

USEFUL CLASS LIBRARY FUNCTIONS

In the above examples we introduced you to some **easygopigo3** class library functions for driving and turning your robot orienteer. Let's briefly explain what these functions do and introduce you to a few more **easygopigo3** class library functions that you might find useful in this mission.

drive_cm (distance)

Arguments	distance: distance to drive forwards (in centimeters)
Description	Drive forward for the distance requested and stop.
Example	drive_cm (50) <i>Drives forward for 50 centimetres and stops.</i>

drive_inches (distance)

Arguments	distance: distance to drive forwards (in inches)
Description	Drive forward for the distance requested and stop.
Example	drive_inches (12) <i>Drives forward for 12 inches and stops.</i>

turn_degrees (angle)

Arguments	angle: angle to rotate on the spot (in degrees)
Description	Rotate on the spot through the requested angle and stop. angle > 0 is clockwise rotation angle < 0 is anti-clockwise rotation
Example	turn_degrees (-50) <i>Rotates anti-clockwise on the spot by 50 degrees and stops.</i>

steer (left_percent, right_percent)

Arguments	left_percent: a value between -100 and +100 right_percent: a value between -100 and +100
Description	Assign a percentage of the current motor speed value to each motor in order to get a variety of turning movements. <i>For setting the motor speed, see the set_speed() function</i>
Example	steer (-100, 100) <i>Sets left motor to full speed in reverse and right motor to full speed forward, resulting in an anti-clockwise rotation on the spot at current motor speed.</i>

orbit (degrees, radius_cm)

Arguments	degrees: how far to travel around the object (360 = full circle) radius_cm: distance to the object being orbited (in centimetres)
Description	Follow a circular path around an object (like a planet orbiting the sun) degrees > 0 is clockwise orbit degrees < 0 is anti-clockwise orbit
Example	orbit (180, 100) <i>Traces out a semicircle of radius 100cm in a clockwise direction.</i>

set_speed (speed)

Arguments	speed: speed of rotation of the motors (in degrees per second) <i>360 degrees = a single rotation of a motor</i> <i>Allowable range: 0 < speed < 1000</i>
Description	Sets the speed of rotation of your robot's motors <i>higher = faster</i>
Example	set_speed (500) <i>Set the speed of rotation of the motors to 500 degrees per second</i>