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# ACCESSORIES

The following accessories are recommended for use with Eddystone receivers. An external loudspeaker is required with communication models "740," "750" and "680X."

- Cat. No. 688** Diecast Speaker (black to match "740" and "750") ... ..
- Cat. No. 811** Diecast Speaker (polychromatic grey, for "680X") ... ..
- Cat. No. 774** Mounting Blocks (all except "680X") ... .. pair
- Cat. No. 812** Mounting Blocks ("680X") pair
- Cat. No. 669** "S" Meter ("740" and "750")
- Cat. No. 687** Vibrator Unit ("740") 6 volts ...
- Cat. No. 687/1** Vibrator Unit ("750") 6 volts ...
- Cat. No. 732** Mains Filter Unit ... ..
- Cat. No. 731** Doublet Aerial (50 feet feeder) ...
- Cat. No. 731/1** Doublet Aerial (100 feet feeder) ...

## STRATTON & CO. LTD.

ALVECHURCH ROAD, BIRMINGHAM 31

Cables : STRATNOID, BIRMINGHAM.

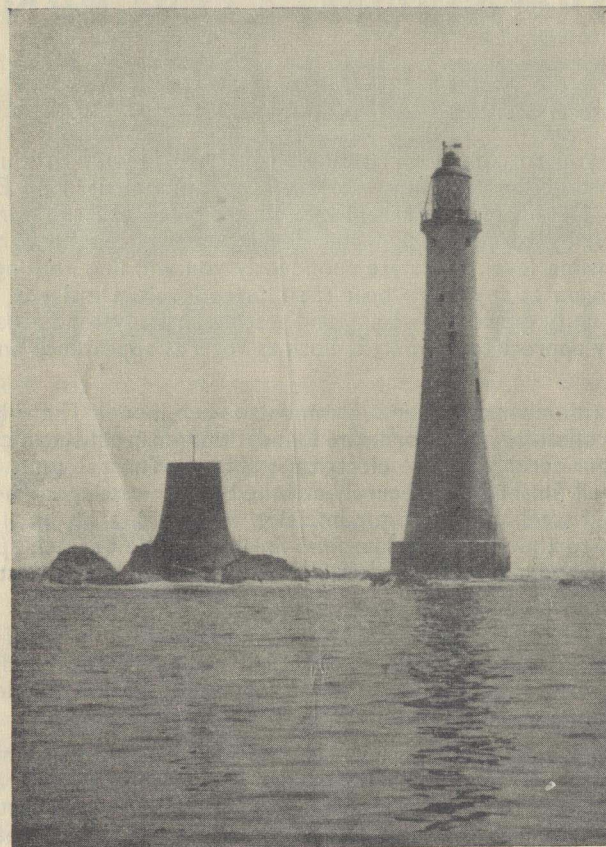
Telephone : PRIORY 2231

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Printed in England (5.53)



*The present Eddystone Lighthouse, completed in 1882, with the stump of the earlier lighthouse, built in 1759.*

# EDDYSTONE

# RADIO RECEIVERS

YOU CANNOT WISH FOR BETTER

# INFORMATION CONCERNING EDDYSTONE RECEIVERS

We invite you to compare critically against world-wide production the sturdy construction and fine workmanship embodied in all Eddystone receivers. Details of the current models are given and the performance of each has, by careful design and development, been brought to the highest possible level. We state confidently 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, both as regards appearance and ease of operation.

There are a number of features common to each model. The solid diecast panel and coil unit, which form the foundation, ensure mechanical rigidity and add considerably to the electrical stability. The sub-units are brass or steel, well finished and securely attached to the castings. The cover is rust-proofed steel and, in communication receivers, a lift-up lid enables easy access to the interior. The final finish is ripple enamel, sprayed on and stoved, and exceedingly durable as well as giving a most pleasing appearance.

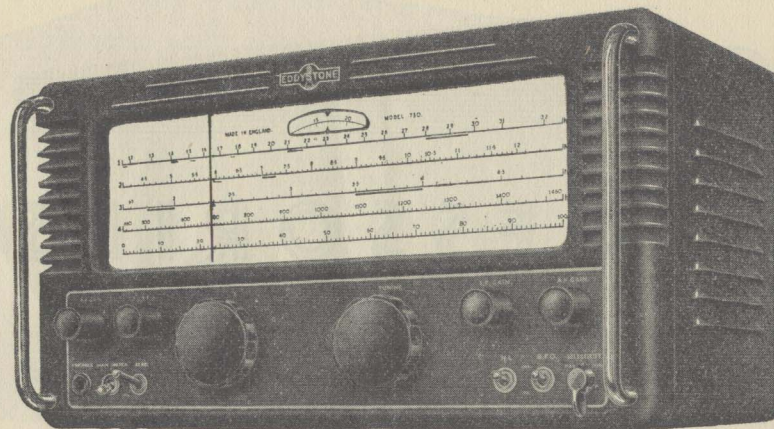
The tuning knob drives a geared mechanism, which in itself is a fine piece of work. The flywheel loading gives smooth control and the high reduction ratio simplifies accurate tuning. An auxiliary scale, with a further reduction, provides adequate bandspread.

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.

The aerial input impedance is nominally 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.

All models (except "All World Six") are for operation from A.C. mains, 40/60 cycles, 110 and 200/240 volts ("670" from D.C. mains also). The bulbs used to illuminate the dial are of a standard type throughout, rated at 6.5 volts 0.3 amperes. Each receiver is guaranteed for twelve months and is provided with a comprehensive instruction manual. Rack mounting to order.

**COMMUNICATION MODELS.**—Terminals are provided for a 2.5 ohm speaker, the Eddystone Cat. No. 688 (black) or 811 (polychromatic grey) being recommended. 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 "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	5Z4G
Stabiliser	...	...	...	...	V11	VR150/30

**ELECTRICAL PERFORMANCE.**—Sensitivity is better than 5 microvolts for a 15 db signal/noise ratio at all frequencies.

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

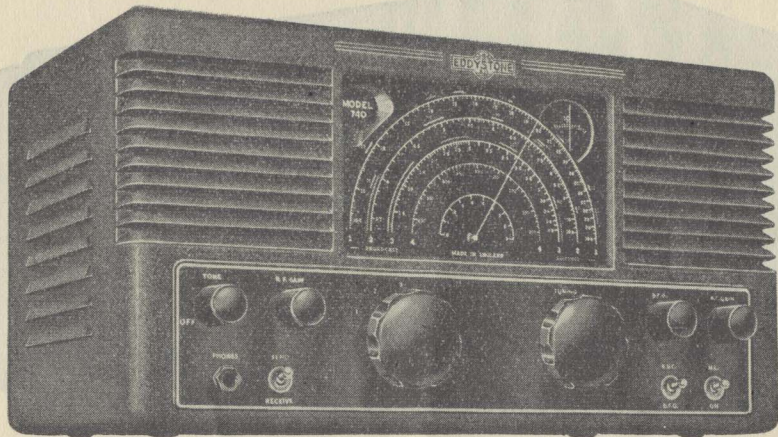
**AUTOMATIC GAIN CONTROL.**—Output level is maintained within 15 db for a 90 db change of input, above 3 microvolts at 8 Mc/s.

**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 16½"; Depth 10"; Height 8¾".



## THE EDDYSTONE "740" RECEIVER

Of sound design, and employing eight B8A valves in a straightforward superheterodyne circuit, the "740" receiver fulfils the demand for a sensitive communication receiver at a moderate price.

### 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	EAF42
Frequency-changer ...	...	...	V2	ECH42
I.F. Amplifier and A.G.C. ...	...	...	V3	EAF42
A.F. Amplifier and Detector	...	...	V4	EAF42
Output ...	...	...	V5	EL42
Beat Frequency Oscillator ...	...	...	V6	EAF42
Noise Limiter and "S" Meter	...	...	V7	EB41
Full Wave Rectifier ...	...	...	V8	EZ40

**ELECTRICAL PERFORMANCE.**—Sensitivity is better than 10 microvolts throughout for a 15 db signal/noise ratio and 50 milliwatts.

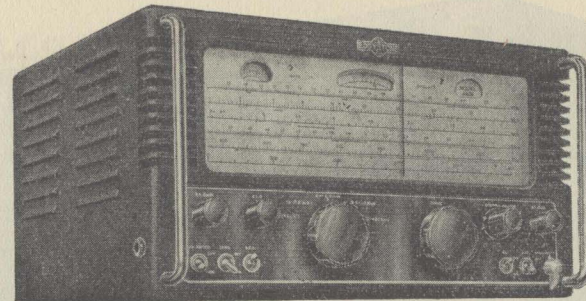
**SELECTIVITY.**—30 db down 10 kc/s. off resonance. Image ratio. Better than 15 db at 30 Mc/s. and greater at lower frequencies.

**AUTOMATIC GAIN CONTROL.**—A change of input of 80 db affects the output by less than 25 db.

**AUDIO OUTPUT.**—Undistorted 1.2 watts, maximum 3 watts.

**POWER INPUT.**—45 watts. A socket at the rear enables the receiver to be operated from a 6 volt accumulator with a Cat. No. 687 Vibrator Unit. "S" Meter. A socket at the rear accepts the Cat. No. 669 "S" Meter.

**FINISH.**—Fine black ripple. Weight 30 lbs. Width 16½"; Depth 10"; Height 8½".



## THE EDDYSTONE "680X" RECEIVER

This model has many refinements, including crystal filter, variable selectivity, "S" meter, push-pull output and stabilized 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 k/cs.
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 ...	...	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, 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.

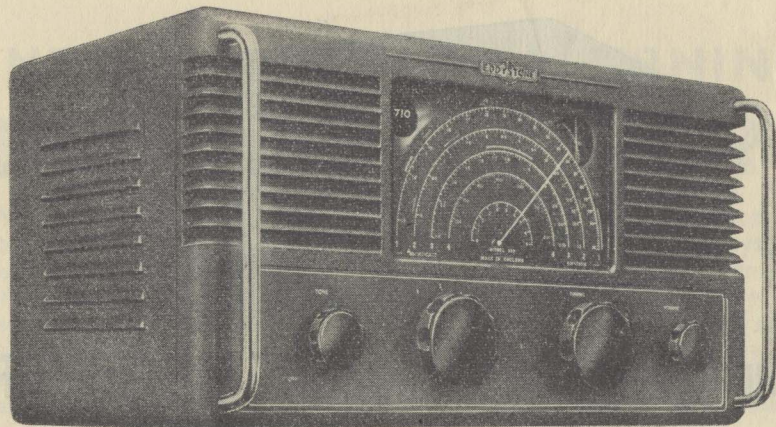
**AUTOMATIC GAIN CONTROL.**—9 db change of output for 100 db change of input, above 1 microvolt at 9 Mc/s.

**POWER 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 16½"; Depth 13½"; Height 8½".



## THE EDDYSTONE ALL-WORLD SIX

The "All World Six" is a short and medium wave broadcast receiver which operates from a 6 volt accumulator and is intended for those who lack mains supply. Due to the modern design, the performance is astonishingly good and the volume is adequate for normal domestic requirements. Programmes from distant stations can be received at good strength and with excellent quality. The current consumption of the "All World Six" has been reduced to the reasonably low figure of 2.5 amperes.

### TUNING RANGE.

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

### CIRCUIT.

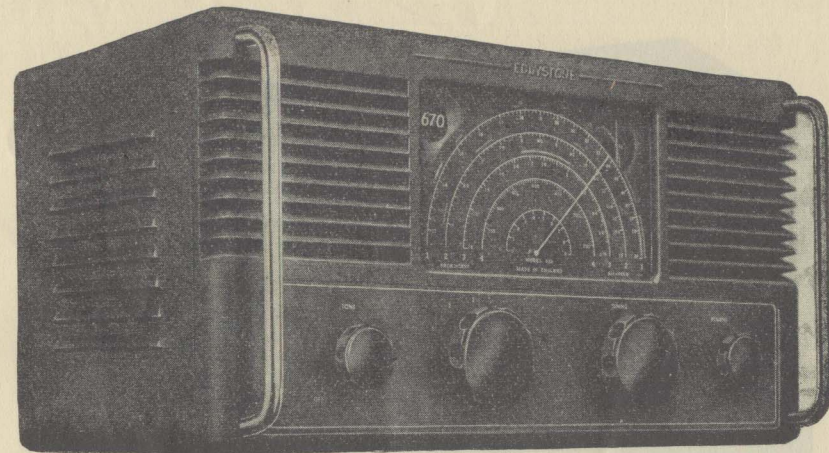
V1	R.F. Amplifier	...	...	...	...	...	...	EAF42
V2	Frequency-changer	...	...	...	...	...	...	ECH42
V3	I.F. Amplifier	...	...	...	...	...	...	EAF42
V4	Audio Amplifier and Detector	...	...	...	...	...	...	EAF42
V5 and V6	Push-Pull Output	...	...	...	...	...	...	EL42

**CONTROLS** comprise main tuning control, band selector, volume control, tone control (combined with on/off switch).

**SPECIAL FEATURES.**—The consumption is 2.5 amperes and this can be reduced by switching off the dial light when a station has been tuned in. High tension is derived from a built-in vibrator unit, using a selenium rectifier and having ample smoothing. Provision is made for attachment of a pick-up. The internal speaker is generally adequate but an external or extension speaker can easily be connected.

**ELECTRICAL PERFORMANCE.**—Special attention has been paid to balancing the electrical characteristics, such as sensitivity and selectivity, to give the finest possible results.

**PHYSICAL DETAILS.**—The receiver is finished a handsome dark brown ripple. Dimensions are: Width 16 $\frac{3}{4}$ " ; Depth 10" ; Height 8 $\frac{3}{4}$ ". Weight (unpacked) 34 lbs.



## EDDYSTONE "670" MARINE RECEIVER

This model operates equally well from A.C. or D.C. mains voltages of 110 and 200/240. It is primarily intended as a cabin receiver and is designed to meet the severe conditions which sometimes prevail on board ship. Numerous testimonials are held confirming the results obtained are well above average. The "670" will give an equally good account of itself when used ashore.

### TUNING RANGE.

Band 1	...	...	...	...	...	30-12.8 Mc/s. ( 10-23.5 metres).
Band 2	...	...	...	...	...	13- 5.8 Mc/s. (23.1-51.7 metres).
Band 3	...	...	...	...	...	2.75- 1.2 Mc/s. (110-250 metres).
Band 4	...	...	...	...	...	1220-522 kc/s. (246-575 metres).

### CIRCUIT.

V1	R.F. Amplifier	...	...	...	...	...	...	UAF42
V2	Frequency-changer	...	...	...	...	...	...	UCH42
V3	I.F. Amplifier	...	...	...	...	...	...	UAF42
V4	Audio Amplifier and Detector	...	...	...	...	...	...	UAF42
V5	Audio Amplifier and AGC	...	...	...	...	...	...	UAF42
V6 and V7	Push-Pull Output	...	...	...	...	...	...	UL41

**SPECIAL FEATURES.** Particular attention has been given to high insulation and the metal cabinet may be directly earthed. All plugs, sockets and leads are well insulated. Internal screening is excellent, to prevent direct pick-up of interference and to reduce oscillator radiation to a very low level. An internal speaker is fitted and it is an easy matter to connect an external speaker or speakers. Provision is made for use with a record-player.

**ELECTRICAL PERFORMANCE.**—Special attention has been paid to the balancing of the technical characteristics, to ensure the finest possible results.

**PHYSICAL DETAILS.**—The finish is a handsome dark brown ripple. Dimensions and weight as with the "All World Six" model.