## Raspberry Pi First-Time Hacker Day

University of Sheffield, Department of Computer Science / Access Space

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### **Getting Started**

Take the Pi out of its box and plug it in following the instructions on the "Quick Start Guide". To log in: user = pi, user = raspberry.

# **Singing Jelly Baby**

First shut down you Pi and build the circuit (see below), then do this stuff from the "command line":

```
1. create a work directory
```

- mkdir work
- o cd work
- 2. install Wiring Pi
  - wget -0 wp.deb -r tinyurl.com/wiringpi
  - o sudo dpkg -i wp.deb
- 3. get the code
  - wget -0 jb.sh -r tinyurl.com/pijellybaby
  - o chmod +x jb.sh
- 4. get the sound effects
  - wget -O police.wav -r tinyurl.com/policewav
- 5. run the thing
  - o sudo ./jb.sh

#### This example uses Shell Script:

```
#!/bin/bash
sudo amixer cset numid=3 1
gpio mode 8 up

while :
do
   if [ `gpio read 8` = 0 ]
   then
      echo "time to sing!"
      aplay police.wav &
   fi
   echo "time to sleep..."
   sleep 1
done
```

# **Traffic Lights**

See below...

## Stay Safe!

You must change the password on the Pi next time you start up...

## Keep in touch...

The Department of Computer Science: <a href="http://shef.ac.uk/dcs">http://shef.ac.uk/dcs</a>

Access Space:

http://access-space.org/

Pi GATE: http://pi.gate.ac.uk/





