



ALCHIMIST

AD16H-960

User Manual

Revolutionary 960W RMS 16-channel DSP with Hi-Res audio and AES/EBU professional input



AD16H-960 Overview

The Alchemist AD16H-960 is a 16-Channel Revolutionary DSP Processor designed to deliver exceptional audio performance in automotive environments. Revolutionary 960W RMS 16-channel DSP with Hi-Res audio and AES/EBU professional input. Built with premium components and engineered in Germany, the AD16H-960 represents our commitment to audiophile-grade sound quality.

Key Features

- 16-channel revolutionary DSP for complex multi-way systems
- Hi-Res 96kHz/24bit audio processing for studio-quality sound
- Professional AES/EBU digital input via XLR connector
- 6V high-voltage RCA pre-out for maximum signal integrity
- 31-band parametric EQ on all 16 channels independently
- Advanced room correction and auto-tuning capabilities
- Premium build quality with machined aluminum enclosure

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 AES/EBU (XLR) cable



Technical Specifications

Parameter	Value
Model	AD16H-960
Channels	16
Total Power Output	960W RMS
Equalizer	31-Band Parametric EQ per channel
Sample Rate / Bit Depth	96 kHz / 24-bit (Hi-Res)
THD+N	< 0.003%
Signal-to-Noise Ratio	> 115 dB
Digital Input	AES/EBU (XLR)
RCA Output Voltage	6V
Input Types	High-level, RCA, AES/EBU, USB, BT
Dimensions (W x H x D)	280 x 55 x 190 mm
Weight	2.9 kg

Installation Guide

Connection Overview

The AD16H-960 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 AD16H-960 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. Connect the AES/EBU cable from your digital source to the XLR input for professional digital audio.
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 AD16H-960 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.