

ALTMANN „TUBE-O-LATOR“ LACQUER

APPLICATION INSTRUCTIONS

Indication: The Altmann „Tube-o-lator“ lacquer is specifically designed for plastic encapsulated semiconductors like AD- & DA-converters, operational-amplifiers, discrete transistors, power transistors as well as integrated power modules and voltage regulators.

Effect: After application of the „Tube-o-lator“ lacquer, the indicated components will have a tube-like sonic character, best described as warm, full, natural and emotional sound. You will recognize, that you can easily listen to higher volume levels than before, because annoying frequencies will be filtered out of the signal.

Only coat the top surface of the chip-package. Not the leads!

Note: If leads are accidentally coated, don't worry, the lacquer has perfect isolating properties after curing.

Attention: This coating is NOT designed to be used on loudspeakers or any components, not indicated. Do not swallow. Avoid eye- and skin-contact. Keep out of range of children. Protect from frost.

Application Sequence:

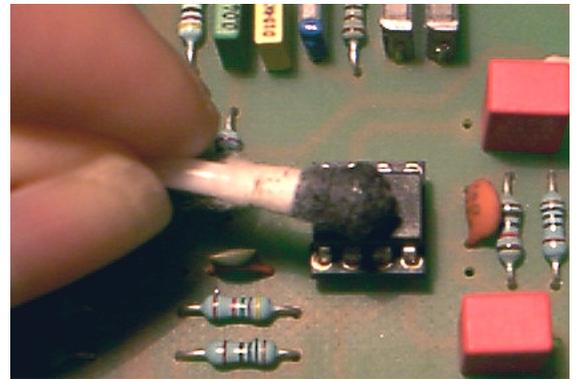
1) Disconnect all cables, including power, from the device you want to treat.

2) Open the case and locate the components you want to coat with the „Tube-o-lator“ lacquer.

On a CD- DVD or SACD player you should coat the DA-converter chips, the Op-amps and maybe the voltage regulators.

On a Preamplifier you will coat Op-amps and discrete transistors.

On a main or power amplifier you will coat small-signal and power transistors.

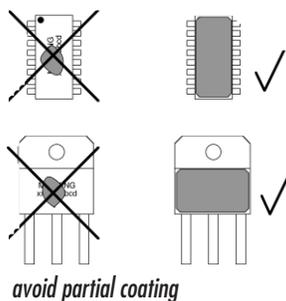


dip applicator into lacquer, then push on device-surface

3) Hit the process tube (the lacquer package) several times on the table and shake it. The ingredients have to be thoroughly mixed before application. The contents must look homogeneously.

4) Open the tube and insert the applicator (Q-tip). Remove the applicator and gently push it on the surface of the semiconductor package you want to treat (see picture). You will see the „Tube-O-lator“ lacquer evenly distribute on the top surface. The lacquer is black and has a metallic glare. Apply just as much lacquer that you get a homogeneous black surface and cannot see the device marking anymore.

Important: Always coat the complete top surface of a device. Do not partially coat a surface, else you may end up in a mess of non-correlated overtones, and the result will not sound as intended.



Experience has shown, that power transistors in certain circuit topologies CAN over-react to Altmann „Tube-o-lator“ lacquer. Over-reaction will lead to a dumb sound, because too many overtones are filtered. If you experience over-reaction of a device, remove the „Tube-o-lator“ lacquer with a carpet knife after curing. There will still be residual lacquer in the pores of the plastic package that will lead to a well balanced tube-sound.

After treatment the sonic character changes immediately. In fact, it changes the very second you apply the „Tube-o-lator“ lacquer. However, before curing the sound may be very soft. Full curing and achievement of the final sonic benefits will occur after 20 days of curing.

Happy listening !!!

If you need additional information, please visit our website: <http://www.altmann.haan.de>