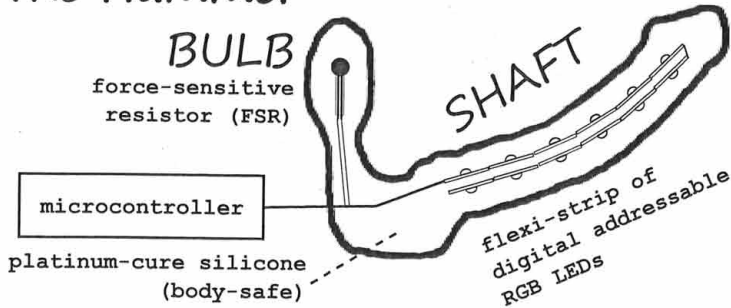# THE HAMMER · CAN YOU RING · TEST YOUR STRENGTH!

A do-it-yourself, muscle-controlled, light-up dildo

project by
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The Hammer

BULB
force-sensitive resistor (FSR)

SHAFT

microcontroller

flexi-strip of digital addressable RGB LEDs

platinum-cure silicone (body-safe)

The Hammer is a silicone toy consisting of a **bulb** instrumented with a force sensor and a **shaft** containing a strip of LEDs. The bulb is inserted into a vagina or anus. The Hammer gets its name from a carnival-style Test Your Strength game: When the wearer squeezes, the shaft illuminates. The harder the squeeze, the brighter it gets!
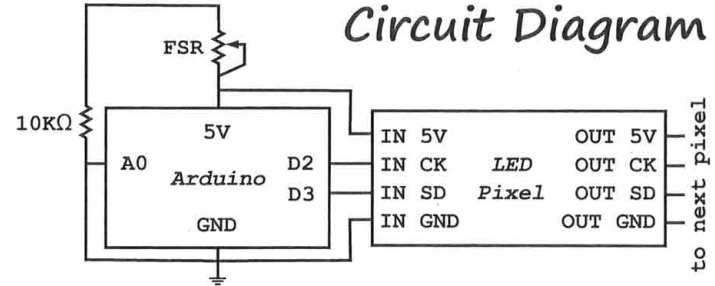
Build a Hammer and...

☆ Receive visual feedback for Kegel exercises or physical therapy
☆ Have a lightsaber duel
☆ Get a blowjob or handjob in the dark
☆ Watch the Hammer change color as you orgasm

... or anything else you can program!

Materials

- Strap-in toy to copy (like a Feeldoe®)
- Platinum-cure silicone
    I use Smooth-On Dragon Skin® for making molds and SORTA-Clear® for casting.
- Force-sensitive resistor plus a 10K ohm pull-down resistor
- Flexi-strip of digital addressable RGB LEDs
    I recommend finding a strip that uses the WS2801 LED driver.
- Microcontroller which can supply 5V power

Circuit Diagram

			LED Pixel	
	FSR	IN 5V		OUT 5V
10KΩ	A0 5V	IN CK		OUT CK
	Arduino D2	IN SD		OUT SD
	D3	IN GND		OUT GND
	GND			to next pixel

Assembly & Programming

1. Make a mold of your strap-in toy. Make sure to use plenty of silicone-compatible mold release on your original!
2. When casting your Hammer, you can basically just embed the sensor and the LEDs into the silicone as-is.
3. To program the Hammer to act as a Test Your Strength game, your code will need to:

```
* Calibrate for the min/max sensor values it sees
* For a given sensor value (or moving average
    of values), compute how many LEDs to light
* Light the LEDs
* Obtain a new sensor value and repeat
```

The Hammer is an exercise in **technological empowerment for sexuality and pleasure**. How do we enable people to build and modify objects around them so they can have the kinds of experiences that they want to have? For more details on this and other projects, visit **www.toymakerproject.com**.