LAMPIRAN A

Program Utama Pada Arduino Mega 2560

```
#include <Keypad.h>
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
#include <Servo.h>
#define redPulse 22
#define redDir 24
#define greenPulse 26
#define greenDir 28
#define yelowPulse 30
#define yelowDir 32
#define buzz 13

int xxx = 3;
int countJmlRed = 0;
int countJmlGreen = 0;
int countJmlYelow = 0;
const byte ROWS = 4; //four rows
const byte COLS = 4; //four columns
char customKey;
unsigned long dawa = 0;
//merah
int flagRunRed = 0;
byte counter_merah;
String setPanjangRed;
String setJmlRed;
//hijau
int flagRunGreen = 0;
byte counter_Green;
```

```
String setPanjangGreen;
String setJmlGreen;
//kuning
int flagRunYelow = 0;
byte counter_Yelow ;
String setPanjangYelow ;
String setJmlYelow ;

int panjang, jumlah;
byte logicRed, logicGreen, logicYelow;
int stnby = 3;
int cut = 110;
int idle = 0;
byte cunterUP;


char hexaKeys[ROWS][COLS] = {
  {'A', 'B', 'C', 'D'},
  {'3', '6', '9', '#'},
  {'2', '5', '8', '0'},
  {'1', '4', '7', '*'}
};
byte rowPins[ROWS] = {23, 25, 27, 29}; //connect to the row pinouts of
the keypad
byte colPins[COLS] = {37, 35, 33, 31}; //connect to the column pinouts
of the keypad

Keypad customKeypad = Keypad( makeKeymap(hexaKeys), rowPins,
colPins, ROWS, COLS);
LiquidCrystal_I2C lcd(0x27, 16, 2);
Servo servoGeser;
Servo servoPress;
```

```
void setup() {
  Serial.begin(9600);
  lcd.begin();
  servoGeser.attach(2);
  servoPress.attach(3);
  servoGeser.write(0);
  servoPress.write(0);
  pinMode(redPulse, OUTPUT);
  pinMode(redDir , OUTPUT);
  pinMode(greenPulse, OUTPUT);
  pinMode(greenDir, OUTPUT);
  pinMode(yelowPulse, OUTPUT);
  pinMode(yelowDir, OUTPUT);
  pinMode(buzz, OUTPUT);
  digitalWrite(buzz, LOW);




  lcd.setCursor(0, 0);
  lcd.print("  pemotong dan  ");
  lcd.setCursor(0, 1);
  lcd.print(" pengupas kabel ");

  delay(3000);
  lcd.clear();
}

     break;
  }
}
```

LAMPIRAN B

Program Pemoton dan Pendan Kupasan

```
void kabelMerah() {

  switch (logicRed) {
    case 0:
      step(3, "maju", "Red");//keluar ke pisau dari posisi stnby
      delay(10);
      logicRed = 1;
      break;
    case 1:
      step(0, "stp", "Red");//
      delay(50);
      mekanikGeser("kupas");
      delay(500);
      pres(cut);//ws kekupas
      delay(500);
      pres(idle);
      delay(500);
      logicRed = 2;
      break;
    case 2://proses ngupas
      step(panjang, "maju", "Red");
      delay(10);
      logicRed = 3;
      break;
    case 3:
      step(0, "stp", "Red");
      mekanikGeser("kupas");
      delay(500);
      pres(cut);
```

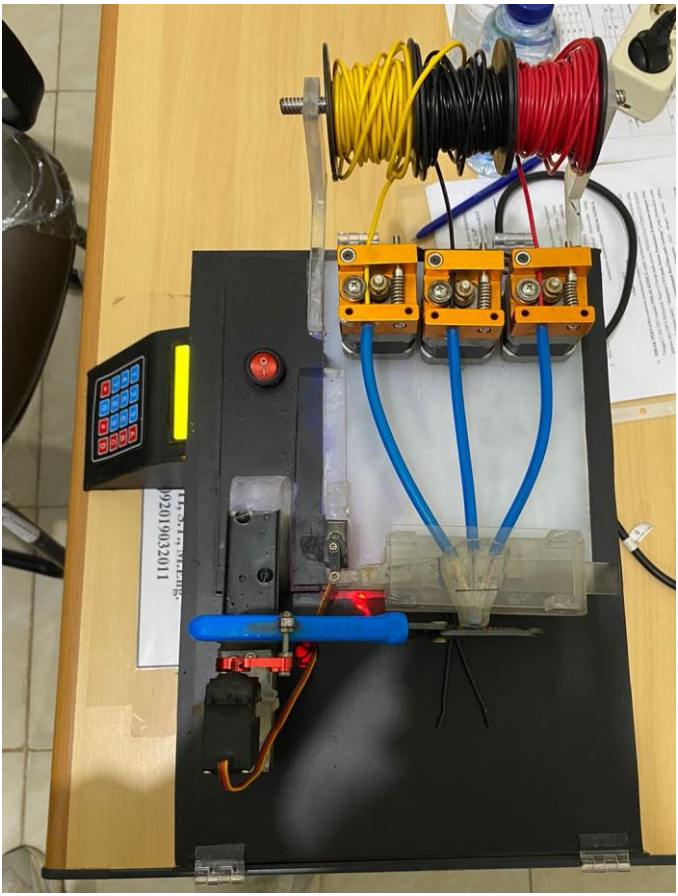
```
  delay(500);
  pres(idle);
  delay(500);
  logicRed = 4;
  break;
case 4:
  step(1, "maju", "Red");
  delay(10);
  mekanikGeser("potong");
  delay(500);
  pres(cut);
  delay(500);
  pres(idle);
  delay(1000);
  logicRed = 5;
  break;
case 5:
  step(0, "stp", "Red");
  countJmlRed = countJmlRed + 1;
  logicRed = 6;
  break;
case 6:
  if (countJmlRed == jumlah  ) {
    digitalWrite(buzz, HIGH);
    delay(500);
    digitalWrite(buzz, LOW);
    delay(100);
    digitalWrite(buzz, HIGH);
    delay(500);
    digitalWrite(buzz, LOW);
    logicRed = 7;
```

```
      }
      else {
        logicRed = 9;
      }
      break;
    case 7:
      step(2, "mundur", "Red");

      logicRed = 8;
      break;
    case 8:
      step(0, "stp", "Red");
      logicRed = 0;
      flagRunRed = 0;
      countJmlRed = 0;
      cunterUP = 0;
      break;
    case 9:
      step(1, "maju", "Red");//keluar ke pisau dari posisi stnby
      delay(10);
      logicRed = 1;
      break;
  }
}

void kabelHijau() {
      break;
  }
```

LAMPIRAN C

Tampilan Mekanik

Gambar Tampilan Mekanik Tampak Atas



Gambar Tampilan Mekanik Tampak Depan

LAMPIRAN D

Rangkaian Keseluruhan Alat