

```

#include <U8x8lib.h>
#include <Wire.h>
U8X8_SSD1306_128X64_NONAME_HW_I2C u8x8(/* reset=*/ U8X8_PIN_NONE);

#include <Wire.h>

void setup() {
    pinMode(A0, INPUT);
    pinMode(6, INPUT);
    pinMode(4, OUTPUT);
    //Wire.begin();
    u8x8.begin();
    u8x8.clear();
}

void loop() {

    static char time[] = "00:00:00";
    u8x8.setFont(u8x8_font_chroma48medium8_r);
    u8x8.drawString(0, 0, time);

    static int h = 0, m = 0, s = 0;
    int rot, dig, prev;
    for (int i = 0; i < 6;) {
        dig = 0;
        prev = 0;
        while (!digitalRead(6)) {
            rot = analogRead(A0);
            //Serial.println(rot);
            if (rot > 920) dig = 0;
            else if (rot > 818) dig = 1;
            else if (rot > 716) dig = 2;
            else if (rot > 613) dig = 3;
            else if (rot > 511) dig = 4;
            else if (rot > 409) dig = 5;
            else if (rot > 306) dig = 6;
            else if (rot > 204) dig = 7;
            else if (rot > 102) dig = 8;
            else dig = 9;
            if (i > 3) time[i + 2] = '0' + dig;
            else if (i > 1) time[i + 1] = '0' + dig;

```

```

    else time[i] = '0' + dig;
    u8x8.setFont(u8x8_font_chroma48medium8_r);
    u8x8.drawString(0, 0, time);
    delay(10);
}
if (i == 0) h = dig * 10;
else if (i == 1) h += dig;
else if (i == 2) m = dig * 10;
else if (i == 3) m += dig;
else if (i == 4) s = dig * 10;
else s += dig;
delay(1000);
i++;
}

static char date[] = "00/00/00";
u8x8.setFont(u8x8_font_chroma48medium8_r);
u8x8.drawString(0, 30, date);

static int mm = 0, dd = 0, yy = 0;
for (int i = 0; i < 6;) {
    dig = 0;
    prev = 0;
    while (!digitalRead(6)) {
        rot = analogRead(A0);
        //Serial.println(rot);
        if (rot > 920) dig = 0;
        else if (rot > 818) dig = 1;
        else if (rot > 716) dig = 2;
        else if (rot > 613) dig = 3;
        else if (rot > 511) dig = 4;
        else if (rot > 409) dig = 5;
        else if (rot > 306) dig = 6;
        else if (rot > 204) dig = 7;
        else if (rot > 102) dig = 8;
        else dig = 9;
        if (i > 3) date[i + 2] = '0' + dig;
        else if (i > 1) date[i + 1] = '0' + dig;
        else date[i] = '0' + dig;
        u8x8.setFont(u8x8_font_chroma48medium8_r);
        u8x8.drawString(0, 30, date);
        delay(10);
    }
}

```

```

    }
    if (i == 0) mm = dig * 10;
    else if (i == 1) mm += dig;
    else if (i == 2) dd = dig * 10;
    else if (i == 3) dd += dig;
    else if (i == 4) yy = dig * 10;
    else yy += dig;
    delay(1000);
    i++;
}

Wire.begin();

Wire.beginTransmission(0x68);
Wire.write((uint8_t)0x00);
Wire.write(decToBcd(s)); // 0 to bit 7 starts the clock
Wire.write(decToBcd(m));
Wire.write(decToBcd(h)); // If you want 12 hour am/pm you need to set
bit 6
Wire.write(0x00);
Wire.write(decToBcd(dd));
Wire.write(decToBcd(mm));
Wire.write(decToBcd(yy));
if (Wire.endTransmission()) {
    digitalWrite(4, HIGH);
}

while (1);
}

uint8_t decToBcd(uint8_t val)
{
    return ( (val / 10 * 16) + (val % 10) );
}

```