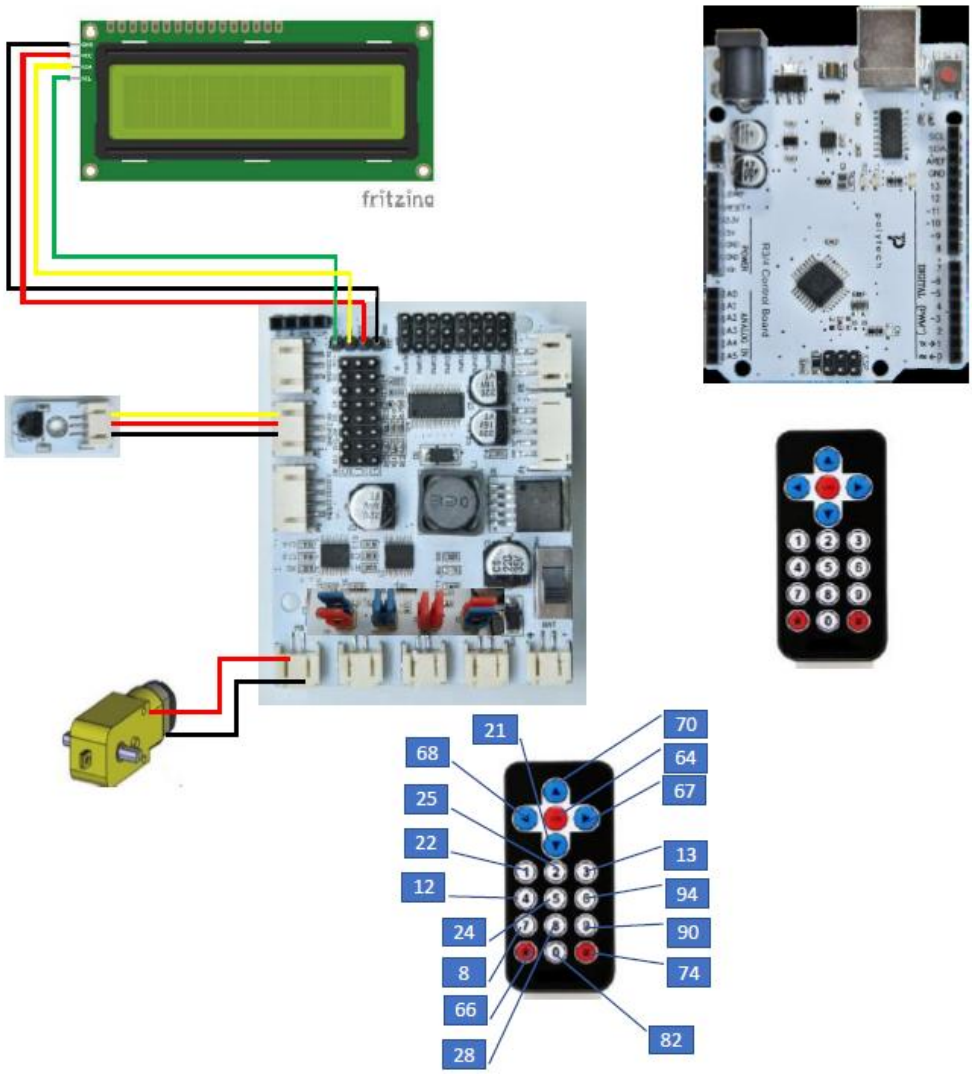


```
#include <Wire.h>
#include <IRremote.h>
#include <LiquidCrystal_I2C.h>
#include <Adafruit_PWMServoDriver.h>

LiquidCrystal_I2C lcd(0x27, 16, 2);
Adafruit_PWMServoDriver pwm = Adafruit_PWMServoDriver(0x47);

int trigPin = 12;
int echoPin = 13;
int RECV_PIN = A0;
int speed = 1000;

int key = 0;
int posar = 0;
int orofosar = 0;
int momove = 0;

void setup() {
  Serial.begin(9600);
```

```
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  pinMode(3, OUTPUT);
  pwm.begin();
  pwm.setPWMFreq(60);

  IrReceiver.begin(RECV_PIN);

  lcd.init();
  lcd.backlight();
  lcd.clear();

}

void loop() {
  if (IrReceiver.decode()) {

    key = IrReceiver.decodedIRData.command;

    if (key == 66) {
      lcd.setCursor(3, 1);
      lcd.print(" ISOGEIO. ");
      posar = 0;

    }
    if (key == 8) {
      lcd.setCursor(3, 1);
      lcd.print("1os OROFOS");
      posar = 1;

    }
    if (key == 12) {
      lcd.setCursor(3, 1);
      lcd.print("2os OROFOS");
      posar = 2;

    }
    if (key == 22) {
      lcd.setCursor(3, 1);
      lcd.print("3os OROFOS");
      posar = 3;

    }
    if (key == 82) {
      lcd.setCursor(3, 1);
      lcd.print(" ISOGEIO. ");
      posar = 0;

    }
    if (key == 28) {
      lcd.setCursor(3, 1);
      lcd.print("1os OROFOS");
      posar = 1;
```

```
    }
    if (key == 24) {
      lcd.setCursor(3, 1);
      lcd.print("2os OROFOS");
      posar = 2;

    }
    if (key == 25) {
      lcd.setCursor(3, 1);
      lcd.print("3os OROFOS");
      posar = 3;

    }
    if (key == 74){
      orofosar = 0;
    }
    if (key == 90){
      orofosar = 1;
    }
    if (key == 94){
      orofosar = 2;
    }
    if (key == 13){
      orofosar = 3;
    }
    momove = (posar - orofosar);
    if (momove == 0){
      lcd.setCursor(0, 0);
      lcd.print("   OPEN DO0RS   ");
      pwm.setPWM(0, 0, 0);
      pwm.setPWM(1, 0, 0);
      pwm.setPWM(0, 0, 0);
      pwm.setPWM(1, 0, 0);

    }
    if (momove > 0){
     lcd.setCursor(0, 0);
     lcd.print("       UP       ");
     pwm.setPWM(0, 0, speed);
     pwm.setPWM(1, 0, 0);
    }
    if (momove < 0){
      lcd.setCursor(0, 0);
      lcd.print("      DOWN      ");
      pwm.setPWM(0, 0, 0);
      pwm.setPWM(1, 0, speed);
    }

  IrReceiver.resume();
  }
}
```