# **Lesson 1 PC Software Introduction**

# 1. Start PC Software

## 1.1 Start with Desktop Icon

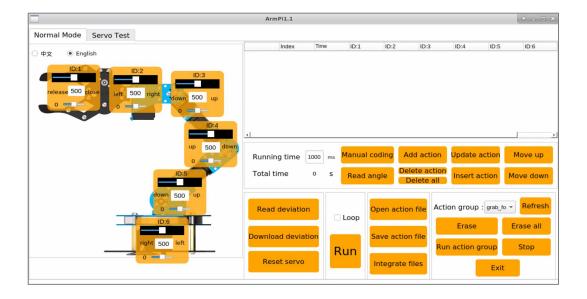
Double-click the PC\_software icon on desktop.

## 1.2 Start with Command Line

- 1) Click Applications in the lower left corner, and then select to open terminal.
- 2) Then enter command "sudo ArmPi\_PC\_Software/ArmPi.py" to open PC software.

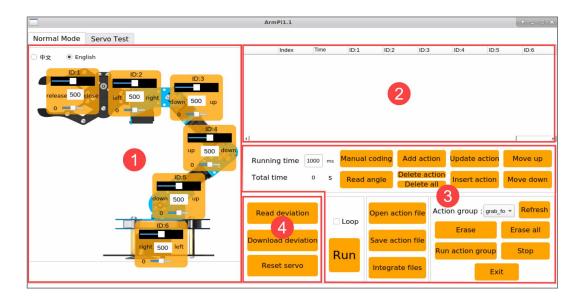
## 2. Software Interface Distribution

The PC software interface is as follow:





The "Normal Mode" interface is divided into several areas, as the figure shown below:



### ①: Servo Control Area

The Servo Control Area displays the corresponding servo icons of robotic arm. You can control the servos by dragging slider bar.

Icon	Instruction
ID:1	The ID number of servo. Here is ID1.
release 500 close	Adjust servo position. The minimum value is 0 and the maximum value is 1000.
0	Adjust servo deviation. The minimum value is -125 and the maximum value is 125.

### ②: Action Data List

The Action Data List displays the running time and servo value of each action



# of current action group.

	Index	Time	ID:1	ID:2	ID:3	ID:4	ID:5	ID:6
•	1	800	500	500	300	900	700	500

Icon	Instruction
Index	Action group number.
Time	The running time of action.
ID:1 500	Modify the value corresponding to the ID number.  Double-click 500 to modify directly.

# ③: Action Setting Area

Icon	Instruction
Running time 1000 ms	The time for running single action. Click to modify.
Total time 0 s	The total time for running the action group.
Manual coding	Click this button to loose robot's joint and then the joint can be twisted.
Read angle	Read the angle information after twisting the robotic arm.  (This button need to use with "Motor power off".)
Add action	Add the current servo values in servo control area to the last line of action data list.



Delete action  Delete all	Delete action: delete the selected action in action data list.  Delete all: delete all the actions in action data list
Update action	Replace the selected action in action data list.  (The selected action will be replaced by the current servo value in servo control area and the running time will be replaced by the time set in "Action Time".)
Insert action	Insert a action before the selected action.
Move up	Exchange the selected action with the previous one.
Move down	Exchange the selected action with the next one.
Run	Click to run action group in action data list once.  (If click "loop", robot will run the action group repeatedly)
Open action file	Click to open the selected action group and then display in action data list.  The path to action group file:  "ArmPi_PC_Software->ActionGroups"
Save action file	Save the current action in action action list to the specific location.  (ArmPi_PC_Software->ActionGroups)



Integrate files	After opening an action group, click this button and then open another action group file to integrate two action groups into a new one.
Action group : grab_fo ▼	Display the saved action group in PC software.
Refresh	Click to refresh.
Erase	Delete the current action group file
Erase all	(Caution) Delete all action group files.
Run action group	Perform the selected action group once.
Stop	Stop the running action group.
Exit	Exit the current PC software interface.

# **4:** Deviation Settings Area (For reference only)

Icon	Instruction
Read deviation	Click to read the saved deviation automatically.
Download deviation	Click to download the deviation that has been adjusted by PC software to robot.



Reset servo

Click to restore all servos in servo control area to the position corresponding to the value of 500.