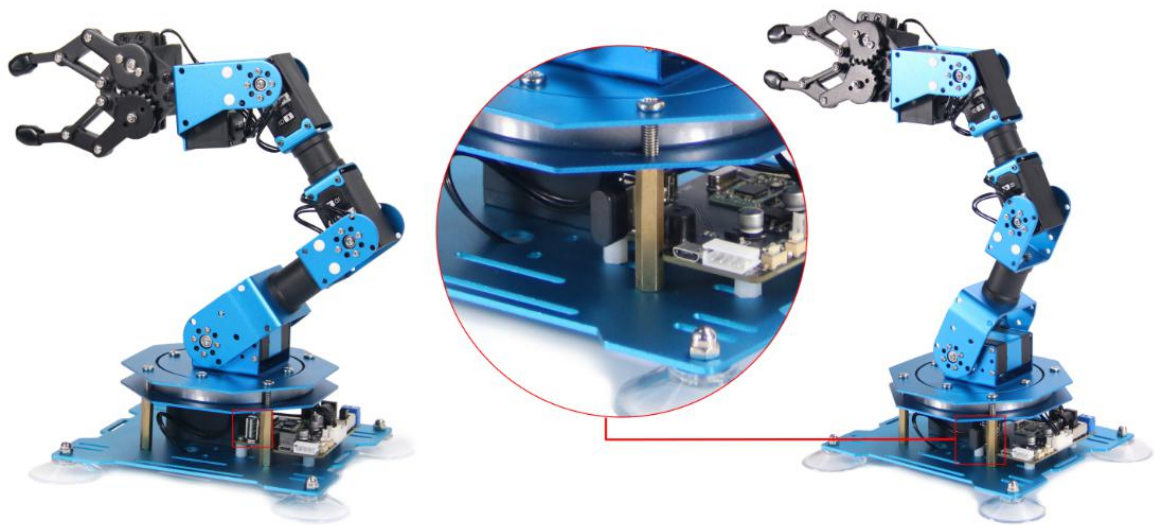# Lesson 1 Wireless Controller

1. Getting Ready

Step 1: Insert the wireless controller receiver into the controller board, as shown below:

Step 2: Prepare your own 2pcs AAA batteries and insert into the battery slot. Please pay attention to the positive and negative poles.

2. Device Connection

Step 1: Turn on the xArm 1S robotic arm.

Step 2: Turn on wireless controller. The red and greed LED will flash.

Step 3: Robotic arm will automatically pair with the wireless controller after few seconds. The red and greed LED will be steady on after pairing. (If there is only the red light or green light when you turn on, please press the "MODE" key.)

Step 4: If the connection fails, please turn off the robotic arm and wireless controller, and then try again following the above steps.

> ⓘ Sleep Mode: If the robotic arm is not connected within 30 seconds after turning on the handle switch, or if no operation is performed on the handle within 5 minutes after connection, the handle will enter sleep mode. Press the "Start" key can restart the wireless controller.

3. Mode Instruction

There are action group mode and single servo mode for the wireless controller. The default mode is action group mode.

Action group mode: Press the key to run the corresponding actions.(For customers who buy the unassembled version, please download the action groups into the controller in advance.)

Single servo mode: Press the key to rotate each servo.

Modes switching method: Press the "SELECT" first and then "START" until hearing a "Beep" sound. The mode will change from action group mode to single servo mode.

4. Button Instruction

The method of pressing the combination key is to press and hold "SELECT" first, and then press the corresponding key.

Button	Function
START	No.0 action group once（back to initial stance）
↑	No.1 action group once（rotation 1）
↓	No.2 action group once（grip to right 1）
←	No.3 action group once
→	No.4 action group once
△	No.5 action group once (rotation 2)
✕	No.6 action group once (grip from left)
□	No.7 action group once (grip from right 1)
○	No.8 action group once (grip to right 2)
L1	No.9 action group once (rotate to grip 1)
R1	No.10 action group once (grip to right 3)
L2	No.11 action group once (rotate to grip 2)
R2	No.12 action group once（turn and grip）

Bottom under single servo mode

Button	Function	Servo
START	All the servo back to middle position	No. 1-6 servo
L2	Gripper open	No. 1servo
R2	Gripper close	
L2	Turn left	No. 2 servo
L1	Turn right	
□	Forward	No. 3 servo
○	Backward	
△	Forward	No. 4 servo
✖	Backward	
↑	Forward	No. 5 servo
↓	Backward	
←	Turn left	No. 6 servo
→	Turn right	