

4tronix Pi2Go Mk2 Robot for Raspberry Pi

Specification

- Requires 6 x AA rechargeable battery cells (not included)
- Supports all versions of 40-pin Raspberry Pi
(NB. the Raspberry Pi 4 consumes a lot of power and it is recommended to use one of the optional 7 x AA, or 2 x 18650 battery boards)
- Motor controller: DRV8833
- Analog input (light sensors and battery) MCP3008
- Switching 5V power supply using TPS5430
- 10 x SK6812-3535 Smart RGB LEDs (compatible with neopixels) – on battery board
- On/Off switch with Blue indicator LED – on battery board
- 2 x TCRT5000 infra-red obstacle sensors (front corners)
- 4 x SFH3710 light sensors (all 4 corners)
- 2 x TCRT5000 infra-red line follower sensors
- 6mm tact switch for programmatic use
- 4 x servo connections – direct from GPIO pins, with 5V and Ground signals
- 2 x optical wheel sensors with 20 slot encoder wheels (i.e. 20 pulses per revolution)
- 2 slots for breakout boards, including ultrasonic distance sensor and IP Display.
These slots are compatible with Pimoroni's Breakout Garden range.
- Overall size with wheels attached: 148 x 118 x 98mm (length x width x height)
- Weight (excluding Raspberry Pi & batteries): 282g

GPIO Connections

(Broadcom numbering)

- Left Motor: 26, 19
- Right Motor: 21, 16
- Smart RGB LEDs: 18
- Left Obstacle Sensor: 22
- Right Obstacle Sensor: 17
- Left Line Sensor: 23
- Right Line Sensor: 27
- Front ultrasonic (or general I/O): 20
- Side ultrasonic (or general I/O): 4
- Tact switch: 15
- Left wheel sensor: 5
- Right wheel sensor: 6
- Servos: 12, 13, 24, 25