

Software Defined Radios

Until a couple of decades ago, virtually all radios were of the Superhetrodyne design.

Software Defined Radios

- First used by the military in 1970's

- Gained popularity with cell phones in 1990's

First used by the military in 1970's

Software Defined Radios

- SDR's use direct conversion to process rf signals directly to audio frequency range
- They use software and processing power to handle tasks that were traditionally done by hardware

Software Defined Radios

- Analog signals are digitized by an ADC into a stream of digital data
- The digitized data is fed to a computer that does filtering and demodulating that used to be done by hardware

Software Defined Radios

- Early SDR's lacked bandwidth and easily overloaded by strong signals
- Faster processors and improved ADC technology greatly improved software defined radios

Software Defined Radios

- Today's SDR's have several advantages over

Software Defined Radios

.Since then, a number of different manufacturers produced SDR receivers for personal use

Software Defined Radios



Software Defined Radios



Software Defined Radios



TARC's SDR

- November 2024 SDRplay begins sales of nRSP-ST
- December 2024 TARC purchases and installs the nRSP-ST SDR radio at the Englewood site
- January 2025 testing completed and presented to members for their use

TARC's SDR

The new
nRSP-ST

SDRplay

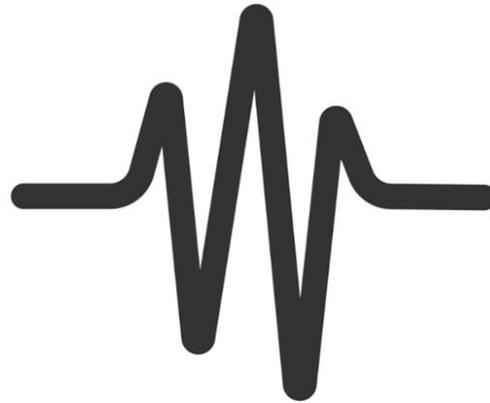


All-in-one, Plug-and-play networked receiver

TARC's SDR

- Radio is accessed by any browser and pointing to <http://73.55.112.146:9001>
- A link also appears in the 'members only' section of our club's webpage
- The following screen appears for about 30 seconds while the radio boots up

TARC's SDR



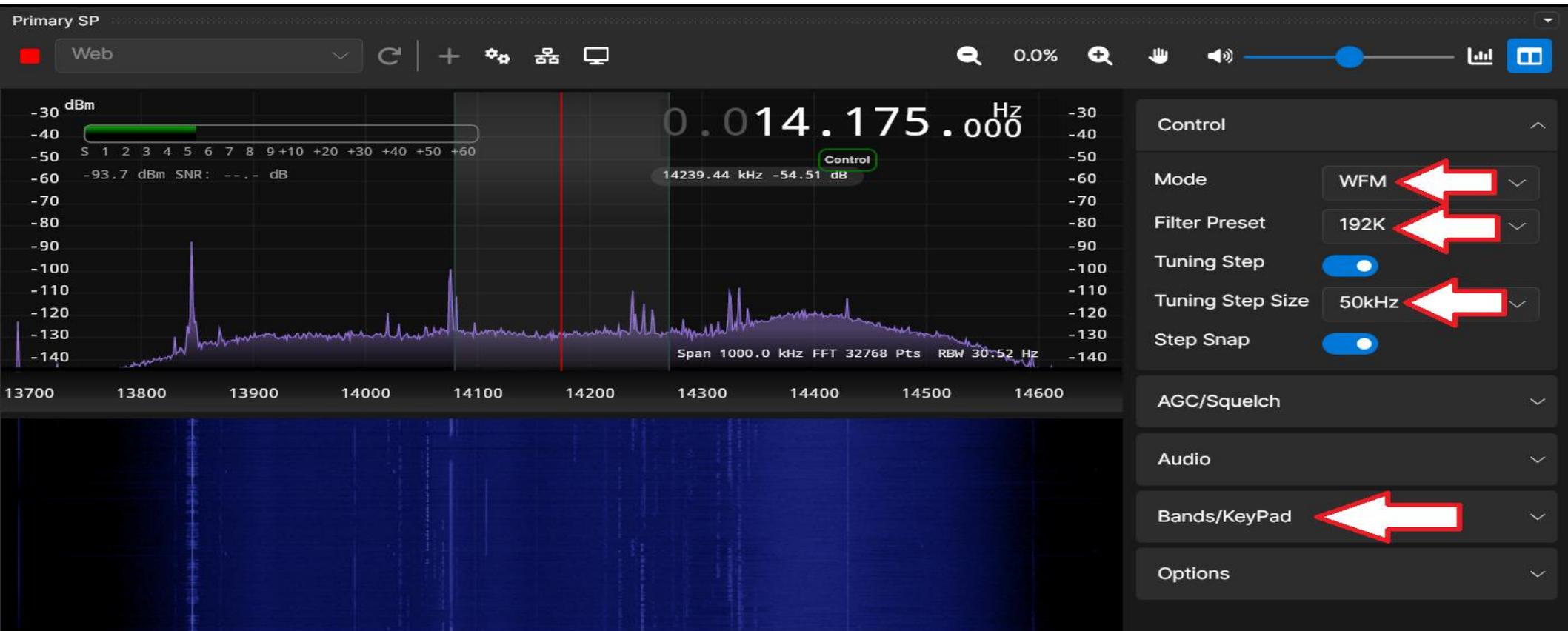
TARC's SDR

.The receiver appears but does nothing until you turn it on by clicking the small triangle in the upper left corner

TARC's SDR

- Next select the band of your choice, adjust mode, frequency, bandwidth, etc

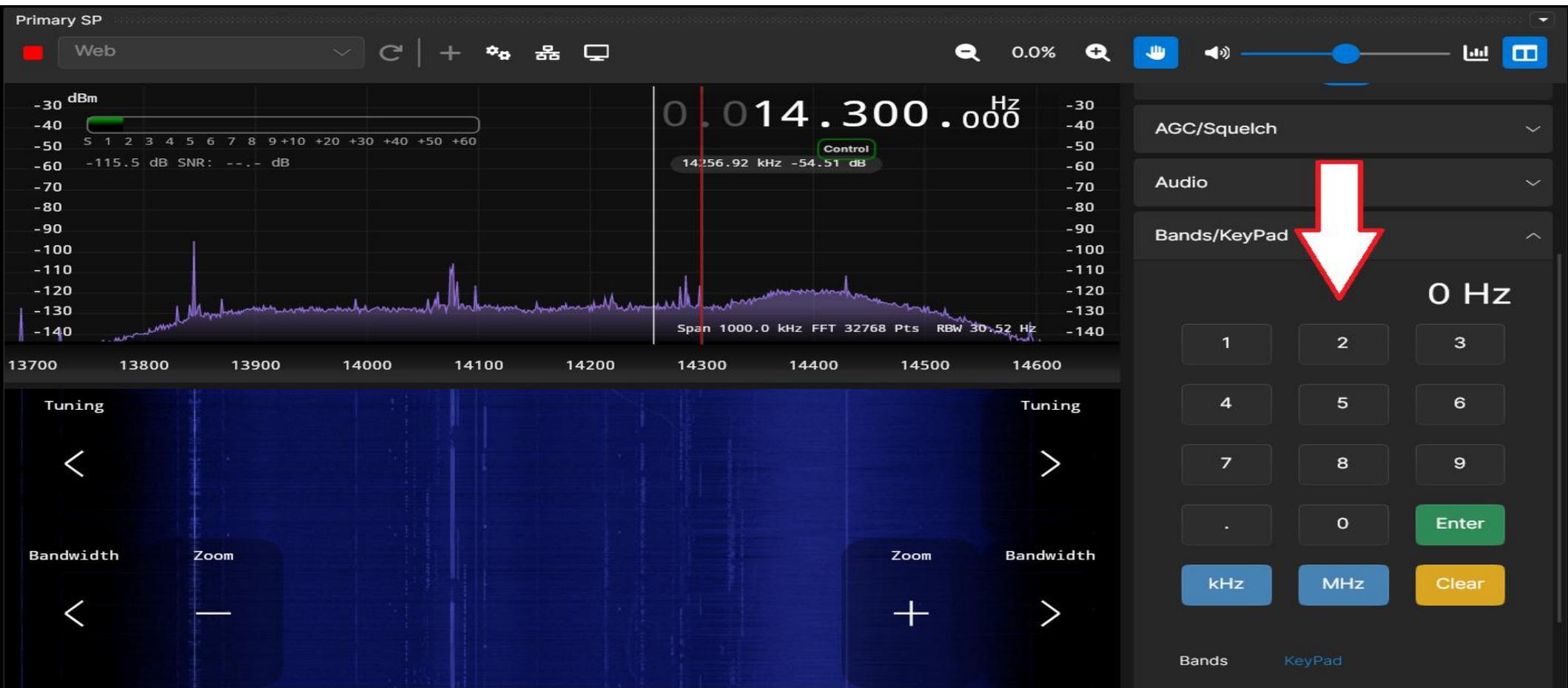
TARC's SDR



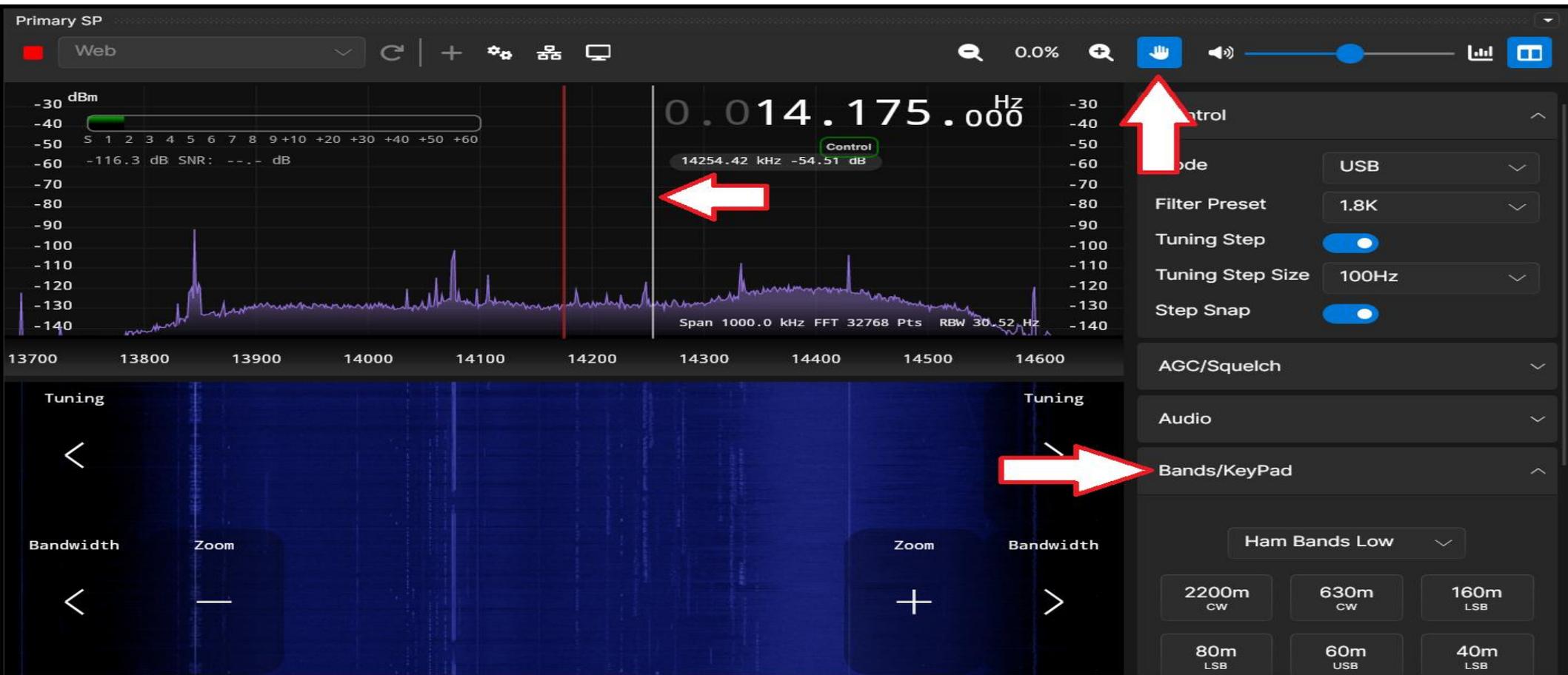
TARC's SDR

- You can use the Bands/Keypad for frequency
- Activate the “Hand” icon and “Step” setting
- Use Mouse to click on spectrum screen

TARC's SDR



TARC's SDR



TARC's SDR

- Enjoy listening. Currently no login or password is required
- Timeout in 10 mins if no activity by user
- Maximum 8 users at the same time
- Only first user can select the band chosen