

# - SMc Audio -

*Hand-Tuned Performance by Steve McCormack*

## **McCormack ALD-1 Preamplifier Upgrade**

The ALD-1 is a fine preamplifier that incorporates a number of advanced features. It is one of the very few preamplifiers that include a high-impedance buffer circuit on the input side, thus improving the dynamics and clarity of most input sources. It also includes a “direct bypass” input path for those exceptional source components that don’t benefit from the input buffer.

Other design features include:

- High-impedance J-FET input buffer for main and tape inputs
- Zero-feedback amplifier design with high-current MOSFET output
- Six independent power supply regulator stages (4 with discrete circuitry)
- Balanced and unbalanced output
- True Passive (unbalanced) output
- Two Buffered Tape Monitor / Processor Loops with disconnect option
- Bi-directional tape dubbing
- A “hard” mute circuit (grounded outputs, which ensure true silence)

The ALD-1 was a very successful design, but was compromised somewhat by the project’s restricted price goals. I am pleased to be able to offer upgrade options which eliminate the original compromises and allow the full potential of the design to shine through.

## **- ALD-1 Upgrade Options -**

SMc Audio offers 2 levels of upgrade for the ALD-1: Revisions A & B. In addition, there are options for upgrading the RCA jacks, adding balanced inputs, and a special volume control option. The details follow...

## **Revision B**

Rev B focuses on the heart of the preamplifier – the amplification and buffer circuitry, and the volume control. Circuit operation is optimized through careful trimming of parts values, and all passive parts in the main circuit path are upgraded to my exacting standards. The stock volume control is replaced by the TKD conductive-plastic volume control – the finest volume potentiometer I have found. Caddock, Vishay and Mills resistors are employed, along with Black Gate, Muse, InfiniCap, and AuriCap capacitors. Wonder Wire is used for the internal connections, and Wonder Solder is used throughout.

All mechanical and electrical systems are checked for proper assembly and operation, and each unit is burned-in and listened-to before shipping.

The result is an outstanding preamp with great transparency, dynamics, and dimensionality. Its sound is liquid and full, but with great speed and agility, and taut, powerful bass. Backgrounds are “black” and grain-free. Many people characterize its musicality as being “tube-like,” but with the rock-solid stability and longevity afforded by its solid-state design.

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## **Revision A**

Revision A begins with all of the work of Rev B (including the TKD volume control), and goes beyond it in a significant area: the power supply. The ALD-1 contains 4 independent, discreet-component voltage regulator circuits which provide power to the buffer and amplifier circuits. With Revision A, these supply regulators are upgraded to the latest circuit topology, and rebuilt with the latest parts, including Mills and Vishay resistors, and Black Gate capacitors.

This additional work results in important gains in liquidity and dimensional bloom. Bass solidity is also improved, along with the sense of pace and timing.

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## **RCA Jack options:**

### **WBT RCA jacks:**

WBT jacks are beautifully engineered, and they deliver the goods sonically, as well. They combine fast, detailed, and transparent sound with a degree of "body," warmth, and richness I have not found in any other jack.

### **Cardas RCA jacks:**

A classic in the High-End industry. I've used Cardas jacks for many years, and still love them. Fast, detailed, and transparent, their musical performance is excellent.

**Note:** If you have the Deluxe model ALD-1, your preamp already has Cardas RCA jacks installed in the CD, AUX/PHONO, and DIRECT inputs, and on the PASSIVE and UNBALANCED outputs.

## **Adding Balanced Inputs:**

One pair of **balanced inputs** may be added to your ALD-1. A pair of Neutrik XLR connectors replace the CD and TUNER RCA input jacks, and a pair of high-performance Jensen Transformers are installed inside the preamp. The TUNER input jacks must be sacrificed in order to install the XLR connectors, so the TUNER input is eliminated as part of this operation. All other inputs remain the same and the front-panel input selector operates as usual, except that the TUNER position is nonfunctional.

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## **The Final Option: The TKD Stepped-Attenuator**

The TKD conductive-plastic volume control is the best true potentiometer I have ever heard. Its sound is wonderfully smooth and rich, while exhibiting fine detail and "air," and this is why I have chosen it as the volume control for the ALD-1 upgrades. However, there is one control that is better still: **the TKD Stepped-Attenuator**. This is simply the finest volume control I have found. Its tracking is as close to perfection as I have seen, and it has enough steps (40) to allow precise control of your volume level. The improvement in bass depth and power, transient definition, precision focus, and staging with this control is amazing. There are 2 drawbacks with this control... First, it is a very expensive part. Second, it will not fit the allotted space in the ALD-1, so the circuit board must be extensively modified to allow its use. The additional time and effort add to the cost, but the result is truly incredible performance.

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## Upgrade Procedure

Select your preferred revision level, and multiply the number of RCA jack pairs you have chosen by the per-pair cost. Add the cost for all selected options, and this will give you the total amount for your upgrade, less shipping. The shipping cost can be determined when we schedule your upgrade.

Please call us at (760) 732-0352, M-F, 10-6 PST (California) to discuss which upgrade components will best suit your requirements.

Applicable CA tax and shipping not included. Please make your check or money order payable to **SMc Audio**.

**A Note About Reliability:** McCormack preamplifiers are exceptionally stable and reliable in their stock form. We do **absolutely nothing** in these upgrades to compromise this inherent reliability in **any way**. Some equipment modifications achieve enhanced performance at the cost of reliability - **ours do not**.

**Scheduling and Turnaround Time:** Our goal is to complete your upgrade as soon as possible, consistent with our quality requirements. Many of the upgrades are very labor-intensive and time consuming, so completion times vary. Ten days to 2 weeks is typical, but we may occasionally need more time to finish your work. We ask for your patience and understanding. We typically operate with a work backlog of several weeks. Give us a call when you are ready to schedule an appointment and we will go over the details. We will discuss any questions you may have and give you a date when we expect to start your work. Your preamplifier is not shipped until about a week ahead of that date. We will also go over your shipping requirements and give you the total for your work, including shipping and handling. Please note that you may make changes to the specifics of your upgrade up to the time that we start the work.

**Shipping Policy:** The customer provides shipping both to-and-from SMc Audio. We work with both UPS and FedEx but we suggest using FedEx Express, especially for amplifiers larger than the DNA-0.5 or DNA-125. We strongly recommend that you fully insure your unit enroute to us, and we will properly insure it for the return trip.

**Packaging:** It is important that your preamplifier be shipped in the original packaging whenever possible. In addition, you may wish to double-box your unit in an outside box approximately 2 inches larger all the way around, with the gap filled with packing foam, bubble pack, or something similar. Protect your preamp's finish by placing it in a plastic bag. Please keep your manual and power cord. If your packaging is incomplete, or you are not sure of the correct method of re-packing, **please discuss these details with us before you ship**.

**Payment:** Full payment by check or money order should accompany your amplifier along with a note detailing your contact information, return shipping address, and any other pertinent information. Please make your check payable to **SMc Audio**.

**California Residents** are subject to applicable sales tax.

**The Fine Print:** Our upgrades are handcrafted using the finest parts available, and we expect them to last for a very long time. We will repair any defects in materials we have used or in the work that we have done for a period of three (3) years from the date of sale, including parts and labor. You pay the freight to us, and we will cover return shipping via surface UPS within the continental U.S.

We reserve the right to determine if any failures are the result of our upgrades, or caused by other problems. (In other words, if you decide to move your speakers late one night and happen to cross the wires... hey, it's not our fault.) Repair work outside of warranty will be billed at \$40 per hour, plus parts. But, if you promise to be careful, we promise to be liberal in our judgement. We plan to be in this business for a long time, and we want you to be a happy SMc owner.

As usual, **prices and specifications are subject to change.**

**Custom Work:** We like to stick to "The Plan" as much as possible, but if you have a special requirement or variation in mind, feel free to discuss it with us. We may not be able to service every request, but we will do our best.

**Recommended Accessories:** We continue to experiment with various accessories to help extract every last bit of the performance these designs are capable of. We feel that certain types of AC power cords and isolation bases do offer legitimate improvements and may have a place in your system. Ask us about the latest results of our ongoing research, and be sure to check the FAQ page on our website at [www.SMcAudio.com](http://www.SMcAudio.com).

### **Other Available Upgrades**

Upgrades are available for a number of McCormack Audio products. Please contact us at (760) 732-0352 for additional information or to discuss your requirements.

**We look forward to doing an upgrade for you!**

**- SMc Audio -**

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