

LAMPIRAN

1. Source Code Keseluruhan

```
#include <NewPing.h>
#define TRIGGER_PIN 12
#define ECHO_PIN 11
#define TRIGGER_PIN2 5
#define ECHO_PIN2 4
#define MAX_DISTANCE 200
#define motor 8
#define buzzer 7
#include <SoftwareSerial.h>
#include <TinyGPS++.h>
NewPing ultrasonic1(TRIGGER_PIN, ECHO_PIN, MAX_DISTANCE);
NewPing ultrasonic2(TRIGGER_PIN2, ECHO_PIN2, MAX_DISTANCE);
SoftwareSerial serial_gps(10, 9); //TX (TX GPS - RX 10 ARDUINO) DAN RX
(RX GPS - TX 9 ARDUINO)
SoftwareSerial SIM800L(2, 3);
TinyGPSPlus gps;
double latitude, longitude;
uint8_t fixCount = 0; // a one-second "clock"

void setup() {
  Serial.begin(9600);
  SIM800L.begin(9600);
  SIM800L.println("AT+CMGF=1");
  delay(1000);
  SIM800L.println("AT+CNMI=2,2,0,0,0");
  serial_gps.begin(9600);
  pinMode(motor,OUTPUT);
  pinMode(buzzer,OUTPUT);
}

void GPS(){
  while(serial_gps.available()) {
    gps.encode(serial_gps.read());
  }
  if(gps.location.isUpdated()) {
    latitude = gps.location.lat();
```

```

    longitude = gps.location.lng();
    String link = "http://maps.google.com/maps?q=" + String(latitude, 6) + "," +
String(longitude, 6) ;
    //Serial.println(link);
    SIM800L.println("AT+CMGF=1");
    delay(500);
    SIM800L.println("AT+CMGS=\"089514519080\"\\r");
    delay(500);
    SIM800L.println(link);
    delay(500);
    SIM800L.println((char)26);
    delay(500);
}
}

```

```

void loop() {
    delay(500);
    int US1 = ultrasonic1.ping_cm();
    int US2 = ultrasonic2.ping_cm();
    Serial.print("Hasil Sensor 1 :");
    Serial.print(US1);
    Serial.print("cm | ");
    Serial.print("Hasil Sensor 2 :");
    Serial.print(US2);
    Serial.println("cm");
    fixCount++;
    if (US1 >= 30 && US1<= 70) // Checking the distance, you can change the
value
    {
        digitalWrite(motor,HIGH);
    } else
    {
        digitalWrite(motor,LOW);
    }
    delay(US1);
    if (US2 >= 45 && US2<=60) // Checking the distance, you can change the
value
    {
        digitalWrite(buzzer,HIGH);
    } else
    {

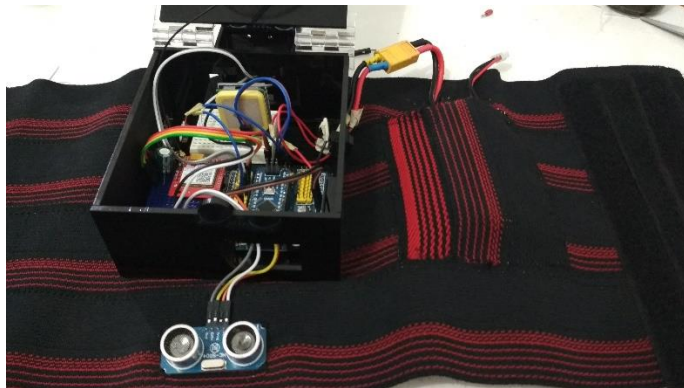
```

```
digitalWrite(buzzer,LOW);  
}  
delay(US2);
```

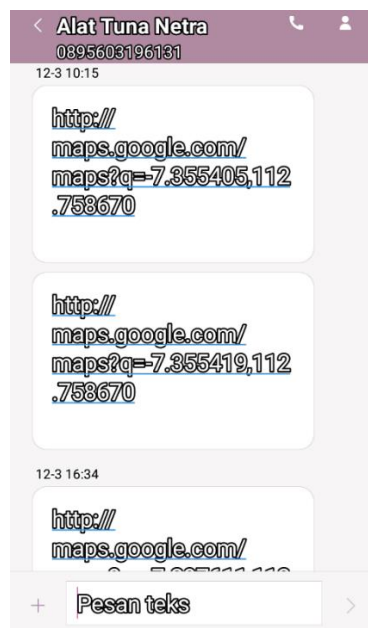
```
if(fixCount >= 20){  
  GPS();  
  delay(500);  
  fixCount = 0;  
}
```

```
}
```

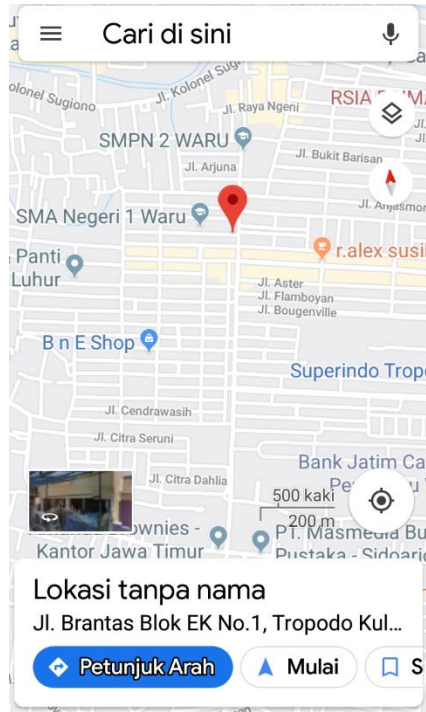
2. Gambar Keseluruhan Alat



3. Hasil SMS



4. Hasil Lokasi



5. Menjelaskan Cara Kerja Alat Kepada Tuna Netra



6. Dokumentasi Survey Data YPAB Surabaya



