



**PIM498** 

# **Unicorn HAT Mini**

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## DESCRIPTION

Over one hundred RGB LEDs, all individually-controllable, and four tactile buttons. It's the ultimate pocket-sized rainbow generator for Raspberry Pi!

Unicorn HAT Mini is a 17x7 matrix of RGB LEDs that can be controlled, both in terms of colour *and* brightness, to display animations, text, simple images, and more. The four tactile buttons add tonnes of utility to control the colour or brightness of the LEDs, or as controls for simple games, or whatever else you like.

There's no fiddly soldering, as the header is pre-attached. Just pop it onto your Raspberry Pi and start pooping out rainbows faster than you can say "Richard of York gave battle in vain".

#### Features

- 17x7 matrix of RGB LEDs (119 total)
- Individual colour/brightness control of each LED
- Holtek HT16D35A LED matrix driver chip (x2)
- Four tactile buttons
- Mini HAT-format board
- Fully-assembled (no soldering required)
- Compatible with all 40-pin header Raspberry Pi models
- Python library
- Dimensions: 65x30x10mm
- Pinout

## Software

We've put together a **Python library for Unicorn HAT Mini** that makes it simple to control individual LED's colour and brightness, display images or test, make games, and more. There's some really fun examples of how to use the buttons for games, with Simon Says and a fun little Columns-type game with coloured, falling blocks.

## **Notes**

Unicorn HAT Mini uses non-smart RGB LEDs, the same as our Unicorn HAT HD, rather than NeoPixel or DotStar-type addressable LEDs, driven by two LED matrix driver chips (the Holtek HT16D35A).

Because the pixels and the driver chip are different to all of our other Unicorn boards (Unicorn HAT, Unicorn pHAT, Unicorn HAT HD, Ubercorn), examples and code written for those other boards won't run directly without a few tweaks to the code first.