

XPAD Module User Guide

Get to know XPAD Module

XPAD Module is a touch key module-a revised version from Touch Shield. In addition to the existing 12 Touch Shield touch keys, we extended two simulated buttons to make it easier for easy button operation. Besides, we adopted a button design resembling joysticks. You can try our modules to experience “touch-to-play”, or if you think that only touch-to-play is too monotonous, we’ve also designed two simulated physical buttons back on the module for you to choose from.

Please note: MPR121 IC working voltage of 3.3V, the power to the module, do not mistake the input voltage!

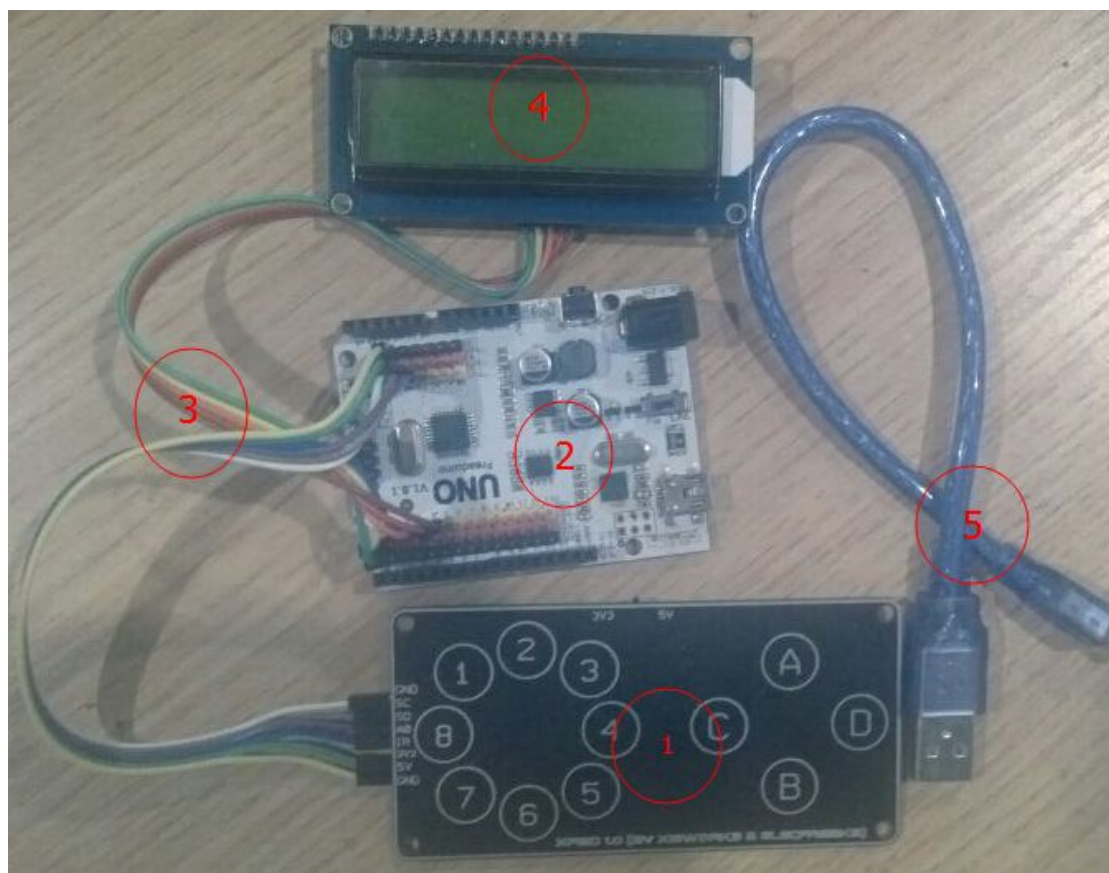


Front



Back

The Hardware and the Software



Physical connection diagram

It's the hardware.

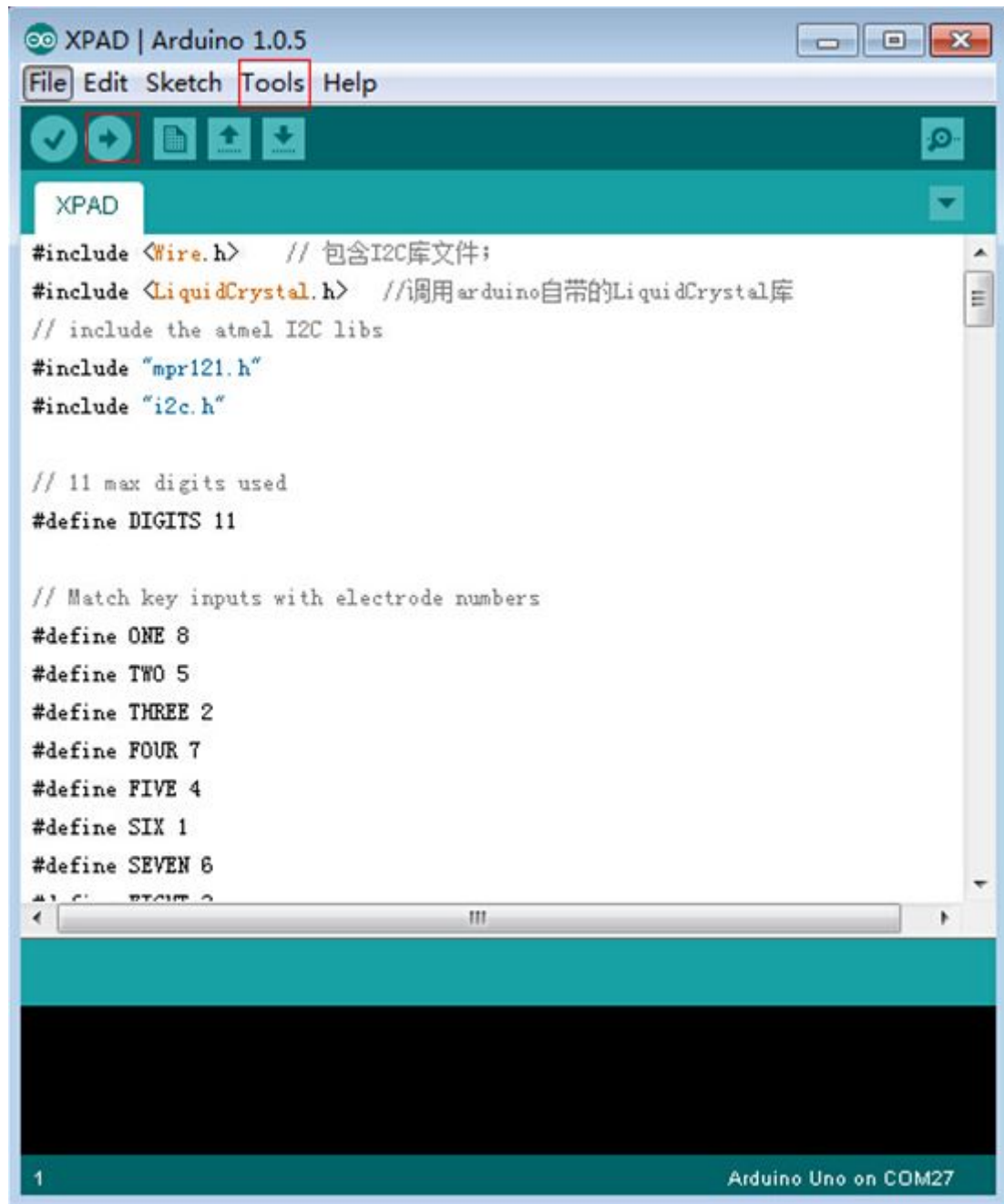
1. XPAD Module
2. Arduino mainboard
3. 5PIN and 6PIN DuPont line (one in each)
4. IIC / SPI LCD MODULE
5. USB cable

It's the Software.

1. XPAD_DEMO
2. Arduino IDE (1.0.5)

Part 1 Downloade Arduino RFID 522 CODE to Arduino IDE

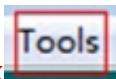
1. Download "XPAD_DEMO" zip file from our official web and unzip it.
2. Open "XPAD_DEMO" to enter the Arduino IDE (1.0.5) interface (IDE). The follow window will appear. Compile and download the code.



Pic 1

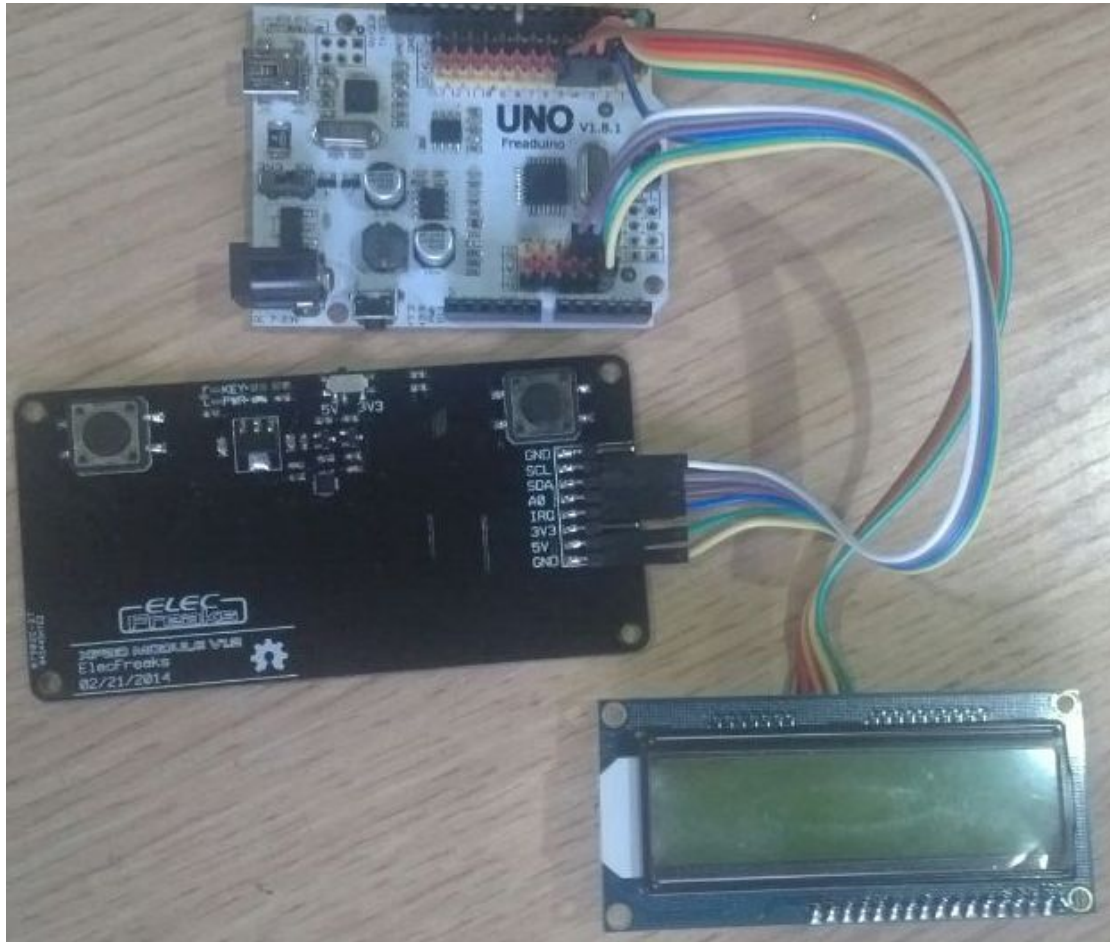
Note:

After entering the IDE window shown above, first click  > Board->

Arduino UNO, and then select the serial port, follow click  > serial port-> COM27 (specific serial port subject to your computer).

Part 2 Wiring between XPAD Module and Arduino UNO

Step 1 Wiring Diagram

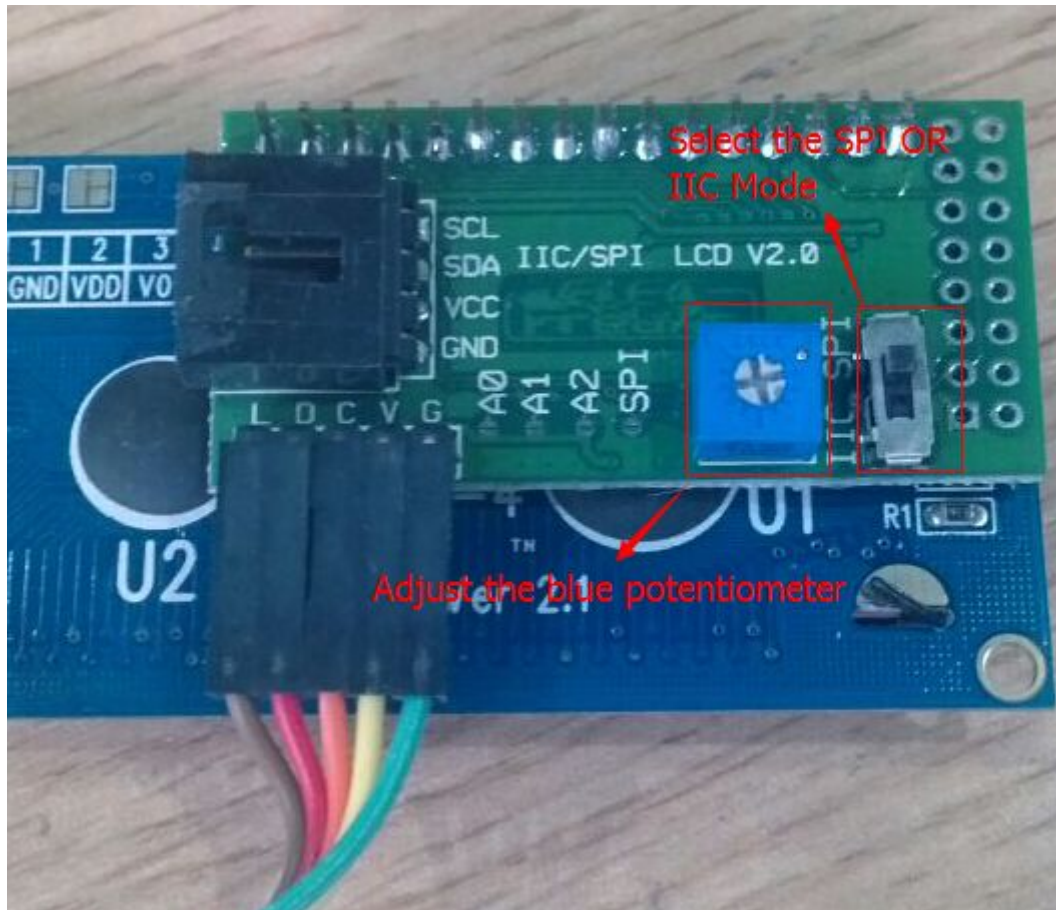


Pic 2

Detailed Wiring Diagram of XPAD Module & Arduino UNO / MEGA 2560

XPAD Module	Arduino UNO
GND	GND
+5V	+5V
3V3	3V3
IRQ	D2
A0	A0
SDA	A4
SCL	A5
GND	GND

PS: Wiring method of IIC SPI LCD MODULE & Arduino UNO: G-GND, V-VCC, C-D3, D-D4, L-D5; Switch the toggle switch on IIC SPI LCD MODULE to "SPI", and then adjust the blue potentiometer on the module until clearer characters appear on LCD display shown as follows:

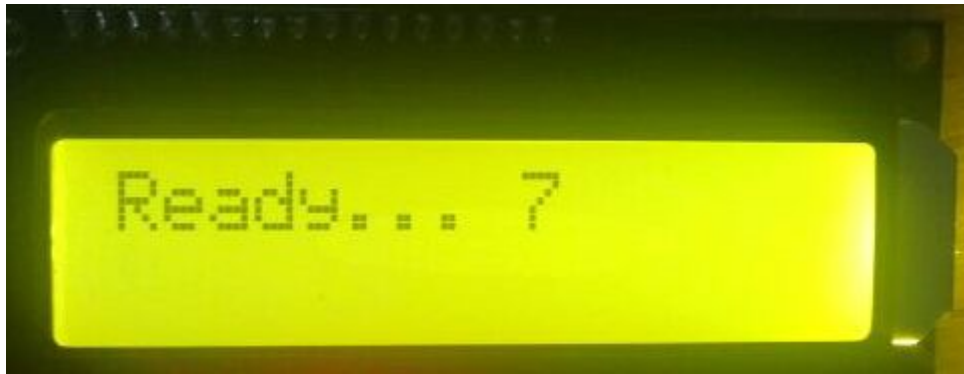


Step 2 Compile and Run the Arduino (1.0.5) IDE Code



Compile and run the Arduino (1.0.5) IDE code. Click (as Pic 1 shows) to download the code. Afterwards, check if there's anything displayed on the LCD, if no, make sure your wiring is correct and repeat the previous step.

(1) Once the LCD displays correctly, touch the module on key 1-8 and A-D. The LCD will display the corresponding key symbols. See Pic 3:



Pic 3

- (2) After the tests of the front buttons, press the patch switches on the back.
The characters will appear on the LCD as below (Pic 4):

