

How to build a Pirate Radio?

Introduction

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.

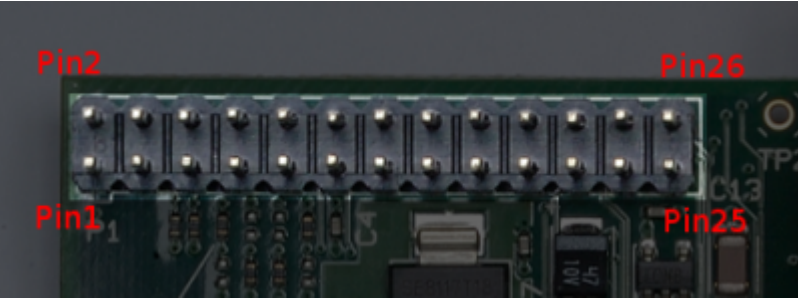
Find the image file and installation instructions [here](#).

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



R-Pi GPIO		left		
		bottom	top	
		P1-01	P1-02	
3V3 Power				5V Power
R1: GPIO 0 (SDA)				5V Power
R2: GPIO 2 (SDA)				
R1: GPIO 1 (SCL)				Ground
R2: GPIO 3 (SCL)				
GPIO 4 (GPCLK0)				GPIO 14 (TXD)
Ground				GPIO 15 (RXD)
GPIO 17				GPIO 18 (PCM_CLK)
R1: GPIO 21				Ground
R2: GPIO 27				
GPIO 22				GPIO 23
3V3 Power				GPIO 24
GPIO 10 (MOSI)				Ground
GPIO 9 (MISO)				GPIO 25
GPIO 11 (SCLK)				GPIO 8 (CE0)
Ground				GPIO 7 (CE1)
		P1-25	P1-26	
		bottom	top	
R1: Revision 1		right		
R2: Revision 2				

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>

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