

DARA-4B900

AMPLIFIERS

Networkable Amplifiers



PRODUCT OVERVIEW

DARA-4B900 is a high-performance, network-enabled Class D power amplifier developed for professional audio installations requiring flexibility, efficiency, and dependable system control. Delivering up to $4 \times 900 \text{ W RMS @ } 4 \Omega$, it supports both low- and high-impedance loudspeaker systems ($70 \text{ V} / 100 \text{ V}$) as well as Bridge mode, configurable by pairs of channels to adapt to a wide range of installation needs.

Equipped with an integrated DSP with internal matrix and dual Ethernet ports with an embedded switch, the DARA-4B900 enables precise audio management and seamless integration into scalable networked systems. Full compatibility with the PULSO Series allows remote control and monitoring via mobile apps or web interface, making it an efficient and reliable solution for modern fixed installations across multiple applications.

KEY FEATURES

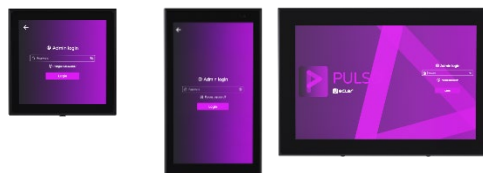
- 4-channel Class D power amplifier with high-efficiency design.
- $4 \times 900 \text{ W RMS @ } 4 \Omega$ output power.
- Supports 2Ω , 4Ω , 8Ω , 70 V , 100 V and Bridge mode (configurable by channel pairs).
- 4 analogue balanced inputs with internal 4×4 digital matrix.
- Integrated DSP for advanced audio processing and system optimization.
- Ecler loudspeaker EQ presets included.
- Dual Ethernet ports with integrated switch for network daisy-chaining.
- Remote control and configuration via PULSO Series (Android / iOS App).
- Embedded web interface for setup, monitoring, and control.
- Auto Standby function for energy savings.
- Comprehensive protection systems (thermal, overload, short-circuit, clip).
- Safety Euroblock connections for secure wiring.
- Software-lockable front panel to prevent unauthorized access.

APPLICATIONS

- Retail
- Hospitality
- Education
- Corporate
- Leisure
- Sport & Wellness

ACCESSORIES & COMPATIBLE PRODUCTS

•PULSO Series



TECHNICAL SPECIFICATIONS

DARA-4B900

CHANNELS	
Number of Outputs channels	4
Output connection type	2-pin Euroblock. Pitch: 5,08 mm
Output configuration	2 Ω , 4 Ω , 8 Ω , 100V, 70V and 4/8 Ω in Bridge Mode
Number of Inputs channels	4
Input connection type	3-pin Euroblock, balanced, pitch 3,5 mm
Input configuration	Digital Matrix 4 In x 4 Out
OUTPUT POWER All channels driven @1kHz @CF9dB @ 1%THD	
Max output power @ 8 Ω	550 W
Max output power @ 4 Ω	900 W
Max output power @ 2 Ω	1600 W
Max output power @ 4 Ω bridge mode	3200 W
Max output power @ 8 Ω bridge mode	1600 W
Max output power @ 100V	900 W
Max output power @ 70V	900 W
OUTPUT POWER Single channel driven @1kHz @CF9dB @ 1%THD	
Max output power @ 8 Ω	550 W
Max output power @ 4 Ω	900 W
Max output power @ 2 Ω	1600 W
Max output power @ 4 Ω bridge mode	3200 W
Max output power @ 8 Ω bridge mode	1600 W
Max output power @ 100V	900 W
Max output power @ 70V	900 W
SIGNAL	
Voltage gain	36dB
Input sensitivity	0 dBV 2,21 dBu 1 Vrms
Input impedance	20k Ω balanced
Max input level	+20,8dBV 23 dBu
Frequency response	15Hz - 22kHz (-3dB, 1W any load)
THD + Noise	<0,1% (@1kHz, from 0,1W to Full Power)
SNR	97,8 dBa
Crosstalk	>90 dB (@1kHz)
CMRR	> 52 Typ (from 20Hz to 20kHz)
ELECTRICAL	
Power supply	Universal, regulated SMPS with PFC
AC mains requirement	100-240 V @ 50-60Hz ($\pm$ 10%)
Power factor correction	> 0,96
AC mains connector	IEC C14 inlet
POWER & HEAT @230VAC	
1/4 POWER, @ 4 Ω (all channels driven)	
Power	1236 W 1300 VA
Current Draw	5,7 Arms
Thermal Loss	289 kcal/h 1146 BTU/h

1/8 POWER, @ 4Ω (all channels driven)	
Power	692,5 W 744 VA
Current Draw	3,25 Arms
Thermal Loss	208,6 kcal/h 827,7 BTU/h
IDLE (all channels driven)	
Power	100 W 163 VA
Current Draw	0,71 Arms
Thermal Loss	86 kcal/h 341,3 BTU/h
SLEEP MODE (all channels driven)	
Power	4,8 W 81 VA
Current Draw	0,35
Thermal Loss	4,1 kcal/h 16,4 BTU/h
POWER & HEAT @120VAC	
1/4 POWER, @ 4Ω (all channels driven)	
Power	1321 W 1337 VA
Current Draw	11,45 Arms
Thermal Loss	362,1 kcal/h 1436,9 BTU/h
1/8 POWER, @ 4Ω (all channels driven)	
Power	725 W 739 VA
Current Draw	6,27 Arms
Thermal Loss	236,5 kcal/h 938,6 BTU/h
IDLE (all channels driven)	
Power	97,6 W 118 VA
Current Draw	0,97 Arms
Thermal Loss	83 kcal/h 329,4 BTU/h
SLEEP MODE (all channels driven)	
Power	4,2 W 27,3 VA
Current Draw	0,23 Arms
Thermal Loss	3,6 kcal/h 14,3 BTU/h
TECHNOLOGIES	
Amplification technology	Class D
Energy saving	Auto standby function selectable
Efficiency	74% (1/4 POWER, @ 4Ω)
Cooling	2 fans
Maximum fan noise	57 dBA

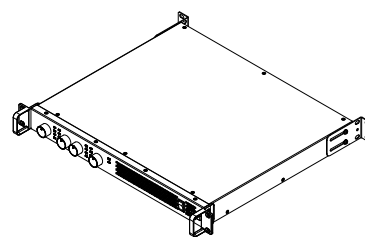
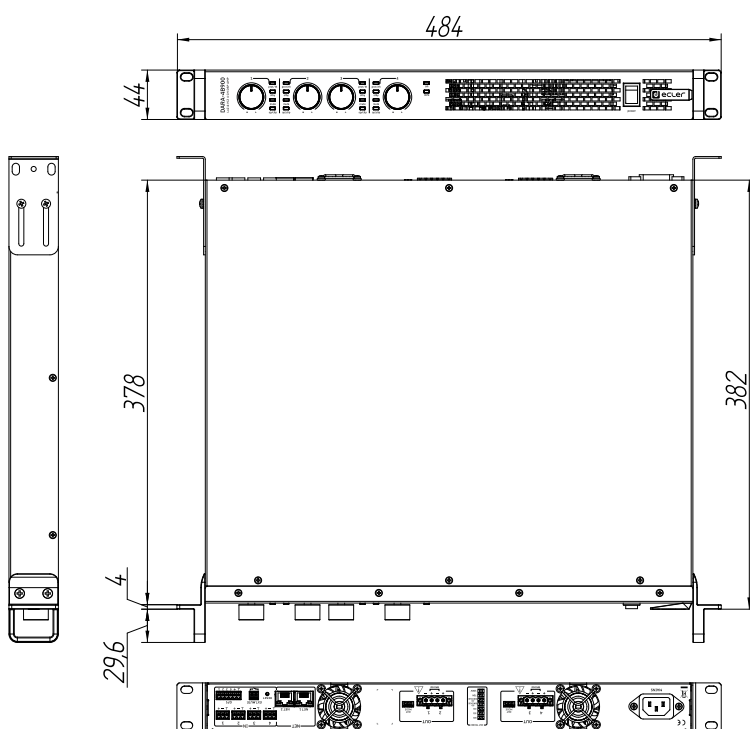
DSP		
	AD converters	24 Bit Tandem™ @ 48 kHz 105 dB-A Dynamic Range - 0.0018% THD+N
	DA converters	24 Bit Tandem™ @ 48 kHz 120 dB Dynamic Range - 0.001% THD+N
	Sample rate converter	24 bits @ 48 kHz
	Internal precision	32 bits floating point
	Latency	1,5 ms
	Memory/Presets	15 amplifiers presets 40 Speakers presets (22 Ecler presets + 18 Custom presets)
	Delay	20 ms (input) + 300 ms (output) for time alignment
	Equalizer	Custom FIR, Parametric IIR: Peaking, Low Shelf, High Shelf, AllPass 1st, AllPass 2nd, General Low, General High, Butterworth Low, Butterworth High, Bessel Low, Bessel High
	Limiters	RMS and Peak voltage limiter
	Digital processing	32 bits
	Inputs processing	Delay, Parametric and Graphic EQ, Compressor
	Outputs processing	Delay, Parametric and Graphic EQ, Polarity, Compressor, FIR filters, RMS and Peak Limiter
	Others	Presets management, Panels and Users, Internal matrix, Linking and Stereo options, Selectable Auto-standby, Panel Operating Range, Knobs and GPI Matrix, Custom and Ecler speakers settings, Network Parameters, Finder, Remote control and configuration via PULSO Series (Android / iOS App)
PROTECTIONS		
	AC protection	Yes
	DC protection	Yes
	HF protection	Yes
	Short-circuit protection	Yes
	Clip limiter	Yes
	Thermal protection	Yes
REMOTE CONTROL CONNECTIONS		
	GPIs	x4 GPIs (0-10V)
	External MUTE	Yes, contact
LOCAL CONTROL		
	Attenuators	Assignable front panel knobs
	Output mode settings	Back panel Dipswitch by pairs of channels
	RUN/SLEEP mode	Auto standby function Forced standby (Settings by embedded web application)
	Power ON/OFF	Front panel switch
SETTINGS		
	Attenuators	Assignable front panel knobs
	Output settings	2Ω/4Ω/8Ω/70V/100V/Bridge Mode output selection by pair of channels
	Auto standby function	Settings by embedded web application
	Auto standby threshold	-40dB
	Auto standby time	90 seconds
	Power ON/OFF	Front panel switch

CONNECTIVITY		
	Ethernet	Ethernet Base-Tx 100Mb CAT5 up to 100m
		Secondary RJ-45 port for Daisy-Chaining
	Programming and control	Embedded web application
MONITORING		
	Signal Present	SIGNAL LED (Green) per channel
	Clipping	CLIP LED (Red) per channel
	Protect	TH/PROT LED (Red) per channel
	Standby	STANDBY (Orange) per channel
	Mute	MUTE LED (White) per channel
	Limit	TH/PROT LED (Red)
	Thermal	TH/PROT LED (Red) per channel
	Data	DATA LED (White) per unit
	On	ON LED (Green) per unit
DIGITAL ENGINE		
	Processor	32 bits
AUDIO CONVERTERS		
	Sampling rate	48 kHz
	Resolution	24 bits
	Dynamic range	112 dB
PHYSICAL		
	Operating temperature	-20° to 40° C -4° to 104° F
	Operating humidity	10-90% RH, non-condensing
	Storage temperature	-40° to 70° C -40° to 158° F
	Storage humidity	10-95% RH, non-condensing
	Installation options	Rack 19" installation & desktop
	Included accessories	EU power cord, UK,US and CN power cord adapters, IEC Power Cord, Remote Volume connector (GPI), External Mute connector x4 Euroblock 3-pin connectors (Inputs), x2 Euroblock 4-pin connectors (Outputs), Warranty Card, Rear Rack Kit, 3M rubber foot (4pcs)
	Dimensions (WxHxD)	484 x 44 x 411.6 mm / 19 x 1.73 x 16.20 in.
	Weight	7.65 kg / 16.87 lb
	Shipping dimensions (WxHxD)	590 x 80 x 590 mm / 23.23 x 3.15 x 23.23 in.
	Shipping weight	10.74 kg / 23.68 lb

MECHANICAL DIAGRAM



Ecler DARA-4B900 Mechanical Diagram



All the measurements are in mm

61-1222-0100

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All product characteristics are subject to variation due to production tolerances.

NEEC AUDIO BARCELONA S.L. reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications.

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