

Setting Filters for PSK31

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I was able to use the PSK31sbw program itself to help set up narrow K2 receive filters for PSK31. First, you need to have them in the general "ball park". For reference, these are my settings:

FL3 = 700 Hz (0.70) LSB BF3 = 4912.70 USB BF3 = 4914.70

FL4 = 200 Hz (0.20) LSB BF3 = 4912.67 USB BF3 = 4914.77

With the K2 running and the computer connected, fine tune the filters in the following manner:

- 1) Run the PSK31sbw program, disable the AFC and set the program's Rx frequency to 1000 Hz.
- 2) Tune in a stable unmodulated carrier and tune the K2 to center the display in the waterfall. If your filter is too far off to hear the signal you can use the FL1 filter to determine this frequency. Note the K2 frequency. Be sure to reselect the filter you are calibrating before continuing with the remaining steps.
- 3) Next, tune the K2 dial for maximum S meter reading. Rock the dial back and forth looking for the S meter to drop off slightly at each end and set the dial so that the signal is centered in the filter passband. Note the new K2 receive frequency.
- 4) Calculate the frequency difference; how much you had to change the frequency and the direction in order to center the signal.
- 5) Put the K2 in CAL FIL and display the BFO frequency.
- 6) Move the BFO frequency by the same amount, and in the same direction as you determined in step 4 above.
- 7) Exit CAL FIL and your BFO is calibrated.
- 8) Repeat the above steps for each PSK31 filter, USB and LSB.

By the way, I use FL1 (OP1) and FL2 (1.80) for SSB and reserve FL3 and FL4 for PSK31.