

Optimizing SSB Receive

Settings on your rig:

1. Turn squelch off. I have not found a squelch that works well with HF SSB. It can get to be tiresome listening to static but that is the nature of SSB.
2. Set RF gain to max (see operators manual).
3. Clarify to zero (see operators manual).

Interference:

4. Local interference frequently comes from electronics on your boat. Observe the bars on your display during receive, when no station is transmitting. Also listen to the static. Ideally less than 2 bars should show and the static should sound like static (no pattern to the noise). If this is not the condition turn off electrical devices on your boat to see if any are the source of the interference. Note that many devices can still interfere when they are off but still have power supplied, so it is best to turn breakers or switches off that are supplying the power. Refrigerators, chargers and inverters are among the worst offenders, but can be most anything like LED or CFL lights to watermaker controls. I help one boat where it was the watermaker even when it was off, we had to remove the 12v supply to get the interference to stop. In this case it did sound like normal static but about 5 bars showed the interference.

Equipment or installation issues:

5. I have seen a few cases now where tuners have relays that become resistive and cause receive to be low while transmit seems ok. What happens is the higher voltage when transmitting arcs the contacts resulting in lower resistance. This usually shows up just after tuning where the receiver is quiet until you transmit, then RX is fine, but can intermittently go resistive again. Sometimes tapping on the tuner will cause it to go quiet or get better.
6. Resistive antenna connection. Similar to tuner relay problem above, but connection between antenna and tuner or tuner and radio.
7. See hints on antenna and counterpoise in this forum.