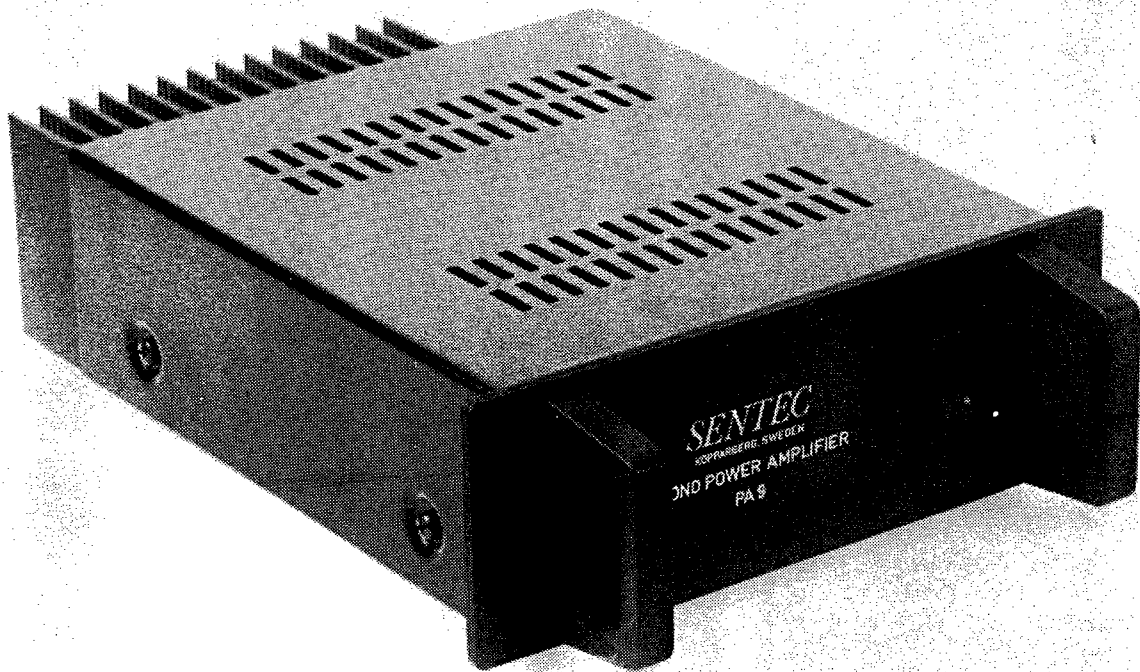


SENTEC PA9

MONO POWER AMPLIFIER



SENTEC AB, a Swedish audio laboratory established in the late 1960s, have refined simple and straight-forward circuitry to state-of-the-art sonic quality in the No.9 Power Amplifier.

The SENTE C PA9 is a monaural power-amplifier that sets new overall standards for medium-power class AB musical performance.

The aim for the development of the PA9 was to create a power amplifier without coloration or its own "sound", totally transparent to any musical signal at the input, and with the ability to reproduce excellent tonal quality and fragile details.

To achieve this superb sonic quality in a cost-effective way, we have optimized an innovative all discrete circuit topology, using high-performance quality components, in a carefully designed layout. We also optimized the signal path and built a very compact and simple, but pleasant looking and practical, handle design cabinet to accommodate the delicate electronics.

In addition, the true mono-block realisation gives also complete electrical independence and choice of placement, e.g. close to the speakers, for the best possible imaging and shortest possible speaker-cords.

The use of long speaker-cords, independent of make or price, gives a serious degradation of sound quality, especially in conjunction with complex-impedance modern speaker-systems.

The SENTE C PA9 is designed to drive all types of acoustical transducers, irrespective of impedance complexity, with a nominal impedance of around 4 Ohms or more.

In sophisticated multi-amplified speaker systems, the PA9 is also the ideal means of achieving further sonic refinements in a very cost-effective fashion.

Technical description of the circuitry

The PA9 is a completely complementary design with a dual differential input stage followed by a dual complementary differential single-ended voltage-gain stage operating at high current for class-A operation.

The output current-amplifier consists of 6 selected and matched 12 Amp. Darlington devices, to achieve low open-loop output-impedance and linear high-current capacity.

This ensures very smooth output transitions with apparently no crossover or switching distortion, even at high-current output conditions.

In the power supply a conservatively rated 150 Watts toroidal transformer feeds a pair of switching-grade low-ESR capacitors of a total capacitance of 30.000 uF through a 6 Amp. full-wave bridge rectifier.

An excellent and well-thought grounding-system, which does not inject internal loop-currents or hum in the signal groundpath, assures high immunity to noise and mains-interference.

The SENTEC PA9 is carefully temperature-compensated and will give its full performance after an unusually short warm-up period.

Protection of the amplifier is moderately utilized, by means of over current protection circuitry in combination with internal fuses, in order not to interfere with any musical transient signals under complex and severe conditions. Gold-plated heavy-duty output terminals will accept 4 mm banana-contacts or up to 4 mm speaker cables in binding posts.

As these design details and impressive specifications cannot describe the exceptional sound quality of the PA9, we recommend you not only to compare specifications by figures, but also to try and get an opportunity to listen under relaxed conditions to your favorite music at your SENTEC representative.

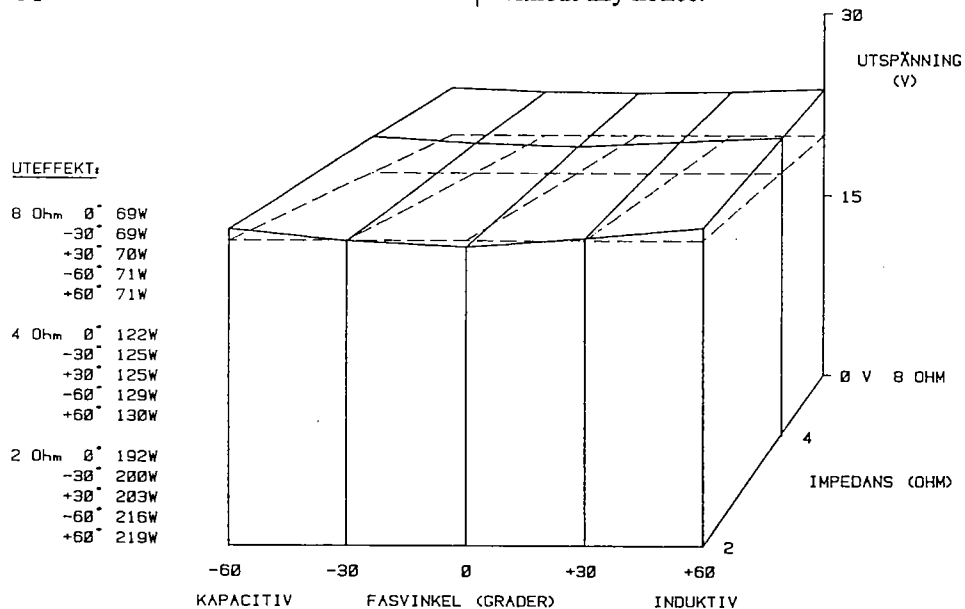
Technical specifications SENTEC PA9

Rated continuous power FTC:.....8 Ohms 60 Watts
4 Ohms 95 Watts
 (intermittent).....2 Ohms 140 Watts
 Output impedance:.....less than 0,1 Ohms
 Slew-rate 4 to 8 Ohms:.....more than 50 V/uS
 Power bandwidth -3 dB:.....5 Hz to 150 KHz
 Phase linearity 20 Hz to 20 KHz:.....max 3 Deg.
 Small signal bandwidth -3 dB:.....2 Hz to 200 KHz
 Distorsion THD 8 Ohms 1 KHz:....less than 0,03%
 4 to 8 Ohms, 20 Hz to 20 KHz:.....less than 0,06%

Input sensitivity:.....aproximately 1 Volt
 Input impedance:.....12 KOhms 1nF/330 Ohms
 Signal to noise unweighted:.....110 dB
 Signal to noise A-weighted:.....120 dB
 Voltage gain:.....26 dB
 Total amount of feedback:.....36 dB
 Open-loop bandwidth -3 dB:.....23 KHz

Maximum power consumption:.....200 Watts
 Dimensions:.....H 76, W 210, D 300 mm
 Net weight:.....4Kgs

We do reserve the rights to change the above specifications without any notice.



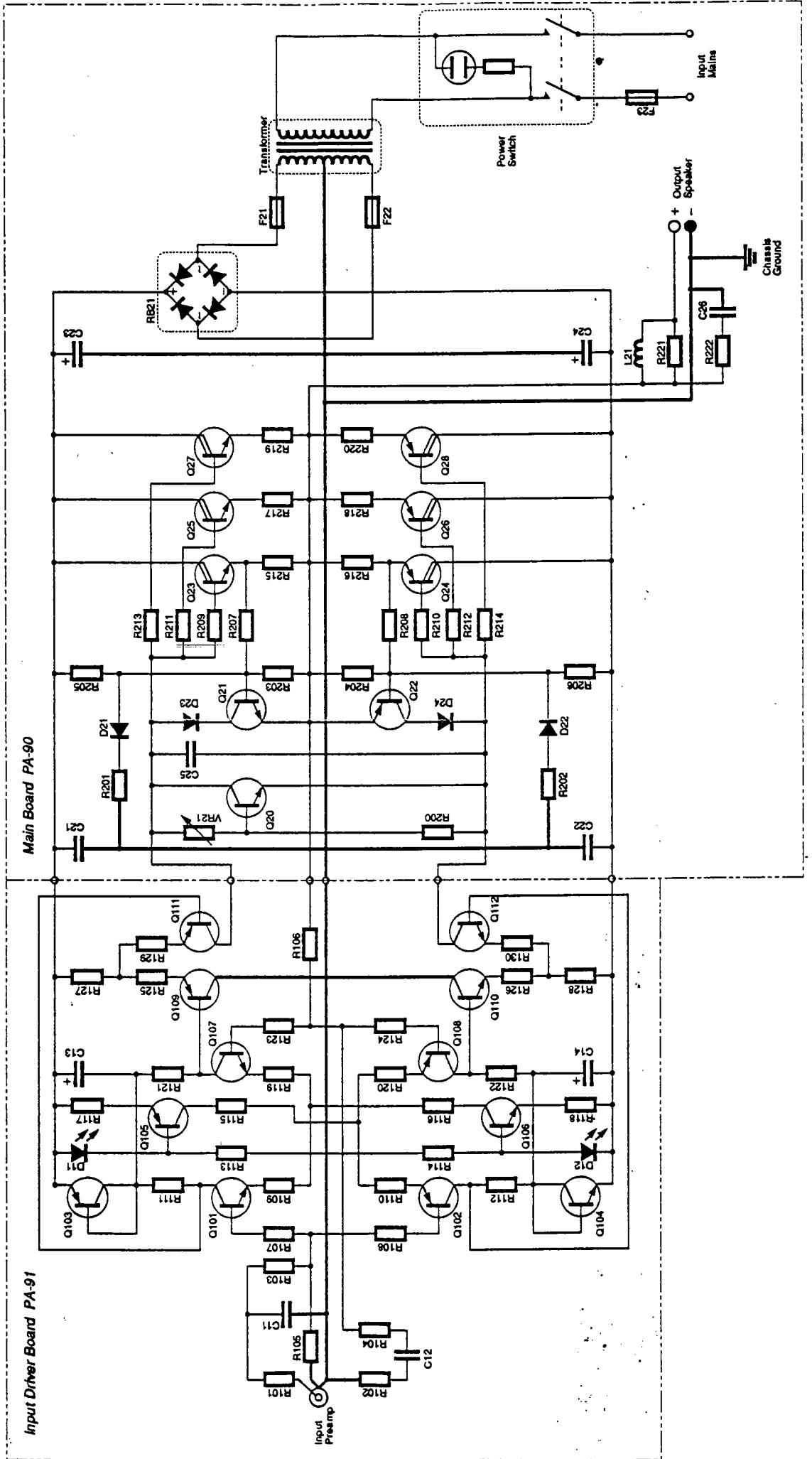
SENTEC AB

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Distributed by:

Sentec PA-9



Sentec PA-9

Resistors					
R	Ω	W	Remarks		
101	330	1/4	Metal-film, 1%, 50ppm		
102					
103					
104					
105	12K1				
106					
107	100				
108					
109					
110					
111	330				
112					
113	12K1				
114					
115	330				
116					
117					
118					
119	100				
120					
121	330				
122					
123	100				
124					
125	20.5				
126					
127					
128					
129					
130					
200	215				
201	1K				
202					
203	215				
204					
205	33K				
206					
207	330				
208					
209					
210					
211					
212					
213					
214					
215	0.47	1	Metal-film, 5%, 100ppm		
216					
217					
218					
219					
220					
221					
222	4.7				
VR	Ω				Remarks
21	1K				Cemet
Capacitors					
C	F	V	Remarks		
11	1n	100	Polypropylene, 5%		
12	220μ	10	Electrolytic Bipolar		
13	47μ	3	Tantalum		
14					
21	0.22μ	100/63	Polycarbonate		
22					
23	15 000μ	50	Class AB version		
24			Electrolytic, SMPS-type		
25	0.15μ	100/63	Polycarbonate		
26	0.02μ				

Inductor			
L	Type	Remarks	
21	Coil	7.5 turns, air-cored	
Semiconductors			
Q	Type	Remarks	
101	BC547B	—	
102	BC557B		
103			
104	BC547B		
105	BC557B		
106	BC547B		
107			
108	BC557B		
109	BD830		
110	BD829		
111	BD830		
112	BD829		
20	TIP29		
21	BC547B		
22	BC557B		
23	BDT65B		
24	BDT64B		
25	BDT65B		
26	BDT64B		
27	BDT65B		
28	BDT64B		
D	Type		Remarks
11	LT1801		LED
12			
21	1N4148		—
22			
23			
24			
RB	Type	Remarks	
21	BP602	Bridge rectifier	
Fuses			
F	A	Remarks	
21	6.3	Fast	
22			
23	2.5	Slow	
Miscellaneous			
Transformer	Prim: 220-230 V / 50 - 60 Hz Sec: 2 x 24 V Class AB version		
	Toroidal, 150 VA		
Switch	10 A, 250 V AC, DPDT, Internal indicator lamp		