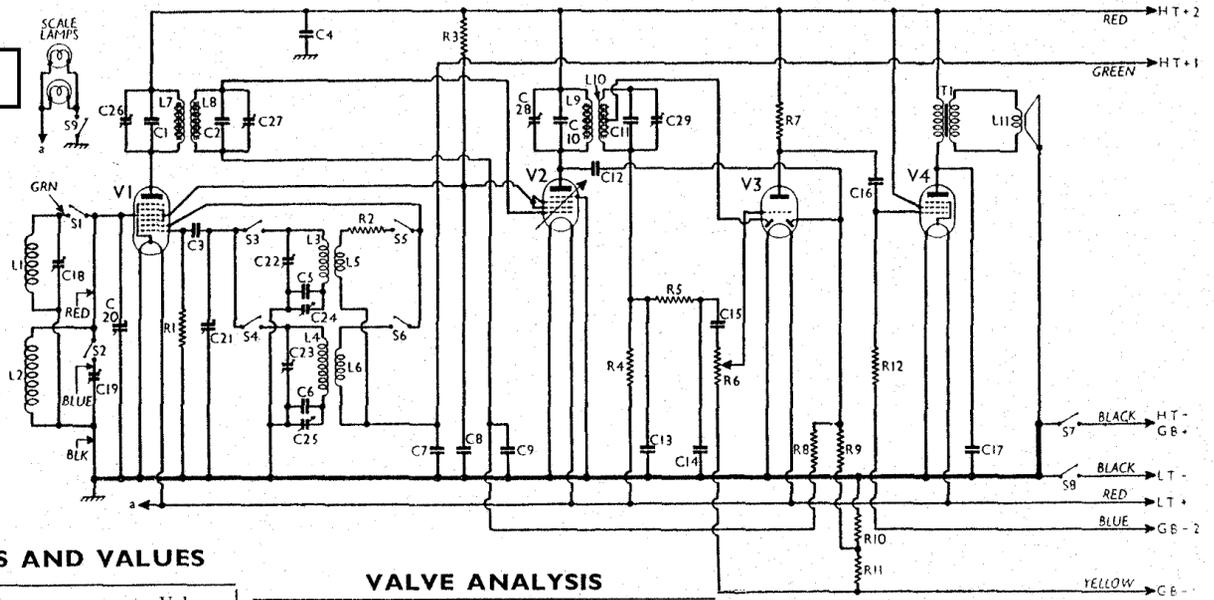


Circuit diagram of the Vidor 288 and Burndept 292. The connections from frame assembly to chassis are colour-coded.



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

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 grounded.

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.

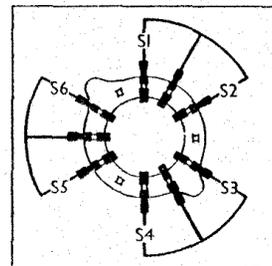
CONDENSERS	Values (µF)
C1	1st IF trans. pri. fixed trimmer .. 0.0001
C2	1st IF trans. sec. fixed trimmer .. 0.0001
C3	V1 osc. CG condenser .. 0.0002
C4	HT circuit RF by-pass .. 0.25
C5	Osc. circuit MW fixed tracker .. 0.0006
C6	Osc. circuit LW fixed tracker .. 0.00018
C7	V1 osc. anode RF by-pass .. 0.1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

† 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	1st IF trans. Sec. .. 5.0
L9	2nd IF trans. Pri. .. 12.0
L10	2nd IF trans. Sec., total .. 5.0
L11	Speaker speech coil .. 3.0
Tr	Speaker input trans. Pri. .. 650.0
	Speaker input trans. Sec. .. 0.3
Sr-S6	Waveband switches .. —
S7	HT circuit switch .. ganged
S8	LT circuit switch .. R6
S9	Scale lamps switch .. —

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.