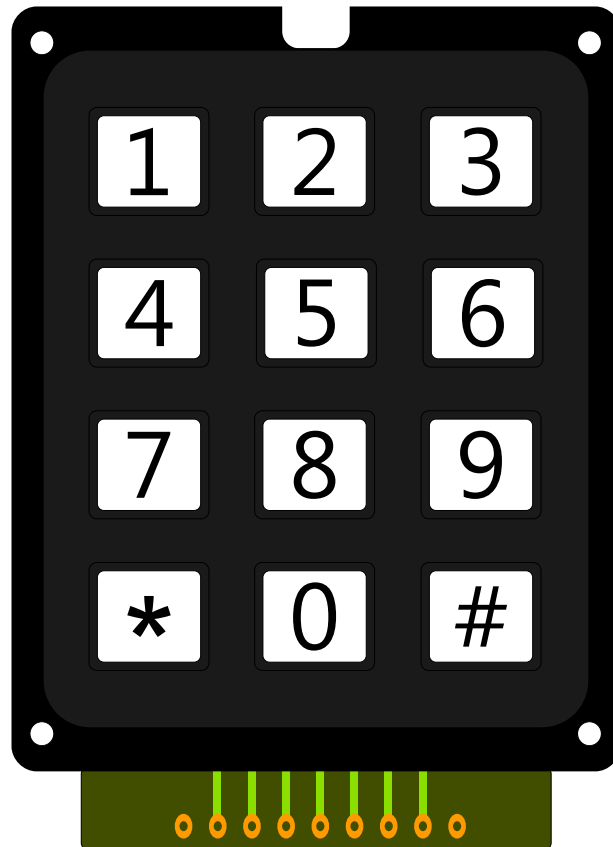


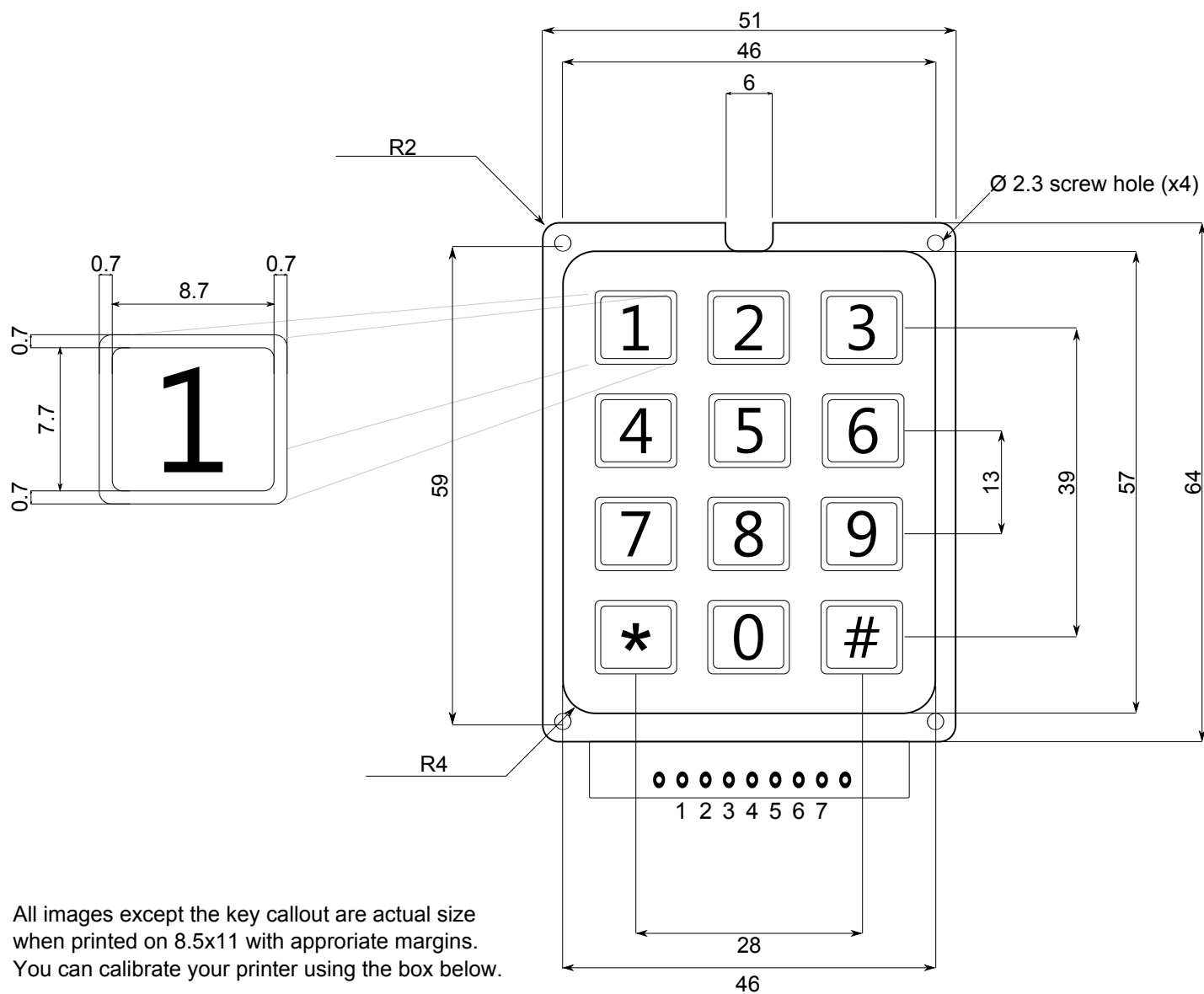
# COM-08653



## DISCLAIMER:

This document is the result of an obscene amount of work and research because I really wanted to make a nice wood case / bezel using Ponoko for a project I'm working on. Literally everything in this document might be wrong and if you waste money or injure somebody based on this document, it's your own look out. If you can and want to correct any of the information here, contact [andrew@amorrow.com](mailto:andrew@amorrow.com).

# Mechanical



All images except the key callout are actual size when printed on 8.5x11 with appropriate margins. You can calibrate your printer using the box below.

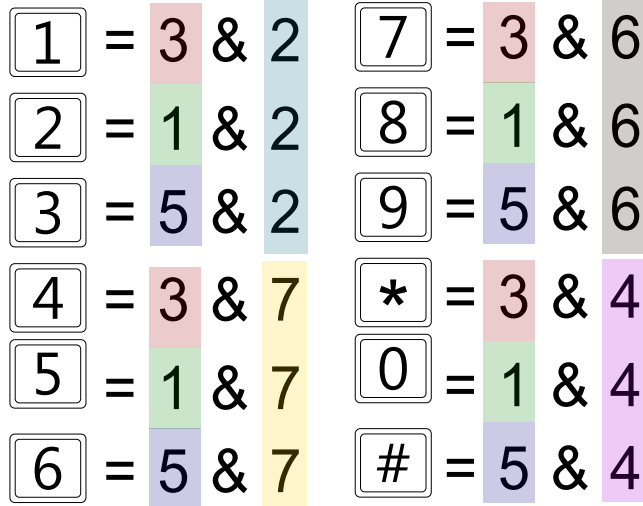
10mm  
(1cm)

# Electrical

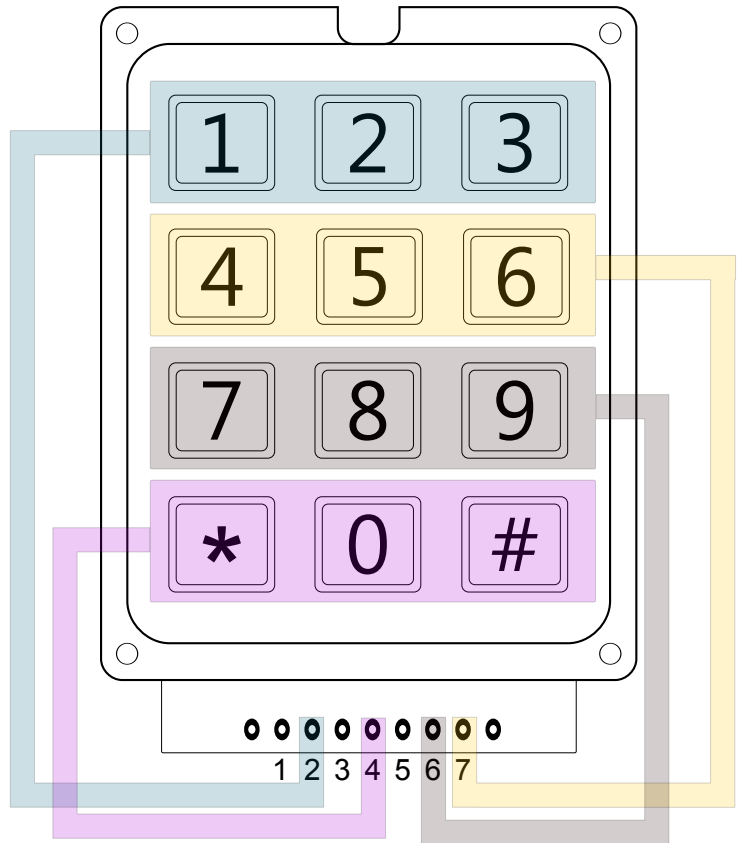
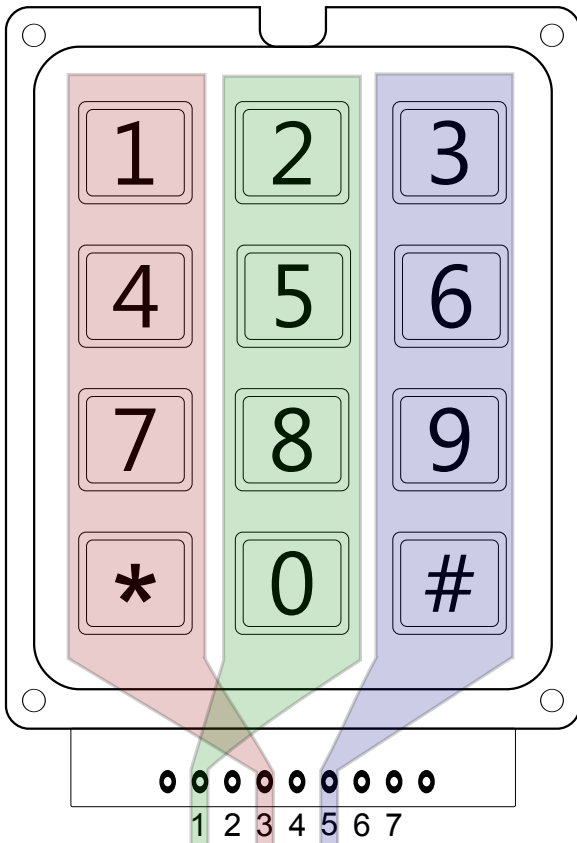
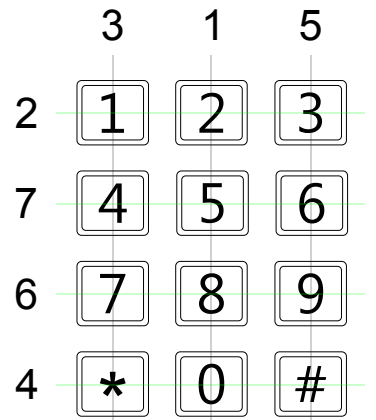
PushButtons: Columns + Rows

This is the same information in several different ways.  
I've gotten requests to visualize it differently, so why fight it?

- 1: 3+2
- 2: 1+2
- 3: 5+2
- 4: 3+7
- 5: 1+7
- 6: 5+7
- 7: 3+6
- 8: 1+6
- 9: 5+6
- \*: 3+4
- 0: 1+4
- #: 5+4



Keypad Columns: 3,1,5  
Keypad Rows: 2,7,4



# Arduino information

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Thanks to Jim Winburn for additional Arduino related info, and for changing the groupings on the pin layouts. MUCH more clear now!

Keypad Pin 3     Arduino digital 2  
Keypad Pin 1     Arduino digital 3  
Keypad Pin 5     Arduino digital 4

Keypad Pin 2     Arduino digital 5  
Keypad Pin 7     Arduino digital 6  
Keypad Pin 6     Arduino digital 7  
Keypad Pin 4     Arduino digital 8

Notice the rowPins and colPins below in the sample code example:

// example from Arduino playground: <http://www.arduino.cc/playground/Code/Keypad>

```
#include <Keypad.h>

const byte ROWS = 4; //four rows
const byte COLS = 3; //three columns

char keys[ROWS][COLS] = {
  {'1','2','3'},
  {'4','5','6'},
  {'7','8','9'},
  {'*','0','#'}
};
byte rowPins[ROWS] = {5, 6, 7, 8}; //connect to the row pinouts of the keypad
byte colPins[COLS] = {2, 3, 4}; //connect to the column pinouts of the keypad
```

# Sources

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2-24-2011

<http://www.sparkfun.com/products/8653>

<http://www.tenrod.com.au/pdf/accord/keypads.pdf>

<http://www.accordia.com.tw/html/tel/index.htm> (AK-304-BBW)

<http://www.accordia.com.tw/html/tel/imagepages/imagepg11.htm>

[http://www.idpcorp.net/product\\_expertise/silicone\\_keypads/stock\\_keypads/technical\\_information.html](http://www.idpcorp.net/product_expertise/silicone_keypads/stock_keypads/technical_information.html)

# Changes

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2-24-2011

5-5-2011

- changed part # to Sparkfun COM-08653
- added link to tutorial

6-27-2011

- changed grouping on column/row pins for clarity - Thanks Jim
- Added source for Arduino with new grouping
- Added new visualization for pin mapping
- Split document into multiple pages