

# Prepare

Before using the biped robot kit, some necessary software installation will be involved. So in order to better experience the learning of biped robot, please follow the instructions of this document step by step, including software download and installation, construction steps, etc.

## 1.Adapted Battery

Due to shipping restrictions, we are unable to provide the required batteries with the product. We apologize for any inconvenience this may cause. To help you quickly find the suitable batteries, we have compiled some recommended links, including 18650 batteries (for powering the robot), chargers (for charging 18650 batteries), for your reference.

(1)18650 Sharp-Ended Battery Link:<https://www.amazon.com/Rechargeable-Genuine18650-Flashlight-Doorbells-Headlamps/dp/B0CW67HTD>

(2)Charger Link: <https://www.acebott.com/products/acebott-us-plug-eu-plug-uk-plug-dual-charger-for-18650-14500-16430-rechargeable-li-ion-battery?variant=42992073015433>

**Note:** This product needs to be equipped with 18650 Sharp-Ended Battery \*2; charger \*1.

## 2.Installing and testing ACECode

Windows system installation and testing ACECode [\[click here\]](#)

Mac system installation and testing ACECode [\[click here\]](#)

**Note:**

1. This tutorial is applicable to ACECode version 2.0 and above. You can check the software version number in the upper left corner of the ACECode software. Please make sure that the software version you are using meets the requirements.

2. If you need to update the ACECode software version, you can go to the

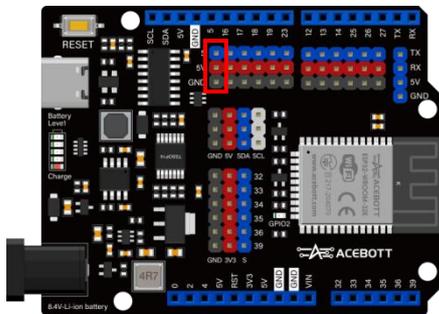
ACEBOTT official website: <https://www.cebott.com/pages/software> to download the latest ACECode software version.

### 3.Initialize the servo angle

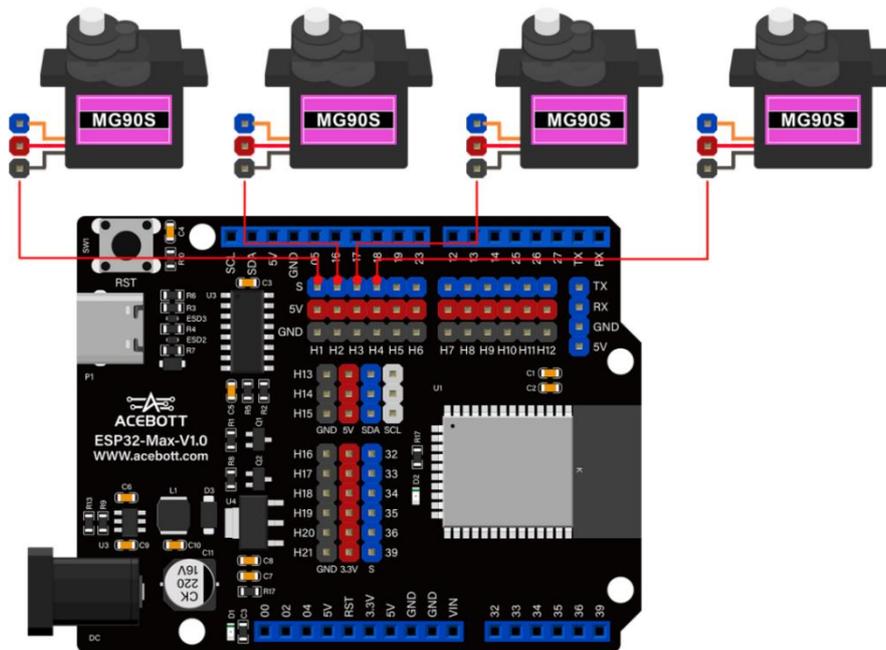
Before assembling the biped robot, in order to smoothly assemble its structure, we need to upload the servo initialization program in advance.

#### 1.Before uploading the program, connect the servos first

The pins of the servo correspond to the connections of the controllerboard as shown in the following table.

Servo	ESP32	Schematic diagram
Brown line	GND	
Red Line	5V	
Orange Line	GPIO5	

According to the connection method of the servos, connect all four servos to GPIO5, GPIO16, GPIO17, and GPIO18 of the controllerboard, as shown in the figure below.



## 2. After connecting the servo, upload the servo initialization program

Open "[Servo\\_90.sb3](#)" in English\ACECode(Blockly Code) \4. Programs\less on1, connect the ESP32 controllerboard and the computer with a USB cable, select the correct controllerboard and port, and upload the code to the ESP32 controllerboard.

**Note:** To maintain a stable power output, install the 18650 battery in the battery box, connect it to the power port of the controllerboard, and turn the switch to the on position for operation. If the servo does not rotate, it may be at a 90-degree position.

This step is only for testing. After initializing the servo angle, please unplug the four servos.

## 4. Assembly steps of a biped robot

[Please click here](#)

**Attention:** If you want to watch the assembly video, please click the [link below](#).

<https://www.youtube.com/watch?v=LHMJ8uW-IdU>

Or scan the QR code below.



## 5. Biped robot tutorial

[Please click here](#)

## 6. After-Sales Support

If you encounter any issues, please contact our support team via email at [support@acebott.com](mailto:support@acebott.com), and we will respond within 24 hours. You can also scan the QR code below to follow us for troubleshooting guides and the latest updates.



ACEBOTT FB Group QR Code



YouTube QR Code