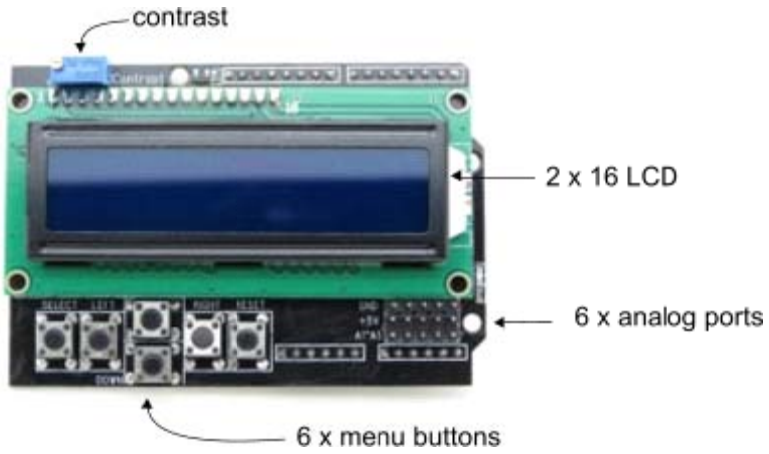
LCD Shield for Arduino – SHD036

This is a very popular LCD Keypad shield for Arduino board. It can be directly plug onto the Arudino board, no soldering or fly-wiring needed. A 16x2 HD44780 compatible LCD, White character & Blue backlight. This Shield uses Arudino **LCD4Bit library.**

Board Layout



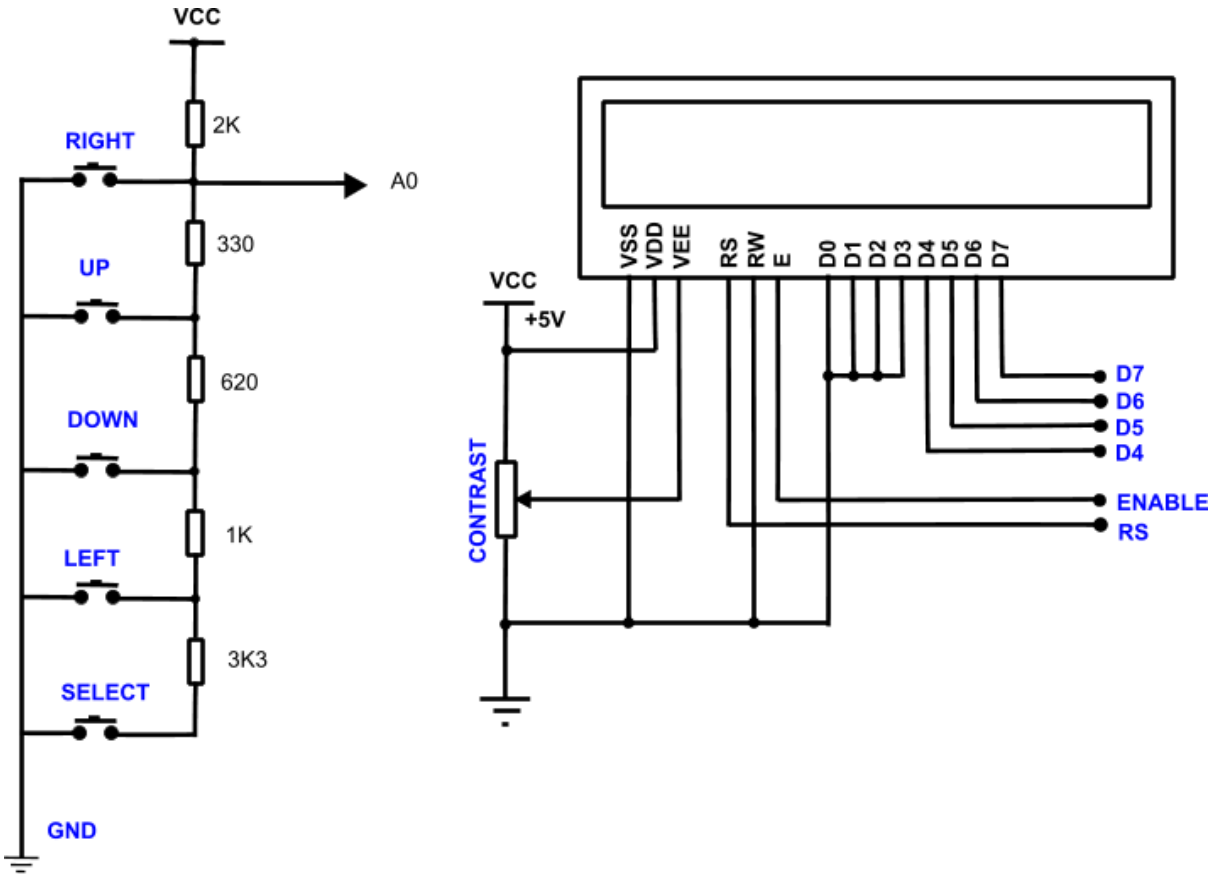
Mounting LCD shield on the Arduino

Pin connections to the Arduino

Pin	Function
A0	Button (select, up, right, down and left)
D4	DB4
D5	DB5
D6	DB6
D7	DB7
D8	RS (Data or signal display selection)
D9	LCD1602 Enable
D10	Backlight control

Basic connection diagram

The button values is read as analog values



Example Code

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(8, 9, 4, 5, 6, 7);   // select the pins used on the LCD panel

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

int read_LCD_buttons()  {
 adc_key_in = analogRead(0);
 if (adc_key_in > 1000) return btnNONE;
 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){
   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;
     }
   }
 }
```