

# Circuit Bending, Hardware Hacking, Performance Technology

## Introduction



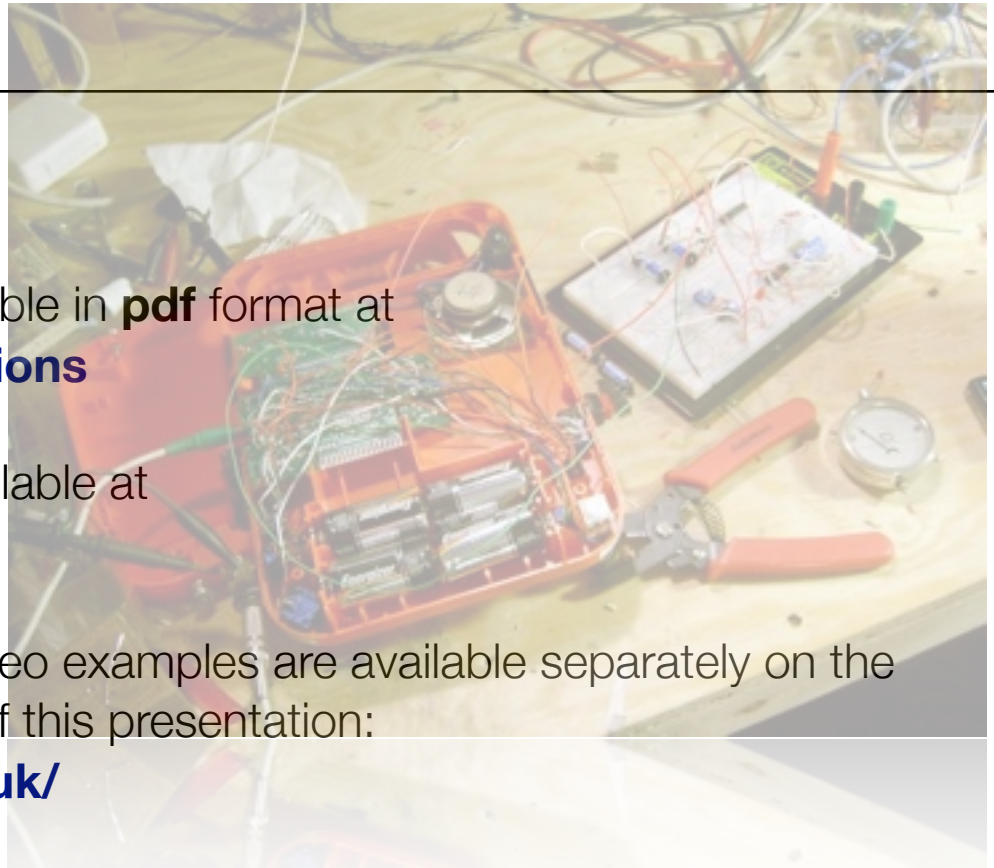
Richard Hoadley  
2014  
v1.000

## Note

This presentation is available in **pdf** format at  
[rheadley.org/presentations](http://rheadley.org/presentations)

Further information is available at  
[rheadley.org/sonicart](http://rheadley.org/sonicart)

Most of the audio and video examples are available separately on the WebCT implementation of this presentation:  
<http://webct.anglia.ac.uk/>



## Laboratories (Bry 015)

- demonstrations (~1hr) and practicals (~1hr)

## Lectures (Hel040)

- Website
- VLE
- Facebook group
- **Makespace**

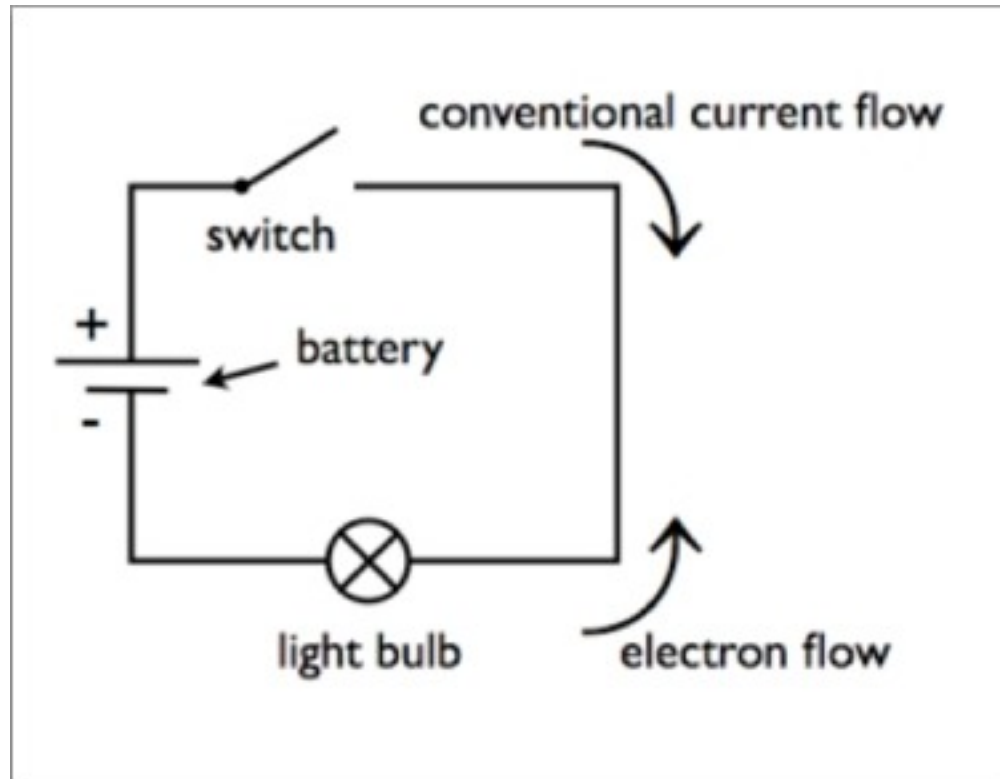
- If you don't have the parts, you can't do the practical
- Bring along cameras, etc., and you'll be able to complete many of the tasks straightaway.
- Practicals are not 'compulsory', but you're recommended to make use of them in one way or another, maybe to get more
- Components

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**previous** examples

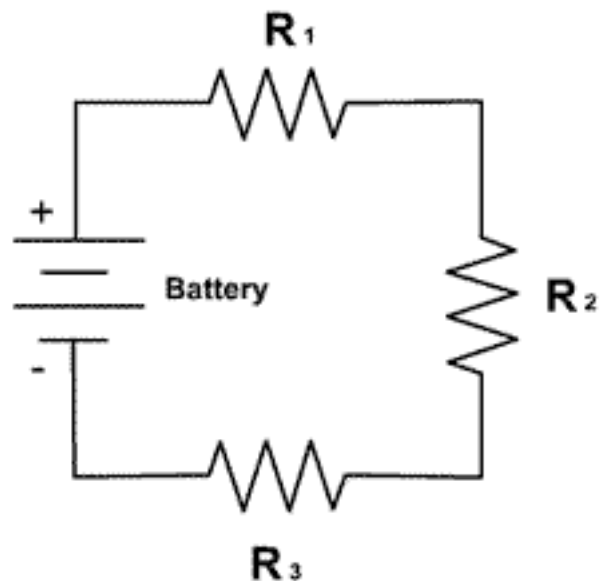
- Disruptive technology and disruptive innovation
- Basic Electronics 1: resistance

A circuit





## Circuit diagram with resistors



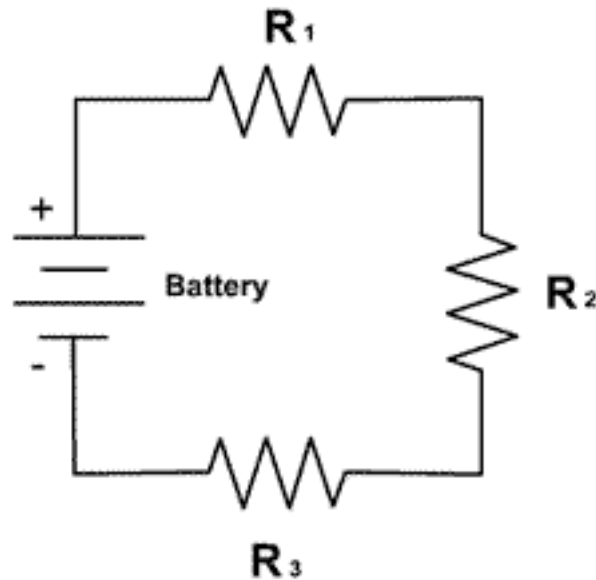
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Colin Cunningham's introduction to resistance for Make TV (5:08)



<http://www.youtube.com/watch?v=VPVoY1QR0Mg>

## Circuit diagram with capacitors



Video about the capacitor (8:01)



<http://www.youtube.com/watch?v=ZYH9dGI4gUE>

Incidentally, there are lots more videos here:

**<http://www.youtube.com/user/makemagazine/videos>**

with more that are specifically aimed at basic users here:

**<http://www.youtube.com/playlist?list=PL970BF3F6D77B12E8>**

## **Simulations:**

**These can be pretty useful to get an idea of how things work without the problems**

- <http://phet.colorado.edu/en/simulation/resistance-in-a-wire>

## **Circuit Construction:**

- <http://phet.colorado.edu/en/simulation/circuit-construction-kit-dc>

- <http://fritzing.org/>
- **MacSpice**
- Presentations
  - NIME papers
  - Organise presentations
  - Claim via Facebook.
- **Circuit Bending Videos**

## Major Practitioners

Nicolas Collins (nice talk: <http://www.youtube.com/watch?v=F7DQXh4IXsk>)

Rheed Ghazala



## **Bry015 Laboratory**

Access to Bry 015

**The Materials list and local and online Suppliers**

How to Solder

**<http://www.ladyada.net/learn/soldering/thm.html>**

Batteries, wall-warts, power supplies

**Task 1: Cable: Make your own cable  
(0%)**

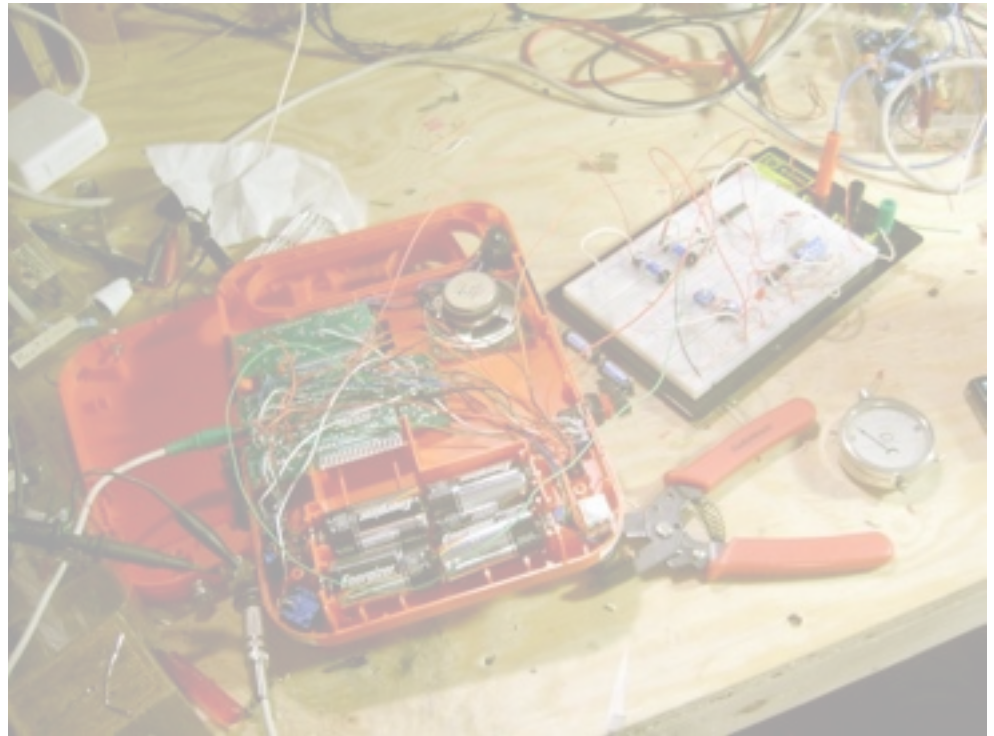
**Task 2: Laying on of Hands and Hacking  
the Clock (10%)**

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Other **Presentations**

<http://rheadley.net/presentations>

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12/05/07 01:50