



That's How Music Should Sound !

Digital series DS50

Excellent sonic performance class-D design

High power and very pure signal amplification under heavy user conditions were the main goals in the development of the DS series amplifier range. These power amplifiers are built with an excellent sonic performing class-D design for increased efficiency by decreased weight and dissipation. With an output power exceeding 2500W @ 4 ohms per channel, a S/N ratio of more than 110dB and a THD percentage of <0.007% @ 1kHz (100W, 8 ohms). The DS50 combines (sound)quality, power and very low weight into one unit. The SA digital amps are among the best sounding amps on the pro-audio market!



- Flat, fully load-independent frequency response
- Switched mode power supply SMPS
- Dynamic Damping Control™ DDC
- Active Clip Eliminator™ ACE
- 64-bit 96kHz digital processing
- Aluminum Reinforced Molest Resistant Chassis™ ARMoR
- Road(y) proof

Dynamic Damping control™

An important feature is Stage Accompany's Dynamic Damping Control (DDC™) system, with which a very high damping factor is being realized (10.000 @ 1kHz). The result is even more remarkable in combination with a Stage Accompany "DDC prewired" loudspeaker system. This unique circuit compensates for the cable and connector resistance, which can be enormous when long loudspeaker cables are being used (lengths sometimes exceeding 50 meters, 164 feet). The result is an extremely tight and accurate bass and mid response, in combination with a "DDC-prewired" loudspeaker system. Furthermore, with "DDC™" both linear and non-linear distortion are reduced substantially. The amps can also be used on a normal, not DDC-prewired loudspeaker.

Active Clip Eliminator™

Also built into the DS50 is our Active Clip Eliminator (ACE™), a circuit which constantly monitors all outputs of the amplifier for continued clipping. When clipping is detected, the related input is inaudible reduced to the safest maximum level in order to prevent harmonics from damaging the high frequency drivers, to maintain the amplifier's sonic quality and to prevent thermal shutdown.

64-bit 96kHz digital processing

Controlled by a very high quality 64-bit DSP unit the DS50 has all the necessary features of a modern professional amplifier to process input from the analog and digital domain. The internal DSP unit provides the following functions: SA speaker dedicated presets, up to 10 parametric filters on each in- and output, up to 24dB/Oct. Bessel / Butterworth / Linkwitz-Riley crossovers, max. 1s delay on each input, max. 40ms delay on each output, full configuration and real time monitoring via PC over Ethernet (IP addressing through DHCP) or USB interface.



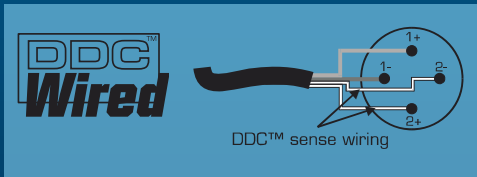
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Aluminum Reinforced Molest Resistant chassis

As basis, the well known Stage Accompany ARMoR chassis is used, made from 3mm thick ("mill-spec") aluminum. Indestructible, absolute torsion free, best strength to weight ratio in the industry, improved heat dispersion and a high radiation shielding are the characteristics of this chassis.

Road(y) proof

The amp is equipped with "Soft start" circuit, variable fan speed, ground lift and LED indicator "power", "signal", "clip". Specific readouts about output power, level, limiting and others will be showed at the 2.5" front panel display. The amp is protected against high temperature, DC on output, short circuit and HF on input.



Wiring for DDC™

For absolute top quality sound reproduction, the DS50 is equipped with Dynamic Damping Control. The DDC™ system is based on 2 loudspeaker wires that return from the speaker to the (SA) amplifier. The picture shows the wiring of a 4-pole speakON connector in combination with the DDC™ system.

Technical specifications

Efficiency	92% @ full power
Max input level	+23dBu
Input impedance	25k
Frequency range @ 100W into 8 ohms	10Hz - 40kHz
Gain	32dB
Channel separation	> 90dB @ 1kHz
Total harmonic distortion	0.05% 20Hz - 20kHz, Pout < Pmax/2 0.03% 20Hz - 20kHz, Pout = 1W amplifier section
Output noise	30µV unweighted, 20Hz - 20kHz
Damping factor	10.000 @ 1kHz, 8 ohms
Output power @ 1kHz, <1% THD	2 x 1600 W @ 8 ohms 2 x 2500 W @ 4 ohms 2 x 2000 W @ 2 ohms
Amplifier section	flat, load-independent frequency response
Audio and data connections	1 x Neutrik USB connector (located at the front) 2 x XLR-3 female connector for input signal 2 x XLR-3 male connector for signal link 4 x SpeakON NL4 for output signal 1 x 32A PowerCON connector for mains power 2 x EtherCON connector (pass-through) 2 x XLR-3 AES/EBU connector for input and buffered out
DSP section	up to 10 parametric filters on each input and each output Butterworth, Bessel, Linkwitz-Riley filters up to 24dB/oct. limiter on each input and each output stated at the rear of amplifier
Mains supply voltage	
Power consumption	3500 VA
Weight	12.5 kg (27.3 lb)
Housing	19 in. rack mount, 2 HU high, 415mm deep



SA Dealer

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