

Motors Troubleshoot

Q1. Despite setting the speed limit of both the motors to n (1-10), the right motor is working slower than the right motor.

(A1) If you get up to 10% of speed difference in the Qu-Bot it is ok. This speed difference can be due to many reasons/factors.

If the speed difference is more than 10% may be you have kept your main circuit board on a conducting surface when the power was on. Hence the motor driver may have been damaged.

Q2. Motors are running at same speed in my hand. But when I put it on floor, it runs at different speeds.

(A2) Firstly if you can see the motors are running at same speed when you hold it in hand, there can be a problem of mis-alignment of motors with PCB. However if you think you have done everything correctly check whether there is a problem in motor drivers (refer Q3) on PCB. Also check that the motors are running at different speeds when you turn them backwards. Also check that the battery is charged, motors do not work at full power on USB.

Q3. How to know is there is a problem in motors or motor drivers.

(A3) Remove both the motor connectors and interchange them. Check if the same problem persists with the motor now connected to that same connector, or the same motor.

If the problem persists with connector, there is an issue with motor driver. (Refer Q4)

If the problem persists with motor, there is an issue with that motor. (Refer Q5)

Q4. How to change motor drivers?

(A4) You can just change four transistors (BC327, BC337) around the connector of the motor whichever is running at lower speed. De-solder the transistors and re-solder with new ones.

Q5 Are faulty motors covered in warranty?

(A5) Yes. You can definitely get replacements from your dealer under warranty but be sure about the problem. Contact your dealer for the same.

In case of mechanical damage to PCB or motors, warranty will not be applicable. If motors are burned (by over voltage or other reason) it may not be covered under warranty.