

How to use OLED model in Arduino

Demo with Arduino UNO

Step 1: Connect OLED display to Arduino:

VCC --> 3.3v or 5v

GND --> GND

SCL --> A5

SDA --> A4

Step 2: Choose the right library

- **For 1.3 inch:** 1.3 Inch use SH1106 drive chip, copy "u8glib" into "x:\arduino-1.X.X\libraries".
- **For 0.96 inch:** 0.96 inch use SSD1306 drive chip. Copy "Adafruit_SSD1306.h" and "Adafruit_GFX.h" into "x:\arduino-1.X.X\libraries".

In order to reduce the pins' number, we use a hardware RESET system. So the standard library form Adafruit or u8glib may not very suitable. Make sure you are using our provided libraries, It's very important. If those files already in you libraries, replace it.

Step 3: Run demo in file "examples"

Summary of common problems

1. Can't light up the OLED display

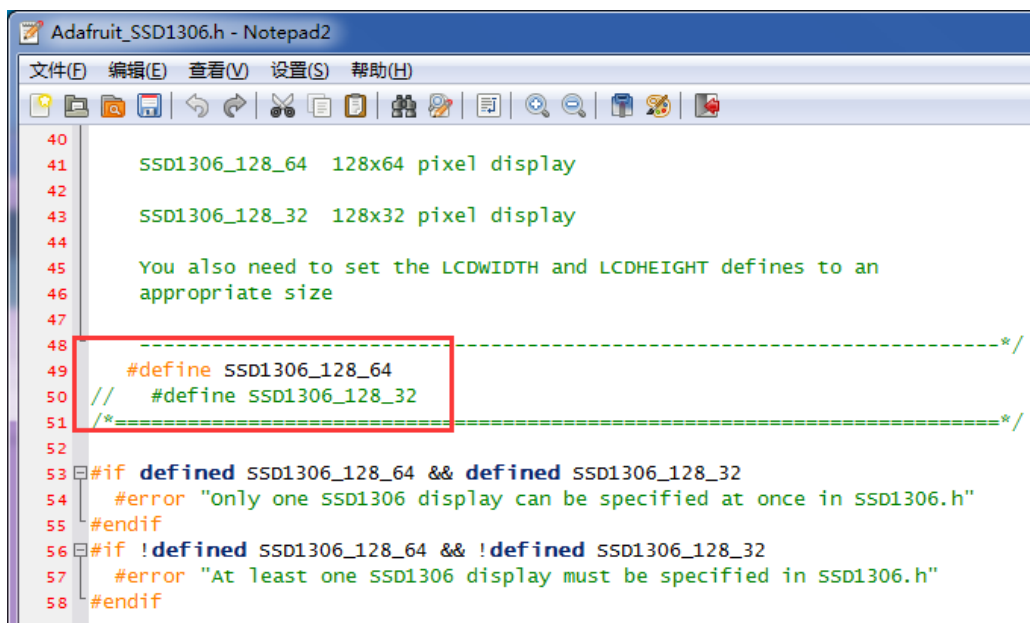
Please check the follow issue:

- Check the connection between OLED and Arduino;
- Make sure you are using out provided libraries;
- The default I2C/IIC address of the display should be 0x3C. We printed in model is 0x78 or 0x7A, but for AVR or MSP430 series (Arduino based on AVR), the IIC/I2C buffer is 7-bits, so, we should right shift 1-bit while using in Arduino or MSP430.
- Check the VCC and GND pins is right be connected, never connect VCC to GND and GND to VCC, it will broke model less than a second.
- Wipe the tin Solder part with alcohol.

2. The dot matrix is 128 * 32

We never produced any 0.96 or 1.3 inch with 128*32 dot matrix. Open "Adafruit_SSD1306.h", and make sure the "#define SSD1306_128_64" is available.

Like this:



```
40     SSD1306_128_64 128x64 pixel display
41
42     SSD1306_128_32 128x32 pixel display
43
44     You also need to set the LCDWIDTH and LCDHEIGHT defines to an
45     appropriate size
46
47
48     -----*/
49     #define SSD1306_128_64
50     // #define SSD1306_128_32
51     /*-----*/
52
53     #if defined SSD1306_128_64 && defined SSD1306_128_32
54         #error "Only one SSD1306 display can be specified at once in SSD1306.h"
55     #endif
56     #if !defined SSD1306_128_64 && !defined SSD1306_128_32
57         #error "At least one SSD1306 display must be specified in SSD1306.h"
58     #endif
59
```

3. Lack some lines

It caused by glass broken. The glass of OLED is very fragile, please be careful while using it. This problem outside the maintenance.

