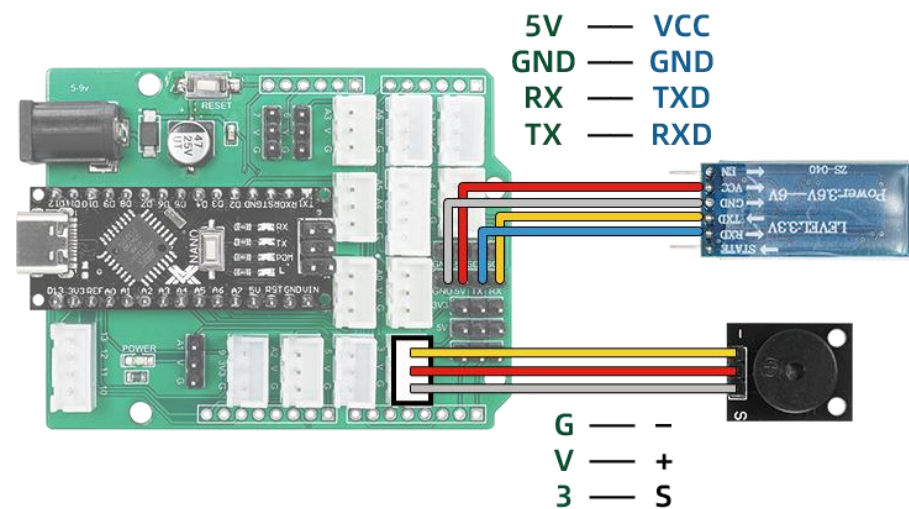# Project 24-Bluetooth Control Buzzer

1. project description

Through this project, you can learn how to use ZY -type-c Nano to control the buzzer to sound and stop by receiving instructions from a Bluetooth device . The function of this program is to sound a buzzer when receiving a specific button message sent by a Bluetooth device , and stop when the message is received again .

2. Project wiring diagram

3. Download Arduino code

Open the project Arduino code file (path: Project 24 Bluetooth Control Buzzer\project24\project24.ino)

📁 project24	2023/10/17 17:03	文件夹	
🎖 Bluetooth controls the buzzer.mp	2023/10/10 9:25	MP 文件	166 KB
📄 项目 24 蓝牙控制蜂鸣器.docx	2023/10/17 17:00	DOCX 文档	3,172 KB

Connect the main control board to the computer using USB, select the board type as Nano, select the newly displayed COM number, click "Download" to start compiling and downloading the program to the main control board. (At the same time, you should unplug the Bluetooth before downloading, and then plug the Bluetooth back in after the download is successful.)

Code analysis:

```
2   #define buzzer 3              //定义蜂鸣器引脚3
3   bool buzzer_Status = false;   //设置蜂鸣器状态变量
4   char ser_val;                 //定义接收蓝牙信息的字符变量    Defines a character variable that
5   void setup() {
6     Serial.begin(9600);
7     pinMode(buzzer, OUTPUT);
8   }
```

```
10  void loop() {
11    if(Serial.available() > 0){        //判断串口是否接收到蓝牙信息    Determine wheth
12      char ser_val = Serial.read(); //将接收到的蓝牙信息保存到变量ser_val    Save th
13      //Serial.print("ser_val=");
14      //Serial.println(ser_val);
15      if(ser_val == 'L'){              //如果接收到的信息是字符"L"，证明按下正确的按钮
16        buzzer_Status = !buzzer_Status;
17      }
18      if(buzzer_Status)tone(buzzer, 523);  //按一次按钮蜂鸣器响，在按一次停止响
19      else noTone(buzzer);
20    }
21  }
```

4. Download Mind+ graphical code

Open the project Mind+code file (path: Project 24 Bluetooth controls the buzzer\Bluetooth controls the buzzer.mp)

📁 project24	2023/10/17 17:03	文件夹	
🎪 Bluetooth controls the buzzer.mp	2023/10/10 9:25	MP 文件	166 KB
📄 项目 24 蓝牙控制蜂鸣器.docx	2023/10/17 17:00	DOCX 文档	3,172 KB

Connect the main control board to the computer with a USB cable and select the newly appeared CH340 serial port COM number. Click "Upload to Device" to complete the code upload.

(At the same time, you should unplug the Bluetooth before downloading, and then plug the Bluetooth back in after the

download is successful.)

Complete code:

5. Operation on APP

5.1 Please confirm that the TSCINBUNY.apk APP has been installed. If it is not installed, please go back to item 23 to see how to install the APP. Android users will send "TSCINBUNY.apk" to the mobile phone and install it. When you see this tutorial, there may be a newer version of the software. , please allow the upgrade when prompted and keep your phone connected to the network.
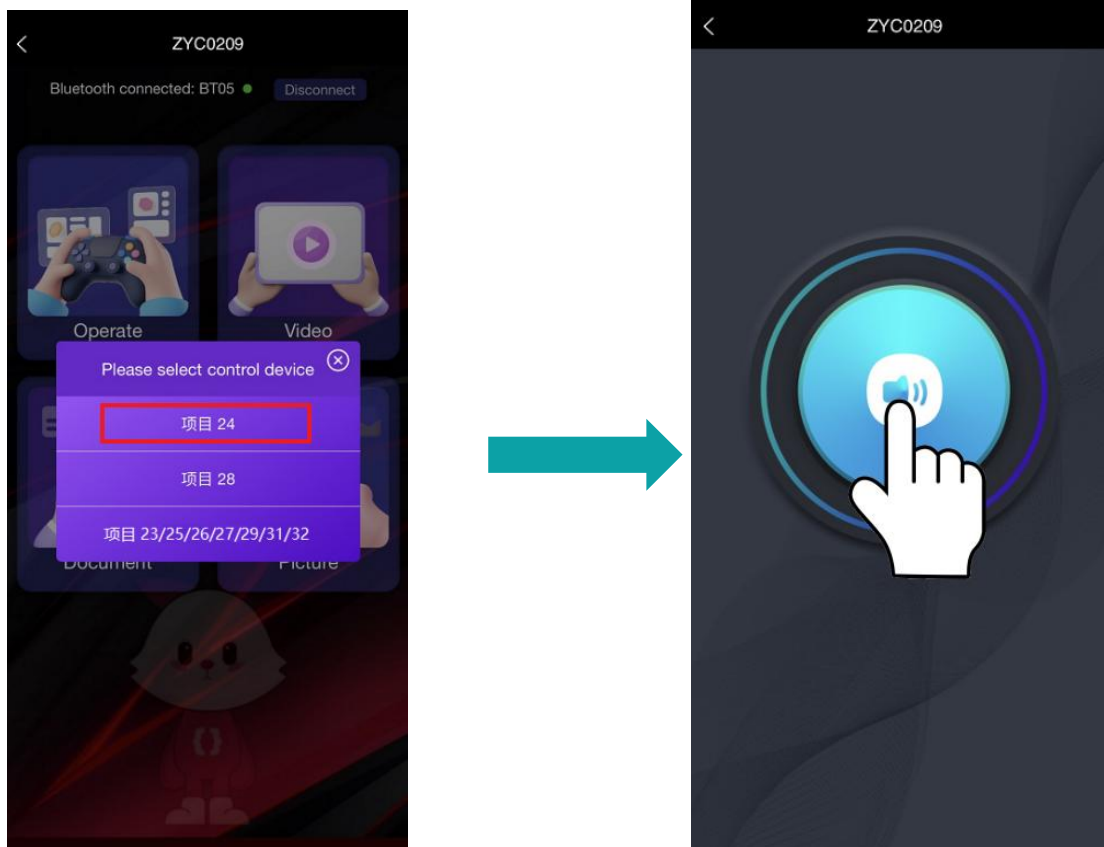

For ios device users, please open the App Store, search and install TSCIBUNY

5.2 TSCINBUNY remote control APP enters the project interface

After successfully connecting to Bluetooth, enter the project. This project is 24, so please select the first column. (How to search and connect Bluetooth? Please see item 23)

Project effect: After clicking the buzzer control button, the buzzer will sound and click again to stop.