

Voltage Meter

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#include <SPI.h>
#include <Wire.h>
#include <Adafruit_GFX.h>
#include <Adafruit_SSD1306.h>
#define SCREEN_WIDTH 128
#define SCREEN_HEIGHT 64
#define OLED_RESET -1 // Reset pin
#define SCREEN_ADDRESS 0x3C
Adafruit_SSD1306 display(SCREEN_WIDTH, SCREEN_HEIGHT, &Wire, OLED_RESET);
const int analogInPin = A0;
void setup() {
  Serial.begin(9600);
  if(!display.begin(SSD1306_SWITCHCAPVCC, SCREEN_ADDRESS)) { Serial.println(F("SSD1306 allocation failed"));
  for(;;); }
  display.clearDisplay();
  display.setTextSize(2);
  display.setTextColor(WHITE);
  display.setCursor(0,0);
  display.println(" Control");
  display.println(" Voltage ");
  display.println("Measurment");
  display.display();
  delay(2000); }
void loop() {
  float sensorValue = analogRead(analogInPin);
  float voltage = sensorValue * (1.0 / 1023.0);
  Serial.print("Analog Voltage: ");
  float vol = voltage * 6;
  Serial.print(vol, 4); // 4 decimal places
  Serial.println("V");
  display.clearDisplay();
  display.setTextSize(4);
  display.setTextColor(WHITE);
  display.setCursor(0,0);
  display.print(vol);
  display.print("V");
  display.display();
  delay(1000); }

```

