



AMATEUR RADIO

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USING AN SW-3 AS A PRE-SELECTOR WITHOUT MODIFICATION

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The September 1982 issue of *OTB* described a technique for using an SW-3 or equivalent receiver as a preselector for an FB-7 or other super heterodyne receiver without an rf. stage. Unfortunately, the method described required modifications to the SW-3. Many collectors who own FB-7s also have SW-3s and would like to improve the performance of their FB-7, but do not want to modify their SW-3.

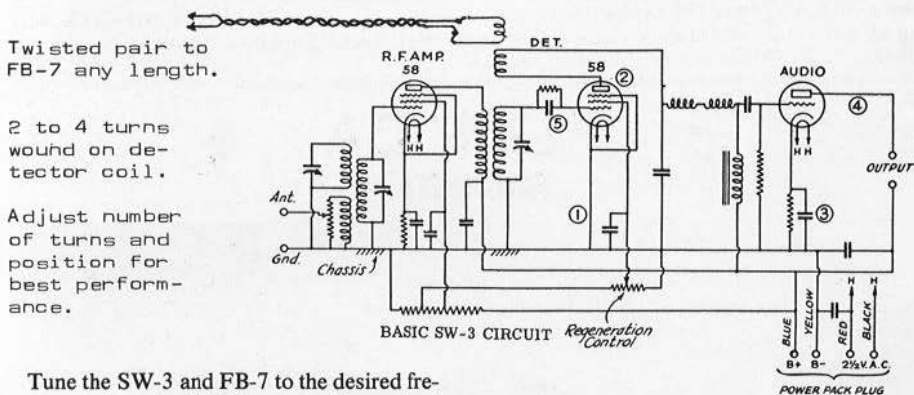
A variation on this circuit that did not require modifications to either the SW-3 or the FB-7 has also been published, but I don't remember where.

Briefly, wrap three or four turns of insulated hook-up wire around the detector coil of the SW-3, twist the leads together and run the twisted pair to the antenna terminals of the FB-7. See figure 1.

After you've won the AWA Old Timers' contest with the hottest receiver on the band, remove the pick-up coil from the SW-3 and put both receivers back on the shelf still in their original mint condition. Save the hook-up wire for next year.

In the above material, I have used the terms "SW-3" and "FB-7" only to be explicit. The scheme will obviously work using any regenerative receiver, preferably with a stage of rf amplification. The greatest improvement will be obtained with a superhet that does not have an rf preselector. Don't expect any improvement with an HRO.

When using older receivers on today's bands, two words of caution are in order: First, average signal levels today are considerably



Tune the SW-3 and FB-7 to the desired frequency and set the SW-3 regeneration control to just below regeneration (detector *not* regenerating); adjust the pick-up coil for maximum signal by sliding the pick-up coil up or down on the detector coil.

This arrangement gives two stages of preselection, one of which is regenerative, without requiring modifications to either receiver.

You can even compare the two receivers by plugging headphones into the SW-3 and comparing the signal from the SW-3 with that from the FB-7.

higher than they were in the early 1930s, so that early receivers may overload. I suggest connecting a small capacitor, about 50 pfd (or 50 uufd in the old days) between the receiver antenna terminal and the antenna.

The second caution is that most antenna systems today are 50 ohms. Yesterday's receivers were designed for much higher antenna impedances, 300 - 600 ohms. This may make the receiver appear dead unless an impedance matching device, such as a pi-coupler is used.