

# THE ULTIMATE QUICK REFERENCE GUIDE (2<sup>ND</sup> EDITION)

# QRG



WEST HEATH LIDO (THE BATH TUB), HOME OF EDDYSTONE RADIO 1940-1996

## A RAPID REFERENCE GUIDE TO RECEIVERS AND BRIEF HISTORY OF EDDYSTONE RADIO IN BIRMINGHAM 1925-2005



1925-1965



1965-200?

First Published August 2002

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Research & Format by  
Graeme Wormald G3GGL**

Details of Eddystone Equipment  
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Eddystone Radio Ltd

## PREFACE to 2002 Edition

The first Edition of 'Quick Reference Guide' was produced in 1998 and covered receivers manufactured by the Eddystone Company from 1946 to c.1969 (the 'Golden Years'). It was intended to help members of the Eddystone User Group identify their areas of interest and further their knowledge of the marque.

In this it succeeded, being well received and creating a demand for a revised and more detailed Edition. This was done in 2000, covering most sets from 1946-1982. This is now out of print and the opportunity is being taken to fulfil members' wishes and produce an edition which attempts to cover Eddystone receivers from the very earliest days of the 'twenties until the present time and give a picture of each.

At the same time a short history of the Company is presented, especially for new members. Much of the information contained herein has been covered in greater detail over the past twelve years by the 'Lighthouse' magazine and its predecessor, the 'EUG Newsletter'. Something approaching 3,000 A4 pages have been produced over this period. These are available from EUG in CD-ROM format for students of techno-history. (Contact me, Graeme Wormald, G3GGL)

My grateful thanks go to the following who have contributed to the creation of this work of reference:-

Bill Cooke, GWØION (former chief engineer and managing director, Eddystone Radio); Chris Pettitt, GØEYO (former managing director, Eddystone Radio); Ted Moore, G7AIR, (founder of EUG); Simon Robinson, M5POO; Mike Arnfield, M5ACS; Tor Marthinsen, Dave Simmons Peter Carney, Dick Carroll (former managing director, Eddystone Radio) and Duncan Whittle (former managing director, Eddystone Radio).

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Note to the Second Printing of the Third Edition of the E.U.G.  
“Quick Reference Guide” (*Known as the ‘Ultimate’*)

The print run (500) of the very successful 2002 Edition of the ‘Ultimate’ Quick Reference Guide was exhausted by January 2005.

It is a principle of membership that every new member of EUG is supplied with a copy. It was therefore necessary to order a reprint. The opportunity has been taken to correct minor errors in the text and this reprint is being issued gratis to all members. Please note that Page 59 now carries an Appendix of information which was not available to me in 2002. Check it out.

Extra copies may be obtained at a price commensurate with the new postal charges. Application should be made to the Editor and an invoice will be included with despatch.

Graeme Wormald, G3GGL  
Bewdley, January 2005.

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Eddystone names & numbers are confusing**

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680	27	902	54
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**Remember that Eddystone  
Numbers are not very logical.**

**They appear to follow a pattern and  
then lose the plot.**

**In this table we have ignored the  
“S” prefix which is sometimes used  
and sometimes not in company  
literature, even for the same set!**



# A BRIEF HISTORY OF EDDYSTONE RADIO

The story of Eddystone Radio is forever linked with the City of Birmingham, in the Midlands of England, 100 miles (160km) north-west of London. Birmingham is one of Britain's 'newer' cities, having grown enormously after the introduction of the canal system in the late 18<sup>th</sup> century. Metal goods of every description were produced and it was rightly known as the city of a thousand trades.

## IN THE BEGINNING

In the year 1860, Stephen Jarrett of Gloucestershire joined in partnership with Charles Rainsford of Birmingham. The former was a pin manufacturer and the latter a commercial traveller. Thus was started the firm of Jarrett & Rainsford.

Premises were taken at No 7 Broad Street, Islington, Birmingham. Probably somewhere near 'Five Ways' where Broad Street now joins Hagley Road on the A456.



**J&R premises in Broad St,  
Birmingham, from 1870 to 1909.**

Stephen Jarrett was also a manufacturer of jewellery of all descriptions but the main business was

the manufacture of pins. Business settled down well and in 1870 the firm moved to larger premises at 48 Broad Street. Probably near the present-day Symphony Hall.

Here they were to remain for the next 39 years until early in the 20<sup>th</sup> century. In the meantime the company acquired a new office boy in 1898.

## A NEW KID ON THE BLOCK

He was 15-years old George A. Laughton who had two years' previous experience in a coal merchant's office.

By all accounts, G.A.L. (as he was always thereafter described) was a bright lad and soon showed the entrepreneurial instinct which was to create an empire. By 1904 he was an assistant manager with the firm.

In 1909 the move to Kent Street took place, near the Birmingham markets area and just round the corner from the Bromsgrove Street location of Balmoral Works; later to become famous as the home of Eddystone Radio.

## THE STRANGE ORIGIN OF STRATTON & CO

In the year of the Coronation of King George V, 1911, G.A.L. was running a small section of Jarrett & Rainsfords,

(J&R) selling coronation badges and flags.

Components were bought in from a small supplier who suffered from the ravages of alcohol and supplies were erratic. To cut a long story short G.A.L. bought the business for £50 and acquired four hand presses and two girl workers. He named this enterprise Stratton, reputedly after the hero in a novel his wife was reading.

In practise this is slightly questionable, as his eldest son, also named 'Stratton', was probably about 7 years old by then!

The following year, 1912, G.A.L. was elected a director of J&R. He would then have been 29 years old. The two companies followed their parallel courses, with Stratton & Co concentrating on men's jewellery.

During the First World War the firm manufactured parts for the famous SE5A British fighter plane and acquired much experience in the use of aluminium and duralumin alloy. This was to be of great value in the radio business.

### **TWO FIRMS AMALGAMATE**

In 1919 J&R became Jarrett, Rainsford & Laughton Ltd., (J.R.&L.) and the following year acquired Stratton & Co Ltd.

Although artificial jewellery was back in production, pins were still a staple part of the company's output.

### **NEW TECHNOLOGY ARRIVES**

In November 1922 the British Broadcasting Company (BBC, and forerunner of the present Corporation) was formed and started broadcasting with low power medium wave AM transmitters in major British cities.

The best known of these stations was 2LO, the London station in the Strand. The Birmingham station (5IT) was opened the next day.

Young Stratton Laughton became a 'wireless fan'. Equipment was expensive. Home construction was widespread.

### **HOLLYWOOD STRIKES**

Although talking pictures were not to arrive until the late 'twenties, the cinema had become a major source of entertainment during the First World War.

The 'Roaring Twenties' were created by this media, especially by the film "Flaming Youth" starring 'Jazz Baby' Coleen Moore.

She introduced the 'pageboy' haircut, which needed no hairpins at all. Stratton's market dwindled overnight from six tons to one.



***Coleen Moore's 'pageboy cut' 1923***

This happened towards the end of 1923 and Stratton Laughton suggested to his dad, George (Abe) Laughton that the shortfall in sales be made good by entering the radio components field.

This is where we enter a slightly grey area in the company's history. Following total loss of records due to enemy action during 1940 there is very little hard evidence to go by.

Stratton Laughton claimed that the company started manufacturing

components for home constructors in 1923, shortly followed by complete receivers in 1924. He also claimed that Stratton's was one of the first firms associated with the original British Broadcasting Company.

My own personal view is that these claims are slightly premature.

Stratton's first radio-related patent was filed in February 1925, as was the Trademark "Eddystone" and the Lighthouse device.

The company's single £1 BBC share certificate (which escaped the blitz) is dated September 1925. By the end of 1925 there were 1716 members of the BBC. The first written reference to an Eddystone receiver (that I can find) is in the Wireless World listings for spring 1926. ("Eddystone Twin").

It is my own belief that Stratton Laughton and his friends were involved in 'Wireless Mania', (as were most bright young men at the time) during 1923/4 and that towards the end of 1924 decided to produce simple components. I don't really think the first complete receivers were constructed until the end of 1925 and marketed in 1926.

A fruitful area for ongoing research, I think. All contemporary evidence gratefully received by the writer!

In the meantime we do know that Stratton's took on board Harold Cox and Arthur Edwards (G)6XJ during this period and that these two were to provide a driving force for the next forty years. Their names crop up again and again in Eddystone history. Harold became Technical Director and Arthur became Sales Director, continuing with the firm until the late 1960's.

## **THE SHORTWAVE REVOLUTION**

By 1927 short waves were well established across the world, due to the pioneering work of early radioamateurs. One of these was Gerald Marcuse,

G2NM, who obtained a permit from the British Postmaster General to transmit speech and music to the British Empire.

Power was to be 1 kW input, wavelengths 23 and 33 metres and the first transmission was on September 11<sup>th</sup> 1927. The experiment continued for almost a year.

The BBC also started experimental broadcasting on 20 metres from G5SW, Chelmsford (Marconi) in November 1927.

The result was a demand for shortwave receivers from expat Brits. Stratton & Co were ready to fill that need and c.1927 produced what is believed to be their first short wave set, the Atlantic Two.

By 1930 the company had ceased making medium wave only sets and from then on everything was focused on the higher frequencies.



***George Brown G5BJ works on a VHF Lecher Line transmitter (G6SL) in the roof-top laboratory at Stratton's Balmoral Works, 1935. Signals were received in New York.***

## RAPID EXPANSION

Sets were produced by the company in bewildering variety. Eddystone receivers were used by many scientific expeditions of the 1930s, such as the British Arctic Air Route Expedition and the Hudson Strait Settlement Expedition.

In 1935 work started on VHF experiments and portable Eddystone five-metre equipment was used by the Hugh Ruttledge 1936 Mount Everest expedition; a world first.



**EDDYSTONE TYPE 215  
VHF 100 Watt AM Tx**

***Over 250 were supplied to the police  
and Admiralty during the war***

During the years 1935-8 much effort was made demonstrating to the police and military to gain acceptance of VHF equipment for use in cars and tanks, but without success. It was not until after 1938, when war was looming, that

Stratton's were to serve a purpose of national importance in this field.

## WAR CLOUDS FORM

The London Metropolitan Police Authority covering some 95 police stations and Scotland Yard, sent an urgent request to Stratton & Co to tender for an automatic wireless telephone network. This was accepted, and work commenced day & night to complete the system for July 1939.



**AFTER THE 1940 BLITZ**

The installation worked perfectly throughout the war. Similar equipment was supplied to many prominent police forces including Birmingham, Glasgow and Edinburgh.

We are dependent on salvaged ephemera for all our information of the 'twenties and 'thirties. Virtually nothing survived the bombing of October and November 1940.

J.R. & L., in conjunction with the Air Ministry (for whom they were manufacturing radar I.F.F. components) took over a disused Lido known as 'The Bath Tub' at West Heath (sometimes referred to as 'Kings Norton') on the southern outskirts of the city. All that remained were two signal generators, a beat frequency audio oscillator and a Q meter! Benches and fixtures were made from timber taken from the dressing cubicles; tools were purchased from local ironmongers and within three months production had outstripped pre-

blitz figures. Type 358 receivers were back in full production. All this improvisation was done under the direction of Harold Cox; Arthur Edwards had joined the Fleet Air Arm.

During the rest of the war no further damage was caused and over 4.5 million components for use by H.M.Forces were manufactured. Just over 4,500 transmitters, 7,264 receivers and 45,000 other supplementary pieces of equipment were supplied, for Police, Army, Royal Air Force, but mainly Admiralty requirements.

After the war ended times were difficult in the radio business. War surplus depressed world markets. A major decision, perhaps an error, was made not to re-enter the VHF two-way radio field. It was decided to concentrate on specialised communication equipment, well constructed for performance and stability and selling on these points rather than price; a policy which brought success for many years.

### **TIMES CHANGE**

In 1964 the death of George Abe Laughton brought the company to a crossroads. Eddystone Radio was the odd man out in a family company that produced goods for the cosmetic market and the "Woolworth's" trade. The family felt that the communication business had grown in complexity beyond their understanding. A decision was made to sell the radio business to one of their largest customers, Marconi, in 1965.

Solid state was just starting. It was to overlap valve production by about a decade and the last valve set was manufactured in 1973. At about this time Marconi made a policy decision that their subsidiary, Eddystone Radio, should pull out of the High Street and concentrate purely on professional receivers.

The H.F. receiver market was starting to shrink as competition from the Far

East started to bite. The size of ships grew, requiring fewer radios. The ocean liner 'cabin set' market vanished in the new 'air travel for all' regime. Satellite communication became a practical reality.

Around 1980 the company entered the broadcast transmitter field in partnership with the BBC. This was very successful and took things into the '90s when Eddystone and the BBC pioneered the new Digital Audio Broadcasting (DAB).

### **END OF AN ERA**

In 1995 the lease on the premises at the Bath Tub expired and the company relocated on a small industrial estate in Selly Oak, within the City of Birmingham, ready to take up the digital challenge. Unfortunately the expected expansion didn't materialise (nor has it yet done so in 2002). *(It finally came in 2004)*

The end of the cold war had seen a big drop in government orders and the increase in satellite communication further reduced the demand for professional HF receivers. Combined with an economic crash in Malaysia, where a large VHF/FM broadcast transmitter order was cancelled, this spelled the end of Eddystone's ownership by Marconi, itself in a parlous state.

In 1999 the firm was bought by Megahertz Communications. After three years in the doldrums Megahertz went into receivership and, as we write, the future of Eddystone Radio is very much in the balance.

I have tried to date the sets as closely as I can and I have given a clue as to the current availability of many sets. This is purely a cockshy and the rather varied style of reference has no significance other than my own state of mind at the time. There is no rank difference between 'quite rare' and 'rather rare'!



# BEFORE THE WAR

As has already been explained the records of Stratton & Co were destroyed in the 1940 blitz. We are therefore dependent upon collected ephemera and magazines for most of our information.

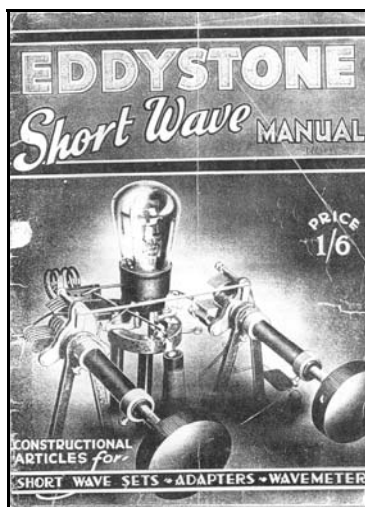
From 1932 to 1938 Stratton published five constructors' manuals, four of which were entitled 'Eddystone Short Wave Manual' and one of which was 'Eddystone Ultra Short Wave Guide'.

**Copies of these are available from Dave Simmons, EUG Archivist,**

telephone/fax 01869 347504. Some of the products described therein were marketed as ready-made sets, some as kits, and some as pure D.I.Y. We start this section with the Indices of each of these Manuals.

## Eddystone S.W. Manual No.1 1932 . . . Contents.

Kilodyne Four.  
 Kilodyne All Electric Four.  
 Atlantic Three.  
 The Short Wave Variable Condenser.  
 Amateur Bands Two.  
 Empire Two.  
 Super Het S.W. Converter.  
 Short Wave Adaptor.  
 Heterodyne Wavemeter.  
 Dynatron Frequency Meter.  
 Seven Metre Converter.  
 T.P.T.G. Transmitter.  
 Crystal Controlled Transmitter.  
 Etc . . .



**EDDYSTONE SHORT WAVE MANUAL No 1 (1932)**

## Eddystone S.W. Manual No.2 1935 . . . Contents.

1935 Kilodyne Four.  
 1935 Kilodyne All-Electric.  
 Mains Eliminator circuits.  
 Eddystone Crossfeed Aerial  
 Heptode Super-Heterodyne Converter.  
 All Wave Buzzer Excited Wavemeter.  
 Ultra Short Wave Receiver.  
 Ultra Short Wave Trans.  
 Six Valve Short Wave Super-heterodyne.  
 One Valve SW Converter.  
 100 Watt C.W. and Telephony Transmitter.  
 Etc . . .

## Eddystone S.W. Manual No.3 1936 . . . Contents.

The All World Two.  
 The 'Everyman' Short Waver.  
 Short Wave Aerials.  
 5 Valve A.C. Short Wave Superheterodyne.  
 Self modulating Oscillator.  
 Four Band Transmitter.  
 5 Valve Short Wave Battery Superhet.  
 Ultra Short Wave Radio Telephone  
 A Modulated Oscillator.  
 One Valve H.F. Amplifier.  
 Two Valve Transceiver  
 Etc...

## Eddystone S.W. Manual No.4 1938 . . . Contents.

Amateurs' Shortwave Two.  
 Improved "Everyman" S.W. Receiver.  
 Miniature Amateur Station.  
 Short Wave Preselector.  
 Absorption Wavemeter.  
 25 Watt Transmitter.  
 Field Strength Indicator.  
 Cathode Ray Oscilloscope.  
 Key Click Eliminator.  
 Ultra Short Wave Two.  
 Resonance Indicator.  
 Amateur Communication Receiver.  
 Power Supply Unit.  
 Etc . . .

## Eddystone Ultra Short Wave Guide 1937 . . . Contents.

The Ultra Short Wavelengths.  
 Two Valve Transceiver.  
 Two Valve Quench Receiver.  
 Absorption Wavemeter.  
 Electron Coupled Oscillator.  
 Lecher Wires.  
 Ultra H.F. Transmitter.  
 Super-Regenerative Three.  
 Six Valve Super-Heterodyne.  
 Modulated Oscillator.  
 Push-Pull Unity Coupled Tx.  
 Etc . . .

## 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 'home-brews'). 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).

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### DETAILS OF SETS

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

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***Eddystone Two***

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

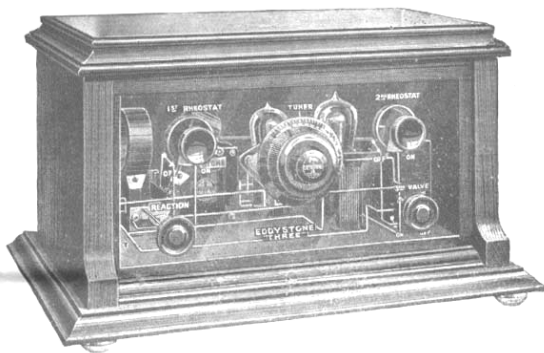
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**EDDYSTONE TWIN:** 1926-28. 0-V-1. Plate glass front panel; Jacobean oak case; price complete with batteries, speaker and coils ; £14 12s 6d. Early models had filament rheostats and plug-in coils. Later models had no rheostats and switched coils for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

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



**Eddystone Twin (early)**

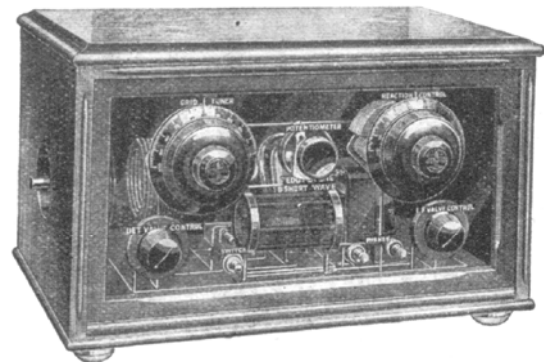


**Eddystone Three**

**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;** (sometimes referred to as "Short Wave 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.)



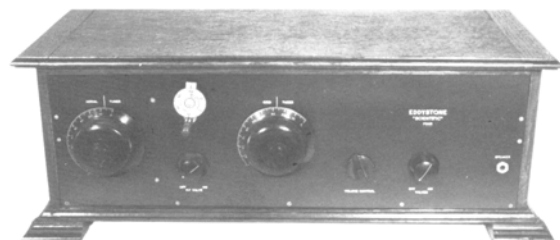
**Atlantic Two**



**Export Model Atlantic Two**

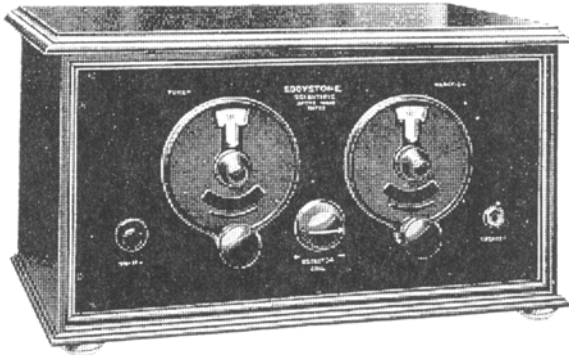
**ATLANTIC TWO (Export),** c.1928, 0-V-1 This model was found in New Zealand in 2000. Licence plate reads "for the reception of broadcasts outside Great Britain". Front panel aluminium – wood finish. 'Igranic Indigraph' dials. 15-550 metres with plug-in coils. ♠

**SCIENTIFIC 5:** c.1927 – nothing known.



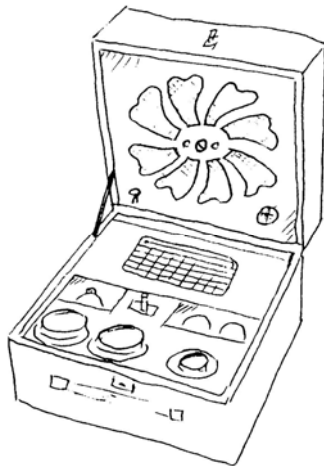
**Scientific 4**

**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 loudspeaker). ♠



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

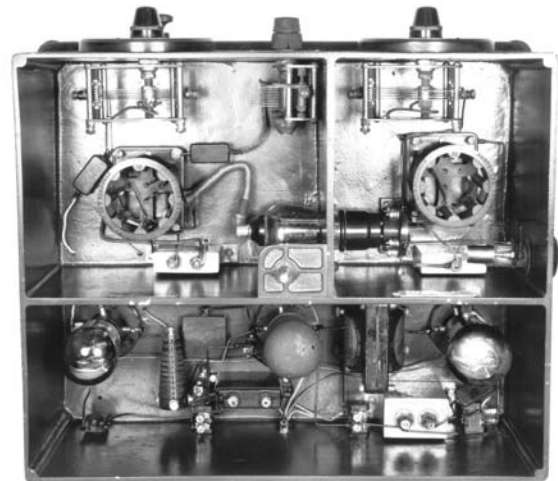
**SCIENTIFIC SCREENED GRID H.F. SHORT WAVE THREE. Kit-Set C.1928** 1-V-1, aperiodic aerial circuit. Plug-in coils, 14-100 metres + MW. Aluminium panel, 'Igranic Indigraph' dials. Batts. ♠



**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 oils).



**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.

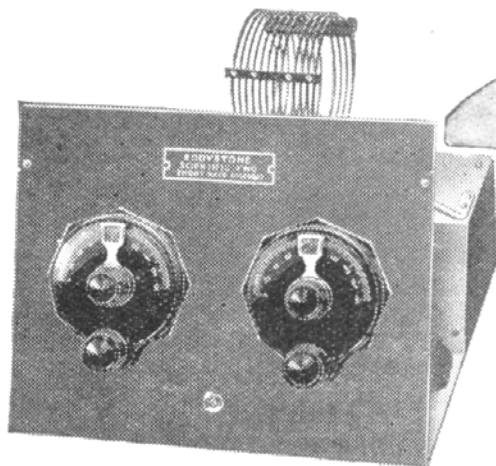
Total Cost of Parts £6 17 6  
Blueprint, List of parts and full details, 1/6 post free.

**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 (*ibid.*) ♠

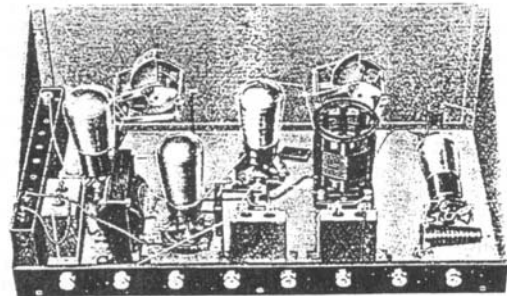


**Scientific 2 – 1931**

**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."

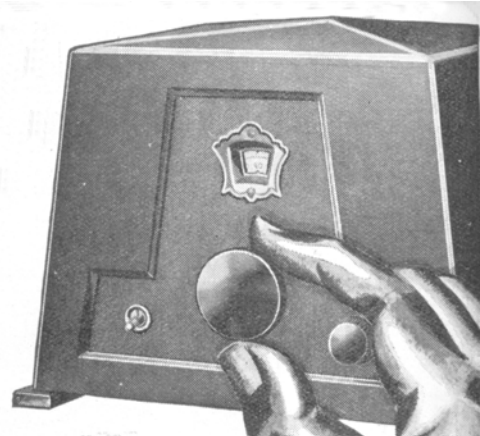
Although the new vertical, ribbed, six-pin plug-in coils had been introduced the year before (in the All Wave Four – see above) this set continued to use the larger air-spaced coils dating from 1926. Possibly a ploy to shift old stock! The LH dial is tuning, the RH is reaction. The aerial coupling condenser is mounted on the LH rear of the chassis. Price 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.



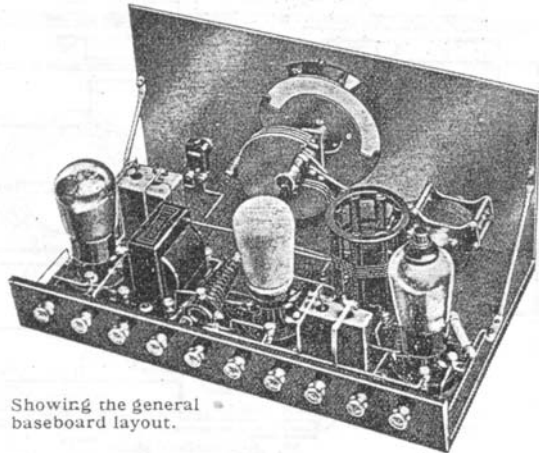
Frequency coverage 12.5 – 503 metres using 2½" plug-in coils.

(Copy of construction manual available from EUG archives – Dave Simmons). ♠



**Short Wave Converter – 1931**

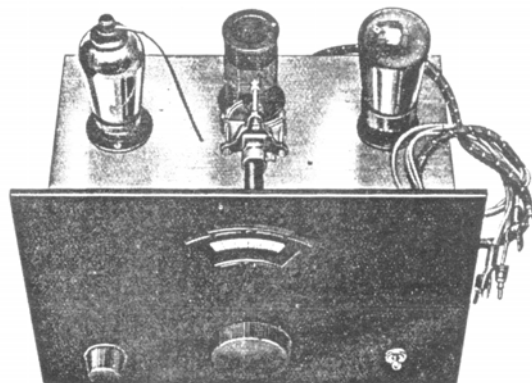
**EDDYSTONE SHORT WAVE CONVERTER:** 1931. Single valve self-oscillating triode mixer with IF output in medium waveband; to be fed into existing MW receiver with RF stage which then became an IF stage. 15-65 metres, switched coil. Oak case, size 10" x 8" x 9" (Likely to be mis-identified as a one-valve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

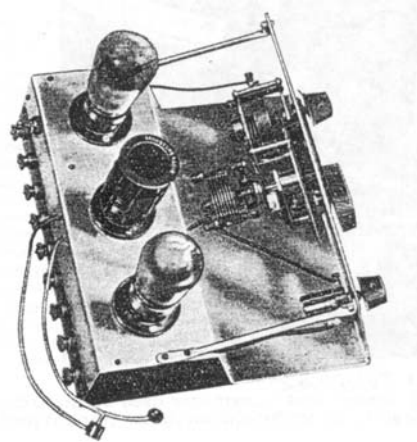


**Amateur Bands Two - 1932**

**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). Full details in ESWM No1.

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:** 1932 a general coverage economy version of the Amateur Bands Two (above)! Chassis-built with sloping front. No cabinet. Frequency coverage 13-78 metres. Ready-to-build, £4 0s 6d plus valves and batteries. ♠



**1934 Kilodyne Four**

onl

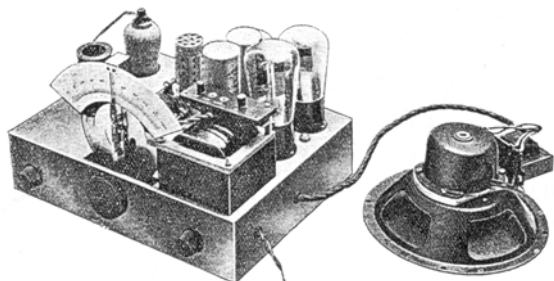
**EDDYSTONE 1934 KILODYNE FOUR:**

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. A copy of the instruction booklet for these two sets is available from EUG Archives (See details presented on the inside front cover of Lighthouse' magazine.

**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").

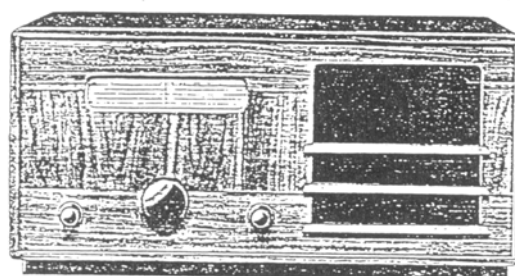
Frequency coverage according to coils acquired (140kc/s-30mc/s). Battery operation, external speaker. Main tuning is on the right side, with aerial peaking on front left and reaction front right. The set probably represents the peak of Eddystone T.R.F. sets (technically if not artistically!)



**All World Four c.1934**

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

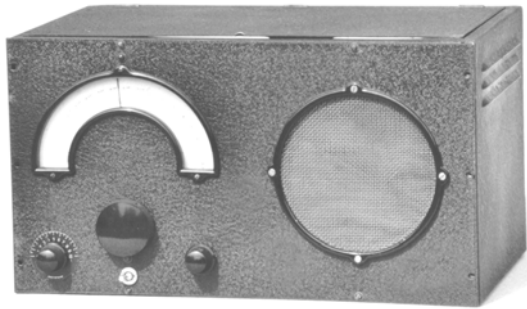
**SPHINX:** 1934-battery model. Switched bands 13-580 metres. Built in speaker (a first for Stratton) 1-V-2 Art Deco teak cabinet. Size 23" x 10" x 11". Wt 25 lbs. Price £23.



**Sphinx; battery and mains models**

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

**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**

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



**Overseas Four 1935**

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

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

Probably the 'Cinderella' of Stratton in the late '30s, the A.W.2 is described in E.S.W.M. No.3 (*ibid.*), 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 the outbreak of World War 2, by which time its price (ready-built) had fallen to £3 17s 6d. To tempt new impecunious S.W.L.s it was offered on Hire Purchase terms

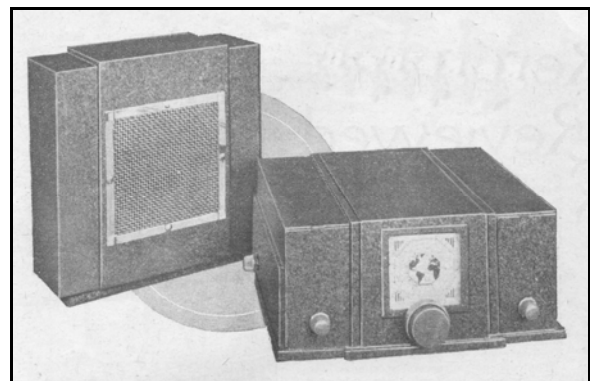
complete with 'phones and batteries for £1 down and six monthly payments of 16s 4d. (The starting pay for an office boy at this time was around 5s weekly).



**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.) ♠

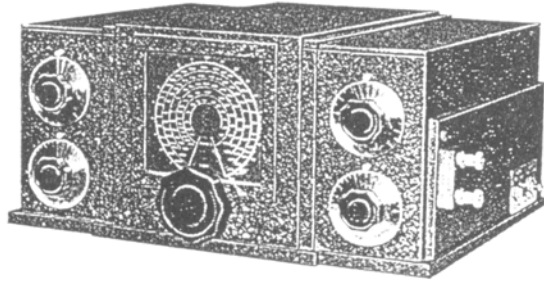


**All World Eight 1936/39**

**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).

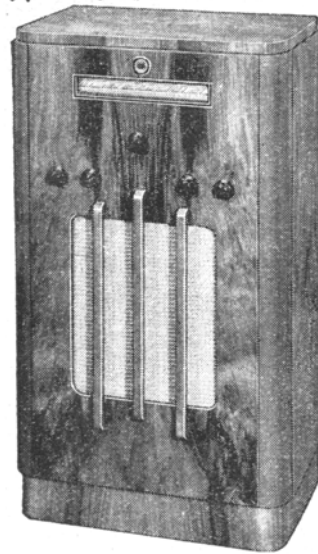
A beat frequency oscillator was fitted for Morse reception and the output stage was changed to a single-ended stage (thus freeing a valve-holder for the BFO). Chassis & Cabinet of diecast aluminium silicon alloy. In 1939 the set was priced at £45 with 5 coil blocks covering 530kc/s-22mc/s.

**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. ♣

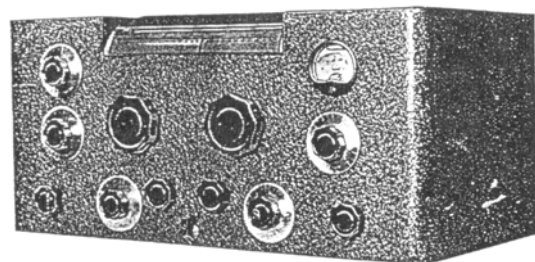
**EDDYSTONE ERA7:** 1937. 7 valve plus magic eye AC mains broadcast superhet. 1 RF; 1 IF (465kc/s) 12" auditorium speaker; diecast chassis, coil box and IFTs. Sold both as a chassis for the customers' own cabinet or as a console in oak or walnut. Bandswitched in two versions; Model A 13-85, 200-

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.

All pre-war Eddystone sets may be considered as extremely rare. Two or three a year come to the surface. ♣

## WARTIME MODELS

### S.358 series

A 'private venture' receiver designed in 1940. Built throughout the war and supplied only to priority customers. Quantity of all types produced = c.5,000. 358/358X common, others rare.

**S.358:** General coverage communications receiver. 7 valves, RF/FC/2-IF/DET/ BFO/OP. IF 450kcs; external PSU. Ten plug-in coil-packs, 40kc/s-31mc/s. Valve-check meter. Module-based construction. **Navy Type B34** (Main user).



**S358 Series**

**S.358/1:** As above but with low-consumption output valve (6J5 instead of EL32, for battery operation).

**S.358X:** As 358 but with dual-gate crystal filter.

**S.400:** Same appearance as 358 and same line-up, but coverage 130kc/s-2.2Mc/s with four coilpacks. I.F. 110kc/s. Triode output stage.

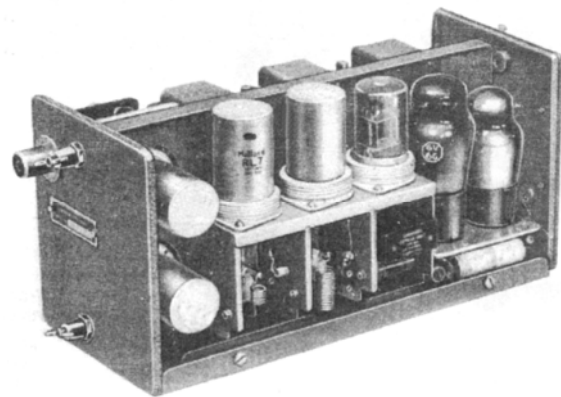
**S.400X:** as 440 but with dual gate crystal filter.

**S.400B:** 1943. As S440X but with product detector; and tuned audio filter (1kc/s) on AF stage (6V6G) CW only. 6 valves. **Air Ministry type R1448.**

External psu's were common to all the above and could be 200-250v AC or 6 volt dynamotor or 6v battery and 175v dry battery (for S.358/1). ♠

**S.214:** VHF fixed station receiver, 1939. Part of wartime police duplex radio network in London (and others).

Used with the high power S.215 (100W) transmitter, c.70-100mc/s. General specification and shape similar to S.450B (below). ♠



**S.450B**

**S.450B:** 1942-45. Single channel V.H.F. A.M. duplex radio-telephone receiver derived from the S.214 (above). Crystal controlled within the range 50-100mc/s. I.F = 2.9mc/s. Matching receiver for the S.440B transmitter. 10 valves. Separate psu (AC or 12 volt versions). Originally used in Admiralty service (part of Type S.S147). Used as part of British Army Wireless Station No 57, of which this set was the **R408**. About 2,000 are believed to have been produced. ♠

As with most Eddystone sets, never be surprised to find a 'one off' variant of any model. The Stratton assembly line was very 'hand-built' and special requirements were easy to incorporate.

No other wartime receivers are known. The 7 watt transmitter which formed part of the WS 57 station (the S.440B) was a

favourite target for conversion to Two Metres in the 1950's and few will have survived in the original state. The S.450B receiver was useless to the amateur and was stripped for parts. ♣

## POST-WAR EDDYSTONE SHORT WAVE MANUALS

There were two of these published immediately after the war; No 5 in 1946 and No 6 in 1947. The format is exactly the same as the 'thirties but there is one big difference. None of the sets was offered either as a kit nor ready-made.

Harold Cox (Technical Director) considered them to be a waste of time and the proposed ESWM No 7 never appeared!

They are both available from EUG Archives (see latest 'Lighthouse' page 2 for current details).

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### Eddystone Short Wave Manual No 5 - 1946.



#### CONTENTS

BAND-SPREAD ALL DRY FOUR  
RECEIVER

V.H.FREQUENCY METER

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SIXTY MEGACYCLE 15 WATT TRAN-  
SMITTER

FIVE-TEN METRE 3-VALVE  
CONVERTER

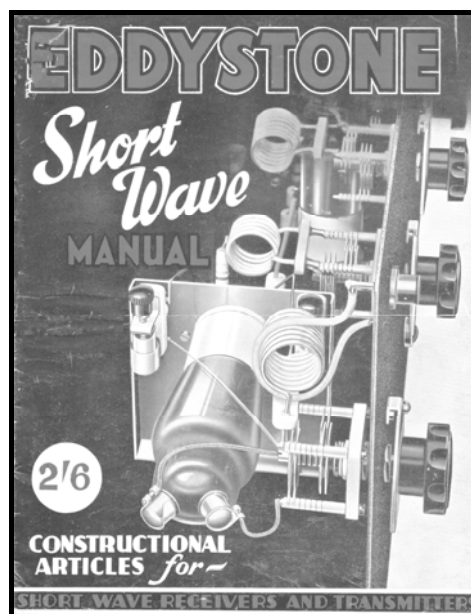
TWO VALVE PRESELECTOR

28 MEGACYCLE C.W. AND  
TELEPHONY TRANSMITTER

COMPONENT LIST AND PRICES

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### Eddystone Short Wave Manual No 6 – 1947



#### CONTENTS

V.H.F. CIRCUITRY

SHORT WAVE TWO BATTERY  
RECEIVER

SINGLE VALVE V.H.F.  
PRESELECTOR

THREE VALVE V.H.F. STRAIGHT  
RECEIVER

60 Mc/s CRYSTAL CONTROLLED  
TRANSMITTER

VALVE BASE DATA

HETERODYNE FREQUENCY METER

AERIAL SYSTEMS

Etc . . .

## POST- WAR MODELS

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### **F**irst of all a word about prices.

In 1940 the British government introduced a new indirect tax to help pay for the War. It was called 'Purchase Tax' and was levied on the trade price of items deemed to be 'consumer goods', not clothes, food, or Eddystone components.

The actual rate was determined by the Chancellor of the Exchequer and varied according to the needs of the economy. After the war it was continued until 1973, and was used as an economic regulator which varied according to the 'luxury rating' of the goods.

In 1946 Stratton's claimed that their Eddystone receivers were not 'consumer goods'. The Revenue authorities begged to differ and rated them as domestic receivers.

Stratton's then claimed that 'communication' receivers were not domestic receivers and left out the loudspeakers (which their first post-war cabinet had been designed to take). The tax-man ignored them.

After two years of debate the Revenue finally gave in, but determined that the criterion would be the presence or absence of a BFO! The tax varied between 30% and 60% of trade price until VAT replaced PT (which started at 8% of retail price across the board, but is currently 17.5%). ♠

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**Secondly, a word about nomenclature.** At some time in the very late 'thirties all Stratton's radio products were given an 'S' number. This stood for 'Specification' (not 'Stratton', as has been suggested).

The actual sequence of these numbers is very erratic. In general terms the numbers get greater with the passage of

time, but not always so. The allocation of these numbers is usually credited to Harold Cox, who by this time was the Technical Director of the Eddystone Radio section of Stratton's, which, it must always be remembered, manufactured more powder compacts and fancy goods than radios!

In the early 1960s a new system of numbering started, to run in parallel with this traditional nomenclature. It was the two-letter prefix of which the first was always 'E' (for 'Eddystone') and the second was a type designator, viz:

EA – Amateur  
EB – Broadcast  
EC – Communication  
EM – Marine  
EP – Panadaptor (not strictly a receiver)  
EY – Yachtsman

In the late 'thirties a 'traditional' dating system was incorporated into the serial numbers of Eddystone receivers. Starting from 1923, it was a simple 'letter per year' which repeated every 26 years plus a 'letter per month' which utilised the first twelve letters of the alphabet.

The earliest sets extant, c.1926-7, to wit four Eddystone Twins and three Atlantic Twos, have no serials whatever, so I think this starting date of 1923 is wishful thinking. Serials of the 1930's don't fit this rule until 1939.

In theory there was a special order to this code; up to 1948 the month came first and from 1949 the year came first.

This was fine, but in practice it seems the job of punching out the serial plates was given to the newest apprentice who was never quite sure which way round he should be doing it and didn't like to ask!

So there seem to be as many errors as correct codes. But with a bit of luck, using the date spread of production given within as a guide, you will probably be able to get the right answer. The exceptions seem to be these of the Type

EC models (above), most of which have the prefix omitted.

Other exceptions to the rule are the prefixes 'DD' and 'PP', which refer to the set being a development or pre-production model. The serial will always be very low (like PP0002).

These sets were not sold but raffled off to employees. They may or may not be something like the final product! But they do turn up.

**Dating Code for Eddystones (see text)**

A – 1923	A – 1949	A – Jan
B – 1924	B – 1950	B – Feb
C – 1925	C – 1951	C – Mar
D – 1926	D – 1952	D – Apr
E – 1927	E – 1953	E – May
F – 1928	F – 1954	F – Jun
G – 1929	G – 1955	G – July
H – 1930	H – 1956	H – Aug
I – 1931	I – 1957	I – Sept
J – 1932	J – 1958	J – Oct
K – 1933	K – 1959	K – Nov
L – 1934	L – 1960	L – Dec
M – 1935	M – 1961	
N – 1936	N – 1962	
O – 1937	O – 1963	
P – 1938	P – 1964	
Q – 1939	Q – 1965	
R – 1940	R – 1966	♠
S – 1941	S – 1967	
T – 1942	T – 1968	
U – 1943	U – 1969	
V – 1944	V – 1970	
W – 1945	W – 1971	
X – 1946	X – 1972	
Y – 1947	Y – 1973	
Z – 1948	Z – 1974	



**Type S.556 / S.556B 1946**

**EDDYSTONE TYPE S.556:** 1946, First post-war model. De-luxe tea-planters' broadcast receiver. AC mains. 10 octal valves; 2 RF; 2 IF (450 kc/s); magic eye tuning, 75Ω input. Twin built-in 3" speakers. 580kc/s - 30.5mc/s Price £37 (plus purchase tax in UK) Rare

**S.556B:** As above but with internal 6 volt vibro-pack in place of the AC psu. (It is wrongly called the model '566' in the 556 handbook). It was intended for use with a 6-volt accumulator and petrol generator for charging. Very rare. ♠



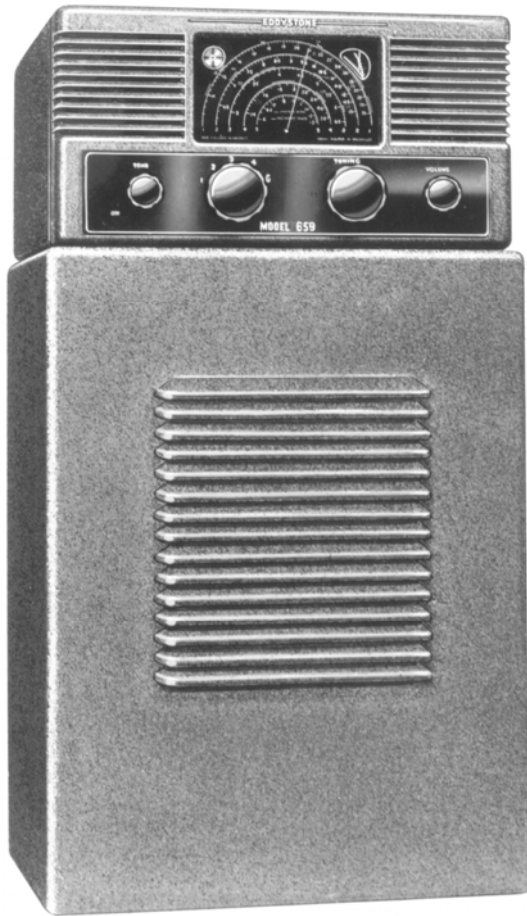
**Type S.504 1946**

**EDDYSTONE TYPE S.504:** 1946. First post-war communications receiver, based on S.556 but without speakers and with S-meter, BFO. Dual-gate Xtal filter, Noise limiter. 75 ohm input.

Same coil-box and frequency coverage as S.556, AC mains. Rare. ♠

**NOTE: Many Eddystone sets have provision for a 400Ω or 75Ω balanced feeder or unbalanced wire aerial. In**

the case of using the latter, a special shorting link must be in place ♠



**Type S659 / 659B**

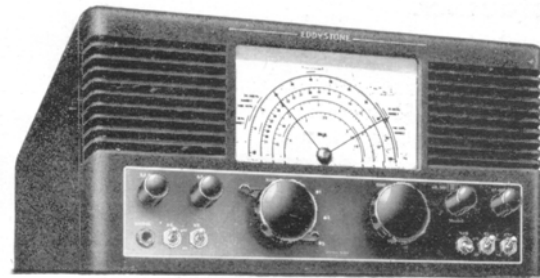
**EDDYSTONE TYPE S.659:** 1947-8. Tea planters' set. 8 octal valves; AC mains, 1 RF; 1 IF (450kc/s) 4 bands, 520kc/s-30mc/s; magic eye, noise limiter (switch at rear); built-in speaker but offered with huge baffle speaker. Very rare.

**S.659B:** as S.659 but with built-in 6-volt vibropack instead of AC. Very rare.

**NOTA BENE: TUNING DIALS MADE FOR THE S.659 WERE LATER USED FOR THE MUCH MORE COMMON TYPE S.670. THIS OFTEN LEADS TO CONFUSION. SEE UNDER S.670.**

**EDDYSTONE TYPE S.640:** 1947. HF communications receiver; 1.7 – 31mc/s; 9 octal valves; electrical bandspread. AC mains; 1 RF; 2 IF (1,600kc/s); BFO, xtal filter, 4,000 manufactured from

1947-1949. Price started at £42 (plus UK PT) then dropped to £27 10s (became tax-exempt in 1948, as did all sets with a BFO). Optional separate speaker and S-meter. Aimed at the radio-amateur/SWL market. Common.



**Type S.640 1947**

**EDDYSTONE TYPE S.680:** A famous communications receiver which had a false start. The model (below) was exhibited at the 1947 Radiolympia Show and hailed as the successor to the S.504 (*ibid.*), using the latest range of miniature valves.



**Prototype Model S.680 – 1947**

Unfortunately it ran a little too warm (it was using the cabinet and mains transformer of the 640, which itself only just managed to keep cool enough). So it went back to the drawing board for a couple of years and re-appeared in 1949 as the 'New 680'. This has caused a little confusion as factory references called this the 680/2, but it was never marketed as such.

**EDDYSTONE S.680 (aka S.680/2): 1949-1951.** Noticeable differences from the previous photo show a deeper

cabinet and cooling louvres, together with phone jack at LHS of case. Stratton's most serious post-war product yet.



**'New' Type S.680 (aka S.680/2)**

15 valves (all miniatures except PSU). AC mains; 30mc/s to 480kc/s. Two RF, two IF (450kc/s), BFO, Xtal filter, push-pull output, variable selectivity, external speaker (option), noise limiter, S-meter. Available for rack mounting. Auxiliary bandsread dial gives 7 ft. 6 ins. per range. Price £85. Rare.

**S.680/2A:** special model for NZBC with different connectors at rear. ♠



**Type S.680X 1951-61**

**EDDYSTONE TYPE S.680X:** a direct successor to the Type 680/2 (above). Commonly incorrectly reported as being a Xtal filter version of the Type S.680 (*almost certainly inspired by the S.358/S.358X, where it IS the difference – but both S.680 & S.680X have Xtal filters, and neither have a product detector – as has been previously reported*). The obvious difference is the front panel, which follows the 750 with 32 ft of band-spread in place of the 7 ft 6 inches on the 680/2. The only circuit difference is in the frequency changer valve. Price ranged from £106 to £125. Production run 1,562. Common. ♠



**Type S.670 (The Seafarers' Radio)  
1948-54**

**EDDYSTONE TYPE S.670;** This was the first of a very successful series of broadcast receivers targeted at ships' officers and first-class passengers; they became known as 'cabin sets'.

In fact, the first batches were reserved for Export Only (in common with many other 'luxury goods') at this time of post-war shortage of 'hard' currency. (See also S.670A and S.670C).

Stratton's north-eastern agent, Alf Willings of West Hartlepool had suggested that such a market existed. Most ships' power supplies were 110v DC and the only sets available for such voltages were American midgets. These had no hash filter nor did they have short-waves or arrangements for a low-interference aerial. There would be a market for a decent general coverage set, he said, and there was.

7 miniature B8A valves + metal rectifier; AC/DC mains 110-250v. 1 RF; 1 IF (450kc/s) Push-pull output, built-in 6½" speaker. 4 bands, 520kc/s-30mc/s. 1948-54. Price £37 10s. (plus P. Tax if sold inland) Common.

**NOTA BENE:** Most S.670 sets were built using calibrated dial glasses originally made for the rare model S.659 and were so labelled. To compound the confusion the top left of the dial back-plate carried the legend 'MARINE RECEIVER 659/670' in the same place that the S.659 had a magic eye. Beware! They are normal S.670 sets. ♠

**EDDYSTONE TYPE S.670A** (1954-62), direct successor to the 'marine cabin receiver' type 670 (above) but with several changes. New 'slide-rule' cabinet. 6 valves plus metal rectifier. Single-ended output stage. Magic eye tuning indicator. 110-250 volts AC/DC. 1 R.F., 1 I.F. (450kc/s) Four bands: 150-380kc/s; 540-1500kc/s; 5.8-30mc/s. It is also listed in company records as the Type S.883. I can find no reason for this so far! Also it is believed that the **TYPE 881/1/2/3 cabin tuner** was a version of this set; 750 produced.



**Eddystone Type S.670A**

3,275 models were produced. It is remarkably rare for such a production run. Price £49. NB: versions of this model exist under the Marconi (MIMCO 2232A) badge. This may include some of the above production. Most examples are likely to have ended up in the ship-breakers yards. ♠

**EDDYSTONE TYPE 670C** The final version of this successful line of marine cabin sets. Slight circuit alterations but otherwise very similar to the 670A (above).



**Eddystone Type 670C**

The main differences were the new-style cabinet, a built-in brute-force mains filter and two extra wavebands, now covering 150-350kc/s and 500kc/s – 30mc/s. 1962-64. 400-plus manufactured. Rare

**Eddystone 670C/1, as above but badged as Marconi 'Elettra' – alias MIMCO 2232B** 400 known to have been manufactured 1963-67. Very rare.



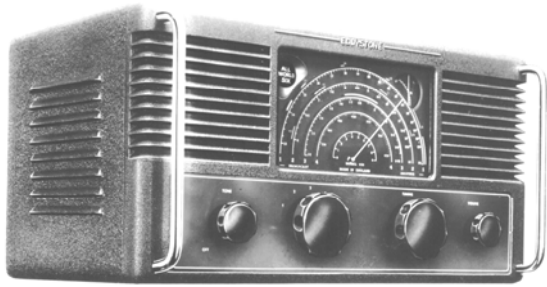
**Eddystone S.670C/1**

**Badged as Marconi Elettra**

Other versions of the 670A & 670C have been badged as MIMCO models, but details are hazy as the service information has not been found in Eddystone Archives. ♠

**EDDYSTONE EM34** was also a member of the marine cabin 670C family but using the 'new' nomenclature. Audio output was 10 watts and it is believed to have been used as a Public Address driver (*i.e.* ships' "Tannoy"). It was badged as the **MIMCO 3873A**, (*also named 'Elettra'*). 100 were known to have been manufactured in 1965.

The whole 670-series was eminent over a twenty-year period and was probably the world's most successful 'universal' AC/DC 110-250v general coverage broadcast receiver. It is, however, probably responsible for getting the marque a poor name among those who believed these were the only sets the company built! But they were just as well constructed as the professional models costing three or four times the price and looking very similar. ♠



**Eddystone Type S.710 (1949)**

**EDDYSTONE TYPE S.710**, was the only post-war set to use a pre-war type of name! It was marketed as the 'All World Six': General coverage tea-planters' broadcast receiver. Built-in 6v DC vibropack; 1 RF; 1 IF (450kc/s); 4 bands 480kc/s - 30.6mc/s; internal 6½" speaker, 1949. Price £39. Production run: 270 models. Very rare.

**NOTA BENE:-** Some of these models also used dial glasses from the S.659, but had the name 'All World' Six' in the top left corner.



**Eddystone Type S.710/1**

**EDDYSTONE TYPE S.710/1 – S.791** Combination for Communal Listening

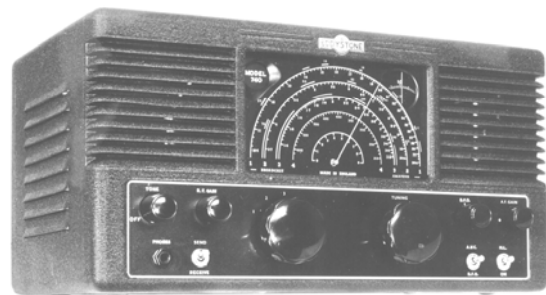
This was a standard Type S.710 fitted with a special output transformer and supplied with a Voigt pressure drive speaker. Speaker length 54", dia 24", weight 16 lbs. This was suitable for a large number of people grouped indoors or out to hear broadcasts from distant or local stations. It was an export special and it is doubtful if any survive. Price of S.710/1, £49 10s. Pressure drive

speaker S.791 £16 18s. Six volt accumulator, 102 ampere hour, 40 hours listening time; (price on application!) ♠



**Type S.720 'Yachtsman' (1950)**

**EDDYSTONE TYPE S.720 'Yachtsman'** designed for use on cabin cruisers and yachts. 7 valves; 1 RF, 1 IF (127kc/s), BFO, built-in speaker, internal 12v vibropack – option for 24 volt adaptor. 3 bands. Coverage 80-620 metres (3750-480kc/s) and 900-2,300 metres (130-330kc/s). Special attention devoted to the reception of 'Consol' navigational signal with maximum intelligibility. Price started at £48 6s 8d then fell to £43 10s. Production run 100 models. Very rare. ♠



**Type S.740 (1950-1954)**

**EDDYSTONE TYPE S.740:** General coverage communications receiver AC Mains 110-250v. 8 valves; 1 RF, 1 IF (450kc/s), BFO, external speaker, provision for plug-in S-meter; (both optional; see page 55 *et seq.*).

4 bands: 30.6mc/s to 1.4mc/s and 205 Metres to 620 Metres. Production run, 900 sets. Price £32 10s. Rare. ♠



**Type S.750 1950-58**

**EDDYSTONE TYPE 750:** Stratton's first true double conversion communications receiver and also the company's first 'slide-rule' set which gave a linear logging-scale of 32 ft. Using 11 valves it had 1 R.F. stage, a tuneable converter to the first I.F. of 1620kc/s, straight into a fixed frequency changer with a second I.F. of 85kc/s and variable selectivity, followed by BFO, N/L and O/P stage. AC mains. 32 – 1.7mc/s and 1465-480kc/s. Introduced at £49 10s. it reached £75 by the time it ceased. Prod run 2054. Quite rare (*considering its production run*).

**TYPE 750/1** As 750 but for 110v 25~ only. Prod run 79, c.1955.

**TYPE 750/2** as 750 badged for Marconi as HR100, for use in coastal stations. Manufactured in two versions (difference not known), Edition 'A', 105 produced; Edition 'B', 545 produced. ♠



**Type S.840 1953-4**

**EDDYSTONE TYPE S.840:** 'Economy' communications receiver suggested by Stratton's agent in the British

Dependency of Aden on the Persian Gulf. They were selling lots of the very successful 670 'cabin' broadcast receivers and suggested that a similar set but with a BFO for SWLs would be a good seller. And so the 840 was created. The whole series (840A/840C – *ibid.*) ran for 15 years and was a great success. 7 valves; 1 RF; 1 IF (450kc/s) BFO; AC/DC 110-250v (work anywhere!) 4 bands, 480kc/s-30mc/s. £45. 501 manufactured. Rare. ♠

**(Bill Cooke, GWØION, Chief Engineer at Eddystone throughout the period of these simpler valve sets, once told me that they were the company's bread and butter. If it were not for the 670-series and 840-series they would have been stuck for work between big specialist orders.)**



**Type S.840A 1954-61**

**EDDYSTONE TYPE S.840A** Successor the 840 (above), built into the 'new' type slide-rule case with 32 feet of logging scale. Exactly the same circuit and specification. Price £49. 2,000 manufactured. Quite rare (*considering its production run.*)



**Type S.840C 1961-68**

**EDDYSTONE TYPE S.840C** Successor to the 840A (above) built into the new-

'60s style cabinet. Virtually the same circuit but with the addition of a 'magic eye' tuning indicator and linear scale device. This involved extra 'padding' capacitors (among other things) and it was necessary to have five bands to cover the same waverange. 1961-68 Price £58 increasing to £68. 3,500 known to have been manufactured by 1965. Common. ♠

**EDDYSTONE TYPE S.730 Series:** A large family of professional communications receivers, based on the 680X. 15 valves; 2 R.F.; 2 I.F. (450kc/s), BFO, IF cathode follower output, variable I.F. selectivity, xtal filter, xtal calibrator, adjustable scale, noise limiter, S-meter, audio filter (for CW), fully tropicalised.

Started with **730** in 1953 (prototype only made); followed by a run of 25 **730/1**. Then the **730/1a** (1954-8; production runs of 317) for the Diplomatic Wireless Service (some of which could be dismantled for the diplomatic bag). **730/2** in 1955 (Stratton's version of /1a – 40 built). **730/3** in 1956 (Stratton's version with switched xtal channels).



**Type S.730/4 with detachable rack-mounts**

**730/4** (1956-c.62) (without the switched xtal channels) was ordered by the Ministry of Defence in large quantities and is by far the most common model. It has provision for use with external power sources in the absence of mains supply. Price £230. Common.

**730/6;** 50 built in 1959. **730/7;** 1959; nothing known. **730/8;** 50 built in 1959. **730/10;** 1962; nothing known. ♠

### THE EDDYSTONE 770 Family of VHF and UHF receivers

This famous family was originally proposed after the start of the Korean War (1950-53) when the Ministry of Defence required wide coverage VHF surveillance receivers.

The original specification was for a set covering 20-250Mc/s. Stratton proposed this as the **S.770M**, which got as far as the 1951 Radiolympia, where it is described as a double superhet. It failed to work when the tuning-gang went into self-resonance at around 200Mc/s. After much further research the following models appeared:

**EDDYSTONE TYPE S.770R** VHF Communications receiver. 1953-63.



**Type S.770R 1953-63**

19 valves; 3 diodes; 6-band turret, 19-165Mc/s, 1 RF; 4 IF (5.2Mc/s) BFO; S-meter, Modes:- AM-CW-NBFM-WBFM. (RAF Type R213.) 14 versions with minor differences. Price £250. Production run: 2,250. Common.



**Type S.770U**

**EDDYSTONE TYPE S.770U;** UHF Communications receiver; 1955-63. 150-500Mc/s. Double superhet; 15 valves, 6-band turret tuner; 1 RF; 2 IF (50Mc/s); 2 IF (5.2Mc/s) AM/FM; 10 versions with minor differences. £250-£300. Common.



**Type S.770S 1961 version**

**EDDYSTONE TYPE S.770S;** UHF Communications Receiver; 500-1000Mc/s, cavity-tuned double superhet.



**Type S.770S 1962 version**

30 valves plus 10 germanium diodes and 8 silicon rectifiers. First IF tunable 150-170Mc/s; 2<sup>nd</sup> IF 46.5Mc/s. Xtal calibrator. AM; WBFM; Pulse. Weight of table model 99 lbs. Production run: 100 models. Rare.



**Type S.770R MkII 1963-69**

**EDDYSTONE TYPE S.770R Mk II;** exactly the same as the S.770R but in a new cabinet and with the addition of a xtal calibrator; scale adjustor, panadaptor output and linear dial bar (to even out the read-out). 12 variants with minor differences. Production run not certain but seems to have been short (a hundred or two). Rare

**EDDYSTONE TYPE S.770U MkII:** exactly the same as the S.770U but in a different case and with the addition of a xtal calibrator; scale adjustor; panadaptor output, linear dial bar (to even out the read-out) and push-pull audio output. Many (slight) variants. Production run approx 1,100. Medium rare. ♠



**Type S.770U MkII 1964-69**

**EDDYSTONE TYPE S.700 known as the IMR.54:** Ships' main communications receiver. 1952. The International Marine Radio Company (IMRC), a subsidiary of STC (part of ITT) supplied many shipping lines (Including the famous 'Cunard') with radio communications.



**Stratton-built IMR.54 still on RMS 'Queen Mary' at Long Beach CA**  
(Photograph by Nate Brightman K6OSC)

In 1952 the installations of the '30s were still in use and badly in need of renewal. The company approached Stratton and arranged for them to design and manufacture a replacement receiver. It was to be designated the **IMR.54** and would be an exact physical replacement for the pre-war IMR.42.

The result of this liaison was recognisably Eddystone, but 50% larger. It had 12 valves, 10 bands, switched IFTs for two frequencies and full coverage from 15Kc/s to 31Mc/s without a gap! 110v AC/DC. Used on RMS 'Queen Mary' etc. Production run 205. After this, Stratton & IMRC fell out over the contract price. IMRC took back all the jigs, etc., produced (at their expense) by Stratton's and started to make their own! **These can easily be recognised by having a flat steel front panel (no fluting).** All rare. ♠

## THE SMALL VALVED EDDYSTONES

In 1955 Stratton's brought out their first post-war 'small' set. In fact it was not a short-wave set but a VHF FM tuner. The BBC had decided upon using Band II wide-band FM for the new 'hi-fi' service (after extensive tests of FM versus AM on 3 metres.)

It was based on a small (11 inch wide) diecast front panel, in family style with the normal slide-rule sets of the period (which were 17 ins wide). This was followed by a variety of other sets using the same format. They were actually smaller than the famous transistor family (12 ins wide) of the '60s and '70s – the EC10 and its derivatives.

**EDDYSTONE TYPE S.820 1955-58.** Broadcast HiFi FM mono tuner. 8 valves. 87.5-100mc/s plus one pre-set LW channel (for BBC Droitwich 'Light Programme' Tx on 1500 metres – 200

kc/s) and two pre-set MW stations for BBC Home and Light programmes. Low level output for HiFi amplifier.



### **Eddystone Type 820 FM Tuner**

Supplied without case for custom mounting in HiFi console. Production run 1,000. Price £38. Medium rare.

The tuning drive of all these 'small' Eddystones is based on the famous catalogue No. 898 dial sold as a DIY item for serious constructors.

ALSO badged as Mimco Type 2294A – 9 produced. Four produced with xtal control for Rediffusion. ♠

**EDDYSTONE TYPE S.870** Broadcast general coverage, 1956-59. Marketed for ocean liner passenger cabins and cult domestic. Universal AC/DC 110-250v. 5 valves (FC-IF-DET-LF-RECT) four bands: 150-380kc/s and 540kc/s-18mc/s. IF 465kc/s. Built-in speaker; brute force mains filter. Production run 3,010. Price £34 16s. Medium rare (considering the production run)



### **Eddystone Type S.870**

**EDDYSTONE TYPE 870A 1960-66.** Identical with the above model but with 5

wavebands, extending the short-wave coverage to 24mc/s Production run 4,050. Price £32 2s. Again, medium rare – considering the production run.



**Eddystone Type S.870A**

**EDDYSTONE Type S.890. 1956/7** VHF radio microphone receiver for the BBC. Single band; AM/FM with wide-range Automatic Frequency Control (AFC) to cope with drift in radio mic. 70-90 Mc/s. 10 valves; RF-FC-IF-IF-LIM-DIS-AFC-AF-OP-RECT. AC mains. Production run: 39

**S.890/1** as above but 100-120Mc/s. Production run: 12

Both the above are extremely rare.

**EDDYSTONE Type S.930-Series.** Very similar to the S.890 (above), used for radio-microphones and intelligence-gathering (bugging).



**Eddystone Type S.930**

Available in many frequency ranges; the following are known:

930 70-90Mc/s;	~1 100-120Mc/s;
~2 85-102Mc/s;	~3 110-130Mc/s;
~4 as 930;	~5 as ~1;
~6 27-28Mc/s;	~7 90-110Mc/s;
~8 80-96Mc/s;	~10 60-76Mc/s;
~11 80-100Mc/s;	~12 45-55Mc/s.

It is recorded that by February 1958 a total of 100 models of all varieties had been produced. (No individual records) All extremely rare. Most production for Military Intelligence. ♣



**Eddystone Type S.901**

**EDDYSTONE TYPE S.901 1958** Radiosonde AM receiver; single band 27-28.8Mc/s. For receiving signals from high-altitude meteorological radiosonde balloons. AC mains; six valves: RF-FC-IF-DET-OP-RECT. Did not proceed past the prototype stage. ♣

**END OF EDDYSTONE  
'SMALL VALVE RECEIVERS'**

**EDDYSTONE Type S.909, 1958,** marine communications receiver. Designed for the Swedish Merchant Marine. Two band (1.6-4.7Mc/s) plus fixed switched crystal controlled channel on maritime distress frequency of 2182kc/s. AC/DC 110-250v. AM and MCW only. Single conversion superhet with switchable crystal gate (IF-465kc/s, bandwidth 10kc/s or 5kc/s at 20dB down). 7valves plus metal rectifier. 1 RF; 2 IF. Built-in speaker. Production run: 100.



**Eddystone S.909-Series**

**EDDYSTONE Type S.909A (1959-63):**  
As above but with optional external HT/LT source connectors. Production run 225.

**EDDYSTONE Type S.909A/1 (1959):**  
As above but no internal power supply. Production run: 25

**EDDYSTONE Type S.909A/2 (1963):**  
As above but with transistorised 24-volt power unit built-in. Production run 50.

**EDDYSTONE Type S.909A/3 (1966):**  
As Type S.909A/2 but in new style cabinet, like Type S.670C (*ibid.*) Production run: 50. All above are very rare in UK. ♠

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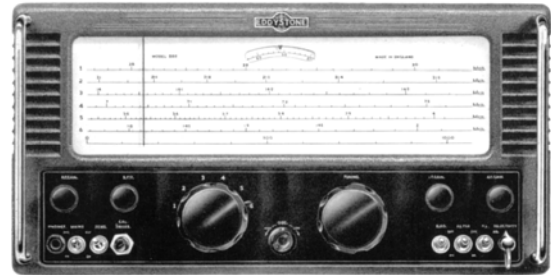
**EDDYSTONE TYPE S.910, 1957,**  
communications receiver. No details other than the factory blueprint (BP) register, which lists the model. It does not seem to have passed the prototype stage but was undoubtedly the forerunner of the 910/1. A very blurred photograph of it shows it to have 5 wavebands. This was used (presumably in error) in an American Marconi advert for the HR101 in 1962 (see below).

**EDDYSTONE TYPE S.910/1, c.1961/2**  
marine communications Rx. I believe this set to have been sold only badged as the Marconi HR101. Double superhet with interpolation tuning of first IF stage. Very similar in operation to the 830-series (*ibid.*) but in general appearance much like the 730-series (*ibid.*) No picture is to hand. 16 valves, 6 bands; coverage 1.5-30Mc/s and 375-525kc/s. First IF 1350-1450kc/s; second IF 85 kc/s. Production run 200. Very rare ♠

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**EDDYSTONE Type S.888. 1956-7.**  
Amateur bands only communications receiver. AM/CW. Double superhet based on S.750 (*ibid.*). 11 valves, AC mains, 160-80-40-20-15-10 metre bands. AM/CW. 1RF; 2 FC (first IF 1620kc/s), 1 IF (85kc/s); variable bandwidth, audio

CW filter, xtal calibrator. Price £100. Production run: not stated but included in the numbers given for 888A (see below). Uncommon.



**Eddystone Type S.888**

**EDDYSTONE Type S.888A. 1957-61**  
As above, but includes product detector for SSB (12 valves – some of which are different from the S.888 but do the same job!) Price £110; production run 550 (this includes the S.888 above). Medium rare. NB: Many Models S.888A have been found to have dial plates bearing the Type No S.888. Always check the serial plate to be sure. ♠

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**EDDYSTONE TYPE S.850/2, c.1961/2**  
VLF/LF communication receiver used for maritime and submarine communications and surveillance.



**Eddystone Type S.850/2**

11 valves; 6 wavebands, 10kc/s-600kc/s. AM/CW. AC mains. 1 RF-FC-2 IF (720 kc/s)-AM Det-CW Det-NL-BFO-AF-OP. Variable bandwidth, 2 xtal gates, S-meter. CW audio filter. Production run: 100. Very rare.

**EDDYSTONE Type S.850/4, 1965/72.** Same as above but in new style case and with crystal control on eight spot frequencies. Production run: 200. Price (1972) £312. Very rare.



**Eddystone Type S.850/4**

**EDDYSTONE Type S.880, 1959-61.** High stability communication receiver. AC mains; 0.5-30.5Mc/s in 30 switched ranges. Double-conversion superhet with crystal controlled first LO and tunable first IF. Second IF 500kc/s. Permeability variable tuning.



**Eddystone Type S.880**

AM/CW/SSB. 21 valves plus 4 silicon diode HT rectifiers. Variable bandwidth plus crystal gate. Crystal calibrator. Every facility. Resetting accuracy within 1,000 cycles at all frequencies. Production run not revealed. Specially developed for government intelligence agencies for radiation from oscillators to be undetectable outside the room of operation. Weight 95 lbs. Price £350. Rare

**EDDYSTONE Type S.880/2.** 1962/5 New version of above with some circuit

changes but same general setup. 23 valves plus diode HT rectifiers. New case. Wt 99 lbs. Production run 600. Medium rare.



**Eddystone Type S.880/2**

**EDDYSTONE type S.880/3; 1964/67,** as above but badged as Marconi H2301 and with crystal controlled SSB BFO oscillator. Production run; 300. Rare

**EDDYSTONE Type S.880/4,** 1966. GCHG version of S.880/2. Production run; 25. Very rare. ♠

**EDDYSTONE S.830-Series 1962-73.** A large family of successful HF/MF general coverage double superhets with tunable first and second local oscillators. First IF 1,250-1,450kHz. Second IF 100kHz. AM/CW/SSB. Resettable to within 1 kHz on all frequencies without external calibrator. Every refinement (the jewel in the crown!) AC mains; 15 valves, 4 diodes, 9 bands, 300kHz -- 30MHz (Except for the 830/4 – Canadian\* model 120-560kHz and 1.5-30MHz). The last valve set to be manufactured (21<sup>st</sup> January 1973); price range £275-£442.



**Eddystone S.830 Series**

Production runs: -  
830 – 200 (1962)  
830/2 – 200 (1963);  
830/4 – 415 (1965-7) (Canadian\* model  
830/5 -- see above)  
830/6 – 3 (1966);  
830/7 – 950 (up to the end of 1967)  
830/8 – Diplomatic Wireless Service  
830/9 – 67 (1965/6) (synthesised osc.)  
830/10 – Canadian\*  
830/11 – badged as STC.  
830/12 – badged as Hagenuk  
(Germany) quantity not known;  
wavebands as 830/4.

The model 830/7 is common in the UK, the rest are rare or very rare. The 830/4 is regularly reported in North America. ♠

**EDDYSTONE Type S.950**, dated 8/8/74 in the Blue Print (BP) Register but this is an anachronism! A crystal controlled single conversion single channel 9-valve superhet receiver for AM signals in the VHF band 110-130MHz. Intended for Air Traffic Control use it was produced seven years after the first appearance of the S.990R (*ibid.*) transistorised VHF receiver. It is just possible that it was produced to fill a Ministry requirement for an atom-proof receiver. Cascode RF-FC-3 x IF (10.7MHz crystal filter) – germanium det – amplified AGC – line monitor and OP. Rack mounting panel 3½ ins deep; AC mains, remote control.

Six examples were produced and sent to Belfast for evaluation. They were never heard of again. Keep watching! 0

**EDDYSTONE Type EA12, 1964-69.** Amateur bands only communications receiver based on the 830 series but with crystal controlled first oscillator and tunable second. (1<sup>st</sup> IF = 1.1-1.7MHz). Nine bands each of 600kHz (160-80-40-20-15-4 x 10metres).

AC mains; 13 valves, silicon diode HT rectifiers; large S-meter; slot filter; crystal filter; audio CW filter; variable



**Eddystone Type EA12**

selectivity; AM/CW/SSB, cascode front end; 2 RF, 2 IF (100kHz). Internal speaker; very deluxe. Price £178. Production run: 350 up to Dec 1967 (it continued for a further two years). A little scarce due to steady demand, but all that were made are in private hands!

♠

**EDDYSTONE Type 940. 1962/70.** General coverage HF/MF communications receiver. AC mains. 13 valves. 5 bands, 480kHz – 30MHz. Cascode front end, 2 RF, 2 IF (450kHz); crystal filter, S-meter, variable selectivity. Price £106 (1962) - £153 (1969). Production run by Dec 1967: 1,500 (continued in production for another 3 years). Common.



**Eddystone Type S.940**

(This set was developed in a short time to fill a gap in the market between the Type 840C (c.£50) and the Type 830 (c.£300). It became very popular worldwide with well-heeled SWLs)

**EDDYSTONE Type 940 variants:** there is an ongoing debate about other

version of the 940. Such as 940HF (?); 940/1 (with xtal channels); 940/2 (fighting vehicle version); 940/3 (H.M. Coastguard version). All I can say is that the Eddystone factory Blue Print (BP) Register has an entry dated 23/10/62 (BP 1035) described as "Crystal control for '940'; theoretical circuit mods [see BP 1131]". BP1131 is dated 16/6/64 and is described as "Calibrator Unit – LP2806 Circuit diagram." Nothing very exciting there.

The factory production run list has only one entry (apart from the one listed above). It is: - "940/2, as 940 with 50Ω and 600Ω (outputs) and NO mains transformer or HT components. QTY 6 date 2/69." This equates reasonably with the 'fighting vehicle' requirement and is confirmed by Bill Cooke (who designed it) and told me a small quantity was ordered by the Ministry of Defence for evaluation, but nothing came of it.

I think it is safe to say, that as with ANY model of an Eddystone receiver, oddballs are bound to turn up from time to time which are quite outside the normal production runs. ♠

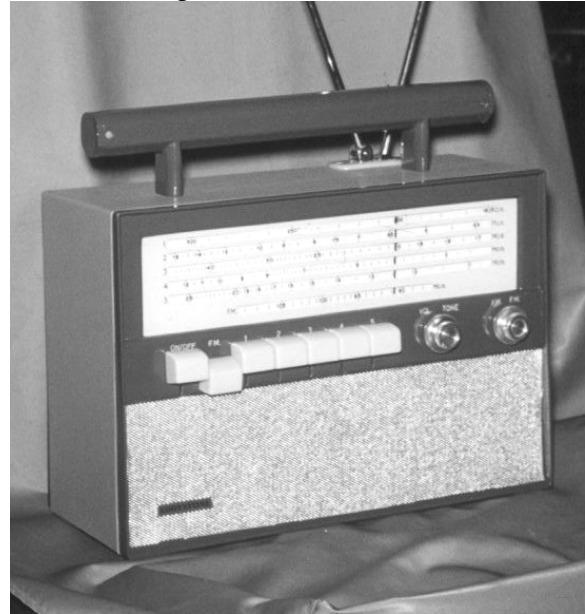
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**STRATTON PORTABLE,** All-band transistor radio of 1961. Strictly speaking this was not an "Eddystone", but as it was developed in Stratton's Eddystone laboratory it is worthy of a mention.

The Laughton family, owners of Stratton and its Eddystone Radio division before the sale to Marconi in 1965, had family connections with the John Myers mail order company.

Transistor radios were new and it was thought that an opening might exist. The radio covered Long, Medium and Short waves up to 30MHz as well as VHF/FM. It was built into a diecast box with ferrite rod aerial in a plastic handle and rabbits' ears for HF/VHF.

Needless to say, the build quality was far too good for the cut-throat



**Stratton Portable 1961**

competition of the mail-order market. Three sets were constructed. They were raffled off amongst those involved with the development. You never know; one day . . . But it gave Eddystone's their first experience of solid state design. ♠

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**EDDYSTONE Type S.960, 1962.** The company's first solid state general coverage communications receiver. Virtually a model S.940 (*ibid.*) with transistors in place of valves. Six switched ranges; 500kc/s to 30Mc/s. Internal 12 volt battery and internal speaker.



**Eddystone S.960**

Twelve transistors and seven diodes. One RF stage, three IFs (465kc/s, bandpass xtal filter). The performance was inferior to its parent S.940 and after two years' production it was dropped. By this time the EC10 (*ibid.*) had entered production and overtaken it. Production run: 150. Price c.£150. Very rare. ♣

### THE COMPACT TRANSISTOR EDDYSTONES

After the false start (but invaluable experience) with the above two models Eddystone launched into their most successful-ever sets (in terms of sales), the EC10-series.

They continued the style of the valved 'slide rule' receivers but only 12 inches wide, with built-in 9-volt battery pack (optional mains PSU available) and speaker. They were an instant success, being very 'dinky' and attractive. The performance was not up to that of the valved sets but they received rave notices in the radio press. The early germanium transistors depreciate in performance after the 30 or 40 years which have now passed and this has given them a worse reputation than they deserve. They DO need to be considered in this context, but are still perfectly good for AM broadcast Dxing.

**EDDYSTONE Type EC10, 1963/69.** General coverage communications receiver. AM/CW. Battery pack or optional AC power supply.



**Eddystone Type EC10**

Ten transistors. Five bands: 550kc/s-30Mc/s. BFO, CW audio filter, speaker, (IF = 465kc/s). £53. Production run: 6,020. Common.

**EDDYSTONE Type EC10 Mk II, 1967/77.** As above plus S-meter, RIT (fine tuning knob) and standby switch. Production run not listed, but known to have reached 100 a week for long periods; say 10,000. Common.



**Eddystone Type EC10 Mk II**

**EDDYSTONE Type EC10A2-series; (previously known as Type EC10A/2).** A series of marine receivers based on the EC10 but with the following differences: 13 transistors; 5 bands: 300-550kc/s; 1.5-30Mc/s, plus a fixed crystal-controlled 2182 kc/s call and distress channel. IF = 720kc/s. 12 or 24 volt operation. 600Ω output.



**Eddystone Type EC10A2/1**

Three versions were available: EC10A2/1, bench mounting; EC10A2/2, 19" rack mounting with forward-facing speaker. EC10A2/3, 19" rack mounting

with extra speaker for ship's intercom. 1966-77. All very rare.



**Eddystone Type EC10A2/3**

**EDDYSTONE Type EB35, 1965/70.** Broadcast general coverage AM/FM. Battery pack or optional AC mains power supply. 13 transistors, 6 bands: 150-350kc/s, 550kc/s – 22mc/s, 88-108Mc/s. (IFs 465 & 10.7), speaker. Later models had extra FM IF stage (making 14 transistors). Very fashionable in the 'Swinging Sixties': H.R.H The Prince of Wales had one fitted in his car by Webb's Radio (Stratton's retail outlet). Production run 2,100 by January 1967. Price £55. Fairly common.

**EDDYSTONE Type EB35A.** As EB35 but VHF band is 155-175Mc/s marine inshore Narrow Band FM (NBFM). Very rare.



**Eddystone EB35**

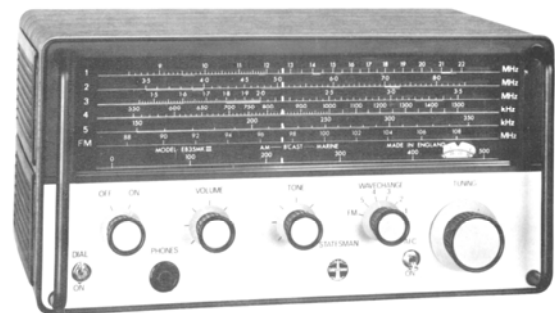
**EDDYSTONE EB35 Mk II, 1970.** Broadcast AM/FM, same as later model EB35 but re-styled case. NATO Stock Number 5820-99-523-7337 Fairly common.



**Eddystone Type EB35 Mk II & II/S**

**EDDYSTONE Type EB35 Mk II/S, 1970** As Mk II but with FM stereo decoder for feeding HiFi amplifier. 20 transistors. Rare.

**EDDYSTONE Type EB35 MK III "Statesman" 1976/80.** AM/FM broadcast set. Same general spec as EB35 but completely new circuit using silicon transistors, FETs and ICs. Switchable Automatic Frequency Control (AFC). Rare.



**Eddystone Type EB35 Mk III**

**EDDYSTONE Type EB36, 1966/69.** Broadcast receiver, 9 transistors; as EB35 but without VHF/FM band. Price £54 5s 7d. Rare.

**EDDYSTONE Type EB36A, 1969.** Special version of EB36 intended for professional monitoring purposes primarily in world-wide news collection agencies. (Press news broadcast monitors).



**Eddystone type EB36**

**EB36A continued;** Narrow IF bandwidth with piezo-electric ceramic filter. 600Ω line output. Supplied with AC power unit with the option of 12 or 24 volt units or battery-pack. Very rare.

**EDDYSTONE Type EB36 Mk II 1970.** As EB36 but new case and circuit. Very rare.

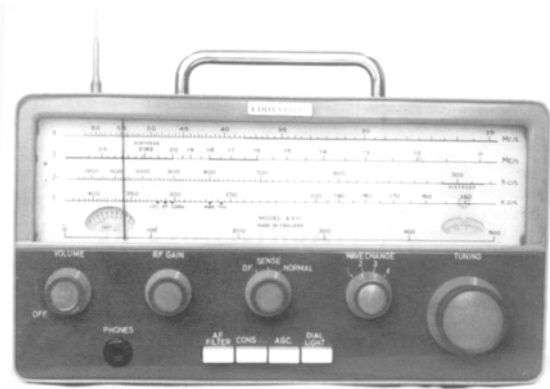


**EDDYSTONE Type EB37, 1971/2.** As EB36. Marketed for ships' cabin use and as a short wave tuner for HiFi setups (becoming fashionable round about this time.) Price £97. Rare,



**Eddystone Type EB37**

**EDDYSTONE Type EY11, c. 1968** Yachtsman's navigational receiver. This set is a bit of an enigma, because it was originally thought that it never proceeded beyond the prototype stage, but then one appeared at a rally!



**Eddystone Type EY11 – prototype**

The early model (above) was, incredibly, an inch narrower than the rest of the “small solid-staters”. Its frequency coverage is 150kc/s – 6Mc/s in 4 bands, with facility for Consol navigation (a form of MF hyperbolic global positioning using a stopwatch and counting the pips). It also had DF loop facilities.



**Eddystone EY11 – later version**

The ‘rally’ version is much more akin to the EC10 Mk II and has the look of a production model, but it has no serial plate. Facilities are similar but the frequency coverage is 150-550kc/s and 1.5-18mc/s in five bands. Probably unique (until . . . )



**All these “small transistors” are fitted with the same ‘slab’ battery pack which takes 6 x D cells (large; we used to call them HP2). The optional AC psu replaced this. It was the S.924, a simple zenner regulated unit with positive earth. NB The EB35 Mk III has negative earth and uses the S.924A psu. Both these units are rare. ♣**

Two unusual Eddystone 'radios' are the Noise Measuring sets made to MPT and Home Office designs and marketed under licence from the Post Office.

**EDDYSTONE Noise Measuring Set No 31A.** 1971. Solid state VHF portable interference tracer and measurer.



### **Noise Measuring Set 31A**

Consider it to be a combination of receiver, 1dB step attenuator (110dB range) and high accuracy RF Voltmeter. Coverage 31-250MHz in three ranges (using 3 tuners). Internal rechargeable batteries & charger. Price (1972) £660. Medium rare. ♠

**EDDYSTONE Noise Measuring Set No 40A c.1975.** Solid state HF portable noise tracer and measurer.



### **Noise Measuring Set 40A**

Generally similar to the 31A (above) in principal but covering the frequency range 130kHz to 33MHz. Rare. ♠

## **A PAUSE FOR THOUGHT.**

Although the sequence of descriptions is by no means in strict date order it does follow the years to a degree. I think we have reached a point where a review of events is appropriate.

The change from thermionics to solid state took place over a decade (1962-73). During this period both valve techniques as well as transistor practice advanced with haste. In 1965 the parent company Stratton, itself owned by the Laughton family, sold the Eddystone part of the business to Marconi, itself part of English Electric, soon to be acquired by GEC.

The most immediate effect was a review of the business side of things, culminating in a general 20% rise in prices! Apart from a new Logo there was very little obvious change in outlook except for the closure of the famous Webb's Radio, wholly owned by Stratton and not wanted by Marconi. Messrs Imhof of Oxford Street, were appointed the main London retail outlet.

By the early '70s competition from the Far East was looming and the decision was made to withdraw from the 'High Street' market and concentrate on purely professional equipment.

This, again, was not an overnight change. The EB35 Mk III was still in the 1980 catalogue. So was the EC958/12, 75-transistor, 70-IC Independent Side-band supermodel in the £ thousands plus price range.

In the 1971 catalogue the 830 valve series was next to the 1830 transistorised replacement, of virtually identical (but slightly better!) performance.

As the 'seventies progressed through to the 'eighties Britain (and much of the rest of the world) was plagued with inflation, the like of which had never been experienced within these shores. This was reflected in the price of

Eddystone radios and prices of sets with long production runs were seen to rise as never before. For instance, the EC958 started at around £750 in 1969 and by the end of its run in 1980 was over £3,000. An optional bench cabinet costing £18 in 1972 had reached £60 by 1981. The S.990R VHF receiver checked in at £325 in 1969, reaching £1700 by 1980. Prices, therefore, cease to have much relevant value unless they are compared year for year.

Also the availability of 'recent' sets is a questionable matter. Although some sets are disposed of through trade auctions I hear that more and more are being consigned to the skip as HF radio stations (e.g. former Post Office coastal stations) are being dismantled.

We continue with our description of Eddystone receivers, having covered the last valve and simple solid state sets and move into complex sets intended only for the professional. Having said that, some *were* sold to well-heeled SWLs and amateurs. ♠

**EDDYSTONE Model S.990R** VHF communications receiver, 1967-1981. This, the first transistorised VHF set was an instant success and had a long life.



**Eddystone Model S.990R (early)**

Single superhet; 38 transistors; IF 10.7MHz. AM/CW/FM; frequency range 27-240MHz in four bands. AC mains or 12 V.DC. Provision for 8 fixed crystal controlled channels. Crystal calibrator and scale adjuster.

Speaker, tuning meter, IF selectivity

30kHz and 200Khz as standard, others to order. Civil Aviation Authority No 10D/CA/5967, NATO Number 5820/99/199/2527. Used for Air Traffic Control, Coastguards, etc.



**Eddystone Model S.990R (later version)**

Variants are 990R/1 and 990R/2, very minor changes. Price in 1969 £325. (1972) £466. (1980) £1,700. Fairly common.

**EDDYSTONE Model S.990S.** UHF communications receiver, 1968-78. First UHF transistorised receiver, 42 transistors, frequency coverage 230-870MHz in two bands. AC mains or 12Vdc. Tuning meter; loud speaker. Crystal calibrator and scale adjuster. I.F. 36.5MHz. bandwidths 1MHz on FM; 1MHz or 6MHz on AM. NATO Number: 5820/99/199/2528. Medium rare. Price (1972) £466

**VARIANT S.990T** for television monitoring. (very rare)



**Eddystone Model S.990S and S.990T**

**EDDYSTONE Model EC958 series.** A very large and successful range. The EC958 was the company's first high stability solid state receiver and was by far the most complicated set undertaken by that time (late '60s). It was designed

by Don Ford, a brilliant Stratton engineer who sadly died young.

The mechanical tuning system was more complicated than a clock and had over 100 parts. All models had a fully-tuned front end turret with interpolation frequency setting (i.e. two knobs, one for coarse, the other for fine). It could be re-set within a few Hz then locked. A triple superhet, it covered 10 kHz – 30MHz in 10 bands. It is considered by some aficionados to be the finest set the company ever built.



**Eddystone Model EC958 rack mounting**

The various models ran from 1969 to 1984. During this period the prices started at £750 and finished at around £6000 (EC958/12). It was an era of high inflation. Specific models may be rare, but a little patience will locate one version or another.

**EC958** The basic model of 1969-73: 41 transistors; 46 diodes and 12 ICs. The frequency display was optical back-projection (reminiscent of the Murphy A-104 of 1946). Early models had the wrap-around desk-cabinet like the one shown on the early 990R (*ibid.*), but later ones were rack-mount with optional desk cabinet (as shown). Price (1972) £1.137 (plus VAT).

**EC958/1** As 958 but with special SSB filter.

**EC958/2** As 958 but with special CW filter.

**EC958/3** As 958 but with specifications for the Canadian government.

**EC958/4** As 958 with military specification.

**EC958/5** Marine version badged as Marconi 'Nebula'.

**EC958/D** was badged as Debeg (Germany).

**EC958/H** was badged as Hagenuk (Germany).



**Eddystone Model EC958/7E**

**EDDYSTONE Model EC958/7E** New version, 1973-83, with digital kHz readout (readout to 1Hz with accuracy of >4Hz). 48 transistors, 53 diodes and 42 ICs. Also badged as the Marconi H2311.

**EC958/12** As EC958/7E but with added independent sideband facility. 1974-84. 75 transistors; 99 diodes and 70 ICs . . .



**Eddystone Model EC958/12**

No doubt there will be other models, but they will all be versions of the main three pictured here. ♠

**EDDYSTONE Model 1830-series.** 1971/7 General purpose HF/MF solid-state replacement for the valved 830-series (*ibid.*)

A medium-cost range of high-grade receivers for general applications in the

band 120 kHz to 31MHz. All versions (at least 8) are based on the 1830/1 (below) which was UK MPT-approved as a reserve receiver for CW, MCW & AM for maritime installation. AC mains or 12 or 24 volt DC. Analogue dial (rotating drum). 10 crystal positions above 1.5 MHz (some models were available with 50 crystal channels). 1971-74, £566-£644 plus case. Medium rare.



**Eddystone Model 1830/1 on optional speaker plinth.**

**EDDYSTONE Model EC964-series.** 1971>. A range of high performance AM/SSB crystal controlled communications receivers, intended for use by unskilled operators. All are powered by AC mains or 12/24V DC via external converter.



**Eddystone Model EC964/1**

The EC964/1 has 28 channels in band 1.6-4.5MHz, plus 24 channels in marine allocations 4.0-27.5MHz. (Ch 1 set to 2182kHz). Price (1972) £857

The EC964/3 has 28 channels in band 1.6-4.5MHz (Ch 1 set to 2182kHz).

The EC964/4 has 12 channels in band 1.6-30MHz and will also work off 24V

DC direct.

**The EC964/7** (c.1980) is a single channel low cost SSB receiver intended for fixed frequency terminals. Crystal controlled on any on specified channel in the range 1.6-27.5MHz. Also available on any spot frequency 400-535kHz. Price (1972) c.£400; price (c.1980) c.£1k



**Eddystone Model EC964/7**

**EDDYSTONE Model 1670** (c.1980) A thirty-channel synthesised marine receiver covering the range 1.6-4.2MHz, in addition to 2182kHz. Dual conversion with first IF of 1400kHz and second IF 100 kHz. AC mains supply. Reception mode to order. (USB-LSB)



**Eddystone Model 1670**

**EDDYSTONE Model 1000-series.** A family of low-cost general coverage receivers, all single conversion, analogue scale (rotating), tuning meter, AC mains, 12v internal Deac battery (NiCad) with charger.

**Model 1000:** 1971-74, AM/CW/SSB; coverage 550 kHz to 30MHz. S-meter, twin mini-speakers. 12 transistors, 2 ICs, 22 diodes. (Looks the same as 1001 – below – but without xtal selector switch beneath tuning meter). Price (1972) £234.



**Eddystone Model 1001**

**EDDYSTONE model 1001.** 1972-4. Exactly as Model 1000 but with the addition of ten crystal-controlled spot frequencies in the bands 1.6-30MHz. 14 transistors, 2 ICs, 22 diodes. (Power source as 1002). Price (1972) £256.

**EDDYSTONE Model 1002.** 1972-7. Professional-grade broadcast receiver with provision for stereo FM reception in the VHF band 88-108MHz and AM in the bands 150-350kHz and 550kHz – 30 MHz. Single conversion, IF 465kHz. and 10.7MHz. Tuning meter, AC mains plus charger for internal NiCad. Or 12V DC external source. 18 transistors, 4 ICs, 23 diodes. Used by HM Forces as 'comforts' set. Price (1972) £273.



**Eddystone Model 1002**

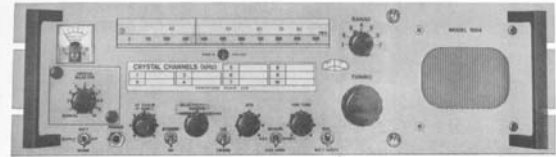
**EDDYSTONE Model 1004** 1972-81. Marine approved reserve receiver; rack mounting, large single speaker, CW/AM/SSB. Seven ranges covering 150-535kHz and 1.6-30MHz.

Integral pre-tuned crystal controlled converter to provide instant selection of 2182kHz International Distress and calling channel for emergency watchkeeping at sea.

Ten crystal controlled channels. Single

conversion; IF 720kHz with selectable bandwidths. Variable BFO and tuning meter. Power sources as 1002. Price in 1972: £312

The 1004 was also badged for Redifon, ITT, Hagenuk and Marconi (Sentinel), with or without the ten crystal channels.



**Eddystone Model 1004**

**EDDYSTONE Model 1630/1.** 1981.

"Watchkeeper". One of the company's more curious sets was this single channel marine radio. Designed specifically for maritime use as a Radio-Telephone Distress Frequency Watch Receiver covering the frequency 2128kHz, in compliance with TSC267 and also MPT1204/1 (Climatic and durability Testing of Marine Radio Equipment). Modes of reception are A", A2H, A3 and A3H. Power supply AC mains or 24 V DC. Bulkhead fitting, about 10" wide by 6" high.



**"The Watchkeeper"**

**Eddystone Marine Model 1630/1**

**EDDYSTONE Model 1635** 1983; single channel (2182kHz) Another watchkeeping receiver. The use of digital integrated circuitry provides the logic to interrogate all received signals and to automatically operate the Mute

when an alarm signal is received.  
Power supply AC mains or 12-32V DC.



**Eddystone Marine Model 1635**

**EDDYSTONE Model 1570.** c.1980. A low-cost general purpose AM/FM-CW/SSB receiver. Model variants covered the requirements of both professional and semi-professional users.



**Eddystone 1570 – early model**

Digital frequency scale; coverage 150-350kHz, 580kHz – 30MHz, 88-108MHz FM. S-meter, Speaker, product detector. AC mains, 12V DC, optional internal rechargeable sealed lead-acid battery. Telescopic whip aerial. 17" wide. Price £600 in 1981



**Eddystone 1570 – later model**

**EDDYSTONE Model 1590.** C.1980 Similar to 1570 but without the FM band and with 19" rack-mount panel. Provision for 12 crystal positions for super-high stability operation.



**Eddystone Model 1590**

**EDDYSTONE Model 1837-series.** 1977-83. A large family of general purpose and maritime High Stability double conversion receivers. Frequency coverage 100kHz-31MHz in 9 bands. Power supply; AC mains or 12/24V DC with inverter. Many minor variations in facility but all cover AM/CW/SSB and have six-digit electronic display and tuning meter. Variable IF bandwidth. Rack-mounting (cabinet option). 1837/1S is badged as the Marconi Pacific. Prices (1980) in the £2.5k region. Medium rare.



**Model 1837/1 (in desk cabinet)**



**Model 1837/3 (in desk cabinet)**

**EDDYSTONE Model 1838-series.** 1976-84. A family of high stability HF receivers intended for maritime telephony applications in the range 1.6-

31MHz. Very closely related to the 1837 (above). Variations of mode coverage: 1838/1 – AM & USB; 1838/2 – AM, CW & USB (LSB on CW); 1838/3 – AM, CW & USB (LSB on CW) on a frequency coverage of 100kHz to 31MHz. Appearance is the same as the 1837 series (above). Price range (1972) c.£600, (1980) c.£2k. Medium rare. ♠

**EDDYSTONE 1990-series. 1975/84**

A series of professional-grade general purpose VHF/UHF communications and laboratory receivers (all look-alike).



**Eddystone model 1990R/2-X**

**EDDYSTONE Model 1990R/1-X.**

1975/84. 25-235MHz, variable tuning with 36" metal 'film scale' roll, plus ten crystal channels. Speaker, tuning meter, calibrator and scale adjuster. Wide/narrow IF. AM/CW/FM/Pulse. Rack-mounting, optional desk cabinet. AC mains or 12V DC. Price (c.1982) £3614.

**1990R/1-S.** As above except Marconi Synchroniser fitted in lieu of crystal selector, allowing continuous selection of one channel in increments of 100Hz. 1975-84. Price (c.1982) £5855.



**Eddystone Model 1990R/2-S (in desk cabinet)**

**1990R/2-X.** As 1990R/1-X except frequency coverage is 25-500MHz. 1975/79.

**1990R/2-S.** As 1990R/1-S except

frequency coverage is 25-500MHz 1975/79.

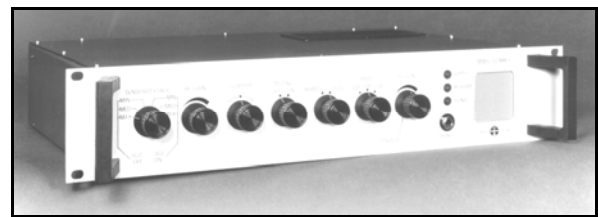
**1990R/3-X** As 1990R/2-X , 1975/84 Price (c.1982) £4223.

**1990R/3-S.** As 1990R/2-S, 1975/84. Price (c.1982) £5855.

**1990S.** 440-1000MHz, continuously tuned, with Marconi Synchroniser fitted. AM/FM/Pulse. 1978/84. Price (c.1982) £5961. ♠

**EDDYSTONE EC1680-series (1982).**

A look-alike family of low-cost compact marine receivers. Single conversion superhets (IF=1400 kHz) with power requirements to suit customer. Standard set is AC mains or 24V DC.



**Eddystone Marine Model EC1680/3**

**EC1680/1** Single channel at 500kHz. Alternative frequency in the range 400-535kHz could be provided to customer requirements. Modes CW/MCW.

**EC1680/2** Seven channels between 400-535kHz. Modes CW/MCW/FSK.

**EC1680/3** Single channel in the range 1.6-30MHz. Modes: AM/USB (LSB, CW or FSK to order).

**EC1680/4** Two channels in the range 1.6-30MHz. Modes AM/USB (LSB, CW or FSK to order). c.1980 ♠



**Eddystone Marine Model 2004 (1984)**

Tunes 400-535kHz, IF 262kHz. Modes CW/MCW. AC 110-250V or 24V DC ♠

**EDDYSTONE Model 1964.** 10 channel compact low-cost marine receiver of great versatility. Many versions offering a mix of channels and modes from MF to 27.5MHz. (1981)



**Eddystone Marine Model 1964**

**EDDYSTONE Model 1650-series.** The company's first microprocessor-controlled general coverage communications receiver. Introduced in 1984 and having many variants, all look-alike.



**Eddystone model 1650-series**

Sealed membrane front panel. Frequency coverage 10kHz to 30MHz in 5Hz steps. 99-channel memory, any number scannable. Keyboard entry or knob tuning. Any segment of spectrum sweepable. Built-in motor-tuned pre-selector option. Double conversion: first IF 46.205MHz, second IF 1.4MHz. AC mains or 24V DC. Prices c.£3.5k.

**Model 1650/1** AM, CW, USB.

**Model 1650/2** AM, CW, USB, LSB

**Model 1650/3** AM, CW, USB, LSB, ISB

**Model 1650/6** Special GCHQ remote control/direct entry model, (no tuning knob), limited facilities. (1988)

**Model 1650/8** VLF model 10 kHz to 160 Khz; built in test equipment (BITE). (1988-2001). Submarine communications.

**Model 1650/9** AM, USB, LSB, CW, NBFM or FSK option. (1990-95)

**Model 1650/9H** High performance version. (1990-95)

**Model 1650/10** (1989) Independent Sideband (ISB) receiver. AM, USB, LSB, CW, ISB.



**Eddystone Model 1650/10 ISB**

**EDDYSTONE Model 1995.** The company's first microprocessor-controlled VHF/UHF communication receiver. Suitable for surveillance, monitoring, re-broadcasting, point-to-point and laboratory use. (1984).



**Eddystone Model 1995 VHF/UHF**

Double conversion; first IF 515MHz, second IF 10.7MHz. modes: AM, FM, USB, LSB, CW, FSK, TELEX, PULSE. Choice of 7 IF bandwidths. Frequency: -

**1995/1** 20MHz to 470MHz

**1995/2** 20 MHz to 1100MHz ♠

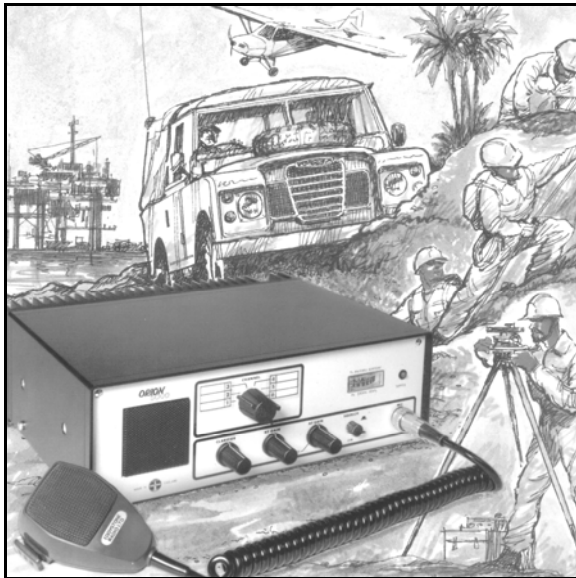
**EDDYSTONE Model 1810** VHF tactical military receiver. (1990) 20 to 88MHz. Modes: NBFM (AM option). 11-16v DC. 99 channel memory, scanning facility. ♠



**Eddystone Model 1810**

## EDDYSTONE “ORION” SSB HF TRANSCEIVERS

A range of mobile “go anywhere” HF radio-telephones introduced in 1984. Intended for use in areas of poor infrastructure. Also adaptable as base stations. Built-in speaker. Tuning meter. Power output of all models on SSB = p.e.p. 150 watts. (*Not a great commercial success . . .*)



**“Orion 5000” mobile TxRx**

**“ORION” Model 5000.** Eight-channels; frequency coverage 2 to 16MHz. Power supply 13.8V DC. USB standard, LSB optional. Base station has built-in AC mains psu.



**“Orion 5000” base station**

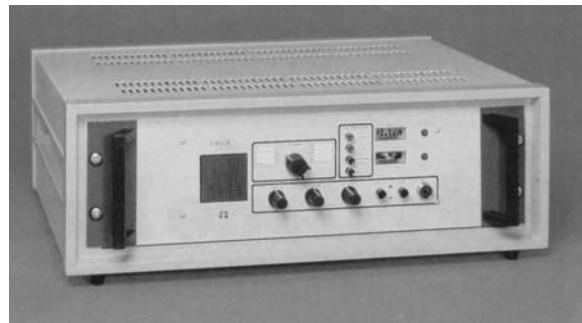
**“ORION” Model 5500.** Six-channel ruggedised military transceiver. Frequency range 2-16MHz. Power supply 13.8V DC. Consumption: receive

mode 100/300mA; transmit: 12A for average voice.



**“Orion 5500” military RxTx**

**“ORION” Model 5600 Base Station.** (1991) Intended for use with a comprehensive range of ancillary units to provide Telex and Voice facilities. Modes: USB standard (LSB option), FSK +/- 85 Hz at 50, 75 or 100 Bauds. With modem additional facilities are ARQ, FEC and SELFEC. Power output on FSK; 60 watts.



**“Orion 5600/3” base station**

**“ORION” Model 5700 Marine Transceiver.** (1988).



Intended for marine or base use by Patrol Craft, Fishing Boats, Rescue launches, Supply vessels, Customs

craft or any marine authority requiring reliable medium to long range communications. Coverage 1.6-16MHz; 6 channels. A radio-telephone alarm generator is provided on the 2182kHz distress frequency. USB standard, LSB optional. Power requirement: 13.6V DC. (24 V DC, also AC mains, as an option).



**“ORION” Model 5600 Compact FSK/Voice System.** (1989).

Operating on 8 channels over 2-16MHz a heavy duty AC power supply permits continuous FSK operation with standby DC supply.

The modem allows interfacing with a wide variety of teleprinters. Intended for use by Police, Government departments, Survey teams, Relief organisations, engineering contractors, shipping companies and any group requiring reliable long-distance communication.



**“ORION” Model 7000.** (1996-2002)

Frequency range 1.6-30MHz transmit, 10kHz – 30MHz receive. Power output 100 watts all modes. (USB, LSB, CW, AM). Digital display, 10Hz frequency

resolution. Digital baseband signal processing and speech compression. Features BITE (Built In Test Equipment) for rapid fault identification. Supply 13.6V DC. AC power pack option.

The “Orion 7000” was the last Eddystone transceiver to be manufactured in Birmingham.

Price c. £1.3k



**EDDYSTONE Model 6100 VLF/HF Channelised Receiver** (1997)

Frequency coverage 1600kHz to 30MHz standard with 10Hz resolution. 10kHz to 30MHz /F option. Local keypad entry or remote control.

Modes: AM, USB, LSB, CW, ISB (/3 variant), FSK (/K variant). Dual conversion, first IF 45MHz, second IF 1.4MHz. 99 channel storage, automatic scanning. Built In Test Equipment (BITE). Rack mounted (optional desk cabinet).

The memory has an integral lithium battery which retains all information for a total period of approximately ten years with power removed.



**EDDYSTONE Model 6200 VLF/HF Receiver.** (1994-2002)

Virtually the same as the model 6100 (above) but with frequency selection also by spin knob in 10Hz increments. Price c.£2.5k. This was the last Eddystone receiver manufactured in Birmingham.



## PANORAMIC DISPLAY UNITS

Panoramic display units are specialised oscilloscopes intended to be used with certain Eddystone receivers (*and some others*) to examine the signals present within the bandwidth of the set's intermediate frequency and hence to analyse the sideband content whilst also listening to the transmission.

They are more of a laboratory instrument than an aid to reception, but brief details are given for those members wishing to play with them! They were first introduced into the range c.1963 with two models; one for use with the MF/HF receiver type 830 (it would also work with the EA12), and the other for the 770R Mk II for VHF.



**Panoramic Receiver EPR27**

This consisted of the model S.830 type receiver together with a plinth Loudspeaker Unit Type S.906. Above is mounted an **EP20 Panoramic Display Unit**. This unit serves a dual purpose in that it can also be used as a wobulator for visual alignment of standard IF channels of 100kc/s, 470kc/s etc. The whole equipment will provide a useful display on signals of less than 0.5 $\mu$ V.



**Panoramic receiver EPR26**

Similar to the EPR 27 (above) but using the S.770R MkII receiver (later versions also used the S.770U Mk II UHF receiver with a suitable **IF Converter Type 939**) together with the **EP17R Panoramic Display Unit**. In this case the wobulator facility was used at 5.2 and 10.7 Mc/s. ♠



**Panoramic Display Unit EP14**

Frequency coverage (*intermediate frequencies*) 5.2 Mc/s (1 Mc/s bandwidth) and tunable 6.2-60 Mc/s.



**Panoramic Display Unit EP15**

Coverage 100 kc/s (30 kc/s bandwidth) and tunable 400 to 800 kc/s. (c.1965) ♠



**Panoramic Display Unit  
Series EP961**

Introduced in the early seventies the EP961 range was the first to use solid state circuitry. Although primarily intended as ancillaries for use with standard receivers, their sensitivity is sufficiently high to allow use with direct aerial connection in many applications. Provision is made for connecting a pen recorder. Screen size 10 x 6cm with log or linear scaling. Power supply 100-250V AC or 12V DC.

**EP961A** Frequency coverage 50kHz to 800kHz. Sensitivity for 1cm deflection 10 $\mu$ V. Resolution 200Hz.

**EP961B** Frequency coverage 500kHz to 36.5MHz. Sensitivity for 1cm deflection 25 $\mu$ V. Resolution 6kHz. price (1972) £1049. ♠



**Panoramic Display Unit  
Series EP1061**

Introduced in the mid-seventies these transistorised display units were designed as ancillaries for use with standard receivers of the period. They provided high-resolution linear or log displays on a screen 10 x 6cm. Power supply 110-250V AC.

**MODEL EP1061A/1.** Input frequency switched 100kHz or 1.4MHz. Sweep

frequency variable from 1.5kHz to 15kHz. Price (c.1980) c.£1.6k.

**MODEL EP1061B/1.** Input frequency 21.4MHz. Sweep frequency variable from 20kHz to 10MHz. Price same.

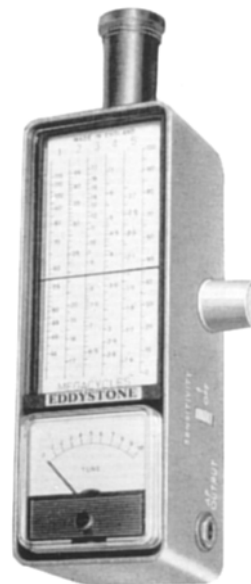
**MODEL EP1061B/2.** Input frequency 21.4MHz. Sweep frequency 20kHz to 2MHz. Also features a switch-selectable fast sweep range from 0.5 secs to 0.01 secs. Price (c.1980) c.£1.8k ♠

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**EDOMETER TEST INSTRUMENT**

**Catalogue No S.902 (1965)**

A versatile transistorised instrument which functions as a dip oscillator, signal generator, absorption wavemeter, AF tone generator and AM modulation monitor.



Seven plug-in miniature coils. Frequency coverage 390 kc/s to 115 Mc/s. Powered by 9v. PP3 battery.

**S.902 Mk I** was supplied in cardboard box and is usually minus coils. V. Rare.

**S.902 Mk II** was supplied in beautiful mahogany case, as well as of improved circuitry. Price (1969) £27 10s. Rare. (but usually complete). ♠

## RECEIVER ACCESSORIES

As well as producing a wide range of components for the home-brewer Eddystone produced accessories for their own receivers.

Some of these have actually been 'badged' other makes. The first item was almost certainly the moving-iron horn loudspeaker advertised to go with the Eddystone 'TWIN' in 1926. Although bearing the Lighthouse logo in the form of a transfer, it was probably one of the many BTH models of the period.

Things really got under way in 1946, which was when the company became a serious contender in the 'class' market. The die-casting, in which Eddystone were particularly successful, was used to the full extent.



**Loudspeaker Model 688 (1946-61)**

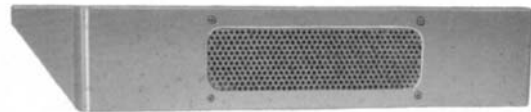
7" diameter housing with 5" speaker unit, 2.5 ohms, black ripple with chrome feet (other finishes available with other numbers). Price (1954) £3 3s 3d. Production run 5,500+ These are quite rare.

**A 5" diameter version, Model 652,** with 3.5" speaker was also produced for a short period. Price £1 17s 6d in 1949. These are extremely rare.

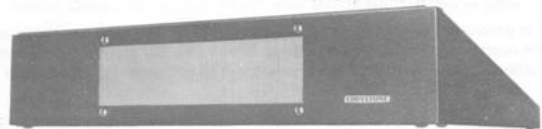


**TYPE 774 Mounting Blocks (1946-61)**

For lifting the front of the receiver to give a more convenient operating position. Die-cast aluminium, finished ripple black. (other colours with other numbers) Price (1954) 11s 6d per pair. (As rare as hens' teeth!)



**TYPE 906 Plinth speaker (earlier)**



**TYPE 989 Plinth speaker (later)**

These two very similar models tilt the receiver in the same manner as the blocks (above), Extra controls may be positioned beside the elliptical speaker (3 ohms). Price of 989 (c.1980) £30. Very rare, but easily replicated by a handyman with plywood.



The Mounting Blocks (top) are designed to suit best the sets in the style of the S.740 and S.680X. The Plinths are designed for the later models (S.940 and after)





### Model 899 Speaker

General-purpose loudspeaker unit in drawn steel case. Oyster hammer or two-tone grey (I/F). 7" square with 5" 3Ω speaker. C.1964 Very rare. ♣

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### Catalogue 1419 Pillow Speaker

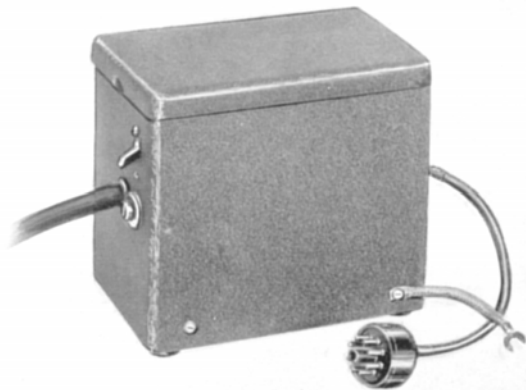
A flat, smooth bakelite grille, approx. 4" dia. by 1" thick. "When slipped under a pillow, speech and music can be heard clearly by a resting person but will not be audible to other occupants of the room." C.1950. Price £3 14s 3d including matching transformer, flex and plug. Advertised on the back of the instruction manual for the Model 670. Extremely rare. ♣

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### Model 669 Signal Strength Meter

This was produced specifically for Eddystone Models S.640, 740, 750, 888 and 888A. These sets have an octal socket ready to receive the plug on the Meter. It is not suitable for other sets (e.g. 670/840) which do not have built-in tuning meters. The movement has a 200 μA full scale deflection and is calibrated in "S" units and decibels above S9 on the basis of a 4db increase in carrier strength for each "S" point (This is rather optimistic by modern standards which allow 6db per "S" point – this is easily remedied by shunting the meter!) Manufactured c.1946/60. Price £5 15s 6d. Very rare. ♣



### Vibrator Power Unit Model 687

Designed to operate specific Eddystone receivers from a six-volt accumulator. It consists of a transformer, non-synchronous vibrator, 6X5G rectifier and the necessary filtering to prevent R.F. interference. Smoothing is not included as the components in the set provide

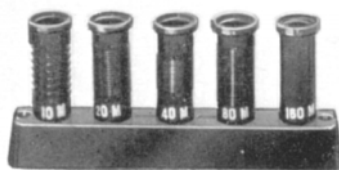
this. Suitable for the S.640 and S.740, c.1947-57. Price in 1949: £7 10s 6d. 1954: £13 5s Very rare.

**Vibrator Model 687/1** basically similar to 687 above, but adapted for use with the Models 750, 888 and 888A, which have balanced heaters. Price in 1954: £13 16s 6d. Very rare. ♠



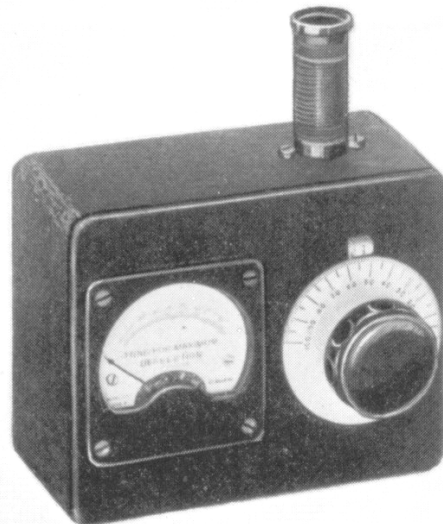
**Model 689 Semi-automatic Speed Key Model 689** c.1949-54

A futuristic 'bug' key which failed to draw hams away from the traditional American 'open' bug key. Its history is surrounded by controversy and I don't intend to open the debate here! It has been well aired in *'Morsum Magnificat' magazine*. Needless to say it is now in great demand and fetching silly prices! Price in 1949 £3 17s 6d, '54: £4 5s 3d. Very rare. ♠



**Modulation Level Indicator Model 678**

c.1948-55. Looking sufficiently like a model 669 S-meter, this AM modulation meter is likely to be mistaken for one, especially if it has lost its aerial and coils. Covering the (then) 6 bands from Top to Ten, it operates by plugging the appropriate coil into the back and adjusting the telescopic pick-up until the meter reading coincides with a special mark on the dial. On switching over it then indicates modulation percentage directly. This is a passive device using two germanium diodes and can also be used as a field strength meter and AM phone monitor. Price in 1949: £8 15s, in 1954: £10 6s 6d. Very rare. ♠



**Absorption Wavemeter Model 696**

Housed in a standard diecast metal box this handy device uses eight miniature plug-in coils to give continuous coverage from 200 kc/s to 150 Mc/s. Two coil-stands are included to take coils not in use and individual hand-calibrated charts are supplied in a containing tube. The movement is 200µA and a germanium crystal is used.

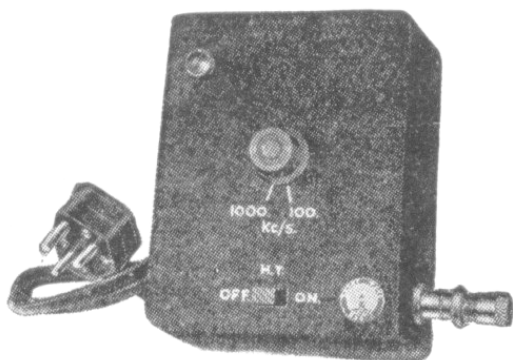
**The later model 696/1** was supplied with nine coils and covered the frequency range 200 kc/s to 200 Mc/s. Price in 1954: £13 10s 6d. Very rare. ♠



**Model 732 Mains Filter**

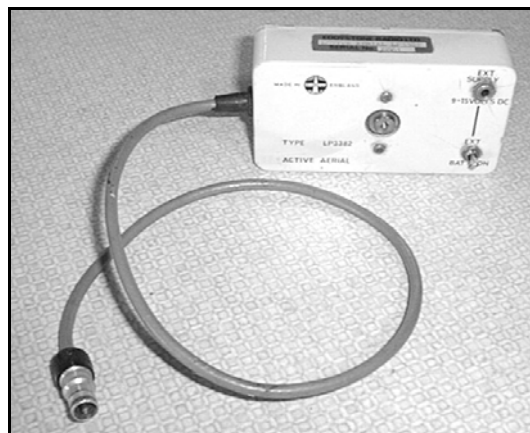
**EDDYSTONE Model 732 Mains Filter**

C.1948-58. Designed specially to reduce interference on board ship where the sparking at the dynamo commutator was notoriously 'dirty'. Intended especially for the model 670 and 670A but suitable for all the earlier models with the non-polarised connector shown. Price in 1954: £2 15s. Rare. ♠



**Crystal Calibrator Model 690**

c.1949. Fitted into a diecast box (4½" x 3½" x 3") and operates from 210/230V AC mains. The circuit uses 'a miniature valve' (unspecified). Harmonics from the 100 kc/s oscillator are usable up to 30 Mc/s and those from the 1000 kc/s oscillator up to 60 Mc/s. 0.01% tolerance. Price £12. Very rare. ♠



**Eddystone Active Aerial Type LP3382**

1975. Price unknown (*still searching for an advert!*). Combined aerial and aperiodic amplifier for use with any receiver having a low-impedance aerial input connection. It provides a useful voltage step-up over the range 10 kHz to 30 MHz. Internal PP3 battery or external supply (9-15V DC). The amplifier and battery are contained in a diecast metal box and a 21.5" telescopic rod is fitted (*missing on the picture!*). Uses one Field Effect Transistor (2N3819), one amplifier (BC214) and one emitter-follower (BF594).

Very rare. ♠

**POST-SCRIPT**

As a little afterthought I think I should mention the current status of the Eddystone 'Lighthouse' logos (as shown on the front cover of this work).

The 1925-65 version was essentially the "Stratton" logo and although invested in Marconi when the Company was sold, the new owner lost no time in adopting a more modern stylised version (1965-200?).

This version is currently licensed to Hammond Industries of Canada (with bases also in USA and UK) for use on Eddystone Diecast Boxes.

It is also licensed to SBS of Hastings for use with "Eddystone Broadcasting". "Eddystone Radio" is now owned by "Ring Communications". Confusing, isn't it?

## APPENDIX – January 2005

This page is devoted to recording the few 'new' Eddystone items which have come to my notice since the 2002 Edition of the 'Ultimate' QRG was published.

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### EDDYSTONE Model EC10A (1965)



As EC10 (*ibid.*) but with MF coverage 300-550 kc/s (to cover non-directional beacons, etc.) I.F. 720 kc/s.

Produced for the Swedish Mercantile Marine. Extremely rare.

**Eddystone Model EC10M** is another marine version badged and marketed by Marconi as the "Seaguide".

Very little is known of this model but it is probably much like the above. ♠

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### LOUDSPEAKER UNIT – Cat No 935



A versatile general-purpose loudspeaker unit styled to match the later Eddystone valve sets.

3Ω elliptical speaker. Size 4.5" x 8.25" x 2.5". Weight 1.75 lb. c.1965-75. ♠

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**EP961 Mk2 and EP1061 Mk2 Panoramic Display Units.** Later models of the 961 and 1061series (*ibid.*) With minor variations. c.1985. ♠

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**Model 1560TR Marine Transmitter-Receiver.** Manufactured by Eddystone and badged as the Mimco "Marlin" (*Marconi*). c.1980, solid state, 30 channels plus 2182 kHz distress watch. Freq coverage 1.6 – 4.2 MHz with option to 16 MHz. Tx output power: 300W pep USB; 200W AM and MCW. 24V DC. ♠

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**Eddystone Model 760.** VHF comms Rx. 30-300 mc/s. (S.N. FH0049 – Aug 1954)

An example of this model was examined by Ted Moore in 2003. It looked a bit like a 770R with different frequency coverage and without a BFO. It had been in the owner's possession for over 30 years and was in the process of being sold for a large sum . . .

An examination of the Company's Blue-Print Register shows no such model. I spoke to Bill Cooke, GWØION, who was the chief engineer at that time. He said:-

"The 770R was originally intended to cover 20-300 mc/s. We had problems with the tuning gang self-resonating and made experiments with an American Mallory tuner which covered 30-300 mc/s; but it came to nothing.

"The Bath Tub was littered with 'dead' experimental models which were raffled off for charity or just given away. We had one assembler in the prototype department who was a dab hand at breathing new life into these sets. He also had access to the serial plates and engraving machine. We believe he was the source of many 'rogue' sets. Look no further . . . " ♠



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