connect the Spinner via USB.
2. Open **https://icodehub.icode.com** in Chrome or Edge.
3. Click **Connect** and select your Spinner from the device list.



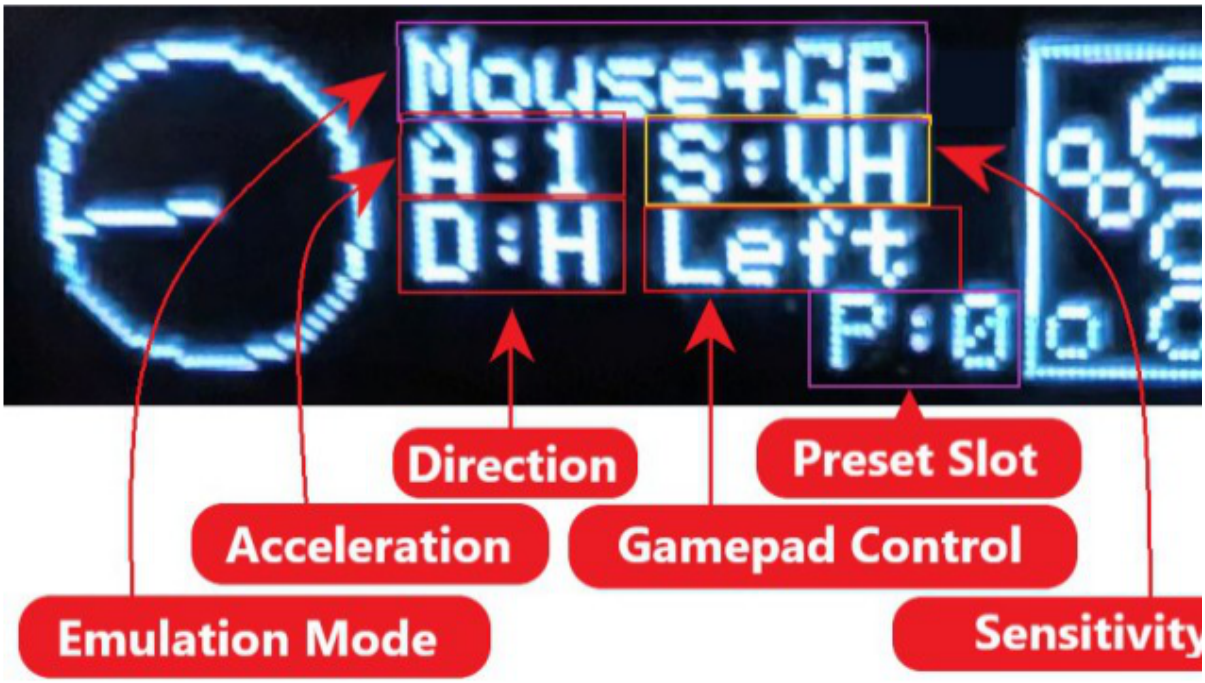
With iCode Hub you can:

- Manage all 10 device presets from your browser — sensitivity, button mappings, axis settings, and more
- Back up to **Cloud Vault** (100+ presets) and restore to any Spinner
- Name your presets and your device — names sync to the device display
- Update firmware with one click
- Sync **Bricks** high scores to the iCode Hub leaderboard
- Switch USB emulation modes from the web app

- Use **smart button validation** — Hub enforces valid mappings for each emulation mode
- **Transfer your device** to another owner with their presets intact

Understanding the Status Display

Once connected, the LCD screen on the unit will light up. This display provides real-time feedback on your configuration.



Use this key to read the "shorthand" codes shown on the display:

Code on Screen	Setting	What it Means
S:	Sensitivity	Controls how far the cursor moves per spin. VH (Very High), H (High), M (Medium), L (Low), VL (Very Low).
D:	Direction	Axis Control. D:H means Horizontal, D:V means Vertical.
A:	Acceleration	A followed by a number, 1 (very low) to 9 (highest). Acceleration controls how far the game object moves based on how fast you spin, not how much you spin. Acceleration should be off for most games. A: is only visible if value is 1–9.
P:	Preset Memory Slot	The active slot number 0–9 is shown next to the P: indicator on the screen.
Mouse / **Gamepad**	Emulation Mode	Indicates the current Emulation Mode. "Mouse" means Mouse mode only. "Gamepad" means Gamepad only. "Mouse+GP" means Mouse and Gamepad simultaneously.
Left, Right, Dpad, Rudder, None	Gamepad Control	Indicates which gamepad function the Spinner Dial emulates when in gamepad mode.

USB Emulation Mode

The Spinner can identify itself as four different USB device types. This affects what your computer or console recognizes the device as, and which emulators and platforms will auto-detect it.

Mode	Best For
Standard (DInput)	Windows, Linux, emulators
Classic	Retro gaming platforms
Nintendo Switch	Nintendo Switch console
Legacy	Older basic HID systems

The current USB emulation mode is shown briefly on a splash screen when the device boots. Switch modes from iCode Hub, or from the on-device Settings Menu.

> **Note:** USB emulation mode controls device *identity* (VID/PID). It is separate from the **Mouse vs. Gamepad Emulation** setting below, which controls how the spinner *behaves* once recognized.

Mouse Emulation vs. Gamepad Emulation

The device can be configured to emulate a mouse, a gamepad, or both at the same time. Depending on the game you want to play, some games support mouse for their spinner control and others will use analog gamepads. Check the emulator and game settings to determine which mode would best work for your game.

You can change the emulation mode two ways on the device. First way is to press the black button to access the settings menu. Then change the **"Mode"** setting. The second way is to press and hold the blue button and at the same time press and release the black button to cycle through the emulation modes in real time.

Gamepad mode controls what gamepad function (**Left Stick, Right Stick, D-PAD, Rudder,** or **None**) the spinner dial will emulate. Use **"Gamepad As"** in the settings menu for this option. Note that **"None"** disables the Dial but buttons will continue to emulate gamepad buttons. The **"Mouse As"** setting allows you to set if you want the spinner to emulate movement of the mouse or wheel.

Gamepad Auto-Recenter

Some classic arcade games — such as **Asteroids, Galaga,** and **Space Invaders** — expect a fixed-position stick rather than continuous rotation. Auto-Recenter automatically returns the gamepad axis to center after a brief idle period, letting you play "stick" games with the spinner.

- **Configurable timing:** 5 ms to 1 second of idle before recenter
- **Per-preset:** save different auto-recenter timings for different games
- Configure from iCode Hub or the on-device Settings Menu

Axis Control

You can configure the spinner to normally control either the Horizontal Axis (Left/Right) or the Vertical Axis (Up/Down). You can also invert the direction of each axis independently via the Settings Menu. Axis settings are saved **per-preset**.

Dynamic Axis Override: You can assign a button to act as a "Shift Key" for the axis. By default, the Yellow Button is assigned to this function. Holding it down temporarily swaps the control (e.g., from Horizontal to Vertical) for as long as you hold the button.

Sensitivity

Sensitivity determines the ratio of cursor movement to spinner rotation. We recommend setting this to **Very High** for most applications. This ensures the game character or cursor can traverse the entire screen with least physical rotation, reducing fatigue and increasing reaction speed. Sensitivity is saved **per-preset**, so each game can have its own setting.

Acceleration

Acceleration adjusts your game object movement speed based on how fast you rotate the spinner.

- **Slow Spin:** Gives you high precision for fine aiming.
- **Fast Spin:** Gives you a speed boost to cross the screen instantly.

Recommendation: We suggest a setting of 1 or 2 for most games. For very sensitive games (like older arcade titles), you may prefer to turn Acceleration **OFF (0)** to ensure 1:1 movement. Generally, adjusting Acceleration is the best way to fine-tune your control, rather than changing the global Sensitivity. Acceleration is saved **per-preset**.

Buttons on the Device

The device features 8 programmable buttons (6 on the top panel, 1 on each side). You can customize these in the **Button Settings** menu — or, more easily, from the **Button Mapping** tab in iCode Hub. Button mappings are saved **per-preset**.

- **Button Mapping:** Configure any button to emulate any of 32 Gamepad buttons or 5 Mouse buttons (Left, Right, Middle, Back, and Forward clicks).
- **Axis Override:** You can assign a button to act as a "Shift Key" for direction. When this button is held down, the spinner temporarily swaps its axis (e.g., changing from Horizontal to Vertical movement).
- **LED Control:** You can configure the button lights to three different modes: **Always On**, **Always Off**, or **On When Pressed**.

> **Smart Validation in iCode Hub:** When you change USB emulation modes, Hub validates that your existing button mappings are still valid for the new mode and warns you about any conflicts.

Real-time Shortcut Actions

Change settings during gameplay without opening the menu. **Action:** Hold the specific Button, then tap the Black Button once.

If you want to change...	Hold this Button...	...and tap Black Button
Emulation Mode *(Mouse, Gamepad, Both)*	Small Blue Button	Cycles Modes
Direction *(Horizontal vs Vertical)*	Small Yellow Button	Toggle Direction Axis
Sensitivity *(Make it faster/slower)*	Large Button *(Closest to Spinner)*	Increases Sensitivity
Acceleration *(Turn "Smart Speed" on/off)*	Small Red Button	Increases Acceleration
Rapid Fire *(Auto-click on/off)*	Side Button *(Yellow/Blue Side)*	Toggles On/Off
Display Mode *(Simple vs Animated)*	Small Green Button	Changes Display Mode
Preset Memory Slot	Side Button *(Red/Green Side)*	Goes to next Preset
Swap Large Buttons	Large Button *(Closest to USB)*	Swaps Large Buttons

Rapid Fire

Any button on the device can be configured to "Rapid Fire" (auto-click) continuously while held down.

- **Adjustable Speed:** You can customize the duration of the firing cycle to fine-tune how fast the button activates.
- **Setup:** Configure from iCode Hub or from the on-device Button Settings menu.

Preset Memory Slots

The Spinner stores **10 presets** on-board (slots 0-9). With iCode Hub you also get a **Cloud Vault** that holds **100+ additional presets**, automatically backed up to your account and restorable to any Spinner.

Each preset saves:

- Emulation Mode (Mouse / Gamepad / Both) and Gamepad Function
- USB Emulation Mode
- Sensitivity, Acceleration, and Axis settings
- Button Mappings and Rapid Fire configuration
- Gamepad Auto-Recenter timing

Naming presets: Give each preset a meaningful name in iCode Hub — names sync to the Cloud Vault. Example preset names: *MAME Mouse Games, Steam Gamepad Games, Nintendo Switch Games, C64 Mini/Maxi Games, Non-Spinner Games with Auto-Center.*

Device transfers: Selling your Spinner? You can transfer the device to another owner via iCode Hub — your Cloud Vault presets stay with your account, and the new owner gets their own presets on the device.

The active slot number is shown next to the **P:** indicator on the LCD.

Display Settings

You can choose from four display modes in the Settings Menu: **Off, Basic, Advanced,** and **Animated**.

We recommend the **Advanced** mode for standard use.

> **Note:** The Animated mode uses additional system resources. In some configurations, Animated mode may cause slight input latency or choppy cursor movement. If you experience performance issues in Animated mode, please switch back to Advanced mode.

Audio & Sound Feedback

The Spinner has a built-in speaker that provides audio feedback during menu navigation and gameplay.

- **Volume Control:** Adjust the volume from the Settings Menu — range 0 (mute) to 10 (max).
- **Menu Sounds:** Audible feedback when navigating settings.
- **Game Audio:** Sound effects in the Bricks mini-game.

Bonus Feature: Built-in Mini Game

A **"Classic Bricks"** mini-game is included directly on the device! Navigate to the Settings Menu to launch it.

High Scores: Your high score is saved on the device and syncs to the iCode Hub leaderboard so you can compete with other Spinner owners. Performing a "Reset to Defaults" will clear the local high score memory; the cloud leaderboard in iCode Hub is preserved.

Firmware Updates

Firmware updates are managed through **iCode Hub**.

1. Connect the Spinner to your PC via USB.
2. Open **https://icodehub.icode.com** in Chrome or Edge.

3. Click **Connect** and follow the on-screen update instructions.

> **Back up first:** Save your presets to the Cloud Vault before updating. Settings and presets may need to be reloaded from your Vault after upgrading.

Recovery (Pinhole Fallback)

Use this only if the device is unresponsive or iCode Hub cannot detect it.

1. Unplug the device.
2. Locate the small pinhole on the top of the unit.
3. Insert a pin to press and hold the internal button (you will feel a click).
4. While holding the button, plug the USB cable back into your PC.
5. The screen will remain blank, but the device will appear as a USB drive.
6. Open iCode Hub and use the device recovery option to install firmware.

System Information

A **System Info** screen on the device shows:

- Product name and model
- Firmware version
- Device serial number (used for iCode Hub registration)

Access this screen from the Settings Menu.

Need Help?

For support and walkthrough videos, visit **https://www.icode.com/support** or use the help links in iCode Hub.

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