

# AUDIO/VIDEO 9-1-1

Tech Bulletin: SB-AV9-1-1  
Revision Date: 03/26/2006

1. Connector Maintenance
2. Vacuum Tube Maintenance
3. Fader Maintenance
4. Potentiometer Maintenance
5. Difference between 5% and 100% products

**NOTE: Name change in 2006. ProGold becomes DeoxIT® GOLD, PreservIT becomes DeoxIT® SHIELD, CaiLube MCL becomes DeoxIT® FaderLube.**

## The DeoxIT® 1-2-3:

- 1 - Apply DeoxIT® contact cleaner to clean/rejuvenate surface,
- 2 - Apply DeoxIT® GOLD for maximum performance & protection - indoor applications,
- 3 - OR apply DeoxIT® SHIELD for maximum protection - outdoor or severe environments.

1. Connector Maintenance (RCA, XLR, BNC, DVI, COAX, etc.)

**NOTE: If the part is used or in service, always assume it's oxidized.**

### ***Metal surfaces:***

1. Apply DeoxIT® contact cleaner to metal contact/connector surface. When connectors contain surface particles (dust, dirt, etc.) along with oxidation, use DeoxIT® spray with flushing solvent (#D5MS-15). When the surface is free from most surface particles, use DeoxIT® without a flushing solvent (#DN5MS-15).
2. Operate device to help displace contaminants from contact surface.
3. Repeat Step 1.
4. If surface is heavily oxidized, leaving DeoxIT® contact cleaner on overnight, is recommended.
5. The next day remove the contaminants lifted by DeoxIT® with lint free swab, cloth on accessible surfaces or repeat Step 1 to displace contaminants from contact surface. Process may need to be repeated if surface is heavily oxidized. When surface is clean, no residue on the cloth, finish with a couple short bursts of DeoxIT®.
6. **For extended protection:** After surface is clean, apply DeoxIT® GOLD (ProGold) for indoor applications or DeoxIT® SHIELD (PreservIT) for outdoor applications.

### ***Plated metal surfaces and gold surfaces - used or in service (i.e. gold or other precious metal):***

7. Follow the above procedure (Metal surfaces) to clean metal surface. Then finish with DeoxIT® GOLD (ProGold) to protect surfaces. Maintain thereafter with DeoxIT® GOLD (ProGold).
8. When connectors contain surface particles (dust, dirt, etc.) along with oxidation, use DeoxIT® GOLD (ProGold) spray with flushing solvent (#G5MS-15 Spray). When the surface is free from most surface particles, use DeoxIT® GOLD (ProGold) spray without flushing solvent (#GN5MS-15).

***Plated metal and gold surfaces - new or with no visible oxidation on the surface:***

9. Apply DeoxIT® GOLD (ProGold) to contact/connector surface. When using 100% solution, wipe off excess. Maintain thereafter with DeoxIT® GOLD (ProGold).

**NOTES:**

*After applying DeoxIT® and DeoxIT® GOLD (ProGold), you may notice immediately or over the next several days a green or black coloration on connector surface. This represents dissolved oxides. Repeat cleaning process above and then apply DeoxIT® GOLD (ProGold) for indoor applications OR DeoxIT® SHIELD (PreservIT) for outdoor applications.*

**Recommended Applicators:**

**Spray Part No.'s:**

*(Nonflammable, non drip - quick dry, safe on plastics. Over 150 sprays per can)*

DeoxIT®, DN5MS-15, 14 g.

DeoxIT® GOLD (ProGold), GN5MS-15, 14 g.

*(Briefly flammable, until solvent evaporates, flushing action - slow dry.*

DeoxIT®, D5MS-15, 14 g.

DeoxIT® GOLD (ProGold), G5MS-15, 14 g.

**Non spray applicators**

DeoxIT®, precision needle, 25 ml.

Part No. D100L-25C

DeoxIT® GOLD (ProGold), precision needle, 25 ml.

Part No. G100L-25C

DeoxIT®, brush bottle, 7.4 ml.

Part No. D100L-2DB

DeoxIT® GOLD (ProGold), brush bottle, 7.4 ml.

Part No. G100L-2DB

## 2. Vacuum Tube Maintenance

**NOTE:** Name change in 2006 from ProGold GxL to DeoxIT® GOLD GxL. Part numbers will remain the same.

***Vacuum tubes generally operate at elevated temperatures. This requires a different approach to clean and protect the connector surfaces.***

1. **First clean the surfaces.** Apply DeoxIT® contact cleaner **100%** to metal pins and sockets using a small foam lint-free swab. If you have DeoxIT® Spray, spray some onto tip of foam swab and apply to tube pins/socket. If you have DeoxIT® liquid, place small amount onto the tip of foam swab, then apply to tube pins/socket.
2. If surface is heavily oxidized, leaving DeoxIT® contact cleaner on overnight, is recommended.
3. The next day remove contaminants lifted by DeoxIT® with lint free swab or cloth on accessible surfaces Process may need to be repeated if surface is heavily oxidized. Surface is clean when no residue is present on the cloth.
4. **Now that the surfaces are clean we need to protect them.** Apply DeoxIT® GOLD GxL (ProGold GxL) sparingly to pins and socket with lint-free swab. Remove excess with clean swab.

## **NOTES:**

*DeoxIT® does not necessarily remove any superficial discoloration (black tarnish) caused by oxidation or burn-in to the tube pins. This will, in no way adversely affect the performance of the equipment. DeoxIT® and DeoxIT® GOLD (ProGold) improves conductivity regardless of this discoloration.*

## **Recommended Applicators:**

### **Non spray 100% applicators**

DeoxIT®, precision needle, 25 ml	Part No. D100L-25C
DeoxIT® GOLD (ProGold), precision needle, 25 ml	Part No. G100L-25C
DeoxIT®, brush bottle, 7.4 ml	Part No. D100L-2DB
DeoxIT® GOLD (ProGold), brush bottle, 7.4 ml	Part No. G100L-2DB

## **Recommended Lint-Free Part Nos:**

### **Swabs:**

SWP-6: 1/4 x 3/4 x 4-1/2", qty 6. (Additional count sizes available).  
SWPX-6: 1/8 x 1/2 x 2-3/4", qty 6. (Additional count sizes available).

### **Cloths:**

LFC-C/6: Cotton, qty 6. (Additional count sizes available).  
LFC-P/6: Polypropylene, qty 6. (Additional count sizes available).

## **3. Fader Maintenance**

**NOTE:** Name change in 2006 from CaiLube MCL to DeoxIT® FaderLube. Part numbers will remain the same.

*The following guidelines have been established based on the experience and feedback of technical professionals, end users and our own years of testing and evaluation:*

### ***Routine Maintenance - general wear and tear:***

1. Apply 1-2 bursts/drops of DeoxIT® FaderLube (CaiLube MCL) **100%** to fader.
2. Manually operate faders 5-10 times to displace surface contaminants and distribute lubrication. It may be necessary to repeat this step the following day, depending on condition of fader.

Faders that have had drinks spilled on them are treated a bit differently:

### ***Emergency Maintenance - drink spills, excessive dirt and moisture:***

1. Apply 1-2 bursts of DeoxIT® FaderLube (CaiLube MCL) **5%** solution to contact surface.
2. Manually operate faders 5-10 times to remove/displace surface contaminants.
3. Apply 1-2 bursts/drops of DeoxIT® FaderLube (CaiLube MCL) **100%** solution to cleaned surface and manually operate the fader 5-10 times to replace lubrication necessary for proper function. It may be necessary to repeat this step the following day, depending on condition of fader.

## **NOTES:**

*If the drink spill does not involve the entire board, it is not necessary to treat the entire board with the three-step process.*

*Normally, we suggest removing any excess 100% product, wherever possible. In this case, we have accomplished this process through mechanical action.*

#### **Recommended Applicators:**

DeoxIT® FaderLube (CaiLube MCL), 100% Spray, 57 g.	Part No. F100S-L2
DeoxIT® FaderLube (CaiLube MCL), 100% Liquid, 25 ml	Part No. F100L-L25C
DeoxIT® FaderLube (CaiLube MCL), 5% Spray, 142 g.	Part No. F5S-H6

#### **4. Potentiometer Maintenance**

*The following guidelines have been established based on the experience and feedback of technical professionals, end users and our own years of testing and evaluation:*

##### **Sealed pots:**

1. Found in newer equipment, may be difficult to restore, and should probably be replaced.
2. Occasionally if the pots are not totally sealed, you may be able to treat it in an ultrasonic cleaner using a 10% solution of DeoxIT.

##### **Unsealed pots:**

Rotary pots respond best to DeoxIT® 100% spray or 100% liquid, depending on how they're mounted.

##### **Recommended Maintenance:**

1. Apply 1-2 bursts/drops DeoxIT® 100% solution.
2. Manually operate pots 5-10 times to displace the surface contaminants and distribute DeoxIT®.
3. Reapply DeoxIT®.
4. It may be necessary to repeat this step the following day, depending on the condition of pot.

**NOTES:** *Normally, we suggest removing any excess 100% product, wherever possible. In this case, we have accomplished this process through mechanical action.*

#### **Recommended Applicators:**

DeoxIT®, 100% spray, metered valve, 57 g	Part No. D100S-2
DeoxIT®, precision needle, 25 ml	Part No. D100L-25C



## 5. The Difference Between the 5% and 100% Products

The following excerpt from the Tech Info. Questions and Answers sheet addresses this quite well.

"Use the 5% spray or liquid to apply a thin coating of our products. Remember only a small amount is required on surface for maximum performance. The 5% solutions will ensure that only small amounts will remain on the surface. The solvent will also assist in flushing away loose dust, dirt, grease and other contamination."

### To summarize:

1. The 5% solution has a carrier solvent, but after the solvent evaporates, what remains is 100% product.
2. Original 5% formula provides flushing action, but the 100% does not.
3. Two 5% spray versions are available.
  - a) Original formula: Flushing action, slow drying, flammable until solvent evaporates. Evaporation rate depends on ambient temperature, approx. 5 to 60 minutes for complete evaporation. 100% solution remains on surface.  
*Example: Part Nos. D5MS-15, D5S-6, G5MS-15, G5S-6, F5MS-H15, F5S-H6*
  - b) Nonflammable formula: No flushing action, quick drying. Solvent evaporates almost immediately. 100% solution remains on surface.  
*Example: Part Nos. DN5MS-15, DN5S-6N, GN5MS-15, GN5S-6N*
4. Always wipe excess 100% solution with clean lint-free cloth or swab. Please refer to Fader Maintenance and Potentiometer Maintenance instructions for the exception to this advisory.

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