## RADIORE



# RADIOKES LTD. 

## Head Office:

 George \& Cleveland Sts., Redfern, N.S.W., Australia.Cables and Telegrams: "Radiokes",<br>Codes: Bentley's<br>Telephones: M6I08: M6I09<br>All communications to Box 10, P.O., Redfern

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## R A DIOKESKIT-SETS

In listing our current models we present a range from which any constructor can select a kit that will meet his requirements. In its class each Kit-Set is right up to date. Each Kit-Set has enclosed full constructional details and circuit diagrams which make it possible for the beginner, without previous knowledge of radio, to make a Radio Set second to none.
RADIOKES KIT-SETS DO NOT INCLUDE SUCH EXTRAS AS VALVES, SPEAKER OR BATTERIES, but include everything necessary to build the set to the last nut and bolt. The components carry our usual Radiokes full guarantee.

Type 12-34 CHAMPION STANDARD SUPERHETERODYNE £ $12 / 19 / 6$


TYPE 12-34
Champion Standard Superheterodyne
£12/19/6

## TYPE 12-34, Champion Standard Superhet.

A powerful 8 -valve superheterodyne very selective and capable of, with average aerial and reception locality, getting all stations on the broadcast band. We recommend this set to constructors who do not want to listen to short wave stations but want the best of broadcast work.

## FEATURES:

Modified A.V.C.
Tone control.
"Wireless Weekly" Champion Audio amplification system.
175 k.c. Intermediate frequency using our Isolantite air dielectric special transformers. Pick-up terminals.
Aerovision dial, calibrated in numbers and kilocycles.
VALVE FUNCTIONS: 58 R.F., $2 A 7$ oscillator, 58 I.F., $2 A 6$ detector, 56 driver, $2 A 5^{\prime}$ 's push pull audio, 573 rectifier. CHASSIS DIMENSIONS: $14^{\prime \prime} \times 10^{\prime \prime}$ overall; height when built $8^{\prime \prime}$.
VALVES REQUIRED: $2 / 58,1 / 2 A 7,1 / 2 A 6,1 / 56,2 / 2 A 5,1 / 5 Z 3$. SPEAKER REQUIRED: 750 ohm field: output transformer to match PP2A5's.

## TYPE 12-34B - OUR BATTERY EDITION OF THE 12-34: A 6-VALVE BATTERY SUPERHETERODYNE £9/7/6

This is an ideal set for country requirements where tone and distance equal to an all-electric set is required. The outstanding ability of this set is entirely due to the use of the new Philips (or Mullard equivalent) valves. After extensive research with I.F. transformers we were able to get maximum gain from these valves without instability. The automatic volume control is another remarkable feature that was only made possible by the use of these new tubes.


## FEATURES:

Full Automatic Volume Control.
175 k.c. Intermediate Frequency, using our special air dielectric I.F. Transformers, specially wound to match the new valves.
Radiokes Class "B" audio system.
Pick-up terminals.
Aerovision tuning dial.
FULLY DESCRIPTIVE INSTRUCTION SHEETS ON APPLICATION

## RAD D O K E S K I T - S E T S

## TYPE 12-35, 6 Valve Dual Wave Kit-Set <br> £10/17/6

This set is really our triumph in a combined Long and Short Wave Receiver, and where listeners only want the pick of international stations. The wave length covered by the kit satisfactorily includes all the stations that can be heard regularly in Australia.
Radio frequency amplification on both bands, combined with full independent A.V.C., makes this set easy to tune and gives worth-while reception.
Chassis Dimensions: $14^{\prime \prime} \times 9^{\prime \prime} \times 8^{\prime \prime}$.
Position of Knobs: Tone on left, volume on right, dial in centre, $8^{\prime \prime}$ between two outside knobs.

## FEATURES:

Wave changing by special switch with silver-plated contacts. New type tone control, tuned R.F. amplification on both bands, Calibrated dual ratio Aerovision dial. Independent A.V.C.
Fillered extended range audio system isolated from R.F. and detector,

Padding on each band.
Special air dielectric Isolantite I.F. Transformers, Litz wound. Provision for transposed aerial system.
Band coverage: 19-52 metres.
200-550 metres.


6D6, latest super controlled Multi-Mu R.F. pentode.
6 A7, electron coupled Pentagrid frequency converter.
6B7. High-Mu pentode I.F. amplifier, Duplex Diode as demodulator and independent A.V.C.
75, High-Mu Triode in extended frequency audio filter and driver stage.
42, Pentode output tube.
80, Rectifier.
The 6 -valve Battery Dual Wave Kit-Set uses the new KF2 amplifiers, KBCI AVC
ICb Pentagrid and B240 output. Same features as the all-electric model.

## R A D I OK K S K I T - S E T S

TYPE 12-39 KIT-SET
£6/15/-
A 5 -valve 175 k.c. band pass Superheterodyne. This Kit-Set is designed to give maximum distance and volume with five valves by using a magnetic band pass stage with a three-gang condenser. Developed on the latest American lines, it is a very capable set.


VALVE FUNCTIONS:
2A7 oscillator, 58 I.F., 2 B7 detector, 2A5 power, 80 rectifier.

## CHASSIS DIMENSIONS:

$12^{\prime \prime} \times 8^{\prime \prime} \times 7 \frac{1}{2}^{\prime \prime}$.

## FEATURES:

Magnetic coupled band pass stage.
175 k.c. I.F. amplification.
Tone control.
Duplex Diode detection.
Pick-up terminals.
Aerovision dial.
Valves required:
I/2A7, 1/58, I/2B7, 1/2A5, 1/80.

## SPEAKER REQUIRED:

2500 ohm. field, transformer to suit single pentode. 2A5.

## TYPE 12-42, THE INTERNATIONAL KIT-SET (7V. All-Wave Superhet.) - $\quad$ - $£ 14 / 5 /-$



We recommend this kit to anyone wanting a radio set to cover all wave lengths from 15 to 550 metres. In all Radiokes all wave sets the coil assembly is wired, completed, tested and sealed, making it a very simple matter for the constructor to assemble the Kit-Set. There are no complicated switches to wire-we do all that for you.

## FUNCTIONS OF VALVES:

56 separate oscillator, 57 Ist detector, 58 I.F., 58 I.F., 55 2nd detector, 2A5 output valve, 80 rectifier.

## CHASSIS DIMENSIONS:

$14 \frac{1}{2} \times 9 \frac{1}{2}^{\prime \prime} \times 7 \frac{1 \frac{1}{2}^{\prime \prime} .}{}$
FEATURES: Covers four bands-

| Band No. $1-2-$ | - | $-15-35$ | metres. |  |
| :---: | :---: | :---: | :---: | :---: |
| $"$ | $"$ | 2 | - | - |

Wave changing by a switch.
Air tuned I.F. amplifier, 465 k.c.
Electron coupled separate oscillator. Drum dial.

## VALVES REQUIRED.

$1 / 56,1 / 57,2 / 58,1 / 55,1 / 2 A 5,1 / 80$.

## SPEAKER REQUIRED:

2500 ohm. field, transformer to match single 2A5.

FULLY DESCRIPTIVE INSTRUCTION SHEETS ON APPLICATION

## R A D I O K ES K I T - S E T S

## TYPE 12-42B

THE BATTERY INTERNATIONAL (A 6V. Battery All Wave Superheterodyne), $£ 14 / 5 /-$
This is our battery edition Kit-Set of the 12-42, and is similar in design to the A.C. circuit, except the audio amplifier where "B" class is used. We find this system best for battery sets.


VALVE FUNCTIONS: IA6 or IC6 Pentagrid oscillator, 34 I.F., 34 I.F., 32 2nd detector, 30 driver, 19 " B " class output.
CHASSIS DIMENSIONS: $14 \frac{1}{2}^{\prime \prime} \times 9 \frac{1}{2}^{\prime \prime} \times 7 \frac{1^{\prime \prime}}{}$.
FEATURES:
Pentagrid oscillator.
Air tuned 465 k.c. I.F. amplification.
"B" class audio.
Band coverage and switching the same as the 12-42.
"B" battery drain $12-18$ mils.
"A" battery drain .56 amp .
VALVES REQUIRED: $1 / 1 \mathrm{C} 6$ or $1 \mathrm{~A} 6,2 / 34,1 / 32,1 / 30,1 / 19$.
SPEAKER REQUIRED: Permanent magnet with transformer to suit 19 valve.
BATTERIES REQUIRED: $1 / 2$ volt 100 amp . accumulator. $3 / 45$ volt "B" batteries. 1/22 $\frac{1}{2}$ volt "C" battery, tapped $3,4 \frac{1}{2}, 6$ and 9 volt.

TYPE 12-44, SIMPLIFIED "MONEYSAVER" 5V. SUPERHETERODYNE KIT-SET - £6/6/In designing this kit our main objective was to design a kit that was extremely simple to construct, cheap in price, with good performance and tone. The circuit is similar to that used in the average 5 -valve set on the market. An added advantage is that, by purchasing a Radiokes $5-44$ all-wave box, with no other extra expense the set can be converted for all-wave reception.


## FUNCTION OF VALVES:

2A7 oscillator, 58 I.F., 2A6 2nd detector, 2A5 output, 80 rectifier.

## CHASSIS DIMENSIONS:

$12^{\prime \prime} \times 8^{\prime \prime} \times 8^{\prime \prime}$.
FEATURES:
Pentagrid converter.
465 k.c. I.F. amplification.
Pan dial.
Pick-up terminals. Adaptability to all wave. Diode detection.

## VALVES REQUIRED:

1/2A7, $1 / 58,1 / 2 A 6,1 / 2 A 5$, 1/80.
Also available for 6.3 volt valves.
SPEAKER REQU:RED:
2500 ohm. field, with trans. former to suit 2A5 valve.
Aerovision Dial can be supplied for 6/9 extra.

FULLY DESCRIPTIVE INSTRUCTION SHEETS ON APPLICATION

## R A D I OKES K I T - S ETS

## KIT-SET, TYPE $12-44 \mathrm{~B}, 5-\mathrm{VALVE}$ BATTERY MONEYSAVER - - $£ 6 / 6 /-$

This is our battery edition of the 12-44, and, like that set, is also readily adaptable to short waves by the addition of a 5-44B all-wave box.


## FUNCTION OF VALVES:

IC6 or IA6 Pentagrid oscillator, 34 I.F. amplifier, 32 2nd detector, 30 driver, 19 " $\mathrm{B}^{\prime}$ class output.
CHASSIS DIMENSIONS:

## $12^{\prime \prime} \times 8^{\prime \prime} \times 8^{\prime \prime}$.

" $B$ " battery current- $10-16$ mils.
" A " battery consumption-. 56 amps . The advantage of " $B$ " class amplification is that the "B" battery drain varies with the output, that is-a loud passage of music increases the current and a soft passage decreases. The consumption is directly relative to the variation of output signals.
VALVES REQUIRED:
1/|A6 or $1 C 6,1 / 34,1 / 32,1 / 30,1 / 19$. BATTERIES REQUIRED:
$1 / 2$ volt accumulator, $100 \mathrm{amp} .3 / 45$ volt " B " batteries. $1 / 22 \frac{1}{2}$ volt " C " battery.
SPEAKER REQUIRED:
Permanent magnet type, transformer to suit 19 valve.

## TYPE I2-46, 3 VALVE SHORT WAVE CONVERTER

This is a particularly fine unit, completely self-contained-that is, it has its own power supply and filter system. On completion, it is only necessary to join the aerial and earth terminals to the aerial and earth leads and the output terminals to the aerial and earth of your broadcast set. The broadcast set is then used as an amplifier, and all tuning is carried out on the converter. By using a stage of I.F. the converter has remarkable sensitivity.

## VALVE FUNCTIONS:

6A7 oscillator, 78 amplifier, 84 rectifier.

## CHASSIS DIMENSIONS:

$12^{\prime \prime} \times 7 \frac{1}{4}^{\prime \prime} \times 9^{\prime \prime}$.

## VALVES REQUIRED:

1/6A7, 1/78, 1/84.

## FEATURES:

Drum dial tuning.
Band covers from 15 to 240 metres in 4 bands.

$$
\text { Band No. } 1 \text { - - 15 - } 35 \text { metres. }
$$

Wave changing by special wave changing switches.
585 k.c. intermediate frequency.
Transformer Litz wound and air-tuned.
Special tuning gang.

FULLY DESCRIPTIVE INSTRUCTION SHEETS ON APPLICATION

## RADIOKES KIT - S E T S

## TYPE 12-89, THE 9-V. INTERNATIONAL DE LUXE ALL-WAVE RECEIVER - £/9/10/-

This Kit-Set is a De Luxe model of our 12-42 kit, and is desianed to meet the requirements of constructors who want a De Luxe Model of the 12-42.


## VALVE FUNCTIONS:

57 Ist detector, 56 separate oscillator, 58 I.F., 58 I.F., 55 2nd detector, 56 driver, 2A3 P.P. output, $5 Z 3$ rectifier.

CHASSIS DIMENSIONS:
$14 \frac{1}{2}^{\prime \prime} \times 9 \frac{1}{2}^{\prime \prime} \times 8 \frac{1^{\prime \prime}}{}{ }^{\prime \prime}$.
FEATURES:
Electron coupled oscillator.
465 k.c. air dielectric Isolantite I.F. transformers Litz wound.
A.V.C.

Drum dial control.
Special Radiokes class ' $A$ '' audio system, using push-pull 2A3's.
VALVES REQUIRED:
$1 / 57,2 / 56,2 / 58,1 / 55,2 / 2 A 3,1 / 5 Z 3$.

## SPEAKER REQUIRED:

750 ohm. field, with transformer to suit pushpull 2A3's.

TYPE 12-47, THE PENTAGRID FOUR VALVE BATTERY SUPERHET.
The circuit employed is exactly the same as used in the "Wireless Weekly" set which has proved the most popular battery set for years. Its economical operation and fair volume are possible only with the use of a PM22A or similar valve.


## VALVE FUNCTIONS:

IA6 Pentagrid oscillator, 32 I.F. amplifier, PMIHL 2nd detector, PM22A pentode output.

## VALVES REQUIRED:

1/|A6, |/32, 1/PMIHL, I/PM22A.

## BATTERIES REQUIRED:

$3 / 45$ volt "B" batteries, $1 / 4 \frac{1}{2}$ volt "C" battery, 1/2 volt accumulator.

## SPEAKER REQUIRED:

Permanent magnet type to suit PM22A valve.

FULLY DESCRIPTIVE INSTRUCTION SHEETS ON APPLICATION

## RADIOKESKIT-SETS

## TYPE 12-48, THE 3-VALVE BATTERY REGENERATIVE T.R.F. KIT-SET

This Kit-Set is the smallest we make, and, for its size, is a front rank performer. To simplify battery connections only four leads are used- " $A$ " positive and negative, " $B$ " positive and negative. Various " B " potential voltages and " C " bias


## VALVE FUNCTIONS:

32 R.F., 32 regenerative detector, PM22A power valve.

## CHASSIS DIMENSIONS:

$8^{\prime \prime} \times 7^{\prime \prime} \times 8^{\prime \prime}$.

## FEATURES:

Single dial control. Economical battery consumption.
" $A$ " battery drain .32 amp.
"B" battery drain, 7-10 milliamp.
Only four battery leads. Maximum distance possible with three valves.
Reaction control.

## VALVES REQUIRED:

2/32, I/PM22A.

## BATTERIES:

120-135 volt "B" battery, 2 volt accumulator.

## SWITCH

FREE Complete pamphlets on any of the grams, layout and complete wiring instructions. Send immediately to Dept. C., Box 10, Redfern, for details of any kit in which you are interested. Our Technicians will be pleased to give you all the information requested. Remember-Radiokes Kit-Sets are sold all over Australia, New Zealand, Singapore, Java and Suva, and can be supplied to suit special requirements.

IN A.C. DISTRICTS the transformers have special tappings to suit your local power supply. For Victorian constructors all A.C. kits are supplied with the transformers for $200 / 230 / 250$ volts and elsewhere $220 / 240 / 260$ unless specially specified.

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## RADIOKES ALL-WAVE BOXES

As a foundation to a special set, Radiokes all-wave boxes are an excellent asset and can be adapted to many uses. All of these boxes are tested under actual working conditions and sealed as O.K. before being despatched.


As incorporated in the 12-42A kit. Requires a 56 oscillator, 57 Ist detector, 465 k.c. frequency. Covers $15-550$ metres in four bands. Dimensions: $5 \frac{3^{\prime \prime}}{4} \times 6 \frac{1^{\prime \prime}}{}$ x $2 \frac{1^{\prime \prime}}{}{ }^{\prime}$.

To be used with a Stromberg-Carlson type "D" or "E" condenser gang.

Housed in an aluminium case, completely wired, and supplied with mounting brackets.

## TYPE No. 5-41

£2/19/6
To suit 2A7 or 6A7 465 k.c. Covers $15-550$ metres in four bands. Wave changing carried out by the use of a special switch. All Radiokes all-wave boxes are supplied wired up ready for use. Tested, sealed and guaranteed O.K. Dimensions: $5 \frac{3}{4}^{\prime \prime} \times 6 \frac{1}{8}^{\prime \prime} \times 2 \frac{1}{2}^{\prime \prime}$.

To be used with a Stromberg-Carlson type " $D$ " or " $E$ " condenser gang.

## TYPE No. 5-42B <br> £2/19/6

As used in the 12-42B all-wave battery Kit-Set. To be used with a IA6 or IC6 oscillator valve, 465 k.c. I.F. Covers the wave bands from approximately $16-550$ metres. Dimensions: $5 \frac{3^{\prime \prime}}{4} \times 6 \frac{1^{\prime \prime}}{} \times 2 \frac{1}{2}^{\prime \prime}$.

To be used with a Stromberg-Carlson type
"D" or "E" condenser gang.

## TYPE No. 5-44A - £2/13/6

To be used with 2A7 or 6A7 Pentagrid oscillator 465 k.c. I.F. Covers 18-200 metres in three bands. Especially made for converting the 12-44 Moneysaver to an all-wave set. Dimensions: $5 \frac{1^{\prime \prime}}{}{ }^{\prime \prime} \times 4 \frac{1}{2}^{\prime \prime} \times 2^{\prime \prime}$.
To be used with Saxon midget or Stromberg-Carlson Type "E" gang condenser.

## TYPE No. 5-44B - £2/13/6

For a IA6 or IC6 Pentagrid oscillator 465 k.c., as used in the 12-44B battery Moneysaver. Covers 18-200 metres in three bands. Dimensions: $5 \frac{1^{\prime \prime}}{}{ }^{\prime \prime} \times 4 \frac{1}{2}^{\prime \prime}$ $\times 2^{\prime \prime}$.
To be used with Saxon midget or Stromberg-Carlson Type "E" gang condenser.


TYPE No. 5-46 £2/19/6
As used in the $12-46$ converter kit, to suit 2A7 or 6A7 Pentagrid
 oscillator 585 k.c. I.F. Covers $15-200$ metres in four bands. Dimensions: $5 \frac{3}{4}^{\prime \prime} \times 6 \frac{1^{\prime \prime}}{}{ }^{\prime \prime} \times 2 \frac{1^{\prime \prime}}{}{ }^{\prime \prime}$.
TYPE No. 5-89 £2/19/6 Similar to the 5-42A boxes, but with different mounting lugs to suit 12-89 Kit-Set. Dimensions: $5 \frac{3}{4}{ }^{\prime \prime} \times 6 \frac{1}{8}{ }^{\prime \prime} \times 2 \frac{2^{\prime \prime}}{}{ }^{\prime \prime}$.

## TYPE No. 5-35-FOUNDATION KIT £6/6/-

Comprising I dual wave box complete and wired ready for use, I 3-gang condenser, 2 special air dielectric I.F. transformers (exactly as incorporated in the 12-35 Kit-Sets). Owing to the necessity of absolute precision, we found it necessary to supply this kit with specially matched condenser gang and intermediates and tested as an individual unit. We can also supply a calibrated dial to suit this kit at $18 / 6$ list. These calibrations are only correct if the complete $5-35$ coil kit is used.
TYPE 5-35B (As used in the 12-35B Kit Set) - $£ 6 / 6 /$ - For ICb Pentagrid.

## RADIOKES COIL-KITS

In presenting a comprehensive range we believe that there is available a type for every circuit popular here at present and, with our precision matching equipment, each coil kit can be depended upon to give excellent results when used as specified by us.


TYPE 5-34B
£2/10/6
Comprising:-
I-5-36B aerial coil
I $-5-36 B \cdot$ R.F. coil
I $-5-36 \mathrm{~B}$ oscillator coil
2 - 5-23B I.F. Transformers
1 - 6-40 padder
Outside diameter of cans, $2 \frac{1^{\prime}}{}{ }^{\prime}$
To suit Stromberg-Carlson type "D" or " $E$ " as used in 12-34B Kit-Set. For IA6.

TYPE 5-36
£1/7/6
Comprising:-

> 1-5-36 aerial coil
> 1-5-36 R.F. coil
> 1 - 5-36 oscillator coil
> 2 - 5-10 I.F. Transformers
> 1 - $6-40$ padder

Outside diameter of cans, $2 \frac{1}{2}^{\prime \prime}$.
175 k.c. The $5-36$ osc. coil will suit 2A7,6A7, or $1 C 6$ valve. For IA6 special 5-36B is required to suit Stromberg-Carlson type "D" or "E".

TYPE 5-37
£1/2/6

[^1]TYPE 5-33
£1/7/6
Comprising:-
1-5-33 aerial coil
1 - 5-33 R.F. coil
1-5-33 oscillator coil
2 - 5-10 I.F. Transformers
1-6-40 padder
Outside diameter of cans, $2 \frac{1}{2}^{\prime \prime}$.
175 k.c. to suit Stromberg-Carlson type "D" or "E" and 57 valve.
TYPE 5-34 £2/10/6
Comprising:-
I $-5-36$ aerial coil
1-5-36 R.F. coil
1-5-36 oscillator coil
2 - 5-23 I.F. Transformers
1 - 6-40 padder
Outside diameter of cans, $2 \frac{1}{2}{ }^{\prime \prime}$.
To suit Stromberg-Carlson type " $D$ " or " $E$ " as used in 12-34 Kit-Set.

> TYPE 5-37 "O" £

Comprising:-
1-5-37 "O" aerial coil
1-5-37 "O" oscillator coil
2 - 5-11 I.F. Transformers
1-6-38 padder
Outside diameter of cans, $2 \frac{1}{2}^{\prime \prime}$.
Octode AC-DC set described in "Wireless Weekly", 465 k.c. to suit Philips AKI or CKI valve. To suit Stromberg-Carlson type " $D$ " or "E" condenser.

TYPE 5-38
£1/6/-
Comprising:-
1-5.38 magnetic band pass coil
I - 5.38 oscillator coil
2 - 5-20 I.F. Transformers (one with 5 leads)
1 - 6-40 padder
Outside diameter of cans, $2^{\prime \prime}$.
Magnetic band pass 175 k.c. coil kit. To suit Stromberg-Carlson type "D" or "E" 57 valve.
TYPE 5-39 £ $1 / 6 /-$
Comprising:-
1-5-39 magnetic band pass coil
1-5-39 oscillator coil
2 - 5-20 I.F. Transformers
1 - 6-40 padder
Outside diameter of cans, $2^{\prime \prime}$.
Magnetic band pass 175 k.c. coil kit. To suit Stromberg-Carlson type "D" or "E" 2A7 valve as used in the 12-39 Kit-Set.

TYPE 5-44 £
Comprising:-
I $-5-44$ aerial coil
1 - 5-44 oscillator coil
2 - 5-19 I.F. Transformers
1-6-38 padder
Outside diameter of cans, 2
5-44 oscillator suits 2A7 or 6A7 valve. Coils wound to suit Strom-berg-Carlson "D" or "E" and Saxon midget as used in 12-44 KitSets.

## RADIOKES COIL-KITS

## TYPE 5-44B <br> £1/2/-

Comprising:-

- 5.44 oscillator coil

I $-5-44$ aerial coil
2 - 5-19B I.F. Transformers
1-6-38 padder
Outside diameter of cans, $2^{\prime}$
$5-44 \mathrm{~B}$ oscillator suits IA6 or IC6 valve. Wound to suit Stromberg. Carson type "D" or "E" and Saxon midget condenser as used in the Pentagrid Four.
TYPE 5-5I £I/2/6
Comprising: | - 5-5| aerial coil
1-5-51 oscillator coil
2 - 5-11 465 k.c. I.F. Transformers
1 - 6.38 padder
Outside diameter of cans, $2 \frac{1^{\prime \prime}}{}{ }^{\prime \prime}$
5-51 oscillator suits 57 or $6 \mathrm{C}^{6}$ oscillator valve. Wound to suit the Stromberg-Carlson type "D" gang.

## TYPE 5-5I SS <br> £1/2/6

Comprising: $1-5-5 I S S$ aerial coil
1-5-5ISS oscillator coil
2 - 5-11 I.F. Transformers
1 - 6-38 padder
Outside diameter of cans, $2 \frac{1}{2}$
465 k.c. to suit 57 valve. Special kit for Simplified Standard advertised in "Wireless Weekly"

## TYPE 5-63

£1/6/6
Comprising: 1-5-63 aerial coil
I - 5-63 R.F. coil
I - 5-63 oscillator 175 k.c.
2 - 5-20 I.F. Transformers
1 - 6-40 padder
Outside diameter of cans, $2^{\prime \prime}$
To suit Stromberg-Carlson type " $E$ " condenser as used in the Pentagrid Six.
NOTE: 5-63 coil kit is also available in 465 k.c. at the same price. Unless 465 k.c. is specially specified, 175 k.c. will be supplied.
TYPE 5-64
£1/7/-
Comprising: 1-5-64 aerial coil
1 - 5-64 oscillator coil
I - 5-64 R.F. coil
2 - 5-21 I.F. Transformers
1-6-38 padder
Outside diameter of cans, $1 \frac{1}{2}^{1 "}$
Automobile midget coil kit 465 k.c., 2 A7 valve, wound to suit Stromberg-Carlson type " $E$ " condenser.

## TYPE 5-30

15/-
Special short wave coils for "Wireless Weekly" single band converter. Consists of aerial and oscillator coils in one shield with seporating screen.
COILS. A comprehensive range is manufactured to meet the requirements of all set builders.
Type 5-33 Aerial 4/6 5-33 Preselector $4 / 6$ 5-33 R.F. $4 / 6$
5-33 R.F. w/reaction ..........................................................
5-33 Osc. 175 k.c., suit 57 or 6 C 6 valve $5 / 6$
5-36 Aerial 4/6
5-36 Preselector .a 4/6 4/6
5-36 R.F. $4 / 6$
5-36 R.F. with reaction $5 / 6$
5-36 Osc. 175 k.c. 2A7 6A7 IC6 valve $\quad 5 / 6$
$5 / 6$
$5 / 6$

All of the above coils are wound to suit Stromberg-Carlson type " $D$ " or " $E$ " condenser gang and any variable condenser with similar capacity.
I.F. Transformers to match the above coils in diameter and appearance would be for 175 KC , type 5 -10; for 465 KC. type 5-11.
KC. type 5-11.
Type 5-37 Aerial ..... $4 / 6$
5-37 Preselector ..... 4/6
5.37 R.F. ..... 4/6
5-37 R.F. w/reaction ..... 5/6
5-37 Osc. 465 k.c. 2A7 or 6A7 valve ..... $5 / 6$
5-51 Aerial coil ..... 4/6
5-51 Preselector coil ..... $4 / 6$
5-51 R.F. ..... $4 / 6$
5-51 R.F. with reaction ..... 5/6
5-5। Osc. 465 k.c. 57 or 77 valve ..... 5/6
D


5-64 AND 5-65 COIL KIT
TYPE 5-65
£1/7/6
Comprising: 1-5-65 aerial coil
I - 5-65 R.F. coil
I - 5-65 oscillator coil
2 - 5-22 I.F. Transformers
1-6-40 padder
Outside diameter of cans, $1 \frac{1}{2}^{\prime \prime}$
Automobile midget coil kit, 175 k.c., 6A7 valve. Wound to suit Stromberg-Carlson type " $E$ " condenser.
TYPE 5-60
£1/2/-
Comprising: $1-5-60$ aerial coil
1 - $5-60$ oscillator coil
2 - 5-19 I.F. Transformers
1-6-38 padder
$2^{\prime \prime}$ diameter cans
465 k.c. coil kit to suit 57 valve.
Suit Stromberg-Carlson type " $D$ " condenser.
TYPE 5-60 E
£1/2/-
Comprising: 1 - $5-60 \mathrm{E}$ aerial coil
I - 5-60E oscillator coil
2 - 5-19 I.F. Transformers
1 - $6-38$ padder
$2^{\prime \prime}$ diameter cans
465 k.c. coil kit to suit 57 valve with Stromberg-Carlson type " $E$ " condenser.

All mounted or a bracket

## R A D I O K E S C O I L S



RADIOKES AERIAL COIL,
with portion of shield cut away to show the construction of the coil.

5-63 Aerial coil ................. $3 / 9$
5-63 R.F. coil 3/9
The above R.F. and aerial coils can be used with any of the $5-63$ series oscillator coils. Please be sure to specify the correct type for your requirements.

For 465 k.c. use type 5-19 I.F. Transformers
For 175 k.c. use type 5-20 I.F. Transformers
5-44 Aerial coil, $2^{\prime \prime}$ dia. $\quad 3 / 9$
5-44 Osc. coil, 465 k.c. 2A7, 2' dia. .......... 5/-
Wound to suit Saxon midget condenser gang. Stromberg-Carlson type "D" or "E".

```
5-64 Aerial, \(1 \frac{1}{2}{ }^{\prime \prime}\) dia. cans 4/6
5-64 R.F., \(1 \frac{1}{2}{ }^{\prime \prime}\) dia. cans ...... 4/6
5-64 Osc., \(\left\lvert\, \frac{1^{\prime \prime}}{}{ }^{\prime \prime}\right.\) dia. cans, 2A7, 465 k.c. b/-
```

For T.R.F. circuits any of the above types can be used but are not interchangeable. They are all standard size cans.

For colour and number codes and physical dimensions, see page 13.

Wound to. suit Stromberg-Carlson type "E" gang condenser, to be used with type 5-21 I.F. Transformers.

| 5-65 | Aerial, $1 \frac{1}{2}^{\prime \prime}$ dia. cans |
| :---: | :---: |
| 5-65 | R.F., $1 \frac{1}{2}^{\prime \prime}{ }^{\prime \prime}$ dia. cans |
| 5-65 | Osc. 2A 7175 k.c., $1 \frac{1}{2}{ }^{\prime \prime}$ dia. cans |

Wound to suit Stromberg-Carlson type "E" gang condenser, to be used with type 5-22 I.F. Transformers.

NOTE: Where R.F., R.F. with reaction and preselector coils are not listed for particular types these can be supplied to special order. Approx. price according to dimensions:-

| $2 \frac{1^{\prime \prime}}{2}$ cans R.F. | $4 / 6$ | $2^{\prime \prime}$ cans R.F. | $3 / 9$ |
| :--- | :--- | :--- | :--- |
| R.F. with reaction | $5 /-$ | R.F. with reaction | $5 /-$ |
| Preselector | $4 / 6$ | Preselector | $3 / 9$ |

Special coils can also be supplied. Send for quotations to suit your circuits.

## RADIOKES COILDATA



Dimensions:

| Series | 5-44 | $2^{\prime \prime}$ dia. $\times 2 \frac{7}{8 \prime}^{\prime \prime}$ |
| :---: | :---: | :---: |
| " | 5-44E | $2^{\prime \prime} \quad 11 \times 2 \frac{7}{8 \prime}^{\prime \prime}$ |
| " | 5-63 | $2^{\prime \prime}{ }^{\prime \prime}{ }^{\prime \prime} \times 2 \frac{7}{8}^{\prime \prime}$ |
| " | 5-64 | $1 \frac{1}{2}^{\prime \prime}{ }^{\prime \prime} 11 \times 2^{\prime \prime}$ |
| . | 5-65 | $1 \frac{1}{2}^{\prime \prime} \prime \prime \times 2^{\prime \prime}$ |

$2^{\prime \prime}$ dia. $\times 22^{\frac{7}{8}}$
$2^{\prime \prime} \quad$ " $\times 2 \frac{7^{\prime \prime}}{}{ }^{\prime \prime}$
$2^{\prime \prime} \quad 1 \quad \times 2 \frac{7}{8}^{\prime \prime}$
$1 \frac{1}{2}^{\prime \prime}$ " $\times 2^{\prime \prime}$
$1 \frac{1^{\prime \prime}}{}{ }^{\prime \prime} \times 2^{\prime \prime}$

## COLOUR AND NUMBER CODES OF RADIOKES COILS

5-44 and 5-44E

$5-51,5-33,5-36,5-37,5-63,5-64,5-65$
AERIAL:
Primary
Secondary
R.F.

Primary _-..............
Secondary


OSCILLATOR (5-36, 5-37, 5-63, 5-64, 5-65)
Primary
Secondary
Anode grid (No. 2)
B plus
Osc. grid (No. 1)
Padder

OSCILLATOR 5-33
Secondary

Primary


OSCILLATOR 5-5I
Secondary
Primary


ALL PRESELECTOR COILS

| Grid | "1 | Top |  |
| :--- | :---: | :--- | :--- |
| Earth | II | 2 | Tap |
| Coupling to previous stage | ". | 6 | Bottom |

## COLOUR CODE 5-38 BAND PASS COIL - AERIAL SECTION

Secondary
Primary
Grid coil


## COLOURS AND MARKS OF RADIOKES COILS

## COLOUR CODE 5-39

BAND PASS COIL

| Aerial | Red <br> Earth <br> Grid $4 \ldots \ldots .$. <br> Brown |
| :--- | :--- |
| Stator Aerial Gang | Green leads only <br> Green |

OSCILLATOR

| Grid 1 | Green |
| :--- | :--- |
| Padder | Yellow |
| Grid 2 | Red |
| B plus 150 volt | Orange |

All reaction coils have the same code as the coil to which they are fitted, with the following additions:-
No. 3 Top of reaction winding 6 Bottom of reaction winding
The only exception is a preselector with reaction. The code then becomes:-

| No. 3 |  |
| :--- | :--- |
|  | $5 \cdots \quad$Top of winding <br> Bottom of winding |

## MIDGET VARIABLE CONDENSERS

Single hole mounting, $\frac{1}{4}^{\prime \prime}$ shaft, brass plates, solder lug contacts. Bakelite insulations. A very sturdy condenser, ideal - for neutralizing condensers, reaction controls or trimmers.

| Type | No. of | Approx. | Price |
| :--- | :---: | :---: | :---: |
| No. | Plates | Max. Cap. |  |
| $6-3$ | 3 | 10 mmfd. | $2 /-$ |
| $6-5$ | 5 | 15 | .1 |
| $6-7$ | 7 | 25 | $\square$ |
| $6-11$ | 11 | 40 | $2 / 3$ |
| $6-13$ | 13 | 50 | $2 / 6$ |
| $6-17$ | 17 | 70 | $2 / 9$ |
| $6-23$ | 23 | 100 | $" 1$ |

## RADIOKES ISOLANTITE MIDGET CONDENSERS

The marked efficiency of Radiokes Isolantite Condensers at ultra high frequencies has been attained by extensive research in materials and design, constant experimentation and careful workmanship-plus years of experience. Their superiority is attested by their dominant position in amateur and experimental fields and their use by the more prominent manufacturers of short wave receivers, television equipment and high frequency apparatus in general.
Among the multiplicity of uses for small size variable condensers, their use as short wave and ultra short wave tuning condensers is unquestionably of greatest importance. In such work, with frequencies running up to 50 and 60 megacycles, unusual electrical efficiency is demanded. Every feature of Radiokes Isolantite Condensers is designed to meet these strict demands.

Isolantite insulation reduces dielectric losses to a minimum and assures maximum and uniform efficiency under all conditions of temperature and humidity. Wide special bearings at both front and rear provide for extra good contact without objectionable inductive reactance. The size and accuracy of these bearings assures long life, quiet operation and absolute stability of calibration. Non-corrosive soldered brass plates eliminate vibration and effect lowest series resistance. Great strength and rigidity are secured through the elimination of all screws and nuts, everything being either soldered or rivetted. End plates are of heavy aluminium, and provisions are made for both single hole panel mounting and base mounting.

Because of their vibration proof construction, the condensers are specially suited to aircraft, police car and marine work. Their small size, light weight, high capacity ratio, low losses and accurate construction, indicate their use for ultra short wave and short wave tuning, broadcast tuning, the tuning of intermediate frequency transformers, aerial tuning, wave traps, compensating and vernier condensers, regeneration and neutralizing condensers, and for laboratorv and test equipment in general.

GENERAL SPECIFICATIONS: Plates are $.0225^{\prime \prime}$ brass with $.0245^{\prime \prime}$ airgap between plates. Shafts are $\frac{1^{\prime \prime}}{4}$ diameter and extend $5 / 16^{\prime \prime}$ beyond the rear frame to facilitate ganging. Standard condensers include stops, and are made to increase capacity by clockwise rotation. Individually tested for breakdown on 500 volts A.C. Quality fully guaranteed.

LIST OF STOCK SIZES
MC 100
MC 75
MC50
MC 35 $\ldots \quad$ Prices

## R. F. CHOKES

 Type 3-20 - - - 1/3Manufacturers' type, where a low inductance choke is required. 600 turns.


TYPE 3-2i

## Type 3-21

Our standard 1,000 turn choke, suitable for all broadcast circuits.
Type 3-22 - - - $1 / 6$
Similar in design to 3-20 chokes but with same inductance as the 3-21 manufacturers' mounting.

Type 3-2IM - - - $1 /$ - Type 3-22D - - - $4 / 6$
A double cotton covered choke, similar in appearance to the 3-21, but without bracket.

Similar to 3-22, but with four sections, each of 1,000 turns; a very high inductance choke wound on Isoramic for greater efficiency.

Type 3-46
Coupling R.F. choke for short wave converters.
2uping k.1. choke ror shon wave colverters.


TYPE 3-20

3/6 Type 3-22S

A special bank wound 4 -section short wave choke, highly efficient, wound on Isoramic former.

## VOLUME CONTROLS WIRE WOUND

This Radiokes Potentiometer needs no introduction, and is standard equipment for most of Australia's set manufacturers. A thoroughly reliable control continuously wire wound.

TYPE 8-1

| 10 | ohm. Rheostats | $3 /-$ |  |
| :---: | :---: | :---: | :---: |
| 20 | " | " | $3 /-$ |
| 30 | " | " | $3 /-$ |
| 50 | " | " | $3 /-$ |


| 400 | ohm. Potentiometers | $3 / 3$ |
| ---: | :---: | :---: |
| 1,000 | $\ldots$ | . |
| 2,500 | $\ldots$ | 3 |
| 5,000 | .1 | $3 / 3$ |
| 10,000 | .1 | .1 |

We will make up special values for $1 /$-extra to the price of the Potentiometer of next highest ohmage.

## POWER TRANSFORMERS

Radiokes Power Transformers are made from the best of materials. Standard primary tappings: 220/240/260, except for Victoria, where 200/230/250 tappings are supplied. Special tappings can be supplied at a small extra charge.

Instead of listing the types as last year, we have changed the serial numbers to show the milliamps at a glance, viz., the old M. 380 m.a. transformer will now be known as the M80. All " $M$ " type transformers ore for flat mounting.


| $M .50$ | $14 /-$ |
| :--- | :--- |
| $M .60$ | $14 / 6$ |
| $M .80$ | $16 / 6$ |
| $M .100$ |  |
| $M .125$ |  |
|  |  |
|  |  |
|  |  |
|  |  |



All transformers can be supplied with 6 volt or 4 volt filaments if required at no extra cost, as long as the maximum wattage is not increased. If you require an $M .60$ with a 5 volt rectifier winding and a 6.3 or 4 volt filament only, specify M.60-6 or M.60-4. An M. 60 with all 4 volt or 6 volt tappings must be specially specified.
RADIOKES "U" TYPE POWER TRANSFORMERS These are now a very popular line, and have the advantage of taking up very little space in the chassis.

| $U .50(1-45)$ | $15 /-$ | $U .100(1-43)$ | $18 /-$ |
| :--- | :--- | :--- | :--- |
| $U .60(1-4)$ | $15 / 6$ | $\vdots .125(1-44)$ | $25 /-$ |
| $U .80(1-42)$ | $17 /-$ | $U .150(1-89)$ | $28 / 6$ |

Brackets denote Old Type numbers.
LIGHTNING ARRESTERS
The Radiokes Arrester is compact and a very effective storm guard.
Price
1/6
18/-
28/6


## RADIOKES ISOLANTITE PADDING CONDENSERS



PADDING CONDENSER

Radiokes Adjustable Condensers are now improved as the result of seven years' specialization on this general type. Quality has been constantly improved through research work carried on for the larger laboratories and radio manufacturers in the development of condensers to resist moisture, temperature and vibration.
Testifying to the correctness of Radiokes design and control is the fact that the great majority of radio manufacturers use Radiokes precision condensers exclusively.
Bases are specially formed Isolantite. Only the world's best ruby clear mica is used. The nickel silver flexible plate is shaped to provide substantially straight-line-capacity increase.
Adjusting screws have machine-cut microthreads and self-aligning conical seats.
Fibre shock-pads prevent strains being set up in the base.
Used for padding, trimming and aligning.

Type 6-40 600-1500 mmf. $3 /-$
11 plates used for 175 KC padding.
Type $6-38 \quad 300-600 \mathrm{mmf}$. ...................... 2/6
7 plates used for 465 KC padding.
Type 6-41 55-200 mmf. ....................... 2/6 3 plates for padder with shunt.
Condensers are tested for capacity range, power factor and for breakdown at 450 v . A C. Size of base is $\left.\right|^{\prime \prime}$ by $1 \frac{5}{8}^{\prime \prime}$. mounting centres $1 \frac{1}{4}^{\prime \prime}$.

Type 6-42

$10-100 \mathrm{mmf}$.
2/6 2 plates for trimming and compensating.
Type 6-35 $4-25 \mathrm{mmf}$. ..... 2/6 Special low capacity for trimming short wave coils.
breakdown at 450 v . A.C. Size of base is $I^{\prime \prime}$ by $1 \frac{5}{8}{ }^{\prime \prime}$.

## RADIOKES INTERMEDIATE FREQUENCY TUNING CONDENSERS

Except for having two sections, they are exactly the same as the single condensers described on previous page.

The sensitivity and selectivity of superheterodynes is dependent on the quality of the I.F. tuning condensers. It is essential that the capacity and power factor be maintained as uniformly as possible under the constantly varying conditions of temperature, humidity and vibration encountered in actual service. Indvidually tested for capacity range, power factor and breakdown.

Diameter of base is $115 / 16^{\prime \prime}$, mounting centres $1 \frac{1}{2}^{\prime \prime}$.


ISOLANTITE BASE

Type B2 $10-100 \mathrm{mmf}$. 3/-
2 plates generally used for 465 KC .

## Type B3 $55-200 \mathrm{mmf}$.

3 plates generally used for 175 KC .

TRIMMING CONDENSERS. Developed expressly for trimming short wave and broadcast coils in the new all-wave and dual-wave sets. The small size facilitates the mounting and assembly of all-wave sets, and enables a more compact and efficient design.

Type BB2 I5-75 mmf. for trimming broadcast or I.F. coils ...... 2/-
Type BB2S $3-35 \mathrm{mmf}$. for trimming broodcast and short wave
coils
Type BB2D $15-75 \mathrm{mmf}$. Double trimmer for tuning both coils
of I.F. Transformers, 460 k.c.
of I.F. Transformers, 460 k.c. ................................... $2 / 6$
Type BB3 55-140 mmf. for aerial coupling or trimming coils $2 /-$
3/- Type BB3D $55-140 \mathrm{mf}$. Double trimmers for tuning both coils of I.F. Transformers, 175 k.c. ........................................2/9 NOTE: The numeral indicates the number of plates, e.g., BB2 has
2 plates.

SPECIAL TYPES CAN BE MADE TO SUIT MANUFACTURERS' SPECIFICATIONS.

# NEW RADIOKES ISOLANTITE MICA DIELECTRIC I.F. TRANSFORMERS 

These high-grade Transformers are all of the tuned grid, tuned plate type, with lattice wound coils impregnated to prevent moisture effects.
The tuning base is Isolantite, which has lower dielectric and insulation losses than any other commercially known material.
Only the world's best ruby clear mica is used. The mica plates undergo rigorous double tests for gauge and any mineral content that would cause power loss.
They are subjected to special treatment both before and during assembly to ensure complete absence of surface stains in any form.
The chassis bracket is plated brass. No iron is used. All leads are colour coded. Quantity production permits pricing these units very attractively.
There are special types for nearly all purposes.
Special types can be made to manufacturers' specifications.

## TYPE 5-10 175 KC . <br> 5/9

Mounted by means of plated brass bracket, which also carries the coils. Machine screws come through the receiver chassis and into the brass bracket.
The tuning base is Radiokes Isolantite 3-plate type B3 (see I.F. tuning condensers).
Distance between mounting centres is $1 \frac{1}{2}^{\prime \prime}$. Size of shield, $2 \frac{1}{4}^{\prime \prime}$ diam. and 2 13/16" high.
Adjusting screws are at top of shields, suitable for all standard values.


Same design as 5 -10, but is 465 KC , and uses Isolantite two-plate tuning base, type B 2 (see I.F. tuning condensersj. It is a very efficient high gain I.F. transformer, suitable for single stage amplification, following 2A7 or 6A7 valves. Is also very efficient when used with 57 or 6 Cb autodyne oscillators, provided the oscillator coil is correctly designed and the correct values of cathode resistor and bypass are used.
These values are fairly critical, and unless correct, motor boating and instability will result.
This transformer is suitable for use with Radiokes types $5-51$ and $5-51$ SS coil kits for 57 or 6 C6 autodynes, and with $5-37$ coils for $2 A 7$ or 6A7 valves.

$$
\text { TYPE 5-IIN } 465 \mathrm{KC} . \quad-\quad-\quad-\quad-\quad-\quad-\quad 5 / 9
$$

Same design as $5-10$ and $5-11$, but is specially designed for one or two stage amplification following 57 or 6 C 6 autodyne, and two stage amplifiers following 2A7 or 6A7 or Philips AKI octode.
Has high capacity tuning condensers, type B3 (see I.F. tuning condensers) and a lower gain than type 5-11.
I.F. amplifiers using this transformer are very easy to stabilise, and autodyne oscillator coils and resistor and bypass values are not critical.

$$
\text { TYPE 5-IIH.F. } 465 \mathrm{KC} . \quad-\quad-\quad-\quad-\quad-\quad-\quad 5 / 9
$$

A special extended range transformer for use in high fidelity superheterodynes with a single I.F. amplifier made for first and second stage, and supplied only in pairs.
There is an amazing difference in the reproduction of an extended tone superheterodyne when ordinary intermediate transformers are replaced with these special units. The gain is much the same as the standard type transformers, but the extended range of amplification reduces the selectivity slightly. The mechanical construction and design is similar to the above types 5-10 and 5-11.
A 2A7 or 6A7 Pentagrid converter or the AKI Philips octode is recommended to precede the I.F. amplifier.
There are special tuning coils, type 5-37 H.F., designed for use with these I.F. transformers, and a 2A7 or 6A7 or octode AKI valve.

## RADIOKES (BRACKETLESS) TYPE I.F. TRANSFORMERS

Similar in electrical design to the types 5-10 and 5-11, but the mechanical construction differs.
The stator plates are extended from the soldering lugs to form brackets which carry the coils.
Mounting is by means of specially shaped machine screws rivetted to the shields. Mounting centres are $23 / 16^{\prime \prime}$.

## TYPE 5-I2 175 KC .

Suitable for all standard valves. Uses B3 tuning condensers, 3-plate trimmers.

TYPE 5-I3 465 KC .
Especially suits 2A7 and 6A7 valves and Philips AKI, also suitable for 57 and 6A6 and all standard valves. Uses B2 tuning condensers, 2-plate trimmers.

## RADIOKES STANDARD TYPE AIR DIELECTRIC I.F. TRANSFORMERS

The use of air dielectric condensers eliminates the variations in gain and selectivity inherent in I.F. transformers tuned by condensers of the compression type using mica as dielectric.

These transformers have small capacity air condensers mounted on high dielectric bakelite bases. The adjusting screws are tuned from each end, the secondary from the top and primary from underneath the shields.

The shield can is $2 \frac{1}{4}^{\prime \prime}$ diameter and $3 \frac{3}{8}^{\prime \prime}$ high; the mounting
 centres are $1 \frac{3}{4}{ }^{\prime \prime}$.

TYPE 5-14 465 KC . - $12 / 6$ TYPE 5-15 175 KC. - $12 / 6$
Suitable for all standard type valves. standard valves.

Suitable for 2A7 and 6A7 and all standard valves except 57 and $6 C 6$ autodynes, for which a first and second stage unit must be specified.

TYPE 5-16 465 KC , Litz Wound 15/- TYPE 5-18 585 KC , Litz Wound 15/Similar in every way to the type 5-14, except that the coils are litz wound; suitable for all Similar to above $5-16$, but specially designed for short wave converters.

## RADIOKES (COMPACT) TYPE I.F. TRANSFORMERS



These transformers are identical in design and performance to the types $5-12$ and $5-13$, but the overall dimensions are only $2^{\prime \prime}$ diameter by $211 / 16^{\prime \prime}$ high, mounting centres 1 15/16", $\frac{1}{8}$ " clearance holes.

All leads are colour coded.

$$
\begin{aligned}
& \text { TYPE 5-19 } 465 \mathrm{KC} . \quad-5 / 6 \text { TYPE } 5-20 \quad 175 \mathrm{KC} \ldots \\
& \text { Suitable for all standard valves. }
\end{aligned}
$$

## RADIOKES MIDGET TYPE I.F. TRANSFORMERS



Black

## RADIOKES LABORATORY TYPE I.F. TRANSFORMERS



## I.F. TUNING WITHOUT AN IF.

To increase selectivity and sensitivity and where $100 \%$ efficiency and absolute stability are essential requirements, these special type air tuned units are an absolute necessity.
These new precision I.F. Transformers are double air tuned and litz wound. The air condensers are of special design.
The litz coils have the exceptional "Q" of 115, and a coupling co-efficient of $.77 \%$.
The transformers provide a gain of 200 per stage, together with unequalled selectivity.
The shield can is $23 / 32^{\prime \prime}$ diam. by $5^{\prime \prime}$ high. Mounting is by two screws through the base.

| TYPE 5-23 | 175 KC | $-\quad-\quad 17 / 6$ ea. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| . | $5-24$ | 465 | - | $17 / 6 \quad$. |

The above are the standard types and are designed for $57,58,6 D 6,6 C 6,6 A 7$ and other similar types of valves in standard circuits.
A special transformer, type 5-35, has been developed for use in single I.F. stage short wave and all wave superhets. It has a high gain, and extended band characteristics. It is ideally suited to superheterodynes which incorporate high fidelity audio systems, especially when wide range amplification must not be obtained through dispensing with selectivity.
TYPE 5-35 465 KC, Special - 17/6
Special types can be supplied to meet set manufacturers' specifications.
TYPE 5-23B 175 KC - $17 / 6$
An air dielectric tronsformer similar to type 5-23, but designed especially for the new Philips KF2 battery Pentode amplifiers.

Radiokes Precision Wire Wound Resistors are designed to meet the requirements of an accurate and absolutely dependable resistance with a minimum of inductance and distributed capacity.
The core former is non-porous tubular Isoramic, which is not effected by moisture or heat and has a low expansion co-efficient.
The contact clips and soldering lugs are specially shaped to facilitate mounting or soldering into position.
Available in any value from 20 ohms. up to 100,000 ohms. in standard ratings, tabulated underneath.
All values up to 5,000 ohms. of standard rating are nickel-chrome wound on "Isoramic." Core sizes: $9 / 32$ " diam. x $1 \frac{3}{4}$ ".
'Special resistors of greater current rating than standard and maxomes above 5,000 ohms. are wound on $\frac{3^{\prime \prime}}{8}$ diameter P. \& R. tubing, the length varying according to the resistance.
All values are guaranteed accurate within $4 \%$.
Resistance is clearly marked in ohms.
Special types and values can be made to manufacturers' specifications.


MAXOME RESISTORS

## STANDARD RATINGS OF MAXOMES.

| Ohms. Resistance |  |  |  |
| :---: | :---: | :---: | :---: |
| All | I values | 100 to | 450 |
|  | " | 475 | 750 |
| " | " | 775 | 1,000 |
|  |  | 1,025 | 2,000 |
|  |  | 2,025 | 3,000 |
|  |  | 3,025 | 5,000 |


| Max. current | Price |
| :---: | :---: |
| 100 m.a. | .9d. |
| 75 | 9 d. |
| 35 | 9 d. |
| 25 | 9 d. |
| 20 | 9 d. |
| 10 | 9 d. |

Dimensions of above values $9 \% 32^{\prime \prime}$ diameter by $1 \frac{3}{4}$ " long. Wound on Isoramic Tubular Core.

| All values | 5,050 to 10,000 | 15 m.a. | $1 / 6$ |
| :---: | ---: | ---: | ---: |
| " | 1 | $10,500 ~$ | 30,000 |

Above are all nickel-chrome spiral wound on $\frac{3^{\prime \prime}}{8}$ P. \& R. tubing.

## ORDERING

The following procedure for ordering is recommended:-
If standard ratings are required do not state current rating, order by resistance only, example:Forward I gross of 250 ohms Maxomes as soon as possible.
If special current ratings above our standard ratings are required, please state max. current capacity required, example:-
Forward I gross of 400 ohms 150 m.a. Maxomes as soon as possible.
In most cases, Maxomes of heavier current ratings than standard are subject to extra charge and are often of larger dimensions.


## RADIOKES VOLTAGE DIVIDERS

Remarkably compact and sturdy in construction. Wound with high-grade nichrome wire and equipped with strong fixing brackets. Surface of wire amply protected by lacquer. Three movable contacts provided. Overall length, $3 \frac{3}{4}$ inches for 15,000 ohms, and 4 inches for 25,000 ohms. VOLTAGE DIVIDER (Type 4-24), 15,000 ohms … ...................................... $2 / 6$ VOLTAGE DIVIDER (Type 4-25), 25,000 ohms .............................................. 3/6

## RADIOKES AUDIO

## RADIOKES AUDIO EQUIPMENT

All Radiokes audio equipment has been continually improved as the result of laboratory research and experiment, until, to-day, in every transformer and choke one finds the technical design of expert knowledge and long experience. There are types for most standard valves and circuits and special types can be supplied to specification.
All transformers are colour coded and charts of the code are supplied with each transformer.

## Type 3-6



A standard 3-1 ratio class A audio coupling transformer matches standard triode audio valves such as 55,56, 30, etc. Price 14/-.

## Type 3-14

Similar to above, but with a ratio of 5-1. Price $18 / 6$.

## Type 3-7

Class B input transformer for use in either all electric sets or battery sets, for valve types 19 or B240, 79 and 53 ; and suitable for driver valve types 30 , 56, 55, B217. Price 14/-.

## Type 3-7B

Same specification as $3-7$, but mounted with terminals underneath so that wiring is not visible from above the chassis. Price 14/-.

## Type 3-8

Class B output choke for coupling B class battery valves to magnetic type loudspeakers. Price 14/-.

## Type 3-10

High impedance C.T. audio coupling choke 230 henries to match pentode detectors or audio valves such as 57 or 6 C 6 . Price $15 / 6$.

## Type 3-19

A wide range special A class push pull transformer with a remarkably good audio response, uses a Radio Metal Nickel alloy core of very high permeability, a new development, which permits a high inductance with low distributed capacity. Recommended for high fidelity amplifiers. Price $37 / 6$.

## Type 3-7A

Same as above but specially designed for B240 valve. Price 14/-.

## Type 3-9

Standard A class push pull audio transformer for use with standard triode audio valves and either Pentode or triode output valves. Price 14/-.

## Type 3-1I

Class A double push pull for intermediate stage, designed for audio triodes such as 56,76 , etc. in push pull driving push pull 245 's or 250 's or similar tubes in A class operation. Primary is centre tapped. Ratio is $2 \frac{1}{2}$ to 1 . Price 14/-.

## Type 3-23

Special $A B$ class input push pull transformer for $2 A 5$ 's or 42 's with a 2 A5 or 42 used as a triode driver. The original data leading to the design of this transformer was supplied by Mr. Langford Smith for use in his AB class amplifier. Price 15/-.

## Type 3-24

Class B for 53 driver and 53 B class output. Price $18 / 6$


AUDIO CHANNEL

## RADIOKES AUDIO COUPLING CHANNEL "B" CLASS OUTPUT

For any battery-operated receiver using " $B$ " Class Amplification, the Radiokes Audio Coupling Channel is a great convenience and makes for simplicity of layout. It comprises the 3-6, $3-7$ and 3-8 units (as listed above) mounted on a heavy gauge aluminium channel.


## P O W E R C H O K E S

## POWER CHOKES

Type C-50

30 Henries - 50 m.a. Similar in appearance to our audio transformers. It has a very generous core and is very effective for filtering small current up to 60 m.a. Price $10 / 6$.

## Type C-200

30 Henries - 200 m.a. Identical in appearance to the above type C- 150 but is built on a heavier core and wound with heavier wire. Price $22 / 6$.

## Type C-100

30 Henries - 100 m.a. Similar to above type C-50 but built on heavier core and has heavier windings. Price $12 / 6$.

## Type C-I50

30 Henries - 150 m.a. A very efficient heavy duty choke for use where perfect filtering is necessary. Built on heavy core and provided with handsome upright cover shields, is really a small replica of our large transformers fitted with the requisite air gap. Price 17/6.


## PAN FULL VISION DIAL

Type 7-6 - Price 5/9

A straight out full vision dial with spring tensioned friction drive and travelling spotlight. Clearly calibrated scale reads $0 / 100$ and from 1500 to 550 KC . Suitable only for condensers with $\frac{1}{4}^{\prime \prime}$ diameter spindles supplied with light browr celluloid and old bronze escutcheon.

EXCEL FULL VISION DIAL Type 7-8 - Price 5/9


ROYAL DIAL, Type 7-9

Similar appearance to the Pan but uses a different driving mechanism of the spring loaded wedge type. The escutcheon also differs somewhat. The Excel escutcheon can be used with the Pan dial. Suitable for use with either $\frac{3^{\prime \prime}}{}{ }^{\prime \prime}$ or $\frac{1^{\prime \prime}}{}{ }^{\prime \prime}$ condenser spindles.

## ROYAL FULL VISION DIAL

Type 7-9 - Price 5/9
A small dial designed expressly for Midget sets and for small cabinets. Has the same type driving mechanism as the Excel. Is graduated in degrees from $0 / 100$ or $100 / 0$ if specified. Fits $\frac{3^{\prime \prime}}{8}$ or $\frac{1^{\prime \prime}}{4}$ diameter condenser spindle.

## R A D I O K E S

## LUXOR DRUM DIAL

Type 7-10 - Price 15/-

A drum dial designed to mount on the end plate of a gang condenser. The large drum and cord drive make it particularly suitable for all wave sets and where an exceptionally smooth and frictionless movement and fairly high ratio must combine to ensure accuracy of adjustment.
These drums have a distinction which adds dignity to any cabinet. Their use immediately stamps a radio as one of character and quality. Calibrated in degrees $0 / 100$ and kilocycles $1500 / 550$. Supplied with light brown celluloid
 as standard or with white if specified.


SCROLL DRUM DIAL
Type 7-1I - Price 12/6
Similar to the Luxor but has a different escutcheon.

## VISOR DRUM DIAL

Type 7-13, Price 27/6
A drum dial mechanically similar to the above types $7-10$ and $7-11$ but in which a tuning meter is incorporated.
The escutcheon plate is artistically and symetrically designed, beautifully finished and enriched by touches of coloured enamel.

## CENTENARY DIAL, Type 7-15

Price $7 / 6$
This is a straight forward window dial in which the celluloid scale moves past a small


VISOR DIAL
With Visual
Tuning Meter
Type 7-13 window escutcheon.

The driving mechanism is the latest spring loaded wedge type. Calibrations are in degrees $0 / 100$, and kilocycles 1500/550.

## DIALS

NOTE.-All Radiokes dials can be supplied with 100/0 readings if required at no extra cost. All dials are supplied and fitted with lampholders, but lamps and knobs are not supplied.
The aerovision dials are supplied with two lampholders, but can be supplied with only one if specified.

## RADIOKES NEW AEROVISION DIAL



Celluloid indicating scales face celluloids with numbers only in white. All dials are supplied 100/0 unless otherwise specified. Special designs made to specifications with or without manufacturer's name by arrangement. NOTE.-When ordering dials, specify size of condenser shaft and direction of reading.


## RADIOKES AEROVISION DIAL Type 7-140 Price $14 / 6$

Uses exactl? the same excellent "Knee Action" movement as the $7-14 \mathrm{~N}$, the shape of the escutcheon being the only difference. Available with black, brown or mottled brown bakelite escutcheon plate.

## RADIOKES AEROVISION DIAL Type 7-14S - Price 12/6

Similar to above but with a square bakelite escutcheon. Available in black, brown or mottled brown bakelite.

## DUAL RATIO AEROVISION DIAL Type 7-14D - Price 18/6

Identical in principle and design to type $7-14 \mathrm{~N}$, but with the addition of dual ratio drive which permits tuning on the ordinary broadcast band at the standard 8 to 1 ratio and provides micro tuning at 56 to 1 for short wave work.
Special dial scale is available for matching the Radiokes dual wave coil assembly calibrated in metres for both bands, and with the 19, 25, 31 and 49 metre bands clearly marked by heavy black lines.
The broadcast band is in black and the short wave scale in red.
Special triple wave and all wave scales can be supplied to specifications by arrangement.

## Escuicheons

Metal escutcheons as illustrated in Chromium, nickel plate, Old bronze and Florentine bronze with either celluloid or glass face. Bakelite escutcheons available in black, brown, mottled brown and dark walnut.
Type 7-14N - - Price $12 / 6$
The entire mechanism is mounted on a steel chassis to prevent the possibility of movement between centres and to ensure absolute rigidity. Ratio 8 to 1 .

Knee action completely eliminates slipping and back-lash. Milled driving disc to give uniform and smooth movement. Bronze bushes reduce wear and wobble to the minimum. Twin illumination gives even diffusion of light and prevents needle shadow.


## ADDED AERIAL EFFICIENCY Transposed Feeders Improve Reception



THE aerial constructed on the Transposed Feeder principle makes the difference between the signals that are drowned by static, and the signals that are clear, readable and enjoyable. Whether you are an amateur transmitter, a short-wave fan or an enthusiastic broadcast listener, Radiokes Transposed Feeder Blocks with your aerial will make a world of difference in reception. In transmitting aerials, pick-up and radiation is diminished to an amazing degree. Losses are small. The aerial looks neat and attractive . . . . the service it gives cannot be equalled by any other type of aerial.
Radiokes Transposed Feeder Blocks are made of High Dielectric low-loss bakelite. They are strong and well-moulded, and weigh very little. Weather has no effect on them. Leakages of signals and current are impossible. Radiokes Transposed Feeders for Stronger Signals, Lower Noise-level, Increased Sensitivity. Available from all dealers.

## List Price: Set of Eight, 4/6

Special Tapped Coupling Unit for coupling Transposed Aerial to any Radio Set. TYPE 5-3I. Price

# EASY AS FALLING OFF A LOG ! THE RADIOKES KIT-SETS 

 which have been designed SPECIALLY for AMATEURSWHETHER you want sets of three valves or nine valves De Luxe All-wave Receivers, all you have to do is to follow simplified instructions in connecting a number of leads. Every possible device has been used to keep these leads down to the very minimum . . . the construction cannot be made any simpler. No technical knowledge is necessary. Any intelligent man can build himself a set second to none in performance.

Every Kitset includes a large instruction sheet, showing under chassis point-to-point wiring diagram, circuit diagram, large photographs and complete instructions for assembling, aligning and testing the Receiver. In addition there are hints on operating and for getting the last ounce of efficiency out of your Receiver.

Radiokes Kitsets embody the latest developments in receiver design. Simplicity of construction has always been foremost in the mind of Radiokes engineers, but nothing has been sacrificed to get really outstanding performance. Fidelity, sensitivity and selectivity are unequalled. Never is there any doubt when buying Kit-sets. The name RADIOKES is enough to guarantee satisfaction, economy and real service.

You Can Build Any One of these Sets - YOURSELF!
Champion Standard Superhet., 12 34.

Battery Champion Standard Superhet., 12-34B.
Dual - Wave 6 -valve All-electric Superhet., 12-35.
Battery Dual-Wave 6 -valve Superhet., 12-35B.
International 6 -valve All-Wave, 12- 42.
Battery International, 12-42B.
Simplified "Money-saver". 5-valve Superhet., 12-44.
Battery "Money - saver" 5 -valve Superhet., 12-44B.
Shortwave Converter 3 -valve, 12-46. International De-luxe All-wave Re ceiver, 12-89.
Pentagrid 4 -valve, 12-47.
Battery, 3 -valve T.R.F., 12-48., and others.

SEND FOR FREE FULLY
DESCRIPTIVE PAMPHLETS.



[^0]:    FULLY DESCRIPTIVE INSTRUCTION SHEETS ON APPLICATION

[^1]:    Comprising:-
    | $-5-37$ aerial coil
    I 5-37 oscillator coil
    2 - 5-11 I.F. Transformers, 465 k.c.
    1 - 6-38 padder
    Outside diameter of cans, $2 \frac{1^{\prime \prime}}{}$.
    465 k.c. to suit 2A7 or 6A7 valive. Stromberg-Carlson type " $D$ " or " $E$ " gang condenser.

