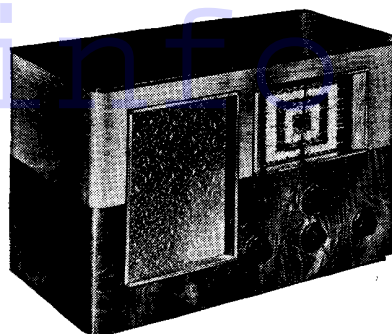


VIDOR 269 STRAIGHT ALL-WAVE THREE



The Vidor Model 269 is a four-wave-band "straight" three plus rectifier instrument for operation on A.C. or D.C. mains. Besides medium and long-wave bands, it covers two short-wave ranges: 13-8-49 and 75-210 metres.

CIRCUIT.—The aerial is coupled to the grid of V1, a variable-mu H.F. pentode, through a band-pass filter for long and medium waves and inductively coupled for the two short bands. The input to the coils from the aerial passes through either one or two aerial series condensers.

V1 is directly coupled to the pentode detector through a tuned anode coil. Reaction is applied from the anode of V2 through a series resistance R5 and controlled by a variable condenser.

The output of V2 is resistance-capacity coupled to the L.F. amplifier V3, an output pentode.

Mains equipment consists of an indirectly heated half-wave rectifier V4, the speaker field used as smoothing choke, and the usual electrolytic condensers. A condenser is connected across the anode and cathode of the rectifier to reduce ripple.

A condenser and two H.F. chokes are connected across the mains supply input to reduce outside interference entering the set from the mains supply.

Special Notes.—The on/off switch is connected in the negative side of the mains lead and ganged to the volume control.

The electrolytic smoothing condenser is fixed on to the base of the cabinet, underneath the speaker.

The dial lights are rated at 6.2 volts and consume .3 amp. and are of the usual screw-in type, fixed to clips which clamp on to the wavelength dial assembly. The dial lights are in series with the valve heaters and the mains voltage adjustment resistance.

Removing Chassis.—Remove the six fixing screws on the back of the cabinet, which will enable the back to be removed.

The four control knobs on the front of the cabinet are fixed with grub screws and must be detached before the chassis can be completely removed.

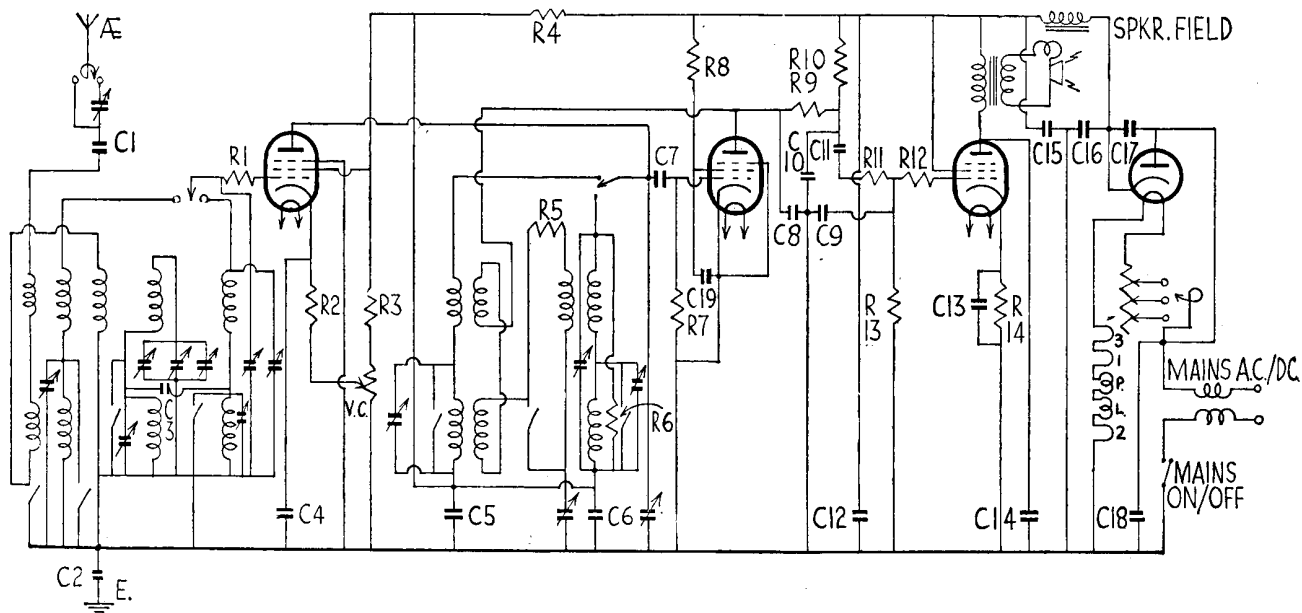
Turn the set on its side and remove the four screws securing the false bottom to the cabinet. The underside of the chassis is then available for most service work.

If it is found necessary to completely remove the chassis, take out the four fixing bolts and washers on the underside of the cabinet and unsolder the speaker lead tags to the speaker transformer. For the reverse process it may be noted that the connections are as follows: F, yellow and red (red lead from set); 3, blue; 2, green and black (black from electrolytic condenser); 1 and F, black and red (black from set, red from electrolytic condenser).

The tables and circuit diagram below should be used in conjunction to ascertain the value of any condenser or resistance.

CONDENSERS		
C.	Purpose.	Mfds.
1	Aerial series .. .. .	.0005
2	Chassis isolating .. .. .	.02
3	Top band-pass coupling .. .	.00009
4	V1 cathode bias shunt .. .	.1
5	V1 screen and anode decoupling.	.25
6	V1 screen and anode decoupling.	8
7	V2 grid condenser .. .. .	.0001
8	H.F. filter .. .. .	.09005
9	H.F. filter .. .. .	.002
10	H.F. filter .. .. .	.0003
11	L.F. coupling .. .. .	.01
12	H.T. shunt .. .. .	.5
13	V3 cathode bias shunt .. .	.25
14	Pentode compensator .. .	.005
15	Smoothing .. .. .	.24
16	Smoothing .. .. .	.16
17	Interference suppressor ..	.02
18	Mains suppressor .. .. .	.01
19	V2 screen decoupling .. .	.1
	Reaction condenser .. .. .	.0005

RESISTANCES		
R.	Purpose.	Ohms.
1	V1 series grid	100
2	V1 cathode bias (part) .. .	150
3	V1 bias potentiometer (part)..	50,000
4	V1 anode and screen decoupling.	5,000
5	Regeneration modifier .. .	500
6	L.W. and M.W. shunt	50,000
7	V2 grid leak	1 meg.
8	V2 screen decoupling .. .	750,000
9	H.F. filter	50,000
10	V2 anode load	250,000
11	H.F. filter	50,000
12	V3 grid stopper	100,000
13	V3 grid leak	250,000
14	V3 cathode bias	150
15	Mains voltage adjustment ..	—
VC	Volume control	10,000



Theoretical circuit arrangement of the Vidor 269. Three pentodes and a rectifier are employed in a straightforward arrangement. On medium and long waves, the input is band-pass; on the short-wave bands inductive coupling is used.

For more information remember
www.savoy-hill.co.uk

Circuit Alignment Notes

For the alignment of this receiver a signal generator covering the following wave ranges is necessary: 13.4 to 48 metres (22 to 6.2 mc.), 75-210 metres (4 1.5 mc.), 200-550 metres (1,500-545 kc.) and 900-2,100 metres (330-143 kc.).

Connect an output meter across the primary of the speaker transformer.

Medium Waves.—Screw up C1, series aerial condenser, moderately tightly and inject a signal of 250 metres (1,200 kc.) to the aerial terminal A2.

Rotate the set pointer to 250 metres on the wavelength scale, turn the volume control to maximum and reaction condenser up until the set is nearly, but not quite, on the verge of oscillation. The reaction control must be adjusted to the same state on each band in turn.

Adjust main anode trimmer for maximum strength in the output meter. Repeat with the main grid trimmer. Access to both of these trimmers can be

obtained through the top of the chassis near the scale ends.

Next adjust the trimmer on the top of the aerial section of the ganged condenser unit. If this is found to be at its maximum capacity, an additional trimmer is to be found under the chassis.

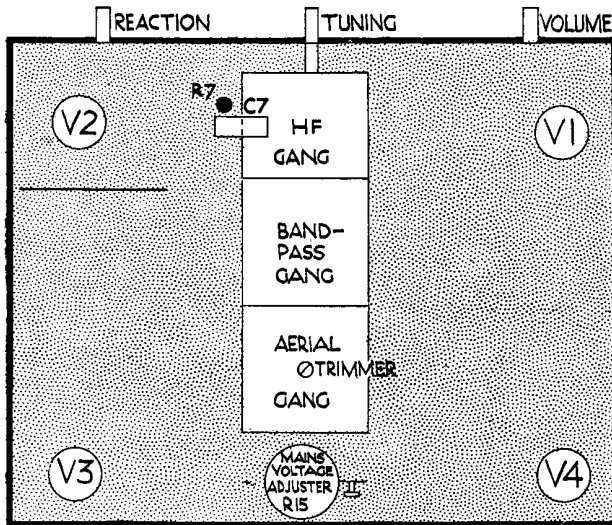
Check for calibration by injecting various signals in the waverange of 250 to 500 metres (1,200-600 kc.).

Long Waves.—Turn the pointer to 1,000 metres (300 kc.), inject a signal of corresponding wavelength, and adjust the long-wave anode trimmer, long-wave grid trimmer, and finally long-wave aerial trimmer for maximum strength.

Check for calibration for medium waves by injecting various signals.

Short Wave 1.—Inject a generator signal of 75 metres (4 mc.) and tune set to that wavelength on the dial. Adjust the main short wave anode and main short wave grid trimmers for maximum.

Short Wave 2.—This wave range has no separate trimming controls. The calibration may be slightly varied by altering the various anode and grid leads with respect to each other.



These drawings of the chassis of the 269 show the arrangement of the components on the top and the underside. That on the left is the top view, shown "tinted," as are all top-of-chassis drawings in these reviews.

Vidor 269 on Test

MODEL 269.—Standard model for A.C. or D.C. mains operation, 200-250 volts, 40-100 cycles. Price £9 7s. 6d.

DESCRIPTION.—Table model, universal four-waveband "straight" three plus rectifier. Band-pass input on medium and long waves. No pick-up or extension speaker sockets.

FEATURES.—Controls for tuning, volume, reaction, and wave selection. Full-vision 360 degree scale with names and wavelength calibration.

LOADING.—65 watts. **Sensitivity and Selectivity.**

SHORT WAVES (13.8-49 and 75-210 metres).—The performance on both short waves is representative. Reaction control is particularly good. The tuning ratio is just sufficient to enable tuning to be carried out with care. Sensitivity is well maintained, and there is no difficulty in operation whatever.

MEDIUM WAVES (200-550 metres).—Good sensitivity, maintained fairly well towards the top of the waveband. Selectivity suitable for ordinary purposes. Careful use of reaction and volume is necessary for working between the local stations.

LONG WAVES (900-2,200 metres).—Performance representative. All main stations easily received, with careful handling.

Acoustic Output.—Sufficient for an ordinary room, with well-balanced characteristics. There is very slight colouration on speech, and generally pleasing reproduction on all orchestral music.

Replacement Condensers

EXACT replacement condensers made by A. H. Hunt, Ltd., of Garratt Lane, Wandsworth, London, S.W.18, for the Vidor 269, are: for C13, 25 mfd., is type 2918, 1s. 6d.; for C6, 8 mfd., is type 3490, 2s. 6d.; for C15, 24 mfd., and C16, 16 mfd., type 2851, 11s.

QUICK TESTS

Quick tests are available on this receiver between the speaker transformer primary and chassis. Volts measured should be:—

Red condenser lead, 133 volts, smoothed H.T.
Yellow condenser lead, 210 volts, unsmoothed H.T.
Blue lead, 103 volts, smoothed H.T.

VALVE READINGS

No signal. No reaction. Volume maximum—200 volt. A.C. mains.

V.	Type.	Electrode.	Volts.	Ma.
1	Mazda 1321 .. met. (7)	Anode ..	125	5.1
		Screen ..	125	1.4
2	Mullard SP13C met. (7)	Anode ..	25	Inaccessible.
		Screen ..	40	10
3	Mullard Pen 36C (7)	Anode ..	103	58
		Screen ..	133	10
4	Brimar 1D5 .. (5)	Cathode	210	—

This diagram shows components on the underside of the chassis of the 269. All are very accessible. Note the additional medium-wave trimmer. All resistances are shown in solid black.

