

# PIMORONI

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## Robo:Bit Mk2 - buggy for the micro:bit

This little buggy can be assembled very quickly using only a screwdriver. No soldering is required.

## **Contents:**

- Robo:Bit robotics controller PCB
- Fixings pack (battery holder, screws, mounting pillars, caster, etc.)
- 2 x Yellow Wheels with Tyres
- 2 x Motors with pre-fitted connection wires (no soldering required)
- **micro:bit not included, [click here if you need to pick one up!](#)**

## **Using the basic kit you can learn about:**

- Controlling motors with simple Forwards / Reverse controls
- Controlling the speed of motors in both directions using PWM
- Use a second micro:bit with the easy-to-use radio software to control the buggy
- Use the motion sensor on the micro:bit to detect collision with obstacles and avoid them

## **With the optional Ultrasonic Distance Sensor (not included):**

- Detect when obstacles get close and change the program to avoid the obstacles
- "Follow-Me" program that tries to stay a certain distance from the object in front

## **With the optional Line Follower Sensor Pack (not included):**

- Use the 2 line sensors either side of the non-reflective line to detect the line and keep the buggy on track
- Write more complex programs that behave as required if you meet a T-Junction or crossing of lines
- Compare different line following strategies - create a race-track and see which strategy is fastest
- In combination with the distance sensor, make it avoid obstacles on the track and then re-acquire the line

## Essential extras

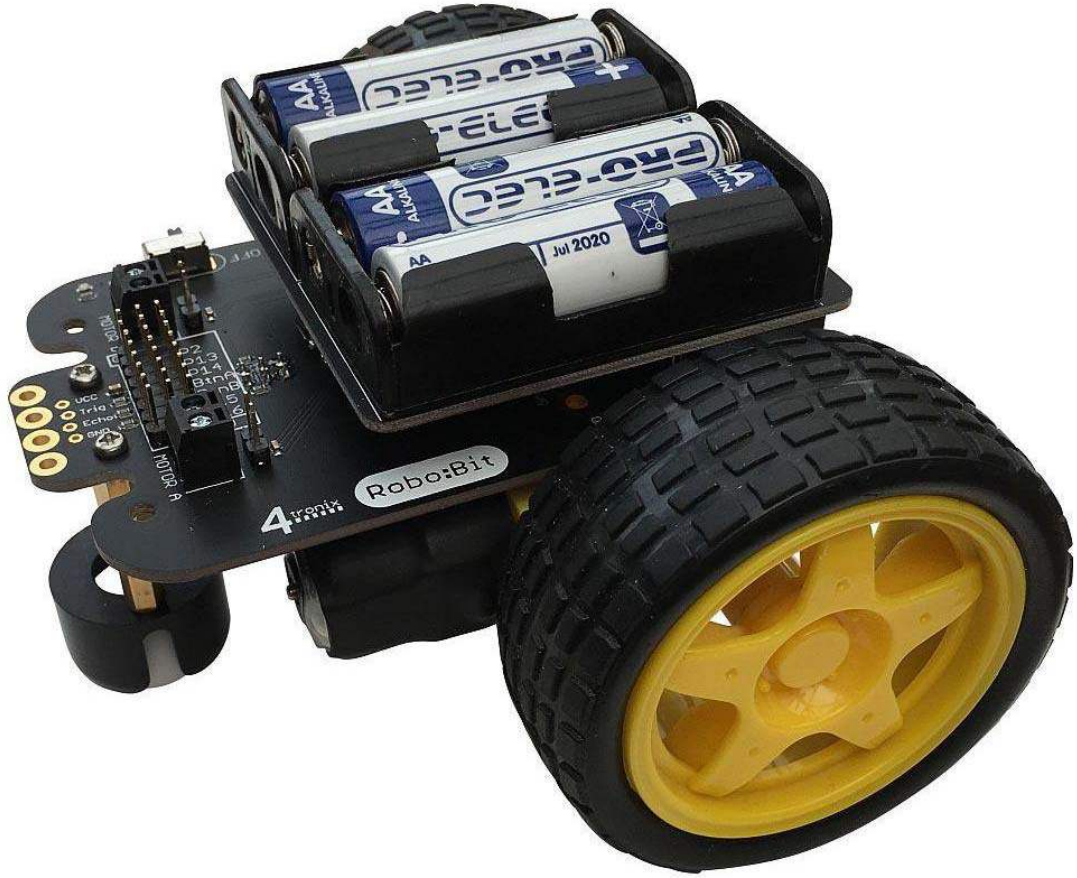
Make sure you have everything you need with this handy checklist!

### Ultrasonic Distance Sensor for Robo:Bit Mk2



### Line Follower Sensor Pack for Robo:Bit Buggy







<https://shop.pimoroni.com/products/robo-bit-mk2-buggy-for-the-micro-bity-5-24-18>