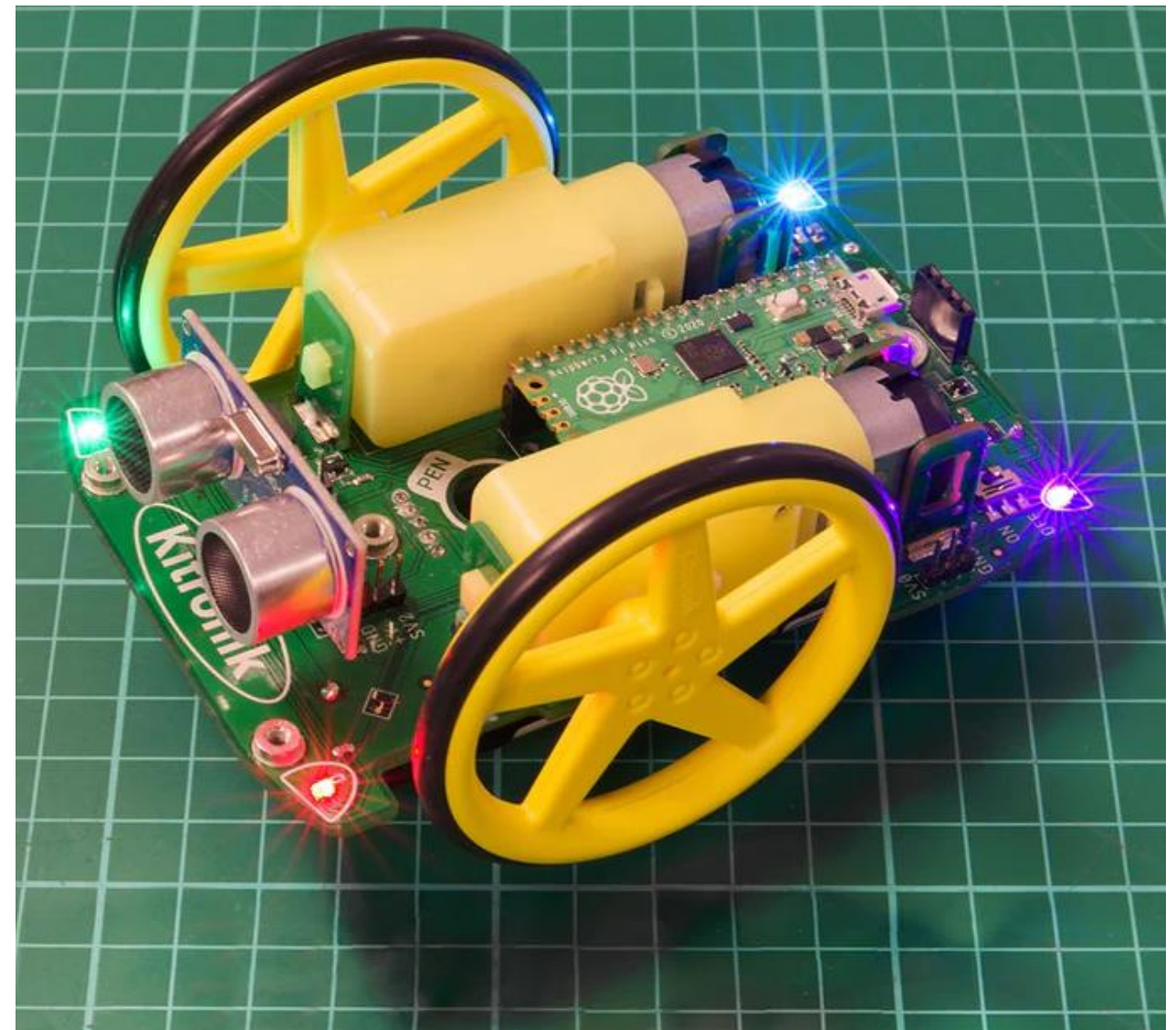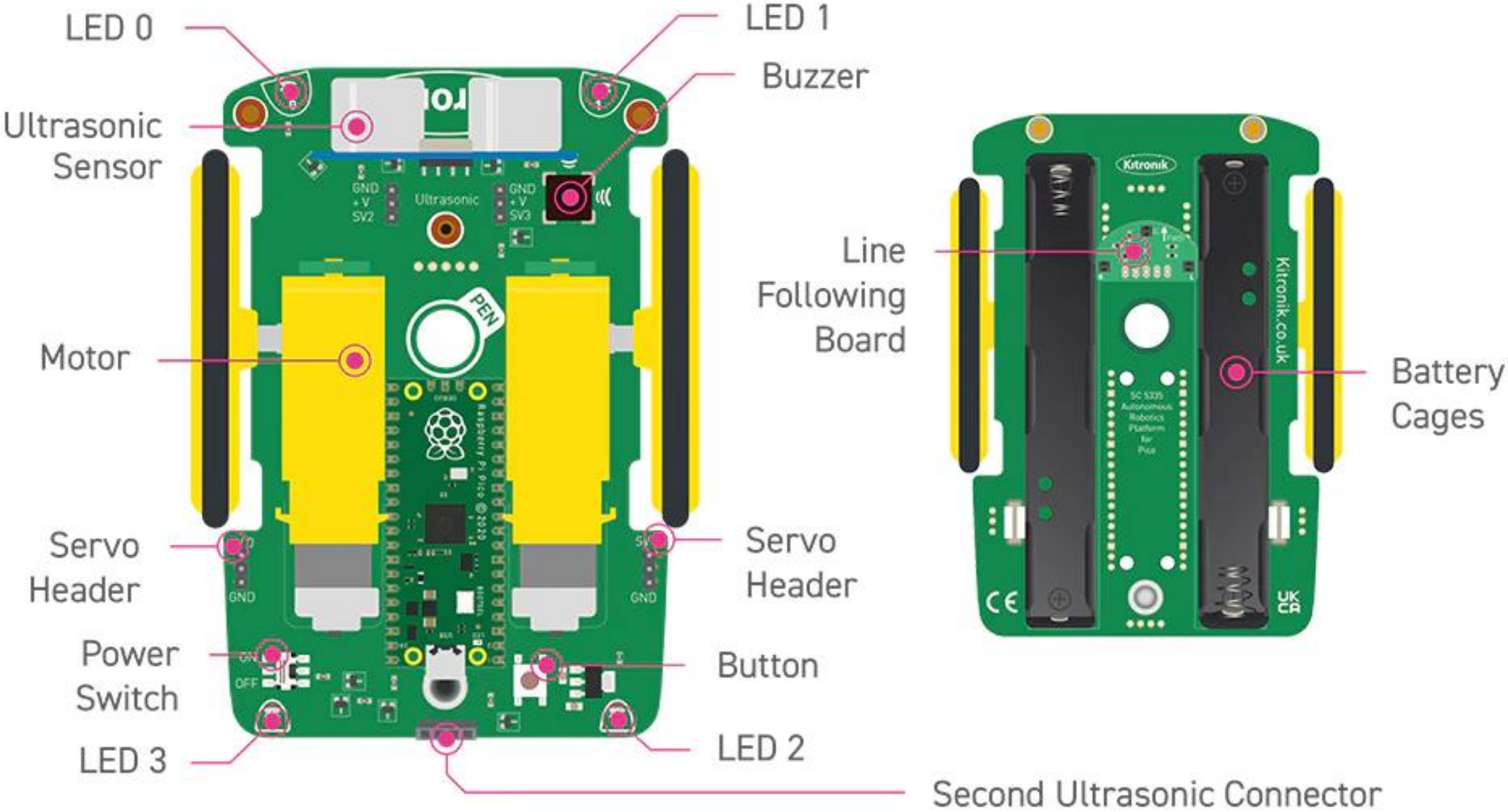# Kitronik Autonomous Robotics Platform (Buggy) for Pico

The Kitronik Autonomous Robotics Platform for Raspberry Pi Pico is an introduction to robotics using Pico. The included booklet provided with the kit details all of the steps required to set up and use the robot. This buggy requires a Raspberry Pi Pico with pin headers attached.

The kit is supplied with the autonomous robotics platform chassis, 2 wheels and tyres, a Kitronik line-following sensor board and an ultrasonic sensor. The kit requires no soldering and only minimal mechanical assembly. Fit the tyres to the wheels, push the wheels onto the pre-mounted motors and both the line following sensor and ultrasonic distance sensor plug straight into the board.

The included booklet guides you through every step of getting to know the robot. It contains a detailed assembly guide, info on preparing the Raspberry Pi Pico, instructions for installing an editor (Thonny), and instructions on how to write code for every feature of the Robotics Platform.

Kitronik.co.uk

Contents

LED 0

LED 1

Buzzer

Ultrasonic Sensor

GND +V SV3

Ultrasonic

GND +V SV3

Line Following Board

Motor

PEN

Battery Cages

Servo Header

Servo Header

GND

SV

GND

Power Switch

ON

OFF

Button

LED 3

LED 2

Second Ultrasonic Connector

Features

- A fun and hands-on introduction to buggy robotics.
- The Robotics Platform has been designed to grow with you, start small then add complexity later.
- The kit ships with a detailed guide booklet backed up with freely available online tutorials.
- The autonomous robotics platform introduces the user to light, movement, and sensing so the robot can be as hands-on or hands-off as want it to be.
- Program your buggy to react to the world around it.
- Learn to code with MicroPython, using our simple to follow guides and the beginner-friendly Thonny editor.
- This buggy is not supplied with a Pico.

Contents

- 1 x Autonomous robotics buggy chassis PCB.
- 2 x Kitronik 5 spoke wheels and tyres.
- 1 x Kitronik line following sensor board.
- 1 x Ultrasonic Sensor.

Dimensions

- PCB Length: 126mm.
- PCB Width: 80mm.
- Wheel Diameter (with tire): 67.5mm.

Requires

- A Raspberry Pi Pico.
- 4 x Alkaline AA Batteries.
- A Micro USB cable.

Tutorials

- Motors.
- Lights, switch, and buzzer.
- Line Following Sensors.
- Ultrasonic Distance Sensor.
- Using the servo connectors.