

Stock SVX Radio AUX Adaptor Installation and Modification

Recently, the cassette adaptor I had been using to listen to music in my SVX began making funny noises and cutting in and out, so I began wondering what it would take to add an AUX cable attachment to the stock radio. I have seen people do this mod before, but it was always accompanied by a feeler for creating a group buy or a lack of helpful information. Looking through many of these I worked out the process and added a female AUX adaptor stock radio. I accomplished this all for around \$5 and it took me about three or four hours, but using this guide it should take you much less time. This mod is completely reversible and does not harm the stock function of the cd player or the radio. Let's begin.

Links

First, some helpful links. These are the links that benefited me the most in this process. You can read through them to understand the process more. (or not, I don't really care.)

<http://www.itsayellow.com/girls/subaru.audio.html>

<https://www.instructables.com/id/Add-an-auxiliary-MP3Ipod-input-to-your-cars-st/>

<http://www.subaru-svx.net/forum/showthread.php?p=573485>

<http://ae64.com/SVXAudiolInstall.htm>

Tools needed

- Philips head screwdriver #2
- Set of dental picks (Harbor Freight 66836)
- Cardboard and/or masking tape
- Soldering iron
- Rosin core solder
- Towel or blanket
- Multimeter
- Wire strippers
- Lighter or heat gun
- Heat Shrink
- Electrical tape

Parts Needed

- Female or male AUX jack socket (\$1 from dollar tree)
- Male to male AUX jack cable (\$1 from dollar tree)
- Speaker wire, thinner the better around 18 AWG
- Blank CD-R

Step 1: Remove the radio from the car

The instructions on SVXdc's website are fantastic (<http://ae64.com/SVXAudiolInstall.htm>). Follow these to the letter, just skip the part where he installs a new radio, unless you really want to. Just a note, the front flip face cover is extremely delicate, be careful not to pull or apply pressure it when removing the radio.

Step 2: Remove the CD player from the cage.

- a. Two Philips head screws attach the cd player to the cage. These are old Japanese screws so they don't like being twisted without proper pressure. Be careful or the head will strip easily.
- b. Slide off the illumination clip and disconnect the round din connector that goes to the radio top.
- c. Slide the CD player out the front. Carefully apply pressure to the front flip cover to move around it.

Step 3: Cracking the case

- a. Several tabs secure the face to the metal housing. Carefully work your way around with the dental picks to remove the face.
- b. The top is secured by several metal clips. Pry up slowly on each of these being careful not to bend the metal. Should pop off relatively easily.

Step 4: remove the CD player internals mechanisms.

Note: this step can be skipped if you feel comfortable with soldering the new wires on close to the metal housing. I found it easier to remove the internal parts.

- a. Remove the 8 screws holding the top PCB to the housing. There are two hidden screws at the back corners hidden down inside the holes at each corner. Keep track of what screw went where. Some are machine thread, and some are self-tapping.
- b. Lift internal components out of metal housing and place housing aside.

Step 5: Prep the AUX cord for transplant



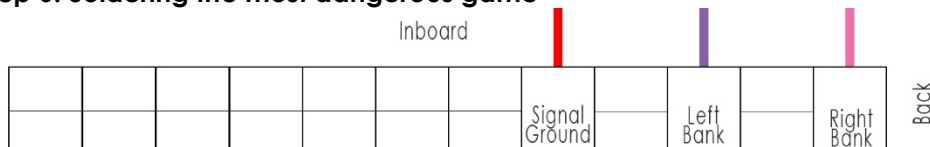
Note: You have two options here, you can hardwire a male aux cable to the back of your radio, or you can wire a female connector to the back and run a two ended cable to your media player/ phone. I elected to wire in a female connector, so I can easily replace the cable or hide it from sight. For the purposes of this write up, I will be detailing my method where I used a cheap cable splitter for my hardware source.

a. Cut open your cable and figure out which poles on the back of the socket go to which portion of the plug. You will have left bank, right bank, and signal ground. Make a note of which is which. Each socket will have slightly different poles on the back, so you have to figure this part out for yourself by testing resistance with a multimeter. If the meter reads no resistance between the two points, you have your matching pole.

b. Once you have figured out the diagram of the poles on your socket, solder your speaker wires to the poles. Move fast, the soldering these parts for too long tends to melt the plastic in and around the socket. Make sure to make all three wires the same length, and measure for where you want your jack to be placed. In my case, I put the wires at about two feet long.

c. Test resistance again after soldering between the end of your male to male cable and the speaker wire ends. If resistance reads zero, you are good to go.

Step 6: Soldering the most dangerous game



Note: This is the most critical part of the job. If you have never soldering anything before, don't make this your first project.

a. Locate the solder points for the 13 pin din connector. With the front of the cd player internals facing you it should be on the upper right side.

b. Turn the unit so the solder points are closest to you with the back of the unit facing your right.

c. Using the diagram above, locate the points you must solder to. This is a critical step.

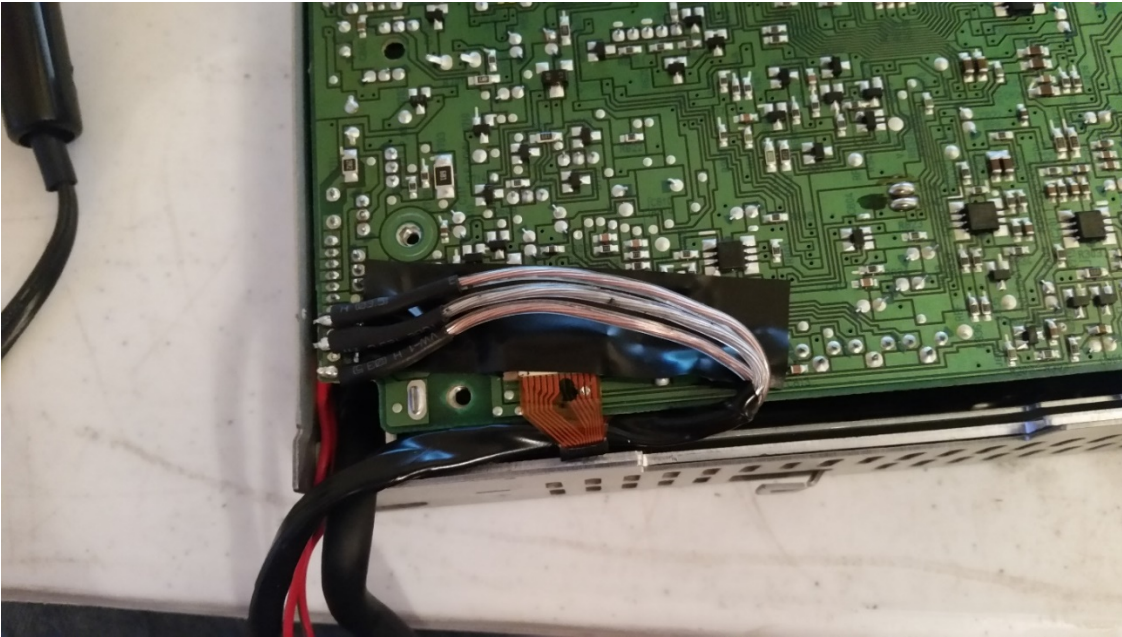
d. Add a bit of solder to both the board and the wires the bare pigtails. Align the wires so that they go inboard not outboard or they will not fit the case. Slide on a bit of heat shrink before the next step.

e. Solder each wire to its corresponding terminal on the CD PCB making sure not to bridge solder between any two terminals. If any solder gets close you can use a razor blade to slowly clearance the solder point.

f. Slide the heat shrink down and use your heat source (lighter, heat gun) to shrink it down as close as possible to the solder joint.

g. Slide a piece of electrical tape under the wires and arrange them flat as shown in the picture.

h. Using the multimeter again, check each solder point on the PCB for continuity to the end of your AUX cable. If it all checks out, you are ready to re-assemble.



Step 7: Closing the case

- a. Wrap your wires together with electrical tape from end to end.
- b. Install the internal components back into the case and screw back together.
- c. Pull up the ribbon cable at the rear and snake your wire under this and out the hole in the back along with the other wires and connectors.
- d. Snap the top cover back on. Make sure your wires are placed in such a way this cover can snap on without modification. If not, re-position your wires.
- e. Snap on the front fascia to the unit.

Step 8: The chilling Chitons phrase.

- a. installation is the reverse of disassembly.

Step 9: The sound of silence

- a. Create a silent audio file as long as the capacity of your CDR. I made my file using audacity and exported it as an MP3. I will post a link to my file for those not able to make their own.

Step 10: How to use the system.

- a. Insert your silent audio cd and play it.
- b. Plug in your audio device to the AUX cord. Make sure to turn the volume all the way up on your device.
- c. Enjoy a slightly more modern stereo in your funky old car.