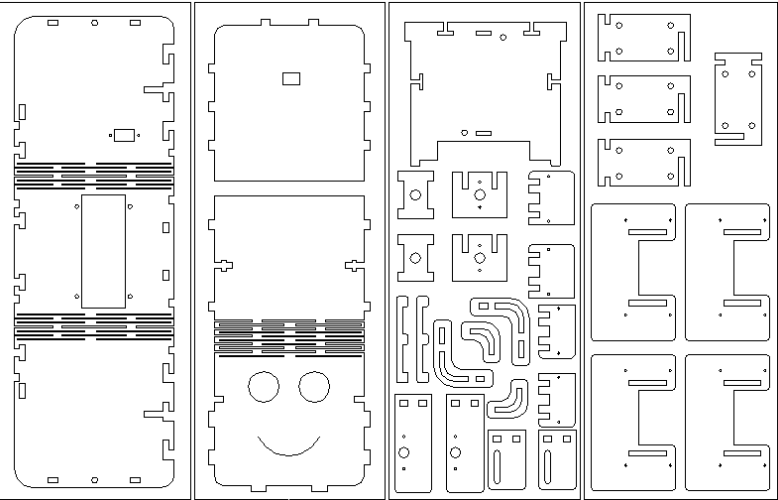


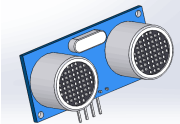
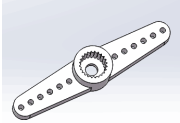


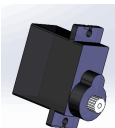

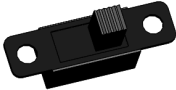
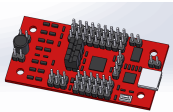

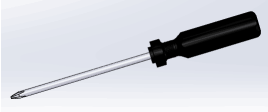
BAIJIA DAGU
百佳大谷

Techie Robot Assembly Instruction

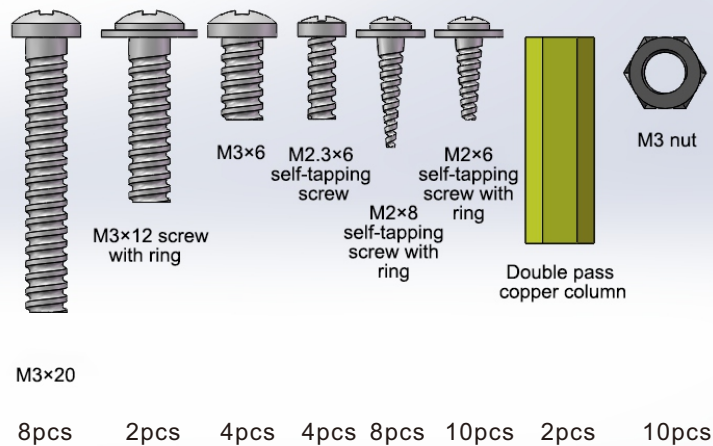
Note
Please read instruction carefully before use and check if the parts are missing.
The parts of Techie robot are listed as follow:



Name	Number
Ultrasonic	 X1
Servo disk	 X4

Servo	 X4
Battery holder	 X1
Switch	 X1
Circuit board	 X1
Cable tie	 X1
Screwdriver	 X1

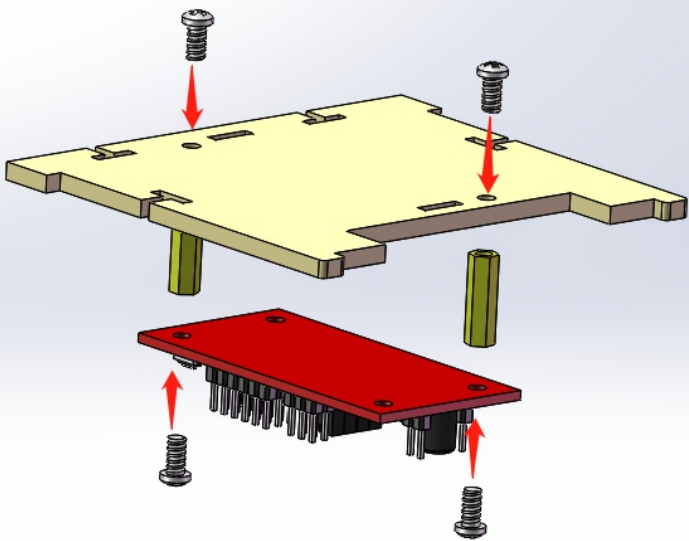
Screw type:



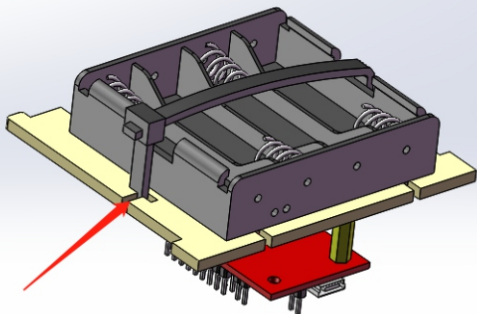
Installation note

- ①The structure of the wooden board is fragile, and the structural position can be fixed without force. Please pay attention to the intensity during the installation process.
- ②After completing the assembly of each part, first connect the electronic components, open the switch to turn the servo angle to 90 degrees and then disconnect the wiring to star the overall assembly.
- ③battery selection
 - 1. User need to assemble 4*AAA 3.2V lithium iron phosphate battery.
 - 2. Directly convert the power supply to a 7.4V Li-polymer battery or a 7.4V lithium battery.

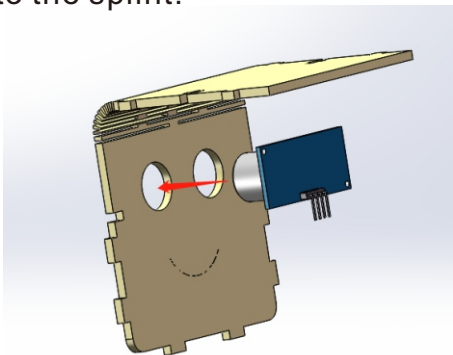
Assembly of parts



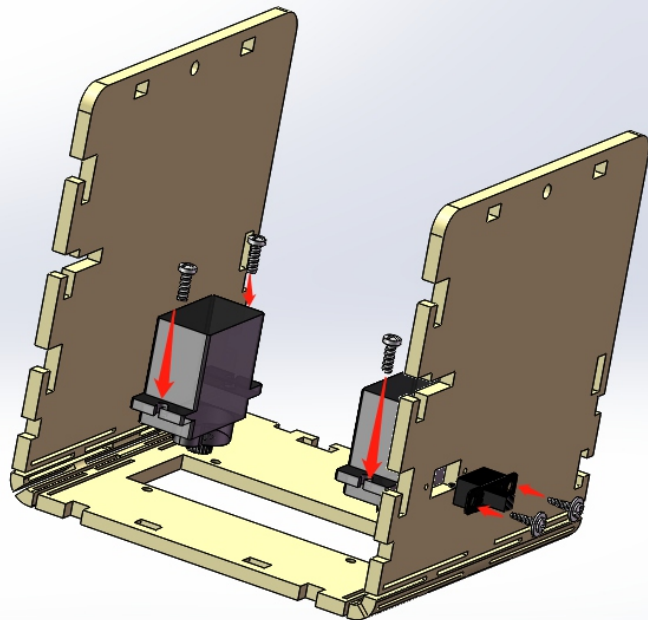
Step 1: Fix circuit board.



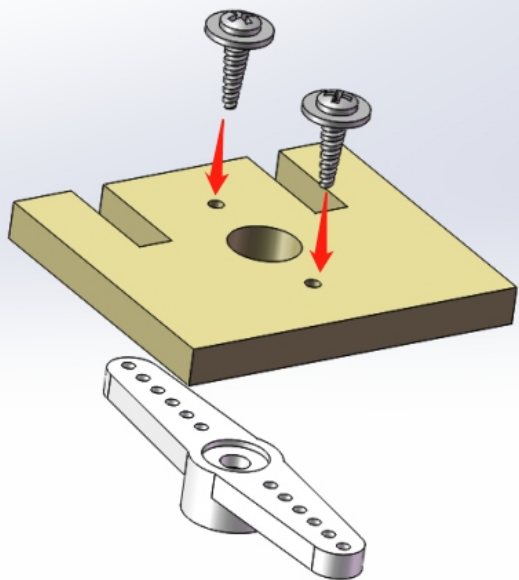
Step 2: Use a cable tie to fix the battery holder to the splint.



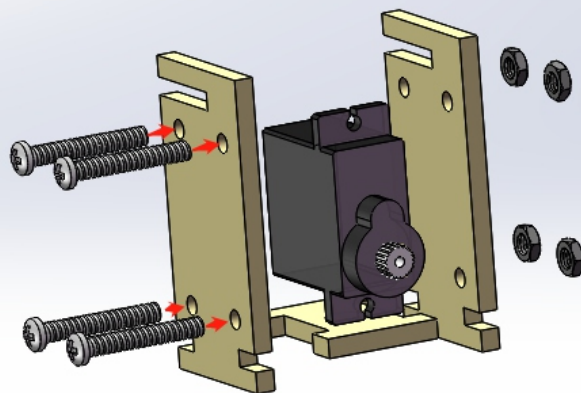
Step 3: Insert the ultrasonic into the eye position.



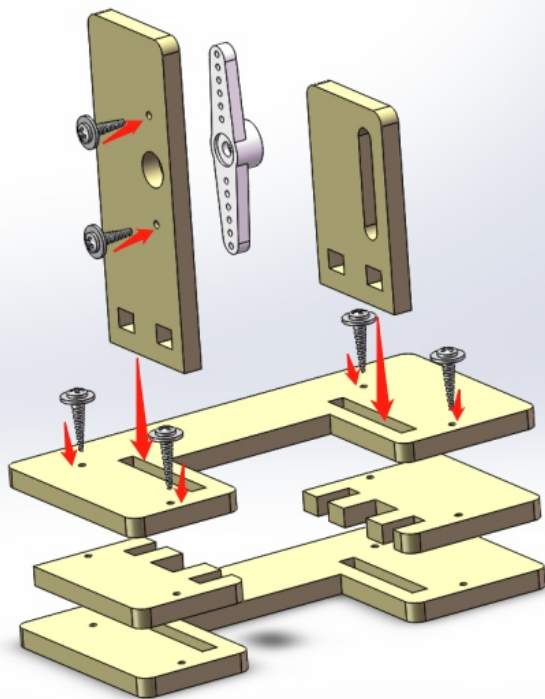
Step 4: Fix the two servos with M2.3×6 self-tapping screws and switch with M2×6 self-tapping screws with ring.



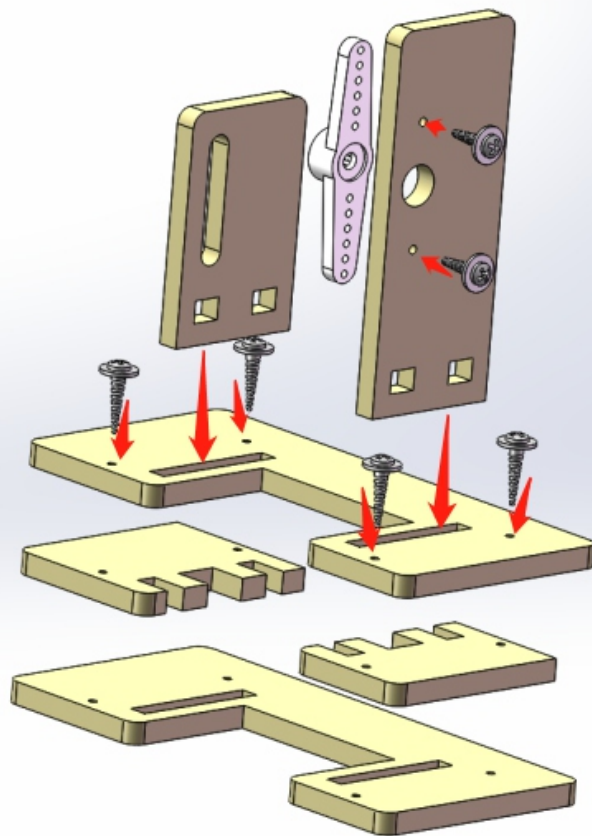
Step 5: Fix servo disk with M2×6 self-tapping screws with ring.



Step 6: Fix servo into legs with M3×20 screws.

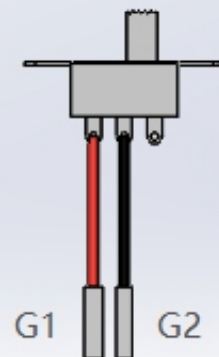
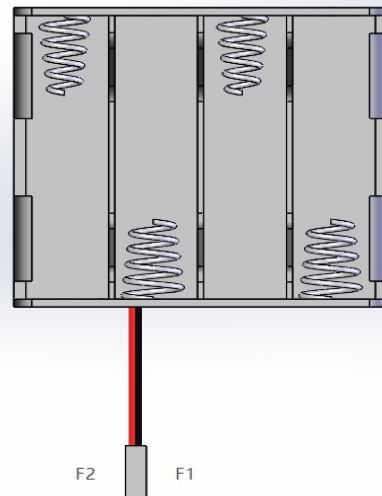
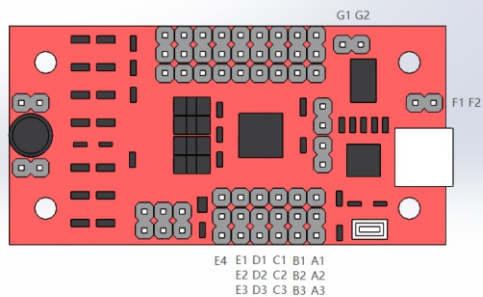


Step 7: The right foot plate: fix servo with M2×6 self-tapping screws with ring and the foot plate with M2×8 self-tapping screws with ring.

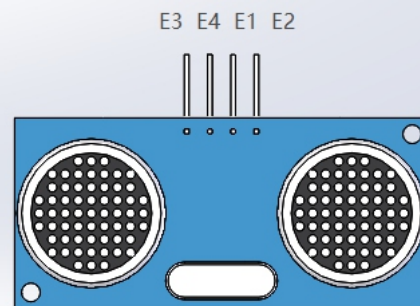
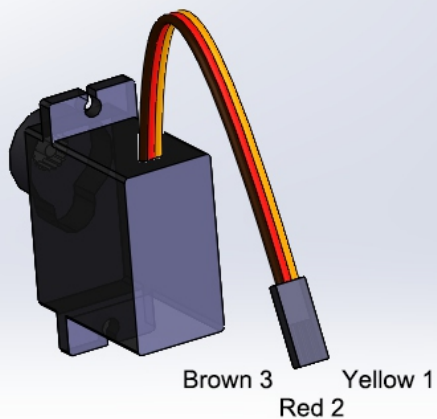


Step 8: The left foot plate: fix servo with M2×6 self-tapping screws with ring and the foot plate with M2×8 self-tapping screws with ring.

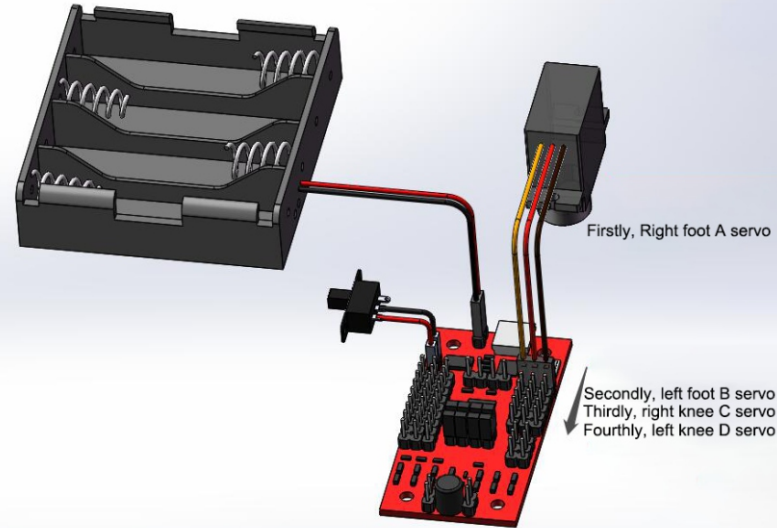
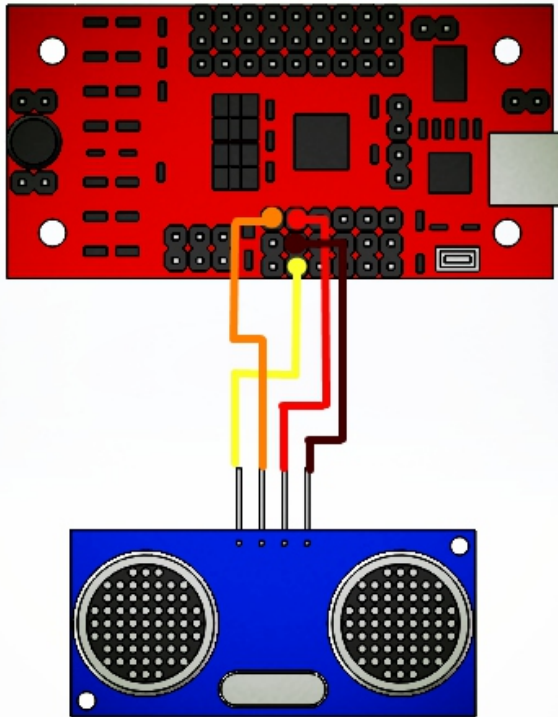
Circuit wiring diagram



Right foot A
Left foot B
Right knee C
Left knee D

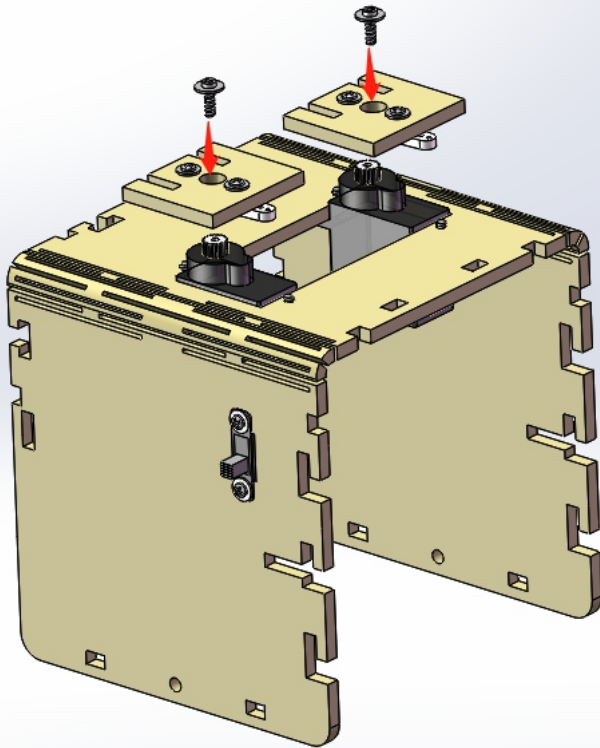


Partial wiring example diagram

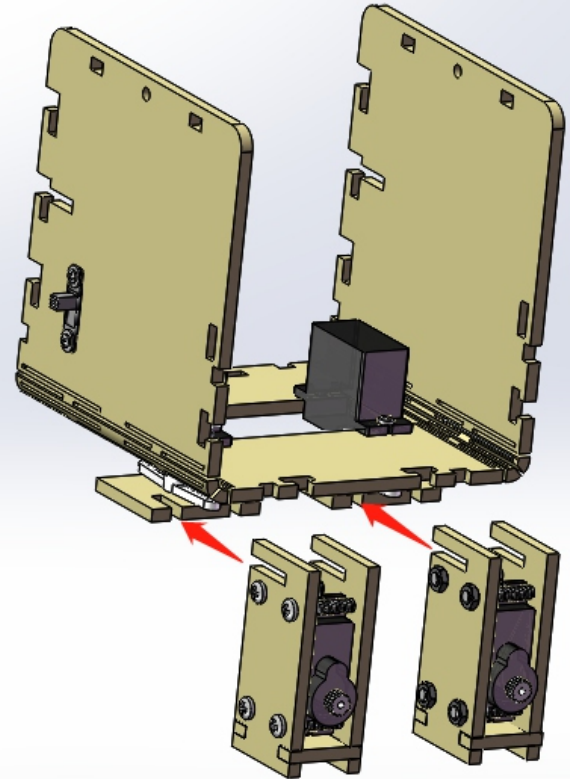


Note: Wiring first, then start the whole assembly
See page 3 for detail.

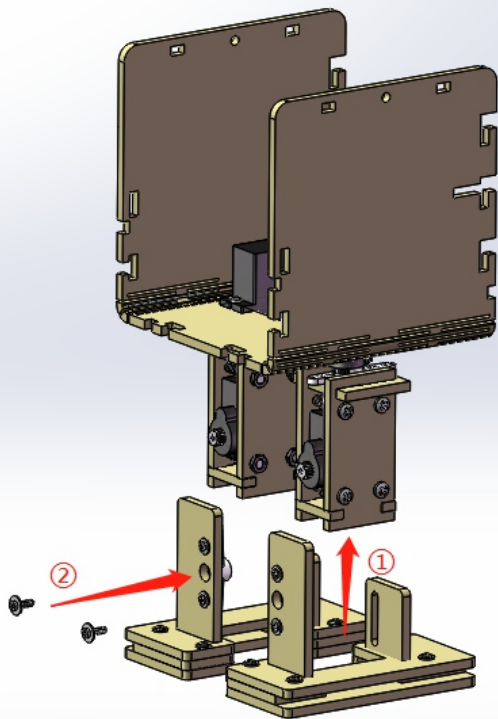
Overall assembly



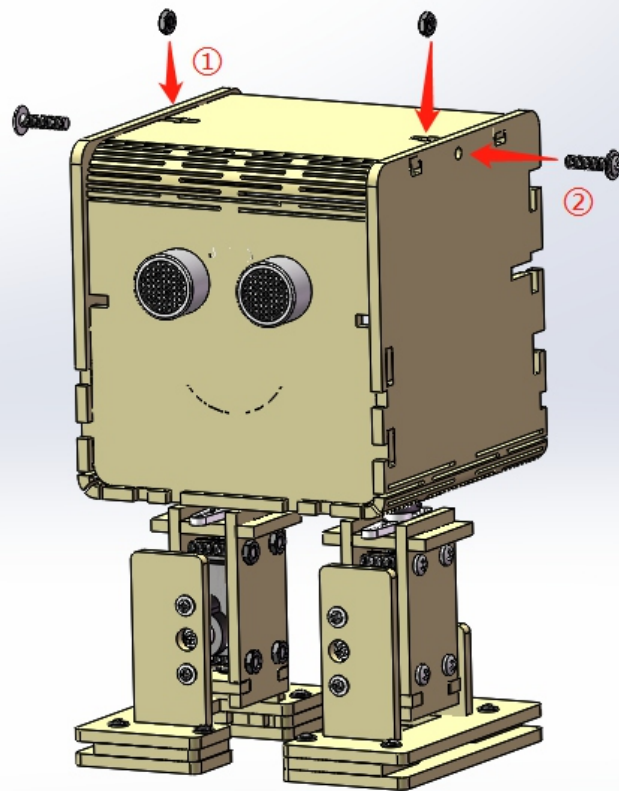
Step 1: Fix the joint position with the thicker screws in the servo bag.



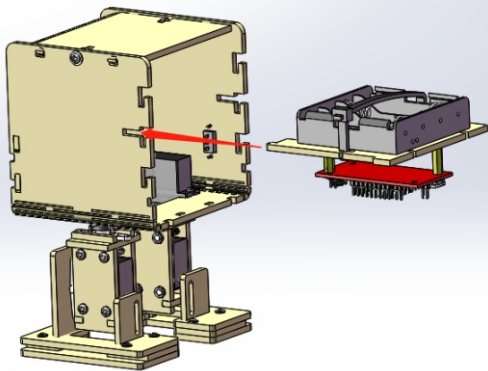
Step 2: Slightly loosen the leg screws before the legs snap into the joint position.



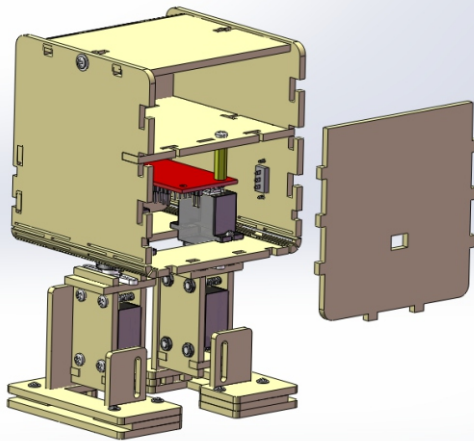
Step 3: After the servo disk is snapped into the servo, fix the servo disk with the large screw in the servo disk.



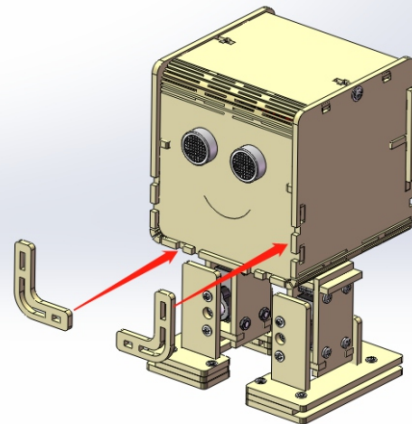
Step 4: Fix the face and lower plate with M3×12 screws with ring and M3 nut.



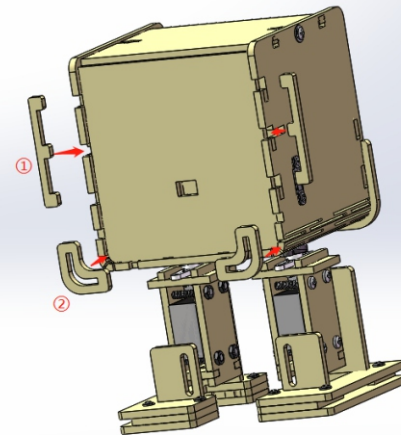
Step 5: Insert the middle splint into the head.



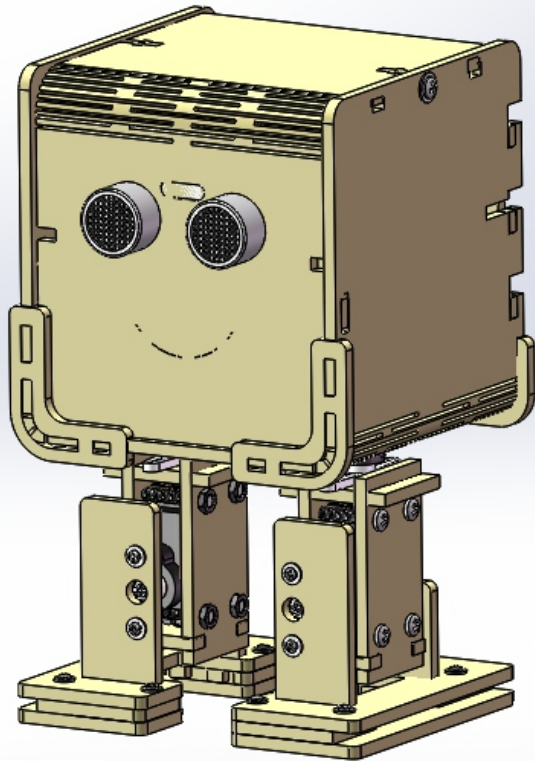
Step 6: Cover the back cover.



Step 7: Fit the front anti-drop fixed block.



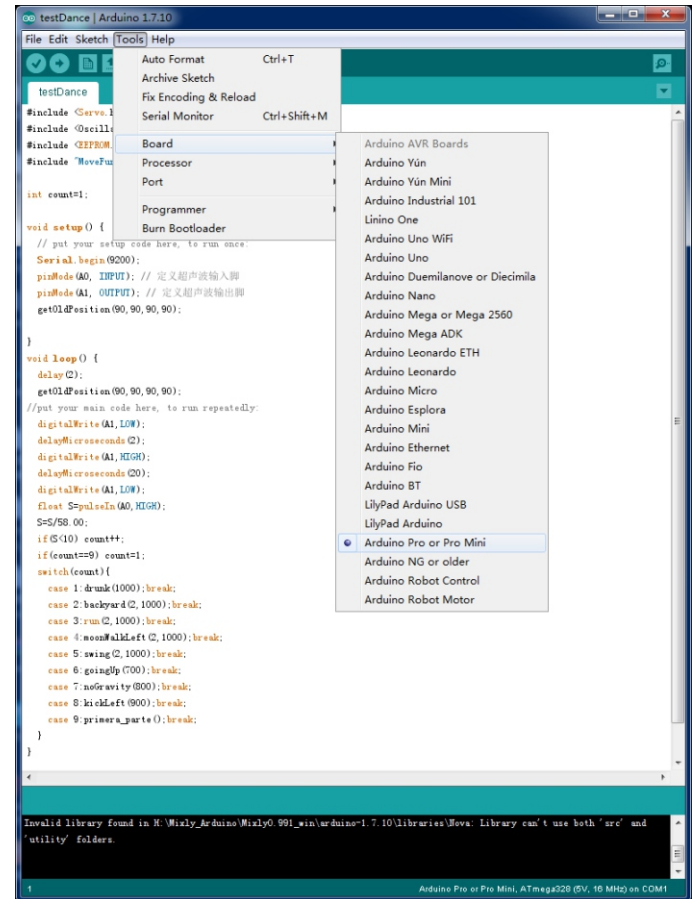
Step 8: Fit the back anti-drop fixed block.



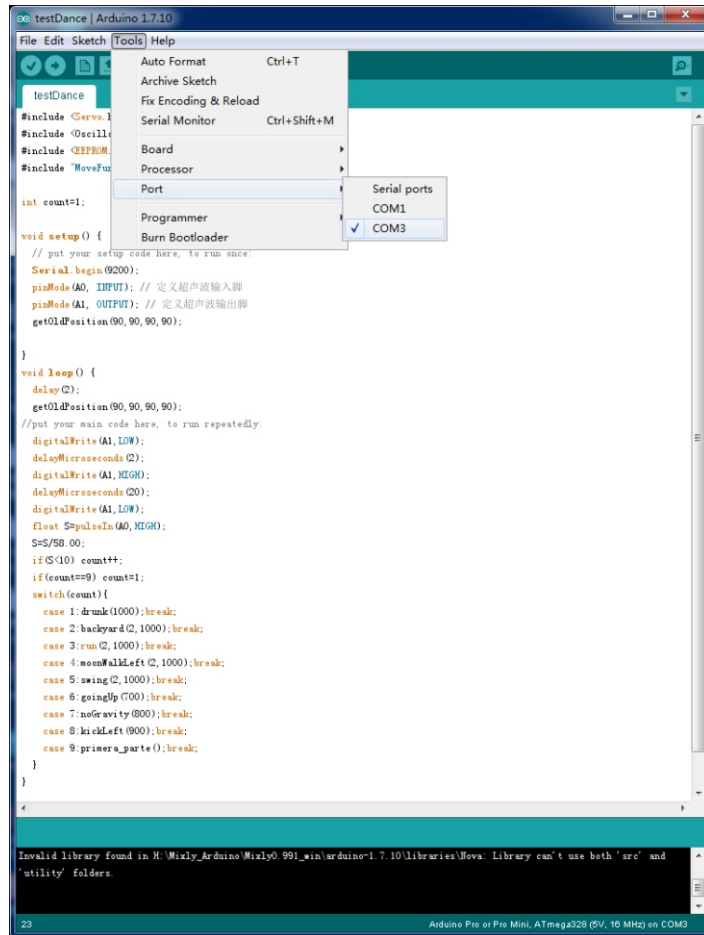
Step 9: Finished.

After connecting the motherboard to the computer, install the serial port driver CP2102USB2UART driverAddress: <https://download.csdn.net/download/wfysu/7957697>

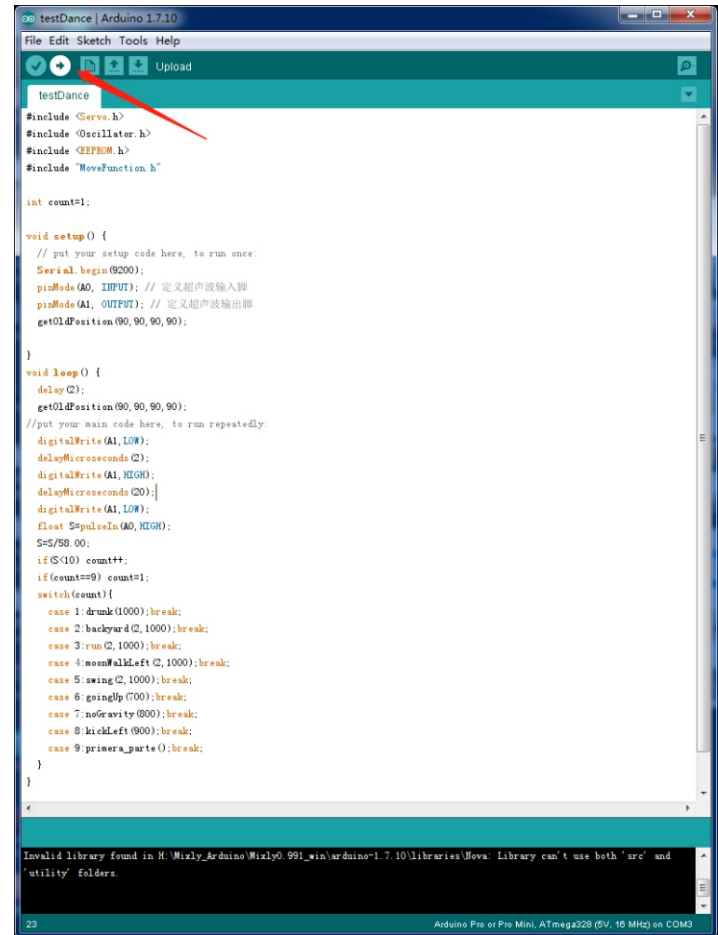
Step 1: Choose the arduino model.




Step 2: Choose port.



Step 3: Click the right arrow to burn the written program into the board.



A program case



```

testDance | Arduino 1.7.10
文件 编辑 项目 工具 帮助

testDance $

#include <Servo.h>
#include <Oscillator.h>
#include <EEPROM.h>
#include "MoveFunction.h"

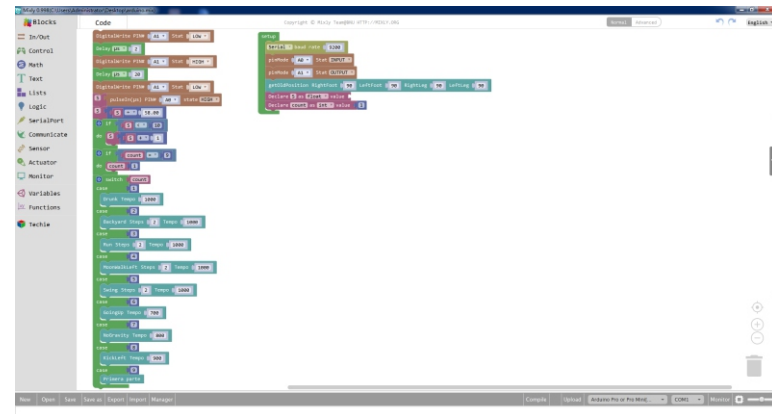
int count=1;

void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
  pinMode(A0, INPUT); // 定义超声波输入脚
  pinMode(A1, OUTPUT); // 定义超声波输出脚
  getOldPosition(90, 90, 90, 90);
}

void loop() {
  delay(2);
  getOldPosition(90, 90, 90, 90);
  //put your main code here, to run repeatedly:
  digitalWrite(A1, LOW);
  delayMicroseconds(2);
  digitalWrite(A1, HIGH);
  delayMicroseconds(20);
  digitalWrite(A1, LOW);
  float S=pulseIn(A0, HIGH);
  S=S/58.00;
  if(S<10) count++;
  if(count==9) count=1;
  switch(count){
    case 1: drunk(1000); break;
    case 2: backyard(2, 1000); break;
    case 3: run(2, 1000); break;
    case 4: moonWalkLeft(2, 1000); break;
    case 5: swing(2, 1000); break;
    case 6: goingUp(700); break;
    case 7: noGravity(800); break;
    case 8: kickLeft(900); break;
    case 9: primera_parte(); break;
  }
}
  
```

38 Arduino Uno on COM1

Mixly graphical programming case



Techie robot video:

Link: <https://www.dropbox.com/sh/nhd41t5wzcsn71z/AADSdsDI0ho-KUSM37QqznPxa?dl=0>