

```
#include<LiquidCrystal.h>

LiquidCrystal lcd(2, 3, 4, 5, 6, 7);
```

```
int timer1;

int timer2;
```

```
float Time;
```

```
int flag1 = 0;

int flag2 = 0;
```

```
float distance = 5.0;

float speed;
```

```
int ir_s1 = A0;

int ir_s2 = A1;
```

```
int buzzer = 13;
```

```
void setup(){

  pinMode(ir_s1, INPUT);

  pinMode(ir_s2, INPUT);

  pinMode(buzzer, OUTPUT);


  lcd.begin(16,2);

  lcd.clear();

  lcd.setCursor(0,0);

  lcd.print("  ARDUINO ");

  lcd.setCursor(0,1);

  lcd.print("SPEED DETECTOR");
```

```

    delay(15000);

    lcd.clear();
}

void loop() {
    if(digitalRead (ir_s1) == LOW && flag1==0){timer1 = millis(); flag1=1;}

    if(digitalRead (ir_s2) == LOW && flag2==0){timer2 = millis(); flag2=1;}

    if (flag1==1 && flag2==1){
        if(timer1 > timer2){Time = timer1 - timer2;}
        else if(timer2 > timer1){Time = timer2 - timer1;}
        Time=Time/1000;//convert millisecond to second
        speed=(distance/Time);//v=d/t
        speed=speed*3600;//multiply by seconds per hr
        speed=speed/1000;//division by meters per Km
    }

    if(speed==0){
        lcd.setCursor(0, 1);
        if(flag1==0 && flag2==0){lcd.print("No car detected");}
        else{lcd.print("Searching... ");}
    }
    else{
        lcd.clear();
        lcd.setCursor(0, 0);
        lcd.print("Speed:");
        lcd.print(speed,1);
        lcd.print("Km/Hr ");
        lcd.setCursor(0, 1);
        if(speed > 50){lcd.print(" Over Speeding "); digitalWrite(buzzer, HIGH);}
    }
}

```

```
        else{lcd.print(" Normal Speed "); }  
delay(3000);  
digitalWrite(buzzer, LOW);  
speed = 0;  
flag1 = 0;  
flag2 = 0;  
}  
}
```