

The **EDDYSTONE**

Yachtsman's Receiver

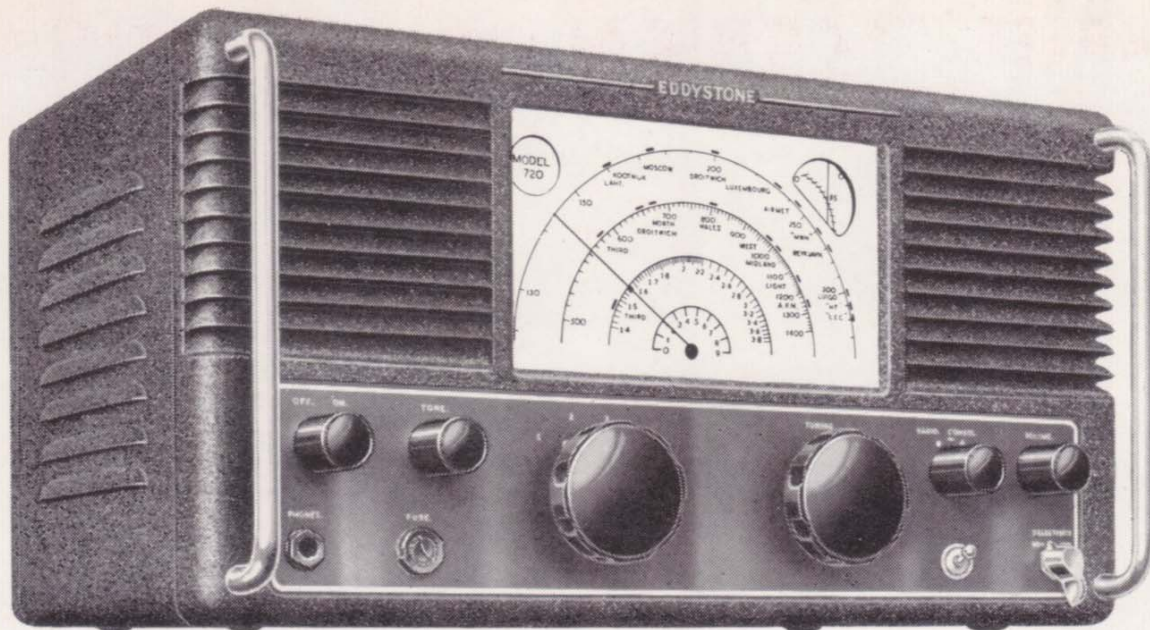


*manufactured
by*

STRATTON & CO LTD

EDDYSTONE WORKS • BIRMINGHAM • ENGLAND

CABLES: STRATNOID BIRMINGHAM



THE EDDYSTONE "720" YACHTSMAN'S RECEIVER

A DISTINCTIVE RECEIVER DESIGNED FOR USE IN CABIN
CRUISERS, YACHTS AND SMALL SHIPS GENERALLY

The Eddystone Model "720" Receiver has been developed to fulfil the requirements of owners of not-so-small craft. It incorporates many of the refinements to be found in professional radio equipment and the performance, accuracy of tuning and reliability are well above average. In particular, much effort has been directed towards obtaining the best possible results on Consol navigational signals.

For these reasons, the size of the "720" receiver (16 $\frac{3}{4}$ -ins. across the front, 8 $\frac{3}{4}$ -ins. high and 10-ins. deep) is perhaps somewhat larger than many small boat owners would wish. Nevertheless, it is reasonably compact and a reduction in the dimensions would have necessitated the loss of some of the special features that are responsible for the outstanding quality of the receiver.

The manufacturers of the Eddystone Yachtsman's Receiver are specialists in the production of radio communication equipment of advanced design, for marine and government services. Added to expert technical experience is the personal knowledge of small boat cruising of members of their staff, resulting in a thoroughly well-designed receiver, ideal for its purpose. We state with confidence that no better receiver is available for use in cruiser craft.

THE EDDYSTONE "720" RECEIVER

Provides you with the following Information Services

Weather reports and forecasts (B.B.C. and Airmet).

Time Signals.

Consol Navigational System.

600 metre International distress wave.

News and general broadcasts.

Trawler and small ship band.

TUNING RANGE

The tuning range is 80 to 620 metres and 900 to 2,300 metres.

RECEPTION OF CONSOL.

Consol transmissions are primarily intended for use by aircraft but can be and are being successfully used as an aid to navigation at sea. Consol stations transmit combinations of dots and dashes and by counting the number of dots and dashes received, the radial position line on which the receiver is situated can be identified. Reception from two Consol stations enables a fix to be obtained.

Around the British coast, the two most reliable stations are Bushmills in Northern Ireland (call sign MWN, wavelength 1140 metres) and Stavanger, Norway (call sign LEC, wavelength 940 metres). Reception conditions vary according to location and are liable to be uncertain when close to land. Screening effects are sometimes noticeable.

Prolonged tests indicate that whilst at times good reception is obtained from both Bushmills and Stavanger, at others only one station can be successfully received. At present, this state of affairs does limit the usefulness of Consol to the yachtsman, but when a new station in course of erection at Brest and scheduled to come into service in 1950 is completed, a very useful navigational service will become available.

Price £48 : 6 : 8

(Extension Loud speaker, if required £2 : 17 : 6)

Comprehensive instructions and a 12 months
Guarantee are provided with each receiver

GENERAL CONSTRUCTIONAL DETAILS

DIMENSIONS AND MOUNTING.

The "720" receiver is housed in a rigid metal cabinet measuring $16\frac{3}{4}$ -ins. long, $8\frac{3}{4}$ -ins. high and 10-ins. deep. The power unit and high efficiency loud speaker are self-contained inside the cabinet, the top of which can well be utilised as a shelf for other articles. The weight of the receiver (unpacked) is 35-lbs.

POWER REQUIREMENTS.

The "720" receiver operates from a 12 volt accumulator. In some vessels, low consumption is a necessity — in others, where continuous charging facilities are available, this feature may not be important. To suit all requirements the current consumption has been reduced to the low figure of 2 amperes.

CONSTRUCTION.

The "720" is very robustly constructed. The front panel and the coil box are stout aluminium diecastings forming a remarkably strong and rigid foundation to the whole receiver assembly. The cover is steel, heavily rust-proofed and anti-resonance sprayed internally. The most reliable tropical finish components are employed, and the receiver is suitable for use in salt laden atmospheres. The exterior is finished a fine ripple brown. The controls are mounted on an appropriately marked finger plate.

VOLUME AND QUALITY.

The loudspeaker gives ample volume with excellent tonal quality. It is possible to use one or two extension speakers and a special under-the-pillow speaker can be connected when it is desired to listen without disturbing others.

CONTROLS.

All controls (and also the safety fuse) are on the front panel and comprise :—

On/Off Switch.

Waverange Selector.

Tuning Knob.

Volume Control.

Tone Control.

Selectivity Switch.

Consol Reception Switch.

Stand-by Switch.

The tuning control is flywheel loaded giving very smooth operation. The illuminated dial is directly calibrated and any station within range on a known wavelength can be tuned in positively. The selectivity switch is mainly for use when receiving Consol signals.

AERIAL REQUIREMENTS.

It is appreciated that difficulties exist on a small vessel in putting up a long aerial. The radio frequency amplifier stage in the receiver increases the sensitivity very considerably, and this in turn permits good results to be obtained with a short simple type of aerial.

BRIEF TECHNICAL SPECIFICATION

For the benefit of the more technically-minded, to whom it may be of interest, we give below abridged details of the specification of the Eddystone "720" Receiver.

CIRCUIT.

R F Amplifier, Frequency Changer, I F Amplifier (127 K/cs), second Det., A V C and A F Amplifier, B F O, Push-pull Output.

TUNING RANGE.

Three wavebands tuning as follows :—

Range 1	80 - 214 metres.
Range 2	214 - 620 metres.
Range 3	900 - 2,300 metres.

SELECTIVITY.

Variable between 20 db down for 5 K/cs off resonance, to 45 db down 5 K/cs off resonance.

SENSITIVITY.

Better than 10 microvolts input for 50 mW output for a signal-to-noise ratio of 15 db with 30 per cent modulation.

STABILITY.

To all practical intents and purposes drift is non-existent.

A V C

Output is constant within 12 db for a change in input of 80 db. Zero level = 10 microvolts at 1 Mc/S.

CALIBRATION.

The accuracy of calibration is within 0.5 per cent.

BATTERY CONSUMPTION.

2 amperes at 12 volts.

HIGH TENSION SUPPLY.

This is provided by a non-synchronous vibrator and selenium type bridge connected rectifier (line voltage 155).

OUTPUT STAGE.

Push-pull with negative feed-back giving 3 watts output.

We reserve the right to modify the above specification

Distributed by :

Sole Manufacturers :
STRATTON & CO. LTD.
BIRMINGHAM 31



MANUFACTURERS OF SPECIALISED FINE
QUALITY RADIO EQUIPMENT SINCE 1925

Front Cover scene reproduced by courtesy of "The Yachting World"