

Amplifier

High performances class D amplifier

2 bridgeable channels
2 x 4000 W in 4 Ohms

Features

High power
Performance and power efficiency
Protection circuits for reliability

Applications

Touring
Large scale APG systems

Specifications

Universal switch mode power supply with PFC
(Power Factor Correction)
EIAJ Test Standard, 1 kHz, 1% THD
Power efficiency >85%
Fixed switching frequency

Association with DMS48F

The SA100:2 is a 2 channel fixed switching frequency class D power amplifier. Two bridgeable channels allow all sorts of configurations of cabling depending on speakers and impedance load.

Precise gain and sensitivity setting is obtained via internal digital gain control. The SA100:2 delivers high power and sonic quality

thanks to a careful design of all its components. The state-of-the-art switch-mode power technology allows high output power with superior efficiency.

The SA100:2 has a very high level of reliability thanks to its numerous protections against clipping and high voltages or current. Its functional parameters, mains voltage and current draw, are monitored and saved. The temperature is carefully controlled by variable-speed forced-air cooling.

The SA100:2 is lighter than most amplifiers and fits in only one rack unit to ease transport and handling. The device can be configured via its front panel LCD screen, and via PC connexion thanks to its RS485 port.

SA100:2

Preliminary Data



Amplifier SA100:2

The SA100:2 is a 2-channels amplifier for high power applications. It uses the same internal technology than the SA30:2 but is more powerful, and offers compatible performance. Its characteristics are high dynamic and power capacities, combined with a sturdy and ergonomic design that perfectly meets the requirements of live events and shows, in fixed installation as well as in touring.

Thanks to its performance in terms of power, it naturally suits APG high power systems such as Matrix, Uniline, Uniline Compact and TB subwoofers series.

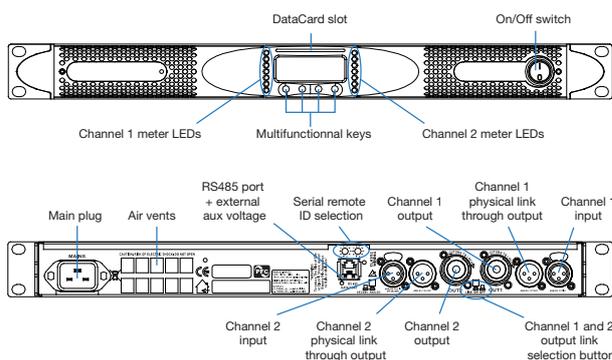
Although the SA100:2 amplifier is optimized for a 4 to 8 Ohms load, operation under 2 Ohms load is possible, provided there is a sufficient headroom. The bridged mode allows high-voltage operation into 4 to 16 Ohms loads.

The SA100:2 must be used according to APG-recommended combinations of speakers and processors.

APG

SA100:2

Technical Specifications



General

SA100:2

Number of channels	2				
Output power	stereo mode		mono-bridged mode		
EIAJ Test Standard, 1 kHz, 1% THD	2 Ω/ch	4 Ω/ch	8 Ω/ch	4 Ω	8 Ω
	2x6000 W	2x4000 W	2x2000 W	1x12000 W	1x8000 W
Max. output voltage / current	200 V _{peak} / 125 A _{peak}				

AC mains power

Power supply	Universal, regulated switch mode with PFC (Power Factor Correction)			
Operating voltage	100-240 V ±10%, 50/60 Hz			
Power factor cos (φ)	>0.95 @ >500 W			
Consumption / current draw	@ 230 V		@ 115 V	
Idle	84 W	1.03 A	91 W	1.11 A
1/8 of max. output power @ 4 Ω*	1250 W	6,1 A	1250 W	12,2 A
1/4 of max. output power @ 4 Ω*	2500 W	11.3 A	2500 W	22.6 A

Audio

Gain (selectable)	26 dB	29 dB	32 dB	35 dB
Gate	-52 dBu	-55 dBu	-58 dBu	-61 dBu
Frequency response	20 Hz - 20 kHz (1 W @ 8 Ω, ±0.5 dB)			
S/N ratio (amplifier section)	>110 dBA (20 Hz - 20 kHz, A weighted)			
Crosstalk separation	>66 dB @ 1 kHz			
Input impedance	10 kΩ balanced			
THD+N / SMPTE IMD / DIM100 IMD	<0.5% from 1 W to full power (typically <0.05%)			
Slew rate	50 V/μs @ 8 Ω. input filter bypassed			
Damping factor @ 8 Ω	>5000 @ 20 - 200 Hz			

Front panel

Indicators	7 meter LEDs: 5 x green, 1 x yellow, 1 x red, top yellow and red show alarm with protect description on LCD panel
Controls	4 pushbuttons, function depending on user menu ; mains switch
Network data port AESOP incl. AES3	2 x RJ45 with activity LEDs

Rear panel

Audio signal input connectors	Analog: 2 x balanced Neutrik® XLR female; AES3: use channel 2 XLR
Audio signal output connectors	Analog: 2 x balanced Neutrik® XLR male
Loudspeaker output connectors	2 x Neutrik® Speakon NL4MD
Network data port	RS485 1 x RJ45 with 2 recessed rotary encoders for ID selection
Aux voltage	1 x 2-pin Phoenix P. 3.81mm
Controls	1 x link switch, linking analog inputs 1 and 2, AES3/analog input switch

Construction

Dimensions (H, W, D)	1.8" x 19" x 18.7" (44.5 x 483 x 475 mm)
Weight	26.4 lb (12 Kg)

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