



# 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

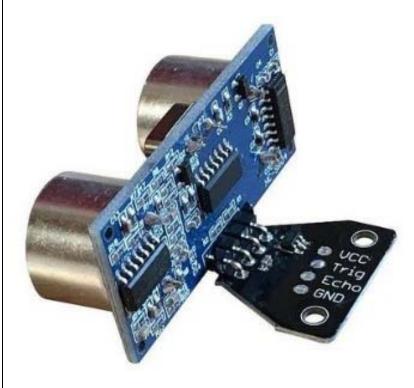
#### With the optional Line Follower Sensor Pack (not included):

- 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 reacquire the line

## **Essential extras**

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





Line Follower Sensor Pack for Robo:Bit Buggy



