

Navigating the BOE-BOT with whiskers

Reference:

For more complete documentation, the following items are available from www.parallax.com or www.tcc.edu/faculty/webpages/PGordy

- [Robotics with the BOEBOT Version 2.2](#)
- [BASIC Stamp Syntax and Reference Manual Version 2.1](#)

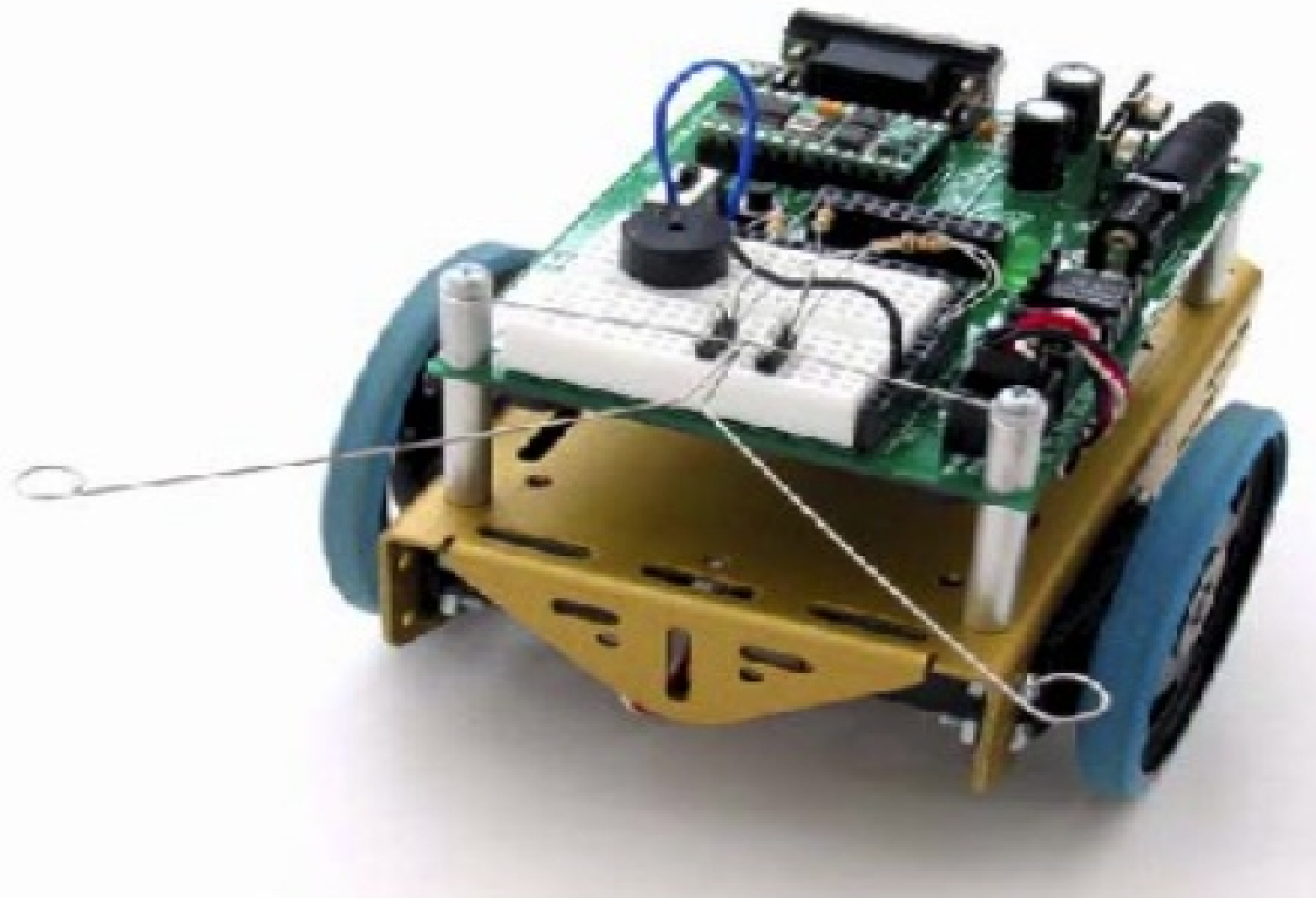


Figure 5-1
Boe-Bot with
Whiskers

Tactile Navigation with the BOE-BOT (Wall following using whiskers)

The following is an excerpt from Robotics, Version 2.2:

“Many types of robotic machinery rely on a variety of tactile switches. For example, a tactile switch may detect when a robotic arm has encountered an object. The robot can be programmed to pick up the object and place it elsewhere. Factories use tactile switches to count objects on a production line, and also for aligning objects during industrial processes.

In this chapter, you will build tactile switches, called **whiskers**, onto your BOE-BOT and test them. You will then program the BOE-BOT to monitor the state of these switches, and to decide what to do when it encounters an obstacle. The end result will be **autonomous navigation by touch**.

The whiskers are so named because that is what these bumper switches look like, though some argue they look more like antennae. Whiskers give the BOE-BOT the ability to sense the world around it through touch, much like the antennae on an ant or the whiskers on a cat.

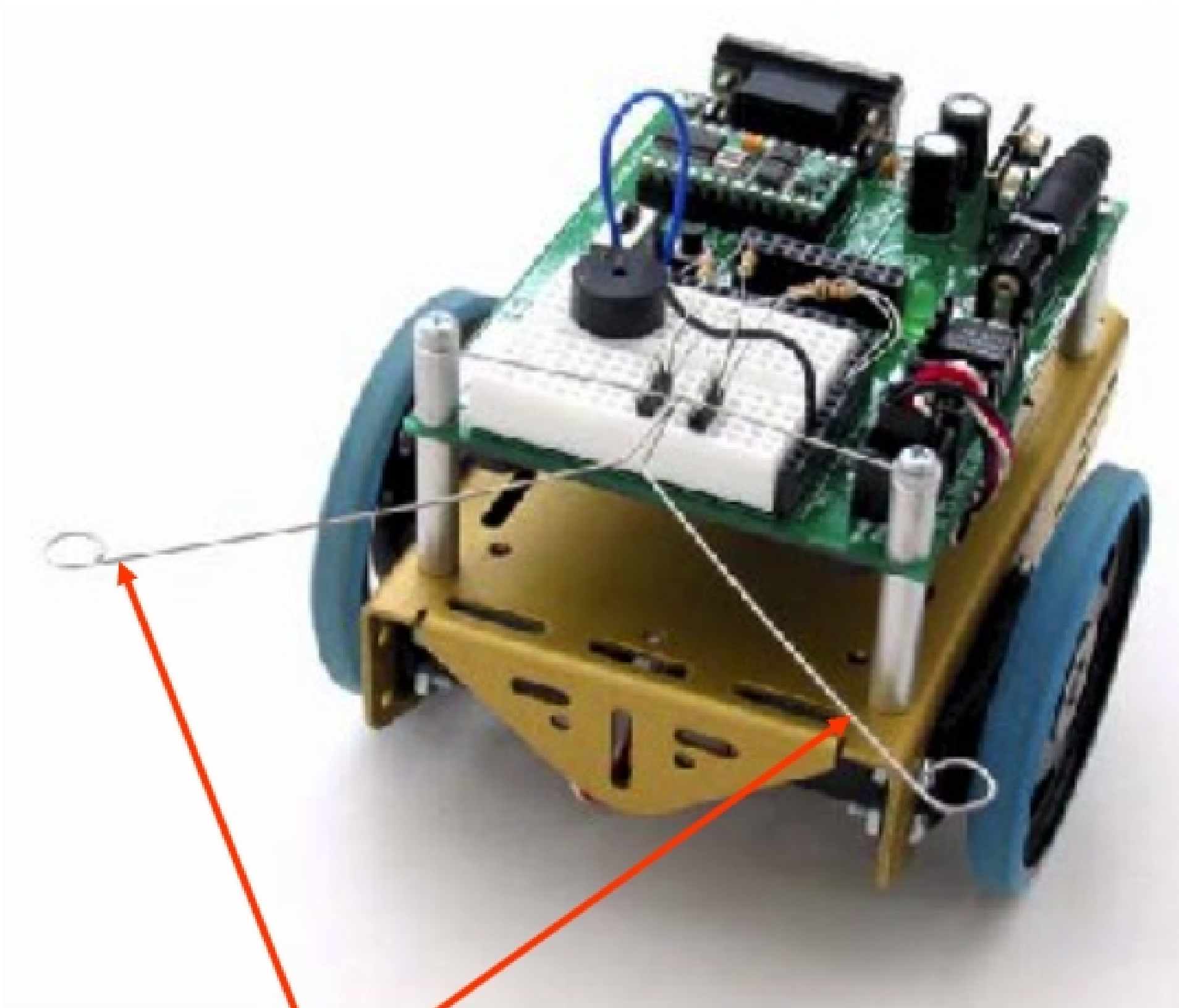


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