

Getting started with SDRC for QMAP

DL3WDG Draft 7

16 Dec 2023

Why use SDRC?

- QMAP was originally designed to work with IQ data from Linrad
- For the beginner, Linrad has a rather steep learning curve
- SDRC was modified recently to enable it to output data in the required Linrad format

Link for download

<https://www.sdr-radio.com/download>

Scroll down on above page and select from the choices.

Download  Version 3.3 Build 3117

32-Bit

- [Dropbox](#)
- [OneDrive](#)

64-Bit

- [Dropbox](#)
- [OneDrive](#)

1) Ribbon Bar, View, More Options select MAP65, restart.

2) Click the MAP65 icon to see the options. here's I'm forwarding packets to the PC where MAP65 is installed.

MAP65 Options

Options

MAP65 / QMAP configuration

Enable

Address: localhost

Port: 50004 [Default 50004](#)

Frequency: Active RX Radio cf

Save

See next slide

MAP65 & QMAP support sends UDP packets containing IQ data to the address and port configured on this page. Normally MAP65 runs on the same computer, if so the address is set to *localhost*. The default port is 50004.

The format of the data conforms to the LINRAD timf2 standard.

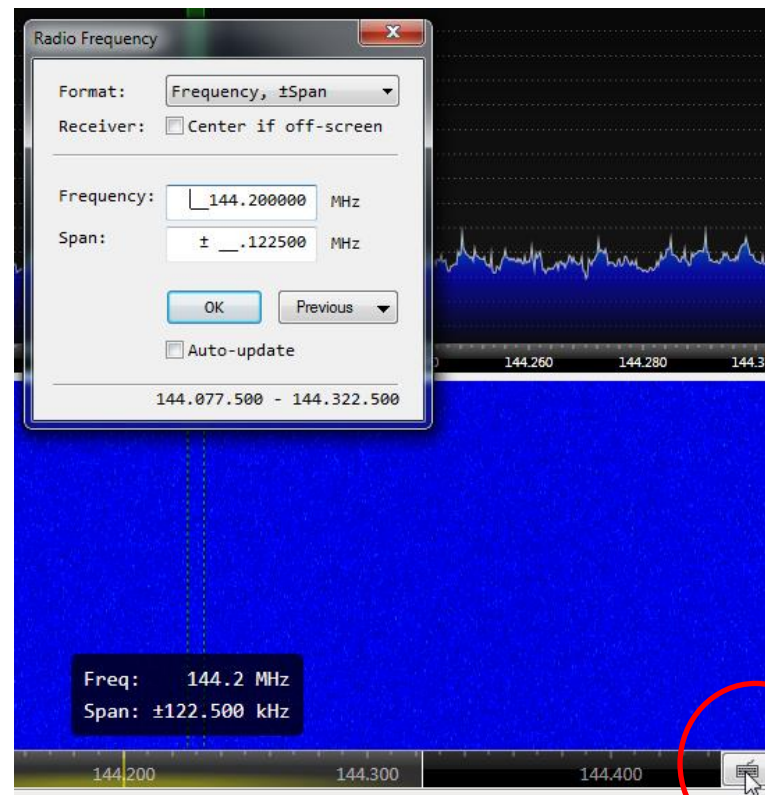
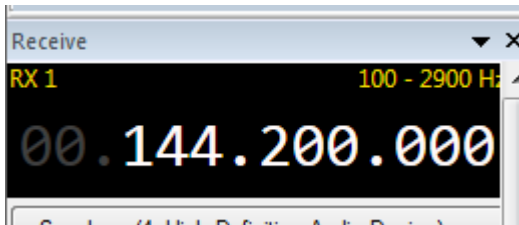
The centre frequency is the center frequency of the main window in SDR Console, the bandwidth is 96kHz.

OK Cancel

Setting centre frequency of data stream to QMAP

Two choices available according to preference:

Frequency: Active RX Radio cf



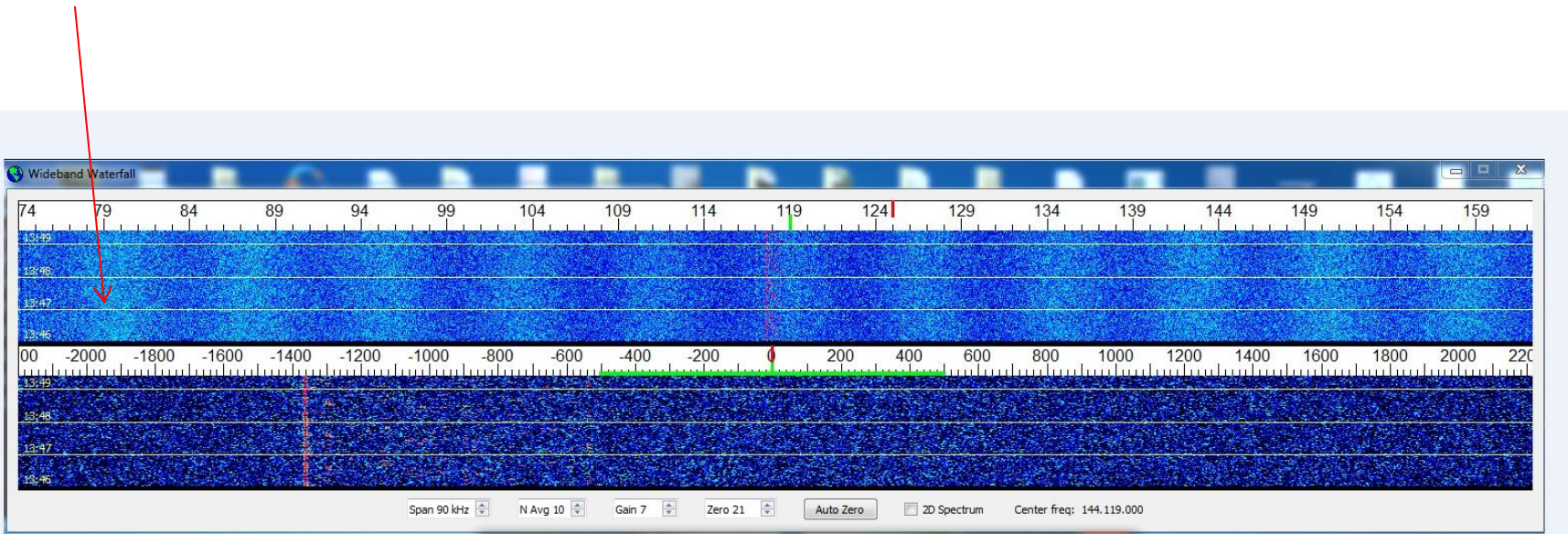
**Remember to press SAVE
after making selection!**

Running with a downconverter

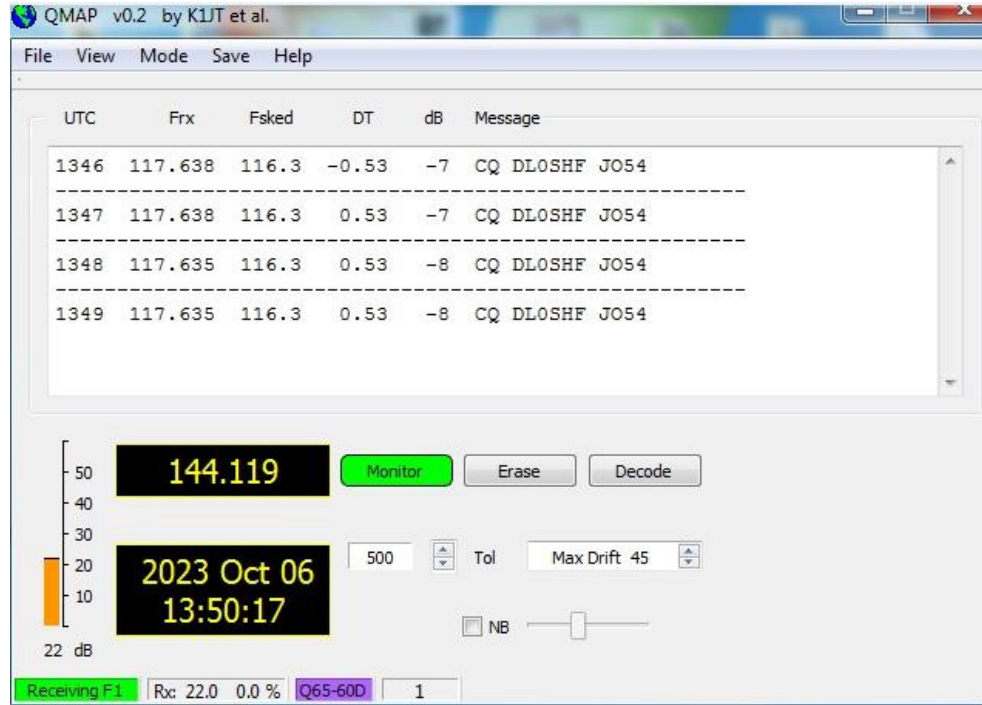
- If you are using a downconverter, SDRC should be tuned to the IF frequency in use. Do not attempt to add any LO offset in SDRC.
- Such offsets are entered into QMAP Settings, per the QMAP Quick Start Guide.
- If SDRC is listening directly on the intended frequency, use the default 0 in QMAP Fadd

Appearance of QMAP waterfall

Bands are present. This is different to using Linrad as the front-end. These do not appear to affect decoding.



Then use QMAP in the normal way



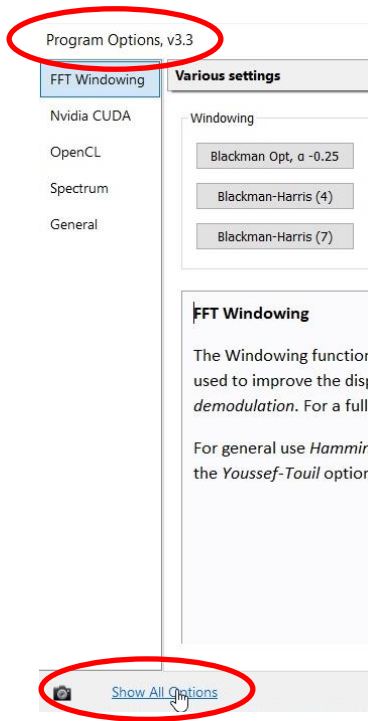
For more info on QMAP see:

[https://wsjt.sourceforge.io/Quick Start WSJT-X 2.7 QMAP.pdf](https://wsjt.sourceforge.io/Quick%20Start%20WSJT-X%202.7%20QMAP.pdf)

Experiences to date

- QSOs have been successfully initiated using SDRC as the QMAP front end on 10GHz EME.
- Probably, Active Rx is the better choice for frequency selection, since you can use SDRC to monitor a wider bandwidth than QMAP can display. Clicking on the SDRC waterfall will move QMAP centre frequency to that. TBD, but may be best to try to click on an integral kHz. See next slide.

Setting SDR# step size to 1kHz



Program Options, v3.3

- Audio
- Controllers
- Display
- Performance
- Receive
- Recording
- Tuning
 - General
 - Step Sizes
 - Auto-Mute
 - Identities
 - Start
 - USB Relay

Mode-specific tuning step size

AM	1 kHz
CW	10 Hz
BFM	50 kHz
NFM	500 Hz
WFM	500 Hz
SSB	1 kHz
SSB Wide	1 Hz
DSB	10 Hz

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Snap

Press
round
and t
3.780

8.333

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step :