

R-390A K5OP Audio Derived AGC Mod

Dallas Lankford

2/8/05

This is not a stand alone AGC mod. It is only effective if you do the AGC mod described in my article "A New R-390A AGC Mod" posted on the Kongsfjord web site (or the variant from which the new mod was derived which was published many years ago in The Hollow State Newsletter, Issue # 27). The nice thing about this mod developed by Wally Chambers, K5OP is that it requires no soldering to the R-390A but can be implemented using the screw tabs on the rear panel as indicated below. I liked the K5OP mod so much that I soldered it to the corresponding tab lugs behind the rear panel, and added a toggle switch (in the oscillator shaft access hole) so I can switch it on and off as desired. I am not a big fan of ECSS, so I use the audio derived AGC mainly when listening to SSB. The amount of audio derived AGC added to the AGC line depends on the setting of the LINE GAIN control, and that in turn depends on how worn the LINE GAIN control pot and LOCAL GAIN control pot are. With new pots (which I install in all of my R-390A's) the optimal setting of the LINE GAIN control pot for best audio derived AGC is between 3 and 7. For worn pots the optimal setting of the LINE GAIN control pot will probably be different. This audio derived AGC mod only improves the attack time in the SLOW AGC position of the basic AGC mod (from about 7 mS to less than 3 mS) which in turn reduces or eliminates the "click" or "pop" sometimes heard on the first syllable of an SSB transmission. For MED or FAST release times the audio derived AGC mod will provide no improvement over the basic AGC mod.

