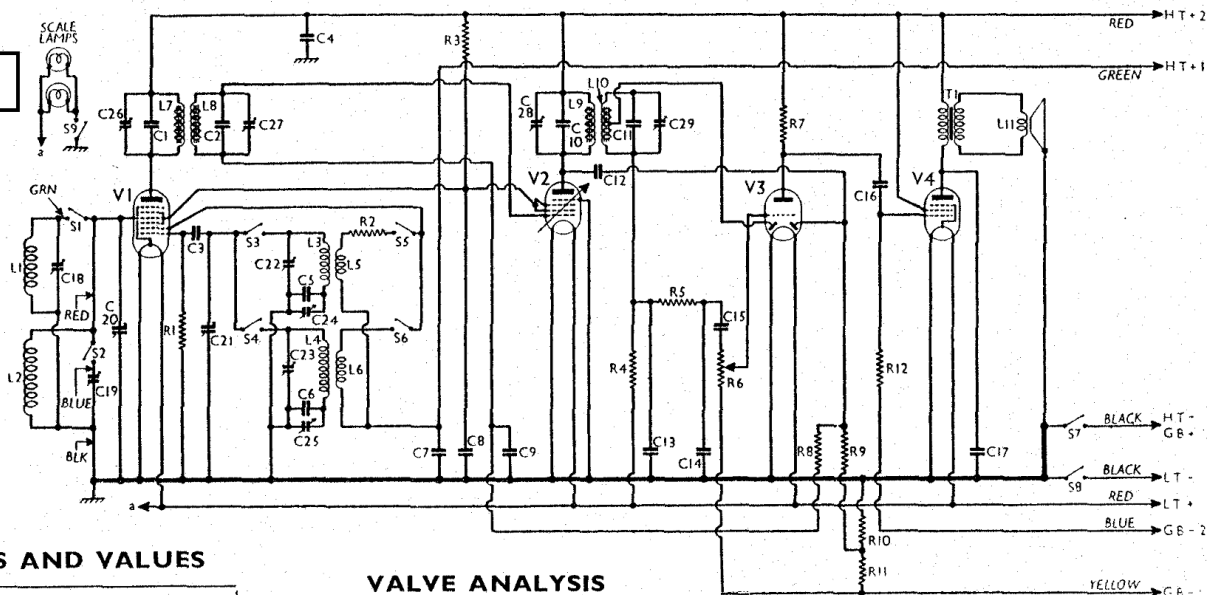


Circuit diagram of the Vidor 288 and Burndept 292. The connections from frame assembly to chassis are colour-coded.



COMPONENTS AND VALUES

RESISTANCES	Values (ohms)
R1 V1 osc. CG resistance ..	47,000
R2 Osc. MW reaction stabiliser ..	1,500
R3 V1, V2 SG's HT feed ..	27,000
R4 V3 signal diode load ..	1,000,000
R5 IF stopper ..	10,000
R6 Manual volume control ..	500,000
R7 V3 triode anode load ..	47,000
R8 AVC line decoupling ..	470,000
R9 V3 AVC diode load ..	1,000,000
R10 AVC delay voltage ..	100,000
R11 potential divider ..	100,000
R12 V4 CG resistance ..	470,000

CONDENSERS	Values (μF)
C1 1st IF trans. pri. fixed trimmer ..	0.0001
C2 1st IF trans. sec. fixed trimmer ..	0.0001
C3 V1 osc. CG condenser ..	0.0002
C4 HT circuit RF by-pass ..	0.25
C5 Osc. circuit MW fixed tracker ..	0.0006
C6 Osc. circuit LW fixed tracker ..	0.00018
C7 V1 osc. anode RF by-pass ..	0.1
C8 V1, V2 SG's decoupling ..	0.1
C9 V2 CG decoupling ..	0.1
C10 2nd IF trans. pri. fixed trimmer ..	0.0001
C11 2nd IF trans. sec. fixed trimmer ..	0.0001
C12 Coupling to V3 AVC diode ..	0.0001
C13 IF by-pass condensers ..	0.0002
C14 AF coupling to V3 triode ..	0.01
C15 V3 triode to V4 AF coupling ..	0.01
C16 Fixed tone corrector ..	0.002
C17 Frame aerial MW trimmer ..	—
C18 Frame aerial LW trimmer ..	—
C19 Frame aerial tuning ..	—
C20 Oscillator circuit tuning ..	—
C21 Osc. circuit MW trimmer ..	—
C22 Osc. circuit LW trimmer ..	—
C23 Osc. circuit MW tracker ..	—
C24 Osc. circuit LW tracker ..	—
C25 1st IF trans. pri. tuning ..	—
C26 1st IF trans. sec. tuning ..	—
C27 2nd IF trans. pri. tuning ..	—
C28 2nd IF trans. sec. tuning ..	—
C29	—

† Variable. ‡ Pre-set.

OTHER COMPONENTS	Approx. Values (ohms)
L1 MW frame aerial winding ..	2.25
L2 LW frame aerial winding ..	25.0
L3 Osc. circuit MW tuning coil ..	5.0
L4 Osc. circuit LW tuning coil ..	8.0
L5 Oscillator MW reaction coil ..	170.0
L6 Oscillator LW reaction coil ..	2.5
L7 1st IF trans. { Pri. ..	5.0
L8 { Sec. ..	5.0
L9 2nd IF trans. { Pri. ..	12.0
L10 { Sec., total ..	5.0
L11 Speaker speech coil ..	3.0
Tr Speaker input trans. { Pri. ..	650.0
{ Sec. ..	0.3
Sr-S6 Waveband switches ..	—
S7 HT circuit switch { ganged ..	—
S8 LT circuit switch { R6 ..	—
S9 Scale lamps switch ..	—

VALVE ANALYSIS

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 FC2A	105	1.4	50	1.2
V2 VP2B	68	1.2	50	0.8
V3 HL21DD	105	2.4	—	—
V4 PM22A	78	0.3	105	0.5

Valve voltages and currents given in the table above are those measured in our receiver when it was operating with a

new HT battery reading 108 V overall, on load. The receiver was tuned to the lowest wavelength on the medium band and the volume control was at maximum, but there was no signal input as the frame connections were shorted.

Voltages were measured on the 400 V scale of a model 7 Universal Avometer, chassis being negative.

GENERAL NOTES

Switches.—S1-S6 are the waveband switches, in a single rotary unit at the front of the chassis. This is indicated in our plan chassis view, and shown in detail in the diagram on page iv. The table (page iv) gives the switch positions for the two control settings, starting from fully anti-clockwise. A dash indicates *open*, and *C* *closed*.

S7, S8 are the HT and LT circuit switches, ganged with the volume control **R6**, and indicated in our plan view.

S9 is the scale lamps switch, incorporated in the knob of the waveband switch. It only closes when the small plunger is depressed.

Coils.—L1, L2 are the frame aerial windings inside the cabinet, with which are associated the trimmers **C18** and **C19**. The frame aerial leads are coloured green, red and black, and are indicated in our circuit diagram, while there is a fourth lead (blue) from **C19** (inside the cabinet) to **S2** on the chassis.

L3, L5 and L4, L6 are in two unscreened units on the chassis deck, while the IF transformers **L7, L8** and **L9, L10** are also on the chassis deck, and contain their associated fixed and variable trimmers.

Scale Lamps.—These are two MES types, rated at 2.6 V, 0.3 A. They are controlled by **S9**, incorporated in the wavechange switch knob.

Note.—No provision is made for the connection of an external aerial, earth or speaker.

CIRCUIT ALIGNMENT

Note.—Aerial, oscillator and IF trimmers can be reached without removing the chassis from the cabinet. If the trackers **C24** and **C25** have to be adjusted, however, the chassis and frame aerial unit must be removed complete.

IF Stages.—Connect signal generator to control grid (top cap) of **V1** and chassis. Short-circuit **C21**, and turn volume control to maximum. Feed in a 450 KC/S signal, and adjust **C26**, **C27**, **C28** and **C29** for maximum output. Remove generator and the short-circuit from **C21**.

RF and Oscillator Stages.—Couple signal generator by a length of wire round the outside of the cabinet or across the frame windings (if out of the cabinet).

MW.—Switch set to MW, feed in a 220 m (1,364 KC/S) signal, tune to 220 m on scale, and adjust **C22**, then **C18**, for maximum output. **C18** is the upper one inside the frame.

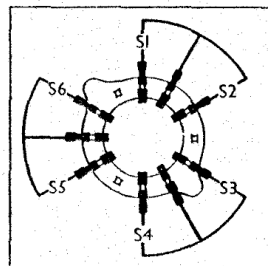
Feed in a 500 m (600 KC/S) signal, tune it in, and adjust **C24** for maximum output, while rocking the gang for optimum results. Return to 220 m, and if calibration is now wrong, adjust pointer to 220 m and re-adjust **C22** and **C18**.

LW.—Switch set to LW and follow the same procedure, trimming with **C23** and **C19** (lower condenser on panel inside frame) at 1,000 m (300 KC/S) and tracking with **C25** at 2,000 m (150 KC/S).

The batteries should be in their correct positions during alignment.

SWITCH TABLE AND DIAGRAM

SWITCH	LW	MW
S1	—	C
S2	C	—
S3	—	C
S4	C	—
S5	—	C
S6	C	—



Switch diagram, looking from the rear, above the chassis deck.