

How to build a Pirate Radio?

Introduction

Hacking is fun. Hardware and software tinkering is common even more! That's what the **Pirate Radio** is about. Combining a some parts with a few lines of codes and off you go to be your own radio station.

Basically the Pirate Radio is not too much of magic as it may seem at a first glance. A Raspberry Pi, a few common electronic tinker parts and a software called PiFM, enable you to air whatever content you would like to over radio waves. Low in budget, short time in realization, waste effect(s).

May be [Video Killed The Radio Star](#), however the Pirate Radio is a hackers' answer, on how to reanimate the Radio culture!



Please note, some frequencies are reserved for specific services **only**. Do not overmodulate these services with the help of the Pirate Radio. Consider [4].

Parts / Tools List

Parts

Item	Quantity
Raspberry Pi (Model A or B)	1
Micro USB cable or adapter (5V 1200 mA)	1
(Micro) SD Card (8GB recommended)	1
Female Jumper Wire Connector (2.54mm)	1
Heat Shrink Wire Cable	1

Tools

Item	Quantity
Soldering Iron Station	1
AWG 12 Cooper Wire	1

Flash the SD card

Flashing the card with your favourite operating system is crucial for the radio to work, as you've probably imagined already. We recommend to install [Arch Linux](#) though. Why? Because, it's (1) light weighted, (2) well structured, (3) it has a very resourceful [wiki](#) and (4) is simply awesome.

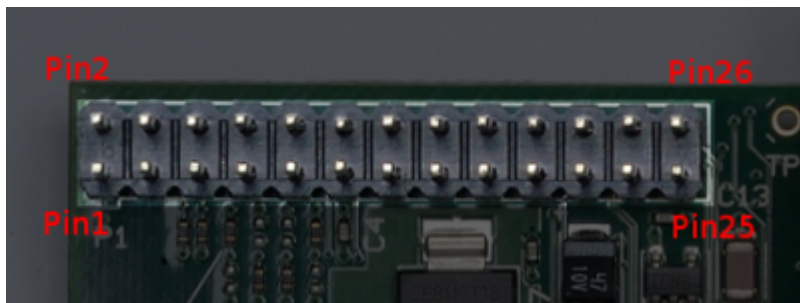
Find the image file and installation instructions [here](#).

PiFM

Log on to your system and download the relating software you need to transmit your messages!

```
<sxh bash> [user@hostname ~]$ wget -no-check-certificate  
https://download.c3l.lu/dlbase/scripts/Pifm.tar.gz </sxh>
```

Increase the range



Tuning in!

References

[0] <http://www.raspberrypi.org/>
[1] <http://makezine.com/projects/make-38-cameras-and-av/raspberry-pirate-radio/>

[2] <http://myhowtosandprojects.blogspot.com/2014/04/raspberry-pi-make-your-own-pirate-radio.html>

[3]

[4] [Frequency distribution and attribution plan of Luxembourg](#) provided by [Institut Luxembourgeois de Régulation \(ILR\)](#)

From:

<https://wiki.c3l.lu/> - **Chaos Computer Club Lëtzebuerg**

Permanent link:

<https://wiki.c3l.lu/doku.php?id=projects:howtos:pirateradio&rev=1403957911>

Last update: **2015/07/15 21:54**

