

Questions and Answers



M. I.J. (Auckland): In winding broadcast coils for the 1930 "Guide" short-wave set can I use 32 B. and S. wound on extended valve bases?

A.: 32 gauge is really very small; 30 would be better, and we have designed coils with these specifications. In a very short time, we really hoped to have had them this week but find we cannot, we intend to publish complete specifications for short-wave coils.

2. What is the most suitable ratio of audio transformer to use?

A.: Use low ratio for quality and high for loudness or volume and distortion. Generally speaking $3\frac{1}{2}$ to 1 gives the best results.

SOMNOS (Taranaki): My set has been distorting on the upper notes and has survived numerous alterations in the valves, layout, etc. With the power valve I have given as much as 40 volts bias and still get distortion. The mampmeter still shows distortion in the first stage. If due to an overloaded detector how can this be cured without loss of volume? The transformers are 4-1 and 2-1.

A.: You seem to have tackled most of the avenues that we can advise. The 2-1 transformer should be placed in the first stage and the 4-1 in the second. Other points seem to be too large a capacity condenser from the plate of the detector valve to the filament, or its absence. An inefficient high-frequency choke in the plate lead of the detector would cause loss in high notes. An anode bend detector will prevent overloading in that stage.

2. I have a swinging tickler and oscillation is very violent.

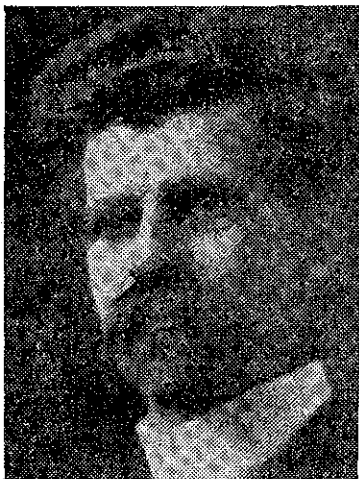
A.: It appears that you will have to take off some of the turns on the swinging coil.

PUZZLED (Westport): Since I have replaced my valves I can get only half the volume that I did with the old ones.

A.: It sounds as though a valve is defective. One of the batteries may be reversed, and see that the "C" connections are the right way round. If you

"Messiah" Relay

DURING 2YA's relay of the evening service from the Taranaki Methodist Church on Sunday, December 14, a portion of Handel's "Messiah" will be presented by an augmented choir and the following soloists:—
Soprano, M^{rs}. Florry Roscoe;
contralto, M^{rs}. Thomas Watson;
tenor, Mr. Harry Phipps; bass, Mr. R. R. Orr.



Mr. H. Temple White,
conductor.

still do not get results you should communicate with the agents for the set who sold you the valves.

J. B.H. (Auckland): Will you design coils for my short-wave receiver to be tuned to a .0003 condenser?

A.: A complete set of coils will appear in the near future. There is no point in using a condenser as large as .0003. Far better to remove some of the plates and use one of the sets of coils to be described.

RESISTANCE (Christchurch): I recently constructed a wet "B" battery, using Edison elements. The battery runs down too quickly. I mixed the electrolyte myself, but do not know the exact proportion in which I mixed the elements. The battery charges very quickly and rises to 175 volts, but at the end of six days the voltage is down to 125, sometimes less.

A.: Your "B" consumption appears to be about correct. The fact that your batteries charge up quickly point to a high specific gravity in the alkaline solution or a high charging rate. The remedy is to reduce the specific gravity and so permit the battery to take a longer charge, or reduce the charging rate, as this holds good with any battery. The slower you charge the longer you discharge, and conversely the quicker you charge the quicker you discharge.

D. X. (Dunedin): How many plates must be removed from my .0003 condenser to make it .00025?—Two.

2. Where can I obtain a copy of the "Listeners' Guide"?

A.: Try the Te Aro Book Depot, Wellington.

3. In what number of the "Radio Record" were the particulars for coils to suit my set given?

A.: They will be given again in a complete table in the near future.

TUI (Wanganui): I have made up your superheterodyne short-wave adapter, but it doesn't superhet. Should L3 and L4 be connected to earth?—Yes.

2. Would it be O.K. if I took the B+ lead for the adapter plates from the cap of one of my 224 valves?

A.: No; you must have a complete separate power supply for the superhet. The cap of your 224's are the grids of the valves, and consequently should be negative. You will find the set will work

quite satisfactorily if you observe these few points.

RAYDIOLO (Hamilton): Below 300 metres reception is clear and then distortion and fading occur. The set used to rumble anywhere below 300 metres, but this was remedied by sand-papering the bottoms of the screening shields.

A.: It may be your down lead from the aerial is swinging or hanging loose. From the data you have given us it is very hard to suggest anything other than this.

2. When the pickup touches any metal on the turntable and when any weight is placed upon the turntable the set buzzes.

A.: In some pickups this is quite in order; in others it denotes a broken cord or open circuit.

3. When the earth is disconnected the set rumbles and the stations come in with more volume.

RADIO DIRECTORY

What to Buy and Where

CITIES

ACE and HAMMARLUND SETS, Johns, Ltd.
WESTINGHOUSE Rectifiers Chancery Street, Auckland.

BROWNING DRAKE SPECIALISTS F. J. W. Fear & Co.
63 Willis Street, Wellington.

BURGESS RADIO BATTERIES, All Radio Dealers.

KING RADIO RECEIVERS ... F. J. W. Fear & Co.,
63 Willis Street, Wellington.

LOFTIN-WHITE AMPLIFIERS Stewart Hardware Ltd.,
Courtenay Place, Wellington.

MAJESTIC RADIO RECEIVERS Kirkcaldie & Stains,
Wellington Agents, Lambton Quay.

MULLARD VALVES ... All Radio Dealers.

PILOT 1930 PARTS—PILOT SUPER WASP KITS, GILFILLAN, KELLOGG and AT-WATER KENT SETS ...
Harrington's, N.Z., Ltd.,
138-140 Queen St., Auckland.
40-42 Willis St., Wellington.

RADIOLA RECEIVERS and Farmers' Trading Co., Ltd.,
Expert Radiola Service. Hobson Street, Auckland.

STEINITE RADIO ... G. G. Macquarrie, Ltd.,
120 Willis St., Wellington.

COUNTRY TOWNS

MAJESTIC ... Radio House, Hamilton.
G. S. Anchor. Manager.

PHILIPS VALVES AND APPARATUS All Good Radio Dealers.

Don't be Handicapped by Isolation.

We specialize in supplying the wants of country listeners, and make a point of sending exactly what is wanted. Remember we pack and post (or rail) Free of Charge.

"A" Batteries, all makes (except Columbia) 2/6
"B" Batteries, Burgess super ... 32/6
Full-o'-Power "Power Sixty" ... 21
Columbia super 32/-
"C" Batteries, 9-volts, tapped ... 2/6
Complete Loftin-White Amplifiers, with "Radiotron" Valves 212
All parts for home constructors of Loftin-Four. Ferranti B1 20-40 hy. choke. Ideal for the L-W. 25/-
Farrand Inductor Speaker. Demonstration model in cabinet 25

We are the Mail Order Specialists. All goods guaranteed. Terms: In advance.

—The—
C.A.S.

(Country Accessories Supply)

20 VENTNOR STREET, SEATOUN,
WELLINGTON.