

## Nicolas Collins

### Hardware Hacking Workshops

### 2012

Participants should bring the following supplies:

- A portable, battery-powered radio or boombox, with appropriate batteries. Make sure it works! It should be cheap enough that you won't be too angry if it never works again. The AM band is more important than FM, but it doesn't matter if the radio picks up both. It should have analog tuning (i.e., a dial) rather than digital presets or scan buttons. Larger radios are easier to work with than tiny ones, and older ones always sound better than new ones. It should have a built-in speaker, not just a headphone jack. And most importantly: IT MUST BE BATTERY POWERED! Beware: an alarm clock radio with a built-in "backup battery" is not suitable, since it requires AC power to function as a radio.
- Two or more battery powered, sound-producing toys, with appropriate batteries. As with the radio, select a toy that is expendable, not too tiny, and has a built-in speaker. A toy that makes sound is preferable to a mute one, and sampled sounds (like voices, animal sounds or instruments) are more useful than simple beeps. The more buttons and switches the better, generally speaking, although musical keyboards often have limited potential for interesting modification. Toys manufactured in the last 10 years are un-hackable – please try to find older, used toys. And, of course: THEY MUST BE BATTERY POWERED!
- One or more raw loudspeakers of any size (just the speaker, not enclosed in a cabinet/box).
- Three nine-volt batteries.
- A small piece of corroded or rough-surfaced scrap metal.
- A soldering iron (lightweight, fine point), holder and solder.
- Hand tools (diagonal cutters, wire strippers, a knife, etc.).
- Optional: an expendable cassette player of some sort (Walkman, boombox, etc.)