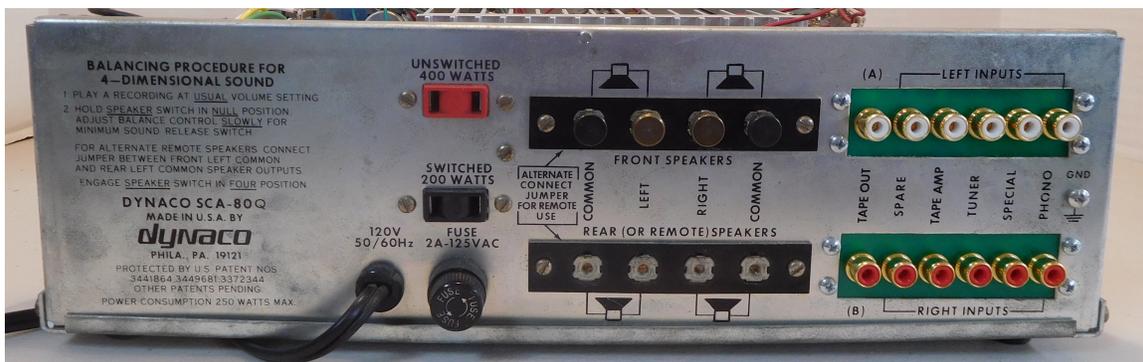


Update my dynaco



Dynaco SCA-80(Q) Integrated Amplifier Replacement RCA Jack Installation [SCA80RCA]

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Section 1: About This Manual

This manual gives the information needed to build and install new RCA jacks into Dynaco's SCA-80(Q) integrated amplifier.

Who Should Attempt this Project?

You can build this kit if you can:

1. Solder (using normal rosin core solder and a soldering iron).
2. Use simple hand tools like screwdrivers, wire cutters, and pliers.
3. Read and follow directions.

It helps if you:

1. know a bit about electronics, or
2. have a friend who knows a bit about electronics
3. can get to YouTube to watch a few helpful videos about the assembly process (none are posted as of this version of the manual).

Tools you'll need

You'll need the following tools:

1. Phillips screwdriver (#1 and #2), regular screw-drivers.
2. Pliers or nut drivers suitable for #4 and #6 hardware
3. needle nose pliers (helpful, but not strictly necessary)
4. pencil type soldering iron of 25 to 50 Watts (no huge honking soldering guns or blowtorches)
5. wire cutters and strippers

Helpful Tools

These tools aren't strictly necessary, but make building the kit easier.

1. magnifying glass, if you're over 42!

Project Overview

The project consists of the following steps:

1. Labeling the wires on the RCA jacks.
2. Removing the old RCA Jacks.
3. Installing and testing the new RCA Jacks.

Important Safety Notes

By purchasing, using, or assembling this kit, you have agreed to hold Akitika LLC harmless for any injuries you may receive in its assembly and/or use. To prevent injuries:

- Wear safety glasses when soldering or clipping wires to prevent eye injuries.
- Always unplug the power before working on the amplifier.
- Large capacitors hold lots of energy for a long time. Before you put your hands into the amplifier:
 - Pull the AC plug!
 - Wait 2 full minutes for the capacitors to discharge!
- Remove jewelry and rings from your hands and wrists, or anything that might dangle into the amplifier.
- If working on the equipment with the power on, keep one hand in your pocket, especially if you're near the power supply or power supply wires. This can prevent serious shocks.
- Build with a buddy nearby. If you've ignored all the previous advice, they can dial 911 or get you to the hospital.
- Read and understand the safety manuals of all the tools you use.

About Components

We reserve the right to make design/or component changes at any time without prior notification.

Recommended Solder

The kit must be assembled with 60/40 Rosin Core solder. The recommended diameter is 0.032 inches. Among many such sources of solder, I have used Radio Shack part number 64-009. It contains 8 oz. of solder, which is *much more* than you'll need to assemble this kit.

Warranty

With the exception of fuses, Akitika LLC will replace for free any parts of a correctly assembled product that fails within one year of the date of purchase when the equipment has been used in home stereo applications. It is the responsibility of the kit builder to install the replacement part(s). This warranty applies to the original purchaser only. It does not apply to units that have been physically or electrically abused, modified without prior factory authorization, or assembled with other than 60/40 Rosin Core solder. Akitika LLC's liability shall in no event exceed the cost paid to Akitika LLC for the kit.

Section 2: Kit Building Hints

Yes, I know you want to ignore this section and jump right into building the kit. However, please ***take a minute and read the advice.*** I've condensed it into bullets so that even you guys who are in a hurry can benefit.

- Stop any time you're feeling confused, tired, or anxious. Taking breaks at those strategic times will keep the build enjoyable and greatly enhance your chances of first-time success.
- A soup bowl is your friend. Before you build, carefully empty the parts for just that board into a broad, flat, light colored soup bowl. That makes it easy to find the parts, and keeps them from getting lost.
- Is something in this manual confusing? Does something look wrong? Send your questions by email to dan@akitika.com or dan@updatemydynaco.com. You'll help yourself and everyone who builds the kit.

Section 3: Removing the Old RCA Jacks

You could be asking why you need step-by-step instructions for this kit. You probably don't. As a result, these instructions may be a bit less detailed than those for other kits. Still, you may find valuable hints that will make the process easier.

Removing the Cover

1. Disconnect your SCA80(Q) from your system.
2. Pull your SCA80(Q)'s power cord out of the AC wall socket.
3. Pull any power cords that are plugged into your SCA80(Q)'s convenience outlets.
4. Remove the 4 screws (two on each side) that hold the cover in place. Note that some SCA80(Q)'s have a 5th screw in the center of the back-panel cover.
5. Remove the cover and set it aside in a safe place.

Gaining Access to the Old RCA Jacks

Remove the 4 screws that hold each (right and left) jack field in place. After that, it's fairly easy to pull the jack fields away from the back panel. For the SCA-80(Q) it's typically not necessary to loosen the back panel. However, you may find that it's easier to disassemble and reassemble things if you loosen the back panel from the chassis bottom.

To do this, remove four screws, two at each side of the back panel retaining brackets. At that point, you will be able to lift the back panel and tilt it back. Be careful not to put too much strain on the wires that run from the chassis to the back panel.

For all of the wires that connect to the RCA jacks, follow this procedure:

1. Remove 1 wire
2. Label each wire using a bit of masking tape and the jack number

Continue that procedure until all of the wires have been de-soldered and labeled. Now, remove the screws that hold the old jack fields in place, and remove the old jack fields.

Building the New Jack Fields

The following drawing shows how all the jacks are assembled onto the jack fields.

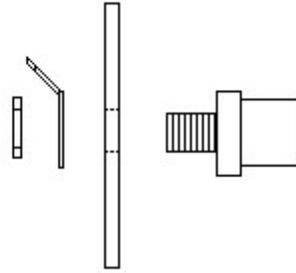


Figure 1-Assembling RCA jacks to the mounting PCB's

Right and Left Channels

Each kit is supplied with 12 RCA jacks:

- 6 red-insulator RCA jacks for the right channel
- 6 white-insulator RCA jacks for the left channel.

Installing the Jacks onto the mounting PCB's

If you have it, an 11/32" nut driver can make assembly much easier. Ideally, you'll have:

- Ground lugs pointing up
- Solder cup of the RCA center conductor as shown in Figure 2.
- The right channel looks the same, but it uses jacks with the RED insulators.



Figure 2-Jack installation, (left channel, white insulator jacks shown)

Ground Jumpers

Use the supplied 22 AWG solid black wire to make a ground jumper. Install it as shown in Figure 3.

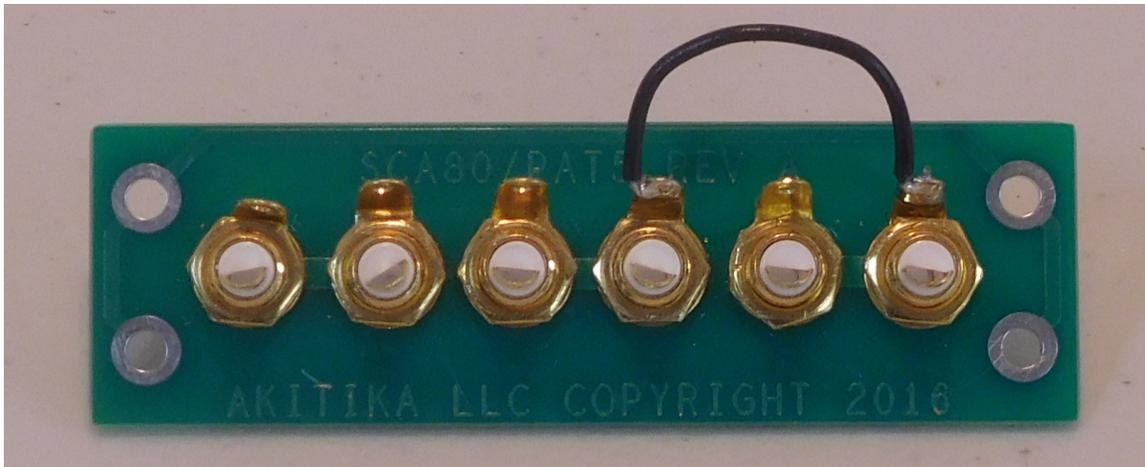


Figure 3-ground jumper installation

The result is that the 4 jacks on the right side of the jack field for the high-level inputs share a common ground. The 2 low level input jacks on the left of the jack field have a separate ground.

Reconnecting the grounds

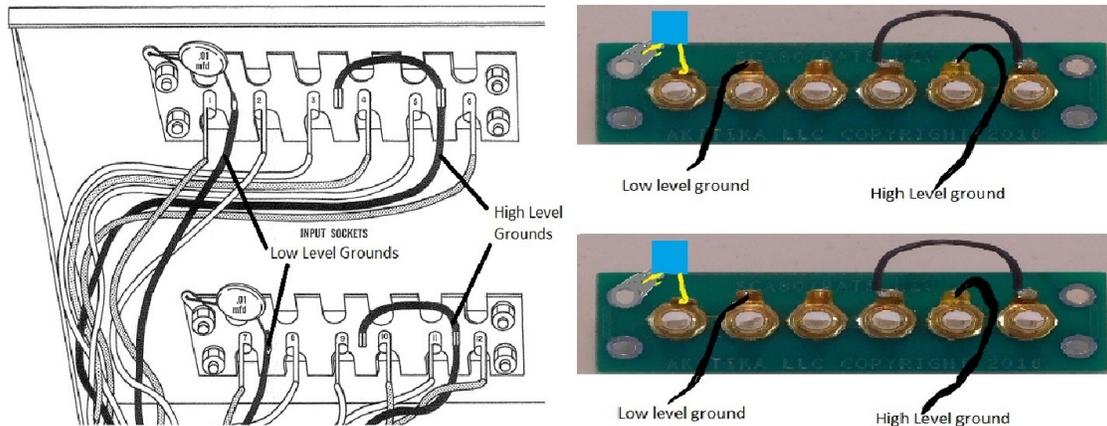


Figure 4-Grounding connections before (left) and after (right)

Capacitor to Chassis Grounds for the Phono/Special Inputs

You'll note that the kit also includes two 0.01 μF capacitors, and 2 number 6 solder lugs. Use the new 10 nF (10 nF=0.01 μF) capacitors and lugs to install capacitors to replace the old disc ceramic capacitors as shown in Figure 4.

Reconnect the center conductors

Reconnect each center conductor. Move them 1 at a time from the old jack field to the new jack field.

Reinstall the jack fields

Use the supplied 4-40x5/16" phillips head screws to re-attach the jack fields. Also use the supplied keps nuts, as they have captive lock-washers. That will assure good connections,

and much less swearing when re-installing the RCA jacks. Each jack field uses 4 screws and 4 keps-nuts.

Make sure to attach the #6 ground lug under the corner mounting screw as shown in Figure 4.

Re-assemble the SCA80(Q)

Install the four screws that hold the back panel to the chassis bottom if you have removed them. Reinstall the cover along with the 4 (or 5) screws that hold it in place. If you have lost some of the screws along the way, replacements can be purchased at the Updatemydynaco web site.

<https://www.updatemydynaco.com/>

<https://www.updatemydynaco.com/storeindex.html#5CS>