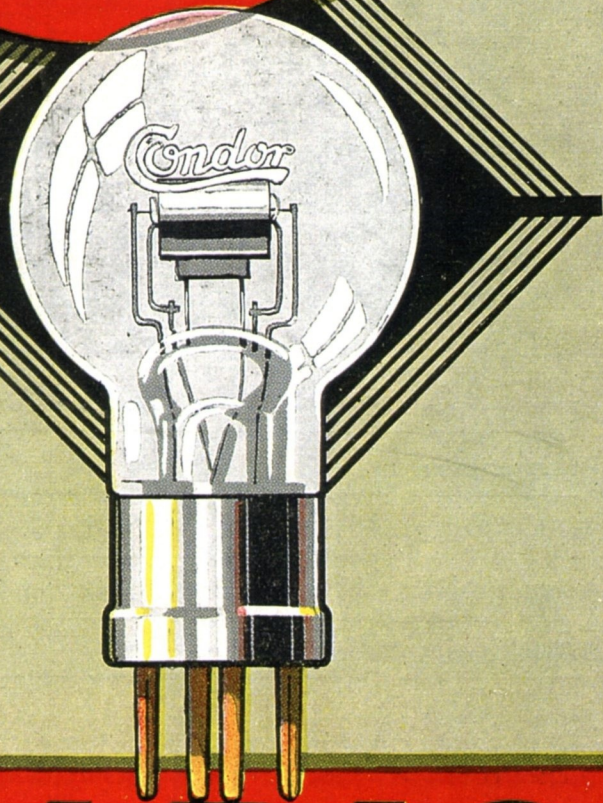


Condor



RADIO

Boireb

Technical Details of Condor Radio valves

Type P. R. 11 is a gasfilled valve of low pressure which is regulated in such a manner that even used for a long period remains absolutely constant. This valve being a gasfilled one operates at a low anode tension (25—30 V.) and is particularly suited for detector.

Type P. R. 12 is a high vacuum valve with an anode tension of 40—100 V. The P. R. 12 is chosen principally *by amateurs* as detector and amplifier and because an exact regulation of the anode tension is not necessary, this type is recommended for cascade or multistage amplification.

Type P. R. 16 is a double grid valve or so-called tetrode. The tetrode has an additional grid and an inner grid, which is connected with the positive side of the anode battery. The P. R. 16 can be used as detector (anode tension 2—4 V.) and as amplifier (anode tension 4—10 V.). Current consumption is about 0.5 Amp. at 3.5 V., so that the valve operates very economically.

Type P. R. 21 is a high vacuum triode valve of larger capacity than our types P. R. 11 and P. R. 12 in consequence of which it has a larger current consumption and anode tension (resp. 0.7 Amp. current consumption; 50—200 V. anode tension; 4 V. current tension).

As the preceding types have a rather high current consumption, we have introduced our so-called



DULL-EMITTERS

	Triode		Tetrode		Trioden		Tetrode		Trioden			Tetrode		
	H.V. PR. 2	H.V. PR. 6	H.V. PR. 31	H.V. PR. 32	H.V. PR. 33	H.V. PR. 37	H.V. PR. 38	H.V. PR. 51	H.V. PR. 52	L.V. PR. 11	H.V. PR. 12	H.V. PR. 21	H.V. PR. 16	
Filament tension . . .	1.6-1.8	1.6-1.8	1.0-1.3	1.0-1.3	3.4-4.0	2.7-3.3	5.0	3.5	4.0	3.5	4.0	3.5	V.	
Filament current . . .	0.15	0.15	0.06	0.06	0.06	0.06	0.25	0.5	0.7	0.5	0.5	A.		
Saturation current . . .	3	6	10	10	10	10	50	3	10	3	3	m.A.		
Anode tension	40-100	2-15	20-100	2-20	20-100	20-100	20-120	25-30	40-100	50-200	2-10	V.		
Amplification factor . .	10	4.5	10	6	4.5	10	6	6	7	—	10	10	4.5	—
Slope (Max.)	0.25	0.4	0.4	10	0.45	0.4	0.8	—	0.25	0.4	0.35	$\frac{m.A.}{V.}$		
Inner resistance (Min.)	40000	11000	25000	15000	4500	22000	13000	15000	9000	—	40000	25000	13000	OHM.
Suitable For	H.D.L.	H.D.L.	H.D.L.	D.L.E.	H.D.L.E.	H.D.L.	D.L.E.	H.D.L.E.	H.D.L.E.	D.	H.D.L.	H.D.L.E.	H.D.L.	—

H = Highfrequency amplification
D = Detector.

L = Lowfrequency amplification.
E = Loudspeaker valve.

H.V. = Highvacuum
L.V. = Lowvacuum.

DULL-EMITTERS with a considerable lower current consumption, so that it is possible to operate with smaller accumulators and often even with dry batteries.

Our Dull-emitters have not only a very low current consumption, but also work without causing any disturbance which is most frequent with the cascade system. We are manufacturing the following Dull-emitters.

Type P. R. 2 is a high vacuum dull-emitter with a current consumption of ca. 0.15 Amp. and an anode tension of 1.6—1.8 V. This valve is used as detector as well as amplifier. The anode tension is between 40 and 100 V.

Type P. R. 6 is a double grid dull-emitter. This valve operates already at an anode tension of only a few volts (1 or 2 pocket batteries), whereas for the filament an accumulator of 2 Volts is sufficient.

Types P. R. 31 and P. R. 32. Both types are high vacuum dull-emitters (anode tension 20—100 V.) and are very suitable for detector as well as for *low* frequency amplification. Furthermore the P. R. 31 can be used for *high* frequency amplification, whilst the P. R. 32 can be used with very good results as loudspeaker valve. Owing to the very low current consumption and low tension it is possible to operate with dry batteries.

Types P. R. 37 and P. R. 38. Both types are identical with our valves P. R. 31 and P. R. 32, only with this difference, that the P. R. 31 and P. R. 32 have a current tension of 1.0—1.3 V., whilst the current tension of the P. R. 37 and P. R. 38 lays between 3.4 and 4 V.

Type P. R. 33. This type is a double grid valve. It is a universal type and can be used as well as detector as high- and low-frequent amplifier. It is also suitable for loudspeaker valve.

Type P. R. 51. and P. R. 52. These three electrode valves are high vacuum and can be used both as detector and amplifier. Owing to the high saturation current the P. R. 52 is the most suitable loudspeaker valve for large energies and is specially recommended for heavy loudspeakers in large rooms. When in use as amplifier a negative grid tension is necessary.

Remark: It is advisable to never overcharge the filament of a valve, as this shortens the duration of life considerably, whereas the amplification factor will not be increased.

The above lamps are fitted with French (Dutch) cap, with exception of the P. R. 51, which is fitted with a bakolite cap and the P. R. 52 which is supplied with American as well as with French (Dutch) cap. Other caps on demand.