

TECHNICAL INFORMATION COVERING BROADCAST RECEIVER MANUFACTURED BY COLLIER & BEALE LTD.

TYPE SET—A.C. Superheterodyne.

POWER SUPPLY—230 v. A.C. Rating 75 watts.

TUBES (five): 6BE6 Converter, 6BA6 I.F. Amp., 2 x ECL82 A.F. Amp./Output, EZ81 Rectifier.

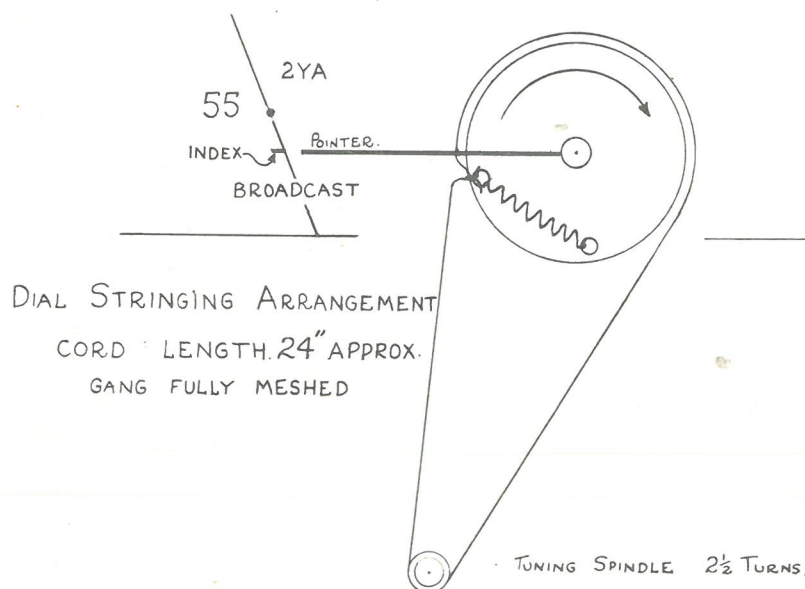
TUNING RANGE—Broadcast, 530-1600 k.c.

ALIGNMENT INSTRUCTIONS

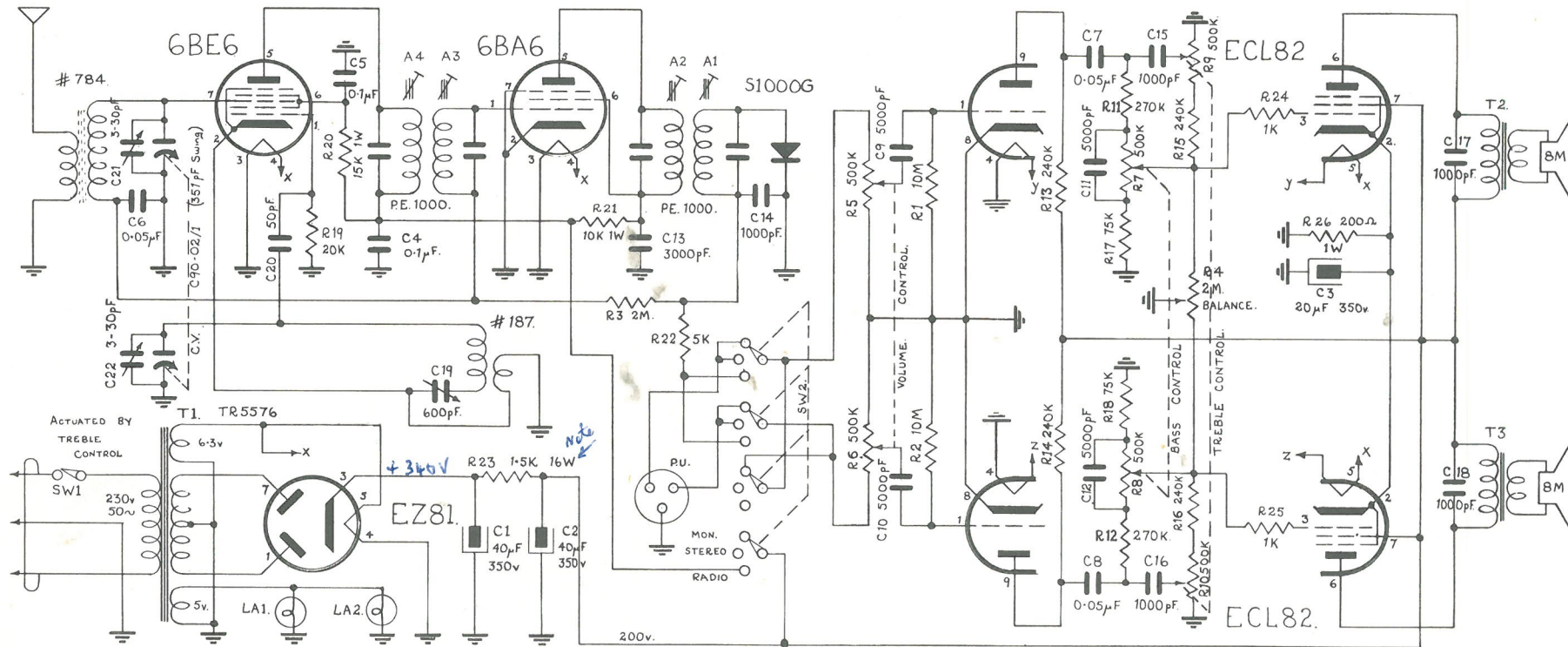
To set pointer, fully mesh condenser and set pointer at last reference mark at left end of dial. Set volume control at maximum and keep output from signal generator no higher than necessary to obtain output readings. Use insulated alignment tool for adjusting.

Dummy Antenna	Signal Generator Coupling	Sig. Gen. Frequency	Band Switch Position	Radio Dial Setting	Output Meter	Adjust	Remarks
0.1 μ f.	High Side to pin No. 7 (grid) of 6BE6.	455 Kc.	BC	High freq. end	Across voice coil	A1, A2, A3, A4.	Adjust for maximum output
R.M.A. Standard	High side to ant. terminal	1400 Kc.	"	1400 Kc.	"	C21	" "
"	"	1400 Kc.	"	1400 Kc.	"	C22	" "
"	"	600 Kc.	"	Rock Variable	"	C19	" "

CAPACITORS			MISCELLANEOUS				RESISTORS		
Ref. No.	Cap.	Volts	Ref. No.	Res., Pri.	Res., Sec.		Ref. No.	Res.	Watts
C1-C2	40 μ F.	350	784	20 ohm	2.7 ohm	B.C.	R1-R2	10 Meg.	$\frac{1}{2}$
C3	20 μ F.	350	187	0.25 "	2.44 "	B.C.	R3	2 "	$\frac{1}{2}$
C4	0.1 μ F.	350	PE 1000	14.5 "	13.5 "	I.F.	R4	1 "	Pot.
C5	0.1 μ F.	125	TR 5576	Volts: 230	Volts: 310 a side		R5-R10	500K/500K	Pot.
C6-C8	0.05 μ F.	350			1 x 6.3 V.	1 x 5 V.	R11-R12	270 K	$\frac{1}{2}$
C9-C12	5000 pF.	Ceramic					R13-R16	240 K	$\frac{1}{2}$
C13	3000 pF.	Ceramic	SW1	SPST on R9/R10			R17-R18	75 K	$\frac{1}{2}$
C14-C18	1000 pF.	Ceramic	SW2	3 Pos. 4 Bank Rotary Switch			R19	20 K	$\frac{1}{2}$
C19	600 pF.	Padder	CV				R20	15 K	1
C20	50 pF.	Ceramic	LA1)	Polar C90-C2/1 (swing 351pF.)			R21	10 K	1
C21-C22	3-30 pF.	Trimmer	LA2)	6.3 V. .3 amp. M.E.S. Tub. Lamp.			R22	5 K	$\frac{1}{2}$
							R23	1.5 K	16 w.w.
							R24-R25	1 K	$\frac{1}{2}$
							R26	200 Ω	1



Note: 1000G diode det V



Schematic Diagram Models "SYMPHONIC" and "BRYDON"

VOLTAGE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
Conv.	6BE6	—5	—	—	6.2 AC	198	95	—	—	—
I.F.	6BA6	—	—	—	"	85	85	—	—	—
A.F. Amp	1/2 ECL82	)—	15	—	6.2 AC	180	200	—	—	75
Output	1/2 ECL82									
Rectifier	EZ81	300 AC	—	340	—	"	—	300 AC	—	—

RESISTANCE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
Conv.	6BE6	20 K	0.25 K	—	—	501 K	515 K	2.25 M	—	—
I.F.	6BA6	2.25 M	—	—	—	510 K	510 K	—	—	—
A.F. Amp	1/2 ECL82	) 10 M	200	*	—	—	500 K	500 K	—	750 K
Output	1/2 ECL82									
Rectifier	EZ81	125 K	—	500 K	—	—	—	125 K	—	—

1. D.C. voltage measurements are at 20,000 ohms per volt—A.C. voltage measurements at 5,000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to chassis. Band Switch in Broadcast position.

4. Nominal tolerances on component values make possible a variation of $\pm 10\%$ in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.
6. Resistance readings in B+ circuits may vary widely according to condition of filter capacitors.

*Dependent on balance control setting.

**SYMPHONIC
+ BRYDON**

June 1960