**Troubleshoot Guide SID (Barcode Scanner Robots)**

**General Notes:**

* NXT requires sufficient power to operate the barcode scanner. Make sure the NXT for the barcode scanner and gates are at least 80% power before going through this guide.
* The program on the Mindstorms interface should resemble the one shown on the SID barcode block tutorial manual.
* The barcode scanner should be properly connected to a sensors port (labeled 1, 2, 3 or 4).
* The barcode scanner should not be blocked by any obstruction when it scans a barcode.
* Proceed to Step ‘1’ of the troubleshoot procedures.

**Troubleshoot Procedures Part 1 (Hardware)**

1. Does your Barcode Scanner scan properly (a red line appears across the barcode) if yes proceed to step ‘**2**’ if not then proceed to step ‘**5**’
2. Connect the robot’s NXT to any gate NXT via Bluetooth then proceed to step ‘**3**’.
3. Load the ‘door’ program on the connected gate NXT and then proceed to scan the barcode that corresponds to that gate. *Does the door open?* If not proceed to the next step.
4. Load the ‘scanner debug’ program on the gate NXT then scan the barcode again. *Does the scanned code appear on the gate NXT properly?* Follow the following steps depending on your answer (in **bold** and *italics*) to this question:
5. ***If ‘yes’ & the gate does not open*** notify the TA for further assistance.
6. ***If a code appears but not the one you desire*,** disconnect the barcode scanner for 5-10 seconds and reconnect it then try again.
7. ***If no code appears on the gate NXT*** then disconnect the Bluetooth connection and reconnect following the proper steps.
8. ***If neither b) nor c)*** solved your problem notify a TA for further assistance.

**Troubleshoot Procedures Part 2 (Software)**

1. Change the port of the scanner to port 1 in your Mindstorms program.
2. Change the output port for which gate 1 is connected to, to port 1, gate 2&3 to port 2, and gate 4 to port 3 (for your Bluetooth connection).
3. Make sure the connections are input as text and output as text to the Bluetooth block.
4. Proceed to scan using this block to see if this works.
5. Finally if this does not work download the Scanner block again and update your program with that, repeat steps 1-4.
6. If step ‘9’ does not solve your problem notify a TA for further assistance.