

# Calibrate PiCar

Now that all the basic hardware and software for the PiCar is in place, let's try to run it and calibrate it!

1. Connect to PiCar via VNC from PC
2. Make sure fresh batteries are in, toggle the switch to ON position and unplug the micro USB charging cable. Note that your VNC remote session should still be alive.
3. In a Pi Terminal, run the following commands. You should:

```
pi@raspberrypi:~ $ cd ~/SunFounder_PiCar/picar/
pi@raspberrypi:~/SunFounder_PiCar/picar $ python3
Python 3.5.3 (default, Sep 27 2018, 17:25:39)
[GCC 6.3.0 20170516] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import picar
>>> picar.setup()
# Calibration
>>> fw=picar.front_wheels.Front_Wheels()
>>> fw.turn_left()
>>> fw.turn_straight()
>>> fw.turn_right()
>>> fw.turn(77)
>>> fw.calibration()
>>> fw.cali_left()
>>> fw.cali_right()
>>> fw.cali_ok()
# Test 1
>>> bw=picar.back_wheels.Back_Wheels()
>>> bw.speed = 50
>>> bw.stop()
# Test 2
>>> picar.front_wheels.test()
DEBUG "front_wheels.py": Set debug off
DEBUG "front_wheels.py": Set wheel debug off
DEBUG "Servo.py": Set debug off
turn_left
turn_straight
turn_right
# Test 3
>>> picar.back_wheels.test()
DEBUG "back_wheels.py": Set debug off
```

DEBUG "TB6612.py": Set debug off
DEBUG "TB6612.py": Set debug off
DEBUG "PCA9685.py": Set debug off
Forward, speed = 0
Forward, speed = 1
Forward, speed = 2
Forward, speed = 3
Forward, speed = 4
Forward, speed = 5
Forward, speed = 6
Forward, speed = 7
Forward, speed = 8
Forward, speed = 9
Forward, speed = 10
Forward, speed = 11

4. To stop these tests, press Ctrl-C. To exit the python program, press Ctrl-D.