

Guide de mise en marche du shield LCD 2x16

Matériel nécessaire :

- une carte [Uno ou compatible](#)
- un shield LCD 2x16 GT1113



Présentation du module :

Shield LCD 2 x 16 caractères blancs à rétroéclairage bleu compatible Arduino et équipé de 6 boutons-poussoirs pour la sélection (select, left, down, up, right et reset).

Alimentation : 5 Vcc via la carte Arduino

Dimensions : 80 x 58 x 22 mm

Table de correspondance :

Carte Uno	Shield LCD
A0	Boutons-poussoirs
D4	DB4 (LCD)
D5	DB5 (LCD)
D6	DB6 (LCD)
D7	DB7 (LCD)
D8	RS
D9	RW
D10	Rétroéclairage

Exemple de programme:

L'exemple de code suivant (à copier dans l'IDE Arduino) permet de tester les différents boutons du module.

```
#include <LiquidCrystal.h>

//Sample using LiquidCrystal library

/*****

This program will test the LCD panel and the buttons
Mark Bramwell, July 2010

*****/

// select the pins used on the LCD panel
LiquidCrystal lcd(8, 9, 4, 5, 6, 7);

// define some values used by the panel and buttons
int lcd_key    = 0;
int adc_key_in = 0;
#define btnRIGHT 0
#define btnUP    1
#define btnDOWN  2
#define btnLEFT  3
#define btnSELECT 4
#define btnNONE  5

// read the buttons
int read_LCD_buttons()
{
  adc_key_in = analogRead(0); // read the value from the sensor
  // my buttons when read are centered at these values: 0, 144, 329, 504,
  741
  // we add approx 50 to those values and check to see if we are close
  if (adc_key_in > 1000) return btnNONE; // We make this the 1st option for
  speed reasons since it will be the most likely result
  // For V1.1 us this threshold
  if (adc_key_in < 50)   return btnRIGHT;
  if (adc_key_in < 250) return btnUP;
  if (adc_key_in < 450) return btnDOWN;
  if (adc_key_in < 650) return btnLEFT;
  if (adc_key_in < 850) return btnSELECT;

  // For V1.0 comment the other threshold and use the one below:
  /*
  if (adc_key_in < 50)   return btnRIGHT;
  if (adc_key_in < 195) return btnUP;
  if (adc_key_in < 380) return btnDOWN;
  if (adc_key_in < 555) return btnLEFT;
  if (adc_key_in < 790) return btnSELECT;
  */

  return btnNONE; // when all others fail, return this...
}
```

```
void setup()
{
  lcd.begin(16, 2);           // start the library
  lcd.setCursor(0,0);
  lcd.print("Push the buttons"); // print a simple message
}

void loop()
{
  lcd.setCursor(9,1);        // move cursor to second line "1" and 9
spaces over
  lcd.print(millis()/1000);  // display seconds elapsed since power-up

  lcd.setCursor(0,1);        // move to the begining of the second line
  lcd_key = read_LCD_buttons(); // read the buttons

  switch (lcd_key)           // depending on which button was pushed, we
perform an action
  {
    case btnRIGHT:
    {
      lcd.print("RIGHT ");
      break;
    }
    case btnLEFT:
    {
      lcd.print("LEFT  ");
      break;
    }
    case btnUP:
    {
      lcd.print("UP    ");
      break;
    }
    case btnDOWN:
    {
      lcd.print("DOWN  ");
      break;
    }
    case btnSELECT:
    {
      lcd.print("SELECT");
      break;
    }
    case btnNONE:
    {
      lcd.print("NONE  ");
      break;
    }
  }
}
}
```



Si vous rencontrez des problèmes, merci de nous contacter par courriel à :

sav@gotronic.fr