



Questions and Answers



C.H.G. (Oamaru): I have a four-valve B.D. using G.P. and a B605 power valve. What is the drain on my "B" battery?—21 mamps. if properly biased.

A: What should be the life of my "B" battery? The set is in use on an average of three hours daily.—Six to nine months.

3. Would a Philips A630 be all right in the radio stage?
A: Yes, but it may cause instability.
4. Will future B.D. articles include a triode as well as a screen-grid circuit?
A: The former has often been published already.

N.Z.'S OWN RADIO BOOKSHOP

The TE ARO BOOK DEPOT, Wellington.

At Last We Have It.—"Wireless, the Modern Magic Carpet," 4/9 posted. Simple language anyone can follow.

"Handy's Handbook," 7th edition. 5/3 posted.

"Theory of Radio Communication," by Filgate, 12/-.
"Collins' Wireless Diary, 1931," 4/- posted (Amateurs and Broadcasters—150 pages useful information).

"Radio Trouble Finder," 1/10.
(Published by "Radio News" Co.)

"Radio Amateur Call Book," Sept, 1930, 5/3.
"Projection Engineering"—a monthly, 21/- per annum.

"Elements of Radio Communication," by Morecroft, 19/-.
"Thermionic Vacuum Tube," by Van der Bijl, 26/-.
"Radio Receiving Tubes," by Moyer and Westrel, 14/-.
"How Radio Receivers Work," by Roberts, 8/-.
Also all leading English, American and Australian wireless magazines.

Mr. F. W. Sellens' list of Shortwave Broadcasting Stations, 7d.

Last year's "N.Z. Listeners' Guide" still selling well, 2/9 posted.

"Modern Wireless," 1/7.
"At About the All-Electric," 1/7.
"N.Z. Radio Handbook Annual, 1930," 2/9. (contains list of the World's broadcasting stations).

Blue prints and complete instructions on following—1/9 each—
7-Valve Super-Het,
6-Valve Neutrodyne,
5-Valve Neutrodyne,
Batteryless Neutrodyne,
Selective Crystal Set, 2-stage Audio Simple Wave Trap and Clarifier.

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TE ARO BOOK DEPOT

64 Courtenay Place, Wellington.

"CAMERON" (Canterbury): Your query was answered in our issue dated October 17. A little observation would have saved us time in looking up references.

G. P.K. (Te Aroha): In what issue was the "R" method of judging reception volume published?—August 22, 1930.

2. Could you publish a technical index?—We do so annually.

3. When are time signals sent from 2YA?—At 4 p.m. and 7.30 p.m.

"RECORD READER" (Huntly): I have a Mullard four-valve receiver. Where could I obtain short-wave coils?

A: Write Spedding Ltd., Box 462, Auckland.

C.A.H. (Napier): I wish to construct the "Guide" screen-grid short-wave receiver. Could six-volt valves be used?—Yes.

2. What alterations will be necessary to the circuit?—None.

3. Which six-volt valves would be best?

A: One screen grid, a special detector, a general purpose, and a 605 type.

4. Are amperites necessary when using a six-volt accumulator?—No.

A.B.C. (Waipawa): Where could I obtain a circuit diagram of a short-wave adapter to use with a commercial five-valve set?

A: In the 1929 "Listeners' Guide." A further one will be published in the 1931 "Guide."

2. What is the best combination of valves to use with it?

A: The ones you are at present using are quite suitable. Use a special detector, 415 type, in the adapter.

"AUDIO" (Oamaru): Is the short-wave adapter as described in the 1929 "Guide" as good as any for simplicity and efficiency?—Yes.

2. Where may I procure one?

A: From almost any dealer or Te Aro Book Depot, Wellington.

3. Is the log enclosed a good one for my set?—Yes.

"MAC" (Oamaru): What would it cost to change my five-valve commercial set into an electric one?

A: We do not advise it. It would not be worth the trouble.

2. My aerial pole on the house is five feet higher than the one at the bottom of the yard. Would it be better shorter?

A: No, worse.

3. Would you advise me to bring my lead-in to the set as I have indicated?

A: No, your aerial would be much less efficient.

H. P. (Blenheim): In a recent issue in "Laboratory Jottings" you say the Marconi pick-up is satisfactory for the average set. Could I get enough volume for a small room from my eight-valve super. het. with two audio stages?—Yes.

2. Could I arrange the pick-up so as to get the benefit of my full eight valves?—No.

3. Who stocks the Marconi pick-up?

A: The nearest agents for these, so far as we know, are Fear and Co., Willis Street, Wellington, and the C.A.S., Wellington.

A.S.M. (Fairburns): One of my masts is much lower than the other because of the slope of the ground, and my lead-in comes in from the top mast. Is that the correct one?

A: Take it from the nearest. Otherwise it is immaterial.

"PEP-PUNCH" (Christchurch): What valve would you recommend for a one-valve amplifier, using Daniel Cells as "A" supply?

A: In the two volt class use the Radiotron 280 type, in the four volt the 415 type.

2. Using Daniel cells as "A" supply, would it be necessary to use a wet "B" battery?

A: No, a dry one would be quite suitable.

A.E.S. (Onehunga): I have a three-valve commercial set which I have been using about 15 months. I find now that I cannot get Wellington. I have renewed my valves, but not my batteries.

A: It was probably not necessary to buy a new set of valves, but new "B" batteries are certainly indicated.

J.T.S. (Kaitangata): You stated in answer to a previous query concerning the Daniel Cell battery charger that the drain of 1.16 amps was a little high for the charging of a six volt accumulator by a nine cell Daniel's cell charger. Would the addition of another three cells, making a total of 12, be more efficient?

A: It is certainly worth trying.

2. Would the increased voltage have a harmful effect on the accumulator.

A: No, it would be quite safe.

"CRANK" (Wanganui): I enclose a copy of a circuit for a two-valve all-wave receiver taken from an English magazine. Would this be suitable for N.Z. conditions?

A: Probably not. In a short time we will be publishing a series of excellent all-wave receivers. We would advise you to wait for this.

"CRYSTALITE" (Wellington): In the issue dated December 14, 1928, there appeared an article entitled "A Crystal with Unusual Volume." I have recently constructed this set for use at a place about 20 miles from Wellington, but cannot get the increased volume referred to. It is just as loud with one detector as it is with two, irrespective

of the manner in which the detectors are placed.

A: In the first place this is merely an experimental set which, however, will do all that is claimed for it if it is working properly. Carborundum crystals are very patchy and though they appear to be matched they may differ electrically. We would advise that you experiment further until you get two that are properly matched. Forget about full-wave rectification which at the best of times is an experimental hook-up.

SARTORIUS (Woodville): My set has a background noise on the lower numbers of the tuning dial. At 20 it is a roar, and if I detach the aerial it bursts into oscillation. The noises are almost eliminated while it is raining.

A: It appears that there is a leak either in the high-tension wires across the insulators or switches in, or surrounding your home is taking place, and

CORRESPONDENTS must attach this coupon to all queries sent to the Technical Editor (Box 1032, Wellington). Questions arriving without it are likely to go astray or be delayed.

Name of set

Number of Vales

Name

Address

.....

.....

Nom de plume

To be kept in subsequent inquiries.

Date

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, but accept suggestions for feature articles.

Solving trouble, as different from

advice, is difficult by correspondence

and while letters are given every

consideration, answers are not

necessarily correct—they are only

our opinion based on the matter

supplied, which may be quite in-

adequate. Intricate and involved

specifications cannot be supplied

without a specialist's fee.

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