



# Adafruit Parts Pal

PRODUCT ID: 2975



## Description

LEDs and passives and transistors and switches and op-amps oh my! The **Adafruit Parts Pal** is the ultimate companion for an entry-level maker learning electronics. This kit is your friend whenever you need to build up a project. It contains many of our most popular components and prototyping parts all wrapped up in one parts pack so you can open up and dig right in.

## **Kit Contents:**

### Prototyping:

- 1x - Storage box with latch
- 1x - Half-size breadboard
- 20x - Male/male jumper wires - 3" (75mm)
- 10x - Male/male jumper wires - 6" (150mm)

### LEDs:

- 5x - 5mm Diffused green LEDs
- 5x - 5mm Diffused red LEDs
- 1x - 10mm Diffused Common-Anode RGB LED

### Capacitors:

- 10x - 1.0uF Ceramic capacitors
- 10x - 0.1uF Ceramic capacitors
- 10x - 0.01uF Ceramic capacitors
- 5x - 10uF 50V Electrolytic capacitors
- 5x - 100uF 16V Electrolytic capacitors

### Resistors:

- 10x - 560 ohm 5% axial resistors
- 10x - 1K ohm 5% axial resistors
- 10x - 10K ohm 5% axial resistors
- 10x - 47K ohm 5% axial resistors

### Semiconductors:

- 5x - 1N4001 Diodes
- 5x - 1N4148 Signal Diodes
- 5x - NPN Transistor PN2222 TO-92
- 5x - PNP Transistor PN2907 TO-92
- 2x - 5V 1.5A Linear voltage regulator - 7805 TO-220
- 1x - 3.3V 800mA Linear voltage regulator - LD1117-3.3 TO-220
- 1x - TLC555 wide-voltage range, low-power 555 Timer
- 1x - LM358 Dual operational Amplifier

### Sensors:

- 1x - Photocell
- 1x - Thermistor (Breadboard version)
- 1x - Vibration sensor switch
- 1x - 10K Breadboard trim potentiometer
- 1x - 1K Breadboard trim potentiometer

Mechanical:

- 1x - Piezo buzzer
- 5x - 6mm Tactile switches
- 3x - SPDT slide switches
- 1x - 40-pin Break-away male header strip
- 1x - 40-pin female header strip

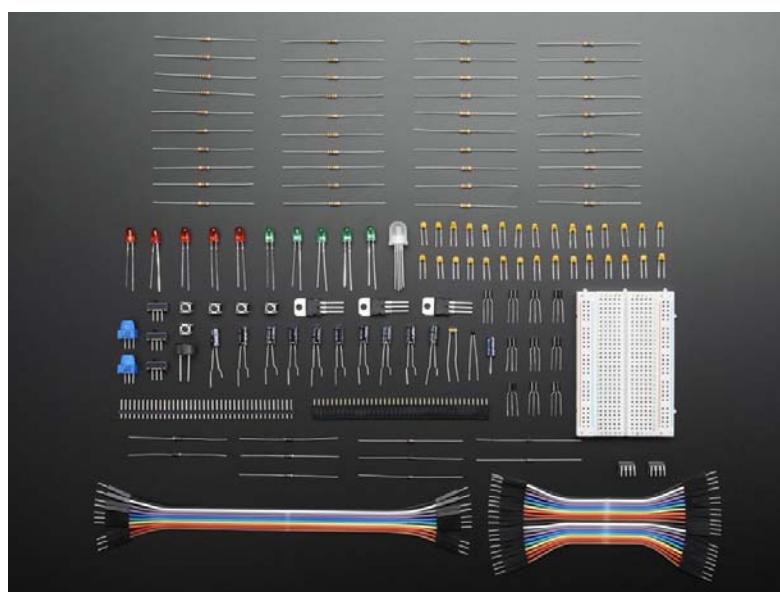
## • Technical Details

Revision history

- As of July 20, 2016 we now include an LM358 dual opamp!

Datasheets:

- TLC555
- LM358
- PN2222A
- MPS2907A
- LD1117
- L7805CV
- Electrolytic Capacitor
- Thermistor
  - Resistance at 25 degrees C: 10K +- 1%
  - $B_{25}/50 = 3950 \pm 1\%$
  - Thermal time constant  $\leq 15$  seconds
  - Thermistor temperature range -55 °C to 125 °C



<https://www.adafruit.com/product/2975> 8-1-17