



new LCD Keypad Shield 1602 For Arduino MEGA 2560 1280 UNO R3 MEGA2560  
MEGA1280



### Product Description

arduino input output expansion board LCDKeypad Shield

LCD Keypad Shield input and output expansion board using the 2-line, 16-character LCD with contrast adjustment and backlight will complete five key input, use an analog port, a reset button, the the unused IO port expansion out spare make full use of the IO port. Occupancy digital port: PIN4 (DB4), 5 (DB5), 6 (DB6), 7 (DB7), 8 (RS), 9 (E), 10 (backlight control), the analog button port A0. (LCD color is not specified, the random delivery.)  
Use tieRoboduino:

Pin definitions:

Module debugging:

LCD Keypad Shield plugged into the Arduino controller, then you need to download LCD4Bit\_mod.h (Right click to save) library files arduino-0015 \ hardware \ libraries and then downloaded to the Arduino, then compile a test program, the initial LCD Keypad Shield, the first observation of the LCD has no display character, if the character is not displayed that may be

incorrect contrast, you can use a flathead screwdriver to adjust the RP1 (clockwise rotation), transferred to appear clearly characters can.

Professional anti-static packaging

Figure of test results:

GP2D12 ranging code:

```
# include <LCD4Bit_mod.h>
LCD4Bit_mod lcd = LCD4Bit_mod (2);
char GP2D12;
char a, b;
char str1 [] = "Renge:";
char str2 [] = "Renge Over";
char str3 [] = "cm";
void setup ()
{
  lcd.init ();
  lcd.clear ();
  lcd.println ("GP2D12 testing ...");
}
void loop ()
{
  GP2D12 = read_gp2d12_range (1);
  if (GP2D12 > 80 || GP2D12 < 10)
  {
    lcd.cursorTo (2,0);
    lcd.println (str2);
  }
  else
  {
    a = 0x30 + GP2D12/10;
    b = 0x30 + GP2D12% 10;
    lcd.cursorTo (2, 3);
    lcd.println (str1);
    lcd.print (a);
    lcd.print (b);
    lcd.println (str3);
  }
  delay (50);
}
float read_gp2d12_range (byte pin)
{
  int tmp;
  tmp = analogRead (pin);
  if (tmp < 3) return -1;
```

```
return (6787.0 / ((float) tmp - 3.0)) - 4.0;  
}
```