

PRE-WAR SETS

(All very rare)

As previously explained, we are in a period of some confusion here. I am going to describe as much as I can. The details may be scant or even not quite right; but, as Mark Twain said of life, "It's the best we've got".

All Eddystone sets up to 1936 (and some after) were "Straight" or TRF (Tuned Radio Frequency). The conventional way of describing these is a number representing the valves in the RF stage, followed by a "V" representing the valve detector, followed by another number indicating the valves in the LF or audio stages.

For instance "1-V-2" would refer to a set with one RF amplifier, a valve detector, and two audio amplifier valves. All valve detectors in such sets were regenerative (i.e. had a reaction control) and were thus able to receive CW (continuous wave or Morse transmissions) as well as A.M. (amplitude modulated transmissions).

There is therefore no distinction between a "broadcast" or a "communications" receiver. All 'straight' sets are, to a degree, both.

Many Eddystone kit-sets made use of an untuned aerial circuit. This made for simplicity of construction, operation and economy. By isolating the regenerative detector from the aerial it became much easier to control. Such sets will be noted as "Aperiodic aerial".

Plug-in coils. These were used in the vast majority of pre-war Eddystone sets (and many post-war 'homebrews'). When they first appeared in the '20s they were about 3" dia. horizontal axis. This changed to 2½" vertical axis in the late '20s and 1½" in the early '30s.

A superhet (supersonic heterodyne) receiver normally uses a diode detector and it is necessary to have an extra

beat frequency oscillator (BFO) at the intermediate frequency to copy CW.

Hence the presence or otherwise of a BFO in a set determines whether it is intended for broadcast or communication use (accepting the fact that virtually all communication receivers are also perfectly good broadcast receivers).

DETAILS OF SETS

REGIONAL ONE: 0-V-0; battery; MW, leatherette case. c.1924. Nothing else known (and even this is questionable!).



Eddystone Two

EDDYSTONE TWO; 1926; 0-V-1, batts. plug-in coils for MW/LW, complete with valves, speaker and batteries: Price £11 9s

♠

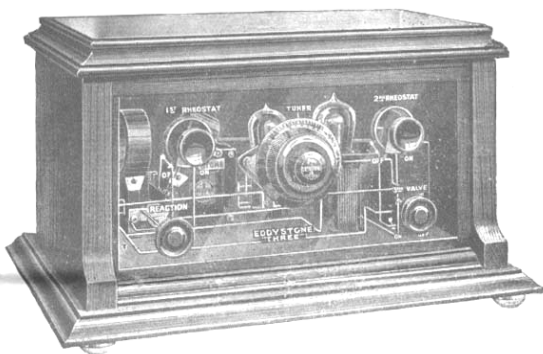
EDDYSTONE TWIN: 1926-28. 0-V-1. Plate glass front panel; Jacobian oak case; price complete with batteries, speaker and coils; £14 12s 6d. Early models had filament rheostats and plug-in coils. Later models had no rheostats and switched coils for MW/LW. (See picture on next page.)

ALSO AVAILABLE in short cabinet without battery compartment; price £13 12s 6d. (Not illustrated)

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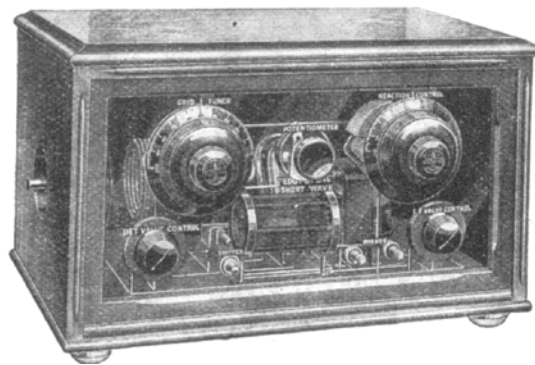
Eddystone Twin (early)



Eddystone Three

EDDYSTONE THREE; 1926; 0-V-2. Plate glass front panel, Jacobean solid oak case, filament rheostats; supplied with coils for MW/LW but extra coils were available to extend the coverage from 60-6000 metres. Eddystone Microtune dial 128:1. Price complete with speaker and batteries £25 10s. ♠

ATLANTIC TWO; 1927, 0-V-1, plate glass front panel, dark oak cabinet, plug-in coils, condenser reaction, 15-550 metres. Batts. Microtune dials (128:1) Stratton's first true Short Wave Set. Price £10 plus Marconi Royalty of £1. 5s extra (it is uncertain whether this included valves, loud speaker or batteries.) ♠



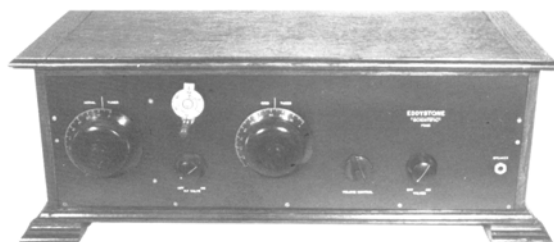
Atlantic Two



Export Model Atlantic Two

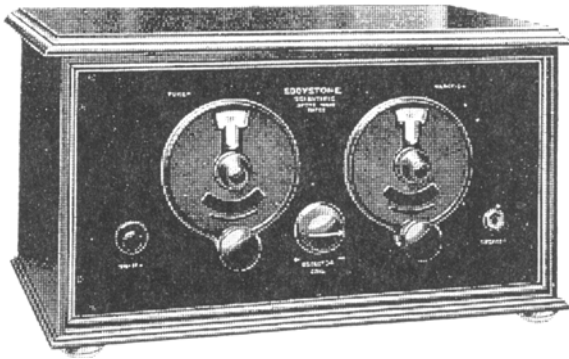
ATLANTIC TWO (Export), c.1928, 0-V-1 This model was found in New Zealand in 2000. Licence plate reads "for the reception of broadcasts outside Great Britain". Front panel aluminium – wood finish. 'Igranic Indigraph' dials. 15-550 metres with plug-in coils.

SCIENTIFIC 5: c.1927 – nothing known.



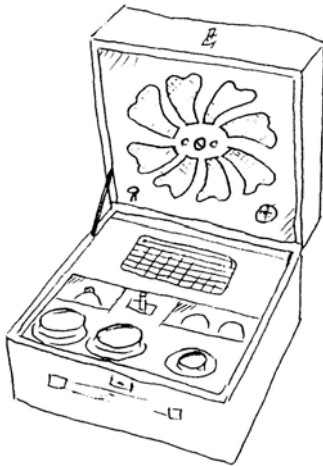
Scientific 4

SCIENTIFIC 4: 1927; 1-V-2, neutralised triode RF stage. Microtune dials. Ebonite panel, mahogany case. Plug-in coils 8-100 metres plus MW/LW. Price £21 (it is not clear if this included batteries or speaker). ♠



Scientific Screened Grid H.F. Short Wave Three c.1928

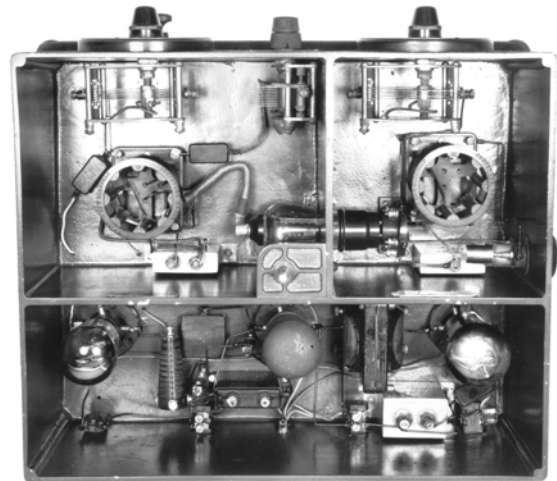
SCIENTIFIC SCREENED GRID H.F. SHORT WAVE THREE. Kit-Set C.1928 1-V-1, aperiodic aerial circuit. Plug-in coils, 14-100 metres + MW. Aluminium panel, 'Igranic Indigraph' dials. Batts. ♠



Scientific Portable Three

SCIENTIFIC PORTABLE THREE: 1930 1-V-1 (screened-grid HF stage, triode detector with reaction, pentode output) Size 15"x15"x10" Wt 34 pounds. Built-in Celestion moving iron speaker. Price £26 15s. Band-switched, MW/LW. Probably the last Eddystone set without short wave coverage. ♠

With the arrival of the 1930s radio broadcasting came of age. The BBC's domestic high-power chain of Regional and National stations was well under way and the Empire short-wave transmitters at Daventry were planned.



**All-Wave Four, 1930
(top removed – see further)**

ALL-WAVE FOUR: 1930 1-V-2 Fully sealed tropicalised diecast sectionalised aluminium case. Devised by Harold Cox; (Technical Director), Bill Chaplin (Company Manager) and Stratton Laughton. In the above picture the top right section is the aerial tuning, (coupling condenser control just visible on side). Screengrid RF amp is on side through hole in screen (top cap anode). Top left is detector tuning and reaction. (Note large 2½" dia vertical plug-in coils).



All Wave Four (1930 model)

In the bottom row of valves the left one is the detector, then the first AF stage, then the output pentode. 'Indigraph' dials. Stratton's first 'professional' model. 12.5 – 2000 metres.

Used by the British Arctic Air Route Expedition of 1930 where they worked perfectly. Price £27 (Without speaker or batteries) .

**HEAR the WORLD'S
EVENTS**
Direct
with a guaranteed
**SHORT
WAVE
RECEIVER**

A builder of over
20 Sets says
"Yours—is Master
of them all
. . . and so easy
to tune."

**THE
"KILODYNE
FOUR"**

The "Kilodyne Four" is a powerful ultra Short-wave Receiver capable of first-class loud-speaker results. It has a wave range of 14-85 metres, but extra coils up to 2,000 metres are available. The set is built on a metal chassis, and tuning is remarkably easy. Reaction is smooth and there are no hand-capacity effects. For the convenience of Amateurs, components are obtainable individually.

Total Cost of Parts £6 17 6
Blueprint, List of parts and full
details, 1/8 post free.

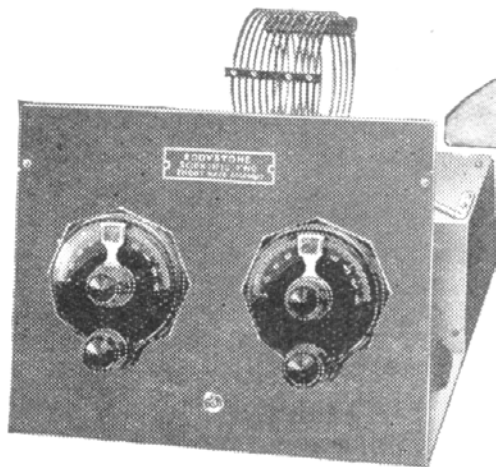
STRATTON & CO., LTD.
Bromsgrove St., Birmingham.

London Service Dept.—
C. WEBB, LTD.
164 Charing Cross Road,
W.C.2.
Tel.—Temple Bar 2944.



Kilodyne Four – 1931 Kit Set

KILODYNE FOUR: a kit series which started with the battery model of 1931. 1-V-2 (aperiodic aerial circuit). No cabinet. 14-85 metres Note the large-diameter 2½" ribbed plug-in coil – this is the same as used in the All-Wave Four. Kit price £6 17s 6d (valves, speaker, M/LW coils and batts extra). An A.C. mains version was also available. These sets are fully described in Short Wave Manual No 1

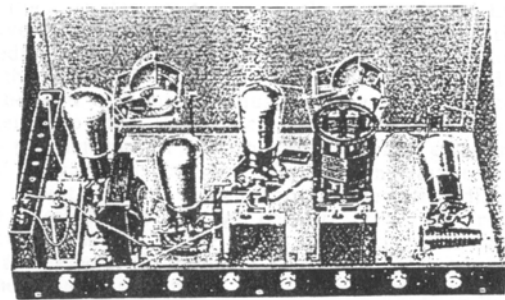


Scientific 2 – 1931

THE SCIENTIFIC TWO: a battery kit-set introduced in 1931. 0-V-1, described as "Simple . . . can be easily assembled with a screw-driver and a pair of pliers. No soldering."

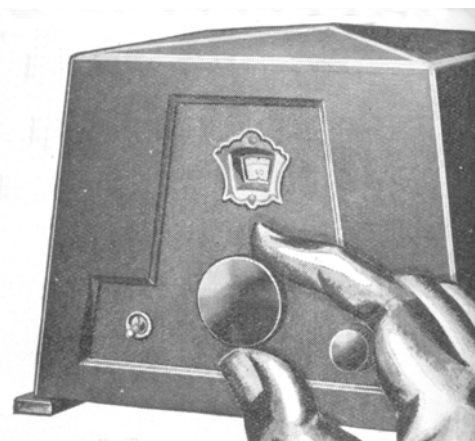
Although the new vertical, ribbed, six-pin plug-in coils had been introduced the year before (in the All Wave Four – see above) this set continued to use the larger air-spaced coils dating from 1926. Almost certainly a ploy to shift old stock! The LH dial is tuning, the RH is reaction. The aerial coupling condenser is mounted on the LH rear of the chassis. Price of parts for "complete set of parts" (unspecified frequ. coverage) £4 5s. ♠

HOMELAND FOUR: 1931 Kit Set. 1-V-2 Aperiodic aerial circuit. Aluminium chassis & panel; no cabinet.



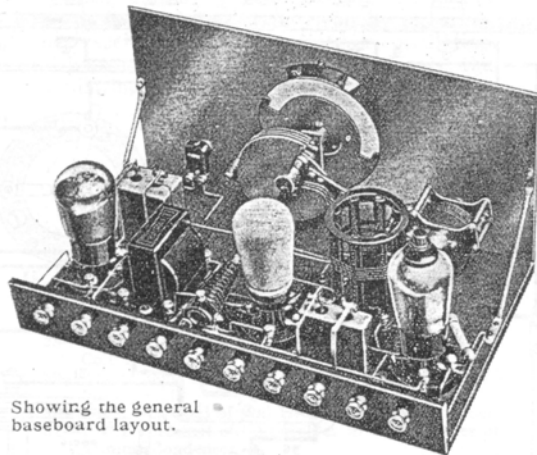
Frequency coverage 12.5 – 503 metres using 2½" plug-in coils.

(Copy of construction manual available from EUG archives.)



Short Wave Converter – 1931

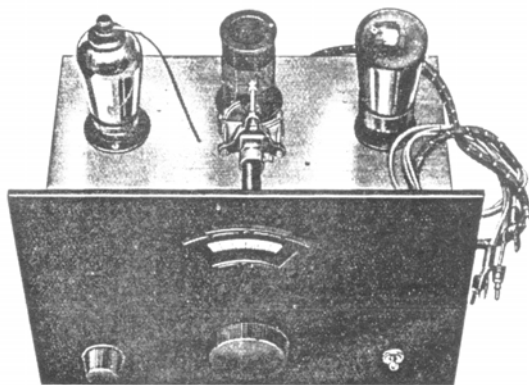
EDDYSTONE SHORT WAVE CONVERTER: 1931. Single valve self-oscillating triode mixer with IF output in medium waveband; to be fed into existing MW receiver with RF stage which then became an IF stage. 15-65 metres, switched coil. Oak case, size 10" x 8" x 9" (Likely to be mis-identified as a one-valve receiver!). Price complete £4 17s 6d. ♠



Showing the general baseboard layout.

Atlantic Three – 1932

ATLANTIC THREE: 1932 Kit Set. 1-V-1 Aperiodic aerial circuit.. Breadboard construction. No cabinet. 12.5 -- 85 metres. (MW coils extra) Circuit virtually the same as Scientific S.W. 3 (*ibid.*) See ESWM No1. Cost of parts £4 13s 9d. plus valves and batteries. ♠

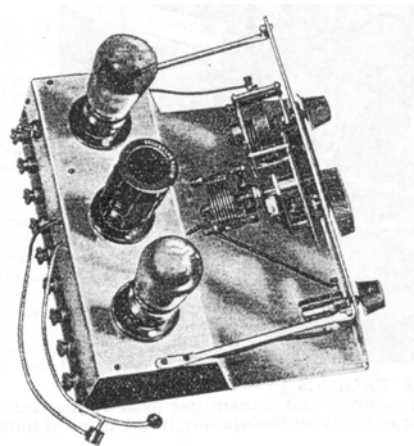


Amateur Bands Two - 1932

AMATEUR BANDS TWO: 1932 Kit Set. 0-V-1. Batteries; chassis-built, no

cabinet. A very complex version of the Scientific 2 (*ibid.*) Frequency coverage: 20, 40 and 80 metre amateur bands (may be modified for general coverage).

Three out of the first five competitors in the 1932 B.E.R.U. Cup (SWL) Contest, including the winner, used this set. Employs a screen-grid detector with screen voltage controlled reaction and new small 1½" plug-in coils. Price of kit £6 13s 8d plus valves and batteries. ♠



Empire Two - 1932

EMPIRE TWO KIT: 1932 a general coverage economy version of the Amateur Bands Two (above)! Chassis-built with sloping front. No cabinet. Frequency coverage 13-78 metres. £4 plus valves and batteries. ♠

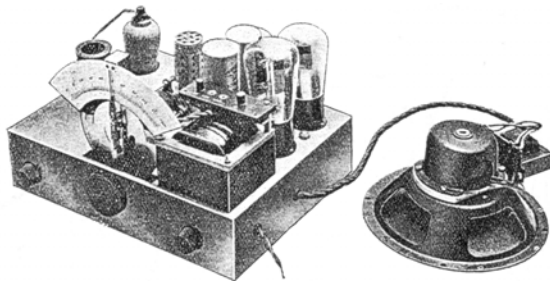


1934 Kilodyne Four

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EDDYSTONE 1934 KILODYNE FOUR: An up-to-date version of the 1932 model **Battery and Mains Version**. 1-V-2 Aperiodic aerial circuit. Standard chassis and panel construction as with most Eddystone kit-sets of the period. Price of kit: £6 5s 6d plus valves, batteries and speaker. Plus, for the AC mains model, power supply unit.

1935 KILODYNE KITS (Battery & Mains): Only a year later these sets were updated yet again. They are fully described in ESWM No 2 (*ibid.*). The battery set is only slightly changed, having a new RF valve and manual RF gain. The AC mains version is considerably different, having the psu and speaker built in, ready for installation in a custom cabinet.



1935 A.C. Kilodyne Four

However, in spite of this new look the wavechange was still by plug-in coils. The cabinet would need a side-door to access this. Price of kit £12 17s 9d, plus valves and cabinet. (This at a time when a new Ford Eight car cost £99 and 400 premium cigarettes cost £1.) ♠

ALL WORLD FOUR: 1934. 1-V-2. A direct descendant of the 1930 'All Wave Four' using the same tropicalised diecast cabinet but now with ganged tuning, hinged lid and smaller plug-in coils (1½").

Frequency coverage according to coils acquired (140kc/s-30mc/s). Battery operation, external speaker. Main

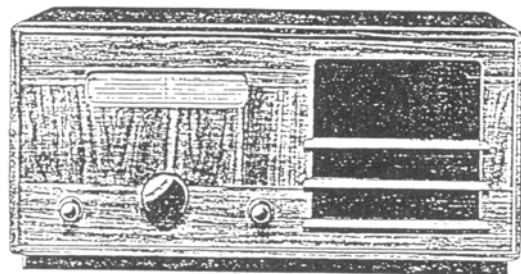
tuning is on the right side, with aerial peaking on front left and reaction front right. The set probably represents the peak of Eddystone T.R.F. sets (technically if not artistically!)



All World Four c.1934

It is almost certain that 'hybrids' of these two sets were produced in the intervening years.

SPHINX: 1934-battery model. Switched bands 13-580 metres. Built in speaker (a first for Stratton) 1-V-2 Art Deco teak cabinet. Size 23" x 10" x 11". Wt 25 lbs. Price £23.

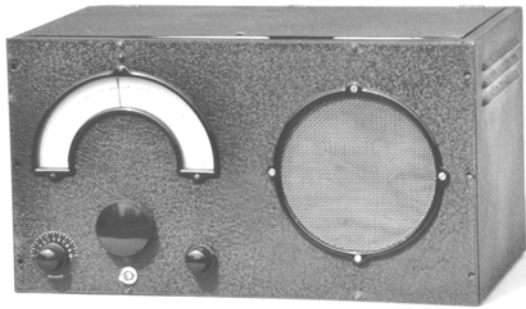


Sphinx; battery and mains models

SPHINX: 1934-AC mains model. Details as above but Wt 29 lbs and price £27 10s.

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HOMELANDER: 1935 battery set. Self-contained metal cabinet with speaker and batteries enclosed. 1-V-2 with aperiodic aerial circuit. Plug-in 1½" coil, four supplied for 12-87 and 245-555 metres. Price £14 including batteries.



Homelander 1935

OVERSEAS FOUR: 1935. 1-V-2, battery, oak cabinet and matching speaker, 5-band rotary-switched coilpack. LW/MW/SW.



Overseas Four 1935

QUADRADYNE: 1935, 0-V-3 battery set. Push-pull output. Tropicalised welded steel case.

ALL WORLD TWO: 1936. 0-V-1 battery, headphones. 15-52 metres with the two coils supplied..

Probably the 'Cinderella' of Stratton in the late '30s, offered as a kit (price £3 7s 6d plus valves and case) or ready-built and tested for £5 5s complete.

It continued in the shops until after the outbreak of World War 2, by which time its price (ready-built) had fallen to £3 17s 6d. It was offered on Hire Purchase terms complete with 'phones and batteries for £1 down and six

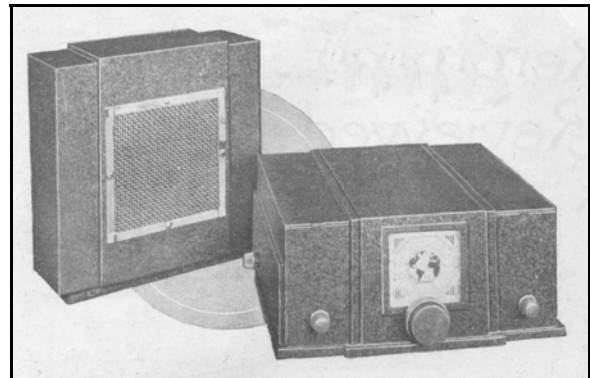
monthly payments of 16s 4d. (The starting pay for an office boy at this time was around 5s weekly).



All World Two 1936-39

A mains hybrid was described (heater transformer, HT battery) but never mentioned again.

Used by Voluntary Interceptors (V.I.s) during the early war period, before H.R.O.s were bought from U.S.A. (V.I.s were civilian hams and S.W.L.s who monitored enemy Morse signals from their home QTH for Bletchley Park cipher school to decode.) ♠

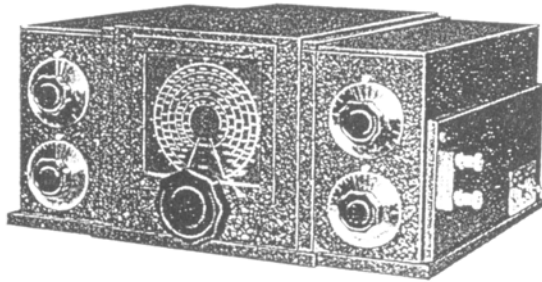


All World Eight 1936/39

ALL WORLD EIGHT: Introduced in 1936 and updated in 1938, this was a fully tropicalised eight-valve broadcast battery superhet (the first such).

It was presented in an art deco diecast aluminium cabinet with matching speaker. Band changing was by diecast coil blocks (as used later on the wartime S.358) under a hinged lid-panel. Lineup; RF-MIX-LO-IF-IF-DET-

push-pull output. 1.5 watts output. Supplied with 3 tuning units covering 13-69 and 240-573 metres, price £25, speaker £3 3s. 4 extra coils to cover extended short plus long waves, £1 each. ♠



Eddystone L.P.C. 1936-39

EDDYSTONE L.P.C. was a communication version of the All World Eight (above). (1936-39; battery).

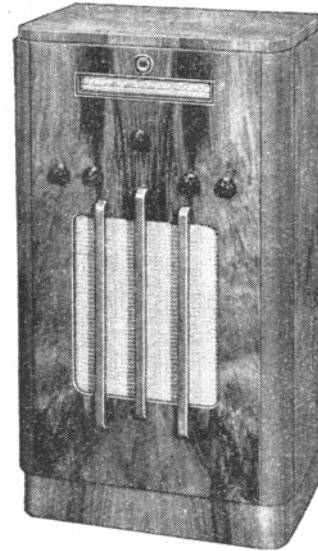
A beat frequency oscillator was fitted for Morse reception and the output stage was changed to a single-ended stage (thus freeing a valve-holder for the BFO). Chassis & Cabinet of diecast aluminium silicon alloy. In 1939 the set was priced at £45 with 5 coil blocks covering 530kc/s-22mc/s.

RECEPTION SET R101. This was a British Army version of the L.P.C. It was slightly modified to provide a tuning lock and No 9 jack sockets (non-standard) for army headsets.

70 models were ordered and delivered early in 1939. Although found to be satisfactory in a fixed station they were too unstable in mobile use and not further adopted. ♠

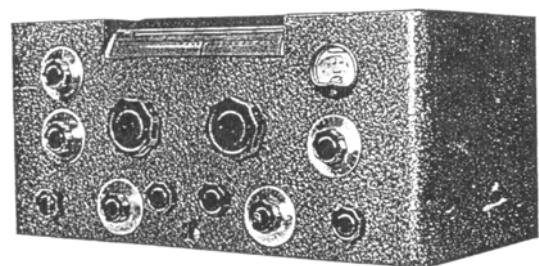
EDDYSTONE ERA7: 1937. 7 valve plus magic eye AC mains broadcast superhet. 1 RF; 1 IF (465kc/s) 12" auditorium speaker; diecast chassis, coil box and IFTs. Sold both as a chassis for the customers' own cabinet or as a console in oak or walnut.

Bandswitched in two versions; Model A 13-85, 200-550, 900-2100 metres. Model E (Export) 13-550 metres. Price as shown: 25 Guineas. (£26 5s.) or less cabinet: 21 Guineas. (£22 1s.)



Eddystone ERA7 1937

EDDYSTONE E.C.R.: 1939. Produced as a serious rival to the American communication radios readily available. 10-valve superhet, 4 bands 1.6-30mc/s AC mains. Substantial diecast aluminium chassis. Sheet steel case. RF-MIX-LO-IF-IF-DET-BFO-AF-O/P plus RECT. Crystal filter; S-meter, electrical bandspread. (no speaker) Price £45.



Eddystone E.C.R. 1939

So far as I am aware, the E.C.R. was the last pre-war introduction (March 1939). The rest of that year was spent working overtime on defence orders.