What is the MaKey MaKey?

The MaKey MaKey is a collaborative project between Jay Silver and Eric Rosenbaum of the MIT Media Lab and us here at SparkFun Electronics. It's an invention kit that encourages people to find creative new ways to interact with their computers. For more information visit: www.sparkfun.com/makeymakey

Create custom computer inputs.

The MaKey MaKey plugs into your computer via a standard USB cable. Then, using alligator clips, a world of everyday objects (anything that's even slightly conductive) can be connected into the MaKey MaKey. The MaKey MaKey converts your newly-found inputs into keyboard presses or mouse control. For example, you could replace your space key with a banana, use Play-Doh to move and click your mouse, or high-five your best friend to advance PowerPoint slides.

The MaKey MaKey uses very high resistance switching to detect when any of its 18 inputs are activated. It communicates with your computer using the standard USB Human Interface Device (HID) specification, so your computer just thinks it's a boring old mouse/keyboard. On top of that, the MaKey MaKey is also an Arduino-compatible platform, so users can easily re-map any of the keys, or further customize it to their needs.

Some things you can make with the MaKey MaKey platform:

- Pencil-Drawn Game Controller
- Houseplant Powerpoint Trigger
- Clay Mouse
- Banana Piano
MaKey MaKey - Top Side

[Diagram showing connections]

- SPACE to Up
- CLICK to Down
- Arrow to Left
- Arrow to Right
- (Left Click on Mouse)
- SPACE to Space Bar on Keyboard
- EARTH

[Note]
These connections go to earth, which is the same as ground. See page 12...
MaKey MaKey - Bottom Side

- Controls your keyboard inputs “W-A-S-D-F-G”.
- LED

mini USB hub
(put your USB cord in here)

Output/Expansion

Controls your mouse inputs.

(These headers offer six more connections to earth, aka ground.)
Banana Spacebar

Learn how to turn a banana into a spacebar. Instead of using the computer keyboard buttons to play the piano, you hook up the MaKey MaKey to the bananas.

Your First Circuit

1 Connect the board to your computer via USB.
While holding the ground in one hand, touch the banana with your other hand. If your MaKey MaKey is connected to your computer with the USB, each time you touch the banana, the spacebar command will work.

A short list of materials that can be used with the MaKey MaKey:

This is not a comprehensive list by any means. Anything even slightly conductive should work.

**PARTS:**
- Tin Foil
- Coins
- Graphite Pencils
- Silverware
- Humans
- Plants
- Fruits
- Water
- Marshmallows
- Copper Tape
- Play-Doh
- Conductive Thread
For more information check out:

MaKeyMaKey.com

For more advanced tips: www.sparkfun.com/makeymakey