

Questions and Answers

RASLOS (Christchurch): The easiest way to write for a verification is to use the special paper made available to the DX Club. You merely have to fill in certain gaps and then post the form to the station.

2. What voltage "A" and "B" batteries would I use for the "Sparrow Hawk One"?

A.: Use two-volt valves, and then you need only use a two-volt accumulator. You need about 45 to 90 volts on the detector. The "Sparrow Hawk" will not work a loudspeaker except on the local station.

20 (DUNEDIN): Improvements have been made in the construction of these valves, and the new ones, although of the same number, are better than the old. If you put in a different type of valve you would have considerable trouble in adjusting the filament voltage, etc.

2. Do you want a battery or an a.c. amplifier? A battery push-pull outfit was described in the "Radio Record" a considerable time ago. This would still be the best for your requirements.

3. The voltages on the different taps of your eliminator vary considerably with the drain put on them. At about 10 mamps, at number 6 you get 150 volts, and the others are in proportion down to about 22 volts, with 4 or 5 mamps.

H.C.F. (Auckland): Sorry, we do not supply circuits, but we shall keep your request in mind, and possibly design a circuit for the "Radio Times."

"JAY EYE SEE" (Christchurch): Providing correct voltage is supplied to the valve filaments, it is not necessary to install rheostats to control the filaments of the "Super Six."

2. The negative side of the filament is earthed to the baseboard screen. Be careful with the screen round the condenser, as it is a different potential from that round the rest of the wiring.

W.W. (Auckland): A loosely coupled crystal set is the "Rejecta Two."

described in the "Radio Record" dated June 19, 1931.

J.W.S. (Auckland), and "Marsite" (Te Aroha): You require 1½ lb. of 36 enamelled or .6lb. of 38.

2. Would such a coil have the same resistance irrespective of the current flowing through?

A.: Resistance is, within limits, not affected by the amount of current flowing through it. The more the current the greater the voltage drop across the resistance. Replacement coils, we think, can be obtained from Spedding, Ltd., Auckland, who are the New Zealand agents.

O.M. (Auckland): It seems that there is something wrong with your potentiometer, as varying the slider should make a big difference.

2. We think the circuit of the P.C.J.J. would be better than the one you are using, as you are not getting fullest efficiency out of the first valve. You are getting greater efficiency from the longer aerial because you have no tuning arrangement, and that length is most suited to your circuit. If you put in a proper tuning arrangement you would definitely notice the difference.

L.D.H. (Te Aroha W.): I have made the super-het. converter described in the 1931 "Guide," and it works splendidly as far as volume of stations is concerned, but I find that the stations repeat after half the dial?

A.: This, unfortunately, is one of the difficulties facing the amateur super-het. constructor. You are getting repeaters due to the oscillator and the tuner altering their relationship, and probably because of coupling due to incomplete coupling. There is very little that you can do to overcome the difficulty.

38NW (Westport): I intend to erect a Beverage aerial and can get in pointing towards Christchurch only, and must slightly slope it.

A.: Yes, it will be quite satisfactory. You will probably bring in the Australians quite well. An earth connection is necessary, and is joined, as usual, to your ordinary earth terminal. We suggest you consult the 1931 "Radio Guide." We think the length of the aerial will be quite satisfactory. Your voltage divider appears to be in a hopeless condition if one half is threaded and the other half broken. We really think it would be unsatisfactory.

J.A.M. (Dunedin):—Your aerial appears to be constructed on lines that are technically unsound. The masts should be further back from the house, and the actual aerial should be kept away from the roof of the house by a halyard, the lead-in sloping back from the aerial to the set. A lead-in should never slope back underneath the aerial as yours is doing. Furthermore, it is running fairly close to the roof and parallel to it.

L.F.B. (Auckland): We do not advise you to construct the set you suggest. It would be difficult, if you do not have the honeycomb coils to fit the swinging coil holder, to make them. You could, of course, use an ordinary regenerative set such as described for the Browning Drake. The other components should be C2, .006 (approx.), and C3, .00025.

G.W.R. (Auckland):—My electrolytic "B" eliminator hums badly. How can this be reduced to a minimum?

A.: Do you mean the eliminator when connected to the set or is the noise arising from the eliminator itself? Presuming it is the first, and most likely, you will need to connect extra filter condensers across the output, say a 4 mfd. 400-500 volts test, according to voltage delivered. Generally speaking, the condenser must be tested at double the working voltage. You merely connect a condenser between B+ and B—. If you have several taps it may be necessary to connect 1 mfd. condenser between each tap and "B—."

H.F.B. (Ellerslie): We have the circuit you want. Send us a stamped and addressed envelope, and a shilling postal note, and we will send it to you.

"QUERY" (Eltham): It is not practicable to add another to a commercial receiver such as yours. You can use the 221 in the detector stage if you wish.

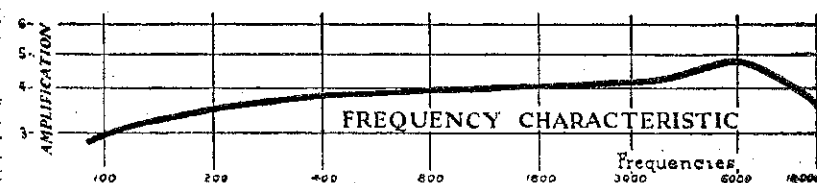
B.B. (Central Otago): The rated filament voltage for such a tungar bulb is two volts. It is possible, but not likely, that the filament voltage is blowing yours out. Otherwise we cannot suggest any reason. We presume that your a.c. mains are not subjected to severe voltage fluctuations?

J.M.T. (Christchurch): See the dx columns for your query.

"DXER" (Dunedin): You have not made your first question clear. What do you mean when you say the condenser won't go below 25 but tunes the circuit all right below that number?

"CURIOUS" (Timaru): The "Radio gram Five" is not designed for short-wave work.

"ADAPTOR"—It is very difficult to get an a.c. shortwave adaptor to work satisfactorily. A good one using a battery valve for balancing appeared in the 1930 "Radio Guide." An extra choke in the plate circuit of the detector valve may possibly quieten things down a little. Extra by-passing will be needed, and try a h.f. choke between the detector plate and its connection with the socket.

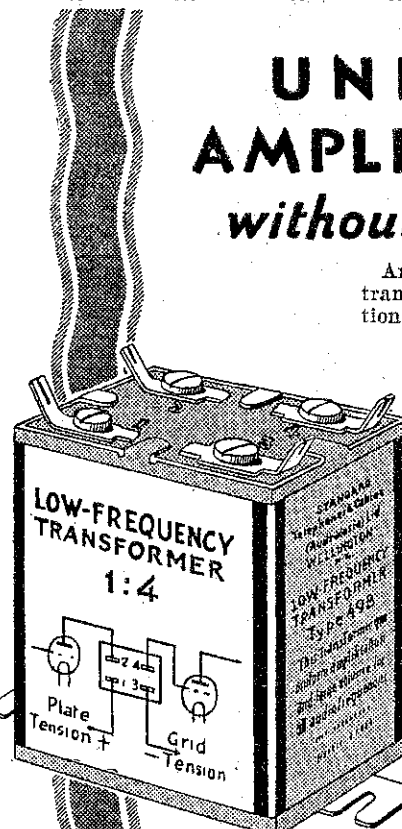


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