



ALCHIMIST

AD-812

User Manual

The pinnacle of car audio: dual ESS DACs, 384kHz/32bit, and balanced XLR + RCA outputs

AD-812 Overview

The Alchemist AD-812 is a Premium Audiophile DSP with Dual ESS Sabre DAC designed to deliver exceptional audio performance in automotive environments. The pinnacle of car audio: dual ESS DACs, 384kHz/32bit, and balanced XLR + RCA outputs. Built with premium components and engineered in Germany, the AD-812 represents our commitment to audiophile-grade sound quality.

Key Features

- Dual ESS Sabre ES9038PRO DACs in true dual-mono configuration
- 384kHz/32bit - the highest resolution in automotive audio
- Both balanced XLR and RCA outputs for maximum flexibility
- THD below 0.0008% - beyond the threshold of human perception
- SNR exceeding 122dB - reference-grade dynamic range
- 31-band parametric EQ with zero signal degradation
- Aerospace-grade aluminum enclosure with copper shielding
- Separate power supply regulation for analog and digital sections
- Gold-plated connectors and OCC copper internal wiring

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 Premium RCA cable set
- 1x Optical (Toslink) cable

Technical Specifications

Parameter	Value
Model	AD-812
Class	Premium / Audiophile Reference
Channels	8
Equalizer	31-Band Parametric EQ per channel
DAC	Dual ESS Sabre (2x ES9038PRO)
Sample Rate / Bit Depth	384 kHz / 32-bit
THD+N	< 0.0008%
Signal-to-Noise Ratio	> 122 dB
Analog Outputs	Balanced XLR + RCA
Input Types	RCA, Optical, Coaxial, USB, AES/EBU
Dimensions (W x H x D)	260 x 58 x 185 mm
Weight	2.8 kg

Installation Guide

Connection Overview

The AD-812 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-812 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. RCA outputs are also available for compatibility.
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-812 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.