

Questions and Answers



"F.P." (Hokitika) asks what would be the cost of running a 6-valve all-electric set.

"A.P." You would need to name the valves you are using, and state if you are using a dynamic cone speaker, and how the field is energised. If you do this, we can give you some idea of the running cost.

"A.C.Y." (Auckland).—You sent a covering letter for your questions but omitted the actual questions. Send us these, and we will endeavour to answer them for you.

"W.M.M." (Glen Murray) has a 4-valve set, but cannot get any short-wave stations. The set is quite dead when the short-wave coils are plugged in. What is the matter?

A.: Increase the detector voltage (probably marked HT1) to 45 or even 67½ volts. The tuning is very fine, but needs some practice before stations can be tuned in. Removing the earth frequently makes the set more sensitive. A fairly short aerial is better than a long one.

"H.G." (Hammer Springs) asks us when the D.C. eliminator is coming along.

A.: We have been temporarily held up with it, but it should appear within the next month. Our difficulty in Wellington is that there is no D.C. current with which to experiment.

"W.H.H." (Earnslugh) asks us where a switch which was described in a previous issue might be obtained.

A.: This was a news item concerning a piece of apparatus which has just made its appearance in America. No doubt within a very short time it will be available in New Zealand.

"J.B." (Longford) sends a report on the frequency test, and asks if his apparatus, comprising a horn speaker and H.R. set, came up to scratch. It reproduced well between 200 and 3000 cycles.

A.: It appeared to be slightly lacking on the higher frequencies, with, of course, the usual horn speaker cut off of the lower. Other than this the performance was normal.

"J.H." (Sandringham) asks concern ing the Daniells cells.

1. Would the charger supply 6 volts to the valve filaments if connected to the accumulator as shown in the diagram?

A.: No, it would be quite safe.
2. Are the two extra cells in the charger to overcome all resistance?—Yes.

3. How many of these cells would be required to charge a 6-volt accumulator, and could they be left permanently connected to the accumulator?

A.: Eight would be required, and they could be permanently connected.

4. Would they keep the accumulator fully charged if .75 amps. were taken out per hour and the set used for three hours a day?

A.: In all probability, yes.
5. I have constructed the eliminator for small sets, but it hums very badly. I have departed from the specifications in that I did not shellac the laminations as they were already insulated. I used 1700 turns on the transformer primary and reduced the other accordingly.

A.: Probably the insulation is not sufficient. The laminations should have been shellaced as specified. It is quite a simple task. You need only a jar of shellac and can put in the strips by the dozen, and lift them out singly and leave them to dry. You should not have made the primary less than specified, for it would not have harmed the eliminator to have made a join. It seems that you will have to pull the transformer down and make it up again.

"H.W.Y." (Herekino) asks advice on certain points.

1. When I use "Round-the-World" Two as an adaptor plugged into the detector socket of a 4-valve Browning Drake I get nothing but a continuous whistle.

A.: Reverse the connections to the primaries of one of the audio transformers.

2. I have built the 4-valve B.D. exactly as specifications, with the coils, aerial 74 turns tuned with a .0005 condenser, secondary 88 turns tuned with a .00025 condenser. There is a great difference in the readings of these two dials.

A.: The coils are not matched. Make them both the same, preferably 74 turns tuned with a .0005 condenser.

3. Rotating the tickler makes no difference.

A.: Try a .0005 fixed condenser across the primary of the first audio transformer. Try reversing the connections to the primary and to the tickler.

4. The neutralising condenser is full out.

A.: The capacity appears to be too big. Can you reduce it by removing fixed plates.

5. I cannot neutralise the set as de-

scribed because I cannot receive signals with the R.F. valve turned off.

A.: Use the other system for regenerative receivers. That is, rotate the tickler till the set howls and then advance the neutralising condenser to prevent the howl. The method has been fully described in several of our publications, including the last "Guide" and the "Record."

"R.V.P." (Petone) has an A.C. set which stops after from 1½ to 2 hours work. The valves light, but there is no signal from any stations. The maker's agents have taken the set back and cannot find any trouble.

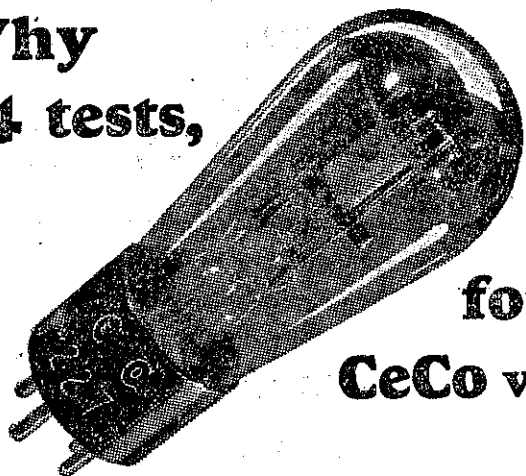
A.: Unless your aerial is defective we cannot suggest anything. Examine this equipment very carefully to see is not a possibility of the aerial shorting to the earth. We would advise you to have the representative of the firm come to your home and examine the conditions there.

"NOVICE" (Nelson) wishes to construct the Daniells cell charger and wants to know a few points:

1. Is the battery charger left connected to the set all the time, even when the set is in use?—Yes.

2. How are the connecting wires joined to the copper and zinc rods? Is it best to solder them direct or by brass terminals to the copper and the zinc? I have plenty of brass terminals from dry "A" batteries. Could I use these or the strips of zinc off the old dry "A" batteries to which the terminals are already attached?

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