

STAX power amplifiers/Class A DC

DA-80M



● The DA-80M is a 90W mono pure class A DC power amplifier. It offers exactly twice the output of one of the DA-80's 45W channels so two of these amplifiers may be used to drive relatively inefficient speaker systems. Of course, with average efficiency speaker systems you will enjoy even greater dynamic range thanks to this amplifier's ample headroom and distortion free reproduction at all levels. Although no one questions the theoretical superiority of the class A DC amplifier configuration, we should point out that the circuit components employed are as important as the circuit design. The ideal amplifier may well be "a straight wire with gain", but even so simple an item as a piece of wire has a significant influence on sound quality. This is all the more so with transistors, resistors and capacitors. At Stax, we collect circuit components from around the world and try them out in our amplifiers while subjecting them to extensive hearing tests and performance measurements. We choose only the best available regardless of cost.

In this context, the power supply is extremely important for taking advantage of the true potential of each circuit component. In the DA-80M, the power supply takes up fully half the space available in the chassis. Here we employ a huge toroidal transformer with separate sets of capacitors for each stage to prevent mutual interference: two 22,000 μ F chemical condensers are used for the predriver stage and two 22,000 μ F units for the output stage. Half the remaining chassis space is taken up by huge heat sinks designed to efficiently dissipate heat produced by the power transistors. An obvious benefit of using the DA-80 is that its mono design eliminates the possibility of crosstalk. Two of these amplifiers may be used in a stereo system with each amplifier placed as close to the speaker systems as possible to assure optimum signal transmission with minimum degradation due to the speaker cable itself. In such a configuration we recommend using the best low-impedance, low-capacitance shielded cable for preamp-power amp connections.

With the superior circuitry and superior parts of the DA-80M you can expect excellent musical reproduction. For the best possible results we recommend using the DA-80M in a state-of-the-art system employing today's best speaker systems, pickup systems, and preamplifiers.

	DA-300	DA-80	DA-80M
Equipment Type:	All Silicon Transistor Stereo Power Amp.	All Silicon Transistor Stereo Power Amp.	All Silicon Transistor Mono. Power Amp.
Circuitry Type:	± 2 electric source. Top Stage FET input pure complementary. A-class operation DC Amp.	Class-A Operation DC Amp. Left/Right independent ± 8 power sources. Top stage FET input, pure complementary.	± 4 Power sources. Top stage FET input, pure complementary Class A operation DC amplifier.
Maximum Output:	150 + 150 W	45 + 45 W	90 W
Power Bandwidth:	5 Hz – 50 kHz (75 W /0.1 %)	5 Hz – 50 kHz (22.5 W/0.1%)	5 Hz – 50 kHz (45 W/0.1 %)
Distortion:	Less than 0.025%/20 – 20 kHz/at 150W Less than 0.01%/1kHz/at 150W	Less than 0.005%/DC – 10 kHz/at 45W Less than 0.002%/1kHz/at 45W	Less than 0.04%/20 – 20 kHz/at 90W
SN Ratio:	102 dB	More than 100 dB	More than 100 dB
Input Sensitivity/ Impedance:	1.7V/100k Ω /100pF. Maximum output	0.89V/100k Ω /100pF. Maximum output	1.26V/100k Ω /100pF. output
Frequency Response:	DC – 500 kHz (DC Mode)/+0, –3 dB/1 W 3 Hz – 500 kHz (AC Mode)/+0, –3 dB/1 W	DC – 500 kHz (DC Mode)/+0, –3 dB 3 Hz – 500 kHz (AC Mode)/+0, –3 dB	DC – 500 kHz (DC Mode)/+0, –3 dB 3 Hz – 500 kHz (AC Mode)/+0, –3 dB
Gain:	26.3 dB	26.3 dB	26.3 dB
Thru-Rate:	20 V/ μ sec	20 V/ μ sec	20 V/ μ sec
Cross-talk:	–50 dB/20 kHz	–70 dB/20 kHz	
Power Consumption:	700 W (at 150 W output), 180 W (at 40 W output)	180 W	280 W
Power Source:	100/115/200/230V $\pm 10\%$	100/117/200/230V $\pm 10\%$	100/117/220/240V $\pm 10\%$
Dimensions(W x H x D)	428 x 358 x 250mm	437 x 166 x 407mm	437 x 166 x 407 mm
Weight:	36 kg	19.5 kg	20 kg