

McMICHAEL

Models 463, 483, 493

General Description : A series of four-valve, two-waveband portable superheterodyne receivers for "all-dry" battery operation.

Power Supplies : H.T. 90 volts, L.T. 1.5 volts. Batteries recommended by manufacturers :

Models 463, 483 : Ever Ready Batrymax B117 and "All-dry 32".

Model 493 : Vidor L5515 and "Heavy Duty L.T."

Intermediate Frequency : 465 kc/s.

Valves :

Model 463 : (V₁) DK32; (V₂) DF33; (V₃) DAC32; (V₄) DL35.

Models 483, 493 : (V₁) DK91 or X17; (V₂) DF91 or W17; (V₃) DAF91 or ZD17; (V₄) DL92 or N17.

Circuit Variations : The circuit diagram of Model 483, not shown, closely resembles that of Model 493. Major differences include : (a) 620-pF. (not 690-pF.) fixed padding capacitors; (b) 250-pF. (not 270-pF.) fixed L.W. trimmer capacitor; (c) no 20-pF. capacitor in parallel across the M.W. trimmer capacitor; (d) the 0.001- μ F. audio coupling capacitor is connected directly to the anode of V₃, the single-anode load resistor being 1M.

Alignment Procedure : Use standard frame-aerial alignment procedure.

(1) Adjust cores of I.F. transformers for maximum response at 465 kc/s.

(2) Check that pointer is at the lower edge of the words "McMichael Radio, Ltd." (or 550-m. calibration mark on Model 493) on the printed scale with the ganged tuning capacitors fully meshed.

(3) Adjust M.W. oscillator and aerial inductor cores at 500 m. (600 kc/s.).

(4) Adjust M.W. oscillator and aerial trimmers at 200 m. (1500 kc/s.).

(5) Adjust L.W. oscillator and aerial inductor cores at 2000 m. (150 kc/s.).

(6) Adjust L.W. oscillator and aerial trimmers at 1000 m. (300 kc/s.).

Check Voltages : Measured with Universal Avometer, Model 7 (400-volt range unless otherwise indicated), negative connection being made to chassis.

Model 463

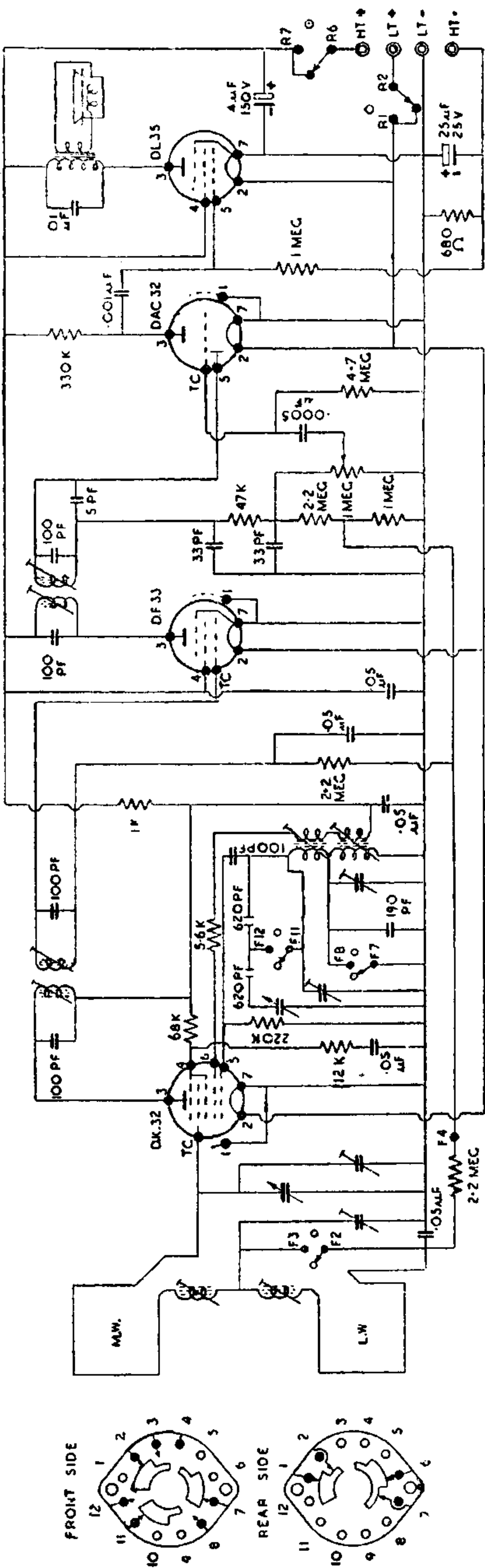
V ₁	Anode (pin 3)	82 v.	Screen (pin 4)	36 v.	Osc. anode (pin 6)	74 v.
V ₂	Anode (pin 3)	74 v.	Screen (pin 4)	85 v.	—	—
V ₃	Anode (pin 3)	30 v.	—	—	—	—
V ₄	Anode (pin 3)	82 v.	Screen (pin 4)	85 v.	—	—

Total H.T. consumption 11.5 mA. Bias voltage 7 v. (10-volt range).

Models 483, 493

V ₁	Anode (pin 2)	81 v.	Screen, Osc.	47 v.	—
			Anode (pin 3)	—	—
V ₂	Anode (pin 2)	81 v.	Screen (pin 3)	45 v.	—
V ₃	Anode (pin 5)	7 v.	Screen (pin 6)	5 v.	—
V ₄	Anode (pin 2)	78 v.	Screen (pin 4)	81 v.	—

Total H. T. consumption 14 mA. Bias voltage 9 volts (10-volt range):



CIRCUIT DIAGRAMS—MCMICHAEL MODELS 463 (above), 493 (below)

