



Sega Trackball LED Mod

Description

Fully assembled PCB kit. Adds RGB LED lighting to official Sega trackball assemblies in a low-profile form factor with multiple operation modes and ability to save settings. Modes allow for rainbow fade with adjustable speed, single color selection, white, reactive brightness to trackball spin (any mode), and adjustable brightness. **Note: This mod is only compatible with the official Sega trackball pictured in the instructions.**

The kit includes:

- 1 x Sega Trackball LED Mod
- 2 x wire harnesses
- 4 x self-drilling #6 x 3/8" mounting screws

Operation

Mode Selection

When first connected, the board will be in **Rainbow Fade** mode (mode 1). To adjust modes, press/release the **mode** button. This will advance to the next mode in sequence and the LEDs will flash the number of times that correspond to the current mode:

Mode 1: Rainbow Fade

- **Rainbow Fade** mode will cycle through the full color range of the RGB LEDs. The speed of the color fade is adjustable (see **Rainbow Fade Speed** under **Additional Settings**).

Mode 2: Single Color

- While in Rainbow Fade mode, press the **mode** button to lock the current color. This enables you to select any color from the **Rainbow Fade** mode as the static color.

Mode 3: White

- **White** mode changes the LEDs to pure white.

Additional Settings

Brightness

- There are 20 brightness levels, including off (zero brightness), available in all 3 operation modes. Press/release the **bright** button to cycle through the 20 available levels.

Rainbow Fade Speed

- The speed of the **Rainbow Fade** cycle is adjustable. Hold the **mode** button for 2 seconds and the LEDs will begin to flash. While holding **mode**, press/release the **bright** button to cycle through fade speeds. While adjusting the fade speed, the LEDs will flash relative to the current fade speed setting. Release the **mode** button to complete the adjustment.

Trackball Spin Response

- To enable or disable **Trackball Spin Response**, hold the **bright** button for 2 seconds until the LEDs flash and release. A single LED flash indicates this mode has been disabled, and two flashes indicate it has been enabled. When **Trackball Spin Response** is enabled, the brightness of the LEDs will increase with the speed at which the X and Y axis of the trackball are moving and will fade down when not moving. *Note: your initial brightness setting will be the root value in this mode. Lower brightness settings will have or more dramatic effect vs. high brightness which will see little change.*

Save Settings

- All settings can be preserved when powered off. Set the mode, brightness, fade speed, and spin response to your preference, hold the **bright** button until the LEDs slowly flash 3 times (5 seconds), and your settings will be saved to memory.

Installation

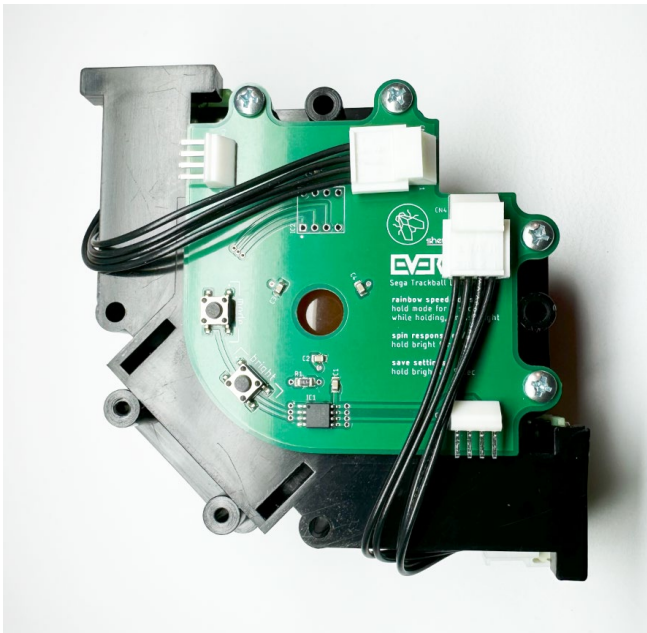
1. Disconnect all wires and remove any existing lighting kit or metal bracket from the bottom of the trackball assembly.



2. Mount the Sega Trackball LED Mod PCB to the bottom of the trackball assembly using the 4 provided screws.



3. Connect the included wire harnesses from CN2 and CN4 on the Sega Trackball LED Mod PCB to the connectors on the trackball assembly as pictured.



4. Mount the trackball in your control panel and connect the control panel harness connectors for X and Y to CN1 and CN3 on the Sega Trackball LED Mod PCB.
5. Enjoy!