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WELLINGTON

Day and Night Service



Questions and Answers

"PUZZLED" (Berhampore): What is the best crystal circuit to separate 2ZW and 2YA?

A.: The "Rejecta 2," described in the "R.R." dated June 19, 1931.

2. What are the coil specifications using a 3in. former and a .00025 variable condenser?

A.: As given in the article describing this set.

3. My aerial is 60ft. long and the earth 30 feet. Would I get better results with a shorter earth, and is the aerial long enough?

A.: Short earth connections are always the best; 60 feet is long enough for your aerial if it is efficient. If not, crystal reception would be greatly improved by using 100 feet.

"FORMO" (Papakura): Does static injure a radio set?

A.: No.

2. My set has a static control. Is it advisable not to use this except when static is bad? A salesman told me that when this control was full on only five valves are working.

A.: Your static control is merely a tone control, which reduces the intensity of static by cutting off the high frequencies. It certainly does not cut out any valves.

3. In the event of American valves not being available after the Ottawa Conference, what make would you advise for my set?

A.: We do not think the import of valves will be in any way influenced by the Conference. However, if you wish to use English makes, American equivalents are available in nearly all of them—Cosor, Osram, Philips, Mullard, etc.

R. L. (N.P.): Why does my four-valve "Neutron" set (less shielding) go very much better minus the grid leak, which is in parallel with the grid condenser, except when oscillation, which is hard to control, commences with a violent noise like an exhaust from a motor? The volume is excellent.

A.: Your grid leak is probably defective. We occasionally find samples marked 3 megs, which on test with an ohmmeter show as much as 10 megs. Keep only to the better makes. The instability is easy to understand in that the grid, without the grid leak is more or less up in the air. Your set still operates with the grid leak out because there is always a certain amount of leakage in the valve holder and through the grid condenser, and perhaps through the grid leak holder.

2. My wavetrap made according to the 1931 "Radio Guide" and using a .0004 fixed condenser in conjunction with the .001 compression condenser, is absolutely useless for tuning out 2YB.

A.: Reduce the number of turns on the coil by ten or so.

3. Where could I get directions for making up the "Outspan Five"?

A.: Unfortunately we are completely sold out of the issue in which the description of this set appeared. However, in the next "Radio Times" the "1932 Outspan" will appear. Briefly, it is a four-valve battery set using two stages of s.g. r.f., s.g. detector, with pentode output. The stages have been ganged successfully, even though reaction is incorporated. Altogether it is, in our opinion, one of the best dx battery sets we have ever described.

"CHEMIST" (Auckland): I have made up the "Outspan Five," and it is not too selective.

A.: Reduce the number of turns on the aerial coil to 16 and also insert, if it is still too unselective for your needs, a .0001 fixed condenser in the aerial.

2. What are the lowest numbers of turns on the primary coils, using 1½in. formers inside 2in. formers?

A.: We do not know quite what you mean by "lowest." The practical minimum would be one turn, but you would hear nothing but locals. Try 16 on the aerial primary and 25 on the r.f., and 25 the detector; lin. formers would be of no advantage. The turns are close wound, the bottom primary turn and bottom secondary turn are approximately opposite.

N. Z. 37W (Shannon): Could you give me the specifications for an 80 m.h. r.f. choke?

A.: An 1in. diameter wooden rod, with 5 slots 1-Sin. wide, ¼in. deep, and 1-Sin. apart. Wind 200 turns 36 d.s.c. in each slot, making a total of 1000 turns.

2. Could you give me the number of primary turns for an inter-stage primary in a screen-grid r.f. stage? The former is 1½in. diameter.

A.: 40 turns of 30 d.s.c. would be quite satisfactory.

"QUEERIE" (Balclutha): I have a t.r.f. all-electric 7-valve commercial set. When the volume is turned toward maximum the set oscillates and bangs when the dial is turned. Valves are O.K. When the dial is stationary the set is all right.

A.: Do you mean tuning dial or volume control dial? If the latter then your volume control is defective and should be cleaned and tightened or replaced. If the former, the rotor of the ganged condenser is probably not efficiently earthed. Solder a pigtail connection between rotor and chassis. Keep leads from caps of s.g. valves well separated.

L. S. (Christchurch): Is it of any benefit to shield coils and valves in a battery set?

A.: It depends on the circuit you are using. If the set is perfectly stable without shielding, it is of course not necessary. But with modern s.g. sets, however, shielding will be found essential.

2. Is A415 suitable for detector, first and second audio?

A.: Substitute second audio, with a B409, and do not forget appropriate bias. Otherwise O.K.

3. What New Zealand stations could I get on a 3-valve set at fair speaker strength with battery, aerial and location all in the set's favour?

A.: At present you should get all New Zealand stations and the main Australians at fair speaker strength.

"WEST" (Hokitika): What is the best combination of valves to use in a 5-valve Pada neutrodyne? Till now I (Continued on page 23.)

Information Coupon

(To be used with all requests for information.)

Name of set

Model

Name

Address

.....

.....

Nom de plume

To be kept in subsequent inquiries

Please Note:—

- (1) Be specific and brief, tabulating, if possible.
- (2) Write legibly and on one side of the paper.
- (3) We do not design circuits.
- (4) Limit three questions, unless 1/- is enclosed.
- (5) Postal queries limit three questions. Enclose stamped envelope and 1/- fee.