

### AUDIO OUTPUT FOR THE WS52 RECEIVER

Tom Bloxam, GW3LJS

I have found that the audio volume on loudspeaker from the WS52 receiver is just about adequate, but with little gain to spare on weak signals. The following modifications resulted in a considerable improvement in audio output and involve only minor changes associated with the two audio stage valves, V1G and V1H:-

1. Change anode load resistor on V1G (R48G) from 100K to 270K.
2. Change screen resistor on V1G (R59B) from 1meg to 470K.
3. Add a 22uF capacitor from the cathode pin of V1G to chassis. This provides an AF bypass across the cathode resistor (R20C, 1K).
4. Change the screen resistor on V1H (R47A) from 50K to 4.7K.
5. Replace the 12uF cathode bypass capacitor on V1H (C10A) with 22uF.
6. Connect a 10uF, 350V capacitor from tag number 1 (HT+) on T1A (audio output transformer) to chassis, to provide extra audio decoupling.

Some of the several 1meg resistors are suspect throughout the set, one measuring 30+ meg, so they need checking, along with a couple of 4meg resistors (R60A, R60B). I have had no trouble with the original capacitors in the set, although I replace electrolytics as a matter of course.

