# 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 × 900 W RMS @ 4 Ω, it supports both low- and high-impedance loudspeaker systems (70 V / 100 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 × 900 W RMS @ 4 Ω output power.
- Supports 2 Ω, 4 Ω, 8 Ω, 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 | 2Ω, 4Ω, 8Ω, 100V, 70V and 4/8Ω 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 @ 8Ω | 550 W |
| Max output power @ 4Ω | 900 W |
| Max output power @ 2Ω | 1600 W |
| Max output power @ 4Ω bridge mode | 3200 W |
| Max output power @ 8Ω 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 @ 8Ω | 550 W |
| Max output power @ 4Ω | 900 W |
| Max output power @ 2Ω | 1600 W |
| Max output power @ 4Ω bridge mode | 3200 W |
| Max output power @ 8Ω 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 | 20kΩ 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 (±10%) |
| Power factor correction | > 0,96 |
| AC mains connector | IEC C14 inlet |
| **POWER & HEAT @230VAC** | |
| 1/4 POWER, @ 4Ω (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<br>105 dB-A Dynamic Range - 0.0018% THD+N |
| DA converters | 24 Bit Tandem™ @ 48 kHz<br>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<br>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 |

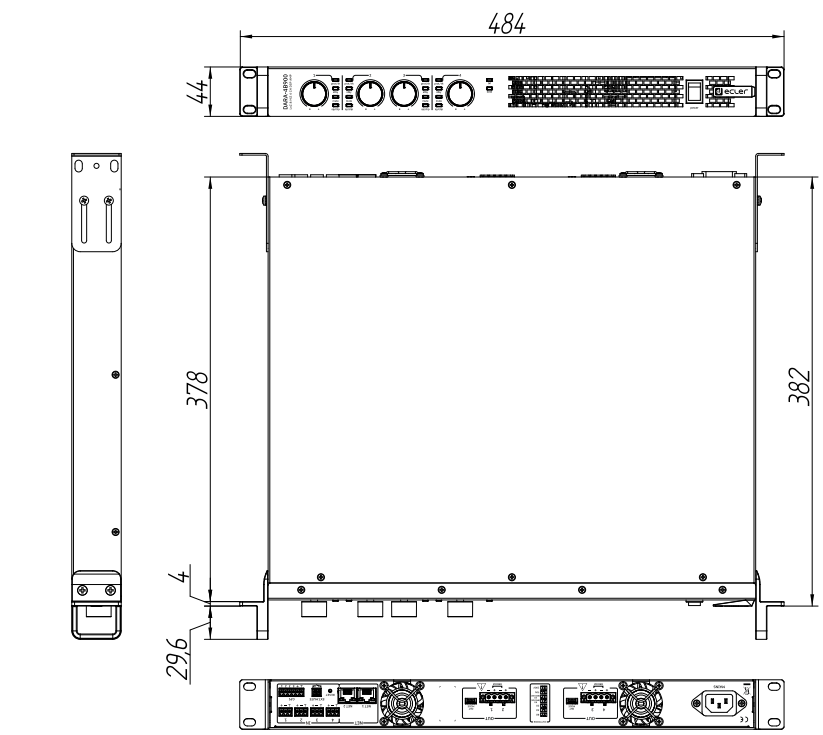
| LOCAL CONTROL | |
|---|---|
| Attenuators | Assignable front panel knobs |
| Output mode settings | Back panel Dipswitch by pairs of channels |
| RUN/SLEEP mode | Auto standby function<br>Forced standby<br>(Settings by embedded web application) |
| Power ON/OFF | Front panel switch |

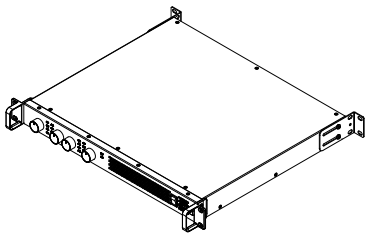
| SETTINGS | |
|---|---|
| Attenuators | Assignable front panel knobs |
| Output settings | 2Ω/4Ω/8Ω/70V/100V/Bridge Mode output selection by pair of channels |
| Auto standby function | Settings by embedded web application |
| Auto standby threshold | -40dB |
| Auto standby time | 90 seconds |
| Power ON/OFF | Front panel switch |

| | |
|---|---|
| **CONNECTIVITY** | |
| Ethernet | Ethernet Base-Tx 100Mb CAT5 up to 100m<br>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 | -20º to 40º C<br>-4º to 104º F |
| Operating humidity | 10-90% RH, non-condensing |
| Storage temperature | -40º to 70º C<br>-40º to 158º F |
| Storage humidity | 10-95% RH, non-condensing |
| Installation options | Rack 19" installation & desktop |
| Included accessories | 1 x EU & IEC power cords, UK,US & CN plug adapters, 4x Desktop feet, 1x Rack 19" installation hardware, 1 x Remote Volume connector (GPI), 1 x External Mute connector, 6x Euroblock connectors (4x 3-pin blue for inputs and 2x 4-pin green for outputs), 2x Euroblock jumper. |
| Dimensions (WxHxD) | Handles incl.: 484 x 44 x 411.6 mm. / 19.06 x 1.73 x 16.20 in.<br>Handles excl.: 484 x 44 x 378 mm. / 19.06 x 1.73 x 14.88 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 measurments are in mm

61-1222-0100

www.ecler.com