

## Rainbow HAT



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- Raspberry Pi 3 Starter Kit for Android Things PIM243
- Rainbow HAT + Pibow Coupé Android Things PIM251
- Rainbow HAT only PIM242

Rainbow HAT has a buffet of sensors, inputs and displays to explore Android Things™. Use it as a weather station, a clock, a timer or stopwatch, a mood light, or endless other things.

We've worked with the Android Things team at Google to create this great add-on board that features displays, sensors, sound, and lots of LEDs! It's the perfect introduction to developing Android Things applications on the Raspberry Pi.

Rainbow HAT also has a full Python API for use on Raspbian just like all of our other HATs that you know and love!

The MagPi said that *"Rainbow HAT has an impressive number of features crammed into it, making it useful for all sorts of projects"* in their four star review.

### **Rainbow HAT features:**

- Seven APA102 multicolour LEDs
- Four 14-segment alphanumeric displays (green LEDs)
- HT16K33 display driver chip
- Three capacitive touch buttons
- Atmel QT1070 capacitive touch driver chip
- Blue, green and red LEDs
- BMP280 temperature and pressure sensor
- Piezo buzzer
- Breakout pins for servo, I2C, SPI, and UART (all 3v3)
- Compatible with Raspberry Pi 3, 2, B+, A+, Zero, and Zero W
- Python library

The board is designed specifically to show off the wide range of protocols available on the Raspberry Pi, including SPI (the APA102 LEDs), I2C (the BMP280 sensor and 14-segment displays), GPIO (the capacitive touch buttons and LEDs), and PWM (the piezo buzzer).

### **Raspberry Pi 3 Starter Kit for Android Things™ contains:**

- Raspberry Pi 3
- Rainbow HAT
- Pibow Coupé for Android Things
- 2.5A official Raspberry Pi worldwide power supply
- 8GB microSD card