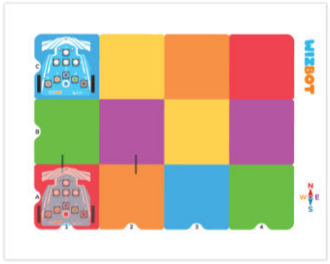
Calibrate Wizbot

Calibrate Forward – Reverse Step

Check the Forward Step

Steps:

6. Take 2 forward steps.



7. Did your Wizbot reach the last cell (i.e. the blue cell) perfectly?
8. If it didn't arrive exactly at the centre of the blue square cell, let us calibrate.

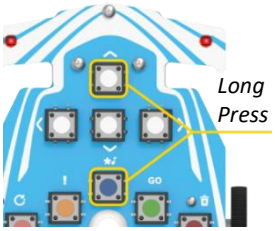
Calibration means to assess, take readings and train ***Wizbot*** to perform with accuracy.

Scan QR code to watch **"How to: Calibrate"** or follow next exercises.

Calibrate the Forward - Reverse Step

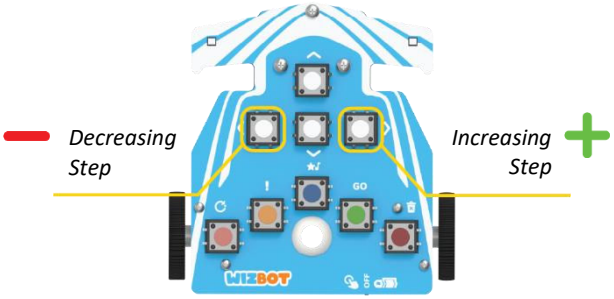
Steps:

1. Align **Wizbot** on any square cell evenly. Long press together the **"Action" Button** and **"Forward" Button** to start the forward step Calibration. You will notice that the Wizbot will take a step forward and both LEDs will glow **Red** as it starts Forward – Reverse step calibration.



2. Assess: Did your Wizbot reach the next cell If not, perfectly?
   If not, follow Step 4 to train your Wizbot!

3. Press the **"Left" Button** for decreasing the length of step and **"Right" Button** for increasing it.



4. Press the **"Forward" Button** to test the forward step.
5. Use the trial-and-error method to check and correct the forward/reverse step length in calibration mode.
6. When you are satisfied with the result, press the **"Go" Button** to lock the calibration. With this the **Forward step** and **Reverse step** are set.
   Let's test the forward motion once again!

Left Turn Calibration can be done in the same way with a long press of the **"Action" Button** and the "**Left" Button**.

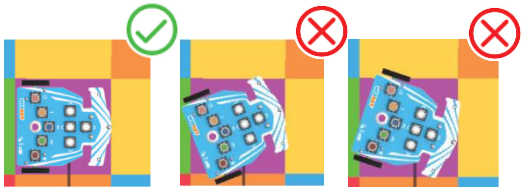
Calibrate Right – Left Turns

Check the Right Turn

Steps:

9. Align **Wizbot** on any square cell of the **Grid Arena**.
8. Code Wizbot to take a Right turn.

9. Is your **Wizbot** turning right properly?



If not, let's learn and improve that!

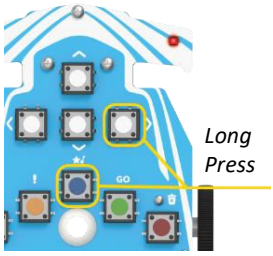
Calibrate the Right Turn

Steps:

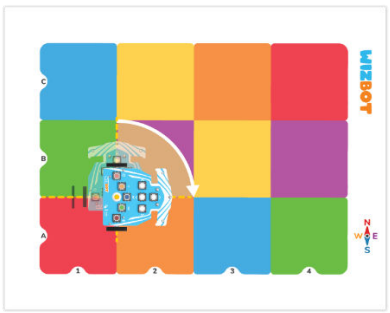
10. Place the **Wizbot** on top of the black markings on the **Grid Arena**.

Wheel Position Markings

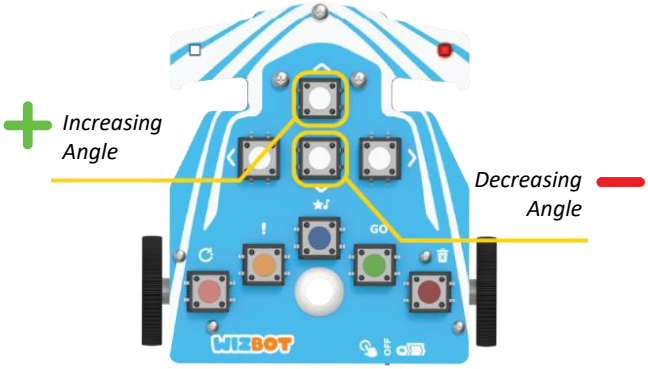
11. Long press together the **"Action" Button** and the "**Right" Button** to start the Right turn calibration. You will notice that **Wizbot** will take a Right turn and the Right LED will glow "Red" as it starts right turn calibration.



Assess: In the right turn, are Wizbot's initial and final positions perpendicular⊥?



10. If not, then press the **"Forward" Button** for increasing the angle of the turn and the **"Reverse" Button** for decreasing it.



11. Press the **"Right" Button** to test the right turn.
12. Use the trial-and-error method to check and correct the Right turn angle in calibration mode.
13. When you're happy with the turn, press the **"Go" Button** to lock the changes. With this the **Right Turn** is set!

Let's test the Right motion once again?

Left Turn Calibration can be done in the same way with a long press of the **"Action" Button** and the "**Left" Button**.