



ALCHIMIST

AD10H-680

User Manual

Precision-engineered 680W RMS DSP for detailed and accurate sound reproduction

AD10H-680 Overview

The Alchemist AD10H-680 is a 10-Channel Precision DSP Processor designed to deliver exceptional audio performance in automotive environments. Precision-engineered 680W RMS DSP for detailed and accurate sound reproduction. Built with premium components and engineered in Germany, the AD10H-680 represents our commitment to audiophile-grade sound quality.

Key Features

- 10-channel precision DSP with 680W RMS output
- Ultra-precise 31-band parametric EQ per channel
- Advanced crossover network with multiple filter types
- High-precision time alignment down to 0.01ms steps
- 4V RCA pre-out with low-impedance output stage
- Robust construction for automotive environments
- Full software suite for PC, Android, and iOS

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

Technical Specifications

Parameter	Value
Model	AD10H-680
Channels	10
Total Power Output	680W RMS
Equalizer	31-Band Parametric EQ per channel
Sample Rate / Bit Depth	48 kHz / 24-bit
THD+N	< 0.005%
Signal-to-Noise Ratio	> 108 dB
RCA Output Voltage	4V
Input Types	High-level, RCA, USB, Bluetooth
Dimensions (W x H x D)	200 x 42 x 155 mm
Weight	1.6 kg

Installation Guide

Connection Overview

The AD10H-680 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 AD10H-680 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 RCA output cables to your amplifier(s) or powered speakers.
8. Reconnect the battery and verify the unit powers on with the ignition.
9. Configure input source and channel mapping using the Alchemist DSP software.
10. Perform initial tuning using the EQ, crossover, and time alignment tools.

Warranty & Support

12-Month Limited Warranty

Your Alchemist AD10H-680 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.