

# ACCESSORIES

The following accessories are recommended for use with Eddystone receivers. An external loudspeaker is required with communication models "888A" "750" and "680X."

Cat. No. 688	Diecast Speaker (black to match "888" and "750") ... ..
Cat. No. 811	Diecast Speaker (polychromatic grey for "680X") ... ..
Cat. No. 774	Mounting Blocks (black) for "840A" and "750" receivers ... pair
Cat. No. 812	Mounting Blocks (polychromatic grey) for "680X" receiver pair
Cat. No. 669	"S" Meter for "750" and "888" receivers ... ..
Cat. No. 687/1	Vibrator Unit 6 volts input, for "750" and "888" receivers ... ..
Cat. No. 732	Mains Filter Unit ... ..
Cat. No. 731	Doublet Aerial (50 feet feeder) ... ..
Cat. No. 731/1	Doublet Aerial (100 feet feeder) ... ..

(The model "888" referred to above is a special Amateur Band only receiver — details on request).

MANUFACTURERS:

## STRATTON & CO. LTD.

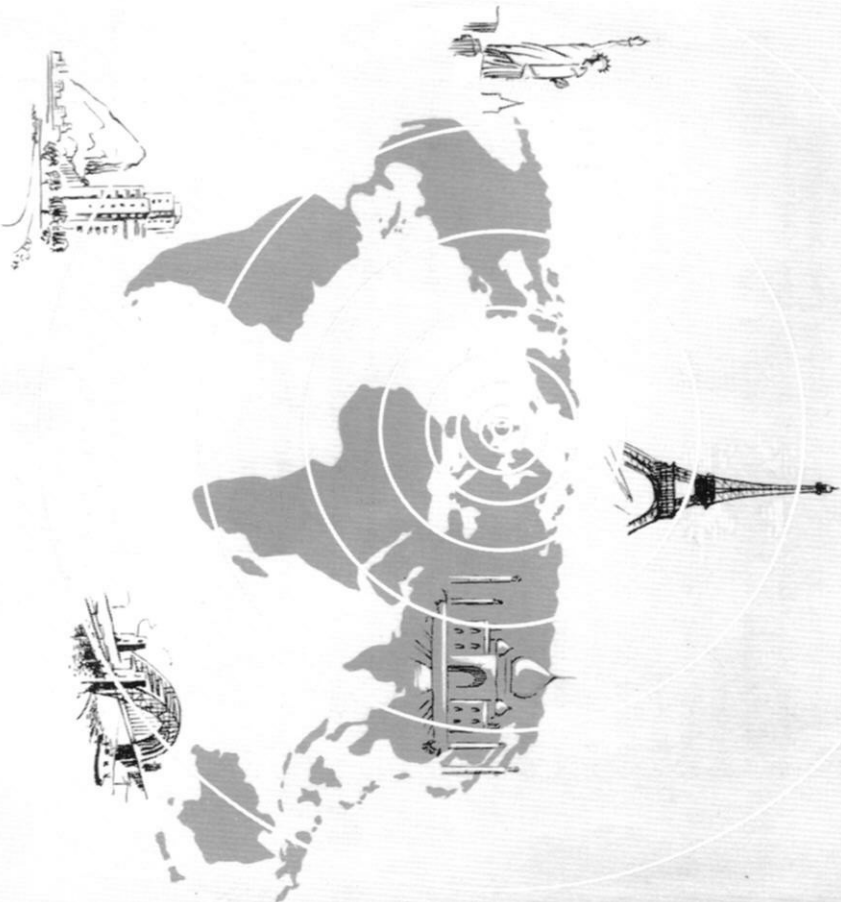
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# EDDYSTONE *Receivers*

FOR WORLD - WIDE RECEPTION



# INFORMATION CONCERNING EDDYSTONE RECEIVERS

Details of current models are given and the performance of each has, by careful design and development, been brought to the highest possible level. You will find nothing to equal these receivers at anywhere near their price levels. Until you have had the opportunity of actually seeing and testing an Eddystone receiver, you cannot fully appreciate its merits, in appearance, construction and ease of operation.

There are a number of features common to each model. The tuning knob drives a geared mechanism, which in itself is a fine piece of work. The flywheel loading gives smooth control and the high reduction ratio simplifies accurate tuning. An auxiliary scale, with a further reduction, provides adequate bandspread.

Modern types of valves, especially selected for optimum performance, are used throughout. The signal frequency and oscillator coils are fitted with variable powdered-iron cores and air trimmers, whilst the I.F. transformers and B.F.O. units are permeability tuned. Screening and decoupling are thorough and stability is of a high order.

In most cases the aerial input impedance is normally 400 ohms but good results are secured with almost any type of aerial. Either a single wire unbalanced aerial or twin balanced feeders may be connected (except "820").

Each receiver is guaranteed for twelve months and is provided with a comprehensive instruction manual.

**COMMUNICATIONS MODELS.**—Terminals are provided for a 2.5 ohm speaker, the Eddystone Cat. No. 688 (black) or 811 (polychromatic grey) being recommended. (The "840A" is fitted with a speaker internally). A jack on the panel takes high resistance telephones. The B.F.O. pitch control gives a variation of plus or minus three kilocycles. The noise limiter is effective against ignition and similar kinds of interference, whilst the standby switch mutes the receiver when desired and can also be used for the control of an external circuit.



## THE EDDYSTONE "680X" RECEIVER

This model has many refinements, including crystal filter, variable selectivity, "S" meter, push-pull output and stabilised supply to the oscillator stages. The "680X" is essentially for the Professional user or for the Amateur who requires a communication receiver having a superb performance.

### FREQUENCY RANGES.

Band 1	30 Mc/s. to 12.3 Mc/s.	Band 4	2.5 Mc/s. to 1.11 Mc/s.
Band 2	12.5 Mc/s. to 5.3 Mc/s.	Band 5	1120 kc/s. to 480 kc/s.
Band 3	5.7 Mc/s. to 2.5 Mc/s.		

### CIRCUIT.

Fifteen valves perform the following functions:

Two R.F. Amplifiers	V1 and V2	6BA6
Frequency-changer	V3	6BE6
Separate Oscillator	V4	6AM6/Z77
Two I.F. Amplifiers (450 kc/s.)	V5 and V6	6BA6
Detector and AGC	V7	6AL5/D77
Two Audio Amplifiers	V8 and V9	6BR7
Push-Pull Output	V10 and V11	6AM5/EL91
Beat Frequency Oscillator	V12	6BA6
Noise Limiter/"S" Meter	V13	6AL5/D77
Rectifier	V14	5Z4G
Voltage Stabiliser	V15	VR150/30

**ELECTRICAL PERFORMANCE.**—Sensitivity for 50 milliwatts, 15 db signal/noise ratio, 4 microvolts or better on all ranges.

**SELECTIVITY.**—Bandwidths at 6 db down.

Minimum	14 kc/s.	Second intermediate	4 kc/s.
First intermediate	7.5 kc/s.	Maximum	2.5 kc/s.

and greater with crystal switched in and phased.

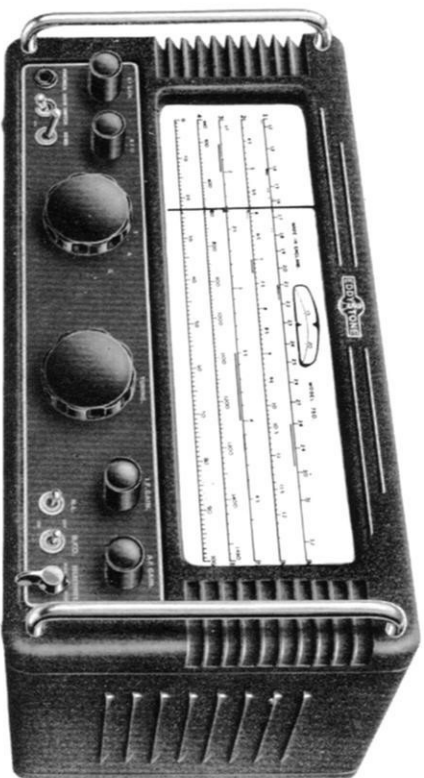
**AUTOMATIC GAIN CONTROL.**—9 db change of output for 100 db change of input, above 1 microvolt at 9 Mc/s.

**AUDIO OUTPUT.**—Undistorted 2 watts; maximum 4 watts. The audio stages are linear within 3 db from 50 to 10,000 cycles. Pick-up terminals are fitted.

**POWER INPUT.**—80 VA. (1 ampere fuses are fitted).

**FINISH.**—Polychromatic Grey. Weight 47 lbs.

**DIMENSIONS.**—Width 16 $\frac{3}{4}$ " ; Depth 13 $\frac{3}{4}$ " ; Height 8 $\frac{3}{4}$ ".



## THE EDDYSTONE "750" RECEIVER

Of the double superheterodyne communication type, this model possesses very high selectivity with practically complete freedom from image interference. H.T. supply to the oscillators is stabilised.

### FREQUENCY RANGE:

Band 1	32 Mc/s. to 12 Mc/s.	Band 3	4.5 Mc/s. to 1.7 Mc/s.
Band 2	12 Mc/s. to 4.5 Mc/s.	Band 4	1465 kc/s. to 480 kc/s.

### VALVE LINE-UP.—

Eleven valves perform the following functions :

R.F. Amplifier	...	V1	6BA6
Mixer (S.F. to 1620 kc/s.)	...	V2	ECH42
Oscillator	...	V3	6AM6/Z77
Frequency-changer (to 85 kc/s.)	...	V4	ECH42
I.F. Amplifier	...	V5	6BA6
Detector, A.G.C. and A.F.	...	V6	DH77
N.L. and "S" Meter Diodes	...	V7	6AL5/D77
Output	...	V8	N78
Beat Frequency Oscillator	...	V9	6BA6
Rectifier	...	V10	SZ4G
Stabiliser	...	V11	VR150/30

**ELECTRICAL PERFORMANCE.**—Sensitivity for 50 milliwatts, 15 db signal/noise ratio, 5 microvolts or better on all ranges.

**SELECTIVITY.**—Is variable over the range 30 db to 60 db down 5 kc/s. off resonance. Image ratio : better than 40 db at 30 Mc/s. and greater at lower frequencies.

**AUTOMATIC GAIN CONTROL.**—15 db change of output for 90 db change of input, above 3 microvolts at 8 Mc/s.

**AUDIO OUTPUT.**—Maximum output is 3.5 watts. Pick-up terminals are fitted and audio stages give linear amplification over a wide frequency range.

**POWER/INPUT.**—70 watts. Receiver can be operated from a 6 volt accumulator in conjunction with Cat. No. 687/1 Vibrator Power Unit. (A fuse is fitted).

**"S" METER.**—A socket at the rear accepts the Cat. No. 669 Signal Strength Meter. **FINISH.**—Fine black ripple. Weight 40 lbs. Width 16 $\frac{3}{4}$ " : Depth 10" : Height 8 $\frac{3}{4}$ ".



## THE EDDYSTONE "840A" RECEIVER

Of sound design, and employing seven 8BA valves in a straightforward superheterodyne circuit, the "840A" receiver fulfils the demand for a sensitive communication receiver at a moderate price. A speaker is fitted internally.

### FREQUENCY RANGE:

Band 1	30.6 Mc/s. to 10.5 Mc/s.	Band 3	3.8 Mc/s. to 1.4 Mc/s.
Band 2	10.6 Mc/s. to 3.7 Mc/s.	Band 4	205 metres to 620 metres.

### VALVE LINE-UP.

R.F. Amplifier	...	V1	UAF42
Frequency-changer	...	V2	UCH42
I.F. Amplifier and A.G.C.	...	V3	UAF42
A.F. Amplifier and Detector	...	V4	UAF42
Output	...	V5	UL41
Beat Frequency Oscillator	...	V6	UAF42
Rectifier	...	V8	UY41

**ELECTRICAL PERFORMANCE.**—Sensitivity for 50 milliwatts, 15 db signal/noise ratio, better than 10 microvolts on all ranges.

**SELECTIVITY.**—30 db down 10 kc/s. off resonance. Image ratio : better than 15 db at 30 Mc/s. and greater at lower frequencies.

**AUTOMATIC GAIN CONTROL.**—Less than 25 db change of output for 80 db change of input, above 10 microvolts at 8 Mc/s.

**AUDIO OUTPUT.**—Undistorted 0.75 watts, maximum 1.2 watts.

**POWER INPUT.**—0.275 (approx) amperes. AC/DC 100/115 and 200/250 volts.

**FINISH.**—Fine black ripple. Weight 30 lbs. : Width 16 $\frac{3}{4}$ " : Depth 10" : Height 8 $\frac{3}{4}$ ".



## THE EDDYSTONE "820" UNIT FOR VHF/FM RECEPTION ON BAND II

The "820" unit is specially designed to give first-class reception of FM transmissions. It possesses high sensitivity and will therefore give good results in areas where signal strength is low. The audio quality is outstanding and, for best results, the "820" unit should be followed by an amplifier capable in itself of maintaining high quality. The unit is self-powered and can be installed without difficulty. Three pre-set channels for A.M. broadcast stations are also available.

### FREQUENCY COVERAGE:

Complete continuous tuning over Band 2 87.5 to 100 Mc/s.  
One spot frequency between 1550 and 960 kc/s. (MW1).  
One spot frequency between 960 and 610 kc/s. (MW2).  
One spot frequency between 250 and 150 kc/s. (LW).

**CIRCUIT AND PERFORMANCE.**—Eight miniature valves are used and full limiting action is secured on FM with a signal of 25 microvolts. The discriminator is of the Foster-Seeley type and distortion is kept to a very low level. Audio output is at high impedance and up to 0.5 volts (approx.) is available.

On A.M. the first two valves are switched out of circuit and a germanium diode is brought in to demodulate the signal. Sensitivity and selectivity are adequate for good performance. Audio output up to 0.2 volts (approx.).

**CONTROLS.**—A five position switch selects pick-up: medium wave 1: medium wave 2: long wave: VHF/FM.

**POWER SUPPLY.**—Built-in power unit operating from standard AC mains 200/240 volts, 40/100 cycles.

**PHYSICAL DETAILS.**—Panel height 6 $\frac{1}{4}$ " ; width 11" ; overall depth 10" ; weight 11 $\frac{1}{2}$  lbs. Size of cut-out to take unit 10 $\frac{1}{2}$ " by 5 $\frac{3}{8}$ ".



## THE EDDYSTONE "870" RECEIVER

A compact, light-weight receiver, of the AC/DC type, equally suitable for use at home or in a ship's cabin. Although relatively inexpensive, the "870" is capable of a good performance and, as with other Eddystone models, is designed for use in any climate.

### FREQUENCY COVERAGE:

Band 1	...	...	...	18 Mc/s. to 5.9 Mc/s. (16.66 to 50.7 metres)
Band 2	...	...	...	6.3 Mc/s. to 1.95 Mc/s. (47.6 to 153.8 metres)
Band 3	...	...	...	1500 kc/s. to 540 kc/s. (200 to 556 metres)
Band 4	...	...	...	380 kc/s. to 150 kc/s. (789 to 2000 metres)

**CIRCUIT.**—Five valve superheterodyne, using modern International type valves, readily obtainable anywhere. Highest grade components throughout.

**POWER SUPPLY.**—Operates equally well from AC or DC mains, 100/120 and 200/250 volts. Consumption 0.2 amperes.

**SPECIAL FEATURES.**—Geared drive flywheel controlled system leads to precise tuning, aided by the wide, clear scales. Vernier logging scale is incorporated. There is a built-in mains filter, to reduce electrical interference, and the choke smoothing ensures low back-ground noise and absence of hum. Thoroughly insulated to allow metal cabinet to be directly earthed. Adequate volume and good tonal quality. Internal speaker is fitted.

**PHYSICAL DETAILS.**—The metal cabinet is finished in a pleasing two-tone style, offset with chromium handles. Width 11" ; depth 8 $\frac{3}{8}$ " ; height 6 $\frac{3}{8}$ " ; weight 11 $\frac{1}{2}$  lbs.