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REF: **C11-KP4X4**

Keypad 4x4

Description

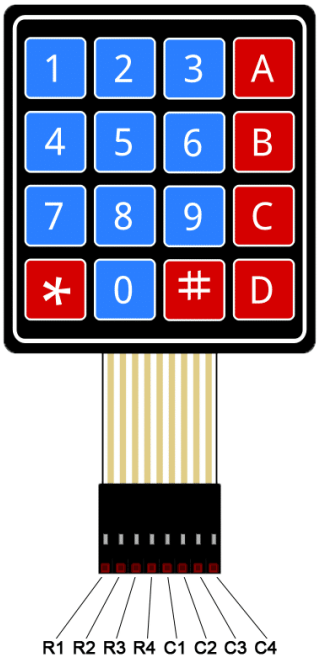
This keypad has 8 wires running from the bottom of the keypad, the wires connect in sequence from left to right and hook up to Arduino digital pin 2-9. You can get the Library from Arduino IDE, the following code below will allow you to test the keypad as each key is pressed, the corresponding character should appear on a separate line in IDE serial console. In order to reduce the number of I/O connections, as you can see, all rows and columns are wired together. If this were not the case, interfacing 16 individual pushbuttons, for example, would require 17 I/O pins, one for each pushbutton and one for a common ground. By connecting rows and columns, only 8 pins are required to control the entire 4×4 keypad. This technique of controlling a large number of inputs using fewer pins is known as Multiplexing.

Specifications

- Weight: 7.5 grams
- Keypad dimensions: 69mm x 77mm x 1mm (2.75" x 3" x 0.035")
- Length of cable + connector: 83mm
- Connector: Dupont 7 pins, 0.1" (2.54mm) Pitch
- Mount Style: Self-Adherence
- Max. Circuit Rating: 35VDC, 100mA
- Insulation Spec.: 100M Ohm, 100V
- Dielectric Withstand: 250VRms (60Hz, 1min)
- Contact Bounce: <=5ms
- Life Expectancy: 1 million closures
- Operation Temperature: -20 to +40 °C

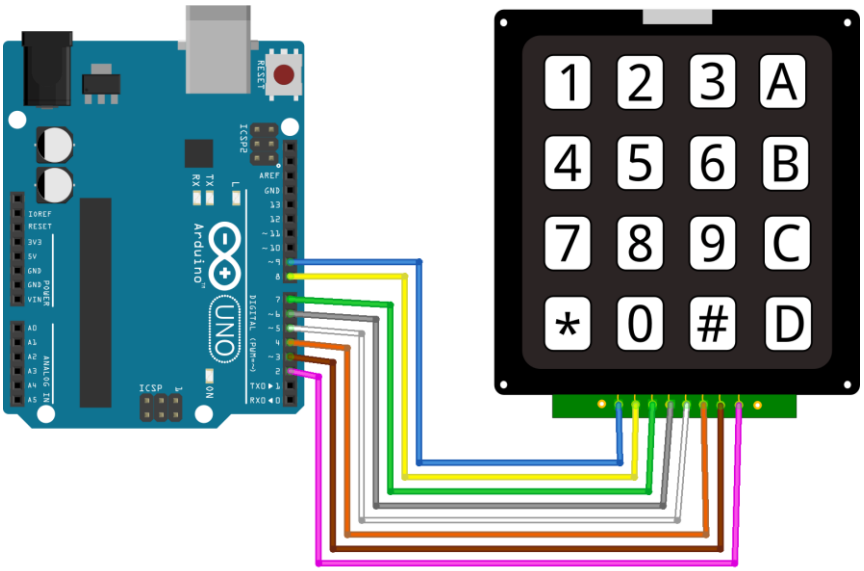
Pin diagram

The keypad has a female Dupont connector. When looking at the front of the keypad, the row pins are on the left, and they usually have a dark strip near the connector to help identify them. The pinouts are as follows:



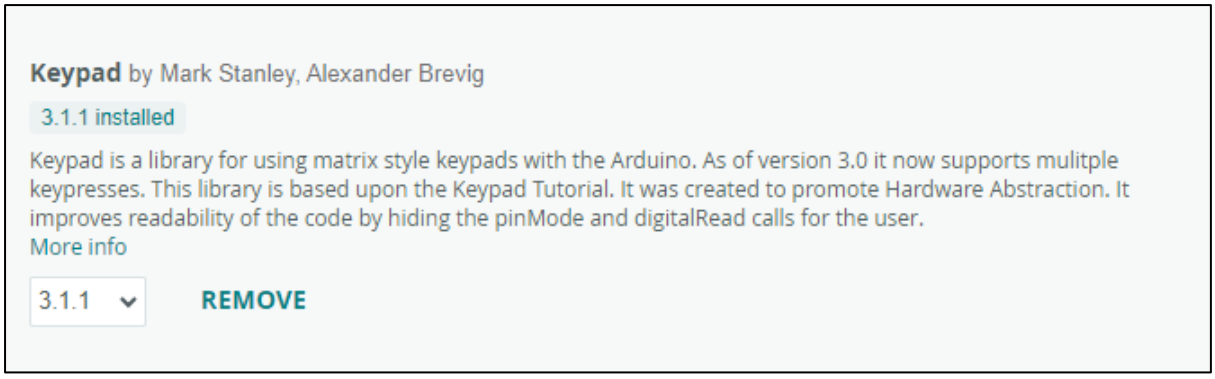
Circuit diagram

The connection is quite straightforward, as the Arduino connections are made in the same order as the keypad connector. Begin by connecting keypad pin 1 to Arduino digital pin 9. And continue doing the same with the subsequent pins (2 to 8, 3 to 7, and so on). The most convenient way to connect everything is to use an 8-pin male-to-male Dupont ribbon cable.



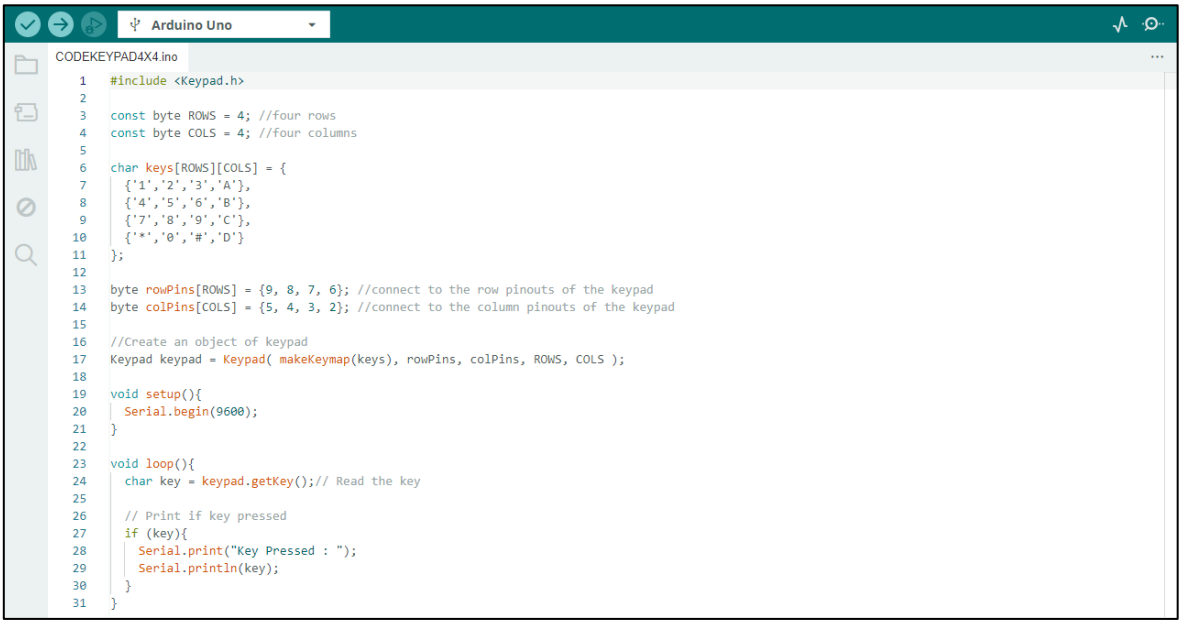
Library

Filter your search by entering 'keypad'. Look for Keypad by Mark Stanley, Alexander Brevig. Click on that entry and then choose Install.



Coding

The basic sketch below will print key presses to the Serial Monitor.



Result

After loading the sketch, open your serial monitor at 9600 baud. Now, press some keys on the keypad; the serial monitor should display the key values.