Care and Feeding of the Alpha 76A

As noted in the amplifier manual, use a coax cable between the radio and amplifier that is 4 feet long or less. This will lower the SWR seen by the radio when driving the amp.

The best way to run the 76A is to tune up in the CW position to about 500w output, then switch to it to SSB (higher plate voltage) and continue your tuneup to whatever output you desire.

The CW / SSB HV settings were made for **the old USA FCC power rules in effect when these amps were designed**, which were 1.0 kw DC INput on CW **(600w out)**or 2.0 kw PEP INput on SSB **(1200w out)**. The ratio of the low to high HV is such that if you tuned up at the CW limit using the lower HV (CW), you could then just switch to SSB and the amp would be tuned up correctly for the higher SSB limit.

It is better for the amp to run the higher HV all the time, it keeps the grid and plate current low. Watch the grid current, NEVER exceed 50ma per tube (as stated in the manual).

For 1200w output, tune the amp with a keyer sending fast dots. The grid current will be about 60ma, plate current will be about 1A. Sending dots at 40 wpm gives about 1/2 of the key-down reading on the meters.

It is normal to have slightly lower output on 10m than the lower bands.

Use the following starting settings for tuning up on 17m:
Bandswitch on 21, Tune=25, Load=75

Do NOT use the 76A on 12m, the plate choke will burn up.

The 78/76A/374A amps were designed to run on 240vac. Using lower voltage that is 10% less (like 220vac or less) lowers the filament voltage of the tubes, lowers the output power and will shorten tube life.