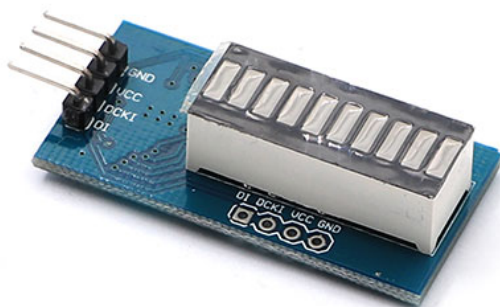




Arduino Led Level Display

User's Manual



Description:

Arduino Led Level Display is comprised of a 10 segment LED gauge bar and an MY9221 LED controlling chip. It can be used as an indicator for remaining battery life, voltage, water level, music volume or other values that require a gradient display. There are 10 LED bars in the LED bar graph: one red, one yellow, one light green, and seven green bars.

Hardware installation:

Plug the 412 ARDUINO LED LEVEL DISPLAY into the digital port 8 on [412 ARDUINO SENSOR SHIELD V5.0](#) and then plug the base shield into [Arduino Uno Board](#).

Code:

Basic control

This example will show you how to use the setBits() function of this library.

Set any combination of LEDs using 10 bits.

Least significant bit controls the first LED.

The setBits() function sets the current state, one bit for each LED.

First 10 bits from the right control the 10 LEDs.

eg. 0b00000jihgfedcba

a = LED 1, b = LED 2, c = LED 3, etc.

dec hex binary

0 = 0x0 = 0b0000000000000000 = all LEDs off
5 = 0x05 = 0b000000000000101 = LEDs 1 and 3 on, all others off
341 = 0x155 = 0b000000101010101 = LEDs 1,3,5,7,9 on, 2,4,6,8,10 off
1023 = 0x3ff = 0b000001111111111 = all LEDs on

| |
10 1

The bits >10 are ignored, shown here as x: 0bxxxx0000000000
*/

```
#include <Grove_LED_Bar.h>
```

```
Grove_LED_Bar bar(7, 6, 0); // Clock pin, Data pin, Orientation
```

```
void setup()
```

```
{  
  // nothing to initialize  
  bar.begin();  
}
```

```
void loop()
```

```
{  
  // Turn on all LEDs  
  bar.setBits(0x3ff);  
  delay(1000);
```

```
  // Turn off all LEDs  
  bar.setBits(0x0);  
  delay(1000);
```

```
  // Turn on LED 1  
  // 0b0000000000000001 can also be written as 0x1:  
  bar.setBits(0b0000000000000001);  
  delay(1000);
```

```
  // Turn on LEDs 1 and 3  
  // 0b000000000000101 can also be written as 0x5:  
  bar.setBits(0b000000000000101);  
  delay(1000);
```

```
  // Turn on LEDs 1, 3, 5, 7, 9  
  bar.setBits(0x155);  
  delay(1000);
```

```
  // Turn on LEDs 2, 4, 6, 8, 10  
  bar.setBits(0x2AA);  
  delay(1000);
```

```
// Turn on LEDs 1, 2, 3, 4, 5
// 0b0000000000011111 == 0x1F
bar.setBits(0b0000000000011111);
delay(1000);

// Turn on LEDs 6, 7, 8, 9, 10
// 0b000001111100000 == 0x3E0
bar.setBits(0b000001111100000);
delay(1000);
}
```

Note: More examples are found inside the software.

How to add library:

Distract the folder found in software, and just like adding any other library, copy the folder named Suli_Arduino to *My Documents -> Arduino -> libraries*.