

# QSL Managers Message - Filters

What are filters? Filters remove stuff we don't want. In your car you have Air Filters, Gas Filters and Oil Filters. They remove dirt which would hurt your car.

Your radio has filters too. The filters on your radio remove sounds you don't want to hear. Common filters found on radios include...

NB – Noise Blanker. Removes the sound of spark plugs firing in your vehicle when the engine is running. This filter can be turned On when needed and is usually Off.

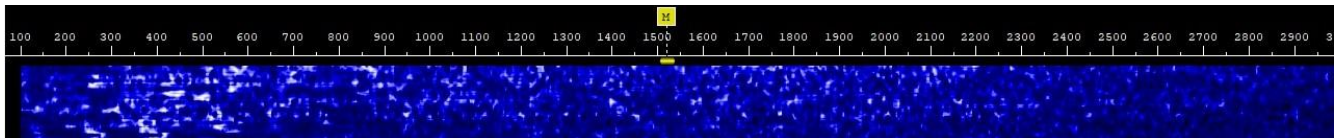
NR – Noise Reduction. Reduces overall background noise. This filter can be turned On when needed and is usually Off.

Notch. Reduces or removes noise close to the frequency you are on. I find this very useful to remove the tone when another station tunes up on the frequency your on. This filter can be turned On when needed and is usually Off.

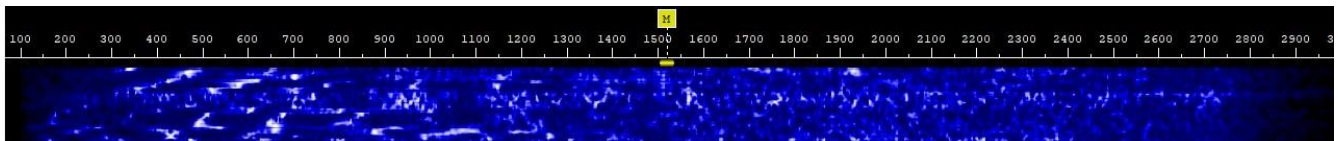
One filter that is always On and can't be turned Off is the Twin PBT – Pass Band Tuning – if you have an Icom radio. It is called DSP – Digital Signal Processor – if you have a Kenwood or Yeasu radio. This filter sets how much you can hear on the radio. It is set differently depending on what Mode you are using. Here are some examples...

SSB – Phone

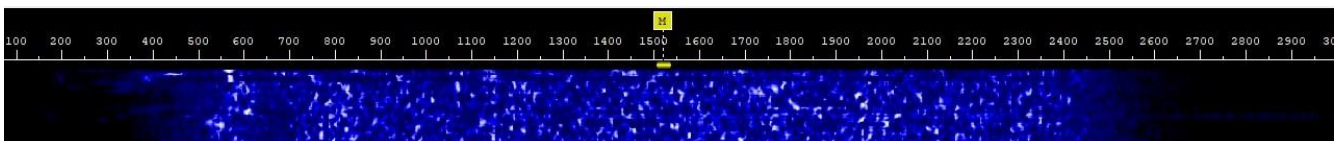
FIL1



FIL2

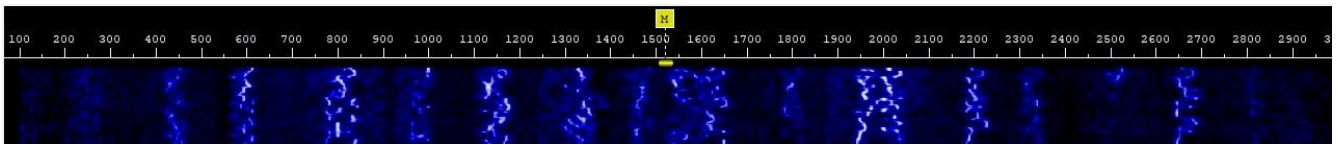


FIL3

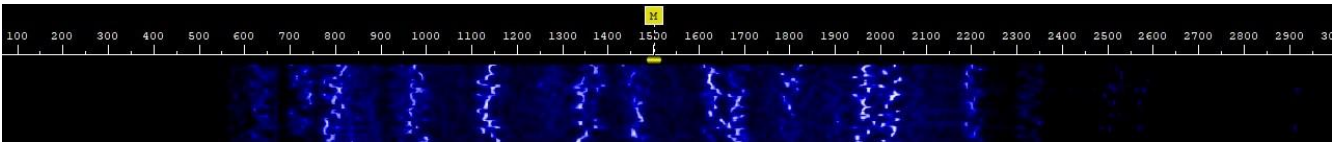


## DIG – Digital Modes

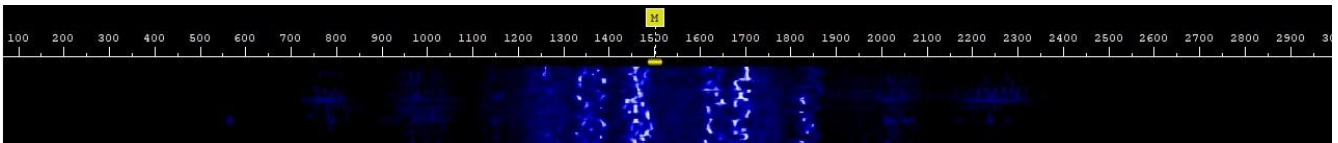
### FIL1



### FIL2

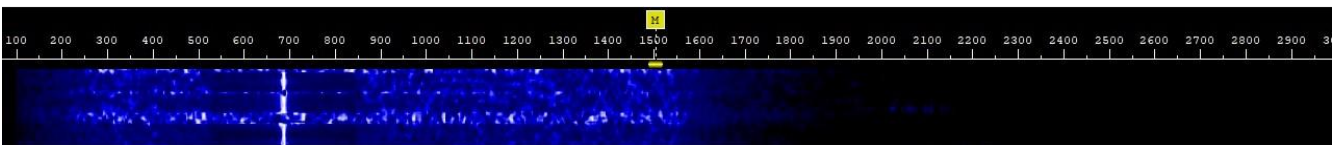


### FIL3



## CW Mode

### FIL1



### FIL2



### FIL3



The images above are the waterfall of the USB of my Icom 7300 radio. The upper side band is 3000 Hz wide. You can see that the widest signal is heard when FIL1 is selected. The signal is narrower when FIL2 or FIL3 are selected. You can manually adjust these filters...you can adjust the upper and lower settings and move the whole filter from left to right. These images are the default settings on my

radio.

How you set these filters on your radio is really personal preference.

For me I do SSB – Phone and DIG – Digital Modes. I always use FIL1. When doing Phone Modes voices just sound better to me using FIL1. FIL2 makes voices sound a little funny and FIL3 makes it very difficult to understand the other station. When doing Digital Modes the software I use will filter out all of the stations except the one I want to have a QSO with. Therefore I want to use FIL1 to insure that I'm hearing everyone that is on frequency.

James, KW5CW, can tell you all about CW, but as you can see, you can set the filter to only hear a small portion of the SSB signal. This will make it much easier to hear only the station you want to have a QSO with.

You should also realize by now that setting the Twin PBT or DSP filter incorrectly can make it impossible for you to hear what you want on the radio.

It is important that you learn how to use all these filters on your radio. I hope that you'll find this information useful.

Thanks.

73

Lee N5SLY