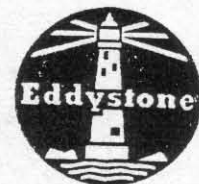


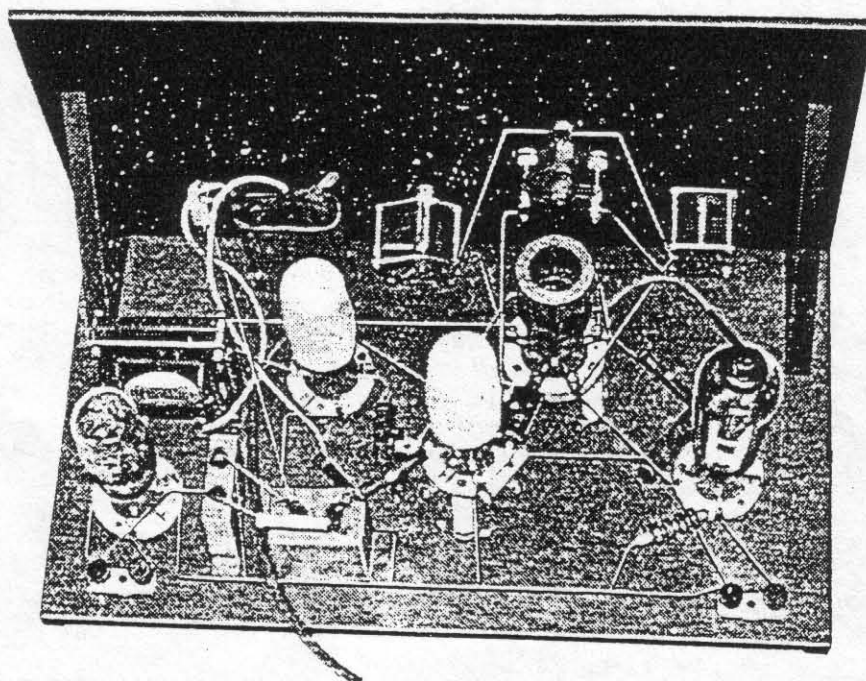
Eddystone User Group Newsletter

Issue No: 40 Xmas Edition
December 1996



40

Featured Model: The 'Everyman' Short Waver



*A non profit newsletter for Eddystone Users
*Information quoted from Eddystone Literature by kind permission of
Chris Pettitt, G0EYO, Managing Director of Eddystone Radio Limited

*Please address all mail to:
Eddystone User Group
c/o Graeme Wormald, G3GGL

15 Sabrina Drive,
Bewdley,

Worcs, DY12 2RJ

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This is issue 40 of the newsletter and is the fourth of six issues for the year 1996/97. If you join after this issue you will get back issues 37,38,39 and 40 plus the next issues No 41 and No 42.

Subscriptions

Subscriptions are £10 per year UK and £11 per year overseas. Metals EUG badges are available at £2 each. Any remittances for subscriptions, badges or manuals must be by cheque or money order and in sterling. We cannot cope with foreign currency as the bank charges for conversion are more than the value of the subscription. Make your cheques payable to **Eddystone User Group**.

Manuals and Circuits

Copies of manuals and circuits are available for most Eddystone receivers through the EUG with discounts for EUG members. Manuals cost between £3 and £10 depending on size, and whether original or a copy. Most manuals are now copies. Back copies of all newsletters are available at £2 each post paid. Contact Graeme Wormald G3GGL whose address is on the front cover.

Subscription renewals

This issue is only going out to those who have renewed this year.

Christmas Special

I am pleased to be able to wish you all a Very Merry Christmas and a Happy New Year from all of us at Eddystone Radio and hope you will be pleased with this bumper issue which also includes a super index of EUG Newsletters prepared by dedicated member Anthony Richards. Christine in our Tech Pubs Department has been working hard to print the index and the newsletter, some 70 plus pages by my reckoning. Now Pat will have the hard work of stuffing the envelopes and posting them off. In fact this issue will go to 290 addressees. My grateful thanks to both of them for the effort they put in on behalf of the EUG members. If any EUG members want to show their appreciation with a Xmas card feel free, address it to Pat and Christine, EUG Newsletters, Eddystone Radio, Unit 8/9, Birkdale Avenue, Heeley Road, Selly Oak, Birmingham B29 6UB.

I was pleased to see the EUG net got off to a good start. I would have joined in but I have been having problems getting a long wire to tune on low HF bands, perhaps next month, although it may clash with the December 2m AFS contest. Glad to see that Bill GW0ION was able to take part. Now Bill is the real Mr Eddystone. He was the Managing Director at Eddystone Radio and then Chairman until 1985. He spent his whole working life at Eddystone, apart from war service, and he is blessed with a fine memory. Now retired to Wales, I am glad he is still active on the air!. Best wishes Bill and Vera.

Chris Pettitt -GOEYO
Managing Director.

LATE ADVERTS

FOR SALE

Wanted: HRO Receiver, Model 5/5T/7R/7T or a model using octal valves. Should have coils for band "A", "B", "C", and "D". Any other band desirable but not essential. Preferred complete with original power supply. For Dr Leoni IK4NGC, but in the first instance call Graeme, G3GGL on 01299 403372.

- Issue 40 - Xmas 1996. -

- Another Xmas issue to do, seems not long since I was doing the last one ! With six and a half years of EUG behind us I have to admit that the Group has proved to be more successful than I had ever expected. Don't put that down to me, or any of the other volunteers, we only play a small part. The real factor in the success of EUG has been the reputation of The Eddystone Radio Company and its Quality products, known throughout the world. The backing that EUG has received from Chris Pettitt of Eddystone, and the help of those lady volunteers who copy and post off your Newsletters cannot be discounted either, they are true 'workers' of the EUG, so Thanks Ladies !

- I usually try to include a Xmas bonus with the Newsletter at this time of the year, something for you members to mull over whilst digesting your Xmas or New Year fare, so you will find this years offering enclosed - have fun.

- It has not been an easy time these last six months for Graeme, the trove of Company related paperwork that he found at the QTH of the late Geoff Woodburn. I understand that he has reduced the mass to the point where he is once more able to use his garage. The proceeds of this 'trove' are being made available to members as Newsletter items but should you have particular queries then do please ask, if we have the gen in the files, either chez-moi or at Graeme's QTH then you will get what you need.

- The featured model this time around ? Well it was a toss up as to whether I feature the Scientific Two or the Everyman, the latter won out by number of requests/queries in the mail. You will have the Sci-2 in next issue !

- Sometimes I omit to mention the name of the sender of the photocopies of those period ads that adorn your N/L, sorry about that but accept the thanks of us all if you are not mentioned by name. The files here are crammed with such ads for future use but I cannot use all I get in one issue, the goodish thing about this situation is that we are guaranteed a good supply for future issues for a long time to come. I guess the same goes for Featured Models, it seems like we have enough knowledge of the Eddystone models so far to keep us going in this feature for many years to come - cannot see myself ever running out. The Company really has been a very prolific source of different models through the years from 1922 and right up to the present day, let us hope that they continue for many years to come.

- Enough from me, enjoy your Xmas Issue and your Xmas Fare, and a Happy New Year to all members from all of us at EUG.

- - - - -
- Letters from the Source. -

- In this issue I am starting to include some of the interesting letters that form part of the correspondence I carried on with Geoff Woodburn. From the early days of EUG I was able to rely upon Geoff for both historical gen on the Eddystone Company and for information on the products over the years.

- Some of these letters contain anecdotes about the Factory and the many models with which Geoff was concerned during his time there, it is with the permission of Geoff's widow Margery that we are all able to enjoy these letters.

- Those that I have included in this issue help to clear up one of the mysteries that had remained unsolved for a long time, some of us knew of the Strattons models that had been of so much assistance during the D Day landings but we did not know the actual model. We do know now, thanks to Geoff. I also have a letter from him detailing the happenings on the night when the Bromsgrove Street Factory was blitzed, you will have to wait for that one ! Patience.

- - - - -

- It Can Happen ! -

- We all say and think it, "it can't happen to me" - Oh Yes It Can !

- Bill had got home from the weekend shopping trip, left the XYL to put all the goodies away in the Kitchen and had gone up to the 'shack', switched on the 680X and left it to 'warm up' (the joys of steam radio). He nipped into the bathroom whilst waiting and when he returned to the 'shack' he was met by a loud silence and none of those pretty lights that illuminate the scale of his number 1 receiver, the 680X. It was as dead as though he had never switched on at all, but he had ! A quick check showed power in the shack - the Tono RTTY reader was working as was the BC 221. A continuity check on the 13 amp plug fuse showed okay BUT there was no continuity from live to neutral on the plug.

- Plans had been for a quick tune around some utility stations using RTTY but it looked like this was going to be a servicing session instead. First step was to move the set across to the service bench and to remove the case - something that had not needed to be done for more than 7 years, despite quasi continuous use on a daily basis. Up ended on the bench it was now possible to do some under chassis continuity checks. As those of you who own a 680X know the mains adjustment panel is actually on the transfo and a moulded link couples the tappings for 110, 200 or 230 volts. This fell out onto the bench ! Honest Injun ! It simply dropped out as the 680X was man-handled into another position for further checks. Pushing it back into the 230 volt position showed that it was a pretty tight fit, and Bill was very loathe to believe that he, all those years back, had omitted to push it fully home, so what had caused it to come out ? The only feasible reason had to be 50c/s vibration of the transfo. Anyway it was replaced properly and a new check made - still no continuity. The two fuses on the 680X chassis were checked and found okay, as were the fuse holders, next came the SP on/off mains switch, this proved to be the real culprit. It was open circuit no matter whether it was meant to be on or off.

- Now I don't know about the theory behind fitting a single pole mains switch in the neutral leg of the mains input but I DO NOT like the idea. Nor does Bill apparently for he decided to swop the original SP mains switch with a similar DP toggle switch from the junk box, thus cutting both live and neutral legs of the AC mains input. The old switch felt peculiar as though switching it was not causing movement inside, so into the bin with it says Bill. Fitting the new one meant some re-arrangement of the wiring but nothing exceedingly difficult to an ex Signals bod. This done and power applied the 680X came to life as it had before. The whole task took up the better part of 2 hours, with a coffee break included and it meant that time spent QAPing the bands had to be curtailed for that day. The repair was done several weeks back and there have been no further problems. As Bill says, one toggle switch in seven years is a pretty good service record - compares favourably with the domestic washing machines 3 service calls in less than a year !

- - - - -
- EC10 Push Button Switches. -

- This member had the bad luck to buy a fairly cheap EC10 that was found to have a 'broken' - physically broken that is - push button switch assembly. He knew that any hope of getting spares was somewhat akin to finding a meteorite from Mars ! Repair seemed to be the only way out.

- When a close examination was made it was found that the mechanical frame of the switch assembly had a small piece of metal missing, broken off ! This turned out to be one of the little 'bits' that kept the BFO switch ON when pushed in. The bit was not in the case but by comparison with the other sections of the assembly it was possible to guess at both the shape and the approximate size of the piece.

- With some fiddly cutting and filing a suitable size and shaped piece of metal was manufactured, with an oversize end bit which was later to be soldered to the assembly frame.

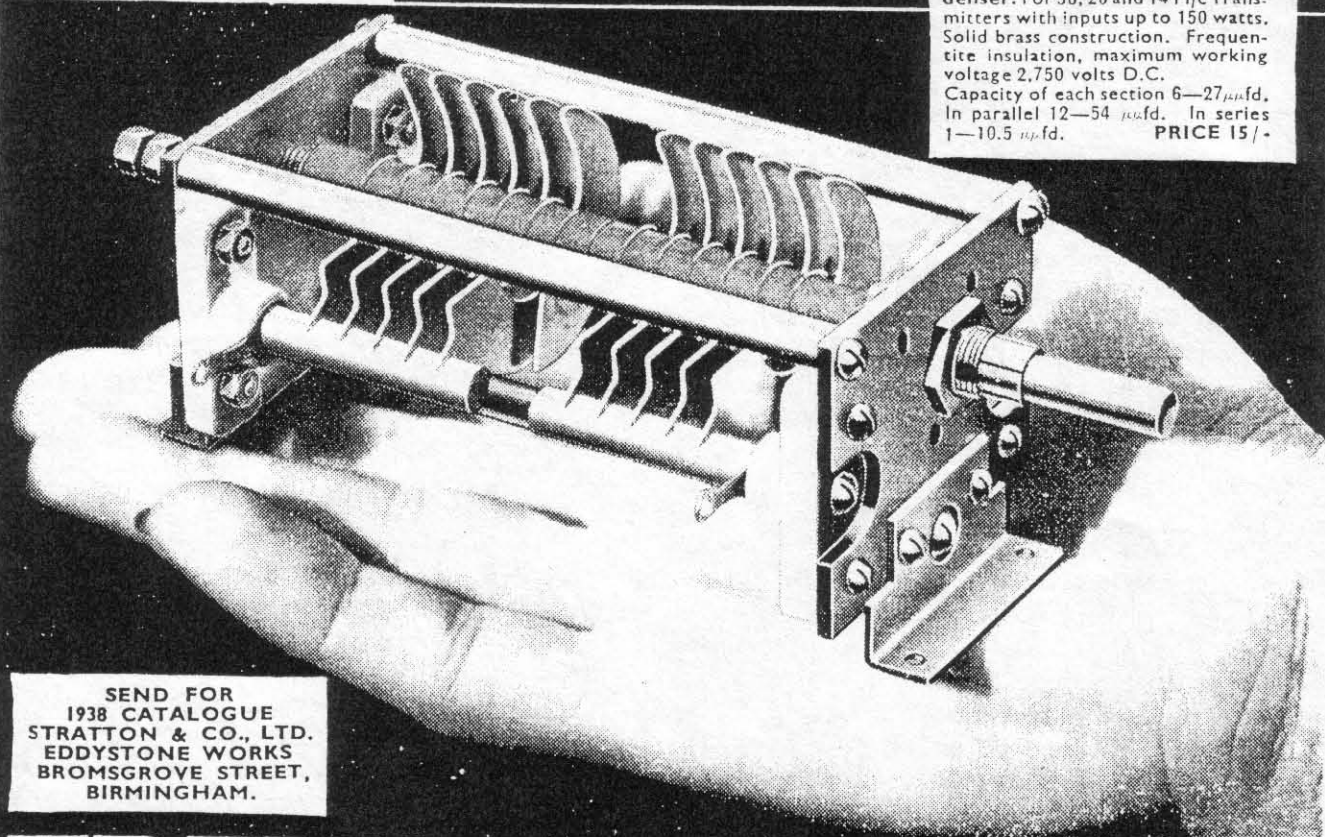


Latest Examples of EDDYSTONE Craftsmanship



Cat. No. 1088. Neutralising Condenser. Ideal for ultra high frequency circuits using low capacity triodes. Maximum working voltage 2,000 volts D.C. Capacity variation 1—8 $\mu\mu\text{fd}$. Glazed Frequentite Pillar insulator for mounting. Insulated adjusting knob **PRICE 6/6**

Cat. No. 1087. Split Stator Condenser. For 56, 28 and 14 M/c Transmitters with inputs up to 150 watts. Solid brass construction. Frequentite insulation, maximum working voltage 2,750 volts D.C. Capacity of each section 6—27 $\mu\mu\text{fd}$. In parallel 12—54 $\mu\mu\text{fd}$. In series 1—10.5 $\mu\mu\text{fd}$. **PRICE 15/-**



SEND FOR 1938 CATALOGUE STRATTON & CO., LTD. EDDYSTONE WORKS BROMSGROVE STREET, BIRMINGHAM.

EDDYSTONE SHORT WAVE COMPONENTS

LONDON SERVICE : WEBBS RADIO, 14, SOHO STREET, W.1.

S.W.M. 4/28

- Now soldering of this sort of metal with the usual resin fluxed solder & a 'mini' low power iron is out of the question. What was available was a 150 watt iron of 1960s vintage and some plumbers flux and solder. The flux was dabbed onto the spot on the frame of the assembly where the new piece had to go. Flux was also dabbed onto the extra long end of the new 'bit' that was going to replace the missing piece.

- The long disused iron was plugged in and when sufficiently heated the bit end was cleaned and retinned, normal soldering practice was now followed. The iron tip was applied to the point on the frame where the new bit had to go, a dab of solder when the metal had come up to temperature and the spot was tinned properly. The new bit was held in a pair of pliers and the end bit of this was also tinned properly. Whilst it was still warm this new part was held in pliers and placed where it had to be soldered to the frame of the switch assembly. A mere seconds holding of the Iron melted the layers of solder on both pieces and they were allowed to cool before removing the pliers. The first attempt had put the new part slightly askew, a second 'meltdown' was successful in positioning the new piece more accurately. When the whole switch frame had cooled down the BFO push button was tried, some touch up with a flat needle file was necessary but the switch then worked well, as good as the original switches in fact. The whole switch assembly was now lubricated with some 'oil-dag' & after re-assembly the EC10 worked fine, a nice addition to the station with a 940 in the middle, and EB36 to one side and now the EC10 on the other side.

* The term 'oil-dag' is a fifties one that may be familiar to engineers, I used it a great deal whilst in the employ of the Post Office Engineering Dep't and it consisted of a light oil with finely powdered graphite suspended in solution in the oil, shake the bottle and you had a thickish 'goo' that could be utilised to lubricate moving metallic parts, the graphite acted as a lube and on contacts it was a conductive film.

- - - - -
- Armchair Servicing. -

- It does not pay to simply open up and tip up, and then delve into your favourite Eddystone at the first sign of a problem. It is certainly not a recommended practice !

- Quite often a spell of quiet thinking, pondering over the circuit diagram and manual, will help one to at least delineate that part of the circuit where the problem is most likely to be.

- A completely dead set, no lights, no heater glow, no sound, well it looks like a complete power failure, so head for the AC input circuitry up to the transformer primary.

- If you have dial lights, and valve heaters but no sound, then check for HT supplies.

- If you have HT also but still not a peep out then check the last stage and speaker/phones output by touching the top end of the AF gain pot; with the tip of a small screw driver - you ought to get a click or maybe a 'plop' if the output stage/s is/are working okay.

- By continuing in this way you can definitely isolate the faulty stage & all this without delving too deep into the wiring and circuitry.

- Now for another bout in the armchair with the circuit. You know where you are, you know the stage that is 'duff', so a further examination of this stage should make the working of it familiar to you. Look at it and decide which component or components will likely be suspect. Condensers, especially paper ones are the first off, then electrolytics, only then go for resistors.

- Do the necessary voltage checks, all okay ? then try a new valve ? still no joy ? then you have to really get down to component level now and test each and every component in that stage. Condensers for isolation and resistors for resistance at least within the specified tolerance. You CAN get correct correct voltage readings with resistors that are way out of tolerance. The resistor may be several times higher in value than spec; not be carrying any current, and so give the impression you have correct volts so beware.

- All of the above is simply to warn YOU, don't dive in without doing some

homework whilst sat comfortably with the manual in hand ! And Yes, it does happen as EUG has often had letters where the owner has spent weeks, even months trying to figure out faults without even the benefit of a manual or schematic diagram. One non-member last year had changed practically every component on his 670 last year, in a two month frenzy without finding the fault and without consulting the circuit. In desperation he wrote off for the manual and sent an SOS to me, a few suggestions and he found the problem was a dry joint on the fourth wafer of the range switch.

- - - - -
- Replica Chassis. -

- From an EUGer with some knowledge of metal-bashing comes the suggestion that it would appear to be an easy job to reproduce one of those fancy chassis cum front panels that were used by Strattons on so many of their early sets.

- The kind referred to is where you have a chassis of folded metal attached by stays to a distant front panel - the spacing being to help eliminate that old bug-bear of 'hand capacity' when insulated extension spindles, naturally made by Strattons, were used.

- Varied sizes were made - such as the smaller one for the Sci-2 model up to the larger one for the Kilo-4 model. In some cases the actual measurements of the panel and chassis are available, in Imperial units of course. (who wants those silly metric units anyway ?).

- If you are contemplating building a replica of any set then ASK, if we can locate any gen whatever for you then you shall have it, soonest ! I know of three 'jobs underway' and two 'jobs projected' so far. With winter coming on why not get busy ???

(See Page 33 - Graeme)

- - - - -
- Problems with an S.504. -

- Not often we hear of this one, yet there must be many out there still. In the present case the owner wrote in to say that his trusty 504 had developed an annoying habit of drifting off frequency after a couple of hours of use.

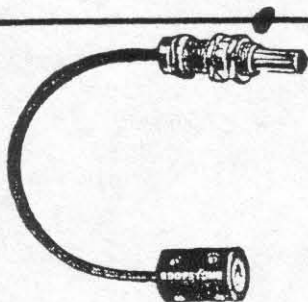
- He further stated that observation showed it was going LOW in frequency and not what I often find is a clue, going HIGH.

- After a lot of brain cell bashing I had to admit that I had no CE cure, but had come up with several possibilities. I duly sent off my reply with the list of possible cures and waited, and waited ! Usually when a correspondence of this type gets going the letters fly back and forth rapidly. Here this was not so and it was several weeks later that I got my reply, the EUGer had had to abandon his 504 and take the XYL and sprogs on holiday.

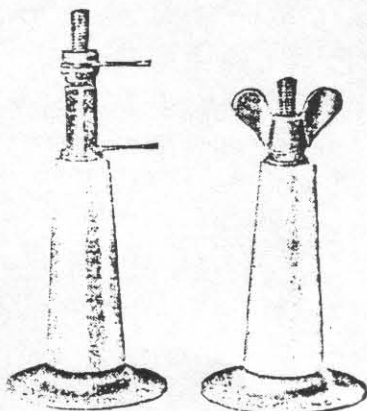
- The good thing was that the third suggestion that I made had effected a complete cure of the drifting. Well my first one had been a check - by a substitution - of the RF/IF valves, No Go ! But he did find an RF valve with loose glass bottle which needed glueing into its base. The second suggestion of trying for leaky paper type condensers was also unsuccessful, although it was deemed necessary to replace a couple of them.

- Success was obtained when the whole range switch assembly had been cleaned with switch-cleaner and a thin artists paint brush, this not only cleared the drifting but made operation of the range switch far more positive. In this letter the EUGer did mention that he had never before had a problem with the 504 in some 20 years of ownership, he is now assembling a new set of valves as a further rejuvenation project.

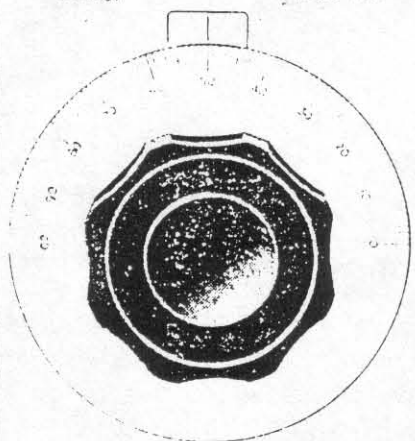
For Outstanding Performance



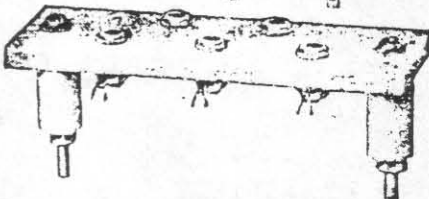
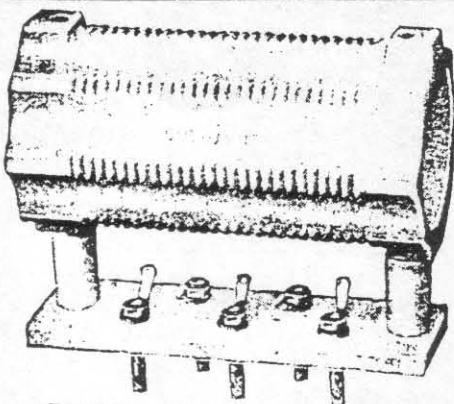
FLEXIBLE COUPLING UNIT.
Cat. No. 1096.
For front panel control of awkwardly placed components. Will drive through 90 deg. perfectly. One hole fixing. For $\frac{1}{4}$ " Spindle. Price 3/6



FREQUENTITE PILLAR INSULATORS
Ideal for mounting inductances, formers, meters, etc. Tested to breakdown voltage of 30,000 volts.
Cat. No. 1049 (wing-nut fitting) Price 1/6
Cat. No. 1095 (2BA Plug and Socket fitting) Price 1/8



PRECISION DIAL. Cat. No. 1077.
For high-grade equipment. White metal 4" scale with machine-cut markings. For $\frac{1}{4}$ " spindle. Price 6/9

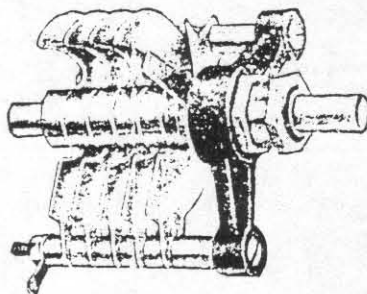


FREQUENTITE LOW LOSS FORMER
Cat. No. 1090.
Ideal for Amateur transmitters. Former size 5" x 2 1/2", spiral grooves take 26 turns of wire up to 12 gauge. Winding data supplied with former. Price 4/-

FREQUENTITE SUB-BASE.
Cat. No. 1091.

For mounting former No. 1090. Can be used as base for self-supporting inductances. Power plugs ensure positive contact. Price 3/6

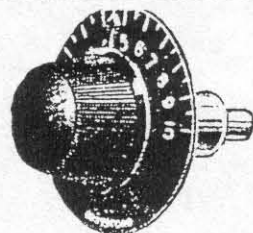
FREQUENTITE BASE. Cat. No. 1092.
For mounting former with sub-base. Heavy-duty power sockets for sound electrical connection to former. Price 3/9



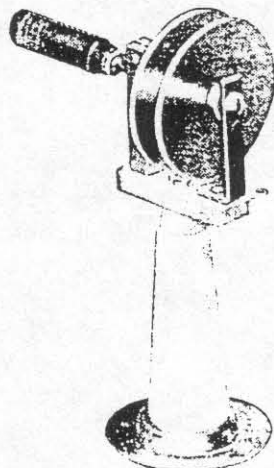
HIGH-VOLTAGE MICRODENSER.
Highly efficient. Soldered brass vanes. Constantly maintained capacity; very low minimum 3 mmfd. DL9 insulation. $\frac{1}{4}$ " spindle extended for ganging. Peak flashover voltage 3,500 volts. Easy to gang - capacity matched within 1 per cent.
Cat. No. 1094. 18 mmfd. Price 3/9
Cat. No. 1093. 60 mmfd.
For crystal oscillator plate circuit, buffer amplifier, tank tuning. DL9 insulation. Price 4/6

SEND FOR 1933 CATALOGUE STRATTON & CO. LTD., EDDYSTONE WORKS, BROMSGROVE STREET, BIRMINGHAM.

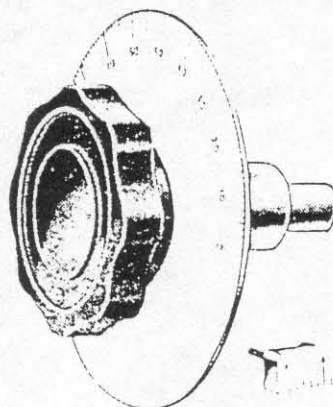
London Service: Webb's Radio, 14, Soho St., Oxford St., W.1.



SLOW MOTION DRIVING HEAD. Cat. No. 1012.
Very useful for Transceivers and Ultra Short Wave Receivers. With 9-1 reduction ratio. Price 3/-



NEUTRALISING CONDENSER.
Cat. No. 1033.
For H.F. circuits using low-capacity triodes. Maximum voltage 2,000 volts D.C. Capacity variation 1-8 mmfd. Frequentite pillar insulator mounting, insulated adjusting knob. Price 6/6



PRECISION DRIVE.
Cat. No. 1085.
An instrument type driving movement with slow-motion ratio of 6-1. Vernier indicator allows accurate readings to one-tenth of a division. For $\frac{1}{4}$ " M or FM fitting. Price 15/-

EDDYSTONE SHORT WAVE COMPONENTS

THE "EVERYMAN" SHORT WAYER

A 4-VALVE BATTERY RECEIVER WITH BANDSPREAD TUNING.

15 - 100 METRES.

Here is a specially designed short wave receiver which is simple to construct and relatively inexpensive. An ideal set capable of giving loud speaker results that will satisfy the ardent short wave enthusiast.

The circuit has been based on that of the Eddystone "Kilodyne Four," a set which has already achieved a world-wide reputation for performance and reliability. The patented method of bandspread tuning makes the receiver easy to handle and facilitates the thrill of world-wide reception on the short wave bands. The circuit consists of a high frequency amplifier, detector and two low frequency stages. It is free from "blind spots" or hand capacity, and has smooth and gentle reaction control. The set does not re-radiate and can be used without any interference to the general domestic receiver.

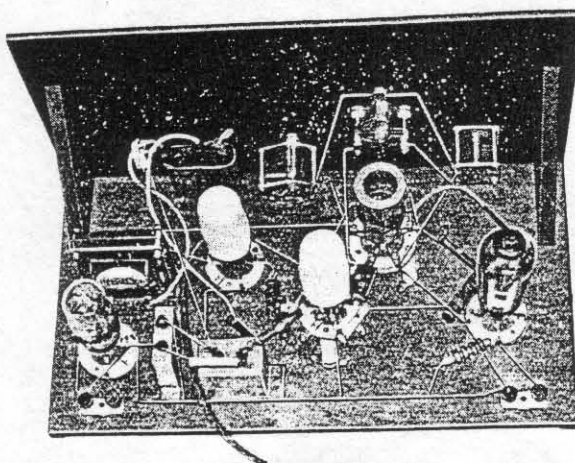
CONSTRUCTION.

The wiring plan and point to point connection details make this quite straightforward. It is best to proceed as follows:—

Make up panel and baseboard as shown in sketch on page opposite. Only simple tools are needed and plywood will be most suitable. The chassis or panel can, of course, be polished to suit individual choice. A metal panel is not recommended, it may cause hand capacity. The assembly comes next; but first for ease of wiring, it will be advantageous to tin or give the connecting points a coat of solder before parts are fixed in place.

Lay out components as shown in wiring plan and proceed to fasten them down. It should be noted that the coil base and valve-holder of V2 are mounted on insulating pillars. When fixing variable condensers to panel take care to bed down squarely otherwise pointer may foul panel.

Make sure in the wiring that all joints are strongly made. One poor or high resistance joint can adversely affect the set's performance, or alternatively may give the set a very high background noise level which is most undesirable.



Baseboard view showing general lay out of components.

BATTERIES.

A 2-volt low-tension is needed, the Exide D.F.G. or larger capacity being suitable. High-tension should be a minimum of 120 volts. This can, with some advantage to quality, be increased to 150 volts. The grid bias battery should be $4\frac{1}{2}$ volts. G.B. - 1 from the 1 meg. leak goes to the $1\frac{1}{2}$ volt tapping, G.B. - 2 from the transformer to 3 or $4\frac{1}{2}$ volts according to anode voltage used. L.T. current is .55 amperes and H.T. 12 m/a at 120 volts. On the battery leads there are two spade connections to L.T. battery and two wander plugs for H.T. battery.

TRYING OUT AND OPERATING THE SET.

Insert a coil, and then starting with both tuning, tank, and reaction condenser at minimum, switch on the receiver. Increase the reaction control slowly by means of the vernier knob until at a certain point the set will begin to oscillate; this will be noticeable immediately, since a low "rushing" sound will be heard. Throughout the whole tuning operations, this reaction control should be so adjusted that the set is always only just in the oscillating condition. The reaction control should never be turned any more than is necessary for the first reaction sound to be

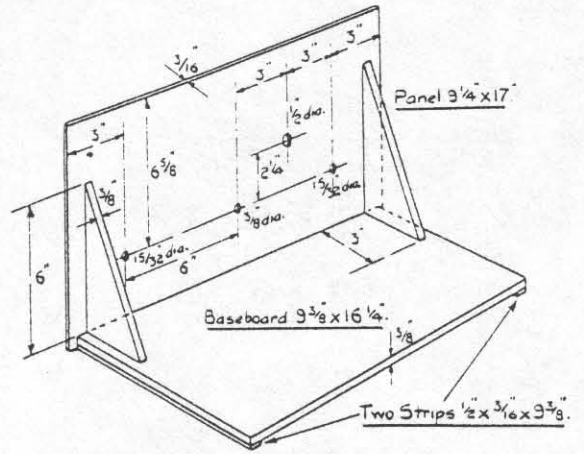
"EVERYMAN" SHORT WAYER—continued

heard. Now commence turning the tuning condenser, and when this has gone through 100° the first step of the tank condenser has been covered. Advance this condenser one step and continue to cover each step with the tuning condenser. Probably the first signals heard will be morse transmissions, a series of dots and dashes of a high pitched musical note. With the set in the slightly oscillating condition referred to, telephony signals will also be first heard as a high pitched whistle similar to a morse signal with the difference, however, that as the tuning is varied, the note will appear to consist of a double peak signal with a silent point in the centre. To receive the telephony signal clearly, leave the set tuned to the silent point, slacken off the reaction control very slightly until the set is just out of oscillation, retune a trifle if necessary, and the speech or music should be quite clearly heard. It simplifies the operation of the receiver when searching for stations, to keep it in the oscillating condition, but it should be borne in mind that clear telephony can never be received with the receiver oscillating.

HOW BANDSPREAD TUNING WORKS.

Tuning is accomplished by means of two parallel condensers. The band required is selected by the larger capacity condenser, which is variable in ten equal steps only and is called the Tank Condenser. A small vernier condenser slightly larger in capacity (20 m.mfd.) than that of one step (14 m.mfd.) in the tank condenser, is used for final tuning.

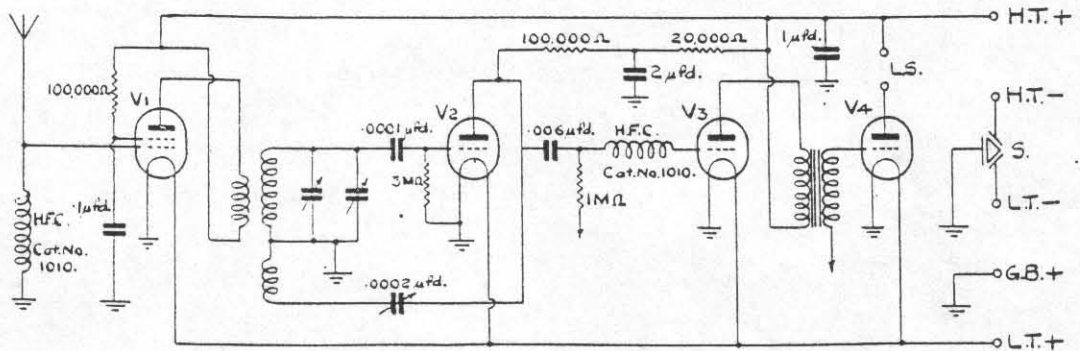
Suppose the coils were tuned in the normal way with a .00016 mfd. variable condenser. The 6LB coil would tune from approximately 19,870 kc/s. at 0° on the dial to 10,067 kc/s. at 100°. Thus, a frequency bandwidth of 9,603 kc/s is obtained by turning the condenser through



Showing details of panel and baseboard assembly.

100 degrees on the dial. With the bandspreading system employed in this receiver the band required is selected by putting the tank condenser knob on, say, No. 5 position, and the small tuning condenser then tunes a frequency bandwidth of only 960 kc/s. approximately, as the dial is rotated from 0 to 100 degrees. Since we have only covered a 1/10th of the previous waveband tuning is ten times as easy as with a normally tuned receiver. As the tuning condenser has a 9 : 1 slow motion head incorporated in its movement, it will be appreciated that tuning difficulties are still further decreased.

To give the constructor an idea of how the various bands are "spread" the curves on page 11 were taken on a specimen receiver. These show the effect of bandspreading, the numbers on the curves indicating the position of the pointer knob on the Tank Condenser, while the figures on the horizontal line refer to the degrees on the tuning condenser dial.

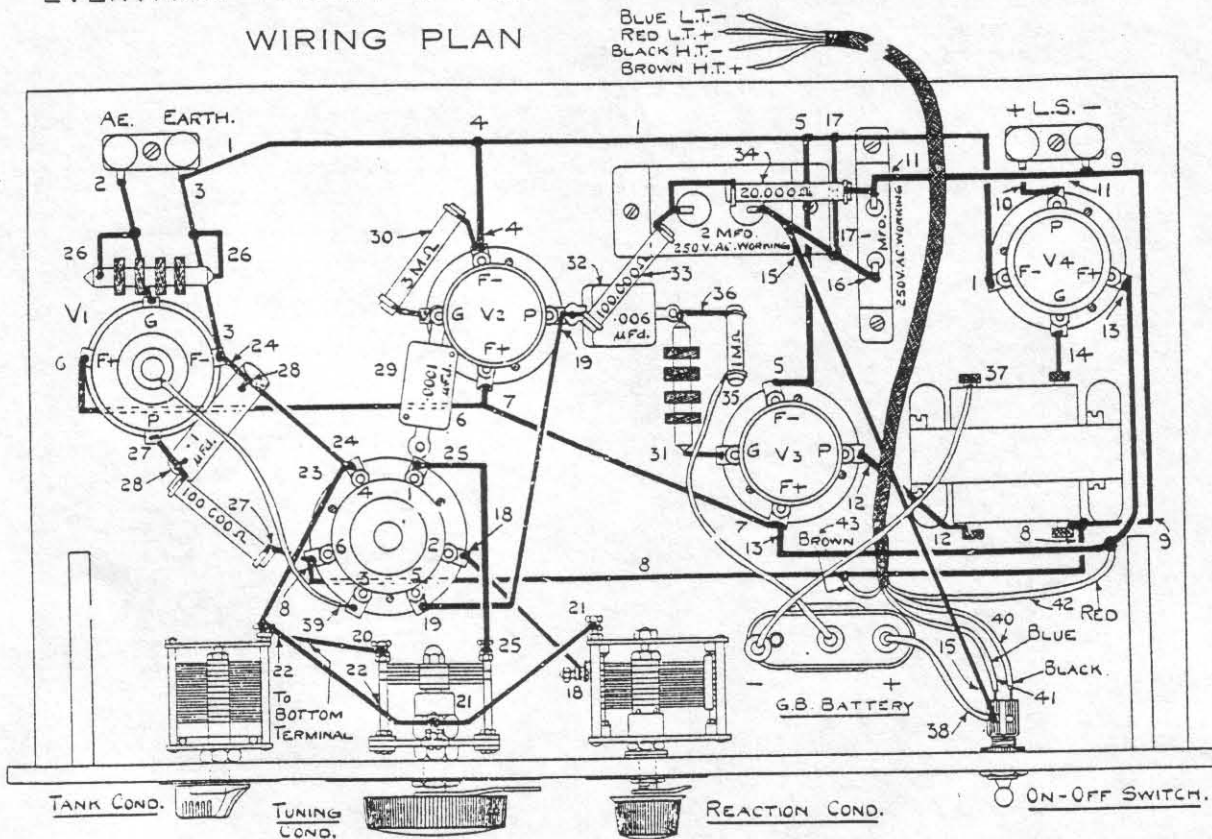


THEORETICAL CIRCUIT DIAGRAM.

EDDYSTONE SHORT WAVE MANUAL

"EVERYMAN" SHORT WAVE—continued

WIRING PLAN



POINT TO POINT CONNECTIONS.

- 1—Earth Terminal to F neg. of V4.
- 2—Aerial Terminal to G of V1.
- 3—Earth Terminal to F neg. of V1.
- 4—Wire No. 1 to F neg. of V2.
- 5—Wire No. 1 to F neg. of V3.
- 6—F + of V1 to F + of V2.
- 7—F + of V2 to F + of V3.
- 8—No. 6 of Coil Holder Socket to Plate Terminal of Transformer.
- 9—Plate Terminal of Transformer to L.S. neg. Terminal.
- 10—L.S. + Terminal to "P" of V4.
- 11—L.S. neg. Terminal to 1 mfd. Condenser.
- 12—"P" of V3 to H.T. + of Transformer.
- 13—F + of V3 to F + of V4.
- 14—G. of V4 to GRID of Transformer.
- 15—On-Off Switch to 2 mfd. Condenser.
- 16—2 mfd. Condenser to 1 mfd. Condenser.
- 17—Wire No. 1 to Wire No. 16.
- 18—No. 2 Socket of Coil Holder to Fixed Plates of Reaction Condenser.
- 19—No. 5 Socket of Coil Holder to "P" of V2.
- 20—Fixed Plates of Tuning Condenser to Fixed Plates of Tank Condenser.
- 21—Moving Plates of Reaction Condenser to Moving Plates of Tuning Condenser.
- 22—Moving Plates of Tuning Condenser to Moving Plates of Tank Condenser.
- 23—Moving Plates of Tank Condenser to No. 4 Socket of Coil Holder.
- 24—No. 4 Socket of Coil Holder to F neg. of V1.
- 25—No. 1 Socket of Coil Holder to Fixed Plates of Tuning Condenser.
- 26—H.F. Choke across Aerial and Earth Terminal.
- 27—100,000 ohm Resistance :—From No. 6 Socket of Coil Holder to "P" of V1.
- 28—One End of .1 mfd. Condenser to "P" of V1. Other End to "F" neg. of V1.
- 29—One End of .0001 mfd. Condenser to No. 1 Socket of Coil Holder. Other End to "G" of V2.
- 30—One End of 3 meg. Resistance to "F" neg. of V2. Other End to "G" of V2.
- 31—One End of H.F. Choke to "G" of V3.
- 32—Other End of H.F. Choke to .006 mfd. Condenser. Other End of .006 Condenser to "P" of V2.
- 33—100,000 ohm Resistance to "P" of V2. Other End to 2 mfd. Condenser.
- 34—One End of 20,000 ohm Resistance to 2 mfd. Condenser. Other End to 1 mfd. Condenser.
- 35—Solder G.B. neg. 1 Lead to One End of 1 meg. Resistance.
- 36—Other End of 1 meg. Resistance to junction of H.F. Choke and .006 Condenser.
- 37—G.B. neg. 2 Lead to G.B. Terminal of Transformer.
- 38—G.B. + Lead to On-Off Switch.
- 39—Lead from No. 3 Socket on Coil Base to Top Terminal of S.G. Valve.
- 40—Black Lead of 4-way Battery Cable to On-Off Switch.
- 41—Blue Lead of 4-way Battery Cable to On-Off Switch.
- 42—Red Lead of 4-way Battery Cable to No. 13 Wire.
- 43—Brown Lead of 4-way Battery Cable to No. 8 Wire.

"EVERYMAN" SHORT WAVE—continued

It must be emphasized that the curves shown are for an average receiver and are drawn to give the listener some knowledge of the wavelengths covered by each position of the Tank Condenser. Individual receivers will vary somewhat, due to different valve and circuit capacities, and the effect of aerial load, although minimised in this receiver, will influence the wavelengths covered to a small degree.

EDDYSTONE PARTS.

	Price
1 Tank Condenser, No. 1042	6/0
1 Bandsread Condenser, No. 1043	6/6
1 Reaction Condenser, No. 957	6/0
2 H.F. Chokes, No. 1010, 2/- each	4/0
4 049 Valveholders, 1/5 each	5/8
2 1046 Terminal Blocks, 1/- each	2/0
6 1028 Pillars, 4½d. each	2/3
1 6-pin Base, 969	2/3
3 Coils, 6LB, 6Y, 6R	12/0

MISCELLANEOUS PARTS.

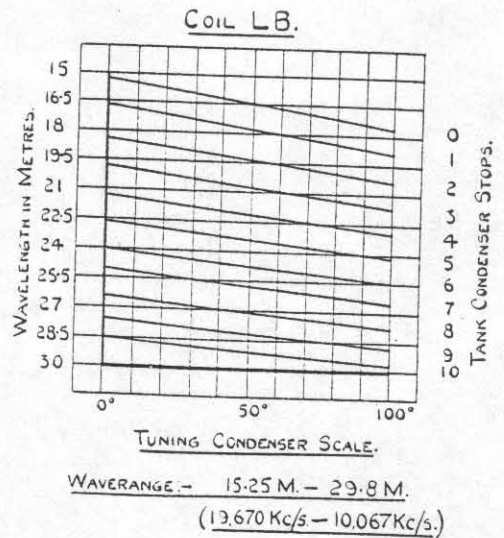
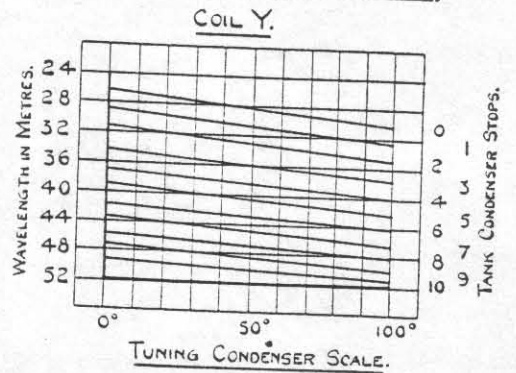
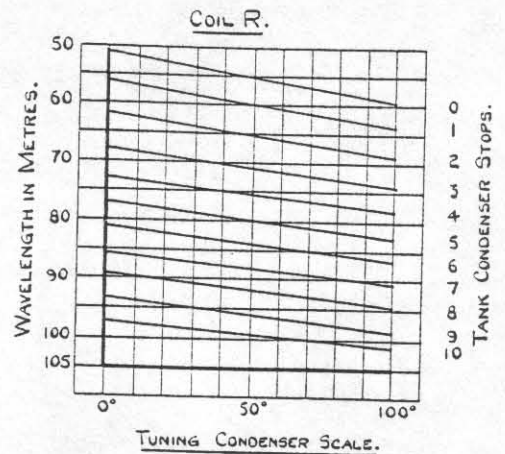
- 1 .0001 Fixed Condenser
- 1 .006 Fixed Condenser
- 1 .1 mfd. Condenser
- 4 Erie Resistances
- 1 3-point Switch
- 1 Ferranti AF4 Transformer
- 1 2 mfd. Condenser
- 1 1 mfd. Condenser
- 1 G.B. Battery, 4.5 volts
- 1 G.B. Battery Clip
- Set of Leads ..
- 5 Plugs
- 2 Spade Terminals

This set is not supplied as a complete kit, but for reference the approximate cost of the parts is 83/6 less valves.

The following valves have been selected as most suitable for this set:—

V.1 (H.F. Position)—	
Mazda SG. 215	11/-
V.2 (Detector)—	
Mazda H.L.2. Metallised ..	4/9
V.3 (L.F.)—	
Mazda H.L.2. Metallised ..	4/9
V.4 (Output)—	
Mazda P.220	6/-

Other makes can be used provided they have similar characteristics and are free from microphonic noises.



- The EY11 - Yachtsman. -

- Well we got all we needed on the 720, now it is the turn of this first generation of tranny receiver to be spotlighted.

- What do we know of it so far ??? Not a lot really. It was one of the 'baby' series similar in size and construction to the EB35/EC10 sets. It was meant as a replacement for the valved 720 "Yachtsman" and so ranges would be similar to the 720, as would controls. It used first generation germanium trannies and diodes as did the EB/EC sets, maybe even used the same PCBs. Operation would have to have been from 12 volts, maybe even dual volts operation of both 12 and 24 volts.

- That is IT ! Nothing more is known and no documentation or circuit has come to light. Even more to the point we know of no existing set, so far.

- Here comes the weepy bit, PLEASE if you know anything more about the EY11 Yachtsman model then do get in touch with EUG. I am aware that copies of this N/L are occasionally read by present day engineers or draughtsmen at the Factory and so to you also, if you can tell us anything then how about having a word with Christine in Tech; Pubs ? or Pat Hawkins ? Tell them what you know and it will get back to me, Ted.

- - - - -

- Mail for ME. -

- Mail for me should go preferably to Jim for onward transmission. Graeme has already got a lot on his plate with the other admin work and it would help us all if queries or bits for the N/L can go via Jim. Don't worry if there is any technical bits in that Graeme needs to know, we send it all on.

- Conversely, please don't send mail re admin; matters, subs; or requests for manuals/circuits to Jim, all he can do is send them to Graeme and this means extra postage. Postage is EUGs biggest expense as those of you who consider these matters will realise. It seems shocking that whereas in the 50s One Pound Sterling would pay for almost a hundred first class letters, but that now in the 90s One Pound Sterling will not even pay for 4 first class letters ! Stamps enclosed with your mail to any of us are appreciated, they are necessary even as your subs will not cover much in the way of additional postage. Come on make it easy for us all at EUG, send the mail to the right person, and send a stamp or SAE if you want a reply. Don't send mail to the Factory or they will have to re-mail it to us !

- - - - -

- A Magic Wand. -

- Well, it is Xmas time after all. A suggestion from an ex RAF type who spent a number of years servicing such sets as AR88s, HROs, and CR100s. (what no 358 sets Jim ?).

- When you are re-aligning the RF or IF stages of your Eddystone there is one tool that cannot be bought but is absolutely necessary. This is the 'magic wand' which will enable you tell whether any tuned circuit is 'on-tune', tuned 'high' or tuned 'low'.

- The idea is that when a piece of brass is approached close to a coil it will detune the circuit high, if a piece of ferrite is brought close it will detune the same circuit low. If both detune the circuit you can hazard a guess that it is on tune.

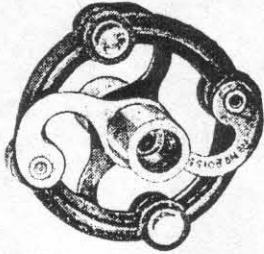
- Jim goes on to say that he has always had one of these wands in his tool box since his RAF days, and that it is often used. His wands are made from a piece of plastic knitting needle about 6 - 8 inches long and thin enough to penetrate the end of most RF/IF formers. To one end is glued a slightly filed down ferrite dust core (most of the thread filed down to leave the outer smooth). To the other end is glued a similar sized piece of brasstube, or rod with a hole drilled into one end for the rod.

- Nothing more to it, and as I know myself, Jim is right and the wand will

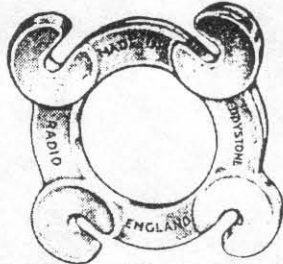
BETTER RESULTS ACCRUE FROM USING EDDYSTONE SHORT WAVE COMPONENTS. ASK YOUR DEALER FOR EDDYSTONE

-It pays to buy the best

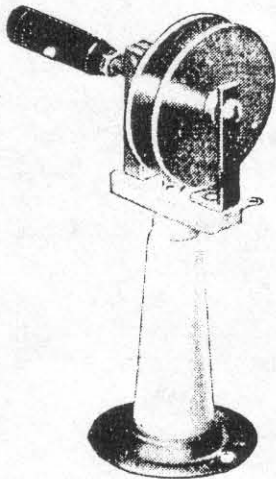
In your continual aim for Radio progress, the highest efficiency of your working components is of major importance. You will find you have moved a step forward if you specify EDDYSTONE. EDDYSTONE Components are specially designed to occupy a high position in the Short Wave World. To get full satisfaction from Short Wave experiments you want the BEST... Eddystone will give it you. See your Dealer NOW.



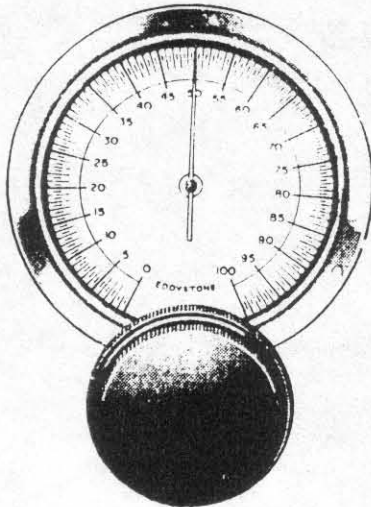
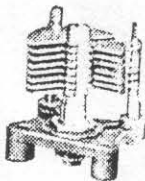
Flexible Coupler. Free from back-lash but very flexible, this coupler banishes alignment troubles, DL-9 HF insulation. For 1/4" spindles. No. 1009. 1/6.



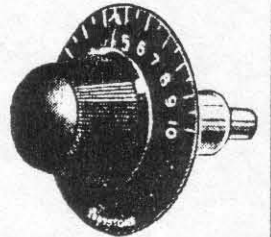
Featherweight Crossteader Blocks. Made of transparent thermo plastic material, impervious to moisture, practically unbreakable and possessing remarkable HF insulating properties. No. 1141. 4/6 doz.



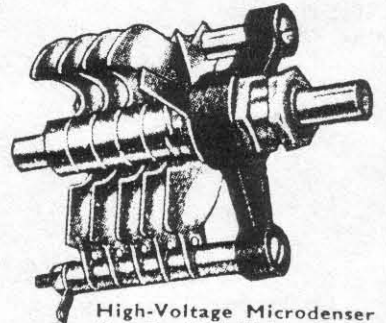
Air Dielectric Trimmer. DL-9 insulation. 3 to 65 mmfd. For all preset and trimming purposes and particularly for use with IF transformers. Cat. No. 978. 3/6.



Full vision dual speed dial. Cat. No. 1070. A full vision dual speed dial with 20:1 and 100:1 speeds. Well graduated scale, reading increasing as frequency increases. For 1/2" panel and 1/4" spindles. Ideal for H.F. tuning. 10/6.

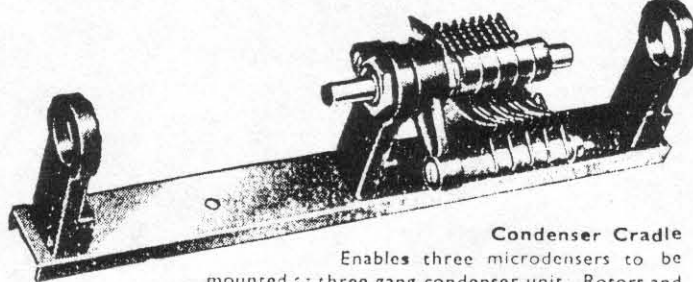


Slow Motion Driving Head. Cat. No. 1012. Very useful for transceivers and ultra short wave receivers. With 9:1 reduction ratio; pointer moving through 180 degrees 3/-

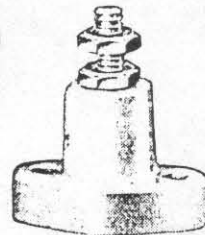


High-Voltage Microdenser Cat. No. 1094. Highly efficient Soldered brass vanes. Constantly maintained capacity; very low minimum 3 mmfd. DL9 insulation. 1/4" spindle extended for ganging. Peak flashover voltage 3,500 volts. Easy to gang - capacity matched within 1 per cent. 18 mmfd. 3/9

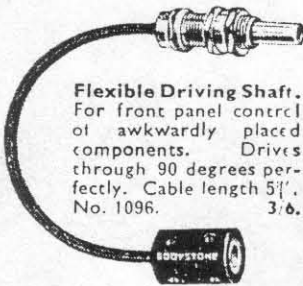
Neutralising Condenser. Cat. No. 1089. For HF circuits using low-capacity triodes. Maximum voltage 2000 volts D.C. Capacity variation 1-8 mmfd. Frequentite pillar insulator mounting, insulated adjusting knob. 6/6.



Condenser Cradle Enables three microdensers to be mounted as three gang condenser unit. Rotors and stators completely isolated. Brass division plates available for screening condenser units. No. 1114. 3/6. Metal screens, No. 1125. 8d. pair.



Midget Insulator. Made from Frequentite for high frequency work, with N.P. metal parts. 1" overall height. No. 1019. 4/6 doz.



Flexible Driving Shaft. For front panel control of awkwardly placed components. Drives through 90 degrees perfectly. Cable length 5 1/2". No. 1096. 3/6.

Post this coupon for catalogue of

EDDYSTONE SHORT WAVE RADIO

Sole Manufacturers:

Stratton & Co., Ltd., Eddystone Works, Bromsgrove St., Birmingham

[LONDON SERVICE: WEBB'S, 14 SOHO STREET, W.1

COUPON

To Stratton & Co. Ltd, Eddystone Works, Bromsgrove St., Birmingham.

Please send me 1 Eddystone Catalogue and address of nearest stockist.

Name

Address

cont; - A Magic Wand.

quite soon become an indispensable part of your toolkit, Jim comments that "to try it is to adopt it" - sounds like an ad for Persil to me !

- Using those Panadaptors. -

- After much searching around the ads and the rallies this EUGer proudly carted home an EP17R which was soon found to be in very good working order, his only task was to clean the filter on the fan at the rear. The panadaptor was soon earning its keep with the station 77OR Mk II receiver as had been intended. This was fine until the arrival of a 99OR which is the transistorised successor to the 77OR.

- Even a cursory glance at the manuals for the two showed immediate problems if the EP17R was to be used with the new acquisition, a 10.7 Mc/s IF will not go into a 5.2 Mc/s Input. Well it will but you won't get anywhere will you ?

- Then the 99OR manual showed that what was needed was one of those very rare IF Converter Units that converts the 10.7 down to 5.2, just a simple crystal oscillator to beat with the incoming 10.7 and to produce the required 5.2 Mc/s.

- But they are rare, practically unheard of ! The circuit given in the 99OR manual seemed to indicate there would be no problems in constructing one, a near enough replica could be built in an Eddystone diecast box - just procure the box and the bits, a bit of work with the iron and Hey Presto ! one convertor.

- Eventually all the bits were assembled, a copy of the circuit was made to avoid having the manual dirtied up on the bench and work began. No actual component disposition was given and so normal construction practice for RF items was used. A co-ax socket for the output and a co-ax plug on a flying co-ax lead for the input, with a short flying lead for the necessary 12 volt supply to be taken from the rear of the 99OR.

- a piece of copper clad PCB was cut to size and the circuit built up using the 'dead-fly' or 'dead-bug' method. As was to be expected the biggest problem after the correct crystal had been bought was the coils, here a glance through the Toyo catalogue showed that there were suitable ones available. The whole thing was built and checked for errors in one weekend. Evenings were then used for the alignment, a good RF scope was needed here but all came out with patience.

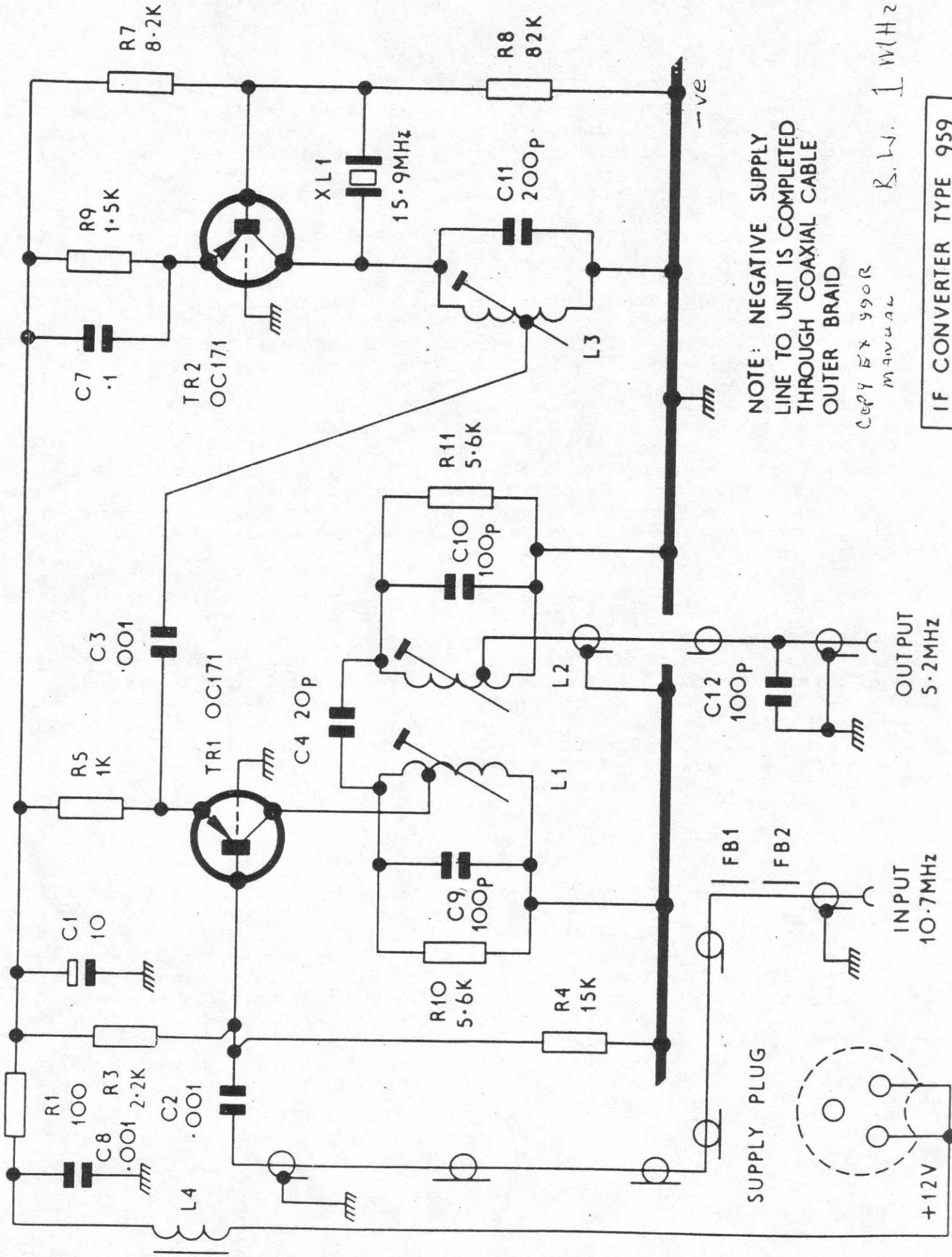
- Final trimming was done when the convertor was connected in circuit between the 99OR and the EP17R, not a lot was needed but it was necessary to adjust for equal height of calibration points at both ends of the trace. After some months of use there are no problems with the DIY convertor, and the ensemble of 99OR and EP17R is a joy to use. See the circuit over the page.

- Mini Co-ax for restoration of Eddystones.-

- A warning here from Stan that the mini screened cable as sold for Hi-Fi audio use is not suitable for RF/IF use. Not at all ! The degree of screening as used for AF co-ax types is hardly sufficient when used on HF signals. Much tighter mesh is necessary and a comparison of that used on the Eddystone sets and a piece of the screened cable used for Hi-Fi will show you what is meant.

- The right stuff can be bought easily, one source is the RS catalogue, (okay I know they call it Electromail these days but I have called it RS since the early 1950s ! I am not about to change now !).

- It is cheap enough so treat yourself to good supply of it and you will be surprised at how often it will be useful.



NOTE: NEGATIVE SUPPLY LINE TO UNIT IS COMPLETED THROUGH COAXIAL CABLE OUTER BRAID

Copy Ex 990R Manual

R.W. 1 MHz

IF CONVERTER TYPE 959

30 Brotherton Avenue,
Webbheath,
Bedditch,
Worcs. B97 5SA.
Y5-2-92

Dear Kath & Ted,

Thank you for your letter and the back copies of the newsletters.

I told Chris Pettitt about the VIF equipment when I went in to work on Thursday and I also said that I couldn't understand why nobody had mentioned about the group to me. I have been looking through the old files and have found quite a number which I hope will be of interest, I am sorry about some of the photocopies but the originals have been folded up for about 50 years and are a bit fragile to flatten out.

Don't worry about costs, it has not cost me anything except the postage.

Regarding the equipment supplied to the Met Police, this was indeed an early version of the S215 Transmitter but the receiver was very large being built on a flat plate about 18" x 24" and fairly heavy when in its cabinet. I remember this receiver very well as I was working on assembly and wiring on them on Sunday 3rd of September 1939 when

War was declared as due to urgency of delivery we were working all hours.

The 770M receivers were produced only as prototypes as the range covered went to 250MHz but due to problems with the gang and frame resonating below 250MHz the range was reduced to 165MHz and renumbered 770R and the 770U was developed to continue beyond 165MHz.

The 770S which you refer to in the No 10 Newsletter was one of my designs and I had an interesting time developing the cavity oscillator and the butterfly RF tuner, sorry about the weight!

One omission from the list of equipment was the S700, this was designed for International Marine Radio and 220 were made and called the IMR54 and carried the IMR badge.

It was Post Office approved for use as a main ships receiver and weighed about 14cwt in its cabinet as I remember only too well having tested and aligned the whole order in 1952/3.

Thought was given to producing an Eddystone version but only one was made, in appearance it resembled an Eddystone receiver but very large having a cast panel about 30ins long with full length scale and a cast coilbox 18ins x 13ins. It covered 10kHz to 30MHz and had dual IF, BFO and AGC units of 465kHz and 110kHz all switched by cams and levers

from the coilbox to allow continuous coverage.
I managed to find a circuit and I enclose a copy.

The 890 single band VHF receiver was produced for the BBC for reception of radio microphones. Also missing from the list was the 1061B Panoramic Adaptor with 21.4MHz input which I designed for use with the 1990R, and the 1990S which covered 470MHz to 1050MHz in two bands, about 50 of these were made of which most went to North Korea.

There was also a version of the 1990R with a special unit fitted in place of the synchroniser which I developed for ASWE but this may still be on the restricted list as I had to sign the Official Secrets Act when I went on acceptance trials on HMS Euryalus down the channel. A tribute to Eddystone reliability was when I took this receiver to AUVE and it was subjected to repeated 15g shocks while tuned to 400MHz and was still functioning perfectly and dead on tune even though the severity of the shocks caused the centre discs of the control knobs to fly out.

One other item, there was a 4000 similar to the 400 but no demodulator so it only responded to CW signals.

Best Wishes,



Dear Ted,

Since writing the letter I have found a lot more drawings which I hope will be of interest.

I also enclose a copy of a design article about the 961 Panoramic adaptor.

I have not met Richard Baker yet.

In your earlier letter you mentioned Cliff Martles, is he a member?, he was a good friend of mine at Eddystone but I lost touch with him many years ago.

- This mini valve type receiver has been the subject of a number of articles in previous newsletters. For such a simple circuit the 870A gives quite good results, often better than many other more complicated models by other manufacturers. There is one real advantage to this set, when compared with other 4 valve superhets of the era.

- Like all Eddystones of the 50s - and other decades - it is solidly built following good engineering principles, this includes a metal case.

- What is so special about a metal case ? As opposed to those sets in a wood or plastic case the use of metal gives complete screening of all of the circuitry, interference can only enter the circuit from either the mains lead or the aerial/earth sockets.

- On the 870A it is possible to turn up the gain to maximum and with no aerial or earth connected you should hear no signals, in theory. In practice there might be some weak signals that get in through the mains lead, despite the use of 'brute-force' hash filter chokes connected where the mains lead enters under the chassis. These hash filter chokes perform a very useful service to the user of an 870A, they really do work at limiting the noise that comes in through the domestic mains supply.

- In some 3 decades of use one typical 870A owned by an EUGer has performed perfectly, one frequency changer valve has been needed during this time and although the dial bulbs are by now quite silvered over they still provide enough indication that the set is on.

- This set is of the universal type and throughout its life it has been operated via a small isolation transformer of 40 watts rating, since the transfo has a dual 110/230 volts secondary the set is operated on the 110 volt tapping, this does make for a considerable reduction in the power that has to be dissipated inside the fully enclosed case - possibly this has been of some help towards the splendid reliability record.

- In use the 870A has been used mainly as a bedside radio for broadcast listening whilst lying in bed, for this purpose it can still cope admirably. With an aerial of about 30feet, some 10feet being indoors and the rest of the length hanging down the side of the outside wall, where it is terminated by a lashing of twine to a pipe. Regular listening to such as Kol Israel, the VOA, R. Sweden and others is possible. In the days of Radio Caroline and Radio North Sea International the 870A was quite capable of holding its own against such as the shack receiver - a 680X.

- The output power into an internal speaker is quite sufficient for good audio level and completely vindicates the view that those QRO Hi-Fi amps are NOT necessary for comfortable listening.

Alan.

- S.358 Mechanical Problems.-

- Having reached the grand old age of fifty years it can hardly be surprising that models such as the 358/358X/400/400X are showing signs of age.

- That they are quite literally built like the proverbial battleship will be why they have lasted so long. Many are still in use in shacks around the world, many others reside in collections but would function if fired up.

- By now the one problem that appears to surface regularly is the contact system used on the plug-in coils. Those split spring pins on the bottom of the coil packs were solidly made but with frequent use they do suffer, it is almost a certainty that by now one or other of the pins on a given pack will have poor contact with the socket on the receiver chassis.

- Simple cleaning all pins and the sockets may clear up an intermittent contact that occurs either in use or when the pack is touched prior to removal. The handbook says that the HT should be off before a coilpack is changed, how many 358 owners have omitted to do this? Very many I am sure. Doing this often can be the cause of corrosion and a simple clean up with switch cleaner that contains a small amount of lubricant is a sure cure.

- For an intermittent caused by actual worn pins and/or sockets there is one method that several EUGers recommend. By using a small screwdriver tip the slots in the pins can be opened out very slightly, thus increasing the effective diameter of the pins and the contact between pins and sockets.

- Another possible area of wear is the gear driven drive mechanism, but even at this advanced age the original lubricant will have prevented much wear, use in an area where sand or dust were a problem could have worn this drive, if possible all old lubricant should be removed with a softener, the switchcleaner fluid will do this. The whole drive chain should then be re-lubricated, not with oil but with a good automotive grade of silicon grease or maybe one with a molybdenum di-sulphide base.

- All of the valves in these sets were of military specification and have a long life in amateur/domestic use. It should be born in mind that they are all still obtainable quite cheaply and a new set of valves will rejuvenate any receiver.

- If you are one of those lucky types who have a 358 series receiver stashed away in the loft then dig it out from under the jumble and USE it, use will not wear it out - Honest. Colin.

- - - - -

21

Sales Manager and later Sales Director and served in the Fleet Air Arm during the war years.

Regarding the All World 8 I was able to find a layout blueprint in the old files at the company this morning which contains a component list and I enclose a copy.

The LPC I mentioned was a version of the AW8 which was made for the Admiralty and had a BFO unit for CW reception, it also went under the Admiralty type no RL01, I enclose a circuit of the modifications.

I hope all this will be of use to you and yes you may quote from my letters with pleasure

Best Wishes,

Geoff.



P.S. The old files I mentioned also contain other old circuits such as the AW4 ,AW2 etc please let me know if any of these would be of interest? Geoff

30 Brotherton Avenue,
Webbheath,
Redditch,
Worcs. D97 5SA.

3-2-92

Dear Ted & Kath,

Thanks very much for your reply to my letter. I cannot understand why I have not heard about the club before as I still work for Eddystone for two or three mornings a week ,it is nice to know I can still be useful to the company even at the age of 70.

I would certainly like to be a member and I enclose cheque for £10-00 to cover subscription and badge.

I am afraid I cannot help with the serial number problem but your other queries I certainly can.

The equipment used on D Day was the 440 ,450 7/10 Watt Transmitter and Receiver, I have photocopied a copy of the manual for this equipment ,I tested quite a number of the Transmitters and other bits of the system. The other equipment landed on the beach was an S215 100Watt VHF Transmitter , I have not yet found a photo of this but I enclose a circuit Diagram.

I know this information to be correct as I was told about it by A.C.Edwards who was

Just a sample from the Number 4 ESWM - to whet your appetite.

EDDYSTONE SHORT WAVE MANUAL

POWER SUPPLY UNIT.

FOR GENERAL USE AND WITH ALL THE MAINS RECEIVERS DESCRIBED IN THIS MANUAL.

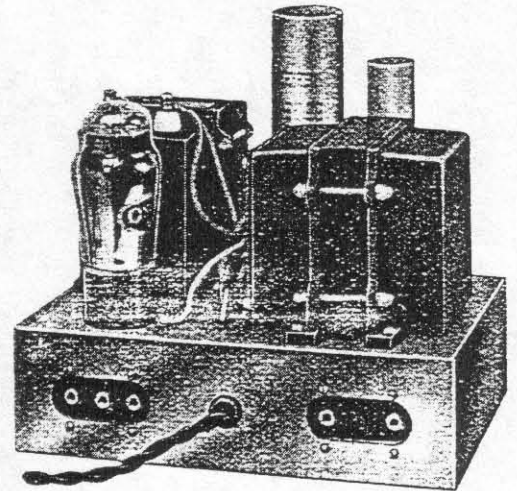
This is a conventional power supply unit giving high tension output as shown in table and 6.3 volts at 4 amperes and 5 volts at 3 amperes for heater current. It is suitable for operating all-mains receivers, speech amplifiers, pre-selectors and other equipment requiring similar inputs.

The design is simple yet efficient and the complete unit can be constructed at modest cost. Special care has been taken to ensure complete freedom from "hum" and the unit can confidently be used to supply power to the most sensitive of receivers without fear of "hum" or other troubles.

The assembly is mounted upon a diecast chassis which gives extreme rigidity of construction and also houses the associated fixed resistances and condensers, etc. The transformer has good regulation while there is ample reservoir capacity to cope with fluctuating loads. The smoothing choke is of generous size and has an inductance of 20 henries at 60 milliamperes. Apart from the main H.T. output there is an H.T. tapping having variable output controlled by a potentiometer. This is intended for screen grid voltages and not more than a 5 milliampere load should be drawn.

Photographs of the top and underside show layout of components and wiring.

The unit is suitable for use with the 2 valve mains short wave receiver, the pre-selector unit, the amateur communication receiver and the ultra short wave receiver described in this Manual and the drop resistors in the receivers are arranged accordingly. Drop resistors of the correct value should be added for any other use to which the unit may be put.



Showing the completed unit.

THE POWER OUTPUT IS AS FOLLOWS :

295 volts at 40 mA.	233 volts at 80 mA.
265 " " 60 mA.	205 " " 100 mA.
6.3 volt filament winding, 4 amperes.	
5 volt filament winding, 3 amperes.	

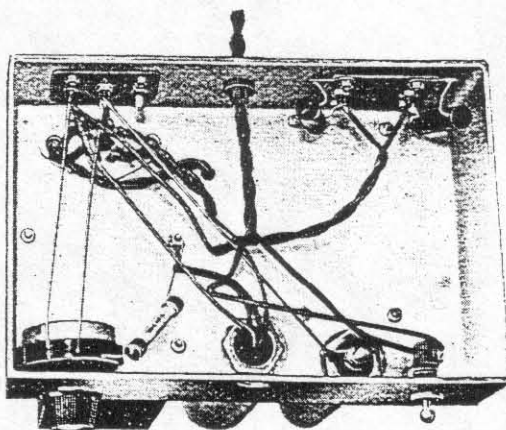
LIST OF PARTS.

EDDYSTONE COMPONENTS.

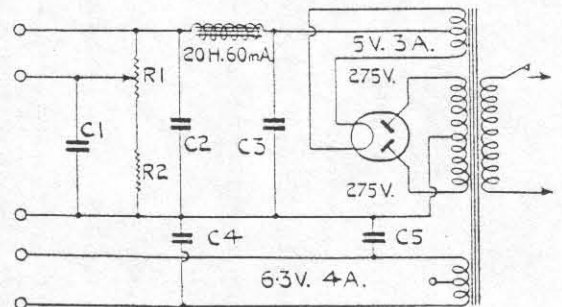
1 Die-cast Aluminium Chassis with Terminal Panels, No. 1117	5 8
1 Frequentite Octal Valveholder, No. 1120	1 3
1 Small Instrument Knob, No. 1086	9d.

MISCELLANEOUS PARTS.

1 Condenser 8 x 8 mfd. Electrolytic type 0289. Duffiler C2, C3	
1 " " 4 mfd. Electrolytic type 0283 Duffiler C1	
2 " " .01 mfd. Tubular type. C4, C5	
1 Mains Transformer 275-0-275V. 60mA	
" " 5V. C.T. 3Amp.	
" " 6.3V. C.T. 4Amp. (Webb's Radio)	
1 Smoothing Choke 20 Hys 60 mA	
1 Resistance 30,000 ohms 1 watt R2	
1 Potentiometer 50,000 ohms, R1	
5 Clix " Parallel " Sockets	
1 Erinoid Threaded Bush	
1 Two point On-Off Switch Toggle Type	
1 Length two way cable	
Wire, Screws, Nuts, etc.	
Approximate cost of miscellaneous parts	£2 17 6
1 Osram U50 Rectifier or equivalent is required.	



Under chassis showing wiring.



(See also Page 33 - Graeme)

- Power Supply Units by Strattons.-

- In the 1930s and early 1940s the Company manufactured a number of power supply units for use with various models in their product line and in one interesting case for use with an American model of Communications receiver.

- By and large the psus were all of similar dimensions and similarly they were all housed in metal cases, pressed steel in all but one instance.

- From my EUG archives I have traced 14 such psus and have complete blueprint details for all except one - unfortunately the most interesting one for many non-EUGers !

- Lets start off with the odd man out, the non-Company receiver psu. There is a comment elsewhere about this. It appears to have been the companion psu for use with the HRO Mx receiver of which so many came, via lease-lend, from the U.S of A to the UK. My only gen on this unit states that it provided an HT supply of 150 mA maximum and an LT supply that could be switched by a soldered tapping from 2 to 4 to 6.3 volts for the various valve types that the HRO could use. The HT supply was well smoothed with RF chokes in the input and a dual LF choke and condenser in the DC side. Rectification was by use of the 5Z4G valve.

- The psus that were utilised with the S.440/450 R/T were designed to enable use of this VHF combination on various supplies, in the field or at base.

- There was of course a psu for mains use with the S.358 series of receivers, and the companion unit for use with low voltage DC supplies of 6 volts from the usual batteries of that era. A later mains supply unit with different components and layout but same dimensions was produced when supplies of transfos and chokes dried up.

- The Blueprint numbers, catalogue numbers, and some relevant info are as listed below :-

- BP 443	- S427	- HRO Mx Recvr.	- Mains AC.	- 10-5-41.
- BP 459	- S390	- 358 series Rx.	- Mains AC.	- 9-10-41.
- BP 466	- S454	- 440 Tx.	- 6v DC.	- 30-6-42.
- BP 470	- S441	- 440 Tx.	- Mains AC.	- 4-7-42.
- BP 471	- S451B	- 450 Rx.	- Mains AC.	- 6-7-42.
- BP 477	- S441B	- 440 Tx.	- Mains AC.	- 15-10-42.
- BP 478	- S390A	- 358 series Rx.	- 6v DC.	- 20-10-42.
- BP *	- S390B	- 358 series Rx.	- Mains AC.	- 2-11-42. *see BP459.
- BP 480	- S454B	- 440 Tx.	- 6v DC.	- 7-11-42.
- BP 497	- S455B	- 450 Rx.	- 6v DC.	- 20-5-43.
- BP 521	- S497	- 450 Rx.	- 6v DC.	- 10-12-43.
- BP 561	- S454C	- 440 Tx.	- 6v DC.	- 31-1-46.
- BP 562	- S455C	- 450 Rx.	- 6v DC.	- 1-2-46.
- BP 566	- S451C	- 450 Rx.	- Mains AC.	- 18-2-46.

- As stated above I have info from Strattons files on all the above models with the exception of the HRO psu. For this model I have but a pencil sketch as provided in correspondence with Geoff Woodburn. Should any member require further info on these psus then do please contact me (Ted), send an SAE in the first instance with your enquiry.

- - - - -
 - Hi Fi Phones Again. -

- This letter from an EUGer comments upon the fact that when he made direct enquiries at one local emporium he was told that modern low impedance Hi Fi phones were ideal for use with the 640 receiver that he had recently bought.

- Some £30 later he got home with the 'ideal' phones to find that they would not work on his set. Stereo plug problems of course, so back went the phones.

- - - - -
 - News from Norway. -

- A letter from Tor Marthinsen replying to my request for info on the possible 'swop' types for those diodes as used in the 770R and U series. Tor is a bit of an authority on early semiconductors so a few words from the horses mouth.

- Tor says that if it came to replacing the GEX34 type he would opt for one of the AAl17, AAl18 or AAl19 types, all still available over here if you look around the dealers adverts.

- When it comes to the GEX66 then Tor suggests that a silicon type of silicon diode might perform equally well, maybe the 1N4148 or 1N918 ?

- Tor has no info in his technical library for the GEX13 and would appreciate any EUGer who has such info to send him a photocopy via EUG - message passed.

- When Tor visited the Norwegian Vintage Radio Club rally he got hold of a last stock of Eddystone condensers and flexible couplings, also two of those dial drives such as are used on the AllWorld Four. Now these are marked as "INDIGRAPH" on the front and Tor is wondering whether those used on the AW 4 are also so marked ? Anybody out there who can help ? please let me know & I shall pass it on. He asks the same question re the dial for the Sci-2 so come on out there, help our Norwegian EUGers out.

- On a recent visit to the Bergen area Tor took along his EC10A and with but a few metres of wire for aerial he logged some 40 more NDBs to add to his log of these beacons. He was at an altitude of 1000 feet outside town and says that down in Bergen he could hear none of them, "So much for man-made noise" Tor comments.

- - - - -

Stratton & Co. Ltd.

MANUFACTURERS OF RADIO

CABLES: 'STRATNOID' BIRMINGHAM



TELEPHONE: PRIORY 2231-2-3-4

TELECOMMUNICATION EQUIPMENT

• EDDYSTONE WORKS
ALVECHURCH ROAD
BIRMINGHAM 31
ENGLAND

OUR REF MBP/HSD/811

YOUR REF.

8th November, 1960.

Mr. E. C. W. Beale,
3, Orchard Road,
Altrincham,
Cheshire.

Dear Sir,

We thank you for your post card of November 5th, and have pleasure in enclosing a brochure describing the "888A" receiver. The information given is practical and factual, but we would emphasise that into the production of each type of Eddystone receiver goes a wealth of experience acquired over many years manufacturing communications equipment. As a result, the initial excellent performance is well maintained over a long period, and the reliability is such that very rarely is attention necessary.

As you will appreciate, many Eddystone receivers are in use both in this country and overseas, and you may wish to read the independent opinions many owners have expressed, as set out on the attached sheet.

If, as we hope, you decide to order, we recommend you make early contact with our nearest Agents, who are:-

The Shudehill Supply Co. Ltd.,
53, Shudehill,
Manchester.4.

You will find them knowledgeable and helpful, and ready to give any further advice you may need.

We look forward to adding your name to the many other more than satisfied owners of an Eddystone receiver and if we can be of any further help, please let us know.

Yours faithfully,
For STRATTON & CO. LTD.

M. E. Porter (Miss).
Home Sales Department.

- Eddystone Today ! - DAB Radio Transmitters.-

- The previous page gives us an insight into the workings of Strattons in the 1960s, now for an insight into what the Company are doing today.

- In a very nice letter to me recently Chris Pettitt, Mr Eddystone no less, mentions that the Eddystone Radio Company are going ahead with their DAB contract for the BBC.

- Chris states that temporary DAB stations have been installed in the London area and in the Birmingham area, so that the BBC are already broadcasting DAB services in these areas.

- He further states that he feels particularly proud of the fact that the company is in on the start of the DAB revolution, given that Eddystone was also in at the beginning of both AM and FM broadcasting. The sole difference being that in those early days the company were mainly receiver manufacturers and that they are now transmitter manufacturers.

- Chris mentions that since the move to a new site the number of items in the 'museum' had increased, as other examples of models came to light.

- Some more racking has been obtained and will be put up so that the sets may be displayed.

- - - - -

- Thanks to EUGers, from Jim.-

- Jim Murphy has asked to pass on his Thanks to those EUGers who have sent him information on the McMurdo Company. "Great stuff" he says, "Many Thanks".

- - - - -

- Useful Addresses, for Sets & Spares.-

- A reminder from Anthony that GWM Radio of Worthing usually have some Eddystone sets in stock, especially the ex MoD types like the 730 and 770 series. Also occasionally they will have diecast speakers and 'S' meters. Try a call on 01903-239050.

- Also from the same source, Durrants of Shrewsbury are a useful source of valves, both new and second hand, passive components (C & R), and even the early Germanium transistors for the EB and EC series. Try a call on 01743-361239. Thanks Anthony.

- - - - -

- MY EB35 II goes Walkies. -

- Now then, I have had this EB35 II for many years, since the end of 1969 I think it was. The serial number was 3176 and it had my name scrtched into the metal of the chassis at rear. It was 'liberated' from my kit recently and thereisno trace of it so far. Despite thorough checks.

- The set has accompanied me on many trips over the years, it has been as far south as Dakar - and could pick up the Beeb on Long Wave 200 Kc/s with a mere 20 feet of wire run up the mast. It went inland with me to Colomb-Bechar and Figuig. It went up around North Cape into the Arctic & as far as the Russian Border at Kirkenes. All in all it is an old friend and it is much missed, okay I shall get compensation eventually but it just ain't the same, is it ?

- I used it on a trip to Iceland and logged a good many UK stations after Dark on Medium Wave, this from the NATO base at Keflavik, several of our transatlantic cousins cast envious eyes upon my EB35 and there were offers made, but refused.

- Now it has gone walkies and I would ask any EUGer who is ever offered an EB35 that they check the serial number and let ME know please - PRONTO.

- - - - -
- Those Germanium Diodes, Again. -

- Another letter from EUGer Dave Simmons to the effect that his GEC Application Report gives similar info to that given by Tor, so it looks as if those needing replacements now have a choice to ask around for. I would suggest that a call to Birketts in Lincoln will get you one or the other replacement type, and they are pretty quick with their postal sales too.

- - - - -
- If Only, from 1938. -

- I spotted an ad in an old Bulletin today, advertising an Eddystone ECR Communications Receiver, with Browns phones, all for £4-4s-0d, well it did actually specify Four Guineas for those of you who can remember that far back in time. The New Price in those days would have been about £45 and so it really was a bit of a bargain. If only there were such bargains around these days ! Recent ads in the SWM small ads offered some of the 50s era Eddystones for some really inflated prices, i.e. a 770R for £165. Seems a bit over the top to me. Ted.

- - - - -

- Strattons and the HRO ! -

- Now then, bet you did not know this ! In 1941 when vast numbers of the HRO receivers, especially the HRO-MX, were coming over here from the States there arose a shortage of HRO power supplies. Mention was made by Geoff Woodburn that he thought there may have been shipping losses on the North Atlantic Convoys and that this was the reason.

- Whatever, the MoD approached Strattons with a request that they design and produce a power supply unit compatible with the HRO receiver. Not a very difficult task for a company such as Strattons, despite their having just a few months previously been bombed out of their three Birmingham factories.

- Just several months installed in the Bath Tub they were already back in full production and the proposed PSU would have been a doddle. In the event the design department came up with their specification number S.427 which was detailed on Blueprint BP.443 dated the 10-5-1941. The unit was a success & several thousand were produced and used by all three of the armed forces and several of the Commonwealth armed forces.

- The above is the sum total of the info available in our EUG files, it came from a letter sent to me (Ted) by Geoff and from the original old Blueprint Register. No known circuit is extant here so if any EUGer can provide us with a schematic for the S.427 psu then PLEASE, we will be very grateful & if you want a refund of your copying costs and postage just say so.

- - - - -

- Late 870A mods; -

- Official type mods this, not the home-enthusiast, go faster, type. Early versions of the 870A that left the factory did not have a rear panel terminal for using the set with a gramophone pickup. DIY attempts would have come up against the AC/DC circuitry and the need to maintain complete isolation from the mains supply, can't have the 230 volts supply going through the tiny coil of the gram pickup can we now ? Oh yes it could happen if the 'bodger' was a bit careless.

- The official mod that was incorporated in all 870As from about November 1963 onwards was designed to exclude just such a sadistic act. Both the earthy side and the 'live' side, or signal side, of the P.U. terminals was decoupled from chassis by a 100 pF mica condenser that was adequately rated at 350 volts DC. This mod made an already good receiver even more versatile in that it could be used with one of the add-on gramo units to play back records via the 870As AF circuitry.

- - - - -

- Common Everyday Interference. -

- It really is common, and what is more many people suffer from this form of domestic QRM, not knowing the source which may even be in the same room as their receiver.

- Fluorescent tube lighting is becoming more and more common in the domestic area. It offers a more acceptable colour of light than the 'old' incandescent bulbs and it is more economical.

- There is of course a price to pay as nothing comes free in this world of ours, despite what all those appetising adverts try to make you believe.

- The QRM generated by these lighting systems manifests itself usually as a continuous rough note that is NOT tunable and which exists throughout whole bands on your radio. It can exist as a barely audible noise which does not cause undue problems except whilst attempting to winkle out those very weak Dx stations. Alternatively it may exist at such a high level as to render use of the receiver impossible, this latter case usually occurs when the tubes are fairly ancient. Okay, I know that THORN are paying my pension but I do think that if you suffer from such QRM in your shack then you ought to consider a return to incandescent lighting, at least in the shack.

- I have experienced such QRM in the past in situations where I was forced to put up with the interference levels if I wished to operate. In those conditions it may help to have one of those 'brute-force' mains input filters **between** the mains socket and the receiver, but the mains lead from the filter box and the receiver should be screened mains cable, the filter box naturally being of the metallic type. If this cures the interference on your receiver when there is no aerial plugged in then you are on the right track, remains for you to arrange for the aerial lead-in to be similarly screened, either co-ax or double, screened, balanced feed line.

- Assuming that this reduces all the QRM to a comfortably low level to enable operation then you have cracked the problem. The odds are that you will still have some though. If it is of the continuous type then try a replacement tube, as old ones DO tend to radiate more, don't know why !

- Alternatively you can try earthing the casing of the fluorescent light as there are very many in use that are simply not earthed, despite what the Regulations say.

- One really obstinate fitting that refused to co-operate in any other way was finally tamed by fitting two RS mains chokes of 5 microhenries each in the live and neutral leads as they entered the fitting.

- One aspect of this QRM that concerns Eddystones in particular. The AC/DC or universal models such as the 670 suffer far less than do such as a 680 or 940 model. Seems surprising that the simpler model will be more resistant to QRM until you consider that the 670, and similar, have built in hash filters. They were after all designed for use on board ship where the mains supply is notoriously 'dirty' - believe me, it is, especially dirty when in port and the winches are operating.

- N. B. Please !!! -

- Please note that I am no longer at the Wakefield, West Yorks; address & there is a distinct possibility that such mail will never reach me. If you have been in the habit of writing to me there then please use Jim's address in the future. This is for all technical mail or ads for the Newsletter.

- Admin; letters or orders for manuals go to Graeme as usual, no change there at all. Ted.

- Problems with the 730 series. -

- This must be the most common model that is owned by EUGers, it could be that it was the model produced in largest numbers by Eddystone. By far the most common version of the many produced was the 730/4.

- At present there is very little problem with spares, okay maybe you will not find new parts but such firms as Centre Electronics will almost always locate a 'second-user' part to suit your set.

- Manuals and schematics are no problem either, Graeme will order you one from the Factory, against the necessary amount of loot.

- Problems come from the complicated nature of the circuitry in this set, remember not everybody is used to dealing with 'hot-bottle' circuits, in fact many of todays engineers will throw their hands up in disgust when confronted by hollow-state models. Even such as the EC10 with its first generation trannies are beyond the ken of todays Radio/TV repairers. A recent letter from one member told of where he had contacted a local dealer asking whether his EB37 could be repaired. He got back a letter saying that the repair of such ancient sets was no longer possible due to a complete lack of spares ! They also sent along a pamphlet with details of a modern Grundig set as a suitable replacement !

- Okay back to the 730, proceed like any other set, work back from the AF output stage, once you have ascertained that the mains power supply is operating okay. Injecting a signal into the input of the AF stages, not even necessary to open up the case for this as there is a P.U. terminal on the rear of the case. You can even get a good idea of whether these stages are 'live' by putting your finger onto the P.U terminal when you should hear a hum.

- In this instance Alan had tried this and found all okay, but the set still refused to perform on the usual aerial. The aerial lead-in had been proved okay by using it on another set alongside.

- Not having a signal generator he used the aerial itself as a signal source ! Imaginative innovation ! He had by now removed the case and had the 730 right way up on the bench (kitchen table type !). There is a four gang tuning condenser on this set and the sections are 1st RF at the rear, then 2nd RF, then the Mixer, with the foremost section being the Local Oscillator.

By touching the aerial lead-in to the 1st Rf section and not getting any kind of response Alan knew that the fault was somewhere between here and the P.U. terminals. When he got to the 2nd RF section of the V.C and still had no signal he knew then that it was still further on in the circuit. Getting a signal, albeit a noisy heterodyned signal when he put the aerial lead-in onto the Mixer stage V.C. section gave Alan the proof he needed that his problem lay somewhere in the V2, 2nd RF stage. The V2 valve heater was visible and appeared as red as all other heaters so his next job was to switch off the set and to check the 730 schematic, sure enough there was another 6BA6 that could be swapped with V2 so as to prove its condition. Of the 5 valve type 6BA6s in the set the BFO, V12, is not essential for operation on AM. When the V12 was fitted in the V2 socket the 730 burst into life? FITTING THE V2 6BA6 INTO THE V12 POSITION AND TRYING THE BFO WAS FINAL PROOF. The V2 bottle was a dud ! A replacement was found at a cost of £1.50, no postage as the dealer was within bicycle ride distance.

- Free Members Adverts. -

- WANTED, - source for Eddystone 6 pin coil formers. Please contact J. Silvester at 10 Bridge Hill, Epping, Essex. Thanks.

- A Real Replica ! -

- A letter from member Philip Parker indicates that his replica receiver as copied from the ESWM number ? manual is working well. He doesn't say which manual nor which model he has copied but does comment that it uses 3 x EF50 valves ? He does comment that it occasionally 'squeals' with joy, or maybe with pain. Now then Philip, G3 AVN, please tell us more, which manual and which model ? You say it was "by G5 JU" but I haven't found it yet - did have a good look.

- Eddystone Ultra Short Wave Guide.-

- With the usual assistance from Jim Murphy we have managed to get a good photocopy of this manual dated 1936 - only 60 years young !

- Surprising just what info there is in these oldie guides that is still so relevant today.

- The article on VHF, sorry USW aeriels and feeders is very good since it deals from first principles with their DIY manufacture. None of this empty your wallets and take home a mass of aluminum tubing and co-ax.

- Simple USW test oscillators, absorption wavemeters and the like that are so well illustrated that you can actually SEE how to make them for yourself.

- Basic VHF, sorry again - USW, transceivers using both regen and superhet circuitry, even a 'short chat' on the features of those ultra short wavebands.

- Together with the six ESWMs this GUIDE will give you a very detailed insight into the early years models of the Strattons/Eddystone Company.

- Ultra Shorts on Everest.-

- The old Wireless World, much regretted by many ! Ah well, it was a good mag; whilst it lasted.

- In the WW for Feb; 28th of 1936 there is an item about those Eddystone transceivers that were supplied for use by the Oxford Mount Everest Expedition of that year.

- These sets, as per the pictures in the last issue were used by a number of expeditions throughout the world, during the 30s. It seems that for the 1936 expedition to Everest there were six of these Tx/Rxs supplied by Strattons for maintaining comms; between the various base camps and upper supply camps.

- Actual Tx power was minimal but of course they would have actual line of sight, direct comms; working - amazing what good efficient aeriels can do with a fleapower Tx and good Rx. The article states that they used 'the five metre band' which would have been the then 60 Mc/s band.

- This is further proof of the primary position that Strattons held in that era when it came to good, high quality communications equipment both for the amateur and the professional user. Their application to the development of the short wave and ultra short wave bands appears to have been in apposition to those other Wireless companies in the UK at that time.

- All in an Hour ! -

- In a write up for the Empire Two receiver there is a paragraph about the results that were obtained when the newly constructed set was powered up.

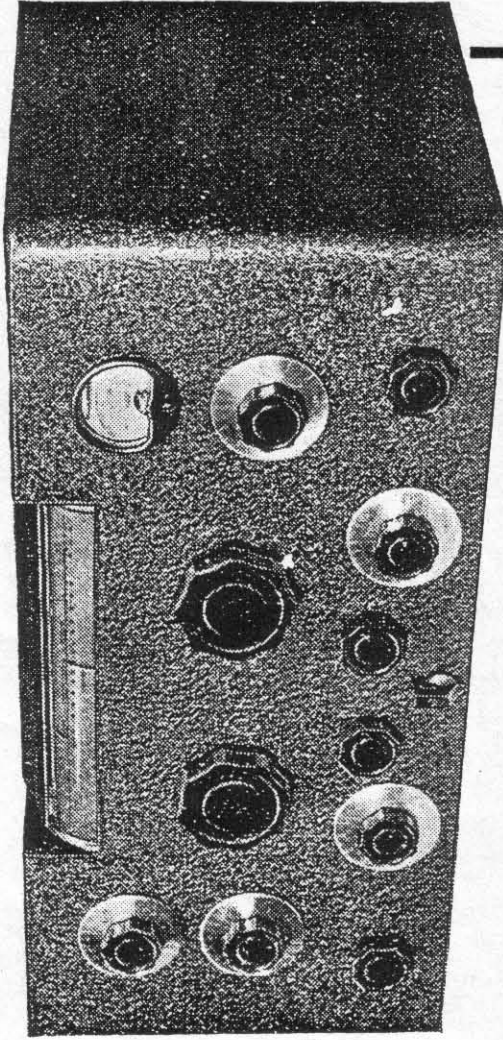
- How about PLE Bandoeng, Java. W2XAD at Schenactady, NY. National B'casting Co; WGY. LSY in Buenos Aires. W8XK in Pittsburg. HVJ in the Vatican. Radio Colonial in Paris. G5SW in Chelmsford. VK2ME in Sydney. Zeesen from Germany. REN from Moscow. 2RO from Rome. VE9CL in Winnipeg. WCVL in Chicago.

- Now remember this was all on a two valver using a triode for detection and reaction and a pentode for AF output. You would be hard put to get those results today on one of those alien black boxes !!!

February 1939

3

POST THE COUPON
FOR DETAILS



INTRODUCING—
THE LATEST

“EDDYSTONE” COMMUNICATION RECEIVER

Type E.C.R.

We particularly invite every reader of this announcement—including YOU—to write for the literature describing this new “Eddystone” Wonder.

The Chassis, Coil Unit and Crystal Unit are die-cast and the most complete screening is employed everywhere. The Superheterodyne circuit comprises 10 valves, including Rectifier. Switched coils cover a waveband of 9.5 metres to 190 metres, 33 megacycles to 1.6 megacycles, divided into 4 wavebands. Electrical bandspread tuning is employed. A crystal gate is fitted with phasing condenser and variable selectivity control. Volume controls for R.F. and L.F. adjustment. An “R” meter calibrated in decibels, B.F.O. control and switch and A.V.C. on and off. 3 Watts output.

PRICE £45

Post the Coupon for descriptive literature and performance specification of this wonder model to:
STRATTON & Co. Ltd. BROMSGROVE ST BIRMINGHAM 5.
LONDON AGENTS: WEBB'S, 14 Soho St., W.1

CUT ALONG THIS LINE.

COUPON
Please send me details of Eddystone Receiver type E.C.R.

Name _____
Address _____
Post office and
S. No. _____

- EC 958/12. -

- Bill Gibson has a 958/12 with the name plate which says "Ralph Whitwell, G4 EDL" and he is wondering whether any EUGer can provide him with some info on the past of the set ???

- Identifying Features of the EC10/EB35 Series of Receivers. -

<u>Model.</u>	<u>Date Out.</u>	<u>Phone Skt.</u>	<u>Handles.</u>	<u>Side Speaker Fret.</u>
EC10	11-63	Front.	Chrome.	Metal.
EB35	4-66	"	"	"
EB35/1	4-67	"	"	"
EB36	6-67	"	"	"
EB35 II	4-69	Rear.	None.	Plastic.
EC10 II	12-69	Front.	Chrome.	Metal.
EC10A/2	12-69	"	"	"
EY11	12-69	"	"	"
EB35 IIS	3-70	Rear.	None.	Plastic.
EB35A	6-70	Front.	Blk Anod;	Metal.
EB36A	6-70	"	"	"
EB36 II	11-70	Rear.	Chrome.	Metal.
EB37	5-71	"	None.	Plastic.
zoo-2530-D	9-71	Front.	Blk Anod;	Metal.
EB35 III	7-76	"	"	Plastic.

- All used the common front panel casting that originated with the very first EC10. Most had common PCBs and similar circuitry with the exception of the EB35 IIS (for Stereo) and the EB35 III, these both used silicon devices and had a negative earth circuit.
 - The above info was compiled from Eddystone Manuals, Period Adverts; and Information supplied by Geoff Woodburn and Richard Baker.

- The Newsletter Index. -

- The issue of the Newsletter Index compiled by Anthony Richards has now been authorised by Chris Pettitt, it will be going out with this Newsletter as the Christmas Bonus. When you check and see the size of the Index you will all realise just how much we in EUG owe to Chris. There is no way the EUG subs can cover even the usual Issue of the Newsletter, the addition of the Index would have almost doubled the size of your Xmas Issue. I have had my copy now for several weeks, one of my 'perks'. Well by now I am wondering how did I ever manage without ? The index is in almost constant use and I wish to take this chance to say to Anthony, Thanks Pal, from all of us in EUG.

- ENDIT - ENDIT - ENDIT -

- That is it for another issue, another Bumper Christmas Issue with the - by now - usual Bonus for your delectation along with the Turkey and the Stuffing ! Both Anthony Richards and Chris Pettitt are members of EUG, both are keen EUGers and it is to them that we owe the Index.

- I have an apology to make myself. I read the models list as was printed in the last issue as being a Receiver List, not a thought for those very useful panadaptors. Result was that I did not link the 961 I and 961 II to the EP961 I and EP961 II. A number of members contacted EUG to offer handbooks or info, to all of you thanks but I have manuals for these panadaptors. Graeme's suggestion is that I am suffering from approaching senility ! Could be right I guess but it is not an excuse, only a possible reason. Thanks to all of you who called, and to Roger at the Factory. Keep taking an interest Roger, might save me some more Boo Boos. Happy Christmas to all, and a Good New Year with Good Listening.

73,

Ted.

- Free Members Adverts. -

- FOR SALE - Model 770U Mk II/2, AM/FM receiver for 150-500 Mc/s in Fair - Good condition. Want £85 and prefer buyer examine and collect. Please phone Alf on (B'ham) 0121-475-8647.

- FOR SALE - 4 used but good OC171, and 2 new OAZ227 as needed for the neg9 volts psu for the EC10, £2.50. also WANTED a cabinet for the 958/12 receiver, please phone Bill Gibson on 0141-562-4571 (Glasgow.)

WANTED: Inverter for EP961 Mk II Panadaptor; Part No LP3101
Call Bert on 01978 852584

WANTED: Eddystone VHF/UHV transistorised models: 990R & 990U; model 1990R/2 and also models 1995/1 or /2. Also wanted cabinet/enclosure for EC958/12 (front panel 7" high). Please call David on 01788 574 099 (Rugby)

WANTED: Eddystone 830/4 or /5 or /10; any model with the long waveband on it (Canadian or Swedish model?) Call Peter on 01438 871350 or 871398 or fax 01438 871505 (Hitchin, Herts)

WANTED: Inductor Unit for 100kHz calibrator in Eddystone Model 1830/1. Part No D4479, colour code brown/gold. Prepared to consider a complete calibrator unit reference LP3300. HELP! Please call Dave on Didcot 01235 512 660

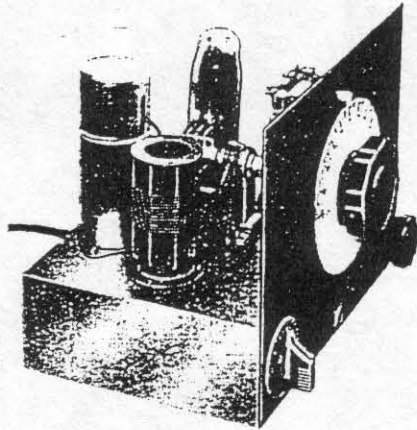
WANTED: Eddystone EC10 MkII receiver. Call Martyn 01460 76143
(Somerset)

FOR SALE: Eddystone 990R and 990S. Both working with manuals. Prefer buyer collects. Sensible offers invited. Call Graham on 01254 682351 at any reasonable time. (Lancashire)

RECEIVED

AMATEURS SHORT WAVE TWO.

WAVERANGE 8.8 METRES TO 100 METRES WITH BANDSPREAD TUNING AND FOR A.C. MAINS OPERATION.



Top view of chassis.

This is a particularly efficient two valve Receiver for A.C. mains operation which includes the now popular to metre Amateur experimental band in its wave cover. The latest Mullard valves are used.

The performance of the Receiver is superior to the usual two valve set. It has good sensitivity, is completely stable without hand capacity and is easy and nice to handle. It is capable of giving all-World range for headphone reception and due to the large output will operate a loudspeaker on the more powerful transmissions.

The Receiver is built on a standard Eddystone die-cast Chassis and panel which gives extreme rigidity to the assembly and the finished unit can be housed in a metal cabinet No. 106t which is available for this purpose.

The construction and wiring present no difficulty if the photographic layout and theoretical circuit are closely followed. All joints in the wiring must be well soldered, each lead being kept short and rigid to prevent circuit variation.

A front view of the panel shows the band-spread tuning dial in the centre with the band-set condenser dial at the bottom of the panel on the left, and the regeneration control on the right. The socket in the centre of the panel permits easy connection of headphones and should be wired in

sockets fitted to the back of the Chassis. The band-set condenser, mounted above the tuning circuit, is enclosed in a metal shield. The headphones are housed beneath the panel and should closely follow the theoretical wiring diagram. In particular, the wiring should be kept short and rigid to prevent circuit variation.

THOSE OF YOU who are members of the RSGB will have read the stunning feature in November's RadCom by Bob King, G3ASE, about the activities of World War II hams (VIs) who monitored German Secret Service Transmissions.

HE DESCRIBES how the Eddystone "Short Wave Two" home-built receiver held its own with the latest Halicrafters and HROs.

THIS SET is fully described in 1939 Eddystone Short Wave Manual No 4, available from EUG, price £5 post-free.

TIPS FOR BUILDING: replace the unobtainable side-contact valves with easy-to-get EF36 and EL33 (or EL32); use a 6-volt mains tranny as a 3-ohm output transfmr, use an old valve-base and 35mm drain-pipe for coil-formers...

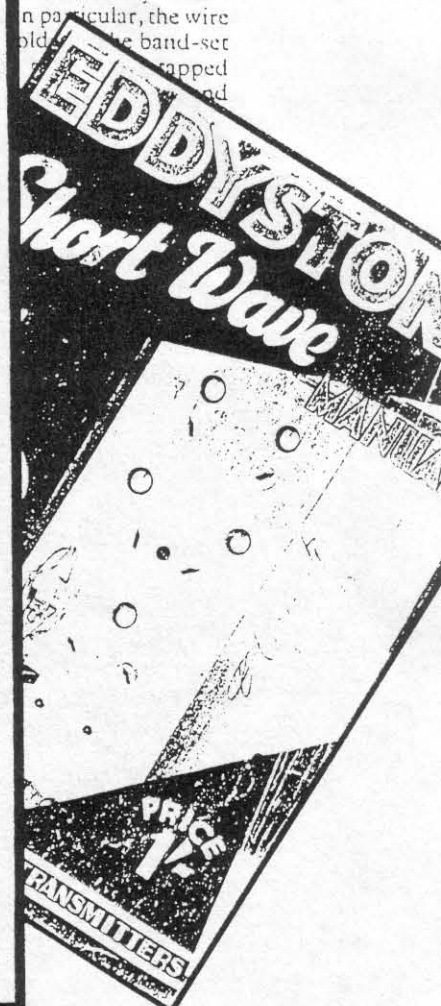
START YOUR NEW WINTER PROJECT NOW!

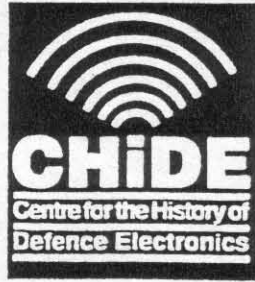
EDDYSTONE SHORT WAVE MANUAL No. 4

CONTENTS

- Amateur's Shortwave Two
- Improved "Everyman" Shortwave Receiver
- Miniature Amateur Station
- Short Wave Pre-selector
- General Purpose Absorption Wavemeter
- General Purpose Transmitter
- 25 Watt Indicator
- Field Strength Indicator
- Cathode-Ray Oscilloscope
- Key-Click Eliminator
- Ultra Shortwave Two
- Resonance Indicator
- Amateur Communication Receiver
- Power Supply Unit
- Ultra Shortwave Aerial

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E.U.G. member Dr John Beavis is the Director of one of the most recent initiatives to promote the study and understanding of the history of electronics and science. It is established in the Department of Conservation Sciences at Bournemouth University and is known by the acronym "CHiDE" - Centre for the History of Defence Electronics.

Electronics has had a major impact on our world view. Many features of the electronics technology with which we are familiar have their origins in the hidden world of defence electronics, during the Second World War and the military tensions of the following decades. Understanding the history of defence electronics and its relationship with domestic electronics therefore plays a vital part in understanding contemporary history. This is why CHiDE has been established.

HAVE YOU ANY MEMORIES OF USING EDDYSTONE COMMUNICATIONS EQUIPMENT IN A DEFENCE OR WARTIME CONTEXT? IF SO, DR BEAVIS WOULD LIKE TO HEAR FROM YOU NOW. WRITE TO HIM AT THE DEPARTMENT OF CONSERVATION SCIENCES, BOURNEMOUTH UNIVERSITY, POOLE, DORSET BH12 5BB. Tel. 01202 595178 Fax. 01202 595255

CHiDE on the World Wide Web

CHiDE is building a unique World Wide Web site on the *Internet*. The CHiDE Home Page can be found at <http://chide.bournemouth.ac.uk>. A growing range of information including photographic exhibitions and the potted history of vital electronic developments are there for you to explore and for the education of others around the world. Happy surfing!

"FRIENDS OF CHiDE"

Anyone with an interest in the history of Military Electronics, from radar to manpacks, is invited to become a Friend of CHiDE. For just £12 a year Friends will receive a quarterly Newsletter, "Transmission Lines"; discounts on events, publications and access to Bournemouth University library facilities. The events will include a Spring lecture, a Summer visit to a Military Communications Museum and an Autumn Colloquium. Telephone now 01202 503902 or email chide@bournemouth.ac.uk for full details and a complimentary copy of "Transmission Lines".

E.U.G. HAMS' NET SUCCESS

MEMBERS LINK UP ON 80 METRES

Report by Graeme G3GGL

JUST BEFORE the first EUG Members' Net was due to go on the air, with Anthony GW4RYK (Montgomery, Powis) and myself as watchmen, I had a summons to distant parts. Disaster! I phoned around to get another anchorman to hold the channel with Anthony, but everyone was due to go to a rally or some other distraction. We don't keep a list of members' phone numbers so Directory Enquiries were on overtime... So I went away and kept my fingers crossed.

BUT NO PROBLEM; Anthony went on the air at 10.00 on the first Sunday in November and before the hour was through he had whistled up no less than 8 members, including old timer BILL COOKE GW4ION, former Chief Engineer, no less, of Eddystone Radio, now retired to the Principality. What Bill doesn't know about Eddystone valve sets isn't worth knowing, so don't anybody try to pull the wool!

OTHERS WHO JOINED IN were Ben, G4BXD, in Kidderminster, well-known for his regular 'Valve and Vintage' column in Practical Wireless; Stan, G3JW, down in Bexley; John, GW3ITT, up in Mold, North Wales. Then in came Stuart, G4TBI, from Kinver in the West Midlands and Ron, G3ZEH, in Lowestoft, the most easterly part of England, followed by Chris, G4LGF, near Trowbridge in Wiltshire and Walter, G4VKN, in Plymouth.

CONDITIONS WERE SO-SO and contacts varied from very good to terrible! Members in the south/east suffered badly from continental short skip and have asked that the Net QSY down a bit to get clear. I don't know if the continentals will oblige us by staying at the top end of the band (I suspect this is always a problem for our south-eastern brethren) but starting in January (10.00 GMT Sunday 5th January 1997, LSB) the Net will operate on 3690-3700 (wherever it's quietest). So take a listen, and if you're licensed come on and give a report. If you're a SWL make a list of calls heard with signal strengths and readability and send it to me, Graeme Wormald G3GGL, at the address on the front cover.

In the last Newsletter I threatened to come on the air using AM and asked if any other members had vintage AM capability. The result was resounding silence! Come on, chaps, ONE of you must have an old AM rig in the shack. I've checked out my KW Vanguard and, after changing one reservoir condenser on the modulator power supply, it's working fine. We're ready, willing, and able, and if weekends are too busy on the band how about weekdays? Standing by for calls.

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THE DECLINE OF LOCAL PROPHECY



[Reproduced by permission of the Proprietors of "Punch"]

"Sky be very bad to-night, Jarge. What do that mean?"

"Can't tell 'e, 'Erbert. Us'll 'ear it on wireless later."

From "The BBC Handbook 1928"

* * * * *

HE MUST BE WORTH A PACKET!

Graham, G8UYD, tell us that he is now on Packet @GB7HVU. He suggests that a list of EUGers on Packet could be published for the dissemination of help and ideas. He has volunteered to set up a database of EUG Packeteers, for inclusion in the Newsletter. So come on, all you Packet fans, give Graham a call. If you want to chat with him you can phone him on 01254 682352 (Blackburn, Lancs)