


(/tag/type-id/category-craft/channel-knitting-and-crocheting/) Yarn (/tag/type-id/category-craft/channel-knitting-and-crocheting/)

Using the sparkfun 12 Button keypad, with the arduino

by amando96 (/member/amando96/) in arduino (/tag/type-id/category-technology/channel-arduino/)

Download

 (/id/Using-the-sparkfun-12-Button-keypad-with-the-ardu/)

2 Steps

▶

+ Collection

I Made it!

♥ Favorite

🔊 Share ▼

🚩



(/file/ENVY/BLV/C69MIID5C/)

Hi guys, well bought this keypad, and wasn't exactly sure how to wire it up, because the pins aren't in order!

well, I will give you a schematic, and code to have it up and running in no time...

About This Instructable

👁 67.393 views

♥ 43 favorites

License:



amando96
(/member/amando96/)

Follow

67

(/member/amando96/)

Bio: I will try my best to provide cheap and easy intructables!

More by amando96:



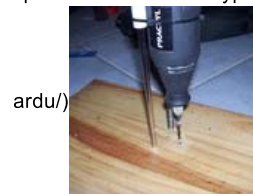
(/id/How-to-make-

custom-and-strong-tank-tracks-for-very/)



(/id/Using-the-

sparkfun-12-Button-keypad-with-the-



ardu/)

(/id/Mini-drill-

press-for-free/)

Step 1: Wiring



1, to arduino 7
 2, to arduino 5
 3, to arduino 8
 4, to arduino 2
 5, to arduino 6
 6, to arduino 3
 7, to arduino 4

The image says it all...

the resistors can be anything between 1Kohm, and 10Kohm.

they go from pin 3, 5, 6 and 7 to +5V.

Step 2: Code

Removed directly from the arduino.cc website, the only mod, was the pins i chose...

the code is attached, instructables won't let me paste it onto here for some reason...

The code will print the numbers of they keys you pressed, to the COM port.
 also, be sure to have the library "keypad" in your libraries folder, or this code will not compile.

To use similar, but not equal keypads, just grab your continuity tester, and press those buttons, you will easily find wich pins are for the rows, and wich are for the columns.

IF you need any help, just ask in the comments :)



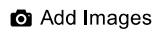
bubbububaaa.txt (/ORIG/F2Q/TFPH/G68HDAVO/F2QTFPHG68HDAVO.txt)



Keypad_1-0.zip (/ORIG/F8U/YHH8/G68H8QX3/F8UYHH8G68H8QX3.zip)



We have a be nice comment policy.
Please be positive and constructive.



Post Comment



jcameron-1 (/member/jcameron-1)

4 years ago

Reply

Thank you for this tutorial. I'm a Arduino newbie, so it was exactly what I was looking for to continue my vending project for my son. I was wondering if you had any examples of how to make a servo rotate if a correct "code" is put into the keypad? I've been searching like crazy but haven't come across any examples.



SamuelF5 (/member/SamuelF5) ▶ **jcameron-1 (/member/jcameron-1)**

Reply

hi! have you found the answer? I can help you, just email me:
samukafranco@gmail.com

2 years ago



amando96 (/member/amando96) (author) ▶ **jcameron-1 (/member/jcameron-1)**

4 years ago

Reply

Put the keys into an array, compare the array to a predefined array of the "correct" code with an if statement, if equal then rotate servo, if not beep or whatever, take things by parts, break down big algorithms into small algorithms and you have no trouble doing anything.



network41 (/member/network41)

6 years ago

Reply

I know little electronics than I should for what I'm doing but why do you say to wire contacts 3, 5, 6, 7 to resistors then 5v when you also say to connect them to pins on the Arduino. Surely you don't mean to connect it like that? I'd be much appreciated if you could clear my confusion.



clancylight (/member/clancylight) ▶ **network41 (/member/network41)**

Reply

hello, I'm wondering did you get this question answered? plug it into arduino pin and 5 volts? how?

4 years ago



amando96 (/member/amando96) (author) ▶ **network41 (/member/network41)**

6 years ago

Reply

Aye, look: <http://www.arduino.cc/en/Tutorial/Button> A resistor is needed, it might work without resistors, but they are keeping all the buttons high, without them the buttons will float and caus bad readings.



cavingboy92 (/member/cavingboy92)

5 years ago

Reply

I have a problem where the arduino program says, 'byte' does not name a type. If you know, how can I fix this problem?



amando96 (/member/amando96) (author) ▶ **cavingboy92 (/member/cavingboy92)**

5 years ago

Reply

Which board/program version do you have? probably something that changed, try uint8_t instead of byte



cavingboy92 (/member/cavingboy92) ▶ amando96 (/member/amando96)

Reply

I have the Arduino UNO SMD board. The arduino program that I have is Arduino 1.0. 5 years ago



nlepka (/member/nlepka)

6 years ago

Reply

on my keypad the pullup resistors are placed on 2, 4, 6, and 7... not 3, 5, 6, and 7

the keypads look identical, but after examining the circuitboard itself, it's clear to see where the resistors should be placed...

even though I managed to get power into my keypad, I still can't make my microprocessor react to it...

any idea why?



ble2nk (/member/ble2nk)

6 years ago

Reply

excuse me, datasheet show that key 2:1+2 and 0:1+4, with your pull-up connection both of that keys (2 and 0) will not connected to pull-up, what do you think?



dcloud102 (/member/dcloud102)

6 years ago

Reply

How did you know to put the resistor in the pins that you mentioned? Why not from pin 1 to 7? Thanks.



amando96 (/member/amando96) (author) ▶ dcloud102 (/member/dcloud102)

6 years ago

Reply

not exactly sure what I was thinking at the time, but it seems okay, keypads tend to be wired like this: http://www.o-digital.com/uploads/2179/2191-1/12_Key_Membrane_Switch_Keypad_848.jpg (http://www.o-digital.com/uploads/2179/2191-1/12_Key_Membrane_Switch_Keypad_848.jpg)

so pins 3, 5, 6 and 7 are for the horizontal connections, so no matter what button I press it will always have a resistor, I could have put the resistors on the vertical connection side, it would work, It even worked without resistors, but you never know, it's not good to leave floating pins.



dcloud102 (/member/dcloud102) ▶ amando96 (/member/amando96)

Reply

Thanks for the help Amando96. Working great now. 6 years ago



dcloud102 (/member/dcloud102)

6 years ago

Reply

I have question, so how did you know to connect the resistors to pin 3,5,6 and 7? Why not pin 1,2,3,4,5,6, and 7? What is the logic to putting the resistor in place where it is?



shyguy567 (/member/shyguy567)

7 years ago

Reply

This is probably a stupid question, but Pins 3, 5, 6, and 7 should be connected to the 5V power supply and the Arduino or will the Arduino supply the power?

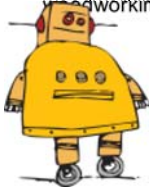


7 years ago

Reply

Newsletter

I'm in!



FEATURED CHANNELS

About Us

Help (/id/how-to-write-a-great-instructable/)

Sitemap (/sitemap/)

Google+ (<https://plus.google.com/+instructables>)

© 2016 Autodesk, Inc.