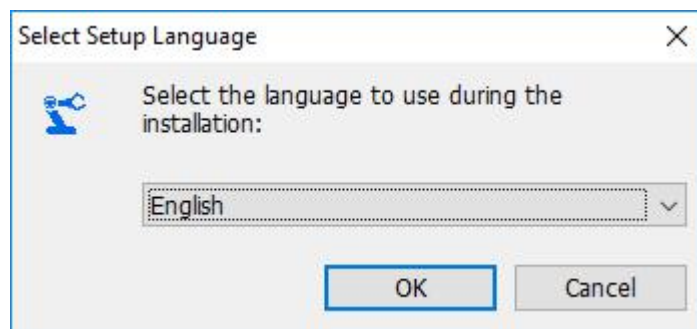


# Lesson 1 PC Software Instruction

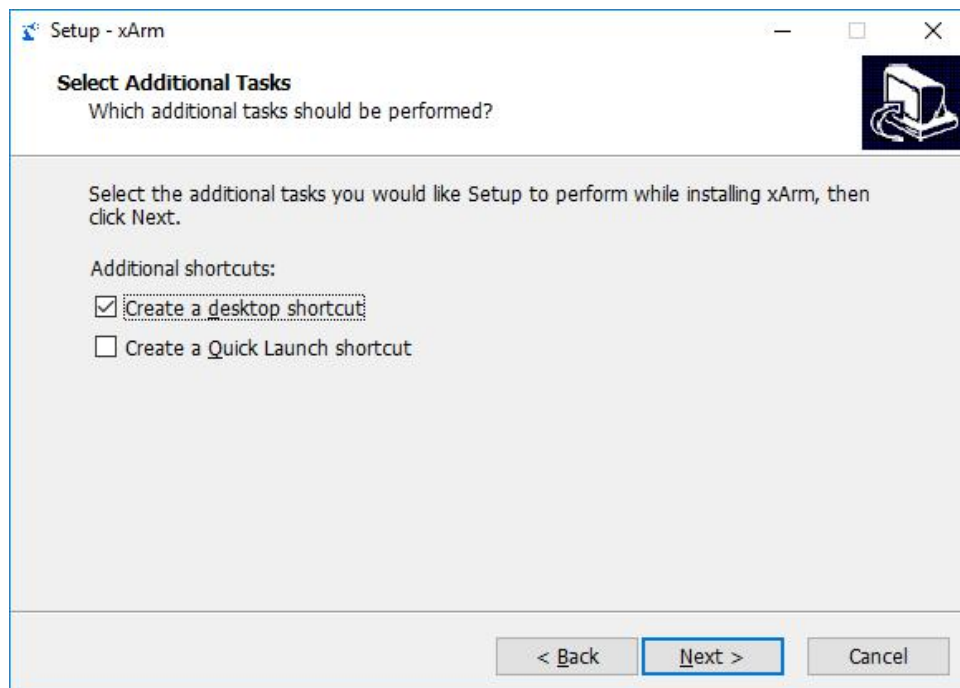
## 1. Software Installation

Step 1: Please get the installation pack in this file and click to download.

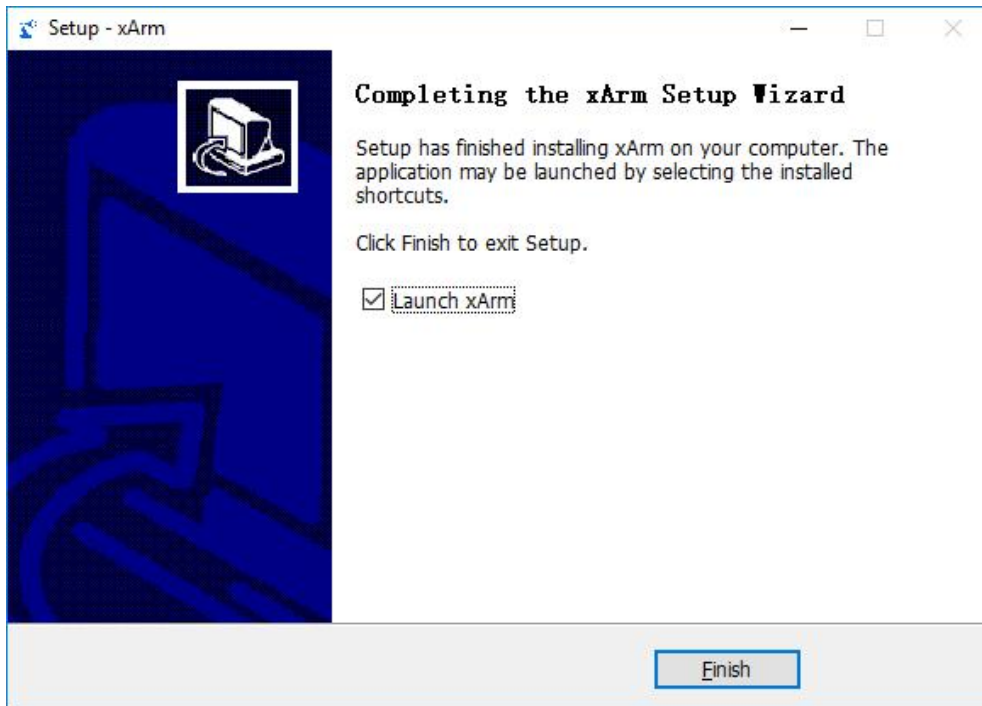
Step 2: Chose the language and click “OK”.



Step3: "Create desktop shortcut" is automatically checked by default, and then click "Next".



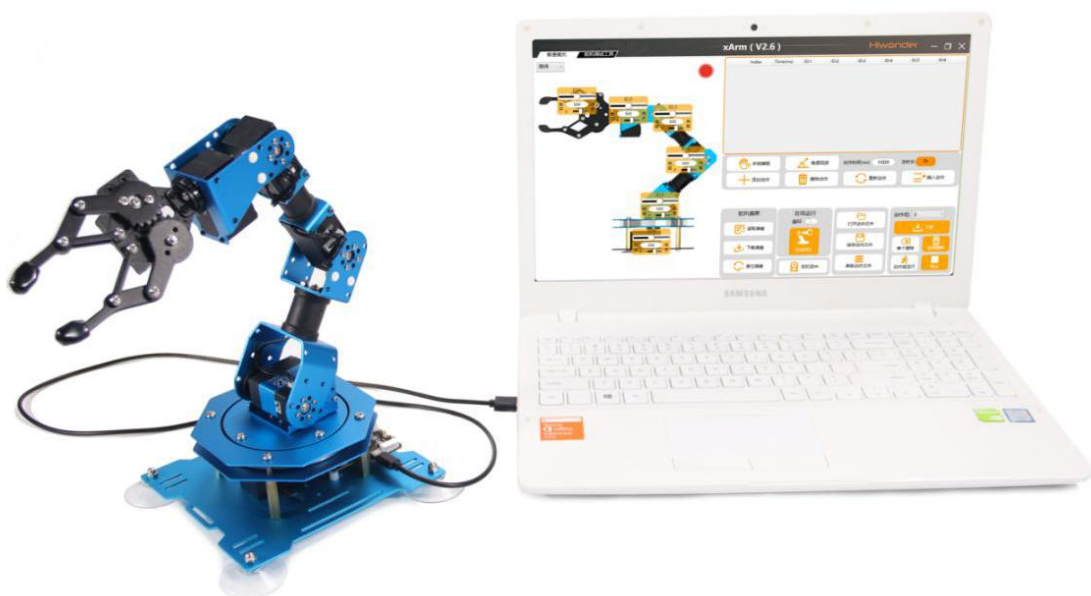
Step4: Wait for the installation and click “Finish”.



## 2. Device Connection

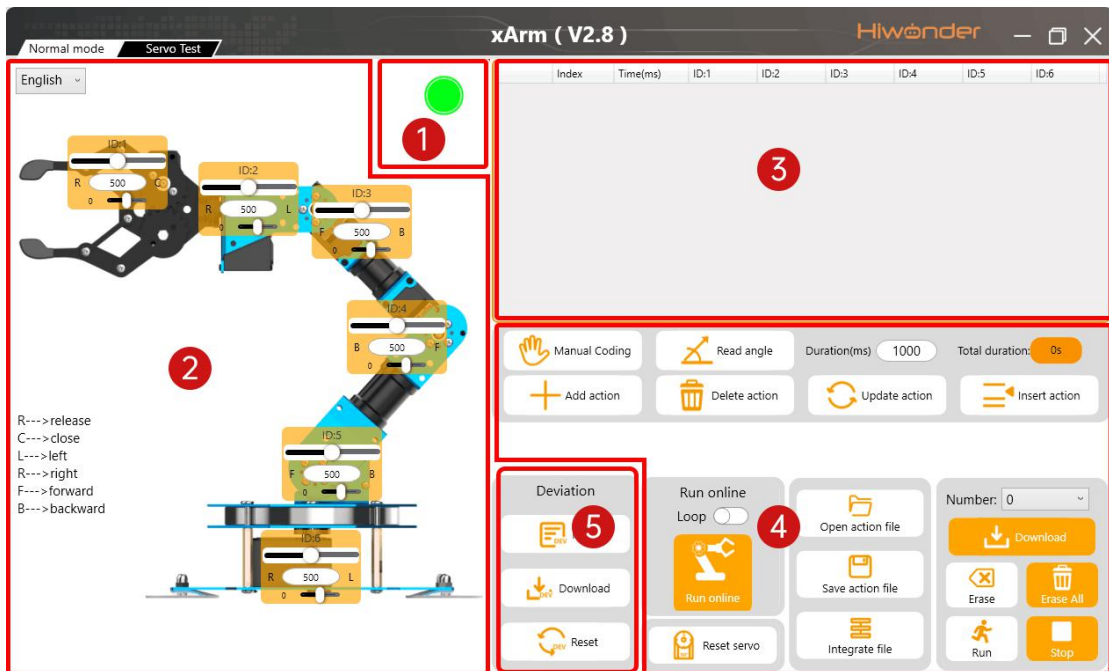
Step 1: Connect the power adapter to the robotic arm and turn on the switch.

Step 2: Connect the micro-USB cable to the USB serial port on the controller and the USB port in the computer.




Step 3: The software will automatically connect after the xArm 1S is turned on.  
When connected successfully, the red icon will turn to “Green”.

### 3. Function Instruction

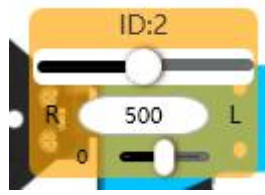





① Device connected:

Icon	Function
	Display connection status. When successfully connected it is in green. It will be in red when not connected or disconnected.

② Servo operation:

Drag the slider to adjust the position of corresponding servo.




Icon	Function
	Servo ID number. Take servo 2 as example.
	Adjust the servo position from 0 to 1000.
	Adjust servo deviation from -100 to 100.

### ③ Action details list:

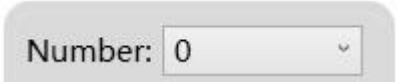




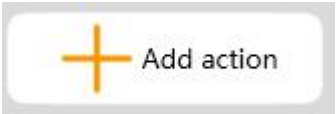
The action details list displays the running time of the current action and the data of each servo.









	Index	Time(ms)	ID:1	ID:2	ID:3	ID:4	ID:5	ID:6
	1	1000	500	500	500	500	500	500
	2	1000	500	500	500	500	500	500
	3	1000	500	500	500	500	500	500
▶	4	1000	500	500	500	500	500	500



Icon	Function
	Number of action group. There are 230 action groups in total, and each action group can hold up to 1020 actions. If it exceeds, it will be prompted that it can only be run online and cannot be downloaded.

Time(ms)	Running time.
ID:1	ID value of the corresponding servo. Double click 500 to revise the value.

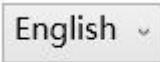



#### ④ Action group setting:

Icon	Function
	Select action group number from 0-230. No.0 is set as "Attention" action by default.
	Download the actions in the current list to the controller. The original actions will be overwritten after downloading.
	(Be careful) Click to delete all the data of action groups from 0 to 230.
	Run the selected action once.
	Stop the running action group.
	Add the action after adjusting the servo value.

 Delete action	Delete the selected action in the action list.
 Update action	Replace the angle value selected in the action details list. Action time (ms)
 Insert action	Insert the new action on the action list. Action time (ms)
 Open action file	Click to chose the action group and then add it into the action list. The action group can be found in the provided folder “Appendix/Action Group”.
 Save action file	Save the current actions in the action list into the computer.。
 Integrate file	Click to integrate the provided action groups.
<div> Run online  Loop <input type="checkbox"/>  Run online </div>	Click to run the action group in the current action list ( Choose the “Loop” to repeat the actions.)
 Reset servo	All the servos back to middle position.

 Manual Coding	Click to loosen the joints of the robotic arm, and then change the stance of robotic arm manually.
 Read angle	Read the angle data from the manual programming.

### ⑤ Servo setting:

Icon	Function
	Set language.
 Read	Read the deviation saved in the controller automatically.
 Download	After clicking, the deviation adjusted by the PC software can be downloaded to the robotic arm.
 Reset	Click to delete the deviation on the PC software but the data saved by the control board will not change.