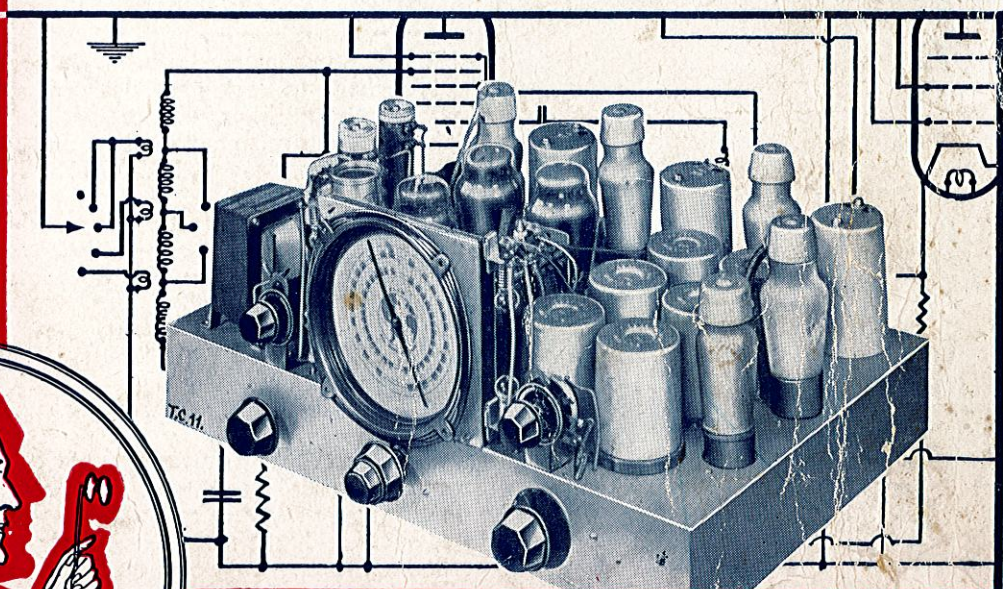


**BULGIN
RADIO**

introducing

PROGRESS

NO. 3 1937/38



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CIRCUITS**

PRICE **1/0** COMPLETE

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Published by A. F. Bulgin & Co., Ltd.,
Abbey Road, Barking, Essex.
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SEASON 1937-1938

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THIS YEAR'S MODERN CIRCUITS

TESTED CIRCUIT NO. 21 ... Page 2 THE WORLD RANGE TWELVE.

THIS is an extremely powerful 12 valve A.C. mains driven receiver. Four wave bands are covered, from 12 to 2000 metres. The L.F. portion of the receiver forms a 14 watt high-fidelity amplifier suitable for the finest reproduction of gramophone records; the H.F. section makes world-wide reception possible. For 200-250 V., 40-60 c/s.

TESTED CIRCUIT NO. 22 ... Page 8 THE BULGIN HIGH FIDELITY AMPLIFIER.

A straight-line response curve from nearly 30 to 10,000 cycles per second and rising beyond this figure, nowhere more than half a decibel off the mean level, enables this superb A.C. amplifier to meet the needs of the most critical judge. The output is 12-14 watts undistorted, and sufficient extra H.T. and L.T. power is available to supply an accessory receiving unit if desired. For 200-250 V., 40-60 c/s.

TESTED CIRCUIT NO. 23 ... Page 12 THE UNIVERSAL MAINS SEVEN (ALL-WAVE).

NEED is still felt in many parts of the country for a really good AC-DC receiver. Exceptional quality and volume and enormous range are the characteristics of this instrument. Push-pull output stage. All wave-lengths covered in three bands, from 18 to 2000 metres. For 200-250 V.

TESTED CIRCUIT NO. 24 ... Page 17 THE FOUR BAND A.C. FOUR.

THIS is a really reliable example of what can be done with only three valves and a valve rectifier. From 12 to 2000 metres is covered in four bands and the undistorted output is $3\frac{1}{2}$ watts. Pick-up connections are provided and may be switched into use by the wave-range switch. For 200-250 V., 40-60 c/s.

TESTED CIRCUIT NO. 25 ... Page 21 THE "VIBRADIO" SUPERHET.

HERE is something really new—a battery receiver that needs no H.T. Batteries! Designed primarily for use with the Bulgin H.T. Vibrator Unit, its power supply is derived entirely from low tension accumulators, and the output is equal to that of many ordinary mains-driven receivers. For 2 and 6 V. input.

TESTED CIRCUIT NO. 26 ... Page 25 THE BULGIN H.T. VIBRATOR UNIT.

THIS Unit enables low-tension accumulator supplies at 6 volts to be converted into high tension anode supplies at 150 volts. Completely replaces H.T. batteries of the largest capacity; provides 50 mA. of current. This Unit is ideal for use with a Car Radio Receiver.

TESTED CIRCUIT NO. 27 ... Page 28 THE DOMINIONS THREE.

THIS is a three valve battery receiver specially designed for use abroad. It covers the Short Wave in two bands, from 12 to 85 metres, and the Medium Wave band only. To those living abroad who depend largely on S.W. transmissions for touch with the Mother Country, this set will be a boon. For 2 V. L.T. and 120-150 V. H.T. supplies.

TESTED CIRCUIT NO. 28 ... Page 31 THE HOME QUALITY A.C. FIVE.

SPECIALLY designed for popular use in modern comparatively small roomed houses, this receiver provides out-of-the-ordinary quality at comfortable strength. The construction is particularly easy and straightforward, and the very latest of Bulgin High-Efficiency coils are employed. For 200-250 V., 40-60 c/s.

TESTED CIRCUIT NO. 29 ... Page 35 FIVE RANGE COILS AND CIRCUITS.

THOSE who desire to design and construct H.F. receiving units above the average level of efficiency will find information for the use of the new type Coils that cover the two usual broadcast and the Short Wave Bands in five steps. In conjunction with the Amplifier of T.C.22, such a Unit would form a receiver that would be comparable in general performance with the highest priced commercial sets, and in details, probably better.

TESTED CIRCUIT NO. 30 ... Page 37 THE BULGIN POCKET AMPLIFIER.

THIS is a small one-valve amplifier and microphone, contained, complete with all batteries, in a neat cloth-covered case. Bulgin "Midget" and extremely efficient components are used, and the instrument has a gain of 23 decibels, rendering it sensitive enough for a number of useful and interesting purposes. For ear-phone reproduction.

CONSTRUCTORS' NOTES ... Page 39

HERE are the vitally important bits of information that render the construction of radio apparatus as successful for the amateur as for the professional. Advice, tips, warnings, practical outlines of wiring and ganging procedures, are amongst the helpful details to be found in

these NOTES. Though the particulars given relate specially to the TESTED CIRCUIT apparatus described in this book, the information and advice given will nevertheless prove of great assistance in the construction of other kinds of radio instruments.