

**MURPHY****Model A192**

**General Description :** Five-valve (including rectifier), three-waveband, table superheterodyne receiver with capacitance plate aerial and provision for external aerial and earth connections.

**Special Note :** The manufacturers supply full servicing instructions to Murphy accredited agents only.

**Power Supply :** A.C. mains, 190–250 volts (two adjustment tappings). Note that the chassis is directly connected to one side of the mains supply.

**Valve Analysis :**

| <i>Valve</i>              | <i>Function</i>                           | <i>Anode<br/>Volts</i> | <i>Screen<br/>Volts</i> | <i>Cathode<br/>Volts</i> |
|---------------------------|---|------------------------|-------------------------|--------------------------|
| V1 10C1 . . .<br>(triode) | Freq. changer<br>Oscillator               | 170<br>75              | 65<br>—                 | 0<br>0                   |
| V2 10F9 . . .             | I.F. amplifier                            | 170                    | 65                      | 0                        |
| V3 10LD11 . . .           | Demodulator, A.G.C. and<br>A.F. amplifier | 75                     | —                       | 0                        |
| V4 10P14 . . .            | A.F. output                               | 210                    | 165                     | 8.4                      |
| V5 U404 . . .             | Half-wave rectifier                       | 210 A.C.               | —                       | 230                      |

H.T. voltage across C35, 222 volts.

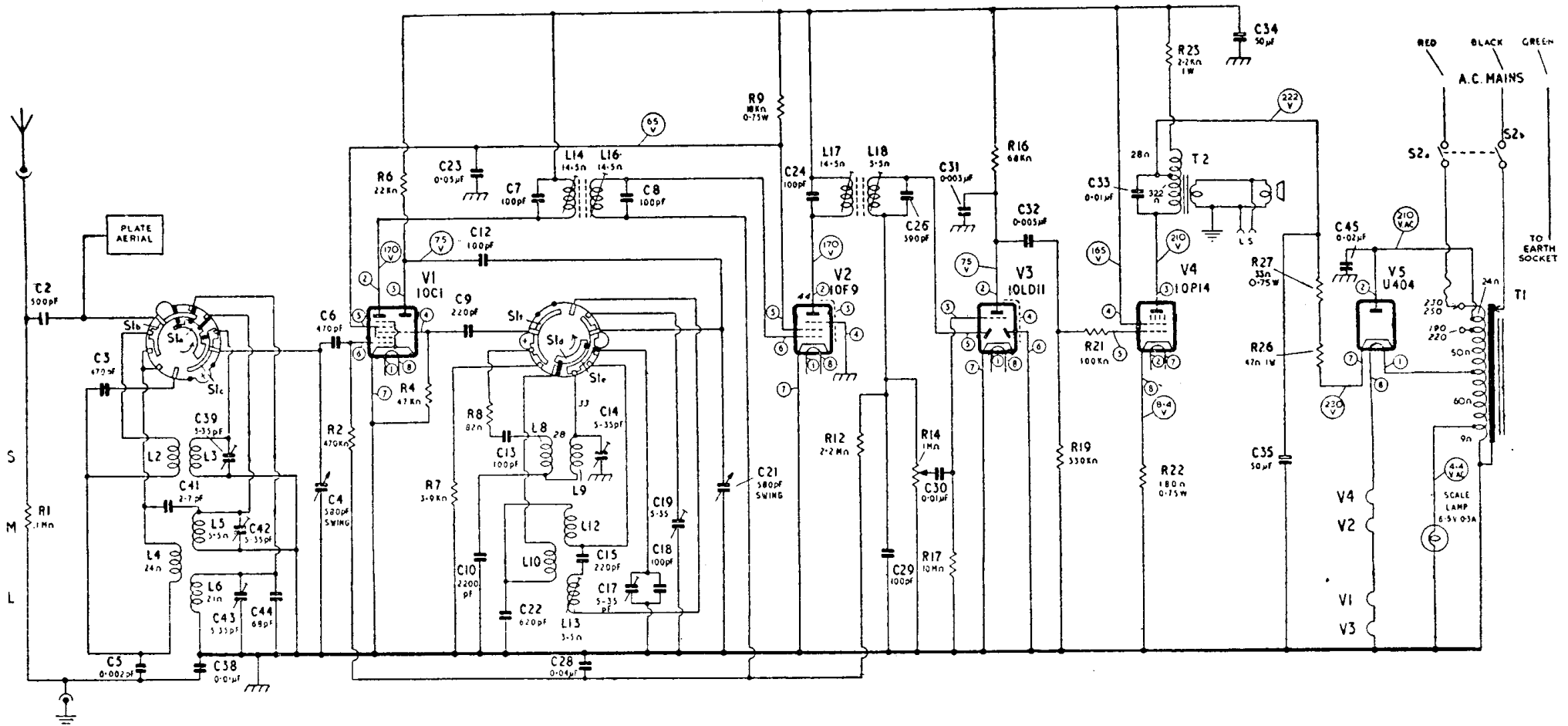
**Intermediate Frequency :** 470 kc/s.

**Scale Lamp :** 6.5 volts, 0.3 amp., bulb fed from 4.4-volt tap on mains auto-transformer.

**Fuse :** A temperature-operated fuse is fitted to the core of the mains auto-transformer.

**Component Values :**

|                    |                       |                   |                                 |
|--------------------|-----------------------|-------------------|---------------------------------|
| <i>Capacitors.</i> |                       |                   |                                 |
| C2 500 pF.         | C21 580 pF. Swing     | C42 5–35 pF.      | R21 100k                        |
| C3 470 pF.         | C22 620 pF.           | C43 5–35 pF.      | R22 180 (0.75 W.)               |
| C4 580 pF. Swing   | C23 0.05              | C44 68 pF.        | R23 2.2k (1 W.)                 |
| C5 0.002           | C24 100 pF.           | C45 0.02          | R26 47 (1 W.)                   |
| C6 470 pF.         | C26 390 pF.           |                   | R27 33 (0.75 W.)                |
| C7 100 pF.         | C28 0.04              | <i>Resistors.</i> |                                 |
| C8 100 pF.         | C29 100 pF.           | R1 1M             |                                 |
| C9 220 pF.         | C30 0.01              | R2 470k           |                                 |
| C10 2200 pF.       | C31 0.003             | R3                |                                 |
| C11                | C32 0.005             | R4 47k            |                                 |
| C12 100 pF.        | C33 0.001             | R6 22k            |                                 |
| C13 100 pF.        | C34 50 (electrolytic) | R7 3.9k           |                                 |
| C14 5–35 pF.       | C35 50 (electrolytic) | R8 82             |                                 |
| C15 220 pF.        | C36                   | R9 18k (0.75 W.)  |                                 |
| C16                | C37                   | R12 2.2M          |                                 |
| C17 5–35 pF.       | C38 0.01              | R14 1M            |                                 |
| C18 100 pF.        | C39 5–35 pF.          | R16 68k           |                                 |
| C19 5–35 pF.       | C40                   | R17 10M           |                                 |
| C20                | C41 2.7 pF.           | R19 330k          |                                 |
|                    |                       |                   | <i>D.C. Resistances (ohms).</i> |
|                    |                       |                   | L4 24                           |
|                    |                       |                   | L5 5.5                          |
|                    |                       |                   | L6 21                           |
|                    |                       |                   | L13 3.5                         |
|                    |                       |                   | L14 14.5                        |
|                    |                       |                   | L16 14.5                        |
|                    |                       |                   | L17 14.5                        |
|                    |                       |                   | L18 5.5                         |
|                    |                       |                   | T1 (total) 143                  |
|                    |                       |                   | T2 (pri. total) 350             |
|                    |                       |                   | T2 (pri. tap) 28                |



CIRCUIT DIAGRAM—MURPHY MODEL AI92

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