

Dog periodic translation and rotation

1. Purpose of the experiment

Learn to control the periodic translation and rotation of the robot dog

2. Experimental path source code

Enter the robot dog system, end the robot dog program, enter "ip (ip is the robot dog's ip): 8888" in the browser, and enter the password "yahboom"



Password:

Log in

Then log in and go to **cd ~/DOGZILLA_Lite_class/3.Dog Base Control/04.Periodic translation and rotation and run Periodic_translation.ipynb** .

3. Experimental Phenomenon

After running the program, you can control the puppy to translate and rotate periodically.

4. Main source code analysis

1. `dog.periodic_tran(['x','y','z'],[valuex,valuey,valuez])` controls the periodic translation of the robot dog 0: stop > 1.5: start movement (the larger the value, the slower the movement)
 - 'x': the front and back direction; valuex: is the value range of this direction [1,8]
 - 'y': left and right direction; valuey: is the value range of this direction [1,8]
 - 'z': up and down direction; valuez: is the numerical range of this direction [1,8]
2. `dog.periodic_rot(['r','p','y'],[valuex,valuey,valuez])` controls the robot dog to perform periodic rotational motion 0: stop > 1.5: start motion (the larger the value, the slower the motion)
 - r: roll angle direction; valuex: is the value range of this direction [1,8]
 - p: direction of pitch angle; valuey: is the numerical range of this direction [1,8]
 - y: direction of the yaw angle; valuez: is the value range of this direction [1,8]
3. `dog.mark_time(data)` controls the robot dog to step in place. The larger the value, the slower the movement. data: range [10,35]. This parameter represents the height of the leg raising when stepping in place. The unit is mm. When the input is 0, it stops stepping in place.