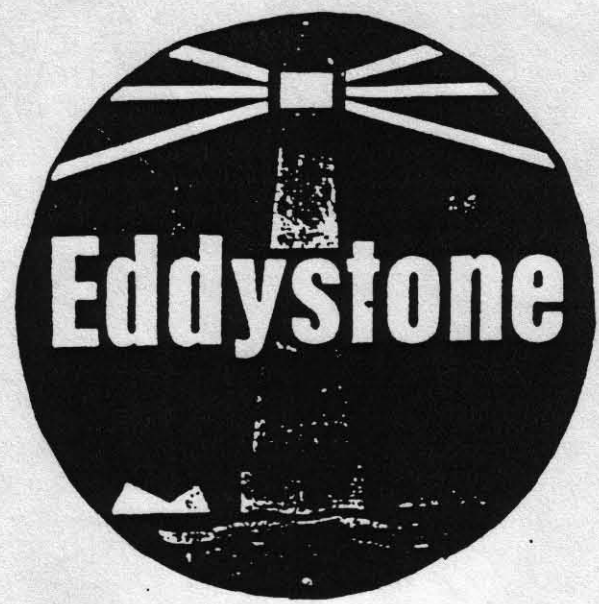
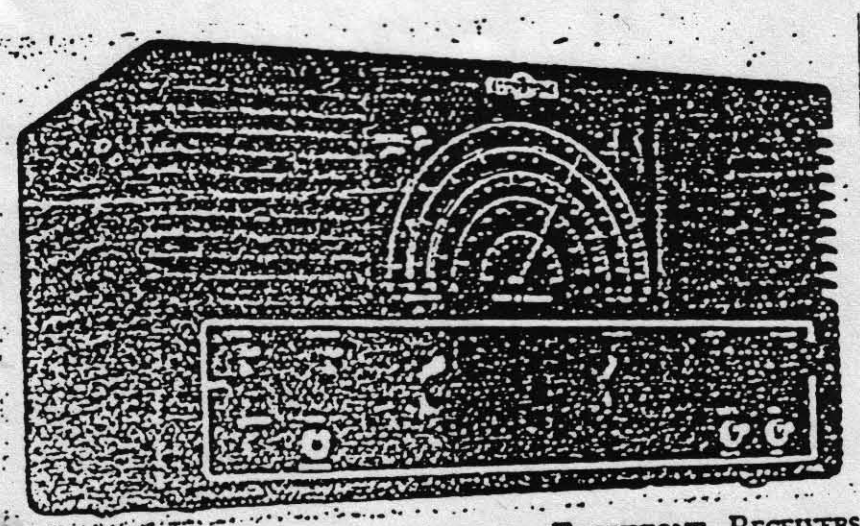


3

740



Eddystone
Users
Group



GENERAL APPEARANCE OF POST-WAR EDDYSTONE RECEIVERS
(MODEL 740)

ISSUE NO.3

September/October, 1990

Information quoted from Eddystone Co.. manuals by kind permission of
Chris. Pettit, Managing Director, Eddystone Radio Ltd.

Featured Model this issue - 740

A non-profit newsletter for Eddystone users. Subscription on request S.A.E. please
Address for all enquiries: - W. E. Moore, 112 Edgeside Lane, Waterfoot, Rossendale
Lancs. BB4 9TR

This issue is being put together under somewhat different conditions to Issues 1 and 2. The newsletter has mushroomed out of all proportion - members now in Canada, U.S.A. and South Africa have put information about E.U.G. on their computer bulletin boards. New members like Stan Cepunas of Ontario who has no Eddystone - at the moment of writing - he is however awaiting arrival of 6 receivers - all unknown Eddystone models, bought as a job lot from Canadian Government, or Neil Bousfield of South Africa who has just obtained a 770R plus the panadaptor to go with it. He is very lucky there since these panadaptors are very difficult to get hold of, I have been offered £300 for my EP17 recently. Neil does mention that his EB35 is "nowhere near as sensitive as a Radionette Kurer portable". I do get comments about this kind of comparison regularly and I do now realise what is happening. A vast number of modern "so called" communication receivers are made to run from a short built in whip - they are very sensitive but also they overload very easily on strong signals. Being non-technical about this, what happens is you will hear the one transmitted signal in several places on the dial due to the high sensitivity and low selectivity of the input stages of the receiver. A friend asked me to come and see what was wrong with his 940 which was dead on 16,000 M/CS whereas he was able to get many broadcast signals on his "Zenith" receiver. His outdoor aerial was 66ft. long and quite high up - 20ft maybe. Using this on his 940 I found more or less what I had previously been able to get on my 940 - lots of utility stations, no broadcast stations at any strength. Changing to the "Zenith" he clipped the long wire to the whip aerial and sure enough there was V.O.A. on 16.115 M/CS. It was still there, faintly with just the whip extended. Of course, the V.O.A. signal was actually on 15.205 M/CS and with a 455 K/CS if the powerful received signal was blasting through the low selectivity stages when the receiver was tuned to 16.115M/CS the 940 was doing its job. Showing the true state of the band to which it was tuned and not reproducing the spurious signals generated in the Zenith. Comparison between a selective Eddystone and a broadcast receiver with a wide open front end are simply not practicable!

Subscribers A.D.S.

S.O.S.....S.O.S. Wanted - 940 or 958 in good condition. Good price paid. Colin Trass 5-1 Concord Greene, Concord M.A.01742 U.S.A. Telephone 508-371-3130 (use U.K.-U.S. STD Code first)

S.O.S.....S.O.S. Swops 670/659 needs a ballast resistor + 680X needs switch wafer for EA12 or 888A or W.H.Y. need wobulator and transistorised signal generator. Ring J. P. Wright on 0256-468649.

S.O.S.....S.O.S. Sell trio R600 V.good condition for £130 plus P&P. Kathy on 0706-218290 after 7.00 p.m.

S.O.S.....Is there a N.D.B. located on the lighthouse on Eddystone Rocks? Info, please to E.U.G. or Alain Tremblay, 316 Champlain App.3, Quebec, Ontario, Canada.

S.O.S.....S.O.S. Wanted 840A. Contact Ron Pearce, 121A Beccles Road, Bungay, Suffolk. NR35 1HX

Q.S.L.s

Although a licensed amateur, I have not much interest in the transmitting side, frankly I get bored with some of the pompous verbose experts you encounter on the bands. My QSL stock is from commercial, military or other governmental stations throughout the world, either C.W., S.S.B. or R.T.T.Y. I have now 412 and they include many from N.D.B. operating agencies both air and maritime. Not all are QSL cards, some are letters, both friendly and some not so friendly - an example being the W.German military station who thanked me for my R.T.T.Y copy, acknowledged it and then added that I was rather "naughty as they were sure the terms of my licensing did not permit reception of their test tape. However, Haifa Coast Radio have several times asked me to verify signals on different frequencies. My 830/8 or 940 are used for this on most occasions. One I particularly treasure whilst I was listening one night to a Liverpool local radio station 2 years ago it went off the air for several minutes. There clear but faint was the armed forces radio station at Keflavik in Iceland. I taped local announcements and station I.D. over several minutes. This resulted in a QSL card which stated transmitter power was only 1 K.Watt.

S.640

One subscriber writes to us regarding a 640 he bought recently in "poor" condition. There was a loud hum when the 640 warmed up and when tuned across the dial only whistles could be heard on stations. Speech and music when on station was only just discernible. Reading this I recalled my own 640 and a 750 which I helped a friend to "do up" last year. Over the years the D.C. smoothing electrolytics had dried out completely, since they also decouple to some extent the H.T. line replacing both electrolytics cured both hum and whistles. Audio output was still distorted and this was traced in both 640 and 750 to a leaky A.F. coupling condenser between A.F. amplifier anode and output valve grid. My 640 actually had 42 volts on the grid after being on for an hour.

When this information was passed to the subscriber he was sufficiently sure of himself to go out and get the components, do the job himself, when he rang up some weeks later his 640 was back to normal and the condenser had cost £2.50 plus a few hours spare time.

Loudspeakers for Eddystones

Queries about speakers are very common in letters. The old standard 2.5 OHM output does confuse younger subscribers. It will not damage your much cherished 840 or 750 if you do use it with a modern 4 OHM or 8 OHM speaker. For most people it will be sufficient simply to connect the speaker to the receiver. However, this will give a mismatch which will cause loss of low frequency. One of my Eddystone die-cast speakers recently died on me. Rewinding and repair was quoted at £8 + V.A.t. so I installed an 8 OHM speaker in the case and after some trial and error found that an 18 OHM 1/2 watt resistor shunted across a 0.1 UF condenser gave me as near as could be reproduction when checked against other Eddystone speakers. For the non-technical members - the two components in parallel may be wired directly across the tags on the speaker.

S.O.S....S.O.S. need for S640 smoothing choke, mains transformer, volts select panel, small control knob. Blanchard, 141 Dunes Road, Greatstone on Sea, New Romney, Kent.

Subscribers Ads.

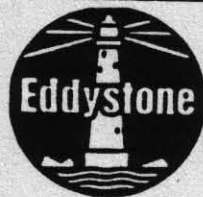
..... S.O.S..... Wanted, W/Change knob for my 770R buy or swap.
Ring 0709-557531 after 6.0 p.m.

.....S.O.S..... Wanted, buy or copy manual or circuit for 358 or 358X
W.W.II Eddystone to replace my copy loaned out and lost.

Info. on some popular models

- 730/4 480 K/CS to 30M/CS in 5 Bands. 13 valves plus stabiliser and calibrator. 2 RF. stages. Controls are R.F. gain. BFO Bandswitch tuning XTAL phasing. AF gain. Mains.on/off. AGC NL. AF filter. Variable selectivity. Sensitivity listed 1-5 uV for 15 db S/N.
- 750 480 K/CS to 32 M/CS in 4 bands. 10 valves plus stabiliser. Double superhet. Controls RF gain BFO Bandswitch. tuning. IF Gain. AF Gain. Mains. AGC.. Noise limiter, Standby, variable selectivity. Sensitivity better than 5uV for 20 db S/N.
- 840C 480K/CS to 30M/CS in 5 bands. 8 valves. AC/DC mains controls on/off tone. RF gain. Bandswitch. tuning. BFO. AF Gain. Standby AGC. Listed sensitivity better than 10uV for 15 db S/N.
- 888A Bandsread bands. 160 80 40 20 15 10 metres. Ten valves plus stabiliser and calibrator. Double superhet. Controls RF Gain. BFO. Bandswitch. If Gain. AF Gain. Tuning. Mains. Standby. AGC. AF filter. Noise Limiter. Variable selectivity. Listed Sensitivity 3uV for 20db S/N
- 940 480 KCS - 30MCS in 5 bands. 12 valves plus stabiliser. 2 RF stages. Controls RF Gain. BFO. bandswitch. Tuning. Crystal Phasing. AF Gain. Mains. Standby. Noise Limiter. AGC. Sensitivity 3uV for 15 db S/N.
- EA12 New style cabinet, replacement for 888A, tunable I.F.9 bands. 160-10 metres. 11 valves plus stabiliser and calibrator. Double superhet. Linear scales. Controls RF Gain, IF Gain. Notch filter. Bandchange. tuning. BFO. AF Gain. Sensitivity CW 0.5uV for 20 db S/N, AM 2uV for 10 db S/N Selectivity standby. AGC Scale Adjust. CW filter. Mains on/off
- 504 600 K/CS - 30 M/CS. Old type dial with semicircular scales, 5 bands. 10 valves. 2RF stages. First receiver after WWII Released 1946. XTAL filter. Controls BFO. NL. Wavechange. Tuning. XTAL filter. Mains. RF and AF Gain. Tone. AGC
- 640 1100 K/CS - 32 M/CS. 3 Waveband. 9 Valves with crystal filter and bandsread tuning. Controls waveband. Main tuning. Bandsread tuning. Filter IN/OUT RF Gain. AF Gain. Standby. Mains. BFO. AGC. NL.
- 670 Long, Medium, SW, Marine AC/DC Receiver. 7 valves. Has no BFO and is really a "Cabin" Receiver.
- 740 480 K/CS to 30 M/CS. 8 valve. 4 waveband. Controls. NL. Tuning. Wavechange. AGC. BFO. Mains. RF Gain. AF Gain. Tone
- 680 Fifteen valve professional comms receiver. 5 waveband with "S" meter. NL. (680X has crystal filter).

Have tried in above list to satisfy queries of several members re various models.



"LISTEN TO THE WORLD WITH EDDYSTONE"

Your local Eddystone dealer is :

CHESHIRE

The Transistor Centre
(Wilmslow) Ltd.
Green Lane
Wilmslow 24766

CORNWALL

S.S.B. Products
(Norman Birkett (GJEKX))
7 Little Castle Street
Truro
Feock 575

DERBYSHIRE

J. & A. Tweedy (Electronic
Supplies) Ltd
64 Lordmill Street
Chesterfield
Chesterfield 4982

DEVON

Graham Newbery
(Reg Ward C 2BSW) Axminster
Axminster 3163

ESSEX

F. E. Smith
184 Moulsham Street
Chelmsford
Chelmsford 54394

Unique Radio Ltd.
6 The Facade, High Road
Goodmayes, Ilford
01-390 8277

HAMPSHIRE

Southern Marine Radio
(Southampton) Ltd
Solent House, Town Quay
Town Quay 22721

Wireless Supplies Unlimited
264-266 Old Christchurch Road
Bournemouth
Bournemouth 24567

IRELAND

John F. MacMahon
10, Church Street, Enniskillen,
Co. Fermanagh, N. Ireland
Enniskillen 2955

ISLE OF WIGHT

Sherratt & Son
81-82-83 High Street, Newport
Newport 3358-9

KENT

G. T. & R. Wilson
12-14-16 Queen Street
Gravesend
Gravesend 63527/8

Percy Powell Radio Ltd.
54 High Street
Tunbridge Wells
Tunbridge Wells 26534

LANCASHIRE

Stephen-James Ltd
70 Priory Road, Anfield
Liverpool L4 2RZ
051-263 7829

North West Electric
769 Stockport Road
Levenshulme, Manchester 19
061-224 4911

Croftfilm Ltd
46 Friargate
Preston PR1-2AT
Preston 55244

LEICESTERSHIRE

A. K. Davey Ltd
New Street, Hinckley
Hinckley 2173 and 4288

LONDON

Imhof's (Retail) Ltd
112-116 New Oxford Street
W.C.1
01-636 7878

R. T. & I. Electronics Ltd
Aahville Old Hall
Aahville Road
Leytonstone, E.11
01-539 4986

Radio Shack Ltd
182 Broadhurst Gardens
London, N.W.6
10-624 7174

MIDDLESEX

Gurney's Radio Ltd
91 The Broadway, Southall
01-374 2115

NORFOLK

The Record Shop
157 King Street
Great Yarmouth

NORTHUMBERLAND

Aitken Bros & Company
35 High Bridge
Newcastle upon Tyne NE1 1EW
Newcastle upon Tyne 26729

SCOTLAND

L. Hardie
542 George Street
Aberdeen
Aberdeen 20113

SUSSEX

Cosh and Hammond
29 Beach Road, Littlehampton
Littlehampton 4477 or 4478

WALES

Holt High Fidelity
Picton Arcade, Swansea
Swansea 53254

Holt High Fidelity
8 Portland Street, Swansea
Swansea 41032

WARWICKSHIRE

Chas. H. Young Ltd
170/172 Corporation Street
Birmingham 4
021-236 1635

YORKSHIRE

Philip Cann Ltd
Chapel Walk, Fargate
Sheffield S1 1GJ
Sheffield 29225/6

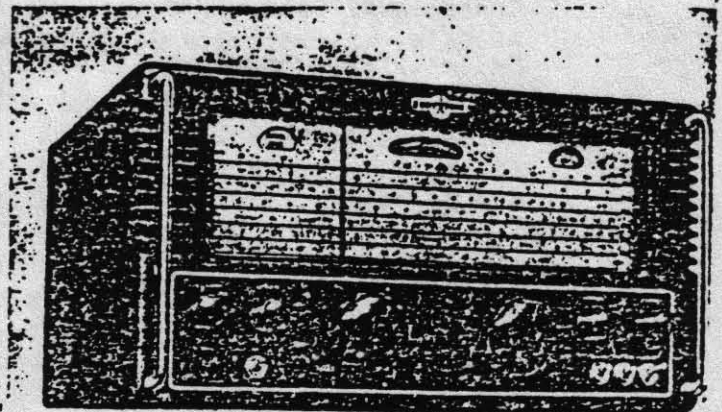
Short Wave (Hull)
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Hull, HU5 3AF
Hull 408953

The EDDYSTONE 770 R/U.

V.H.F

Communications Receivers

SPECIALLY SUITABLE FOR
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TESTS, LAB. WORK etc.



The "770R" Receiver has a frequency coverage of 19 Mc/s to 165 Mc/s. It accepts CW, AM telephony and wide and narrow band FM telephony. AC mains operation. The "770U" Receiver covers 150 Mc/s to 500 Mc/s; has positions for amplitude modulated and frequency modulated signals; operates from AC mains but is also adapted for use with external power supplies. Both receivers incorporate specially designed 6 range turrets and tuning capacitors, ensuring an excellent performance and complete reliability. Full information and performance curves will be sent on request.

EDDYSTONE

Model 740

General Description : Eight-valve (including rectifier), four-waveband communications receiver with noise limiter. Released 1950.

Power Supplies : A.C. mains, 110 and 200-250 volts. Consumption 45 watts. A socket is provided for vibrator power unit.

Intermediate Frequency : 450 kc/s. Oscillator frequency is higher than signal frequency on all ranges.

Valves : (V1) EAF42; (V2) ECH42; (V3) EAF42; (V4) EAF42; (V5) EL42; (V6) EAF42 (B.F.O.); (V7) EB41 (noise limiter); (V8) EZ40.

Notes : Input impedance (aerial terminals) 400 ohms nominal. The standby switch desensitises the receiver without breaking the H.T. supply. Undistorted audio output 1.2 watts, maximum output 3 watts. A separate loudspeaker is required, impedance 2.5 ohms. The R.F. gain control affects the R.F. and I.F. amplification. Switching on the B.F.O. automatically cuts out A.V.C. action.

Alignment Procedure : Alignment frequencies are given on page 492. The location of trimmers and cores is the same as for Model 670.

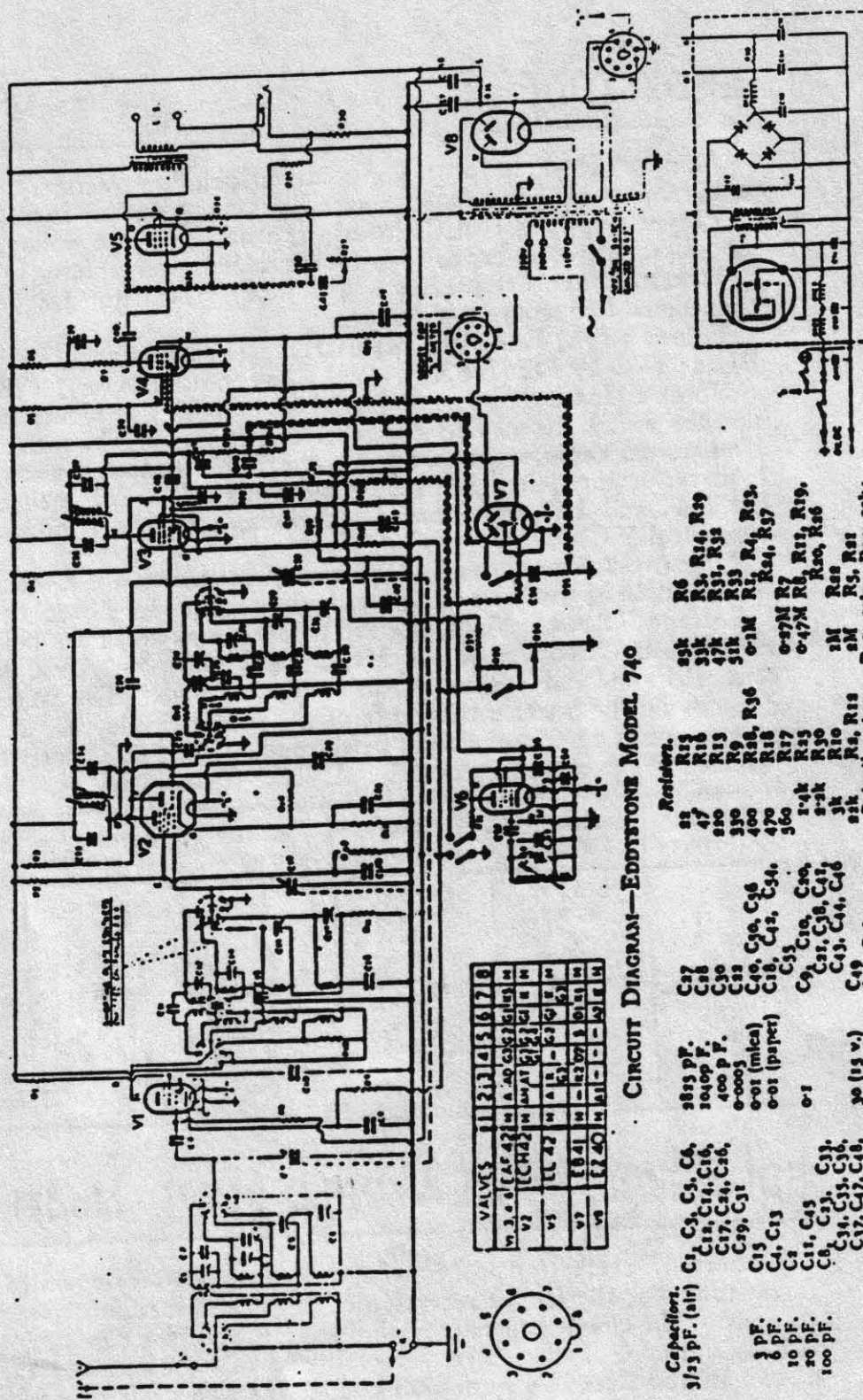
Voltage Values : Voltages given below are between the points indicated and chassis. Receiver at 28 Mc/s., on Range 1. Aerial shorted out; tone, R.F. and A.F. gain controls fully clockwise. The voltage indicated depends on the internal resistance of the meter employed. A tolerance of plus or minus 5 per cent should be allowed. Total H.T. current 57 mA.

Note : When checking Point R, "A.V.C." Switch must be set to "B.F.O."

Circuit Reference	1000 ohms/volt Testmeter	333 ohms/volt Testmeter	Circuit Reference	1000 ohms/volt Testmeter	333 ohms/volt Testmeter
A	240.0 v.	240.0 v.	L	35.0 v.	32.0 v.
B	83.0 v.	70.0 v.	M	18.0 v.	15.0 v.
C	2.0 v.	2.0 v.	N	0.9 v.	0.7 v.
D	240.0 v.	238.0 v.	O	235.0 v.	233.0 v.
E	92.0 v.	84.0 v.	P	240.0 v.	240.0 v.
F	93.0 v.	77.0 v.	Q	10.5 v.	10.5 v.
G	2.0 v.	2.0 v.	R	80.0 v.	75.0 v.
H	240.0 v.	238.0 v.	S	240.0 v.	240.0 v.
J	87.0 v.	72.0 v.	T	260.0 v.	260.0 v.
K	2.5 v.	2.4 v.	U	250.0 v. (A.C.)	250.0 v. (A.C.)

EDDYSTONE "ALL WORLD SIX" Model 710/B

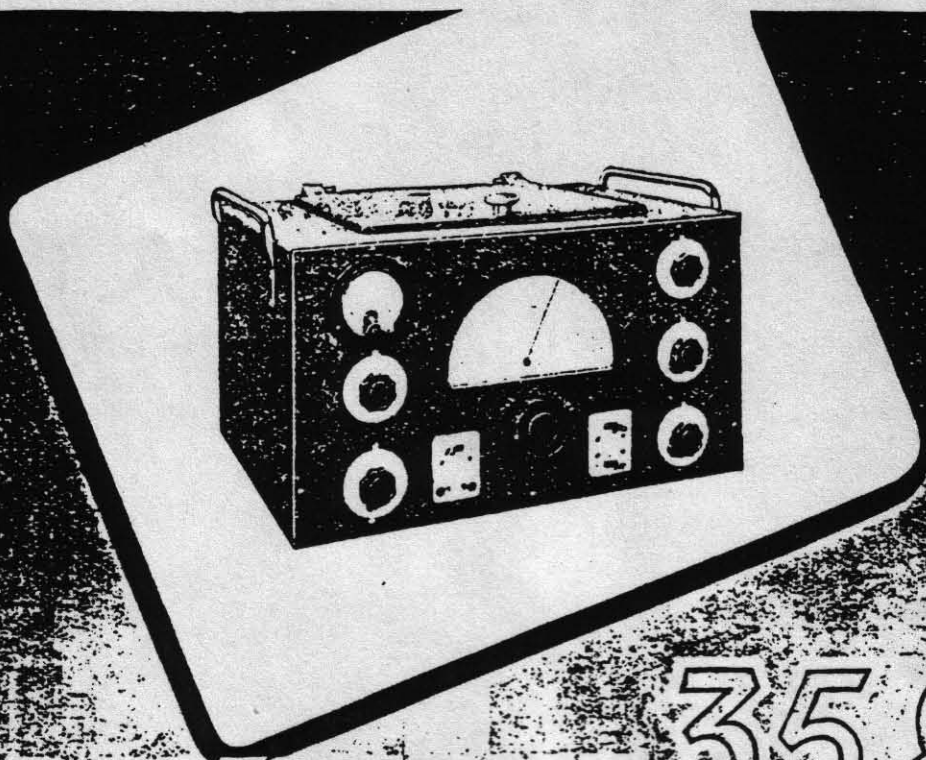
General Description : Model 710/B is a battery-operated receiver intended principally for the reception of short- and medium-wave broadcast stations. The circuit is generally similar to that of the 740 except that the B.F.O. and noise limiter valves are omitted while the output stage consists of two EL42 valves in a push-pull circuit, the two grids being fed from a centre tapped audio transformer, parallel fed from the anode of V4.



CIRCUIT DIAGRAM—EDDYSTONE MODEL 740

- Capacitors.**
 3/33 pF. (air) C1, C3, C5, C6, C19, C29, C32
 8 pF. C7, C9, C32
 10 pF. C12, C14, C16, C33, C35, C36, C37, C38, C48
 20 pF. C17, C24, C26, C34, C35, C36, C37, C38, C48
 100 pF. C18, C21, C23, C25, C27, C28, C30, C31, C33, C34, C35, C36, C37, C38, C48
 3635 pF. C2
 C7, C9, C32 Three-gang capacitor 11-3-366 pF. per section.
 B.F.O. pitch C31.
- Resistors.**
 25 R13
 47 R16
 200 R17
 330 R18
 400 R19
 470 R20
 560 R21
 1-k R22
 2-k R23
 3k R24, R25
 25k R26, R27
 50k R28, R29
 50k R30, R31, R32
 51k R33, R34, R35
 0-1M R36, R37
 0-47M R7, R22, R23, R24, R25
 0-47M R8, R20, R26
 1M R29
 2M R5, R21
 Potentiometers: R27 50k; R34 10k; R35 0-3M.
- Valves**
- | | | | | | | | | | | | |
|----|---|---|----|----|---|---|----|---|---|---|---|
| V1 | 3 | 4 | 4F | 42 | M | A | 40 | 6 | 5 | 7 | 8 |
| V2 | 6 | 6 | CH | 2 | M | A | 11 | 6 | 2 | 6 | 8 |
| V3 | 6 | 6 | CH | 2 | M | A | 11 | 6 | 2 | 6 | 8 |
| V4 | 6 | 6 | CH | 2 | M | A | 11 | 6 | 2 | 6 | 8 |
| V5 | 6 | 6 | CH | 2 | M | A | 11 | 6 | 2 | 6 | 8 |
| V6 | 6 | 6 | CH | 2 | M | A | 11 | 6 | 2 | 6 | 8 |
| V7 | 6 | 6 | CH | 2 | M | A | 11 | 6 | 2 | 6 | 8 |
| V8 | 6 | 6 | CH | 2 | M | A | 11 | 6 | 2 | 6 | 8 |

VIBRATOR POWER UNIT—MODEL 710/B



EDDYSTONE 358

Communication Receiver



WITH BANDPASS CRYSTAL FILTER

Special models of the Eddystone "358" and Medium Frequency Model "400" are available with Bandpass Crystal Filters. The advantage crystal control gives in improved rejection of interference outside the band and correspondingly better signal-to-noise ratio has been fully exploited by Eddystone designers. Both these receivers, at the moment, can only be supplied to holders of priority orders.

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