**Python Programming on GoPiGo**

Each method is a clickable link

**Motor control functions:**

* [**fwd()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/fwd/): Move the GoPiGo forward with PID (better control)
* [**motor\_fwd()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/motor_fwd/): Move the GoPiGo forward without PID
* [**bwd()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/bwd/): Move the GoPiGo back with PID (better control)
* [**motor\_bwd()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/motor_bwd/): Move the GoPiGo back without PID
* [**left()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/left/): Turn GoPiGo Left slow (one motor off, better control)
* [**left\_rot()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/left_rot/): Rotate GoPiGo left in same position (both motors moving in the opposite direction)
* [**right()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/right/): Turn GoPiGo right slow (one motor off, better control)
* [**right\_rot()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/right_rot/): Rotate GoPiGo right in same position both motors moving in the opposite direction)
* [**stop()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/stop/): Stop the GoPiGo

**Motor speed Functions:**

* [**increase\_speed()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/increase_speed/): Increase the speed of the GoPiGo by 10
* [**decrease\_speed()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/decrease_speed/): Decrease the speed of the GoPiGo by 10
* [**set\_left\_speed()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/set_left_speed/): Set speed of the left motor
* [**set\_right\_speed()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/set_right_speed/): Set speed of the right motor
* [**set\_speed()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/set_speed/): Set speeds of both the motors

**Encoder Functions:**

* [**enc\_tgt()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/enc_tgt/): Set encoder target to move the GoPiGo to a set distance
* [**enable\_encoders()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/enable_encoders/): Enable the encoders
* [**disable\_encoders()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/enable_encoders/): Disable the encoders

**Ultrasonic ranger read:**

* [**us\_dist()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/us_dist/): Read distance from the ultrasonic sensor

**LED control:**

* [**led\_on()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/led_on/): Turn LED on
* [**led\_off()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/led_off/): Turn LED off

**Servo control:**

* [**enable\_servo()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/enable_servo/): Enables the servo
* [**disable\_servo()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/disable_servo/): Disables the servo
* [**servo()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/servo/): Set servo position

**Status from the GoPiGo:**

* [**volt()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/volt/): Read battery voltage in V
* [**fw\_ver()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/fw_ver/): Get the firmware version of the GoPiGo
* [**enable\_com\_timeout()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/enable_com_timeout/): Enable communication time-out(stop the motors if no command received in the specified time-out)
* [**disable\_com\_timeout()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/disable_com_timeout/): Disable communication time-out
* [**read\_status()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/read_status/): Read the status register on the GoPiGo
* [**read\_enc\_status()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/read_enc_status/): Read encoder status
* [**read\_timeout\_status()**](https://www.dexterindustries.com/GoPiGo/learning/python-programming-for-the-raspberry-pi-gopigo/read_timeout_status/): Read timeout status