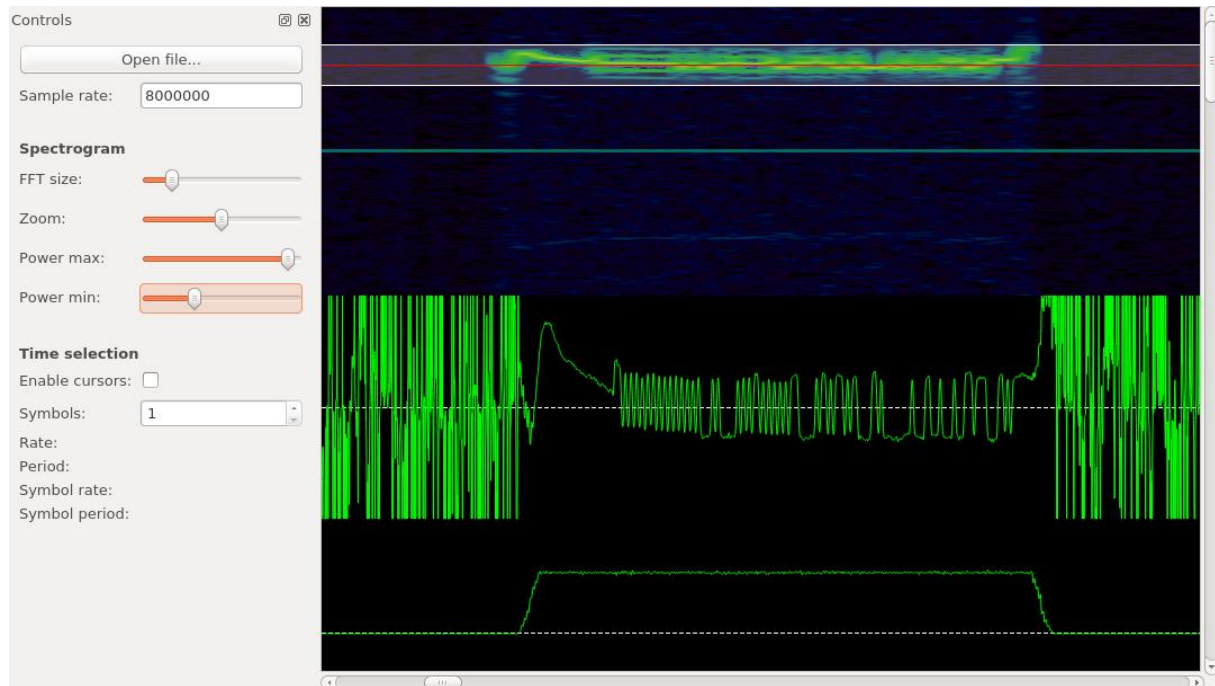


---

# inspectrum

inspectrum is a tool for analysing captured signals, primarily from software-defined radio receivers.



## Features

- Large (100GB+) file support
- Spectrogram with zoom/pan
- Plots of amplitude, frequency, phase and IQ samples
- Cursors for measuring period, symbol rate and extracting symbols
- Export of selected time period, filtered samples and demodulated data

## Install

### Linux

Install inspectrum with your package manager, it should be present in most distros.

### macOS

- Homebrew

- 
- MacPorts

## Windows

- radioconda
- conda

## Build from source

### Prerequisites

- cmake >= 3.1
- fftw 3.x
- liquid-dsp >= v1.3.0
- pkg-config
- qt5

### Build instructions

Build instructions can be found here: <https://github.com/miek/inspectrum/wiki/Build>

### Run

```
1 ./inspectrum [filename]
```

### Input

inspectrum supports the following file types: \* \*.[sigmf-meta](#), \*.[sigmf-data](#) - SigMF recordings \* \*.[cf32](#), \*.[fc32](#), \*.[cfile](#) - Complex 32-bit floating point samples (GNU Radio, osmocom\_fft) \* \*.[cf64](#), \*.[fc64](#) - Complex 64-bit floating point samples \* \*.[cs32](#), \*.[sc32](#), \*.[c32](#) - Complex 32-bit signed integer samples (SDRangel) \* \*.[cs16](#), \*.[sc16](#), \*.[c16](#) - Complex 16-bit signed integer samples (BladeRF) \* \*.[cs8](#), \*.[sc8](#), \*.[c8](#) - Complex 8-bit signed integer samples (HackRF) \* \*.[cu8](#), \*.[uc8](#) - Complex 8-bit unsigned integer samples (RTL-SDR) \* \*.[f32](#) - Real 32-bit floating point samples \* \*.[f64](#) - Real 64-bit floating point samples (MATLAB) \* \*.[s16](#) - Real 16-bit signed integer samples \* \*.[s8](#) - Real 8-bit signed integer samples \* \*.[u8](#) - Real 8-bit unsigned integer samples

---

If an unknown file extension is loaded, inspectrum will default to \*.cf32.

Note: 64-bit samples will be truncated to 32-bit before processing, as inspectrum only supports 32-bit internally.