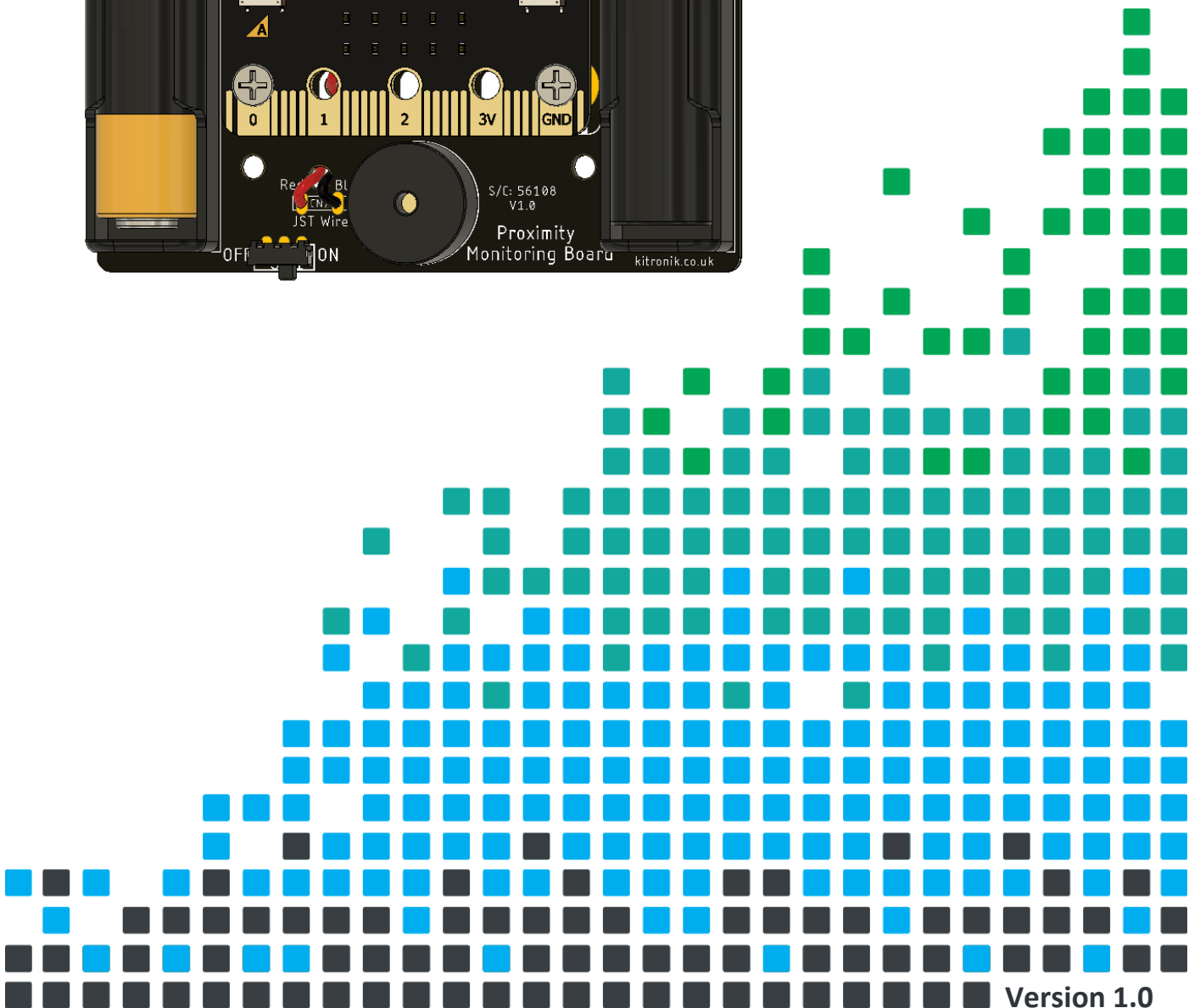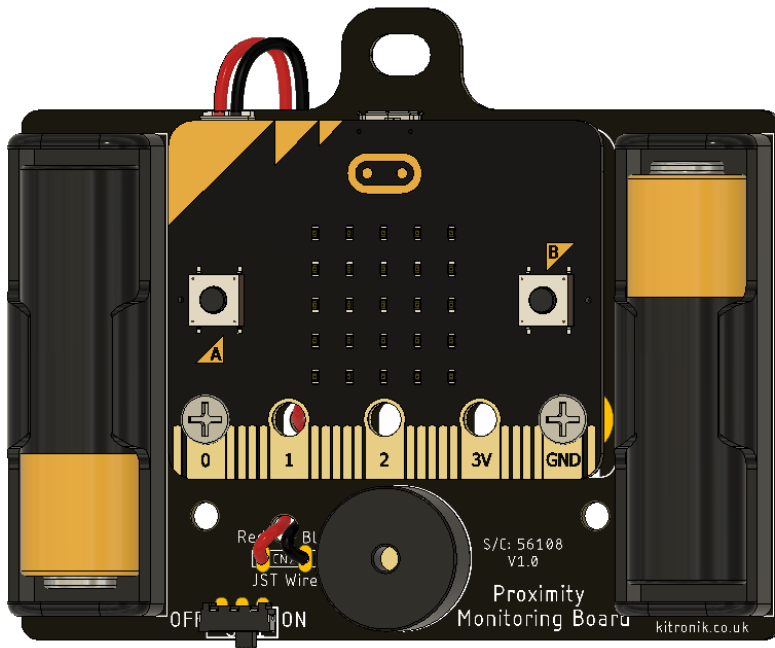**ASSEMBLY GUIDE FOR**

Proximity Monitoring Board

Version 1.0

Build Instructions

Before you start, take a look at the Printed Circuit Board (PCB). The components go in the side with the writing on and the solder goes on the side with the tracks and copper pads.

1 PLACE THE BUZZER

The piezo buzzer is placed into BZ1. It does not matter which way the component is fitted onto the board.

2 SOLDER THE SWITCH

Place the slide switch into SW1, making sure the knob of the switch is on the bottom edge of the PCB.

3 ADD BATTERY HOLDER

There are two single battery holders, BH1 and BH2. On the PCB there are markings for the positive side (marked with a + symbol) and the negative side (marked with a spring symbol). Place a battery holder in each position.

4 FEED THE JST WIRE THROUGH THE BOARD

To make sure the solder joints on the wire do not get broken, feeding the wires through the board will help give strain relief. Start by feeding the cable from the solder joint side of the PCB at the hole closest to the top of the PCB. Then switch sides with the other two holes. See image below for reference

5 SOLDER THE JST WIRES

The connection pads on CN2 for the JST wire have each pad labelled with the required wire colour. Once placed through the hole solder on the reverse side of the board.

Fitting Your BBC micro:bit to the PCB

- Place the M3x12 bolts through P0 and GND.
- Next, screw on the plastic 6mm spacers.
- Feed onto the PCB and attach the M3 nuts on the back of the PCB.
- Plug the JST cable into the BBC micro:bit
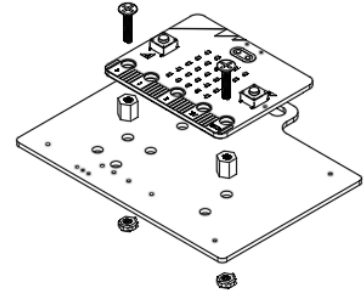
Checking Your PCB

Check the following before you power up the unit:

Check the bottom of the board to ensure that:
- All holes (except the large mounting holes) are filled with the lead of a component.
- All these leads are soldered.
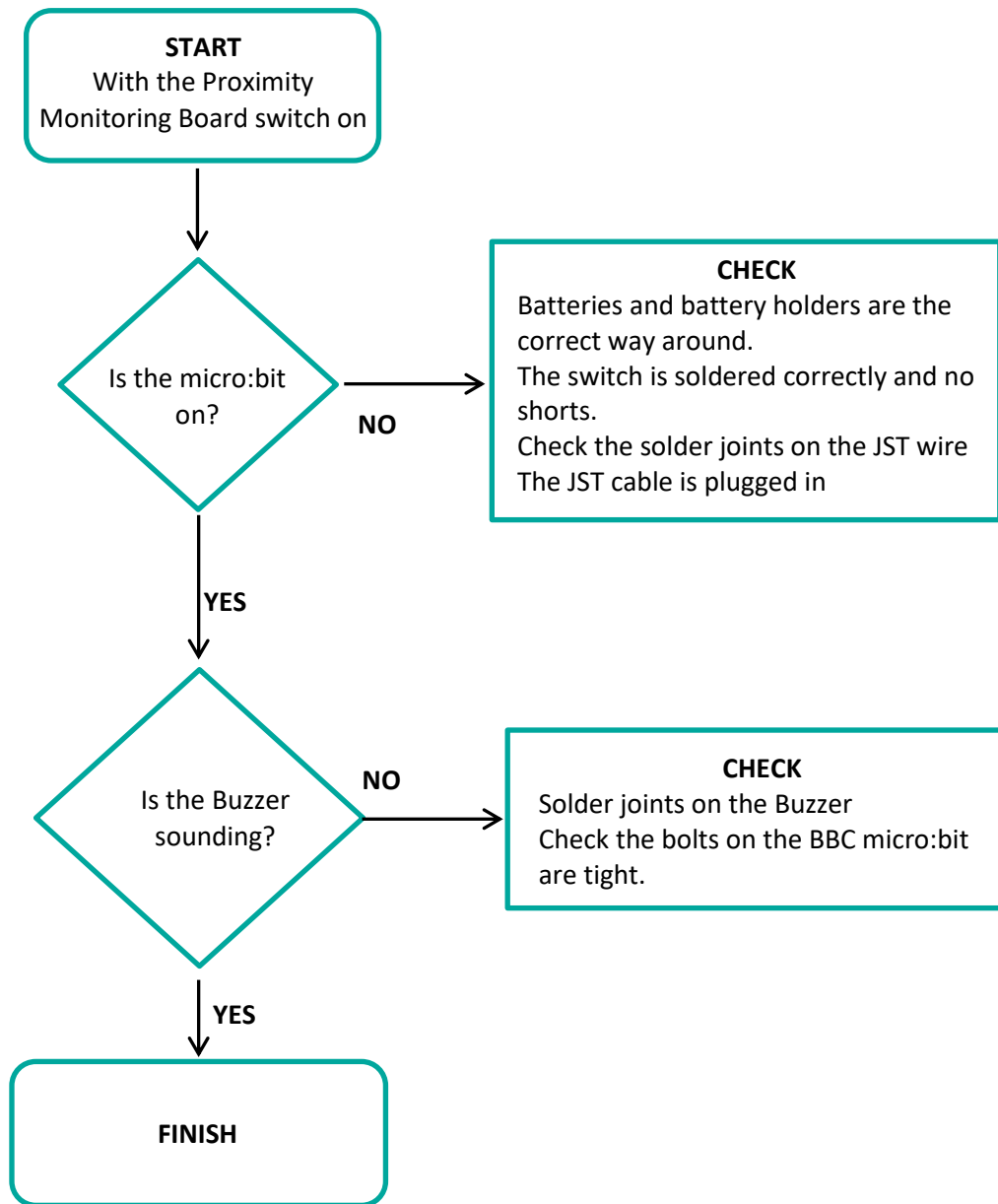- Pins next to each other are not soldered together.

Check the top of the board to ensure that:
- BH1 and BH2 are fitted to match the markings on the PCB.
- The switch knob is on the edge of the PCB.
- The bolts for the BBC micro:bit are tight

Proximity Monitoring Board

START
With the Proximity
Monitoring Board switch on

Is the micro:bit on?

NO →

CHECK
Batteries and battery holders are the
correct way around.
The switch is soldered correctly and no
shorts.
Check the solder joints on the JST wire
The JST cable is plugged in

YES

Is the Buzzer sounding?

NO →

CHECK
Solder joints on the Buzzer
Check the bolts on the BBC micro:bit
are tight.

YES

FINISH

This kit is designed and manufactured in the UK by Kitronik

Every effort has been made to ensure that these notes are correct, however Kitronik accept no responsibility for issues arising from errors / omissions in the notes.