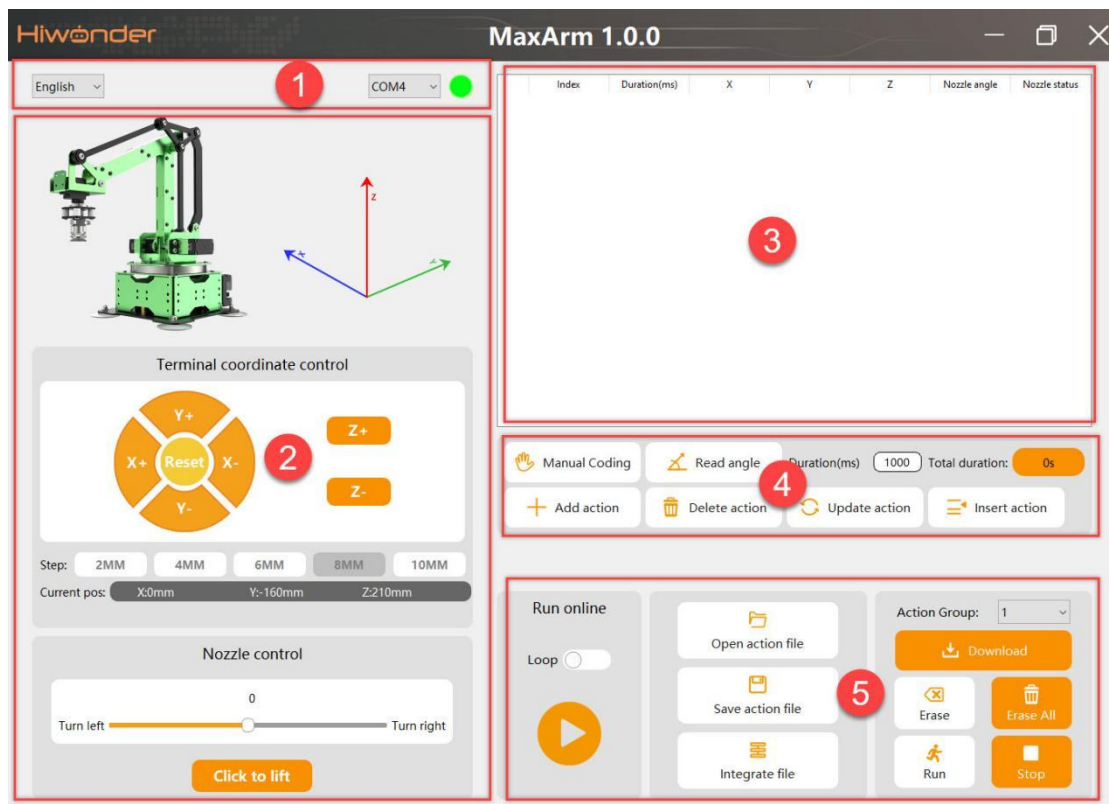


# Lesson 1 PC Software Interface Introduction

The PC software can control the rotation of individual servo, display the current coordinate, customize the action, etc.

Through PC software, we can control individual servo, control the rotation of robotic arm and edit action group to generate a action group file.

The interface of PC software consists of five parts: status bar, robotic arm control area, action data list, action editing area, action setting area.



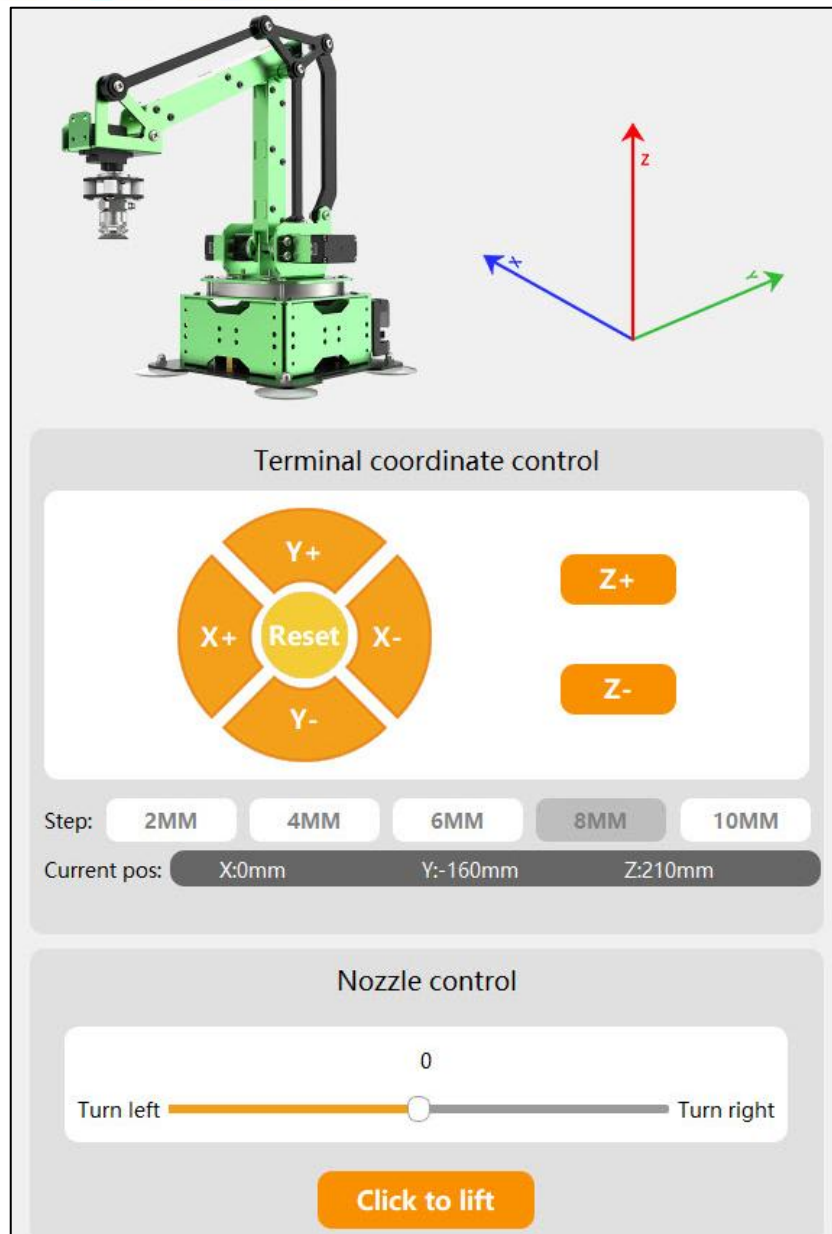
① Status Bar

Icon	Function
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	<p>Language selection box</p> <p>Select interface language in drop-down list</p>
	<p>Terminal status bar</p> <p>Select device terminal.</p> <p>When the indicator icon is green, it means device is connected.</p>








## ② Robotic Arm Control Area

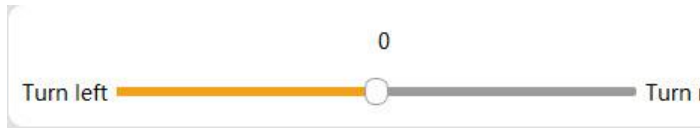
In this area, control the movement of robotic arm and the status of nozzle suction by setting the values in x, y, and z axes.



The function of each button is shown in the following list:

Icon	Function
	Control the robotic arm to return to initial posture

	<p>Increase the value of x-axis</p> <p>MaxArm will rotate horizontally to the left</p>
	<p>Decrease the value of x-axis</p> <p>MaxArm will rotate horizontally to the left</p>
	<p>Decrease the value of y-axis</p> <p>MaxArm will rotate forward</p>
	<p>Increase the value of y-axis</p> <p>MaxArm will rotate backward</p>
	<p>Increase the value of z-axis</p> <p>MaxArm will be lifted</p>
	<p>Decrease the value of z-axis</p> <p>MaxArm will be lowered</p>
	<p>Select the increasing or decreasing value in x, y and z axes.</p>

<div> <div>Current pos:</div> <div>X:0mm</div> <div>Y:-160mm</div> <div>Z:210mm</div> </div>	Display the real-time coordinate of MaxArm
	Drag slider to control the left and right rotation of suction nozzle. The rotation range is between -90 and 90.
<div>Click to lift</div>	Control the air pump

### ③ Action Data List

The servo value and running time of each action can be viewed in action data list, as shown in the image below:

	Index	Duration(ms)	X	Y	Z	Nozzle angle	Nozzle status
	1	800	0	-163	212	0	0
▶	2	1000	8	-171	100	0	0

The parameter instruction is shown in the following list:

Icon	Function
<div>Index</div>	Action number
<div>Duration(ms)</div>	Running time of each action (ms)
<div>X</div>	The current x-axis value of suction cup



<div style="border: 1px solid black; padding: 5px; display: inline-block;">y</div>	The current y-axis value of suction cup
<div style="border: 1px solid black; padding: 5px; display: inline-block;">z</div>	The current z-axis value of suction cup
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Nozzle angle</div>	The current rotation angle of suction cup (-90° ~90° )
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Nozzle status</div>	The current status of suction cup (1 for sucking, 0 for releasing)




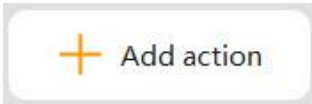
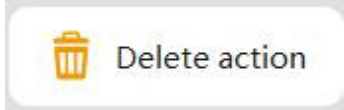
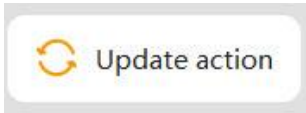

#### ④ Action Editing Area

In this area, the edited action can be modified.



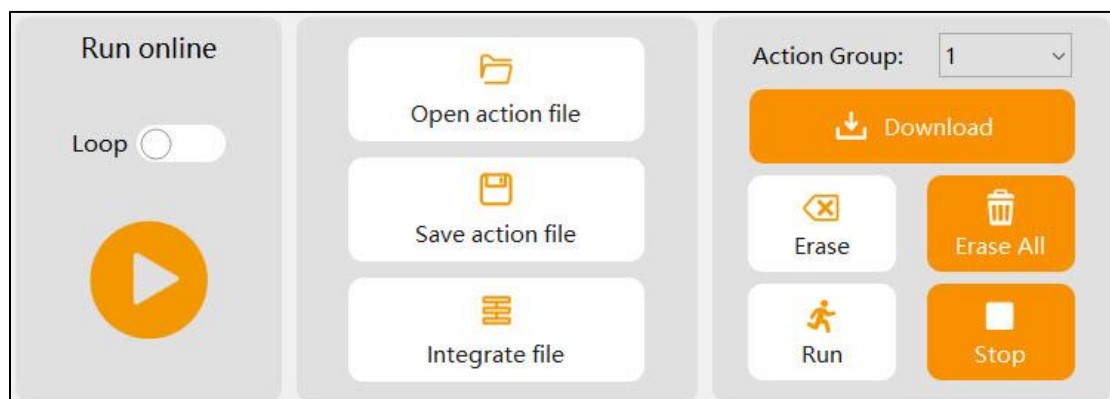
The function of each button in action editing area is shown in the following list:

Icon	Function
 Manual Coding	Loose robot' joints so you can manually deign action.
 Read angle	Read the angle information of the edited action (use with "Manual Coding" button)

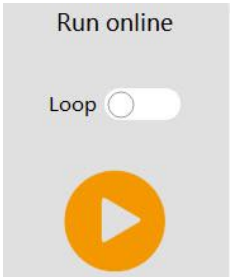
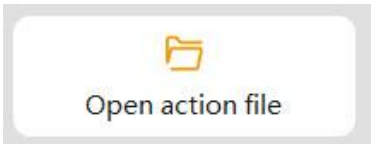
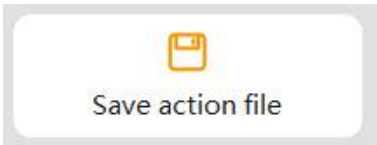
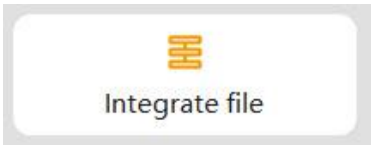



	<p>The running time of single action. You can click  to modify.</p>
	<p>The total running time of action group</p>
	<p>Add the current servo value in servo operation area as the last action in action data list</p>
	<p>Delete the selected action in action data list</p>
	<p>Replace the selected value in action data list. (The selected servo values are replaced with the current servo values on servo operation area. )</p>
	<p>Insert an action in front of the selected action</p>

## ⑤ Action Setting Area

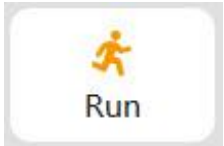

The action group setting area allows you to set the edited action group to run, save, and integrate.



The function of each button in action group setting area is shown in the following list:

Icon	Function
	<p>Click on this button to run all actions in action data list once.</p> <p>If click “Loop”, MaxArm will run actions repeatedly.</p>
	<p>Click it to select action group and load it to action data list.</p>
	<p>Save actions displayed in action data list into the specified path.</p>
	<p>After opening an action group, click “Integrate action file” to open another action file to integrate them into a new action group</p>
	<p>Action group selection box. Display the action group downloaded to MaxArm in PC software</p>
	<p>Download action group to MaxArm</p>
	<p>Delete the action group file in current action selection box.</p>



	(Caution) Delete all the action group files
	Execute the selected action group once
	Stop running action group