

BUSH**Models AC.1, DAC.1**

General Description : Five-valve, including rectifier, three-waveband superheterodyne receiver with "Bush Bi-focal Tone" negative feedback. Released Autumn 1947. Price £21 os. od. (including purchase tax).

Power Supplies :

Model AC.1 : A.C. mains only, 100-120, 200-250 volts, 40-100 cycles. Four tapings 110, 210, 230, 250. Consumption 32 watts.

Model DAC.1 : A.C./D.C. mains, 200-250 volts. Three tapings 210, 230, 250. Consumption 60 watts.

Wavebands : L.W. 850-2000 m. (352.9-150 kc/s.); M.W. 170-560 m. (1760-535.7 kc/s.); S.W. 16-50 m. (18.75-6.0 Mc/s.).

Intermediate Frequency : 465 kc/s.

Valves : Mullard (V1) CCH35, frequency changer; (V2) EF39, I.F. amplifier; (V3) EBC33, detector, A.V.C. diode, L.F. amplifier; (V4) CL33, output; (V5) CY31, mains rectifier.

Scale Lamps : One for scale illumination only.

Model AC.1 : 3.5 volts, 0.3 amp.

Model DAC.1 : 6.2 volts, 0.3 amp.

Modifications : In later models R17 is 10000 ohms.

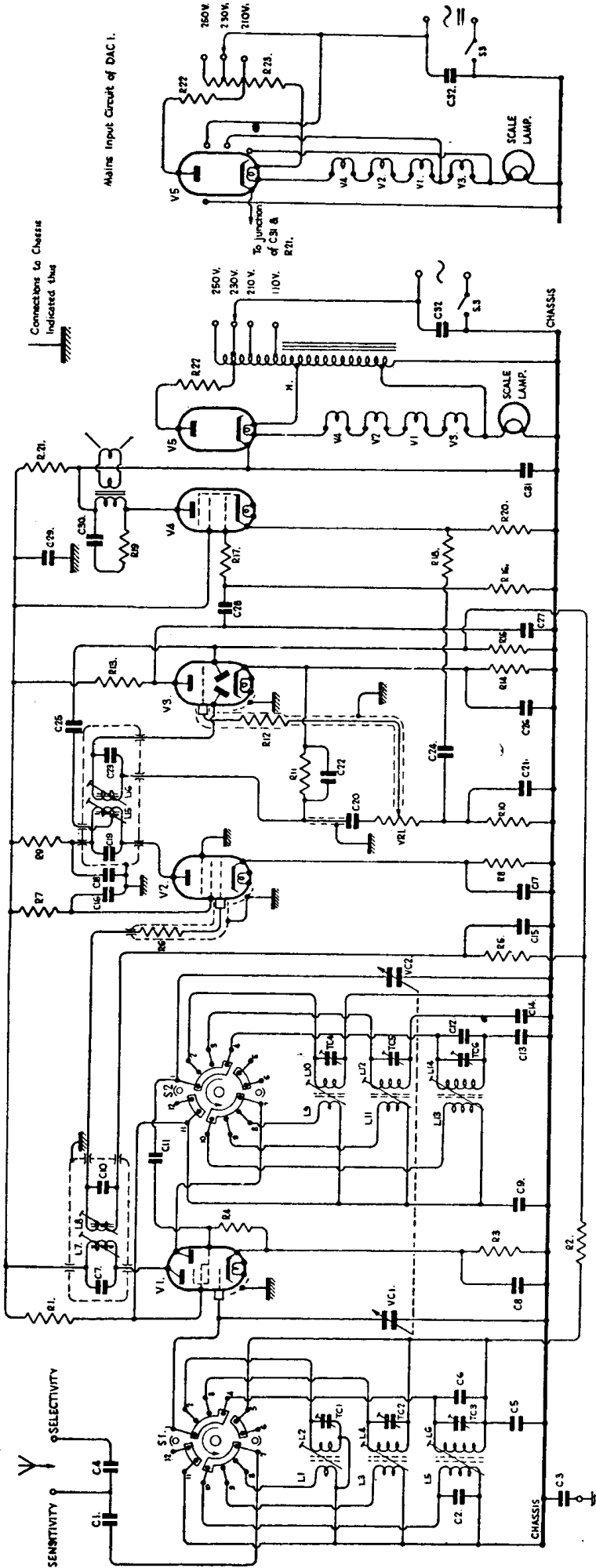
Alignment Procedure : *Warning*—The chassis of these receivers is "Live". See models AC.2, DAC.2.

D.C. Resistances : Inductances and mains transformer see AC.2.

Output transformer: Primary 500 ohms, Secondary 0.5 ohm, Ratio 54.8 : 1

Voltage Checks : Operating on 230 volts A.C.

| | | | | | | | | | | |
|-------|------------|---|---|-----|-------|---------|--------|---|----------|-----|
| CCH35 | Hex. anode | . | . | 115 | EBC33 | Anode | . | . | 40 | |
| | Screen | . | . | 59 | | Cathode | . | . | 0.75 | |
| | Osc. anode | . | . | 59 | | CL33 | Anode | . | . | 265 |
| | Cathode | . | . | 0.4 | | | Screen | . | . | 115 |
| EF39 | Anode | . | . | 84 | CY31 | Cathode | . | . | 4.3 | |
| | Screen | . | . | 57 | | Anode | . | . | 225 A.C. | |
| | Cathode | . | . | 0.9 | | Cathode | . | . | 270 | |



CIRCUIT DIAGRAM—BUSH MODELS AC.1 AND DAC.1

- Capacitors.**
- C1 0.005
 - C2 800 pF.
 - C3 0.05
 - C4 50 pF.
 - C5 0.05
 - C6 30 pF.
 - C7 110 pF.
 - C8 0.05
 - C9 0.05
 - C10 110 pF.
 - C11 50 pF.
 - C12 180 pF.
 - C13 390 pF.

- C14 556 pF.
- C15 0.05
- C16 0.05
- C17 0.01
- C18 0.05
- C19 110 pF.
- C20 0.01
- C21 0.1
- C22 100 pF
- C23 110 pF.
- C24 0.05
- C25 50 pF.
- C26 50

- Resistors.**
- R1 15k
 - R2 1M
 - R3 100
 - R4 33k

- R5 2.2M
- R6 220
- R7 47k
- R8 220
- R9 10k
- R10 4700
- R11 330k
- R12 100k
- R13 68k
- R14 1000
- R15 1M
- R16 470k
- R17 47k

- R18 2200
- R19 10k
- R20 150
- R21 10k
- R22 150
- R23 600 + 100 + 100
- VR1 DAC.1 only
- VR1 2M

Variable Capacitors.
 VC1 } 2 × 533 pF.
 VC2 } Ganged
 TC1-6 } 3-40 pF.