

# The Radiokes Line

PERPETUALLY  
GUARANTEED

FOR  
1929 SEASON

Choose the Right Components . . .  
And you can Choose your Program

In Radio where precision decides between results and failure, the trade mark of the most famous R.F. Engineers in the Commonwealth furnishes a true basis for confidence. Buy with care and you can build with satisfaction.

Obtainable from all good Dealers  
everywhere.  
Or direct from

**METROPOLITAN**  
ELECTRIC CO  
LTD.

27-29 King Street

126-130 Sussex Street

Sydney

294 Little Collins Street, Melbourne

and at

Brisbane, Adelaide, Hobart, Launceston,  
and Auckland, N.Z.

# Foreword



Presented in the following pages of this latest issue of the Radiokes Guide you will find a comprehensive range of Radio Frequency components, for use in all successful circuits from earlier times right up to the present moment, symbolising the maintenance of Radiokes ambition "To lead the field."

The Radiokes instruments illustrated are designed by engineers without equal, all instruments are tested under the most severe conditions, and during their factory life are subject to such inspections and final tests as is probably received by no other manufactured article. So absolute indeed, is the confidence of the makers in the efficiency of their products, that they are guaranteed

UNCONDITIONALLY and PERPETUALLY.

The happy position occupied by Radiokes to-day, supreme in public favour, is easily understood when you consider the attitude of the makers to their products. We know beyond doubt that the future of Radio depends entirely on how good its equipment is made—not how cheap, and our practice is always to build up a standard—not down to a price. This ideal provides the fundamental reason for the extra measure of performance a Radiokes instrument will deliver, and our fame to-day is conclusive evidence that the quality built into our products has won the enthusiastic approval of the radio public.

Surely no greater evidence of Radiokes quality and efficiency could be found than the fact that Radiokes to-day are the greatest manufacturers of Radio Frequency apparatus in the world, making the highest grade equipment in the market.

No claims made on behalf of Radiokes performance but was our own actual experience on test, and the reflection of what some of our hundreds of thousands of users write us. "Radiokes" costs you no more, but gives you a satisfaction no other manufacturer can offer. Radiokes will continue to increase their margin of leadership constantly, determined to give the public further SERVICE—QUALITY—VALUE—and still better products.

## PERPETUAL!!

### Radiokes Guarantee

We hereby unconditionally guarantee in Perpetuity this instrument which has been tested and inspected, and is free from mechanical and electrical defects.

Should it for any reason prove defective or become damaged we will be pleased to repair and test same free of charge. The complete faulty instrument must be returned to our factory, 130 Sussex St., Sydney, together with any broken parts thereof, carriage paid and return postage included.

This Guarantee of Perpetual Service is made between the user and the Metropolitan Electric Co., Ltd., and in no way obligates the dealer through whom this apparatus was purchased.

METROPOLITAN ELECTRIC CO., LTD.





## “Radiokes”

### MASTER BROWNING- DRAKE COIL KIT

This 1928 Model Browning-Drake Kit is one of Radiokes latest productions, and one of which we are justly proud.

Of considerably smaller physical dimensions than those of its predecessor, this Kit is none the less efficient, but conforms with the latest developments announced by its originator Mr. Glen H. Browning of U.S.A.

This Kit embodies a new method of neutralisation, and by virtue of its smaller diameter is not so susceptible to local pickup or magnetic interaction between units. Another feature is the one-hole panel mounting applied to the Regenerformer.

Built according to Radiokes Low-Loss principles, and mounted in a Bakelite framework; this makes up into a particularly robust Kit, fitted with plainly designated screw terminals. Has a Bakelite arrow-engraved knob on reaction coil for greater tuning convenience.

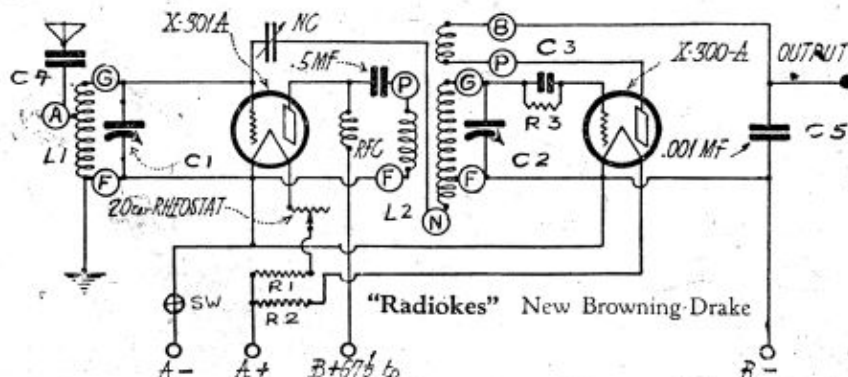


## “Radiokes”

### STANDARD BROWNING-DRAKE KIT

This well-known coil Kit will still be continued. This has been one of the most popular Kits ever introduced into Australia, and no doubt this Kit will retain its following for some little time to come.

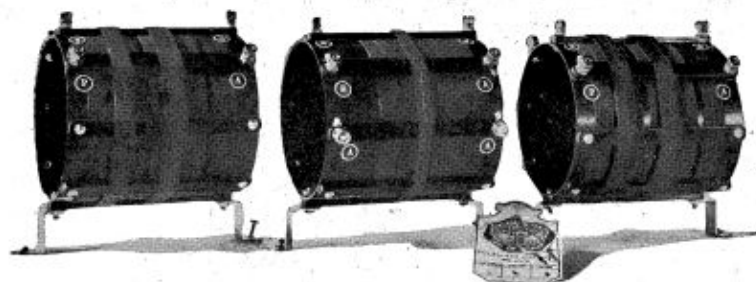
PRICE . . . . . BOTH PATTERNS, £2/-/- per Kit.



L1, L2, Radiokes Master Browning Drake Kit, C1 .0005 variable condenser C2 .0003 variable condenser, R1, R2 Amperite type 1A, N.C. Radiokes Neutralizer R.F.C. Radiokes R.F. Choke, C4 .0001 fixed condenser C3, R3, Grid condenser and 2 meg leak. Output connects to input of either amplifier shown elsewhere in this booklet.

# “Radiokes”

## 1928 SOLODYNE COIL KIT



This Kit does not supersede the standard Radiokes Solodyne Shielded Kit, but is a radical departure in a different field.

The most recent modification of the Solodyne principle is for the utilisation of the modern screen grid valves, thereby assuring tremendous increases in sensitivity and stability of operation.

This is the 1928 Super Set from Britain, and is hailed by authorities in England as the finest receiver yet produced.

Without question the heart of this receiver is the Radiokes 1928 Solodyne Coil Kit, and the inductance units comprising same are acclaimed as the finest available in the World and worthy to take highest place in the best receiver yet.

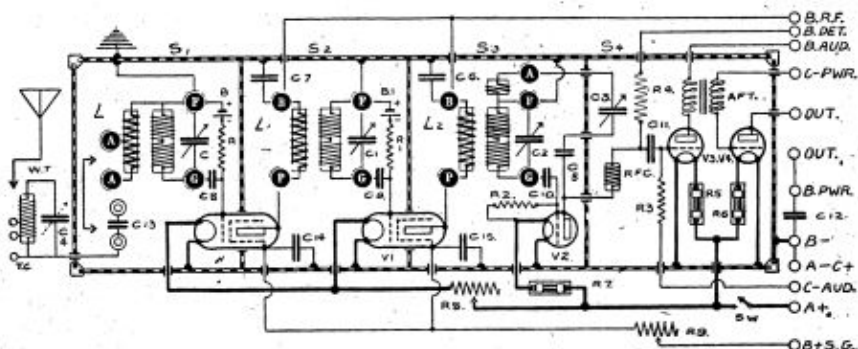
This Kit is constructed according to the best available specifications, and is truly a masterpiece of coil design and manufacture.



The robust framework is carried out in the highest grade genuine bakelite, excellently finished and accurately machined. The windings are in green silk covered wire and are permanently held without the use of any dope; and nickelled screw terminals and hardware complete a truly beautiful coil Kit.

Mounting brackets, conveniently placed and clearly marked terminals make for easy and efficient assembly.

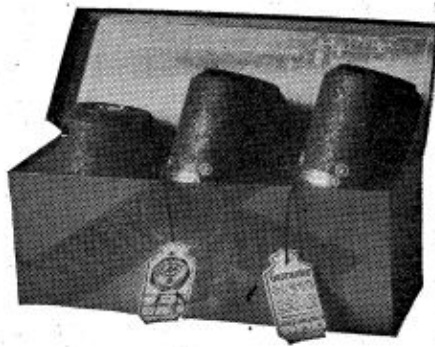
PRICE . . . . . 50/- per Kit of 3 Units



## 1928 SOLODYNE RECEIVER

L, L1, L2, Radiokes 1928 Solodyne Kit S1, S2, S3, S4 Radiokes Standard Box Shields, W.T. optional Wave trap, R.F.C. Radiokes R.F. Choke, C, C1, C2, .0005 variable condenser, C5, .0005 Fixed condenser C6, C7, C14, C15 2 MFD By-pass condenser, C8, C9, .001 Mf fixed condenser, C10, .0003 grid condenser, C11, .1 to .5 Mf fixed condenser, C12, 2 M.F. by-pass condenser C13, .0002 fixed condenser R, R1, R2, 2 meg resistors, R3 ½ meg resistor R4 .1 meg resistor R5, R6, R7, Amperite type 1A R8 50 ohm rheostat, R9 500,000 ohm Rheostat B, B1, 4½ V, C Batts, V, V1, screen grid valves European pattern, V2, V3 201A type tubes V4, 171A type, C3 .0001 var. cond.





# “Radiokes”

**STANDARD**

**SOLODYNE**

**R.F. COIL KIT**

One of the most popular receivers ever introduced into England was the Solodyne. Without doubt, last season, the receiver was the most popular in this country, and bids fair to uphold its popularity next year also.

The sales of Radiokes-Solodyne Kits completely eclipsed those of any other R.F. Kit; and that because of the excellence of the Radiokes Kit, the soundness of Solodyne receiver design, and consistency of performance.



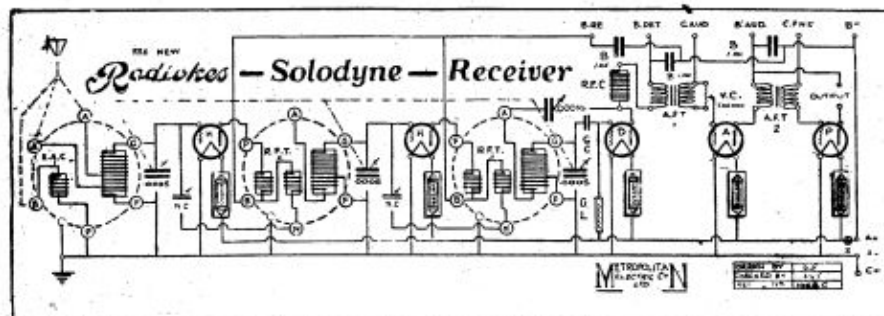
These Kits are very accurately constructed, and consist of 1 Solodyne Antenna coupler unit, and two Solodyne Split Primary units—all matched for use with high-grade, triple gang condenser, to make this receiver “Single Control.”

Radiokes-Solodynes are manufactured in strict conformity with the specifications laid down by the designer, Mr. John H. Reynor, of Elstree Laboratories, England. They are carefully inspected many times during assembly, and every Kit passes a rigid test before leaving the factory.

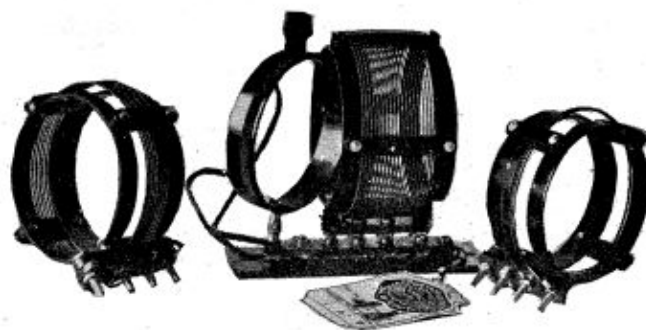
Space windings on light genuine Bakelite formers, braced with rigid supporting brackets characterise the internal construction, while the exterior is gracefully shaped and beautifully finished in lustrous black crystalline lacquer.

Three mounting holes are provided in screen base, and well marked screw terminals are provided for easy wiring into set.

**PRICE . . . . . £3/10/- per Kit.**



E.F.T. 1, 2, 3, Radiokes Standard Solodyne Kit, R.F.C., Radiokes R.F. choke, .0005 gang condenser .00035 var. cond., Nc, Ncl, Radiokes Neutralizers, B 1mf By-pass conds., H, H, Hi M.W. tubes, D, detector tube 700A type, A 201A tube, P 112A or 171A type tube, G.C. .00025 cond., C.L., 2 meg. leak .5 Amperites Type 1A, V.C. 1500,000 ohm potentiometer.



## “Radiokes” SHORT-WAVE TUNER KIT

Acknowledged by experts as the best Short Wave Kit ever presented to the World's Radio public; because it embodies the finest electrical design, because of its high finish and pleasing appearance, because of its mechanical ruggedness, and lastly because of its high efficiency and easy operation.

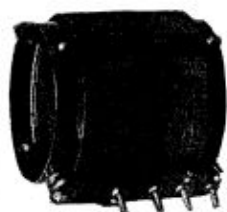


Radiokes Short Wave Kit has been chosen by one of the largest Radio concerns in existence, for use in taking field measurements of its Short Wave stations in all parts of the world.

Editors of leading radio magazines and newspaper sections, acknowledge its superiority, as well as many prominent receiver manufacturers, who now standardize on this Kit.

Robustly constructed of genuine Bakelite, with highly finished nickel fittings, and brilliant green silk covered wire.

**STANDARD KIT RANGE 15 TO 130 METRES. PRICE, 55/- each**



## “Radiokes” ADDITIONAL UNITS

**For Short Wave Kit**



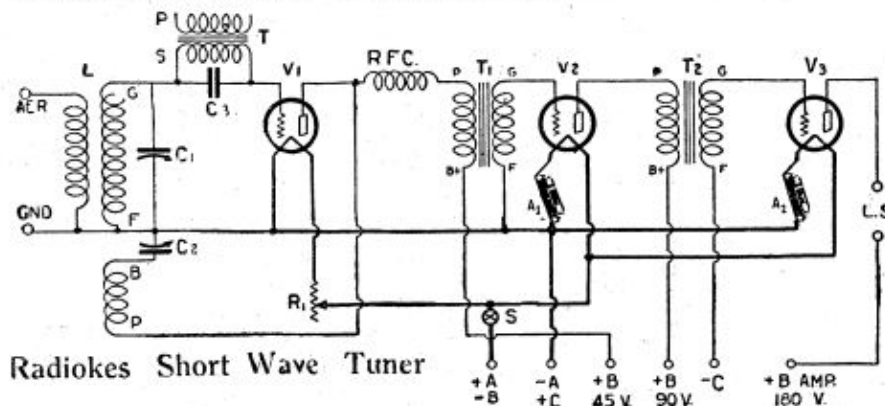
Coil No. 5 illustrated above has a tuning range from 235 to 575 metres.

Coil No. 4 not shown has range from 125 to 250 metres.

Coil No. 0 depicted on right ranges from 12 to 25 metres.

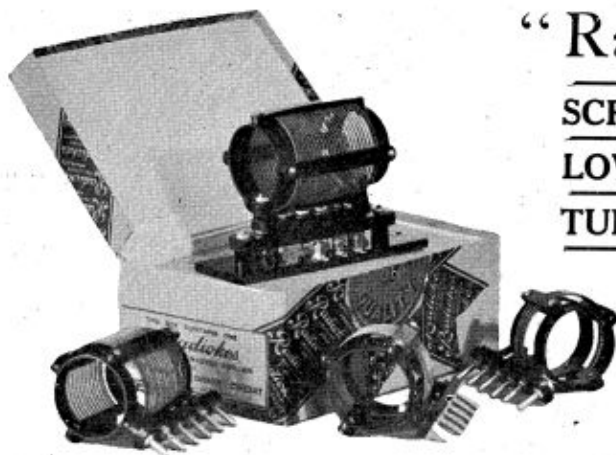
These ranges are completed when using tuning condenser of .00015 M.F. capacity as recommended.

**PRICE of ADDITIONAL COILS as ILLUSTRATED . . . 15/- each**



### THREE TUBE SHORT WAVE BROADCAST SET

L Radiokes Short Wave Tuner Kit, C1 .00015 variable condenser, C2 .00025 variable condenser, C3 grid condenser .0001 T secy of audio transformer for grid leak, R.F.C. Radiokes R.F. Choke, V1, V2, 201A type tubes, V3 112 tube, R1 30 ohm rheostat A1 Amperite type 1A, A2 Amperite type 112.



# **“Radiokes”** **SCREENED-GRID** **LOW-WAVE** **TUNER KIT**

Radiokes latest product, pictured above, has taken public and critics by storm, and everyone who sees this screened-grid low-wave tuner kit is astounded at the perfection of the little masterpiece. Never has its equal even been attempted, here or outside Australia.

The screened-grid low-wave receiver, built with Radiokes screened-grid low-wave tuner kit, is the 1929 contribution to low-wave science, and opens up an entirely new field of interest and entertainment for the broadcast listener.

Being as easy to tune as the average broadcast receiver, it is a real single-control instrument.

It can be used for broadcast reception by means of simply plugging in an additional coil manufactured for that purpose.

It is as useful to the international listener as to the broadcast listener.

It does not radiate energy via the Antenna.

The tuning dial may be accurately calibrated when you have logged stations all over the world, and the “foreigners” may be tuned in again, at will. Its virtues, therefore, are many.

The screened-grid low-wave tuner kit comprises 4 coils covering a wave band from 15 to 115 metres, mounting base, and special Antenna coupling choke.

The interchangeable inductance units are fitted with six specially plated contact pins which engage in suitable mounting base unit, fitted with an accurate silver spring system.

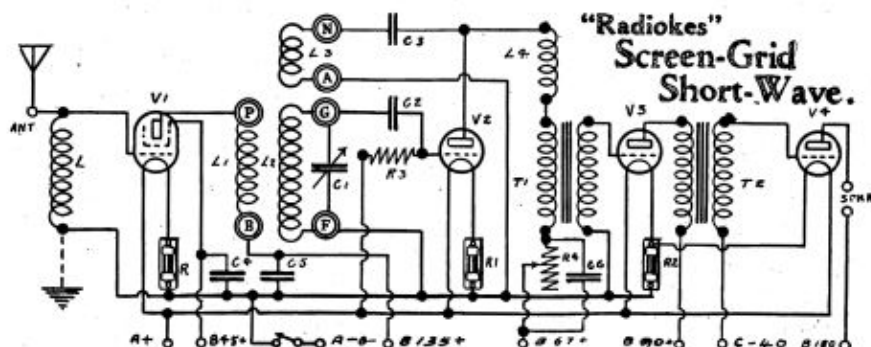
The velvety action of coil changing with this new mounting makes this operation a pleasure, and a positive electrical contact is assured under all circumstances. The sturdy construction of the formers permits of changing almost indefinitely without damage to coils.

The coils being only 2in. diameter, reduce the magnetic field to a minimum, and the requirements of the screened-grid tube, for a high coupling impedance are met by means of a special system of parallel primary and secondary winding.

Mr. Layton Gibson, technical editor of “Queensland Radio News,” Australia’s finest radio journal, says of these instruments: “This latest Radiokes product is truly a masterpiece of design and precision manufacture, and eclipses anything we have ever seen in the coil line.”

The beautiful kit, complete, is priced at £3/12/6.

Additional coil for broadcast band, 17/6



L, L1, L2, L3 Radiokes New Screen-Grid Short-Wave Tuner Kit, L4 Radiokes Standard Radio-Frequency Choke, C1 Variable Condenser .000125 M.F. capacity, C2 Fixed Grid Condenser .00025 M.F. capacity, C3 .001 M.F. Fixed Condenser, C4, C5 By-pass Condenser .5 M.F. capacity, C6 By-pass Condenser 1 M.F. capacity, R Amperite to control Screen-Grid Tube, R1 Amperite Type 1A, R2 Amperite Type 112, R3 Grid Leak 6 Meg., R4 Volume Control Rheostat 500,000 ohms, T1, T2 Audio Transformers 3-1, V1 Screen-Grid Tube Type 222, V2 200A Type Detector, V3 201A Type Tube, V4 171A Type Power Tube; Switch, Panels, Sockets, Terminals, etc.

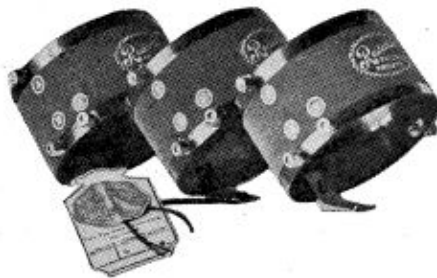
# “Radiokes”

## **GENUINE HAZELTINE NEUTRODYNES**

Below are shown two models of Radiokes popular Neutrodyne Coil Kits which have been approved by the Hazeltine Radio Corporation.

A license has recently been secured for the manufacture of these coils under the patents held by the above company.

These Kits embody the latest scientific developments of this famous circuit and the well-known Radiokes high standard of manufacture and finish.



## “Radiokes”

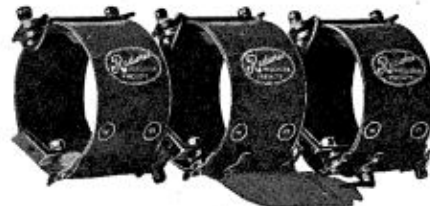
### MASTER— NEUTRODYNE COIL KIT.

The pattern Kit is very accurately constructed on best quality highly polished Bakelite formers, and in such a manner that the windings are securely held in position without the use of any “dope” whatsoever. This guarantees the individual units retaining their original characteristics.

A feature of this Kit is the convenience of assembly and wiring in your receiver. Nickel-plated screw terminals are placed in the correct position to facilitate easy connections, and a correctly designed angle bracket supports the units at the desired angle necessary to prevent interstage coupling.

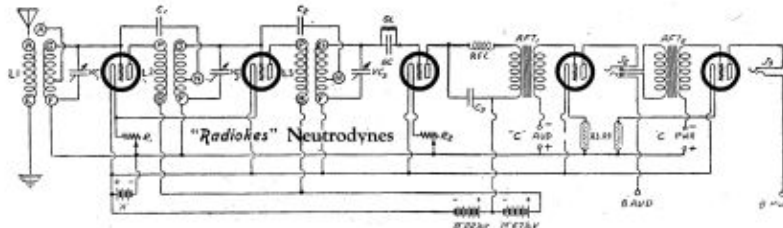
## “Radiokes”

### STANDARD NEUTRODYNE COIL KIT



The Standard Kit illustrated above will still be continued for those fans and manufacturers who “laud its praises” as being the finest Neutrodyne Kit ever used by them.

**PRICE of BOTH TYPES of KITS . . . . . 32/6 each**



### **STANDARD FIVE TUBE NEUTRODYNE**

L1, 2, 3, Radiokes Neutrodyne Kit, Vc1, 2, 3, .00035 M.F. variable condensers, C1, C2 radiokes Neutralizers, R1 20 ohm Rheostat, R2, R3 Amperite type 1A, R4 Amperite type 112, R.F.C. Radiokes R.F. choke, C3 .001 M.F. Fixed Condenser, 201A type tubes in R.F. stages, 112 type in last Audio, 200A detector.





## "Radiokes"

### "ULTRA"—NEUTRODYNE COIL KIT

Circuits come and circuits go—and the Neutrodyne still maintains a very large place in public favour—and illustrated above is the 1929 development.

These "ULTRA" Neutrodyne coils are particularly fine instruments, being precision cut formers wound with high-quality green silk covered wire.

Radiokes method of precision cutting ensures absolute matching of the finished inductance, which is a highly essential feature of tuned R.F. stages.

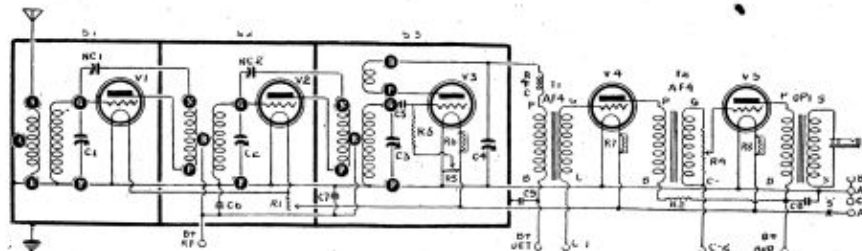
Being of small physical dimensions, only 2in. diameter, inter-stage magnetic coupling is to a great extent eliminated, and the need for mounting the coils at an angle, and a long distance apart, is done away with. As shown, the "Ultra" coils are mounted vertically by means of three brackets secured to the base in each case.

Centre tapped primaries permit of use with latest European and American Neutrodyne variations. By this means also, neutralisation is more easily and smoothly effected.

The Radiokes "Ultra" Neutrodyne Kit is especially designed and adapted for use with screened-grid tubes, and incidentally, is PARTICULARLY APPLICABLE TO A.C. OPERATION.

For those fans who desire regeneration in their circuits, a reaction winding is incorporated in the R.F. Transformers of this kit.

PRICED AT . . . . . £1/17/6



L1, L2, L3 Radiokes Ultra Neutrodyne Kit, S2, S3 Radiokes Standard Box Shields, NC1, NC2 Radiokes Neutralisers, R.F.C. Radiokes R.F. Choke, C1, C2, C3 .00035 variable condensers, C4 Radiokes 23 plate midget Condenser, T1, T2 3-1 Auditor Transformers, S Battery Switch, OP1 Output Transformer, Single Circuit Jack, C5 .00025 Grid Condenser, C6, 7, 8, 9 1-mf. by-pass Condensers, R1 30 ohm Rheostat, R2 50,000 ohm Fixed Resistor, R3 2 meg. Grid Leak, R4 500,000 ohm Potentiometer, R5 400 ohm Potentiometer, R6, 7, 8 Amperites to suit tubes used. We suggest tubes V1, V2 630 type, V3 615 type, V4 609 type, V5 605 type. Panels, sub-panel, tube sockets, wire, etc.

# “Radiokes”

## CIRCLOID DE LUXE

### COIL KIT

#### NEW KIND OF COIL

Instantly brings four  
amazing improvements

to your present set—greater distance, more volume,  
increased selectivity, finer tone quality.



Science has discovered a new inductance principle that is bringing astounding results. Now you can apply it to your present set, through new type coils known as—Radiokes Circloids.

Thousands of tests and experiments were necessary before the circloid was finally perfected. Leading radio engineers worked night and day in order to develop a coil that would correct the four vital weaknesses of present sets. At last they were successful.

When circloids are used, results you think impossible are obtained with surprising ease. Note especially the four that follow:

1. **Greater distance.** Circloids have no measurable external field to affect adjacent coils or wiring circuits. This makes possible higher amplification in each stage with increased sensitivity and greater range.

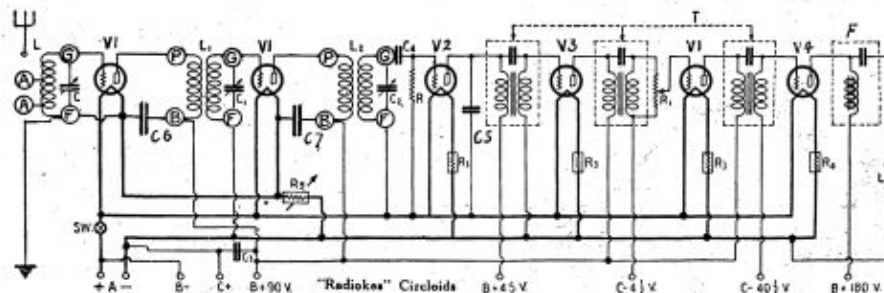
2. **More volume.** Higher r. f. amplification enables circloids to bring in distant stations scarcely audible in ordinary sets with volume enough on the loud speaker to fill an auditorium.

3. **Increased selectivity.** Circloids have absolutely no pick-up qualities of their own. Only signals flowing in the antenna circuit are built up. This explains the almost total absence of static.

4. **Finer tone quality.** The self-enclosed field positively prevents stray feed-backs between coils. Hence no blurring or distortion. Tones are crystal clear.

You will be amazed at the difference circloids will make in your present receiver. Get a set and test them out to-day.

PRICE: £2/5/- per Kit of 3 Matched Coils



#### SIX TUBE CIRCLOID DE LUXE RECEIVER

L, L1, L2 Radiokes Circloid Kit, C, C1, C2 .00035 variable condensers, C3 fixed condenser 1Mf, C4 .00025 F condenser, C5, C6, C7 .002 fixed by-pass condensers, R5 20 ohm reostat, R3 1A type Amperites, R4 112 Amperites, F output filter, T double impedance units, R1 500,000 ohm Potentiometer, V1, 201 type tubes, V2 200A type detector, V3 240 Hi Mu tube, V4 171 type power tube.

# "Radiokes"

## MASTER

### 180° COUPLER



Without question this is the most compact and efficient Three Circuit Tuner available.

Of small dimensions, being only 2 3/16 in. diameter, and very rugged construction, this instrument is particularly applicable in small and portable receiving sets.



One of the main features of this tuner is the Bakelite rotor which is mounted at an angle of 45° to the shaft; with a result that the rotor shaft requires to be rotated through an angle of 180°, instead of the usual 90°, in order to move from minimum to maximum regeneration.

This is a decided advantage, inasmuch as this arrangement allows twice the usual control over reaction, resulting in easier operation and smoother regeneration.

Single hole mounting is provided, so easy assembly in your set is assured.

# "Radiokes"

## STANDARD 3-CIRCUIT TUNER

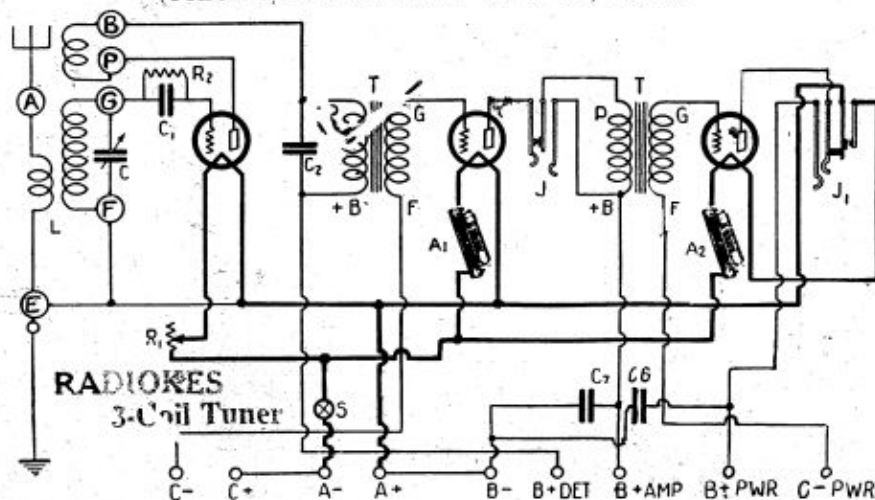


Has been very popular during the last two seasons, and will still be manufactured as long as the demand remains.

Built according to Radiokes famous self-supporting Low-Loss designs; this tuner is conspicuous by its octagonal shape, brilliant finish, and very high efficiency.

The variable primary coil is a decided feature when used in congested areas where very loose coupling to the antenna is essential.

**PRICE BOTH TYPES . . . . . 14/6 each**



## STANDARD THREE TUBE REGENERATIVE SET

L Radiokes 3 Circuit Tuner, C .005 variable condenser, C1 fixed condenser .00025 M.F., C2 .001 fixed condenser, C6, C7 .5M.F. by-pass condenser, R1 30 ohm rheostat, A1, A2 Amperites type 1A tubes, recommended type 201A with 112A power.

# "Radiokes"

## MARCO-FOUR COIL KIT



One very popular four valve receiver which has made its presence felt during the last two years, is the Marcodyne, with its many modifications.

This set is in reality our old friend the trusty Reinartz, to which has been added a stage of R.F. amplification. The addition of this stage makes a receiver second only to the Browning-Drake in its great efficiency, ease of construction, and simplicity of operation.

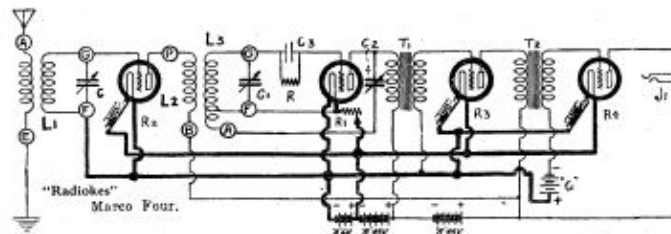
The capacity controlled regeneration employed in this circuit makes for very great sensitivity, inasmuch as the distant station can be worked nearer to the set's point of maximum efficiency, making for stronger signals.

The Radiokes Marco Four Kit illustrated above, has been designed in accordance with the best specifications available, and although a recent production of our laboratories, it has already endeared itself to the hearts of many ardent, admiring fans.



Being one of our "Master" Series, this Kit is excellently carried out in brilliant green silk covered wire, accurately wound on polished Bakelite formers. Three units comprise this Kit—two of which are mechanically connected together by a Bakelite framework, which permits of easy coupling adjustments between the coils.

Conveniently located and plainly labelled, nickel-plated terminals complete this Kit, which with its excellent packing sells for the moderate price of . . . . . **30/- per Kit.**



### **THE WELL-KNOWN MARCO FOUR**

L1, L2, L3 Radiokes Marco Four Kit, C, C1 variable condenser .0005 M.F., C2 .00035 variable condenser, C3 R. Grid condenser .00025 Mf and 2 meg. leak, R1 30 ohm rheostat, R2, R3, R4 Amperites type 1A, 201A type tubes recommended.



# “Radiokes”

SUPER-

MIDGET

CONDENSERS

A GOOD MIDGET CONDENSER—that has long been a very urgent need of the Radio constructor. By a good midget condenser is meant one that is mechanically perfect—one that will not “slop”—whereby the moving and fixed plates are always parallel, and at the same relation to each other whatever position they may occupy throughout their rotation.

The present-day predominance of multi-tube circuits requiring precise balancing of the Radio frequency stages, brings into prominence the faults of the average balancing condenser, and incidentally provides the reason why Radiokes are now manufacturing a range of them—faultless.

The little instrument illustrated herein is made with the object of eliminating your balancing problems, and is the finest midget condenser yet offered.

Bakelite parts highly polished, and metal work with a beautiful silver finish give it a highly pleasing appearance.

Single hole mounting, and terminals and lugs provide ease of fixing and wiring.

Marketed in five standard sizes, as under :—



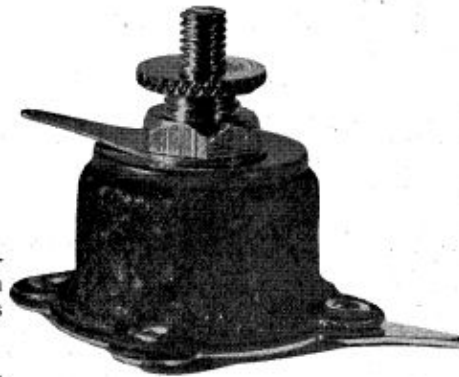
3 plate approx. capacity	.00001, at	.. .. .	4/3
5 plate	„	„ .000015, at	.. .. . 4/9
7 plate	„	„ .000025, at	.. .. . 5/3
13 plate	„	„ .00005, at	.. .. . 6/6
23 plate	„	„ .0001, at	.. .. . 8/6



# “Radiokes”

## NEUTRALIZING CONDENSER

To the army of satisfied Radiokes users, here is presented an illustration of the new Radiokes Neutralizer.



This little micrometric condenser was designed to obviate many of the faults existing in present-day neutralizing condensers.

The main advantages are summarised as follows:—

This neutralizer is exceptionally small, being only 1½ in. overall. It does not “hog” valuable baseboard or sub-panel space.

Is very robustly constructed therefore is difficult to damage, being arranged so that it is impossible for any short circuits to occur between plates.

Vernier adjustment is obtained by means of a micrometer screw, making neutralizing easy.

Is totally shielded, thereby protecting delicate neutralizing field from outside interference.

Final adjustment is securely locked by accurate locknut without up-setting capacity.

Has no screw terminals to work loose, but employs our “solder all the way” method.

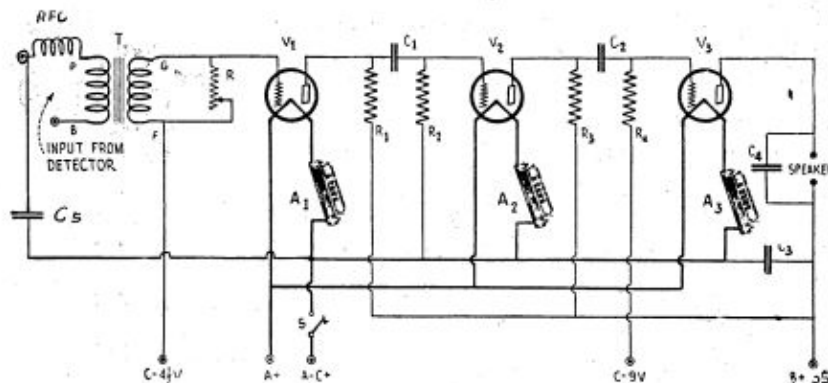
Adjustment is not achieved by crude method, of knob on moving semi-circular vanes.

Having no knob, inadvertent upsetting of adjustment by unauthorised persons is prevented.

Is made of best materials obtainable, and highly finished in black and nickel, and has ample capacity for all normal uses.

PRICE . . . . . 4/9 each

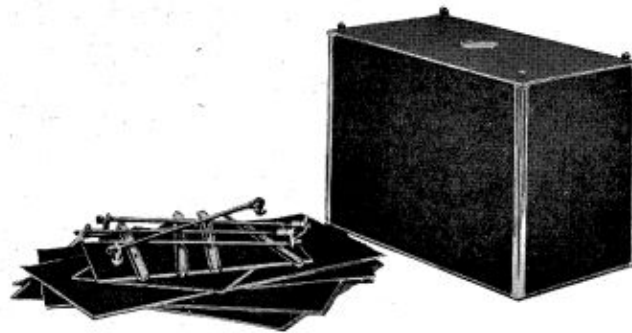
## POWER AMPLIFIER TO USE WITH NEW BROWNING-DRAKE



R.F.C. Radiokes R.F. Choke, R Clarostat or 500,000 ohm rheostat, R1, R3 .1 meg resistors, R2 .5 meg resistor, C1 C2 fixed condenser .1-5 Mfd, C3 1 Mf by-pass condenser, C4 optional .006 condenser, C5 .001 fixed condenser, A1, A2 Amperites type 1A, A3 Amperite type 112, V1, V2 1A type tubes, V3 112 type tube, R4 .25 meg. resistor.

# **“Radiokes”**

## **BOX SHIELDS**



### **COMPLETE SHIELDING IS USED IN THE NEWEST RECEIVERS**

Recent Radio developments demonstrated that complete shielding by means of collapsible aluminium box shields is being more widely adopted by the leading circuit designers and manufacturers than ever before.

To meet this need the manufacturers of Radiokes have produced a standard sized screen supplied 9in. x 5in. x 6in., built of heavy gauge aluminium. This comes to you in the most convenient knocked-down form for easy assembly, and the slotted brass corner posts, locking pieces, and clamping bolts make this shield a pleasure to use.

This is the most convenient size to completely shield one R.F. stage consisting of condenser, inductance, tube, and socket with R.F. choke and necessary by-pass condensers and Amperite.



You build and wire your receiver, then you assemble and lock up your shield. No more diving down into “coffee can” type boxes to solder your wiring and lock up terminals.

If the size does not suit your particular requirement you can easily alter same, as the aluminium is easy to cut and drill.

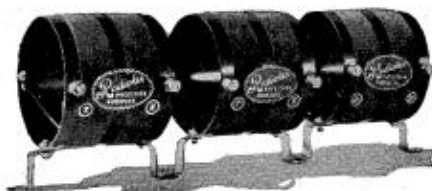
These boxes are beautifully finished in black crystalline lacquer and mounted with highly-polished nickel-plated corner posts and clamping nuts.

The use of Radiokes box shields gives your receiver an appearance equal to the best of imported factory built sets. Packed singly or in Kits of three shields.

**PRICE . . . . . 15/- per Shield**

# “Radiokes”

## SCREEN GRID COIL KIT



The introduction of this Kit was to provide suitable inductances for use with the new screen Grid Type Valves, and the design of these coils is such as to render them particularly suitable for use in “tuned Anode” circuits.

Because of the precision of their manufacture these inductances are quite permanent and similar in their characteristics. By virtue of their electrical design they have remarkably low R.F. resistance, and high inductance—giving these coils extremely low losses and making them ideally suited for taking full advantage of the abnormal sensitivity and high amplification factor of the screen Grid type tubes.

The coil windings are carried out in brilliant green silk covered wire, and each unit consists of two equal and isolated windings which may be connected as a straight solenoid or an astatic type coil.

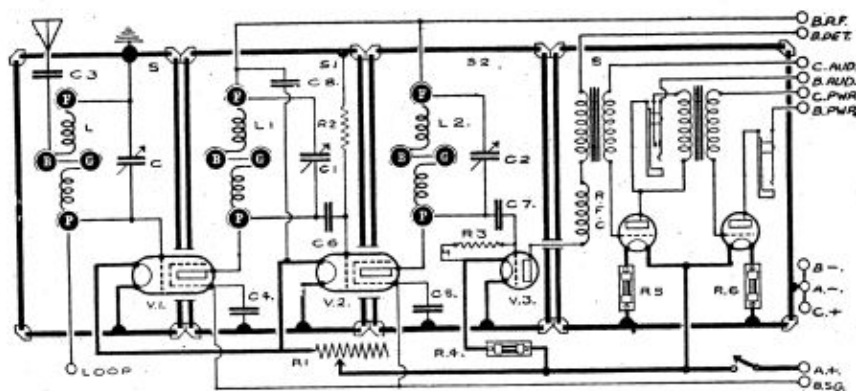
In the circuit shown below the inside terminals of both windings, G and B are connected together thereby making a plain centre tapped solenoid.



By connecting terminals P and B together, and if necessary the connecting bridge may be utilized as a centre tap, the coil will then operate with a minimised field, or as an astatic coil.

Coil connections to the external circuit are then made from terminals G and F respectively.

**PRICE . . . . . 32/6 per Kit of 3 Coils**



### STANDARD SCREEN-GRID CIRCUIT

L. L1, L2 Radiokes Screen Grid Coil Kit, S, S1, S2 Radiokes box shields, C, C1, C2 .0005 variable condenser, C3 .0001 fixed condenser, C4, C5 .2 M.F. condenser, C6 .001 M.F. fixed condenser, C7 .00025 Grid condenser, R1 30 ohm rheostat, R2 .5 meg resistor, R3 2 meg leak, R4 Amperite 1A type, C8 .2 M.F. condenser, V1, V2 Screen Grid tubes European type, V3 201A type tube, R.F.C. Radiokes R.F. Choke.

# “Radiokes”

## RADIO-FREQUENCY

### CHOKES



Australia's most popular R.F. choke, and one which is quite deserving of such public favour.

This instrument is most carefully manufactured according to the best approved methods, and is considered by those who know, as the best radio frequency choke produced in any part of the world.



This choke coil has the lowest distributed capacity, while maintaining an inductance value suitable for most uses. This value has been decided upon as being the most universal in use, and at the same time shows no “holes” within the broadcast band.

Although primarily designed for use in Broadcast receivers, this coil, by virtue of its excellent construction is the best available for use in short wave receivers, and is invariably recommended by experimenters, editors, and manufacturers alike.

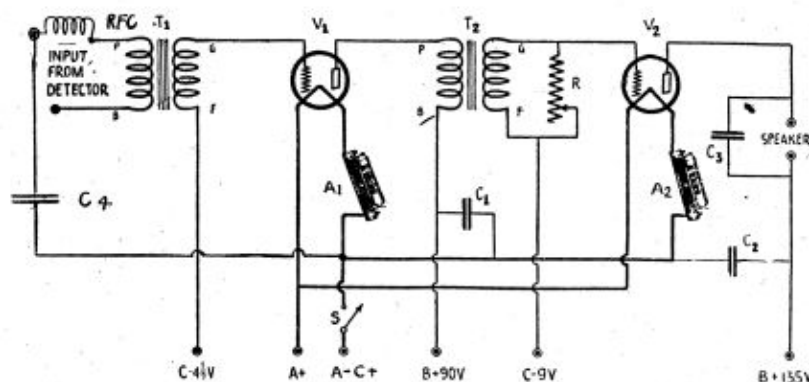
Of small dimensions, being only one inch diameter, this coil does not “hog” sub-panel space. A nickel plated bracket is provided for mounting on baseboard; but if a sub-panel is employed, the bracket may be dispensed with, and the unit bolted direct with screw provided for that purpose.



Screw terminals are conveniently placed for easy wiring.

Filter chokes are carried out similarly to R.F. chokes, but contain a special winding, and are designed for use in wave-filters used in constant-coupling circuits, such as the Inverse duplex, etc.

PRICE, BOTH TYPES . . . . . 8/6 each



## TWO STAGE AMPLIFIER FOR USE WITH NEW BROWNING-DRAKE

R.F.C. Radiokes R.F. Choke, C1, C2 1Mf by-pass condenser, C4 .001 fixed condenser R. Clarostat or 500,000 ohms Rheostat, C3 optional condenser, .006, A1, A2 Amperites 1A type, V1 201A type, V2 112a type tube.

# "Radiokes"

## MASTER BINOCULAR COIL KIT

SCIENTIFICALLY—the BEST  
COIL for YOUR SET—  
HERE'S the PROOF—



Because their form of winding effectively confines the magnetic field as the two halves that comprise a whole unit have opposite polarities.

This feature overcomes interstage coupling and obviates the necessity for special angular placement. It also makes unnecessary the use of neutralizing condensers, potentiometers and resistances to stop oscillation.

### GET ALL THESE FEATURES

1. **Radiokes Binocular-Coils** confine the electromagnetic field and neutralize the tendency towards oscillation.



Low Loss

2. **Radiokes Binocular-Coils** have no "peak." They afford high uniform amplification on all broadcast wavelengths. (They do not cause distortion.)



Solenoid

3. **These Coils** amplify only what is received from the preceding stage. Their non-pick-up qualities reduce the annoyance of static and other interference.

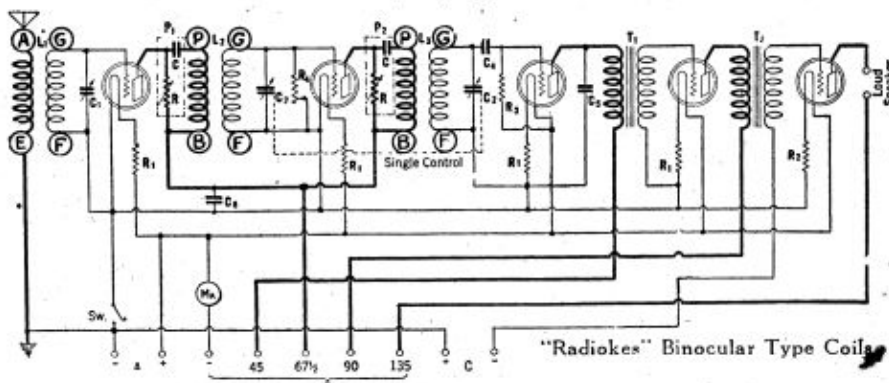
4. A valuable feature of these coils would appear to be the very small energy pick-up when antenna and ground wires are disconnected.

5. **Radiokes Binocular-Coils** are individually tested in the laboratories of the Company and are then packed in kits of three matched coils. These laboratory tests assure simplified tuning and uniform dial readings.

Study these essential features. Buy a Kit of these Coils from your dealer. Build a handsome five or six-tube set easily, in a few hours. Or, if you already have a radio receiver, replace its coils with Radiokes Binocular Coils and get greatly improved reception.

Designed for use with .00035 mfd. variable condensers—(Wavelength range 200-600 metres).

PRICE . . . . . £1/19/6 per Kit of Three Units



### FIVE TUBE SET USING BINOCULAR COILS

L1, L2, L3 Radiokes Binocular Coil Kit, C1, C2, C3 variable condenser .00035, P1, P2 phasatrols, R1 Amperite type 1A, R2 Amperite type 112. Tubes recommended 201A type with 112 power, C6 1M.F. fixed condenser, C5 .001 fixed condenser.





# “Radiokes”

## SHIELDED

## COILS

Units of this pattern by Radiokes represent the latest development in Radio frequency practice.

The leading manufacturers of receiving sets throughout the world are now concentrating on shielding of R.F. circuits.



Fieldless

These R.F. transformers are available in several styles, which embrace practically all types in use in popular American and European circuits:—

**Split Primary Type**—with regeneration coil.

**Antenna Coupler**—magnetic and auto-transformer coupling.

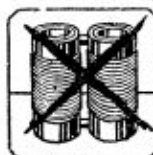
**Split Secondary Type**—R.F. Transformer.

**Reinartz Pattern**—for use in many popular Hookups.

These coils are constructed according to a special process developed by Radiokes, being correctly wound up light Bakelite formers. The spacing between turns, being arranged for maximum inductance with maximum selectivity, is rigidly maintained without the use of any “dope” or varnish.

The R.F. transformer is securely braced and held central within the shield by a new method, which prevents any chance of displacement through rough handling.

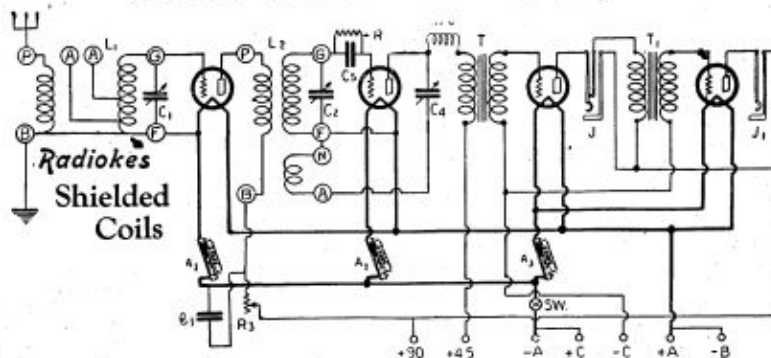
All leads are brought through shields by means of well-proportioned insulating bushings, to clearly labelled screw terminals.



Dual

Shielding is of correct gauge and mechanical design, arranged so as not to detract from high efficiency of coil, has graceful external contour and is finished in beautiful crystalline lacquer

**PRICE . . . . . ALL TYPES 24/- per unit.**



### THE SHIELDED UNIVERSAL FOUR

L1 Radiokes Shielded Antenna Coupler, L2 Radiokes Shielded Reinartz Coupler, R3 rheostat 200,000 ohms, C1, C2 .00035 variable condensers, C4 7 plate midget variable condenser, C3 1 MF by-pass condenser. R.F.C. Radiokes R.F. choke, A, 1, 2, 3 Amperites to suit tubes, 201A type recommended.

# “Radiokes”

## STANDARD REINARTZ TUNER



Wherever it is desirable to build a low-priced and very efficient broadcast receiver the Radiokes Standard Reinartz Tuner finds its best application.

Although this is the lowest priced tuner manufactured by Radiokes, it is none the less carefully planned and executed. As a matter of fact many experimenters consider this the most efficient method of applying regeneration,

by employing the Reinartz principle an exceptionally smooth control is obtained over detector oscillation.

The tuner is simple in design, yet a true member of the Radiokes family. The windings are according to the famous Radiokes Low-Loss, self-supporting principles, and are carried out in brilliant green silk covered wire of ample cross section.



This type of coil uses the minimum amount of solid dielectric within the field, and that fact makes for maximum sensitivity and selectivity.

The framework is polished Bakelite, and metal fittings are nickel-plated brass. This unit is fitted with clearly designated screw terminals, in addition to Radiokes “Solder-all-the-way” lugs.

PRICE . . . . . 10/6 each



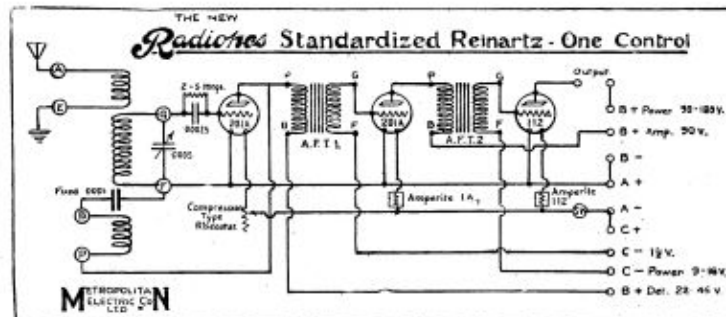
# “Radiokes”

## SHIELDED REINARTZ

When the Reinartz method of applying reaction to detector is employed with multi-tube R.F. amplifiers, then it is advisable to use the Radiokes Shielded Type Reinartz Tuner.

By the use of screened coil, pickup from the local broadcasting stations is eliminated, and interaction between the detector tuning unit and other coils used in the R.F. amplifier is kept at a minimum.

PRICE . . . . . 24/- each





## **“Radiokes”**

### **SHIELDED**

### **WAVE TRAP**

**PRICE . . . . . 25/- each**

**“SELECTIVITY”** is the ability of a receiver to “cut out” one station, while you turn in another, and it is a quantity that is found wanting in a very large number of receivers at present in use.

The failure of a receiver to separate stations sufficiently may be due to any one of several causes. Your receiver may be of an unselective type; you may be too close to a local broadcaster; your set may be badly or wrongly designed and constructed.

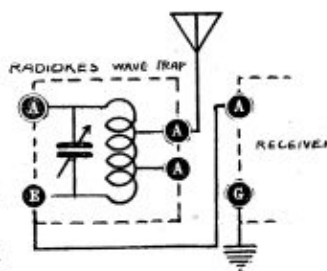
Whatever the cause, the difficulty may be overcome by the inexpensive addition to your equipment, of a Radiokes shielded wave-trap.

This little instrument, tucked away in a corner of the cabinet, and connected between the Antenna and the set, will enable you to separate the signals and bring in the programme you desire with the utmost ease.

Carefully designed, and tested to Radiokes standard of efficiency, this wave-trap will (except where you are situated right under a large broadcasting station) give you “hairbreadth” separation.

Three Antenna terminals are provided, taken from tapplings on the coil, which allow of variations for different length Antennas. Experiment with your own installation must determine which terminal to use.

Illustrated at side hereof is one method of connection which operates as “rejector” Trap. To operate as “acceptor” trap, connect one A terminal of wave-trap to A of set, and E terminal of trap to E terminal of set, the Antenna and Earth being connected to set in usual manner.



## **“Radiokes”**

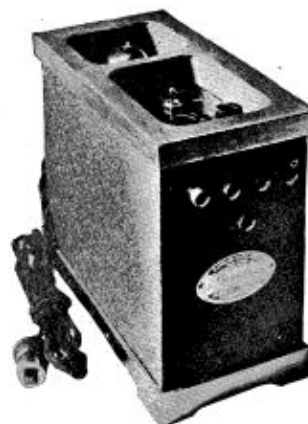
### **Mayolian**

### **“B” SUPPLY**

#### **The “B” Without a Buzz**

**STANDARD MODEL**

**150 VOLTS 125 MILLIAMPRES**



A Mayolian “B” Supply unit gives any Radio receiver, regardless of make or type, a continuous, uniform, noiseless “B” supply, direct from the light socket at half the cost of operating a 25 watt. lamp. This supply remains constant under any and all conditions.

A Mayolian Unit connected to your receiver will pay for itself over again, many times. A laboratory-built product with especially designed transformer, chokes and condensers, each Mayolian unit employs the long life, full wave rectified Raytheon tube, and has been approved by the Raytheon laboratories.

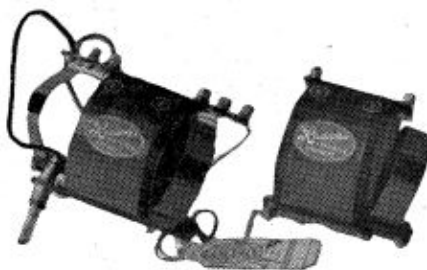
**PRICE: COMPLETE WITH RAYTHEON TYPE B.A. TUBE**

**£10/-/- each**

Page Twenty

# "Radiokes"

## BAYER COIL KIT



Low in price, but high in efficiency, is the manner in which this coil Kit is generally described.

It consists of an antenna coupler, also a Radio Frequency Transformer, containing a Rotor for the application of Regeneration to the detector. Each of these units embodies a variable primary coil, which you will at once recognise as an invaluable asset when this Kit is used in congested districts, for the degree of coupling between primary and secondary, controls the selectivity of the receiver.

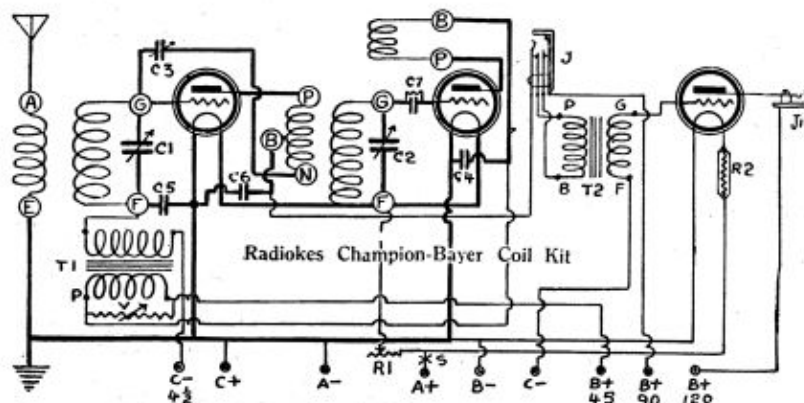


This Kit is excellently constructed of the highest-grade materials obtainable, has the usual high standard of Radiokes workmanship employed in its fabrication, and passes the same rigid Radiokes tests and inspections.

Distinctive in design because of its octagonal shaped coils, and highly efficient in performance, because it has "dopeless" self-supporting windings, correct electrical design, and "solder-all-the-way-lugs," in addition to clearly marked screw terminals.

This Kit was introduced for the well-known "Bayer Four," a very excellent 4 valve receiver, simple of operation, and easy to construct. This Kit is also applicable to the Champion Bayer Six, and more recently to the very excellent "Three-Flex" receiver; the circuit of which is shown below.

**PRICE . . . . . 25/- per Kit**

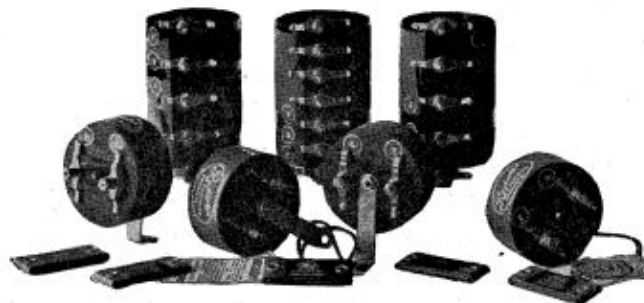


### **THE THREE FLEX, AN EXCELLENT RECEIVER**

Radiokes Bayer Coil Kit, C1, C2 .00035 variable condensers, C3 Radiokes Neutralizer, C4 .001 fixed condenser, C5 .0001 fixed condenser, C6 .00025 fixed condenser, C7 Grid condenser and leak, V 100,000 ohm rheostat, R1 20 ohm rheostat, R2 Amperite 112 type, 201A type tubes, 112 power tube recommended.

# “Radiokes”

## STROBODYNE R.F. KIT



A very recent Radiokes production is illustrated above. This Kit consists of 1 Antenna coupler, 2 R.F. transformers, 4 intermediate frequency transformers, and 4 matched fixed condensers.

This circuit is a recent innovation by an eminent French experimenter, Lucien Chretien, and popularized in U.S.A. by R E. Lacault. In the latter country this receiver has been most enthusiastically received by “fans” in search of a super set.

With the Radiokes Strobodyne you get the three essentials of the ideal broadcast receiver, namely, extreme selectivity, perfect tone, and long distance reception.

The intermediate frequency transformers are matched so exactly that oscillation is reduced to a minimum. The filter coils contain no metal in the field, and the secondary circuits are matched at the factory, so as to show a uniformity as to the wave at which they are peaked. Thereby assuring a high amplification and sharpness of tuning to assure their perfect operation.

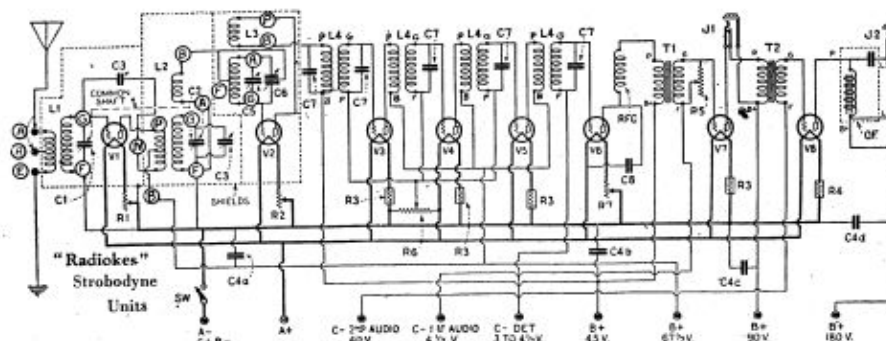
Precision methods and extreme accurate testing have given these results, and Radiokes Strobodyne transformers under practical test give results heretofore only found in a strictly laboratory built transformer.



**PRICE . . . . . £6/15/- per Kit**

**A Specially Designed Strobodyne Kit for use with Screened Grid Tubes is obtainable**

**PRICE . . . . . £7/17/6 per Kit**





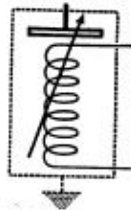
# “Radiokes”

## PERIDYNE SHIELDED KIT



A glance at above illustration shows this Kit consists of three special shielded units. Each incorporating an adjustment, whereby the R.F. transformers contained therein, can be brought to true resonance with the rest of the circuit.

This new “Peridyne” principle of shield tuning was devised by that well-known authority, Mr. Hugo Gernsback, and is claimed by him to be the perfect one-control set—the perfect distance receiver.



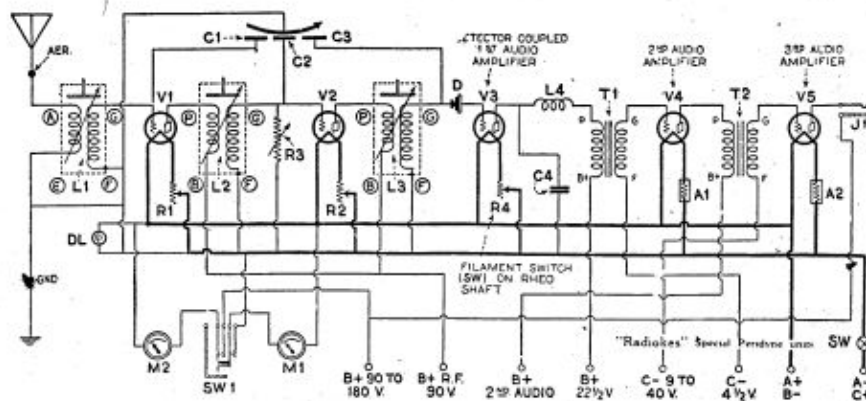
No doubt exists as to the efficiency of this truly remarkable five-tube receiver, and the cost of building this set is extremely low, considering the results achieved. This set will be a favourite for the forthcoming season.

The “dopeless” windings housed within these Peridyne shields are very carefully carried out on genuine Bakelite formers, strictly in accordance with the specifications of the designer, and are guaranteed to give trouble-free, efficient and satisfactory service.

The shielding is carried out in properly fashioned aluminium of correct gauge, and is finished in beautiful black crystalline lacquer.

Screw terminals are provided, arranged and marked for easy assembly in your set; and all connections to interior are made per medium of amply proportioned, rugged, insulating bushings, which are proof against mechanical or electrical breakdown.

PRICE . . . . . £3/15/- per Kit of Three Units

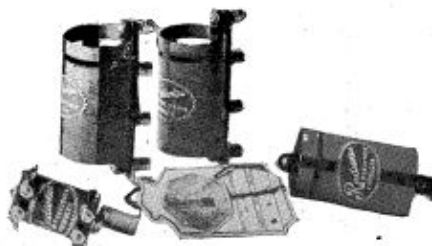


### PERIDYNE RECEIVER USING FIVE TUBES

L1, L2, L3 Radiokes peridyne Kit, C1, C2, C3 .0035 gang condenser, R1, R2, R4 30 ohm rheostats, R3 Royalty 100,000 ohm Rheostat, L4 Radiokes R.F. Choke, D carborundum detector, C4 .001 fixed condenser, A1, A2 Amperites type 1A, V1, V2, V3, V4 201A type tubes, V5 112A type tube.

# “Radiokes”

## FRESHMAN TYPE R.F. KIT



Of small physical dimensions, this Kit was specially developed for use in receivers where small size is essential as in portable work.

To be successful a portable receiver demands two or three stages of Radio Frequency amplification, and as regular pattern coils would call for a very bulky receiver. Radiokes laboratory has developed these units with the remarkably small diameter of  $1\frac{1}{2}$  inches.



These coils may be mounted quite close together without fear of serious interaction between R.F. stages.

Figure Eight.

With this Kit reduction of inter-magnetic-coupling, nullification of “strong feed-back effects,” and elimination of signal pick-up have been obtained without the usual broad tuning and difficult oscillation control.

A special tapped choke is employed as an Antenna coupler, when used for usual domestic receivers, and as such, provides an untuned stage to compensate for various Antenna capacities, making single control practically and theoretically possible.

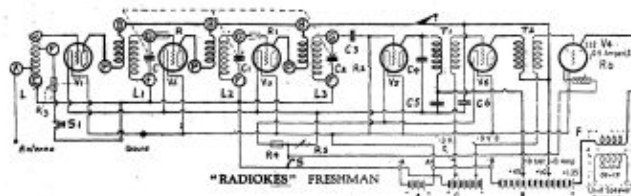
If used with portable receivers, a tuned loop may be substituted, thus providing a sensitive and selective set, which is inexpensive to build and maintain.



Shielded

The Kit consists of special Antenna-coupling-choke, and three miniature matched R.F. transformers, built according to Radiokes recognised, efficient, Low-Loss method. The windings are carried out in brilliant green silk covered wire mounted with polished Bakelite and nickel-plated fittings

PRICE . . . . . 30/- per Kit



## NEW TYPE THREE STAGE SINGLE CONTROL RECEIVER

L, L1, L2, L3 Radiokes Freshman Coil Kit, C, C1, C2 three gang condenser .005, R3 Radiokes 500 ohm resistor, R, R1 300 ohm suppressors, R5 6 ohm rheostat, R4, R6 Amperites type 112, C3 grid condenser .00025, R2 2 meg. grid leak, C4 .001 fixed condensers, C5, C6 by-pass condensers .5 mfd. 201A type tubes recommended with 112 in last stage.

# "Radiokes"

## MARTIN TYPE COIL KIT



This Kit has been produced to meet the demands of the Radio public for a set of inductances with specifications suitable for use in that excellent receiver the Martin Duel Three recently featured in the Australian Radio journals.

Using regular three electrode tubes and employing complete shielding (per medium of Radiokes Aluminium Box Shields), this receiver proved to be a super set, and is suitable for use close alongside powerful broadcasters.

With this Martin Set stations from 1,200 miles distant are regularly brought in on speaker using an antenna of three feet in length, and practically no interference is experienced from powerful locals within half-mile radius or even less.

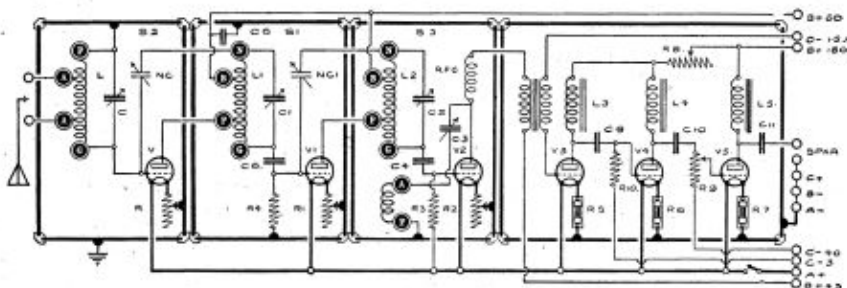


More recently still this receiver has been re-designed to incorporate the new screen grid tubes, with a result that these tubes in conjunction with Radiokes Martin-Coil Kit make a set which ranks among the finest sets of the day.

This Kit comprises three coils accurately wound in brilliant green silk covered wire, permanently held on precision cut polished bakelite forms.

Conveniently placed screw terminals and highly-polished nickel mounting brackets complete a beautiful Radiokes Kit which promises to be particularly popular during the forthcoming season.

**PRICE . . . . . 32/6 per Kit.**



### **MARTIN "DUAL-THREE" RECEIVER**

L, L1, L2 Radiokes Martin Coil Kit, S1, S2, S3 Radiokes Standard, Box Shields, NC, NC1 Radiokes Neutralizers, R.F.C. Radiokes, Radio Frequency Chokes, C, C1, C2 .00035 variable condensers, C3 .0001 variable condenser, C4 .0003 grid condenser, C5, C9, C10, C11, 1 Mf by-pass condenser, C6 .0003 fixed condenser, L3, L4, L5 30 heavy chokes, R, R1, R2 30 ohm rheostat, R3, R4 2 meg. leaks, R5, R6, R7 1A type Amperites, R8 100,000 ohm resistor.



Genuine Amperite is the only automatic filament control that keeps the temperature of the tube filament constant despite variations in the "A" Battery Voltage.

It guarantees improved tube performance, and increased tube life, through always operating tubes at their correct filament temperature.

Simplifies wiring, panel design, tube control, and tuning. Eliminates hand rheostats.

Make no mistake and do not confuse Amperite with fixed filament resistors, which attempt to imitate Amperite; but are entirely different in principle and operation.

These other so-called fixed filament controls, ballasts, etc., are merely resistances of sufficient value to prevent your battery from burning-out your tubes. When battery is fully charged the voltage rises to a dangerous figure, and so considerably damages your delicate tube filaments by overloading.

Do not leave your delicate tube filaments at the mercy of these fixed resistances. Amperite quite automatically allows for the voltage variations, and gives you consistent set operation in addition to better tonal qualities and lengthened tube life.

**PRICE . . . . . ALL TYPES 6/- each**



### **AMPERITE ADAPTOR**

What you have all been waiting for!

This small device, as its name implies, will adapt your present receiver to the advantages of Amperite control without rewiring, or in fact without the displacement of a single wire.



You simply connect the adaptor in series with your "A" lead, and clip in the two correct amperites, and lo! your old set is modernized, with all the advantages of simplified tuning, improved performances, and prolonged tube life of a regularly Amperite equipped receiver.

You estimate your "A" battery draw, and procure the Amperite recommended, clip into circuit, and forget about your tube filament adjustments thereafter.

In many cases the addition of one of these adaptors will so simplify your old set so that it will be quite an easy matter for other members of the family to "tune in"—an operation which at present requires considerable skill, because the present rheostat adjustments are critical.

**PRICE FOR ADAPTOR . . . . . 4/9 each**

Manufacturers and custom set builders are especially invited to peruse the foregoing pages of this little booklet. Radio frequency equipment for all successful and popular circuits from the commencement of broadcasting is illustrated herein, and coils for lesser known combinations, though not perhaps shown, are nevertheless manufactured by and obtainable from us, from stock, or at short notice.

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Any coils that have ever been introduced can be made by Radiokes, and we invite your enquiries. Our technical department is always at your service.

Our new facilities for the forthcoming season's productions put us in a favourable position to execute your requirements for power packs, etc., for all electric receivers.

Remember! Radiokes are the only manufacturers in the world giving an unconditional and perpetual guarantee.