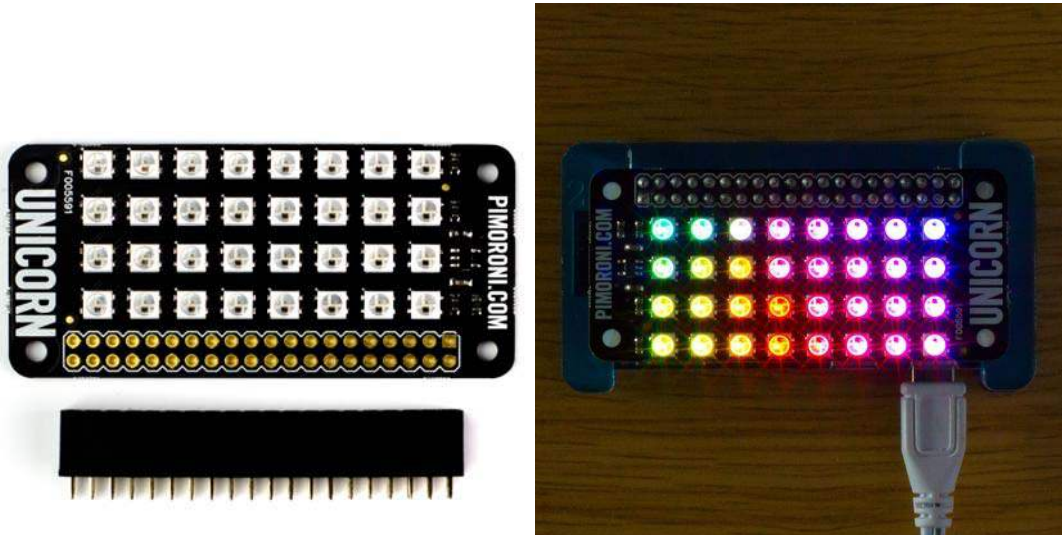# Unicorn pHAT PIM168



What's going to protect your beloved Raspberry Pi from an onslaught of rainbow-coloured fusion? That's right, it's Unicorn pHAT.

Sporting a matrix of 32 (8 x 4) RGB LEDs and powered directly from the Pi, this is the most compact pocket aurora available.

Unicorn pHAT provides a wash of controllable colour that is ideal for mood-lighting, pixel art, persistence of vision effects, status indications, or just blasting colour into your surroundings.

**Features**

- 32 RGB LEDs (SK6218 - 3.5mm x 3.5mm)
- LED data driven via DMA over PWM
- Compatible with Raspberry Pi 3, 2, B+, A+, Zero, and Zero W
- Python library
- **Female header requires soldering**

**Software**

Unicorn pHAT uses the same Python library as Unicorn HAT, so it's super-easy to use, should automatically detect that you're using the pHAT and includes some examples written specially for Unicorn pHAT.

**Notes**

- **Warning**: SK6218 LEDs are bright enough to cause eye pain, do not look at them directly when brightly lit. We recommend using Unicorn pHAT at lower brightness levels.
- **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 pHAT works best with a >2A microUSB power supply for your Pi. We recommend the official Raspberry Pi power supply.
- **Compatibility (audio)**: as Unicorn pHAT uses PWM and GPIO18, it will interfere with analogue audio playback (random colour patterns and flickering). HDMI should work just fine! :D