

## The KIWI SDR and how it can be used to SWL and in amateur radio

What is the KIWI SDR?

It's a high quality SDR that supports 0 to 30 MHz in all modes, that is capable of streaming onto the internet.

Do I need any software?

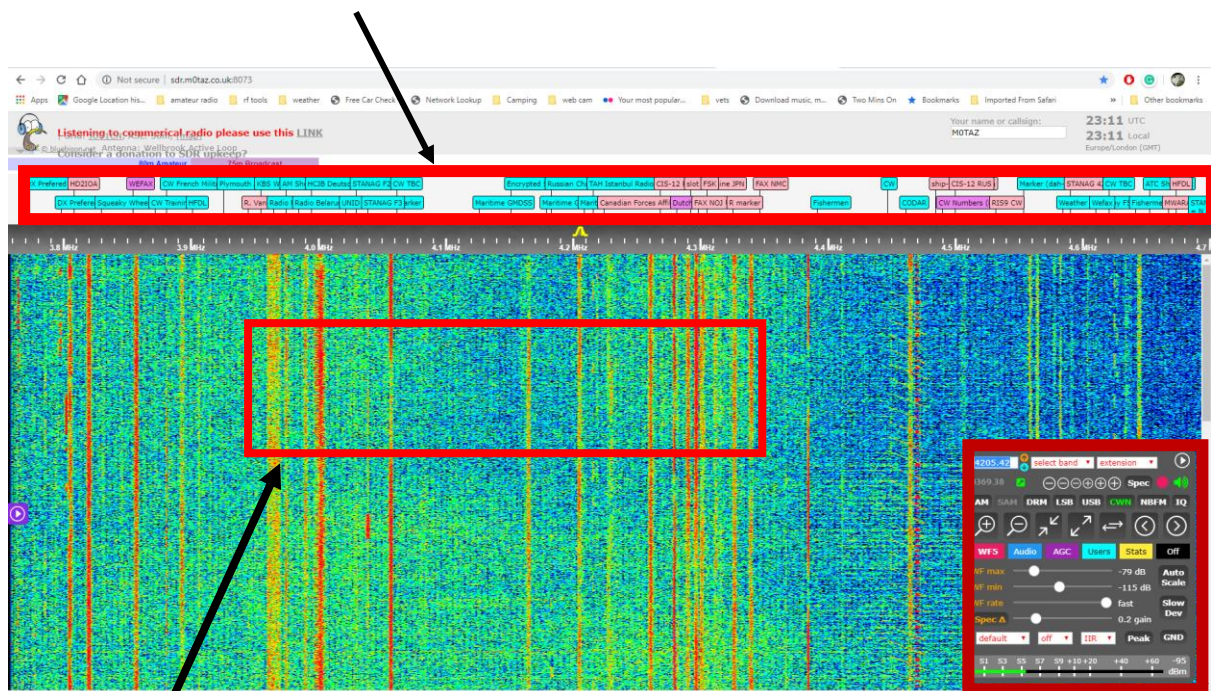
No just an internet browser, typically a modern version of Chrome will do fine, just point your browser at [www.sdr.hu](http://www.sdr.hu) you may need to register on that site to see the receivers, but its free and the resources available are worldwide.

How do I get started?

Get registered on sdr.hu and then search for a receiver by name, or use the map to navigate to an area of interest. Like every receiver and HF location, some are very good others not so. Start with <http://sdr.m0taz.co.uk:8073/> its not the best, but that's what a typical suburban location is like!

Once the browser is running, you should see a screen like this.

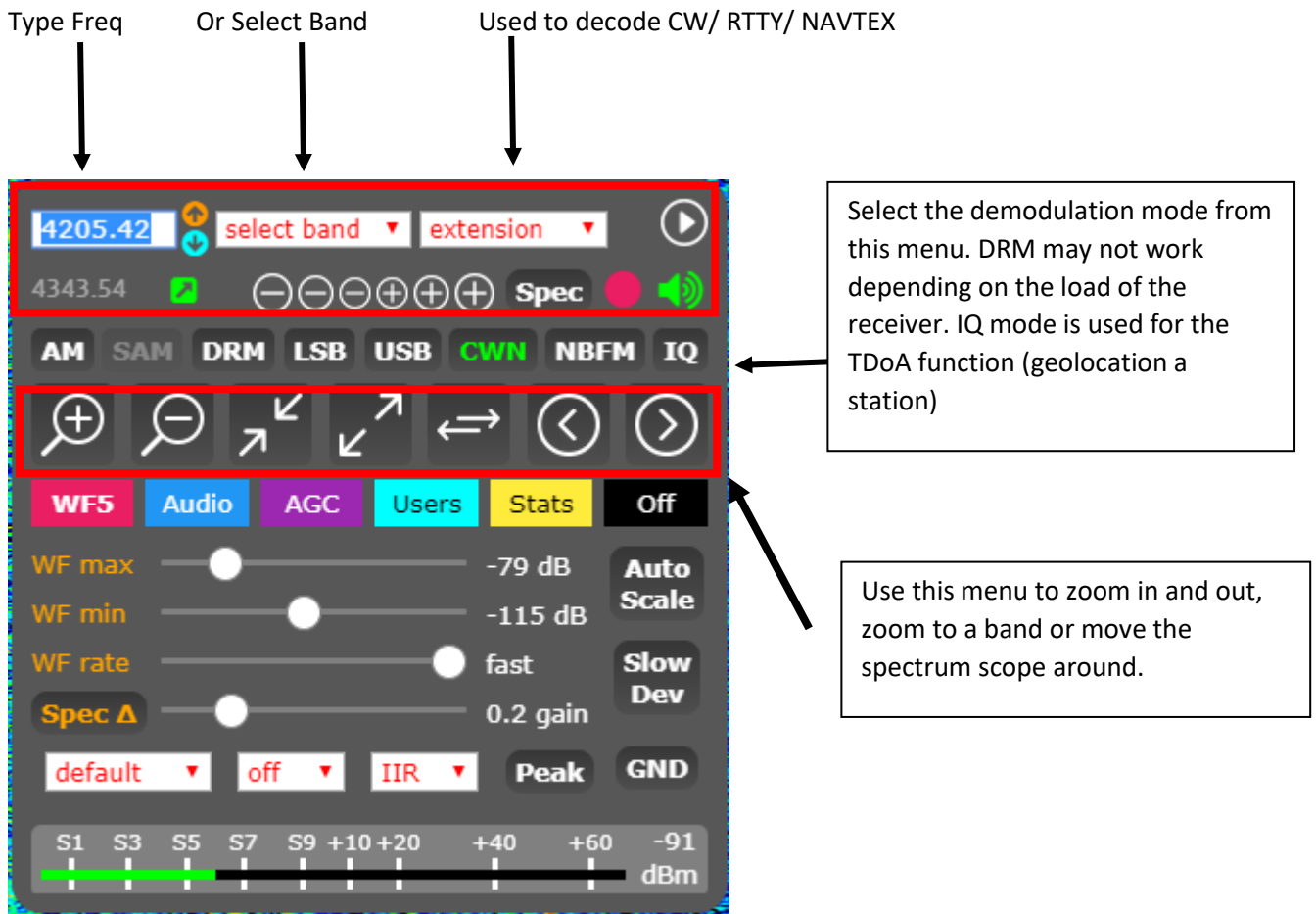
The labels at the top are a guide to band usage, just click on them and the radio will change mode and tune to that frequency.



This is your spectrum view

You can tune the radio here, and change the mode

If we have a closer look at the interface.



TDOA functions need some care.

Its possible to use the TDoA extension to try and geolocate a HF transmitter under ideal conditions to around 20 to 50km on a map. To use this feature you need to select IQ feature, so the CDR can take detailed measurements and compute the Time Distance Of Arrival.

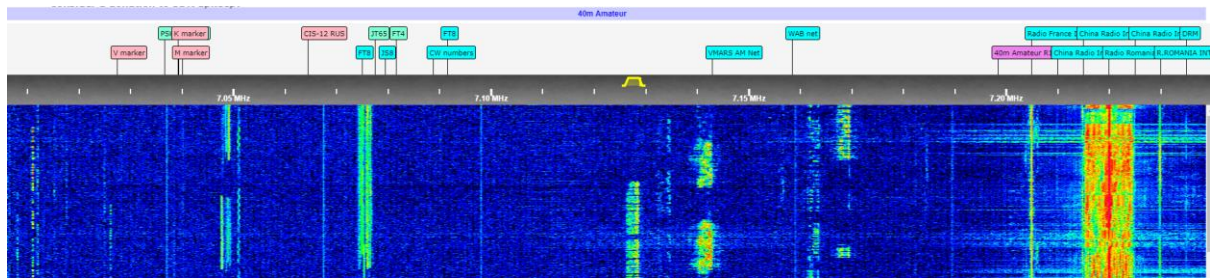
Once you select TDoA you need to make sure the receive bandwidth is only covering the wanted signal, and you can move the bandpass filter by just re-sizing it with the mouse.

You will then be presented with a map showing you other receivers that you would like to use to provide the geolocation. In theory you need 3 or more receivers, and they need to be located in adjacent countries to the likely source. So if you think the signal may be coming from Russia, try to pick receivers that may surround that area.

Its trial and error, and wont always work. Just remember that every attempt to locate a signal will use up resources on every SDR you select, so take some care and the capacity may not always be available.

If all goes well you should see signals on the waterfall, here is 40m you can see the phone and FT8 signals

You can see FT8 on the left, SSB in the middle, and a AM radio station to the right just above 7200



The KIWI only supports 2 people that have the full spectrum waterfall, users 1 and 2 will have access to the full waterfall as seen above.

Use 2, 3, 4 5, 6 and 7 will get access to listen to any frequency, but you wont see the waterfall.

All users have full independent receivers, you can tun and listen without impacting other users on the SDR.

Other resources to look out for.

[www.sdr.hu](http://www.sdr.hu) Other online KIWI radios

<http://sdr.gb0snb.com:8073/> very low noise location

<http://sdr.m0taz.co.uk:8073/> my SDR depending on noise floor

<http://websdr.org/> other online VHF HF receivers

<http://websdr.ewi.utwente.nl:8901/> University SDR in NL, excellent receiver

<http://hackgreensdr.org:8901/> Hack Green HF

<http://hackgreensdr.org:8902/> Hack Green VHF