How to use the KiwiSDR

Courtesy kiwisdr.com. Used with permission.

Here are some aspects of the user interface that are not immediately obvious. In the descriptions below option/alt refers to the keyboard key usually marked "option" and/or "alt". Control refers to the key marked "ctrl" or "control". The "windows" key on Windows keyboards and the "command" key on Macs are not used. The "fn" (function) key is not used.

Clicking refers to left mouse button clicking. Right button or scroll-wheel clicking is specifically called out in the text to distinguish from ordinary clicking. We don't yet handle mice that have been configured for left-hand use where the button assignments are reversed (i.e. the right button functions as the left button normally would).

Touchscreen gestures (pinch-zoom, tap-to-zoom etc.) are not yet supported but are planned. There is no mobile device (small screen) interface yet.

These shortcut choices need to eventually be customizable by each user.

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Passband adjustments

The passband is the yellow line drawn above the frequency scale. It represents the frequencies passed by audio filtering. It is most easily seen when fully zoomed-in. The yellow vertical line represents the carrier ("zero" Hz) point. You can click-drag various parts of the passband to adjust it. When the cursor is over different parts of the passband a tooltip will appear showing various parameters of the passband (see below).

o **Smooth tuning**

Click-drag in the horizontal area of the passband to smoothly tune the received frequency. The center frequency of the passband is displayed.

o **High-cut / low-cut filter adjustment**

Click-drag with the cursor over the sloped ends of the passband to individually adjust the filter high or low frequency cutoff. The cutoff frequency and filter bandwidth are displayed.

o **Filter width adjustment**

Option/alt-click-drag with the cursor over the sloped ends of the passband to adjust the filter high or low frequency together, effectively adjusting the filter width about its current center frequency point.

Shift-click the zoom in/out icons (magnifying glasses) to also adjust the passband width around the center frequency. Each click widens or narrows the passband by 80% of its previous value.

- **Passband shift (aka passband tuning)**

Shift-click-drag anywhere in the passband to shift its center frequency without changing its width. The carrier (BFO) point remains unchanged.

- **BFO tuning**

Shift-click-drag with the cursor over the vertical carrier line to change the BFO (carrier point) while leaving the passband unchanged. As a comparison note that regular tuning = passband shift and BFO tuning done simultaneously. The carrier frequency is displayed.

- **Passband parameters sticky across mode changes**

Adjustments to the passband are unique to each mode and are remembered when the mode is changed. To restore the default passband settings for a mode hold a modifier key (e.g. shift, control or alt/option) before the mode button is pressed. A tooltip will appear reminding you the passband will be restored.

Keyboard & mouse shortcuts

- **Rounded frequency set (shift-click or right-click in waterfall or frequency scale)**

Instead of being set to the waterfall frequency directly under the cursor, the frequency is set to the nearest rounded value that depends on the band and mode. In this way you only have to shift-click close by to the even frequency your signal is likely to be transmitting on. The value is 9 or 10 kHz in the LW or MW band depending on the setting of the 9/10 step button. 5 kHz in the SWBC bands and 1 kHz everywhere else.

- **SWBC database lookup (control-shift-click in waterfall)**

The waterfall frequency under the cursor, rounded up or down to the nearest 5 kHz, is looked up on short-wave.info and displayed in a new window/tab.

- **Utility database lookup (option/alt-shift-click in waterfall)**

The waterfall frequency under the cursor, rounded down to the nearest 100 Hz, is looked up on globaltuners.com and displayed in a new window/tab.

- **Page down (control-click in waterfall or frequency scale)**

Shifts the waterfall down in frequency. Same as control panel left-arrow icon.

- **Page up (option/alt-click in waterfall or frequency scale)**

  Shifts the waterfall up in frequency. Same as control panel right-arrow icon.

- **Mouse wheel zoom**

  The mouse wheel performs zooming.

Saved session parameters

The following parameters from the current session are saved in browser cookies and restored when you next connect:

- Frequency
- Mode button
- Zoom level
- 9/10 kHz LW/MM band step button
- Waterfall max/min sliders

Because browser cookies are stored independently for each website these parameters will be stored independently for each KiwiSDR you visit.