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Keybow 2040

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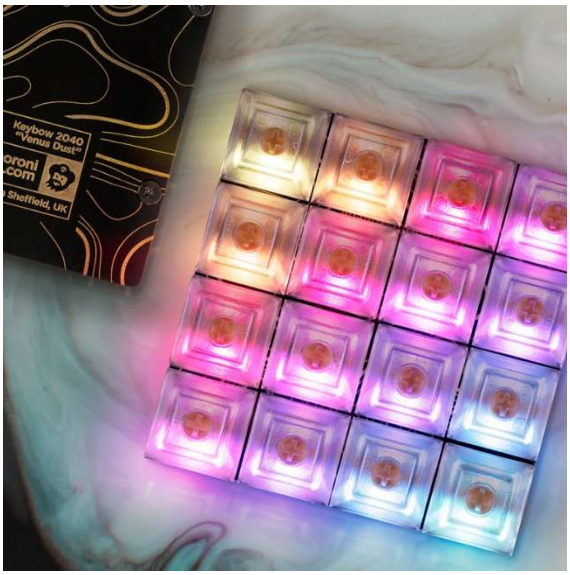

A luxe all-in-one 16 key mini mechanical keyboard with hot swap clicky or linear switches and per key customizable RGB lighting.

Keybow evolves into its final form with a 4x4 grid of keys, and low latency input, high reliability and a super slim footprint courtesy of the brand new RP2040 chip from Raspberry Pi. The RP2040 microcontroller chip is incorporated neatly into the Keybow 2040 PCB, so it's a tidy all-in-one unit. We've added our favorite Kailh Speed switches (now available in clicky, linear or tactile varieties) and smart transparent DSA keycaps that look incredible when lit up with the fully customizable per-key RGB lighting.

You could use Keybow 2040 as a streaming deck for adjusting in-stream audio settings and switching easily between OBS scenes, as a capable midi controller for triggering clips, tracks, or effects in Ableton Live or as a customizable hotkey pad for programs like Photoshop. It's also handy for pasting frequently used text or code snippets.

Features

- Powered by RP2040
- 2MB of flash memory.
- 16 (4x4 matrix) of low-profile keys connected directly to GPIOs
- Kailh hot-swap switch sockets (for Cherry MX-compatible switches)
- Per key RGB LEDs driven by an IS31FL3731 PWM LED matrix driver
- A BOOTSEL button (this can also be used as a user switch)
- A reset button!
- Powered and programmable via USB-C
- Dimensions: approx. 76mm x 76mm x 30mm (L x W x H, including switches, keycaps and feet)
- No soldering required!
- Comes with CircuitPython pre-installed
- PMK CircuitPython library
- Schematic

Includes

The clicky, linear and tactile kits contain everything you need* to assemble your own mini mechanical keyboard with high-quality clicky (Gold), linear (Silver) or tactile (Copper) Kailh Speed switches and clear DSA-profile key caps. The hot-swap Kailh sockets mean that assembly is super simple and there's absolutely no soldering required! We also have a bare bones edition available, without keycaps and switches, for folks who would like to supply their own. The hot-swap sockets will work with Cherry-MX compatible switches, and you'll need ones that have a recess on the underside for surface mount LEDs.

*** A USB-C cable is not included.**

About RP2040

Raspberry Pi's RP2040 microcontroller is a dual core ARM Cortex M0+ running at up to 133Mhz. It bundles in 264kB of SRAM, 30 multifunction GPIO pins (including a four channel 12-bit ADC), a heap of standard peripherals (I2C, SPI, UART, PWM, clocks, etc.), and USB support.

One very exciting feature of RP2040 is the programmable IOs which allow you to execute custom programs that can manipulate GPIO pins and transfer data between peripherals - they can offload tasks that require high data transfer rates or precise timing that traditionally would have required a lot of heavy lifting from the CPU.