Questions about the Structure

Q1: What are the maximum angle of Joint 1 and Joint 5 of myCobot?

A1: The maximum angle of Joint 1 and Joint 5 are 160° both clockwise and anticlockwise. Remember to rotate the joints gently. Do not force a rotation when the joint reach its maximum angle.

Q2: What controls the six steering engine?

A2: They are controlled by Atom at the top of the robot.

Q3: What functions Atom performs?

A3: It serves to control the robot by algorithm, such as forward, inverse kinematics and coordinate switching. Atom is temporarily not open-sourced.

Questions about the Communication

Q1: Why the screen has no display although the robotic arm has been connected with HDMI cable? Does it need to download a port driver?

A1: Check whether the connection is correct and the power has been turned on. Try to use another interface and plunge into the interface stably. There is no need to download a port driver.

Q2: What are the versions of communication interface supported by different robotic arms?

A2: The robotic arms of micro-processor supports TCP communication, and the robotic arms of micro-controller supports USB-port communication.

Q3: How much is the frequency of the communication of robotic arm?

A3: 10-20Hz.

Questions about Parameters

Q1: What's the unit of measurement of the speed of robotic arm?

A2: 180°/s.

Solutions to Hardware Problems

1. How to deal with the shaking of robotic arms?

   Step 1: Burn the latest version of ATOM via myStudio.

   Step 2: Upgrade pymycobot. Click on Win+R, and type cmd to enter in the terminal. Type pip install pymycobot --upgrade --user and then click on Enter.

   Step 3: Go to GitHub to download pid_read_write.py. Reset each parameter of the steering engine according to the prompt message. And then, operate the system again.

   Notice: The parameters of each version of robot are different. Set the parameters according to the data given in the pictures below.

```
25    # 参数对应地址 corresponding parameter
26    data_id = [21, 22, 23, 24, 26, 27]
27    # 修改后的参数 reset parameters
28    data    = [32, 8, 0, 0, 3, 3]
29
```

Parameter	Connotation	myPalletizer 260			
		J1/J3	J1/J3	J2	J4
21	location loop P ratio coefficient	25	32	32	32
22	location loop D differentia coefficient	25	32	32	32
23	location loop I integral coefficient	0	0	0	0
24	minimun starting force	0	16	3	0
26	clockwise insensitive area	3	1	1	0
27	anticlockwise insensitive area	3	1	1	0

Parameter	Connotation	mechArm 270			
		J1/J3	J2	J4/J6	J5
21	location loop P ratio coefficient	32	32	25	25
22	location loop D differentia coefficient	8	8	25	25
23	location loop I integral coefficient	0	0	1	1
24	minimun starting force	0	0	0	0
26	clockwise insensitive area	3	1	3	3
27	anticlockwise insensitive area	3	1	3	3

Parameter	Connotation	myCobot 280		
		J1-J3	J4	J5-J6
21	location loop P ratio coefficient	32	25	25
22	location loop D differentia coefficient	8	25	25
23	location loop I integral coefficient	0	1	1
24	minimun starting force	0	0	0
26	clockwise insensitive area	3	3	3
27	anticlockwise insensitive area	3	3	3

Questions about Gripper & End

Q1: Can the gripper close completely?

A1: Due to the thickness of the gripper, it cannot close completely. You resort to a shim to make it completely closed.

Q2: What is the kind of communication of adaptive gripper?

A2: It is TTL communication.

Q3: What is the communication of the end of myCobot 320?

A3: 485 communication interface.

Q4: How to fix a camera at the end of a robotic arm?

A4: A flange is required to fix a camera.

Other Questions

Q1: Why the electric engine powers off during usage?

A1: Because the engine is too hot to be used. Please wait for a few minutes and reuse again.

Q2: Does the robotic arms support the development based on Android?

A2: We doesn't support Android development. If you want to develop it by yourself, we can provide you with port protocol.

Q3:What is the function of the USB carried by the PI version?

A3: It serves to charge the robotic arm.