ALTMANN ATTRACTION DAC



BYOB - Bring-Your-Own-Battery - SERIES

CONGRATULATIONS

You've just become the proud owner of one of the World's finest DA Converters: the ALTMANN ATTRACTION DAC.

When people come up to compliment you on your sound, you can smile knowingly ... and hopefully you'll tell them a little about us!

This Attraction DAC has been designed, tested, improved, tested again and refined to deliver maximum musical performance of any style, in any situation.

VIBRATIONAL OPTIMIZATION

The ALTMANN ATTRACTION DAC is vibrationally optimized. Unlike other hifi-components that come in all kinds of bad sounding enclosure, your Altmann Attraction DAC is tightly fastened on a solid spruce board, which is treated with a unique formulation of natural wood resins.

The idea is simple: "As we cannot prevent subtle vibrations from entering our hifi-system, let's just give them the very best sound-character possible."

BATTERY POWER & CHARGING

The ALTMANN ATTRACTION DAC relies on battery-power as it is the only source of clean power. It thus completely avoids many disturbing problems that normally arise with mains powered equipment.

Your ALTMANN ATTRACTION DAC is designed to be powered by a 12V car battery, which you supply (Bring-Your-Own-Battery). We did all our tests with a "Optima Red-Top" lead-acid battery, which is also non-spillable. Technically, you can also use a gel-battery, it may, however, sound different.

A car battery is designed to be charged with a car battery charger. You can get that part locally & low cost from almost any car supply shop. Always disconnect the ATTRACTION-DAC before connecting the charger.

The blue LED on your ATTRACTION DAC indicates battery charge. It will light bright with full charge, and will go off, if the battery charge drops below 10 Volts. For best sound quality, please load your battery, when the blue LED goes dim.

BURNING-IN, WARMING-UP & AGEING

Every ALTMANN ATTRACTION DAC is manufactured on a customs basis after the reception of your order. As it comes fresh, please allow a couple of weeks for burn-in and settlement of the lacquer and wood.

As wood is a living material, it will naturally age ...in a very positive sense. As with any musical instrument, it must be played to develop its sound. The same holds true for your ATTRACTION DAC. The more you play it, the better it gets. The ALTMANN ATTRACTION DAC has a integrated warm-up mechanism. Typical warm-up time is 30 minutes.

GUARANTEE & SAFETY

Every ALTMANN ATTRACTION DAC is covered by a 5 years guarantee when treated according to the operational instructions: If it fails, I will repair it for free, no other claims possible.

A car battery is a harmless and safe device, as long as you observe the safety precautions printed on the operational instructions. However, if you do any nonsense with it, like shorting the two output poles or your battery with a screwdriver or any other piece of metal or wire, the experience may become very hot and/or explosive and/or acidic. Please treat your battery with the proper respect and keep it out of the reach of children and pets.

PERFORMANCE STANDARD

This is the leading edge of thought, sound, joy and well-being. The performance standard of your ALTMANN ATTRACTION DAC is A Performance Standard. Happy listening...





ALTMANN MICRO MACHINES GLOBAL WARRANTY AND PROPRIETARY RIGHTS STATEMENT

Limited Warranty:

ALTMANN MICRO MACHINES ("AMM") warrants to you as an end-user purchaser AMM Hardware Products against defects in material and workmanship for a period of FIVE (5) YEARS from the date of original manufacturing, as indicated on the guarantee certificate.

If you discover a defect, AMM will, at its option, repair, replace, or refund the purchase price of this product at no charge to you, provided you return it during the warranty period, with transportation charges prepaid, to the authorized AMM dealer from whom you purchased it, or directly to AMM Germany.

To each product returned for warranty service, please attach your name, address, telephone number, error description, and the original guarantee certificate bearing the appropriate AMM serial numbers as proof of original retail purchase.

AMM does not warrant any products that are not AMM products. This warranty does not apply if the product has been damaged by accident, abuse, misuse, or misapplication; if the product has been modified without the permission of AMM; if any AMM serial number has been removed or defaced, or if the original guarantee certificate is lost or not available.

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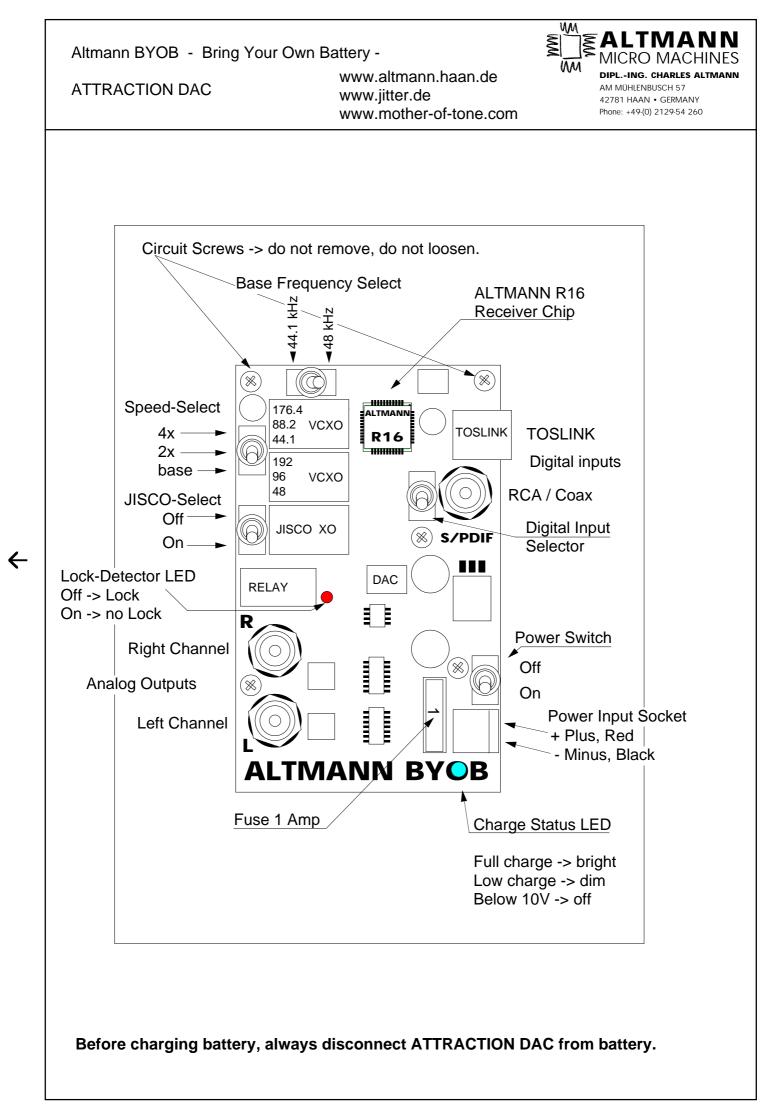
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ALTMANN BYOB - BRING YOUR OWN BATTERY - ATTRACTION DAC

OPERATIONAL & SAFETY INSTRUCTIONS

Checklist:

- If you barely know the difference between a plus pole and a minus pole, let someone help you to do the job.
- <u>A car battery is a very powerful device. Please never short circuit the plus and minus poles of your battery, as it</u> may become very hot, or even explode. Keep any metal objects that are not needed for operation away from the battery. Keep the battery out of the reach of children and pets.
- Please use only a 12V car battery. Do **not** use a 24 Volt truck battery.
- Please use only a car battery charger that is designed to charge 12 V car batteries.
- <u>Before connecting a battery charger to the battery, disconnect the power cable from the ATTRACTION DAC.</u> Reconnect only after disconnecting the battery charger from the battery.
- The blue LED of your ATTRACTION DAC indicates the battery charge. It lights bright when the battery is fully charged (12V). If it lights dim, the battery charge is about 10..11 Volt. The blue LED goes off, when the battery charge is below 10 Volt. For best sound quality, charge your battery, when the blue LED goes dim.
- Every ATTRACTION DAC comes with a battery cable, that is tested together with your ATTRACTION DAC before shipping, and is in the right polarity. The battery cable has a red (+, plus) wire and a black (-, minus, ground) wire. The red wire is connected to the plus battery pole clamp, which has a large pole diameter. The black wire is connected to the minus battery pole clamp, which has a small pole diameter. This way, when connecting the clamps to a standard car battery, you cannot change the polarity since the large pole clamp only fits the large diameter plus-pole of the battery, and vice versa. The other end of the supplied battery cable comes screwed to the byob connector in the right polarity, and can only be plugged into the ATTRACTION DAC with the right polarity. If for any reason polarity is reversed, a input diode will prevent current flow, and protect circuitry. The blue LED will be off.
- Any Altmann BYOB product is sensible to humidity and fluids. If it comes in contact with any fluid (i.e. water, beer, wine, oil, etc.) it may fail. This is not covered by the guarantee.
- Any Altmann BYOB product is sensible to overvoltage. The maximum voltage is 18 Volt. This is especially important, when you charge the battery. Always, before you connect a charger to the battery, disconnect the ATTRACTION DAC. Reconnect the ATTRACTION DAC only after having disconnected the charger.
- Do not touch any part of the circuit board with any cable or metal object. When connecting digital input and analog output cables, do not touch any part of the ATTRACTION DAC except the RCA input plugs.
 It is good practice, to switch the ATTRACTION DAC OFF, whenever you want to connect or disconnect something.
- If you remove or loosen any of the screws that fix the circuit to the spruce board, the guarantee is void.
- The ALTMANN ATTRACTION DAC features a lock-detection circuit, with auto-mute, shut-down-relay, and a read LED monitoring lock-status. When the red LED lights up, lock to input signal is lost, zero data is output of the DAC and the relay shorts DAC output to analog ground. This way, your speakers will be protected from digital garbage, when a lock-failure should occur. If LED stays red even if you connected a CD/DVD transport and disc is running, this may be because of the following reasons: Wrong sample-rate selected or non PCM data sent to DAC or transport does not send with correct frequency. The pulling range of the ATTRACTION DACs high precision VCXO is +- 150 ppm. When red LED is off, the PLL is locked and synchronized and audio data is output.
- Supported sample rates are 44.1kHz (CD-only model), respectively 44.1 / 48 / 88.2 / 96 / 176.4 / 192 kHz for CD/DAT/DVD/DVD-A model. Sample rates must be matched within +- 150 ppm.

Connection Sequence: Toggle power switch in the OFF-position. Connect digital input. Connect analog outputs. Connect the battery pole clamps of the power cable to the battery. Connect the other end of the power cable to the ATTRACTION DACs power input socket. Turn volume fully down. Toggle power switch in the ON-position -> blue LED lights up. Start source (i.e. CD, DAT, DVD). Turn volume up a little. Enjoy...

