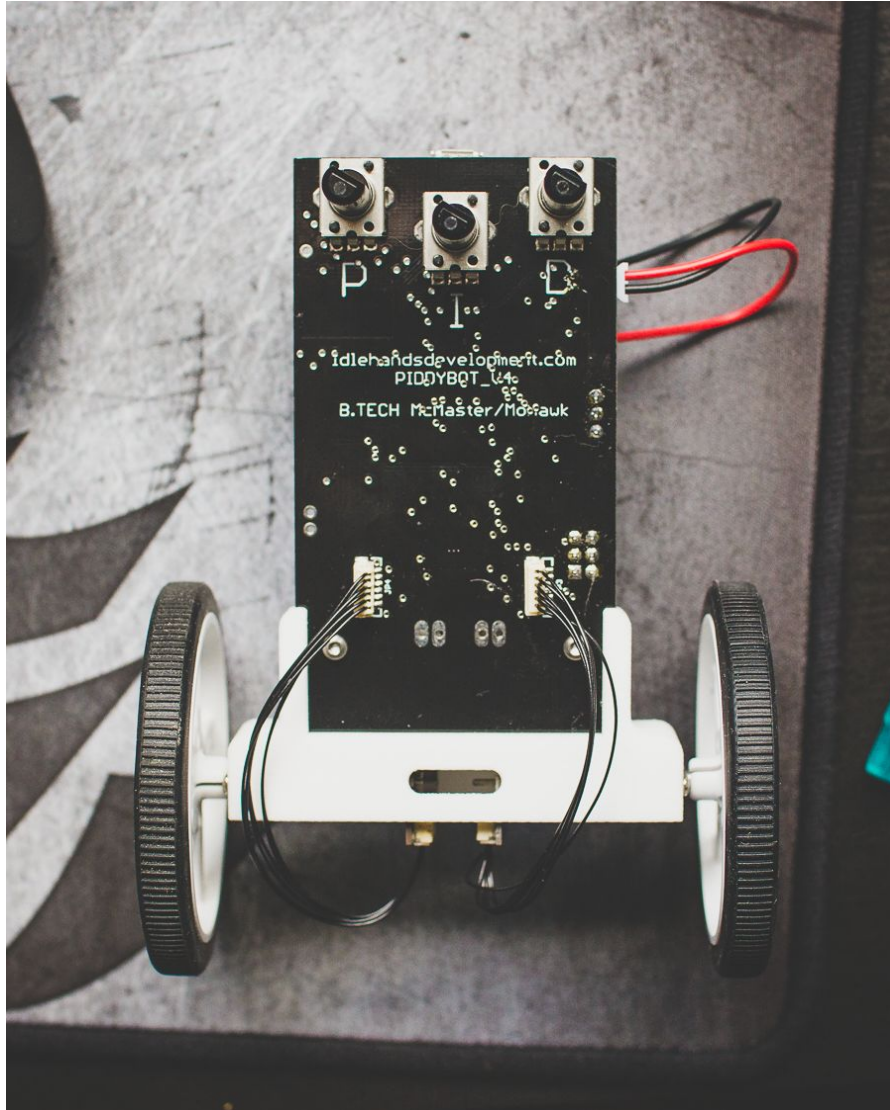


PIDDYBOT Quick Start Guide

For PIDDYBOT_32U4_V11 Firmware

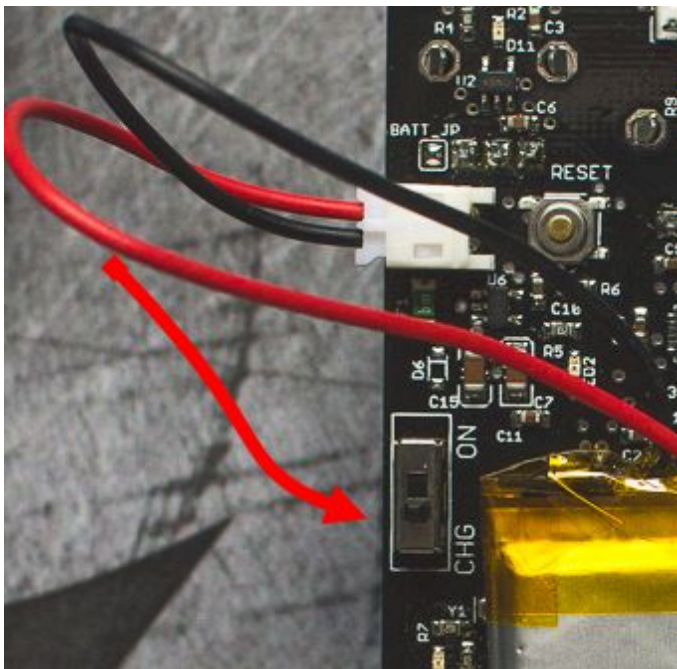
Idle Hands Development



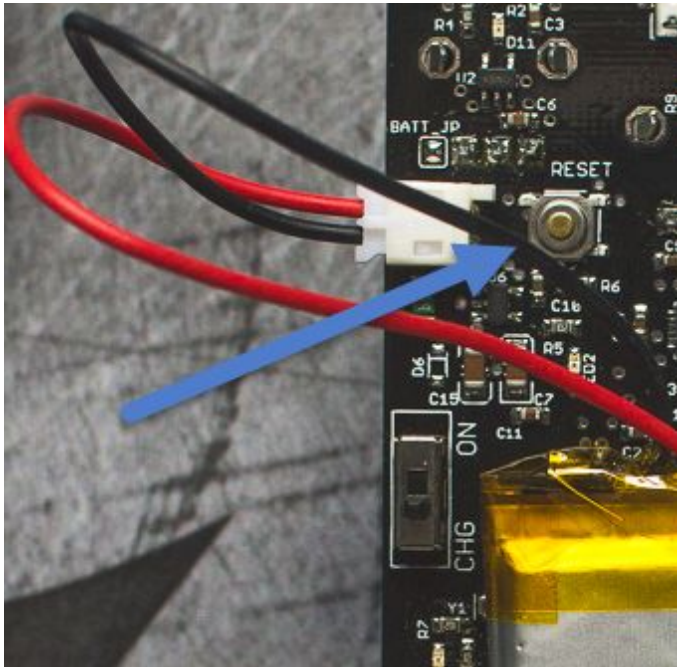
- 1) Make sure all of the potentiometers are turned fully counterclockwise.



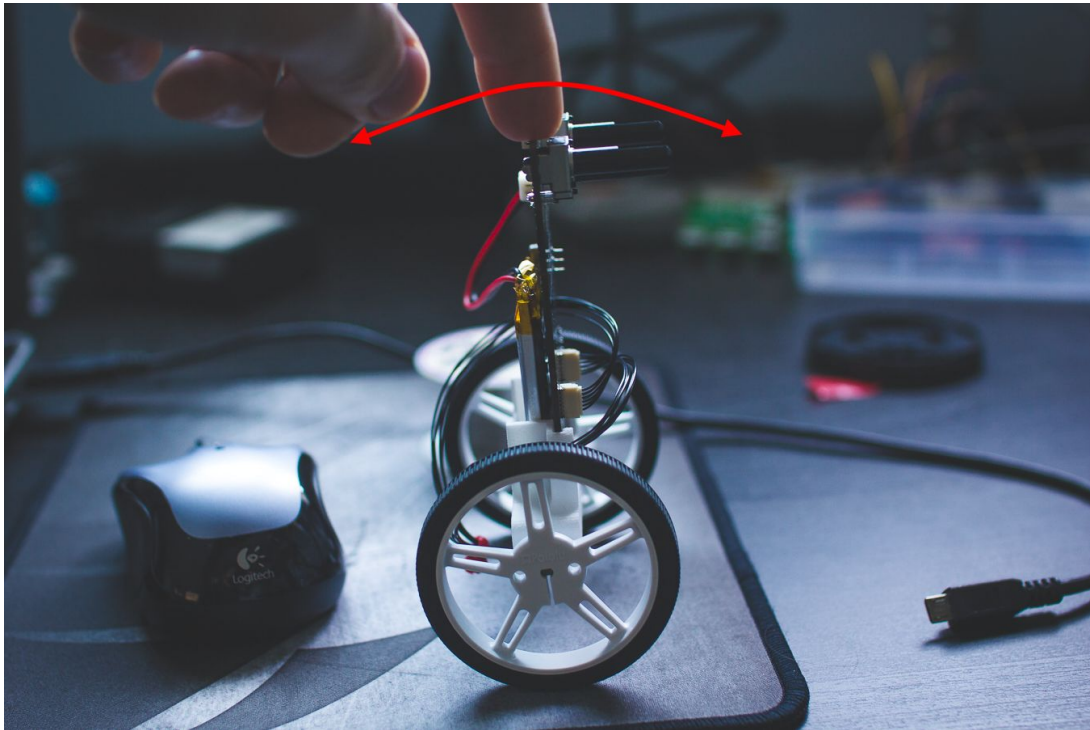
- 2) Switch on PIDDYBOT using POWER switch on back. Power LEDs and Lower UART LEDs will turn ON.



- 3) Immediately press RESET button, lower UART LEDs will turn OFF. Program will fail to run properly if they are left on.



- 4) Place PIDDYBOT on flat level surface and roughly find the balancing point of the robot, the point where it could fall either way. With all of the potentiometers at 0, the robot will be in “calibration mode” looking to set its standing angle.



- 5) Hold the PIDDYBOT in the balancing position and slowly turn the P term knob up. Doing so will take the Robot out of “Calibration Mode” and set the angle it will use to balance. Turning any of the knobs out of zero (fully counter clockwise) will take the robot out of “Calibration Mode” - and the opposite, if you need to change the angle because it is not correct, set all of the knobs back to zero.



- 6) You may now try and tune the PID terms to see the different effects it has on the system.

The Robot will save the last calibration angle for when you restart it. However, every time all of the knobs are turned to zero while the PIDDYBOT is powered ON, it will reset this angle to a new one.

