DSA 8805

DYNACORD
GERMAN ENGINEERING EXCELLENCE

- 8 x 500 W
- Class D
- Optimized for permanent installation
- EN 54-16: 2008
- Optional Remote Control Module (RCM-810)

The multi-channel power amps DSA 8405/8410/8805 are members of the DYNACORD DSA Series, which mark a milestone in the design and production of high-performance power amps. The unique combination of Class D power amp blocks and synchronized switching power supply offers power density which, to this day, is unrivalled and, at the same time, provides excellent audio performance. The possibility to individually switch the operation mode of each power amplifier channel makes DSA multi-channel power amps particularly flexible in use. By default, low-impedance mode (LZ ≥ 2 Ω) is set for all channels. If needed, each channel can be separately switched to high-impedance operation (HZ) to directly drive 70 V or 100 V speaker lines without the need for additional output transformers (Direct Drive).
Through VLD (Variable Load Drive) in combination with a RCM-810 remote control module, it is possible to define freely which output power should be made available in the channel in question: e.g. Channel 1 = 350 W into 2.6 Ω; Channel 2 = 500 W into 8 Ω etc.
The omission of output transformers together with the highly efficient Class D power amp blocks and a switching power supply makes an exceptionally attractive, environment and resource friendly amplifier. DSA multi-channel power amps are ideal for driving any professional fixed installation and ProSound application using, for example, D-Lite, Forum, VariLine or Cobra Series speaker systems. The power amps are protected against thermal and electrical overload as well as short-circuit and the occurrence of RF or DC voltage at the outputs. Speaker system switch-on is delayed by a soft start circuit. Power on delay (0 – 2.25 seconds) is available. An inrush-current limiter circuit additionally protects mains fuses from being blown. Monitoring the power amplifier and connected loudspeaker systems from a computer using the IRIS-Net PC software application is possible after retrofitting an optionally available Remote Control Module (e.g. RCM-810).

Parts included

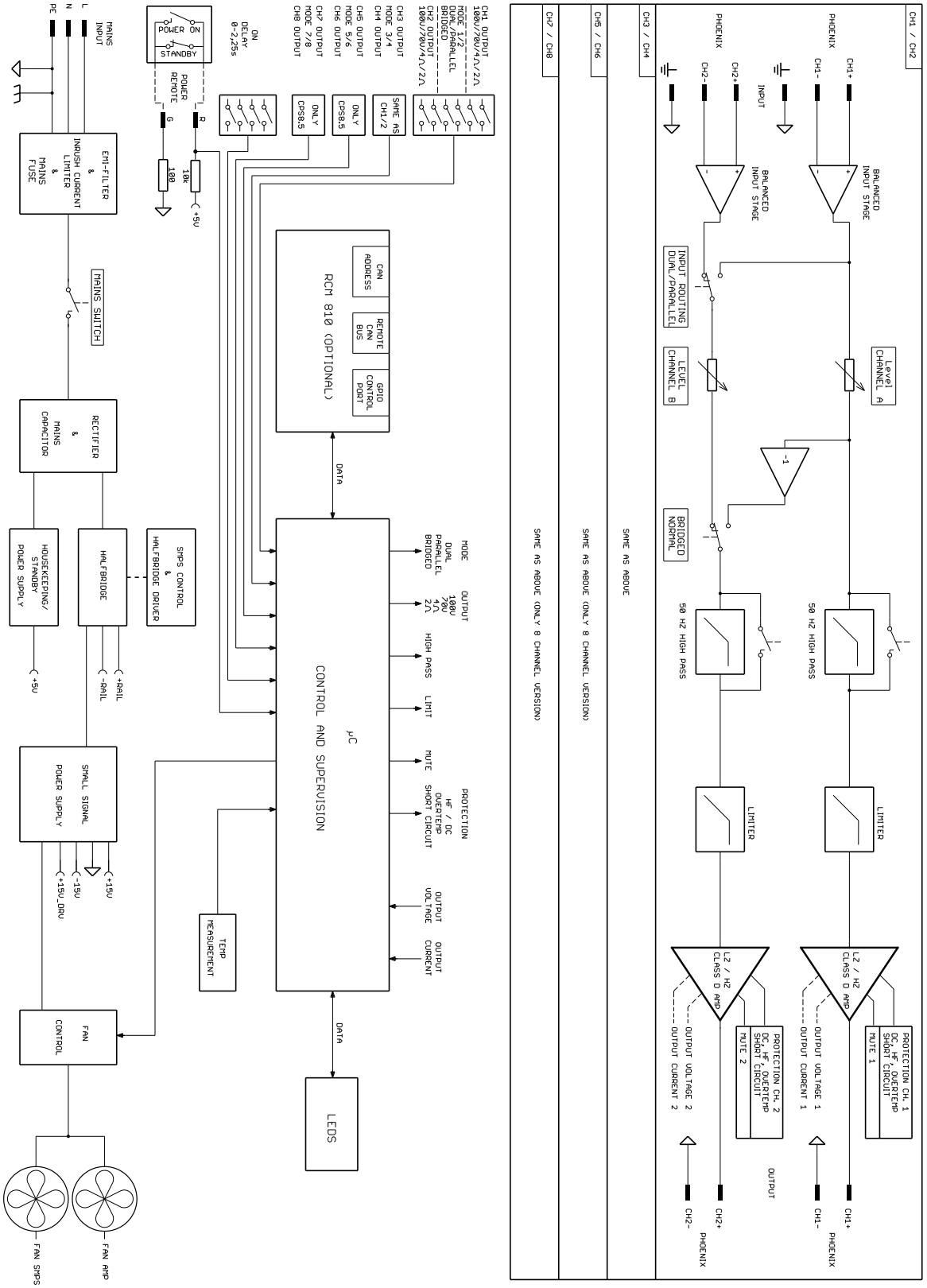
Quantity	Component
1	Power amplifier
1	Power cord
2	Output Euroblock connector 8-pole (Phoenix, IC 2,5/8-STF-5,08, 1825378, F.01U.103.369) with Euroblock connector housing (Phoenix, KGS-MSTG 2.5/8, 1783779, F.01U.103.370)
4	Input Euroblock connector 6-pole (Phoenix, MC 1,5/6-STF-3,81, 1827745, F.01U.104.179)
1	Power remote Euroblock connector 2-pole (Phoenix, MC 1,5/2-STF-3,81, 1827703, F.01U.103.533)
1	User manual

Technical specifications

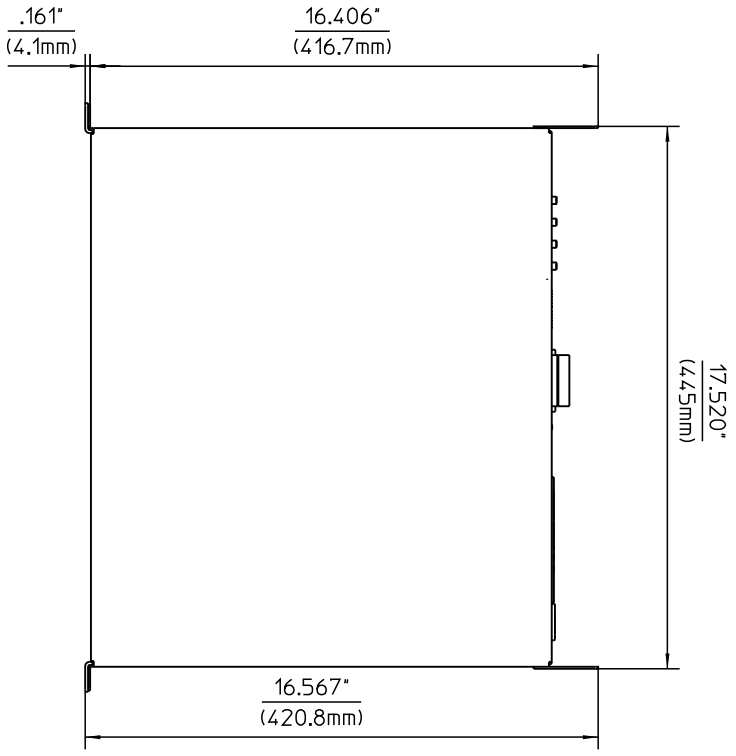
	Low impedance mode			High impedance mode	
	2 Ω	4 Ω	8 Ω	70 V/10 Ω	100 V/20 Ω
Maximum midband output power, THD = 1%, 1 kHz, 8 channels driven	500 W	500 W	250 W VLD: 500 W	500 W	500 W
Rated output power, THD < 0.3%, 20–20 000 Hz, 8 channels driven	450 W	450 W	225 W VLD: 450 W	450 W	450 W
Maximum bridged output power, THD = 1%, 1 kHz	-	1000 W	1000 W	1000 W/20 Ω	1000 W/40 Ω
Alarm power rating (according to EN 54-16)	-	325 W	250 W VLD: 325 W	325 W	325 W
Maximum RMS voltage swing, THD = 1%, 1 kHz	32 V	45 V	45 V VLD: 63 V	70 V	100 V
Power Bandwidth, THD = 1%, ref. 1 kHz, half power at rated load	10–25000 Hz			50–25000 Hz	
Voltage gain, ref. 1 kHz	32 dB	32 dB	32 dB	33 dB	36 dB
Input Sensitivity, rated power, 1 kHz	0.775 V (0.0 dBu)	1.1 V (+3.0 dBu)	1.1 V (+3.0 dBu)	1.55 V (+6.0 dBu)	1.55 V (+6.0 dBu)
THD at rated output power, MBW = 80 kHz, 1 kHz	< 0.05%				
IMD-SMPTE, 60 Hz, 7 kHz	< 0.05%				
DIM30, 3.15 kHz, 15 kHz	< 0.02%				
Maximum input level	+22 dBu (9.76 V_{rms})				
Crosstalk, ref. 1 kHz, at rated output power	< -80 dB				
Frequency response, ref. 1 kHz, 8 Ω load	15–30000 Hz (±1 dB)				
Input impedance, active balanced	20 kΩ				
Damping factor, 1 kHz, 8 Ω	> 240				
Slew rate	28 V/µs				
Signal-to-noise ratio (A-weighted)	98 dB	100 dB	100 dB	104 dB	106 dB
Output noise, A-weighted	< -66 dBu	< -65 dBu	< -65 dBu	< -65 dBu	< -64 dBu
Output stage topology	Class D				
Power requirements	220-240 V, 50-60 Hz or 120 V, 50-60 Hz or 100 V, 50-60 Hz				
In-rush current	27 A				
In-rush current, after five-second power cycle	14 A				
Power consumption, 1/8 maximum output power	930 W				
Protection	Audio Limiters, High Temperature, DC, HF, Short Circuit, Peak Current Limiters, Inrush Current Limiters, Turn-on Delay, Mains Circuit Breaker Protection, Mains Over/Undervoltage Protection				
Cooling	Front-to-Rear, temperature controlled fans				
Operating temperature	+5° to +40° C				

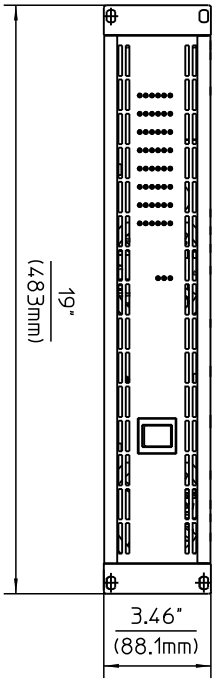
Safety class	I
Product dimensions (Width x Height x Depth)	483 x 88.1 x 420.8 mm
Net weight	13.9 kg

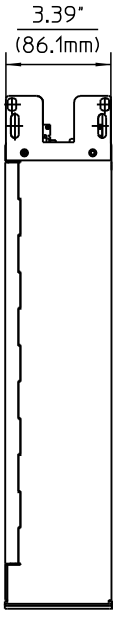
* Depending on the ambient temperature, the unit might not operate continuously at 2 Ω load in Dual Mode or 4 Ω load in Bridged Mode. In addition input power exceeds 1.1 times rated power consumption with at 2 Ω load in Dual Mode or 4 Ω load in Bridged Mode.



Circuit diagram







Dimensions

Certifications and approvals

EN 54-16: 2008

Ordering information

DSA 8805 (220-240V)
Class-D Amplifier, VLD, Remote opt.; 8x 500W; 2HU
Order number **F.01U.100.857**

DSA 8805 (100V)
Order number **F.01U.100.859**

DSA 8805 (120V)
Order number **F.01U.100.858**

LML-1
Line measuring load
Order number **F.01U.266.132**

RCM-810
RCM-810 Remote Control Module for IRIS-Net
Order number **F.01U.101.277**

RMK-15
Rack Mount Kit for amplifiers, Length 15,5“; 1L/1R
Order number **F.01U.135.402**

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Document Number F01U100857 | Vs03 | 21. Jan 2014