SuperStealth **RealityCap**   Installation Hints

RealityCap is designed like a race car, for ultimate performance without compromise, so it should be handled with care. Here are hints to help you get the best sound from it. <u>Keep each cap in its clear shipping bag until you install it, to prevent damage.</u> To free cap, scissor cut clear bag's left or right side open, and pull cap out by its wire lead.

1. Directionality: For best sound, signal should flow through cap in same direction as the printed label reads from left to right (left end is the + or input end).

2. Surround body with air: Air is the best sounding dielectric, and RealityCap is so revealing that it can reveal the sonic loss caused by placing its body next to an inferior dielectric (e.g. a PC board). For best sound, place the RealityCap body so it is surrounded by open air. Point-to-point 3D wiring achieves this. On a PC board, you can simply support the cap on its wire leads, so its body is at least ¼" in air away from PC board.
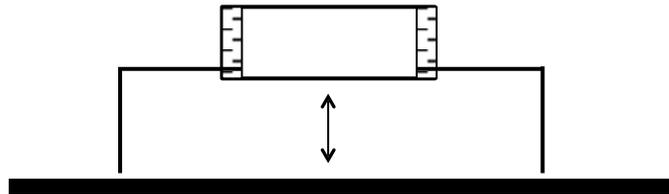
3. End Treatment: RealityCaps are the same lengths as StealthCaps, and RealityCap's gold wrap tape extends past the cap's body and metal end spray, just as with all other wrap-and-fill caps. This insulating gold wrap tape extension, beyond the metal end, must stay there, and insures that outside edge of metal spray end doesn't electrically short to any conductive part of your circuit. Now, all other caps fill up the end well (formed by the extended wrap tape) with a thick plug of solid epoxy. But RealityCap is different. We developed a new low viscosity epoxy for RealityCap, so we can put on just a thin coat, to seal the metal cap ends – not the usual thick plug of epoxy. The gold wrap extends straight out from cap's body (see diagrams); don't bend this gold tape down.

4. For best sound, the wire leads should stay straight, coming out of the cap body, ideally for as long as possible beyond the gold tape ends (don't worry about any extra inductance from longer wire leads, since other factors are far more important). To bend the wire leads down, grasp each wire lead with needle nose pliers, and then bend wire lead beyond the clamping needle nose, as shown in the diagram.
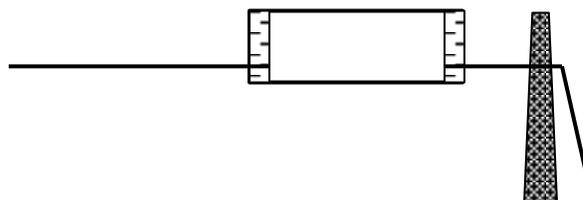
5. When soldering caps in place, use the same common sense precautions you should use for all delicate electronic parts, to prevent heat damage. Use a

solder like Wonder Solder, which melts very quickly, and flows into the joint faster than other solders, thereby minimizing the dwell time of the soldering iron on the joint. Freshly and generously tin the iron (set at 750 F, 800 F for lead-free solder) immediately before heating the joint, so that the liquid solder on the iron tip acts as a quick conductor of heat to the joint. If you have a choice, do not cut cap's wire leads very short, but leave them longer, so less heat gets to cap body. Also, you could use a heat sink or long nose pliers between cap body and the solder joint, to absorb excess heat.