

KW TEN-TEC INSTRUCTION SHEET
MODEL 224 AUDIO CW FILTER

GENERAL

The Model 224 audio CW filter is an accessory intended for use with the ARGOSY transceiver, Model 525. When installed, it provides two selectivity positions centered at 750 Hz selected by two push button switches on the front of the transceiver.

INSTALLATION

- 1.) Remove the bottom cover of the Argosy: two phillips screws on each side and two on the bottom. Slide the cover out and back being careful not to stretch the speaker wires.
- 2.) Insert three retainers into the Model 224 circuit board from the top. Push three spacers over the retainers from the bottom. Insert three sheet metal screws through the retainers (see figure 1).
- 3.) The Model 224 mounts in the left front corner of the bottom behind the selectivity switches. Place the filter in this area, aligning the screws with the holes in the chassis. Tighten the three screws securely.
- 4.) Plug connector #21 into the socket on front of Model 224.
- 5.) Turn the transceiver on and check for proper operation.
- 6.) To replace the bottom, remove the two finishing strips between the top and bottom covers. Replace the six screws and tighten only the bottom two. Turn the Argosy over and loosen the four screws on the top cover. Slide the finishing strips between the top and bottom covers and tighten all screws.

OPERATION

The Model 224 is inserted into the audio signal path when the AF IN/OUT switch is pushed in. Position 1 places all four sections of the filter in line for CW operation with high selectivity. Position 2, where only moderate skirt attenuation is present, may be used either on CW or on SSB to reduce adjacent station or high frequency noise interference.

DESCRIPTION

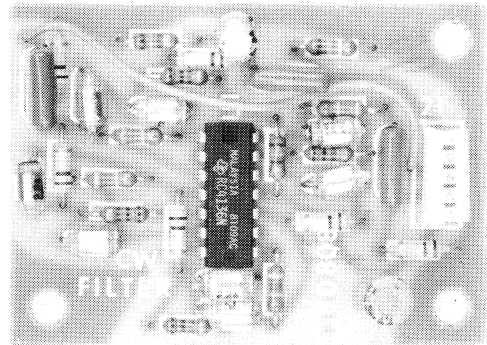
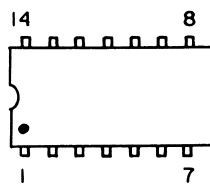
The audio CW filter assembly contains four active two-pole operational amplifier filters whose center frequency is 750 Hz. The four filters are connected in series with the output of the first and fourth brought out to a pin on the board connector. The filters are selected by the AF filter switches and are inserted into the audio chain of the transceiver before the AGC take-off point. Thus, when the filters are in use, the AGC will respond only to signals passing through the filter and will not be "pumped" by out-of-band signals as in conventional audio filter applications.

80808 CW FILTER

PARTS LIST		
C3,11,12	23006	CAP-FXD, 0.1 MF, 250 V, FILM, 20%
C1,2,4-7,9,10	23070	CAP-FXD, 2200 PF, 25 V, FILM, 5%
C13	23182	CAP-FXD, 33 MF, 16 V, EL, VERT, RAR
C8	23222	CAP-FXD, 10 MF, 16 V, EL, VERT
U1A-D	25077	IC-RC4136N

U1

PIN	VOLTAGE
1	3.82
2	3.82
3	3.78
4	3.77
5	3.81
6	3.82
7	0
8	3.82
9	3.81
10	3.76
11	7.53
12	3.77
13	3.81
14	3.82



NOTE: CW Filter IN, set for 2 sections of filtering. No received signal.

