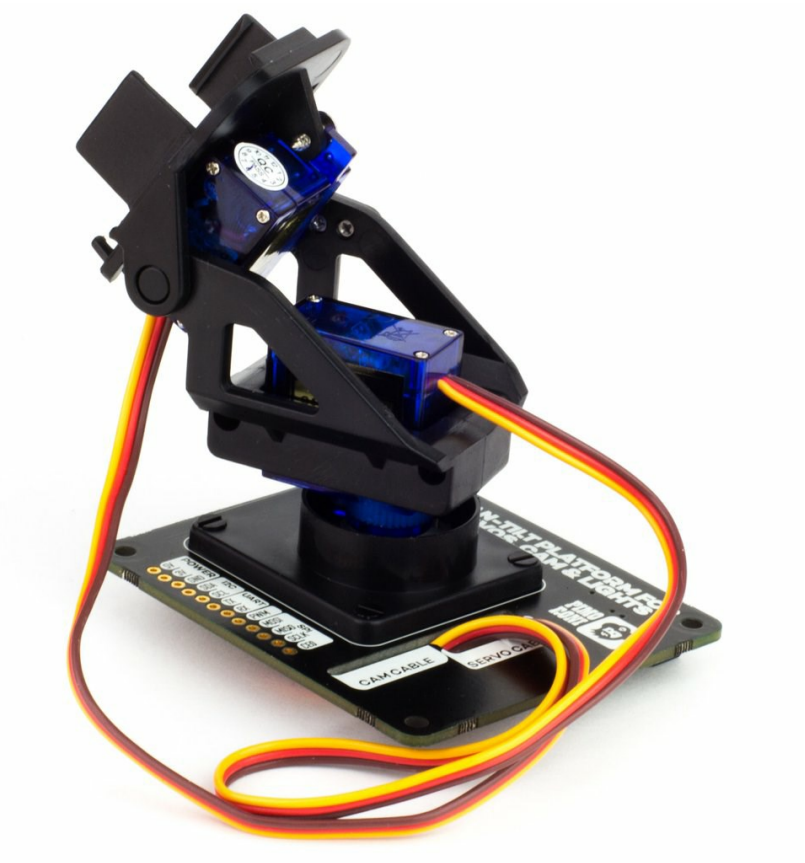

Full kit – Pan-Tilt HAT

Ideal for a mini CCTV system, this set of horizontal and vertical motion servos will give you Pi camera movement with a minimum of fuss. Read more...

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- (•) Full kit
- ( ) without Pan-Tilt module

Essential extras

- [ ] NeoPixel Stick - 8 x 5050 RGB LED with Integrat...

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Pan-Tilt HAT

Ideal for a mini CCTV system, this set of horizontal and vertical motion servos will give you Pi camera movement with a minimum of fuss.

Pan-Tilt HAT lets you mount and control one of our pan-tilt modules right on top of your Raspberry Pi. The HAT and its on-board microcontroller let you independently drive the two servos (pan and tilt), as well as driving up to 24 regular LED (with PWM control) or NeoPixel RGB (or RGBW) LEDs. There's also a handy slot through which you can route the servo, LED, and camera cables. The module pans and tilts through 180 degrees in each axis.

Use Pan-Tilt HAT with a Pi camera for face-tracking. Or mount it on top of your roving robot as a set of eyes. Why not stick a foam sword on top and make it swashbuckle?!

There's absolutely no soldering required (unless you decide to use the optional NeoPixel strip or ring), as the servos on the pan-tilt module have female jumper wires attached and we've soldered a strip of right-angled header pins to the underside of the HAT to connect them up.

We've also included a handy little acrylic camera mount to hold your camera snugly in the head of the pan-tilt module. The mount has a couple of mounting holes at the top to hold a NeoPixel stick and there's a neat little frosted diffuser to make the light super-dreamy. :-) We suggest one of the Adafruit RGBW NeoPixel sticks, as they give a lovely pure white (or any other colour!)

Note that the Pi camera, NeoPixel strip, male header, female to female jumper wires, Pi 3 and Pibow are not included. You'll need to pick them up separately!

The MagPi said, in their four star review, that Pan-Tilt HAT was a *"highly enjoyable and extremely cute accessory"*.

Features

- Pan-tilt module (180 degrees motion through each axis) with two servos
- HAT with two servo channels, one PWM or NeoPixel RGB (or RGBW) LED channel
- Right-angled header pre-soldered to underside of HAT for servo and LED channels
- Slot to route servo, LED, and camera cables through
- Acrylic mount to hold Pi camera and NeoPixel strip (with diffuser) in place
- Pan-Tilt HAT pinout
- Compatible with Raspberry Pi 3B+, 3, 2, B+, A+, Zero, and Zero W
- Python library
- Comes fully assembled

Software

We've put together a super-simple Python library to make it super-easy to control Pan-Tilt HAT. Just tell Pan-Tilt HAT to which angle you'd like it to pan or tilt (from -90 to +90 degrees) and away it goes! There's even a couple of examples showing you how to pan and tilt, and control connected NeoPixels.

Our software does not support Raspbian Wheezy.

Notes

- The servos draw a lot of current, thus we recommend a good quality 2.5A power supply like the official Raspberry Pi power supply.
- Pi camera, NeoPixel strip, male header, female to female jumper wires, Pi 3 and Pibow are not included.
- Connect the brown wires of the servo cables to the GND pins on the servo channels.
- Servo channel 1 controls pan and servo channel 2 controls tilt, although you can easily swap these in software.
- You may require a set of standoffs to use Pan-Tilt HAT with the Raspberry Pi 3B+.

Reviews

★★★★½

WRITE A REVIEW

Steven Pole ★★★★☆

Excellent kit. Needed to do some adjustments to the camera mounting board to accommodate the infra-red lamp I had bought, but not much of a problem.

19 days ago

Bandele Olu… ★★★★★

29 days ago

Richard Ro… ★★★★☆

For me, the pi has the camera the wrong way round! I use LAN cables and if you want the camera to face out the window, it needs to be the other end away from the LAN port! I use an open case, with simple plastic top and bottom, I first stood this on double standoff stilts. Then I mounted the pan-tilt hat on standoffs, the wrong way round for GPIO. I don't use the GPIO plug on the hat. Using 5 wires, I connected the I2C :- SDA, SCL, 3v, 5v and GND from the convenient PADS on the other side of the HAT, connected directly down to the GPIO. The motion unit sits on more standoffs above the HAT. Lots of cool airflow. I don't use the slots for the servo leads, those now swing nicely away from any snagging. A 12" camera cable runs back and up to the upside down camera. The example web controller works fine, you just need to swap the directions for the buttons. Currently I use the simple web app example from the picamera docs, just need to hflip and vflip. I also added a heat shield made from Meccano plate to stop the sun on the Pi....

REVIEWS

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