

Questions and Answers



W. H. (Gisborne): I desire to employ the "Kestrel Three" especially for short-wave work. Would I gain in efficiency by using a tuning condenser of the usual short-wave type instead of the .00085?

A.: Yes, use the .0001, preferably double spaced, condensers, and do not alter the specifications given for the coils.

2. What valves are most suitable? I have a six-volt accumulator.

A.: Use six-volt valves of the special screen-grid, special detector and high-gain power types.

3. In the schematic diagram I see no connections for "B—" and "C+." Where do these go?

A.: "A—," "B—," "C+," are connected together outside the set.

4. What are the voltages for the different "B" and "C" leads?

A.: The detector voltage is, roughly, 22½ to 45 volts. The plate voltage on the power and s.g. valves is 90 to 135, and on the screen 45-67½. The "C" battery will depend upon the valves used in the last stage and the number of volts on the plate of this valve.

5. I understand that in a short-wave set it is advantageous to have the "C"

battery within the set and keep the leads short. Can this be done in the "Kestrel Three"?

A.: Yes; you could probably find room for it when you are laying out your set.

6. Why is the 4in. armoured cable mentioned in the parts list?

A.: The cable, as explained in the text, connects the s.g. valve to the coil in the audio apartment.

7. As to the screening boxes—two open sides and open top only leaves two ends and bottom—hardly a box. What position is it mounted in?

A.: It is mounted with one side screening the radio stage from the audio stages. One end of the box is against the panel and the other along the floor of the baseboard in the radio stage. Neither of your sketches is correct so far as we can see. "A" is nearly correct, but instead of the piece being at the back of the set, it divides the compartments.

A. J.S. (Oamaru): In writing with reference to queries asked previously in the column it is not a bad plan to include the query to which reference is made. In your case, although we have gone to some trouble to look up your previous query, we can find no reference

to a choke. Please get in touch with us again.

INTERESTED (Southland): I have an eight-valve set being only 80 yards from a 66,000-volt power-line; am troubled with crackling noises. What do you advise?

A.: Communicate with the radio inspector in your district and state your case. It is possible that something may be done to alleviate the trouble caused by the power lines. Failing this, get your aerial as high as possible. If it is practicable, get it up another 20 feet with a very short top, and insulate your lead-in by using armoured cable and earth the armouring. See that your line runs at right-angles to the power-line. Change your earth and do not confuse it with the earth on the electric light or your water mains. Keep a separate earth altogether for radio work.

MECHANIC (Wellington): What would be the specifications for a radio frequency tuning coil 1½in. diameter tuned with a .00085 condenser with a closely-coupled primary of 800,000 impedance?

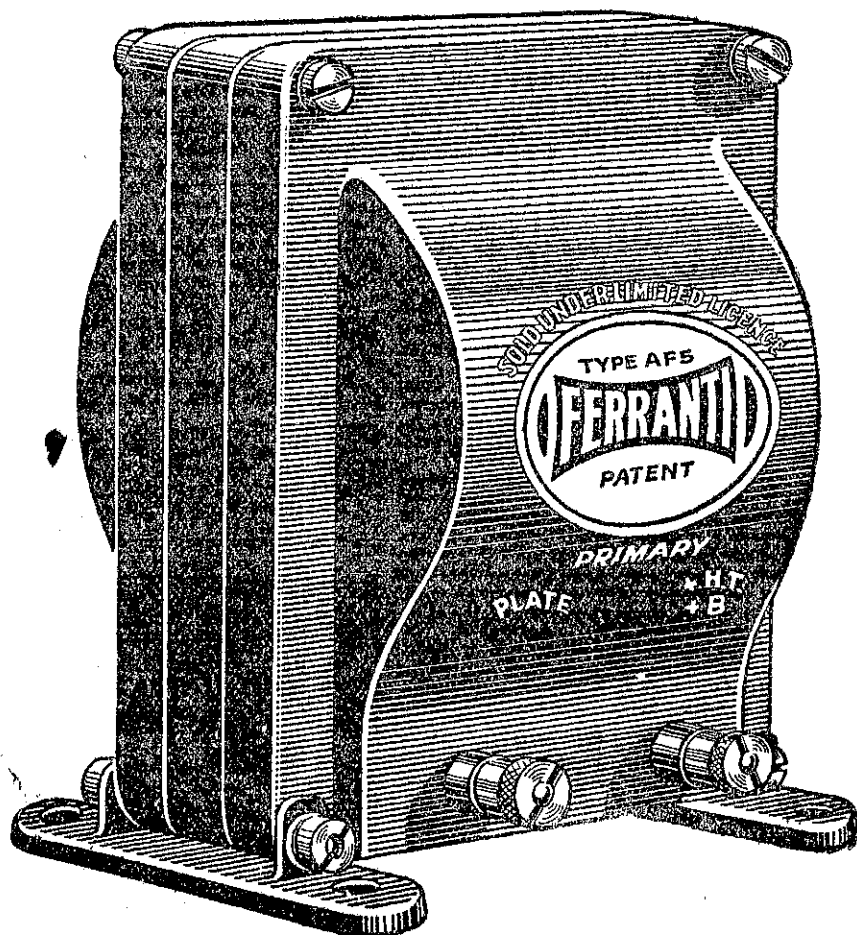
A.: We suggest that on the secondary you use 87 turns of 26 s.w.g. wire, while,

for the primary, use 40 turns of No. 36 d.s.c. or enamelled wire. That should be about right. If you are troubled with oscillation, remove some of the turns because, although it is easy enough to feed into an optimum impedance, the transfer of energy may be too high to maintain stability, and you will have to lessen the coupling.

D. D. (Bay of Plenty): I have a nine-valve all-electric set, and can get very little volume. I have it turned up until the oscillation point is reached, but the change in volume is hardly noticeable. Would the valves be at the bottom of the trouble? My other two sets bring in the American stations by the dozen. Should the speaker be adjusted?

A.: Quite possibly your condensers are out of alignment. Decreased sensitivity may result from almost any defect in the set, so it is very difficult to tell you where to look for it, especially as you are operating a commercial set. However, we very much suspect the condensers, or one of the valves.

H. L. (Nelson): I use a ½-amp. charger and a B eliminator, which supplies 13m. amps. to my set. How much will it cost me to operate both of these?



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