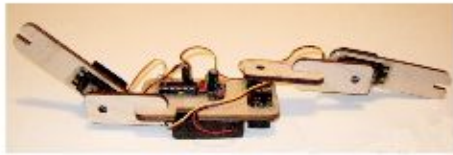


# TWITCHIE!

VO.6 APRIL 2008

TEUTHIS.COM MAKEZINE.COM



Welcome to the Twitchie hardware instructions page! Assembling Twitchie is easy. Just solder the parts in place as shown in the parts placement diagram. There will be some pads left unfilled; those are there for further hacking if you wish to do so. The chip is already programmed and ready to go. You do not need to program it unless you want to change Twitchie's behavior. Once assembled, insert 4 AA batteries and turn Twitchie on. Wait about ten seconds for startup.

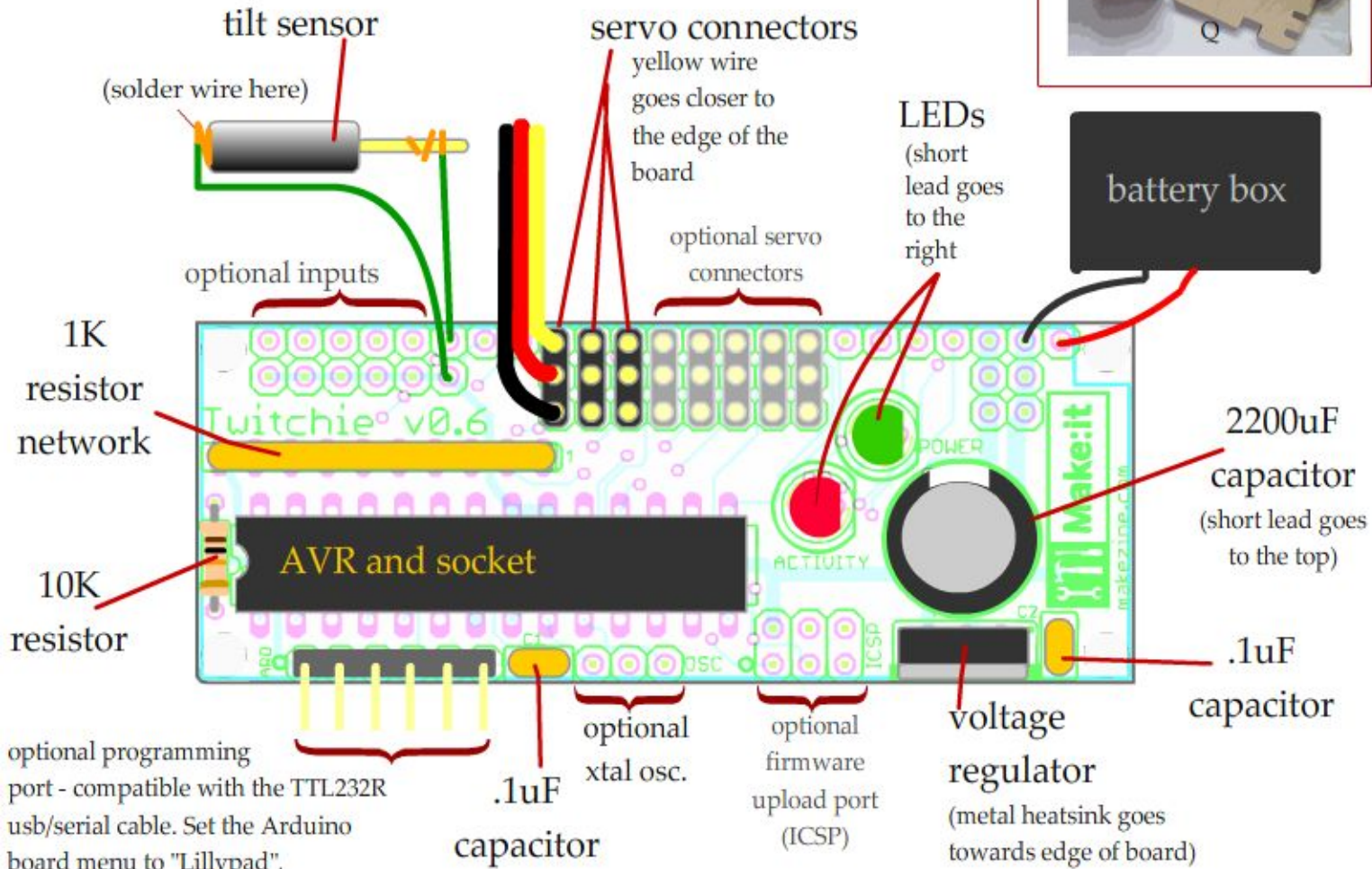
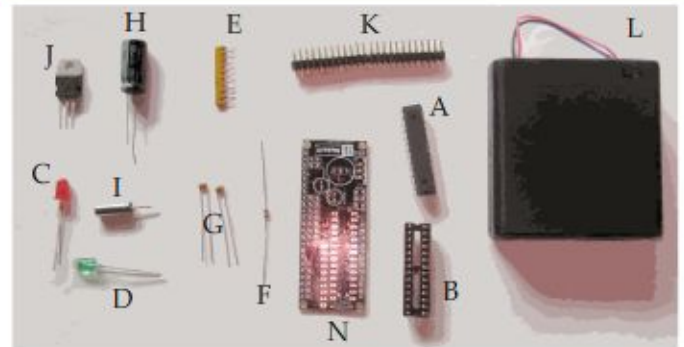
You can configure the servos and the wooden parts however you like. We have had good luck using hot glue to hold all the parts together. It works very well. Small #2 or #4 wood screws work too.

Twitchie is an open source project, and all the files you need to make one from scratch are available for free at [teuthis.com](http://teuthis.com).

Have fun!

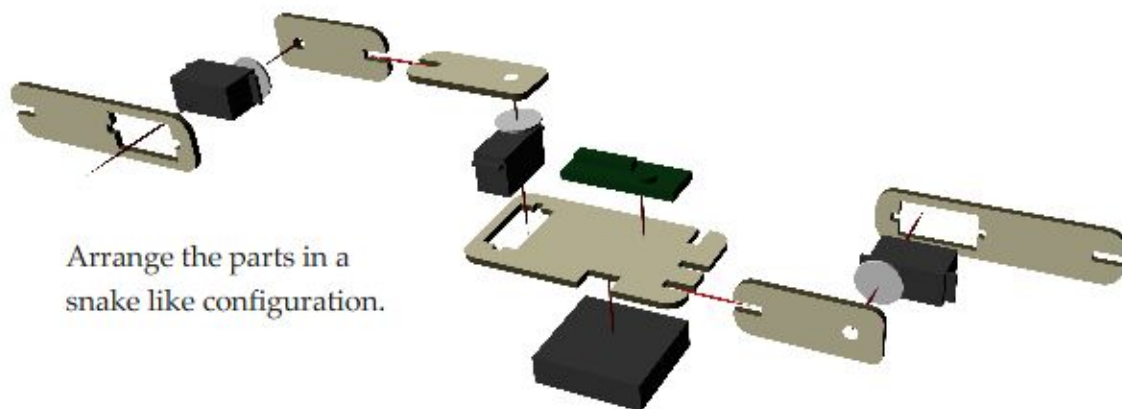
## Parts checklist:

- |   |   |
|---|---|
| <input type="checkbox"/> A) AVR                 | <input type="checkbox"/> I) tilt sensor       |
| <input type="checkbox"/> B) 28 pin DIP socket   | <input type="checkbox"/> J) voltage regulator |
| <input type="checkbox"/> C) red LED             | <input type="checkbox"/> K) pin headers       |
| <input type="checkbox"/> D) green LED           | <input type="checkbox"/> L) battery box       |
| <input type="checkbox"/> E) 1K resistor network | <input type="checkbox"/> M) servos (3)        |
| <input type="checkbox"/> F) 10K resistor        | <input type="checkbox"/> N) circuit board     |
| <input type="checkbox"/> G) .1uF capacitors (2) | <input type="checkbox"/> O) servo horns (3)   |
| <input type="checkbox"/> H) 2200uF capacitor    | <input type="checkbox"/> P) servo mounts (2)  |
|   | <input type="checkbox"/> Q) main body         |



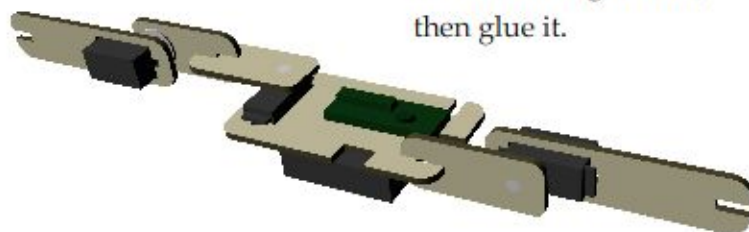
There are many ways to assemble a Twitchie. For example...

# TWITCHIE V0.6

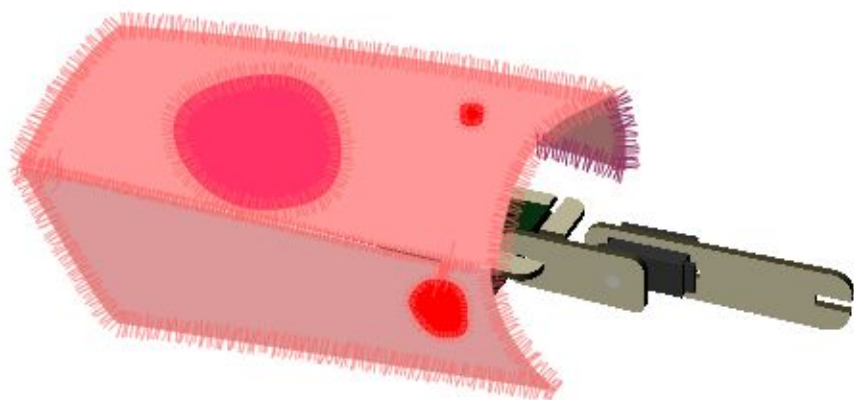


Arrange the parts in a snake like configuration.

Test the configuration, then glue it.



Add some sort of outer covering. It doesn't need to be very complicated. Just a slightly loose tube or sack is about the best thing. Fake fur works great as long as it's not too tight. Same goes for knits and stretchy fabric.



Things we have tried: old socks, tube scarves, stuffed animals with most of the padding removed, feather boas, hand knitted fabric, and shirt sleeves.

Use a zipper or some velcro to provide access to the battery compartment.

Finished!

Twitchie is an open source project. You may download the source code, the schematics and the CAD files all for free at [teuthis.com](http://teuthis.com). For more information on Twitchie and all the many ways to hack it, go to:

[teuthis.com](http://teuthis.com) [makezine.com](http://makezine.com)