



ALCHIMIST

AD-801

User Manual

Premium-class audiophile DSP featuring the legendary ESS Sabre DAC for ultimate fidelity

AD-801 Overview

The Alchemist AD-801 is a High-End DSP Processor with ESS Sabre DAC designed to deliver exceptional audio performance in automotive environments. Premium-class audiophile DSP featuring the legendary ESS Sabre DAC for ultimate fidelity. Built with premium components and engineered in Germany, the AD-801 represents our commitment to audiophile-grade sound quality.

Key Features

- Premium ESS Sabre ES9038PRO DAC for reference-grade conversion
- 192kHz/32bit processing for the highest resolution audio
- Balanced XLR outputs eliminating noise and interference
- THD below 0.001% - inaudible distortion levels
- SNR exceeding 120dB for absolute dynamic range
- 31-band parametric EQ with audiophile-grade signal path
- Precision-machined aluminum enclosure with vibration damping
- Dual-mono internal architecture for channel separation

Box Contents

- 1x DSP processor unit
- 1x Wiring harness with high-level inputs
- 1x USB cable for PC connection
- 1x Remote turn-on wire
- 1x Fuse holder with fuse
- 1x Mounting bracket and hardware
- 1x Quick start guide
- 1x Balanced XLR output cable set
- 1x Optical (Toslink) cable

Technical Specifications

Parameter	Value
Model	AD-801
Class	Premium / High-End
Channels	8
Equalizer	31-Band Parametric EQ per channel
DAC	ESS Sabre (ES9038PRO)
Sample Rate / Bit Depth	192 kHz / 32-bit
THD+N	< 0.001%
Signal-to-Noise Ratio	> 120 dB
Analog Output	Balanced XLR
Input Types	RCA, Optical, Coaxial, USB, AES/EBU
Dimensions (W x H x D)	240 x 55 x 175 mm
Weight	2.4 kg

Installation Guide

Connection Overview

The AD-801 features clearly labeled input and output connectors on the rear panel. Refer to the connection diagram included in the box for a visual guide.

Wiring Steps

1. Disconnect the vehicle battery negative terminal before starting.
2. Mount the AD-801 in a secure, ventilated location (under seat or trunk).
3. Connect the power wire (red) through the included fuse holder to the battery positive terminal.
4. Connect the ground wire (black) to a clean, solid metal chassis point within 18 inches.
5. Connect the remote turn-on wire (blue) to the head unit's remote output or ACC circuit.
6. Connect input sources: high-level speaker inputs from factory head unit, or RCA/optical inputs.
7. For best results, use balanced XLR connections to your amplifier(s) to maximize noise rejection.
8. Connect RCA output cables to your amplifier(s) or powered speakers.
9. Reconnect the battery and verify the unit powers on with the ignition.
10. Configure input source and channel mapping using the Alchemist DSP software.
11. Perform initial tuning using the EQ, crossover, and time alignment tools.

Warranty & Support

12-Month Limited Warranty

Your Alchemist AD-801 is covered by a 12-month limited warranty against manufacturing defects from the date of original purchase. Please retain your purchase receipt as proof of purchase for any warranty claims.

Technical Support

- Email: support@alchemists.com
- Phone: +49 (0) 69 123 4567 (Mon-Fri, 9:00-17:00 CET)
- Website: www.alchemists.com/support
- Software Downloads: www.alchemists.com/downloads

Online Resources

Visit www.alchemists.com for the latest firmware updates, tuning software, installation videos, and user community forums. Scan the QR code on the product packaging to access the dedicated support page for your model.

Register Your Product

Register your product at www.alchemists.com/register to receive firmware update notifications, extended support, and exclusive content.