

The EDDYSTONE '820'

V.H.F. (F.M)

Sound Receiving Unit



Clarity

Fidelity

Range

Designed for reception of VHF/FM transmissions; also for one pre-set long wave station and two pre-set medium wave stations. The "820" is of advanced design, precision built using first-class materials. It is a product of Stratton & Co. Ltd., who enjoy a World-wide reputation for Communication equipment of the highest standard.

OPERATION

Continuous tuning is available over Band II and the horizontal dial is clearly marked in frequency. It is a simple matter to tune straight on to the desired station, final correct adjustment being shown by maximum expansion of the glow in the fluorescent tuning indicator. Your dealer will set up the pre-set medium and long wave positions to frequencies you specify, as this operation should preferably be carried out with proper test equipment, although on occasions adjustments may be made on the signals from the desired station, if these are fairly strong.

Thereafter, it is only necessary to turn the switch to one or other of the indicated positions, and adjust the volume to suit.

GUARANTEE

The Eddystone "820" Receiving Unit is guaranteed against faulty workmanship or components (excluding valves) for 12 months from date of purchase. The valves are covered by the normal guarantee issued by the British Radio Valve Manufacturers' Association.

List Price **£38 : 0 : 0** (INCLUDING PURCHASE TAX £9 : 10 : 0)

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9-18-0



Manufacturers :

STRATTON & CO. LTD.
BIRMINGHAM 31 :: ENGLAND

Telephone : PRIORY 2231

Cables : STRATNOID, BIRMINGHAM



MANUFACTURERS OF SPECIALISED SHORT WAVE RADIO EQUIPMENT SINCE 1925

SUPPLIED BY

WEBB'S
 14, SOHO SQUARE,
 LONDON, W.1.

THE EDDYSTONE "820" RECEIVING UNIT

The advent of sound broadcasting on VHF channels and using frequency modulation opens up a new era of radio reception, free from interference and with a clarity not generally possible on lower frequencies. But to make the most of the new system, it is necessary to use a receiving unit specially designed and built to give the best possible results.

Whilst, as the B.B.C. emphasise, the main virtue of the new system is freedom from annoying whistles and odd noises, the very fact that interference is not present allows the receiver to be designed so that it accepts the whole wide band of frequencies included in the transmitted signal and a greatly improved tonal quality results.

It follows that what a listener actually hears is largely dependent on the receiving equipment and, particularly with connoisseurs interested in concert and similar performances, attention should be focussed on a unit with a guaranteed figure of merit.

Such is the Eddystone "820" Broadcast Receiving Unit. For those technically minded, the specification is given later, in the confident knowledge that the figures will immediately convey the excellence of the technical design. As in all Eddystone receivers, the "820" Unit is of robust construction and embodies workmanship of the highest grade. To those interested in results rather than the ways and means by which they are obtained, you can purchase in the full confidence that products of the Eddystone factory do all that is claimed for them, without any exaggerations being made.

MEDIUM & LONG WAVE FACILITIES

Although Home, Light and Third programmes are available on VHF channels, there may be occasions when other stations are wanted—for instance, another Home Region or a European station. Also, in many areas, it may be some time before VHF

stations are operating and reception of medium and long wave stations is necessary. Hence the inclusion in the "820" Unit of two pre-set medium wave positions and one pre-set long wave position.

SPECIFICATION

FREQUENCY COVERAGE.

Complete continuous tuning over Band II 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 VALVES VHF/FM.

V1 6AM6 RF Amplifier.

V2 12AT7 Frequency Changer.

V3 ECH42 10.7 Mc/s. I.F. Amplifier.

V4 6AM6 10.7 Mc/s. I.F. Amplifier.

V5 6AM6 Limiter.

V6 6AL5 Discriminator.

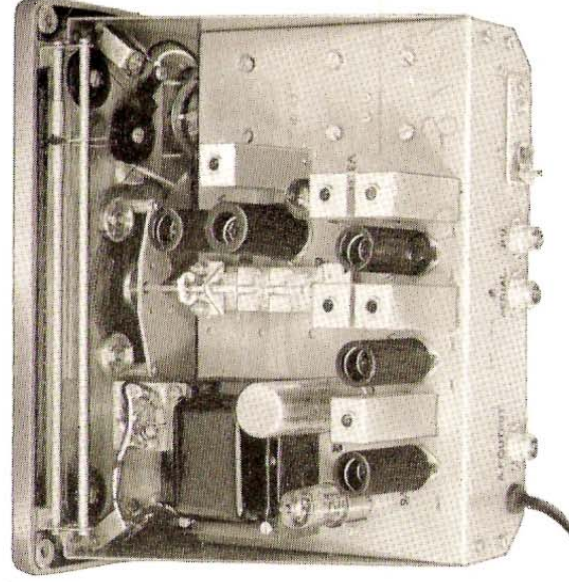
V7 EM80 Tuning Indicator.

V8 EZ41 Full wave Rectifier.

On medium and long waves V3 becomes a frequency changer, V4 an I.F. amplifier on 465 kc/s., whilst a germanium diode is used as demodulator.

TUNING DRIVE AND SCALE.

The scale is printed clearly on a glass dial which is edge illuminated. The tuning drive is gear driven with spring-loaded gears to prevent backlash and the tuning knob is flywheel loaded for smooth control.



Rear view of the "820" Unit, illustrating the clean engineering lines.

PERFORMANCE VHF/FM.

An input of 25 microvolts gives 1 volt at the limiter grid, and ensures full limiting action. Selectivity figures:— 6 db down 100 kc/s. off resonance and 25 db down 200 kc/s. off. I.F. breakthrough greater than 70 db down at 10.7 Mc/s. Image attenuation 35 db. Audio output 0.5 volts (approx) for 30% modulation (= 22.5 kc/s. deviation).

PERFORMANCE MW AND LW.

Sensitivity is adequate for good results with a comparatively small aerial. Image ratio greater than 35 db. Selectivity 25 db down 10 kc/s. off resonance (465 kc/s.). Audio output 0.2 volt approx., 30% modulation, 400 cycles, 50 microvolts input.

Output is at high impedance to match into grid circuit of average amplifier.

Input Impedance. Approximately 75 ohms on Band II, and suitable for a random length of aerial on other frequencies.

Power Supply. Built-in power unit operating from A.C. mains 200/240 volts, 40/100 cycles.

CONTROLS.

Five position switch to select:— pick-up; medium wave one; medium wave two; long wave; F.M.

CONSTRUCTION AND FINISH.

The front panel is a diecasting, finished polychromatic hammer enamel. The brass chassis is fitted with a protective cover, both finished radio grey.

DIMENSIONS AND WEIGHT.

Panel Height 6½ inches.
Panel Width 11 inches.
Depth 10 inches overall.
Weight 11¼ lbs.

EASE OF INSTALLATION

Installation of the Eddystone "820" Unit presents no problems. It has its own power supply, so avoiding any need to draw power from other equipment. A connection to the mains is required and usually this will be common with the amplifier or receiver used with the "820." One socket takes the feeder coming from the special Band II aerial, about which your dealer will give advice. Another accepts the plug on a length of coaxial cable which it is recommended be used for interconnecting purposes. The audio output from the "820" is ample, either for feeding into a high fidelity amplifier or into the pick-up terminals of a broadcast receiver.

When Medium or Longwave reception is required, an ordinary aerial and earth should be connected to the appropriate terminals.