

# Keypad experiment

## Overview



This lesson will teach you how to use Keypad module, which is simple and easy to use.



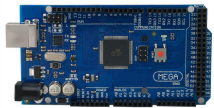
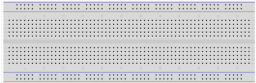

## Specification

Null

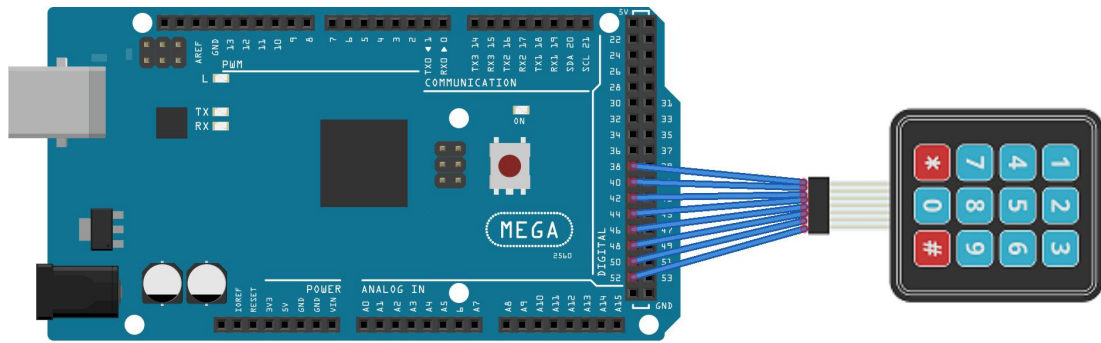
## Pin definition

Keypad	MEGA 2560
UP	D38
	D40
	D42
	D44
	D46
	D48
	D50
DOWN	D52

## Hardware required

Material diagram	Material name	Number
	Keypad	1
	USB Cable	1
	MEGA 2560	1
	Breadboard	1
	Jumper wires	Several

### Connection diagram



## Sample code

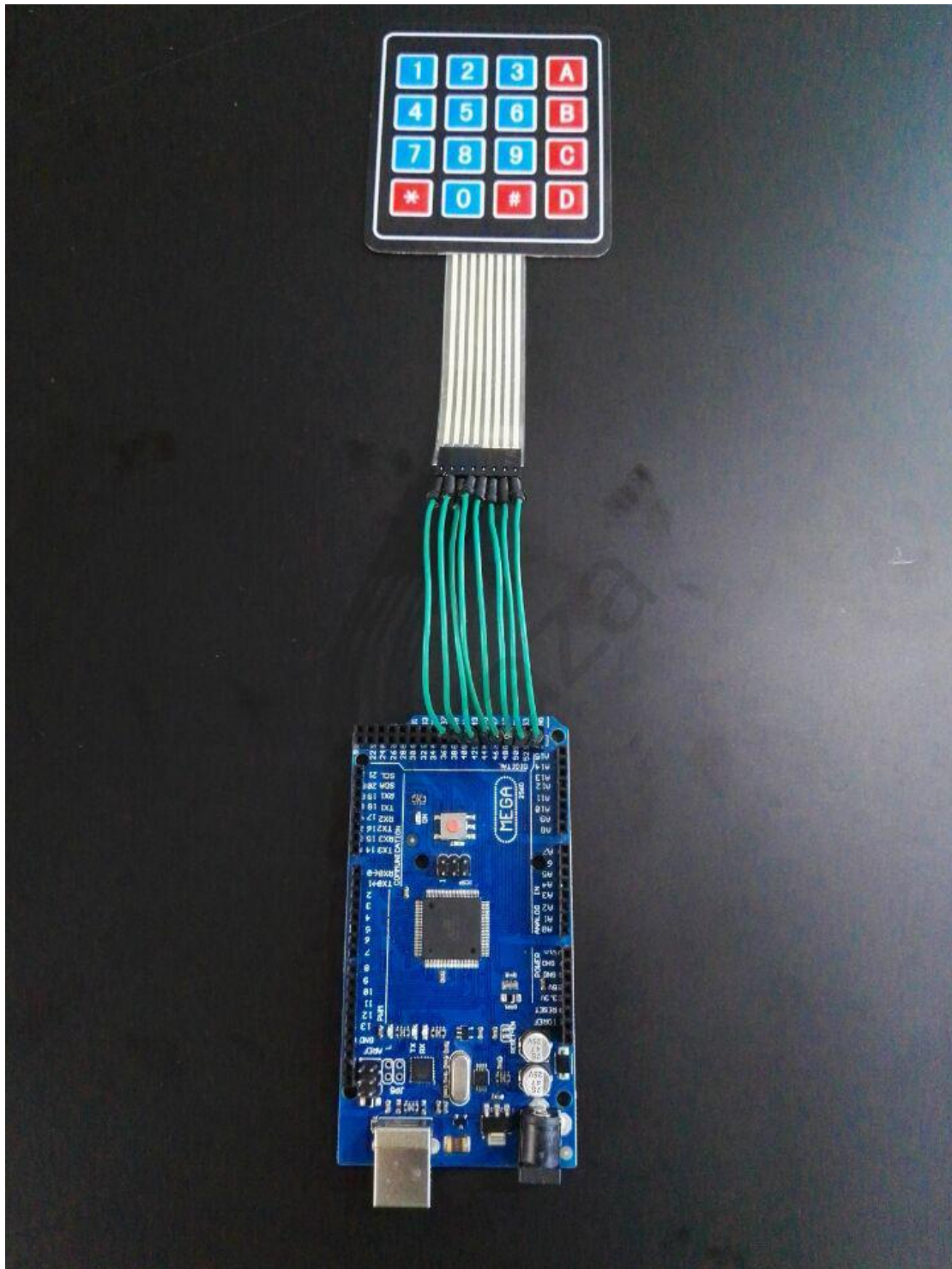
Note: sample code under the **Sample code** folder

You need to add the **Keypad** to the Arduino library file directory, otherwise the compiler does not pass. Please refer to '[How to add library files.docx](#)'.

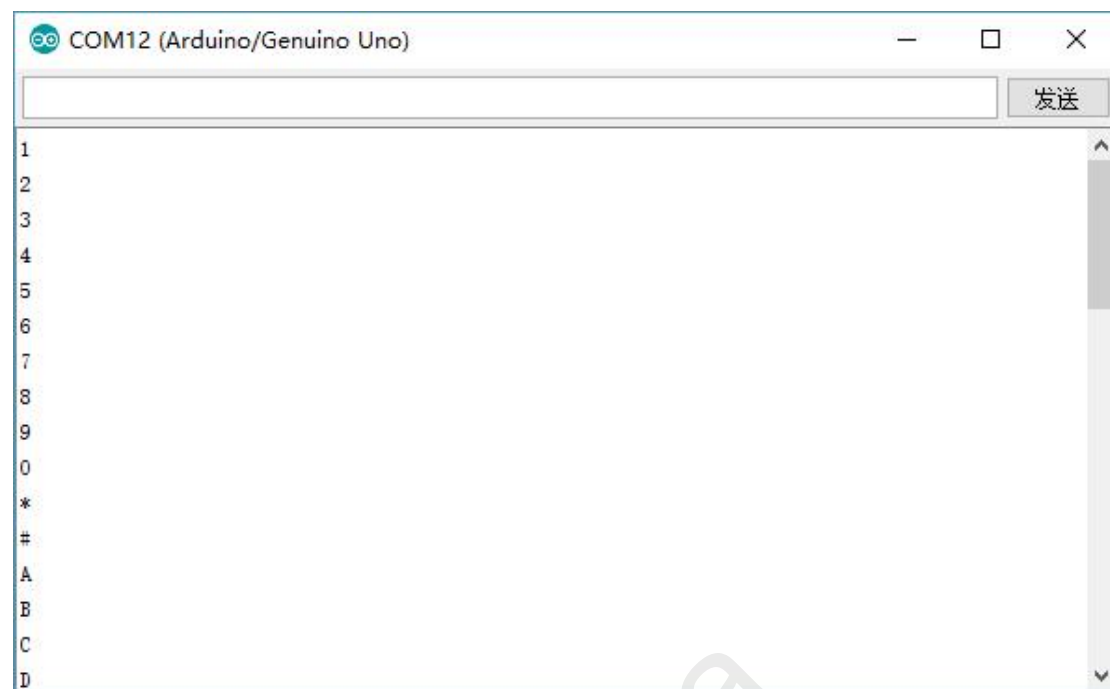
```
#include <Keypad.h>
const byte ROWS = 4; //four rows
const byte COLS = 4; //four columns
//define the cymbols on the buttons of the keypads
char hexaKeys[ROWS][COLS] = {
    {'1','2','3','A'},
    {'4','5','6','B'},
    {'7','8','9','C'},
    {'*','0','#','D'}
};
byte rowPins[ROWS] = {38, 40, 42, 44}; //connect to the row pinouts of the keypad
byte colPins[COLS] = {46, 48, 50, 52}; //connect to the column pinouts of the keypad
//initialize an instance of class NewKeypad
Keypad customKeypad = Keypad( makeKeymap(hexaKeys), rowPins, colPins, ROWS, COLS);

void setup(){
    Serial.begin(9600);
}
void loop(){
    char customKey = customKeypad.getKey();
    if (customKey){
        Serial.println(customKey);
    }
}
```

## Example picture



## Result



## Language reference

**Tips** : click on the following name to jump to the web page.

If you fail to open, use the Adobe reader to open this document.

[byte](#)

## Application effect

Open the serial port, and then press one of the buttons and the serial port monitor will be displayed.

\*\*\*\*\*

\* About Smraza:

\* We are a leading manufacturer of electronic components for Arduino and Raspberry Pi.

\* Official website: <http://www.smraza.com/>

\* We have a professional engineering team dedicated to providing tutorials and support to help you get started.

\* If you have any technical questions, please feel free to contact our support staff via email at [support@smraza.com](mailto:support@smraza.com)

\* We truly hope you enjoy the product, for more great products please visit our

Amazon US store: <http://www.amazon.com/shops/smraza>

Amazon CA store: <https://www.amazon.ca/shops/AMIHZKLK542FQ>

Amazon UK store: <http://www.amazon.co.uk/shops/AVEAJYX3AHG8Q>

Amazon DE store: <http://www.amazon.de/shops/AVEAJYX3AHG8Q>

Amazon FR store: <http://www.amazon.fr/shops/AVEAJYX3AHG8Q>

Amazon IT store: <http://www.amazon.it/shops/AVEAJYX3AHG8Q>

Amazon ES store: <https://www.amazon.es/shops/AVEAJYX3AHG8Q>

\*\*\*\*\*