

# FDM-S2: Just try it out for free!

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*ELAD's FDM-S2 is not "just another" SDR. It took HF engineering as serious as software developing and designing the graphical user interface, or GUI. Look yourself via some HF files and ELAD's software FDM-SW2 - it's for free. This paper gives a short introduction.*

Software defined radios, or: SDRs, are capable of recording and playing HF files. With FDM-S2, these files can be up to roughly 6 MHz, of which FDM-SW2 software covers nearly 5 MHz, while 3<sup>rd</sup>-party software [SDR-RADIO.COM](#) covers 6 MHz.

## How does the box *really* sound?

With such a file and a software, you also can try out the receiver without having it at hand! Play with bandwidth, modes, noise filter, tuning etc.! Make yourself a picture on the performance as well of the usability of this receiver! Test or "tests" in printed magazine become superfluous: Why to stick on a medium that fails to transport the most important information to judge on a receiver when selecting it before buying - how does the box *really* sound?

## Easy Start

What do we need, save for a modest PC?

- ELAD's receiver software [FDM-SW2](#), and/or [SDR-RADIO.COM](#) software
- A HF file ("Sample WAV-Files"), which you find [here](#)

Download and install the software. Due to licence reasons, the free version of FDM-SW2 *for the moment* may not provide the DRM module by Fraunhofer. Only the version delivered with the receiver will carry also this mode. You may demodulate DRM broadcast with the free FDM-SW2 version by some 3<sup>rd</sup>-party software like [DREAM](#).

Read the [manual](#)! Although FDM-SW2 is a rather intuitive software, you must get a general overview. This takes you quickly to your goal without frustration. The manual has been written just YOU in mind - whether you are a beginner or an expert. Read it!

Below you see what can be expected from a file.

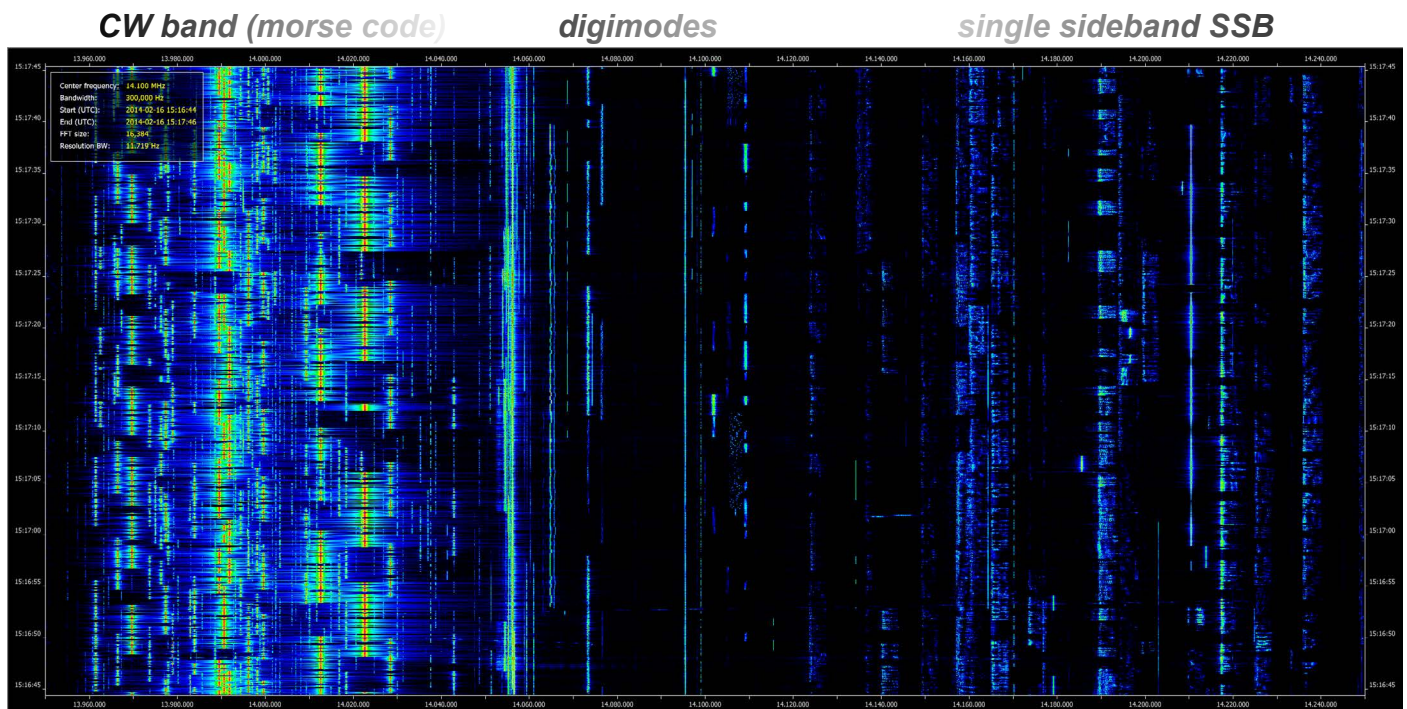


Figure 1: Centered at 14.100 kHz, I took a file of about 200 kHz width and 60 seconds length with software FDM-SW2, showing the lower part of the 20 m band, ham radio. Then I made this sonogram of the whole recording with software SDR-RADIO.COM's module "File Analyzer". You can do the same, even if you don't have an FDM-S2: Just download these software plus the HF file for free!

**6.055 kHz**  
**PBS Xizang/Tibet**

**6.100 kHz**  
**CRI Kashgar**

**6.110 kHz**  
**VoR Taldom**

**6.155 kHz**  
**AIR Bengaluru**

**6.195 kHz**  
**BBC Oman**

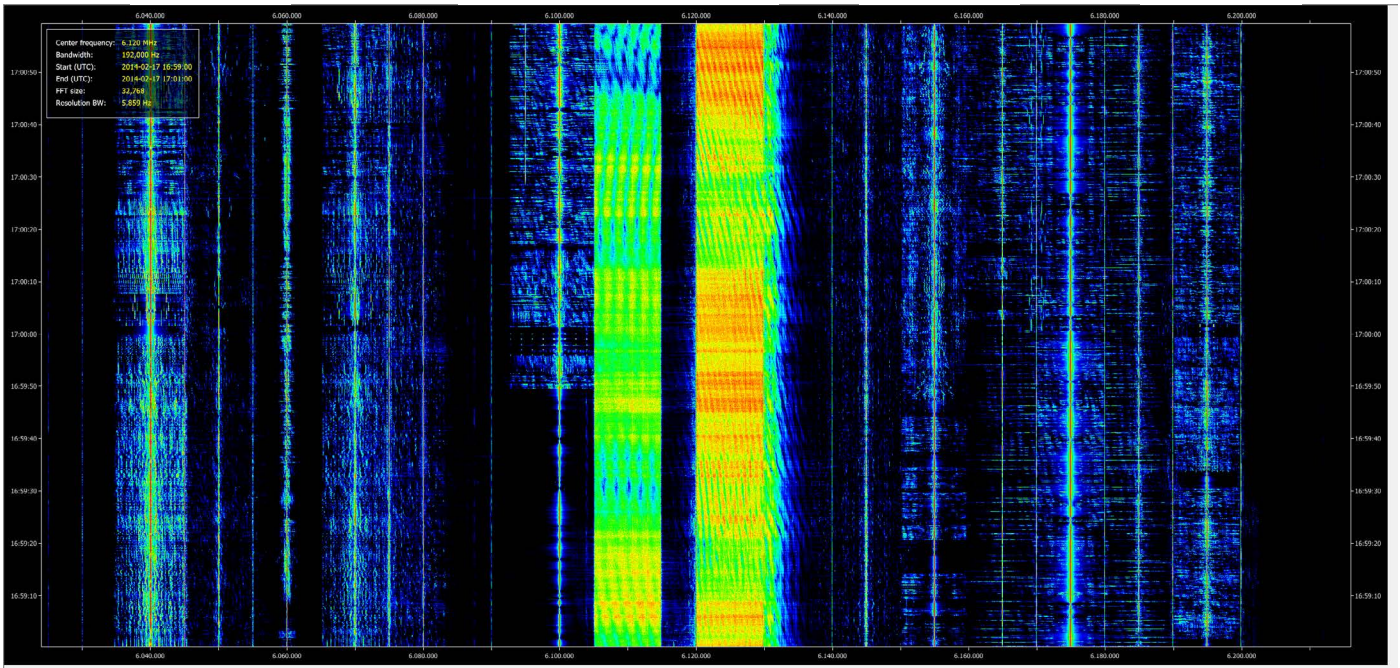


Figure 2: Sonagram of roughly 200 kHz around 6.120 kHz. Download the files [here](#) (“Sample wav-files”)! Some MP3s were extracted as a teaser ... Just click onto the loudspeaker icons!

**ham radio**  
**40 m**

**broadcast**  
**41 m**

**aero &**  
**maritime**

**broadcast**  
**31 m**

**ham radio**  
**30 m**

**broadcast**  
**25 m**

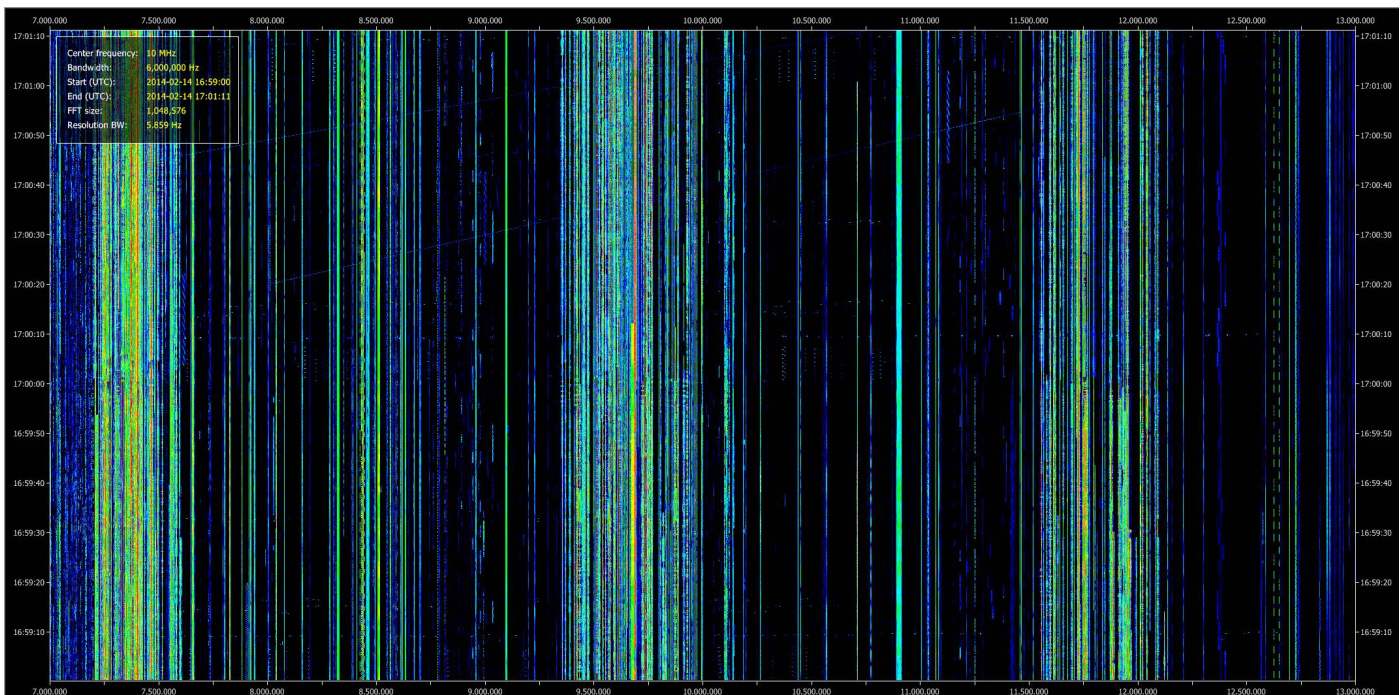


Figure 3: Six megahertz around 10.000 kHz - this sonagram shows 131 seconds (users generalized). The corresponding three HF files sum up to nearly 5 GB. You can download them from [this website](#). A video demonstrating reception of twelve broadcast stations (from New Zealand to Rwanda) and six utility stations (from New Caledonia to Algeria) out of these two minutes files can be seen [here](#). This video may give you a nice start for your own explorations!