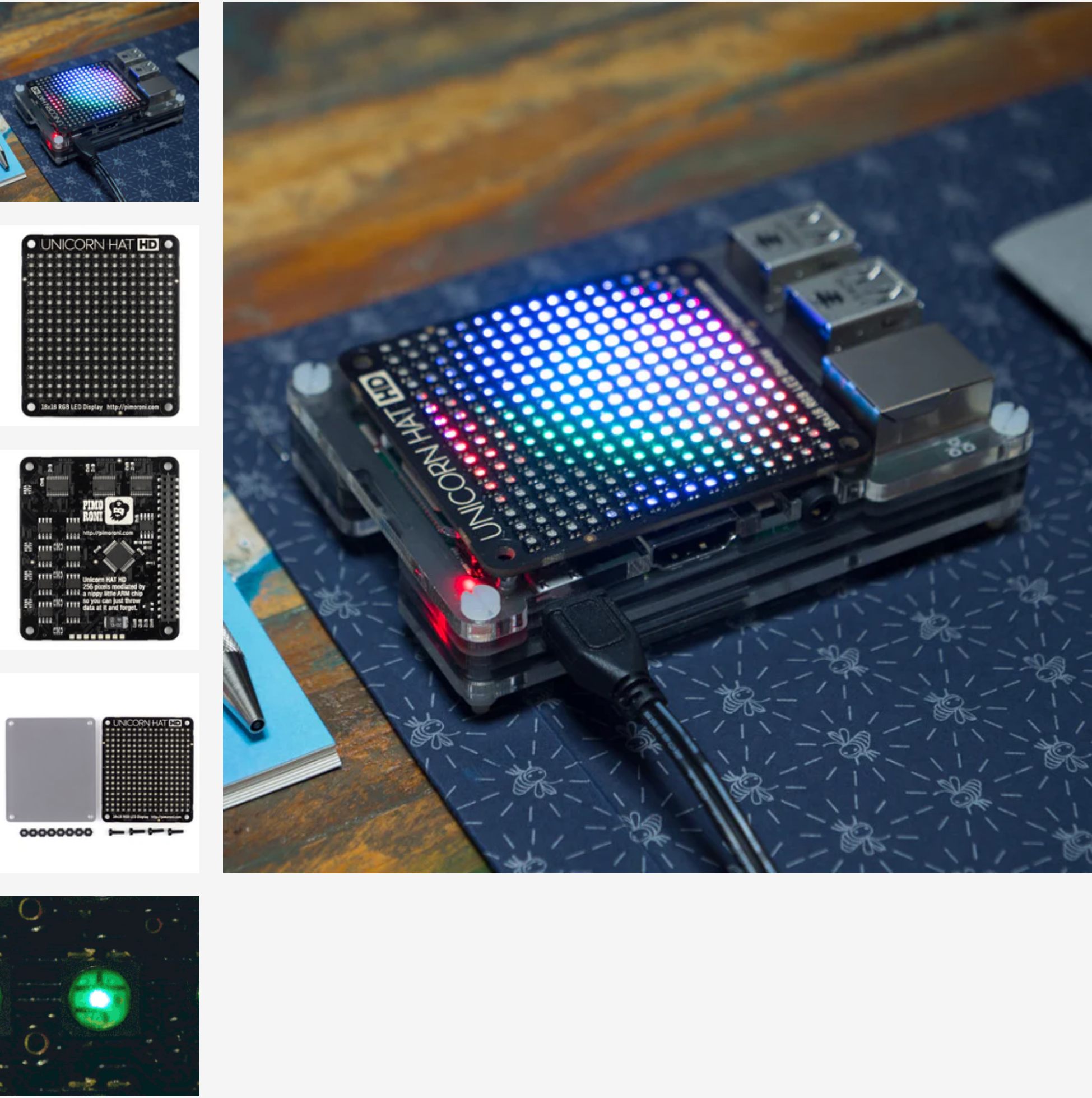


Unicorn HAT HD

by Pimoroni



We've stepped up our LED game! Unicorn HAT HD crams 256 RGB LEDs, in a 16x16 matrix, onto a single HAT. High-definition rainbow goodness!

You can still use it for all of the same things as the regular Unicorn HAT, but with 4 times as many pixels it makes much more complex animations possible, including scrolling text, and even low resolution videos.

The bundled ninja diffuser makes the pixels look extra-shiny by providing some subtle diffusion, blurring the lines between each pixel. Simply use four of the nuts to space the diffuser slightly away from the HAT, and the other four to secure it.

The MagPi said that Unicorn HAT HD had a "real wow factor" and that the "performance is excellent" in their five star review.

Features

- 256 RGB LED pixels in a 16x16 matrix
- Pixels driven by ARM STM32F and three STP16CPC26 LED drivers
- Bundled ninja diffuser, plus nuts and bolts
- [Unicorn HAT HD pinout](#)
- Compatible with all 40-pin header Raspberry Pi models
- [Python library](#)
- Comes fully assembled
- [Schematic](#)

The ARM chip on Unicorn HAT HD does all of the heavy lifting, meaning that you can just bung data to it and it'll take care of the rest. It acts as the man-in-the-middle between your Pi and the three STP16CPC26 LED drivers that actually drive the LEDs.

Software

Our [Python library](#) will have your Unicorn HAT HD pooping out high-definition rainbows in a jiffy. There's a [stack of examples](#) too, to show you how to create slick animations, simulate the Game of Life, a forest fire or a flickering candle, and even scroll text!

Notes

- **Photo-sensitivity warning:** flashing, strobing, and patterns of lights may cause epileptic seizures. Always take care and immediately stop using if you feel unwell (dizziness, nausea, affected vision, eye twitching, disorientation).
- **Power:** Unicorn HAT HD requires a >2A microUSB power supply for your Pi. We recommend the official Raspberry Pi power supply.

41 customer reviews

★★★★★

a month ago

Arrived promptly and well packaged. The tutorials make it very easy to set up, and once I got going I had a great time programming it

by Gavin about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

6 months ago

A brilliant display with lots of potential. It'll jazz up any project that changing and fluid colours are used to display changing conditions

by Reza about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★☆☆☆☆

a year ago

it wont, I ran what I needed to run to get it work. The program through python runs with no errors. but the

by John about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

a year ago

works well, easy to install - sits nicely on the cyberdeck hat

by Anonymous about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

a year ago

awesome!! It's colorful display and swiftly.

by SHIGERU about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

2 years ago

Brighter than expected. Good product

by Jax about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

2 years ago

Brilliant bit of kit, Worked straight away. Very pleased. Excellent service too.

by Jim about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

2 years ago

Excellent Hat with some great opportunities for coding projects! Has some fantastic demo scripts too. Had an issue with my original order where some of the LED's started malfunctioning - however, this was sorted out quickly

by Louis about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

3 years ago

Bright vibrant LED display with an easy to use Python library! However python can be really slow at some times and would be great if we could get a C library for

by Louis about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

3 years ago

by Ben about [Unicorn HAT HD](#) via [REVIEWS.io](#)

★★★★★

3 years ago

Love it. Works great. I played around with the provide python examples and then wrote my own code in Node using the very small node-unicornhathd

by Josh about [Unicorn HAT HD](#) via [REVIEWS.io](#)

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★★★★★ 41 reviews

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Unicorn HAT HD

PIM273

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★★★★★

"I have ordered just about all of the Pimoroni hats, and i can quite confidently say this is my favourite! The high level of detail from such a tiny board, is amazing! I particularly like the demo.py script truly showing it's full glory!"

by Alex

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