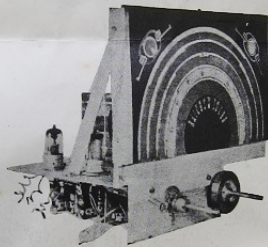


## INTRODUCING THE S.O.S. RAINBOW TUNER



The above is a photo of the S.O.S. RAINBOW DIAL, reduced to quarter size, its overall dimensions being 12in. x 6 1/4in. The basic colour of dark blue is surmounted with five rainbow colours with a different colour to distinguish each band, and all the figures, lettering and divisions are photo etched into the glass in gold, giving the dial a very attractive appearance. The band colours being Broadcast red, 25 to 31 metres yellow, 16 to 22 metres green, 40 to 49 metres blue, and 80 metres violet, these translucent colours being indicated by the false magic eye on the left when the wavechange switch is rotated. On the right provision is made for a dual sensitivity magic eye. In addition, to facilitate logging of stations, a scale of 0 to 100 is provided.

- New type rimlock valves — EF.41 R.F., E.C.H. 41 mixer.
- Special silver ceramic trimmers on osc. section.
- Real spin tuning.
- Pleassey Isolantite three-gang condenser.
- 80-metre Band, 9in. long.
- Full Construction. Details Available.



- Completely tested and aligned on crystal oscillator.
- Special perspex dial pointer eliminating parallax error.
- Calibrated for new frequencies.
- Provision for EM.34 dual sensitivity magic eye.
- Iron Core B/C Coils.
- Cabinets Available.

The above is a photo of the new S.O.S. Rainbow Tuning Unit, which supersedes the well known S.O.S. De Luxe Band Spread Unit. It is a five-band all-wave tuning unit covering broadcast and 16 to 80 metres. The unit consists of sub-chassis, calibrated dial, ganged condenser, coils, trimmers, wave-change switch, R.F. and Mixer valves, spin tuner and numerous small components all of which are completely wired and aligned to form a unit of the highest quality. The sub-chassis fits into a main chassis on mounting grommets and the only connections necessary are B+, I.F., A.V.C., filament and earth leads. The new rimlock series of valves give excellent results and are being adopted by leading manufacturers. The EM.34 dual sensitivity magic eye valve has been selected because of its ability to indicate weak stations. Special silver ceramic trimmers have been used on the oscillator section to prevent frequency drift. Each tuner is inserted in a test chassis, aligned and calibrated on a crystal-controlled signal generator, checked on the air, then sealed ready to use.

PRICE OF TUNER INCLUDING EF.41 AND ECH.41 VALVES, BUT LESS EM.34 EYE VALVE **£14-15-0**

Cadmium Plated Chassis for 7-valve — 15/-

Complete Kitset for 7-valve—£27/10/-  
(Including 8" P.M. Speaker)

Cadmium Plated Chassis for 9-valve — 17/6

Complete Kitset for 9-valve—£28/10/-  
(Less Speaker Output Trans.)

# S.O.S.

THE S.O.S. SIGN OF QUALITY

## S.O.S. RADIO LTD. 283 QUEEN STREET, AUCKLAND, C.I.

# BUILD THE RAINBOW COMMUNICATIONS RECEIVER

FULL CONSTRUCTIONAL DETAILS DESCRIBED IN  
RADIO & ELECTRONICS EASTER ISSUE 1949

## PARTS LIST.

### Valves.

1 ECH41  
1 EAF41  
1 6H6  
1 6J7  
1 6V6  
1 EM34  
1 EF41  
1 80

### Condensers.

1 50 mfd 50 V Electro.  
2 16 " " "  
1 8 " " "  
2 25 " 25 V "  
12 .05 Paper  
2 .02 "  
4 .0001 Mica  
2 .00025 "  
1 15 mmfd variable  
1 15 - 20 mmfd  
2 .001 Mica

### Resistors.

6 1 meg  
5 50 K  
2 100 K  
1 35 K  
1 200 ohm  
1 25 K  
1 30 K  
2 2 K  
1 300 ohm  
2 250 K  
2 500 K  
1 5 meg  
1 250 ohm  
1 250 K pot.  
1 25 K pot.  
1 1000 ohm w/w 10 watt adj.  
1 500 ohm w/w 5 watt

### Coils.

1 455 Kc I.F. trans Q142  
1 355 Kc osc. coil Q141  
2 100 Kc I.F. trans Q142  
1 100 Kc BFO coil Q224.

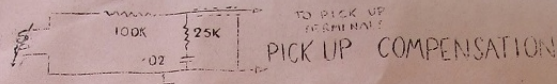
### Sundries.

1 Rainbow Tuning Unit  
1 Chassis IO valve.  
1 80 MA 395 V aside trans.  
1 80 MA choke.  
1 SPST Rotary switch  
1 SPDT " "  
4 Knobs  
3 Dial lights & holders  
2 1/2 yds 3 core flex  
2 1/2" shaft extenders  
3 Rimlock sockets.  
3 Octal sockets  
1 4 pin socket  
1 Speaker plug & socket  
1 Octal socket & cover for magic eye  
1 Grid clip (small)  
3 3/8" grommets.  
2 1/2" grommets.  
6 1/2" X 6 BA nuts & bolts for rimlocks  
14 1/2" X 1/8" nuts & bolts  
5 Single anchor points  
5 Double anchor points  
3 ft 6" shielding braid  
1 yd bare wire for earths  
1 length spaghetti  
2 yds red hook-up  
4 yds brown hook-up  
4 yds asstd. hook-up  
1 ft 6" 4 colour hook-up for magic eye  
1 coil solder  
1 8" PM speaker with 5000 ohm trans.  
2 ft 2 colour speaker lead.  
4 Unit bolts  
4 Unit mounts.  
4 Unit spacers

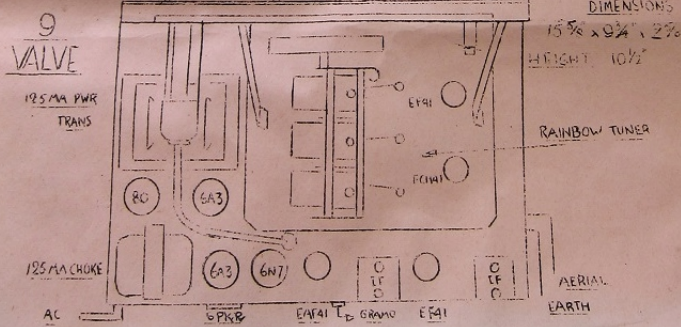
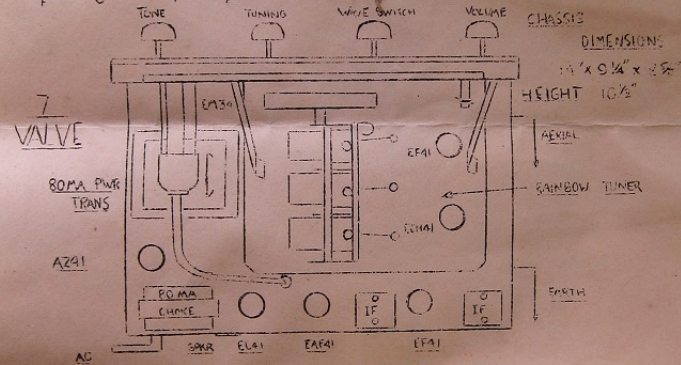
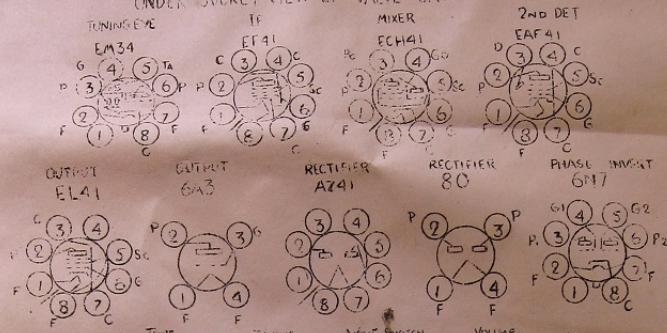
ATTRACTIVE VENEERED TABLE CABINET FOR THE  
ABOVE KITSET - £5-0-0

COMPLETE KIT OF PARTS AS ABOVE

- LESS CABINET - ONLY £34-15-0

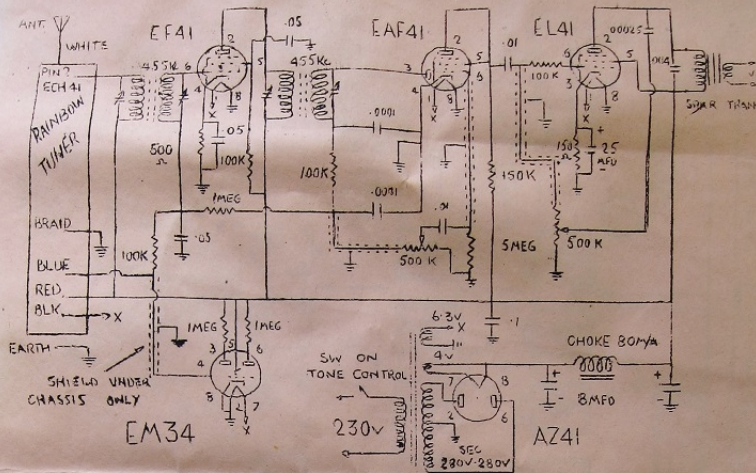


### UNDER SOCKET VIEW OF VALVE BASES





## 7-VALVE RAINBOW TUNER CIRCUIT



80M/A TRANSFORMER  
SEVEN VALVE PARTS LIST.

- 1 SOS Rainbow Tuning Unit  
1 Chassis CAD Plated

Valves.

BM34 Magia Eye  
EL41 Output  
EAF41 2nd.Det.  
EF41 IF.  
AZ41 Rect.

Condensers.

2	8mfd	Electro
1	25 "	"
1	.1"	Paper
3	.05	"
2	.01	"
1	.004	Mica
2	.0001	"
1	.00025	"

Resistors

1	5 megohm
3	1 "
1	150K
4	100K
1	500 ohm
1	150 "

Sundries.

1. .5 meg Pot W/s (tono)

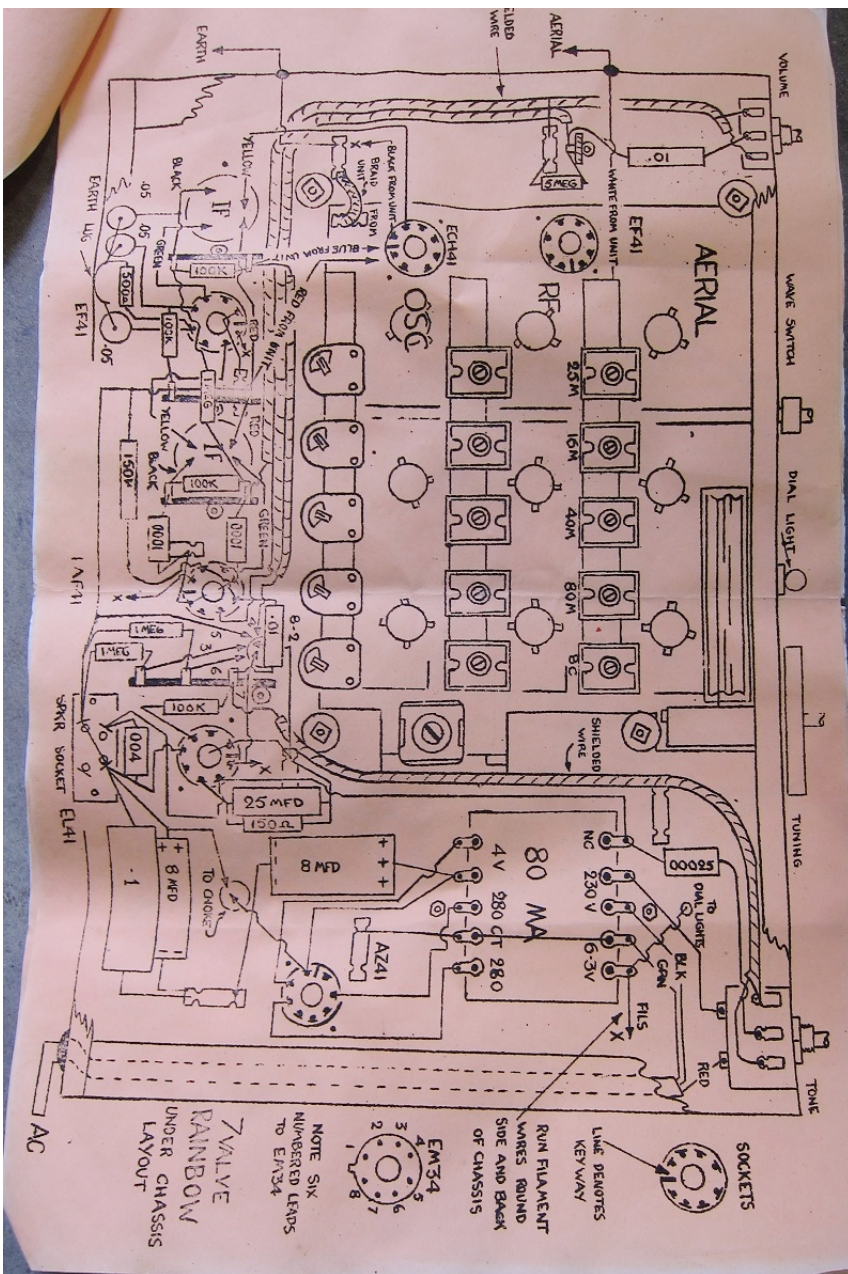
1 .5 meg Pot (volume)  
4 Rimlock Sockets.

- 2 IF Trans 455 ks with 3 extra
- parts for anchor points
- 1 80 W/A Power Trans 290V
- 1 80 W/A Power choke
- 1 8" Fast Speaker & Trans.
- 1 Octal socket and cover
- 5 Double anchor points
- 1 Single anchor point
- 1 5 lug anchor point (spec)
- 1 4 pin Min plug & socket
- 4 knobs
- 1 coil solder
- 4 yds. asstd. push-back
- 1 ft. bare wire for earthing
- 1 ft. 5 colour
- 1 ft. 5" 1 colour (grid wire) for

3 dial lamps & holders  
2 1/2 doz 3 core flex  
1 doz 1/4 x 3/8 auto & belts for  
sockets & anchor points  
2 5/8" x 4/32" for choke  
4 1" x 1/8" for Unit  
4 Unit mtg. grommets & spacers  
2 5/32" grommets  
2 1/8" " "  
2 Tags, aerial & earth  
3 1/2 ft. shielding braid

COMPLETE KITSET AS ABOVE £27-10-0

CALL OR WRITE AND SEND A MONEY ORDER NOW.





[illegible]

EXTRA

£ 28.10.0

PRICE OF 9 VALVE  
KITSET AS ABOVE

I Radio gram plate

3½ yds shelding broad

3  $\frac{1}{4}$ " Prommets (aor, earh & dial light

3 3/8" grommets (power, choke, mag 10

1 1/2 doz 1/8" nuts & bolts (800)

3 Dial lamps & holders.  
24 vda 3 core flex

1 If 6" I colour for Magic eye  
and shielded under cheatin

Summaries contd.

6 yda aavtd. push-buck

4 knobs

11 (wdeg)  
3 Tue  
11

1 Social Rocket & Cover  
4 Double anchor vta.

125 MA P.T. 310/310 asld  
105 MA choke

2 I.F' 455 Kc with 3

3 4 pin Amphenol sockets

2 Rimlock sockets

6.5

20,000 0000  
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 $\frac{1}{2}Y$   
 $X$

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