Installation Instructions

Installing software

To install the AirPi software, first set up your Raspberry Pi with Raspbian. The easiest way to do this is to follow the Quick-Start guide here:

http://www.raspberrypi.org/wp-content/uploads/2012/04/quick-start-guide-v2_1.pdf

Once you have connected your Raspberry Pi to the internet, enter the following commands at the command line (note the capitalisation):

```
cd ~
```

```
git clone https://github.com/tomhartley/AirPi.git
```

Note the capitalisation. This downloads the AirPi code from the GitHub repository. The advantage of this is that it is easy to update when the code is changed.

```
sudo apt-get install python-smbus i2c-tools python-setuptools
```

Press Y when prompted to continue with installation. The final piece of software to be installed is a python module called requests, for making web requests (used for uploading to Xively).

```
sudo easy_install requests
```

I2C setup

The final stage in setting up your Raspberry Pi to work with the AirPi code is to enable I2C. This is used for communicating with the BMP085 sensor. First begin by entering the following command:

```
sudo nano /etc/modules
```

Then add the following two lines to the end of the file:

```
i2c-bcm2708
```

```
i2c-dev
```

Exit by pressing *ctrl-x*, followed by *y* to confirm you want to save, and ↵ *(enter)* to confirm the filename.

Finally, unblacklist i2c by running the following command:

```
sudo nano /etc/modprobe.d/raspi-blacklist.conf
```

Add a *#* at the beginning of the line “blacklist i2c-bcm2708”. Then exit in the same way as last time.

Restart your Raspberry Pi with the following command:

```
sudo reboot
```

Software setup

First, go to Xively and create a new account. Once you've done that, add a device, and set the privacy to Public. You should then be taken to a page with your feed ID (a 10 digit number) and API key (a very long string of numbers and letters). Back on the Pi, enter the following two commands:

```
cd AirPi
```

```
sudo nano outputs.cfg
```

Enter your Xively API key and Feed ID in this file, then exit with ctrl-x.

If you have a 256MB Raspberry Pi (the first Model B version released), you will need to change the two instances of “i2cbus = 1” in *sensors.cfg* to “i2cbus = 0”.

If you’re using a standard AirPi V1.2 kit, this should be all the configuration required to let it upload to the internet. To start it uploading, type the following command:

```
sudo python airpi.py
```

To stop uploading and quit python, you can press *ctrl-c*.