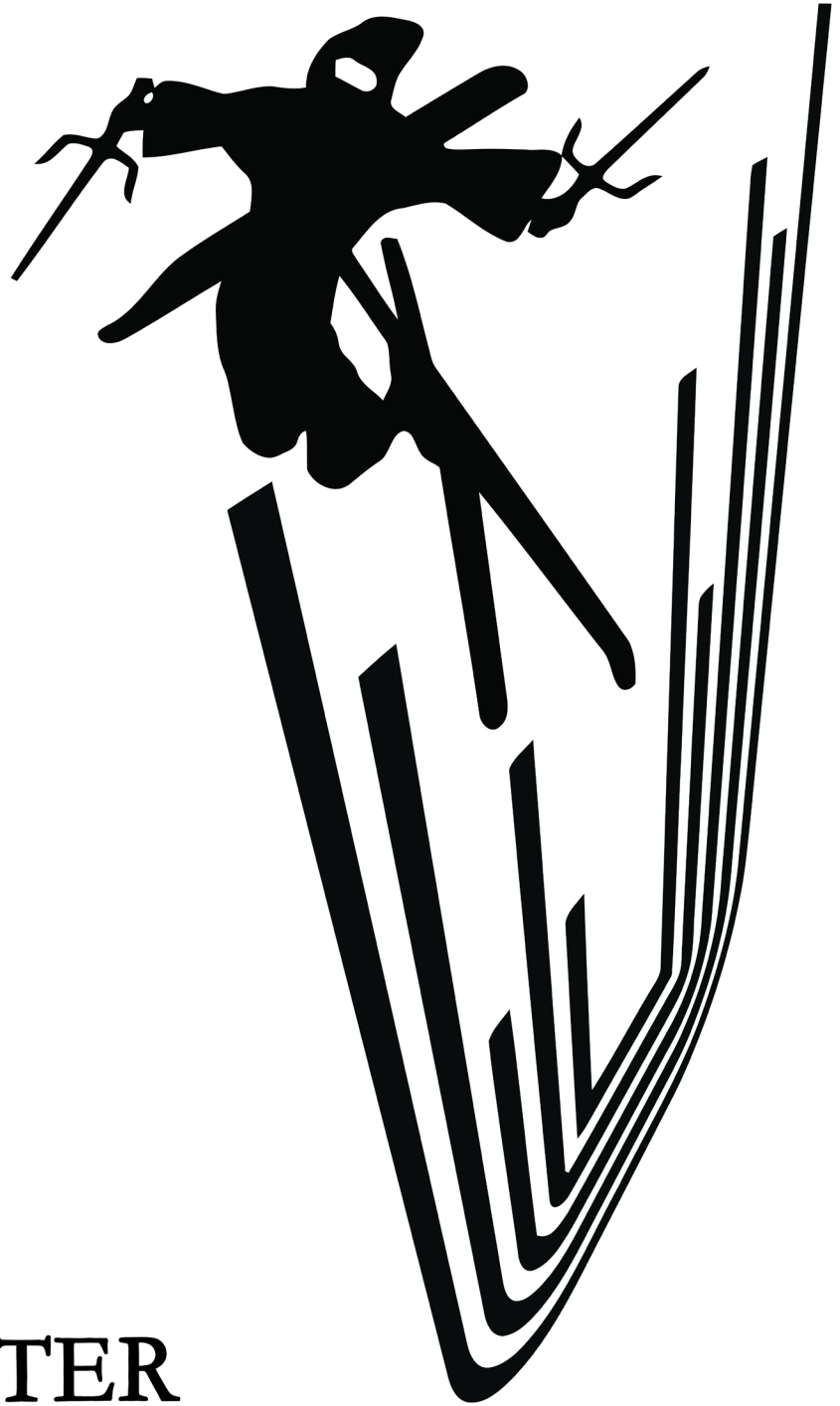


SKIING NINJA

Wellington, Colorado | www.skiingninja.com

Emergency Tech Support | 720.335.2261

Install
Guide



Reference 3
NINJA MASTER

Tools Required...

>> Soldering Iron (40watt recommended)

>> Drill with #2 Phillips bit or a #2 Phillips screwdriver.

>> Drill with 3mm or 1/8" hex (Allen) bit (size depends on time of production).

>> A small right angle driver such as one of the Skil® models or a flexible drill extension will greatly aid in assembly and disassembly.

>> Wire cutters

>> Small knife or x-acto knife

>> *Optional:*

> Crimpers
(if 'copper connectors' option was chosen)

>> *Optional:*

> Heat Gun

>> *Optional:*

> Needle nose vice grip pliers. You can substitute a crescent wrench or adjustable standard pliers.

(if replacing the binding posts)

>> *Optional:*

> Hot glue or silicone caulking

>> *Optional:*

> Blue Loctite thread lock

1. Set up a clean spot with good lighting and a soft blanket.

2. Unscrew one driver at a time and desolder the wires. Repeat for all drivers. Use gravity to help in driver removal. Try laying the speaker on its side to avoid any damage from a swinging driver as you remove that last screw and forget to hold the driver securely. 📺

(!) Having difficulty removing a driver? **STOP** and call Skiing Ninja for assistance.

3. Remove and felt-like material that covers the crossover.

Unscrew the crossover network.

4. Cut the wires close to the network board.

Remove the network.

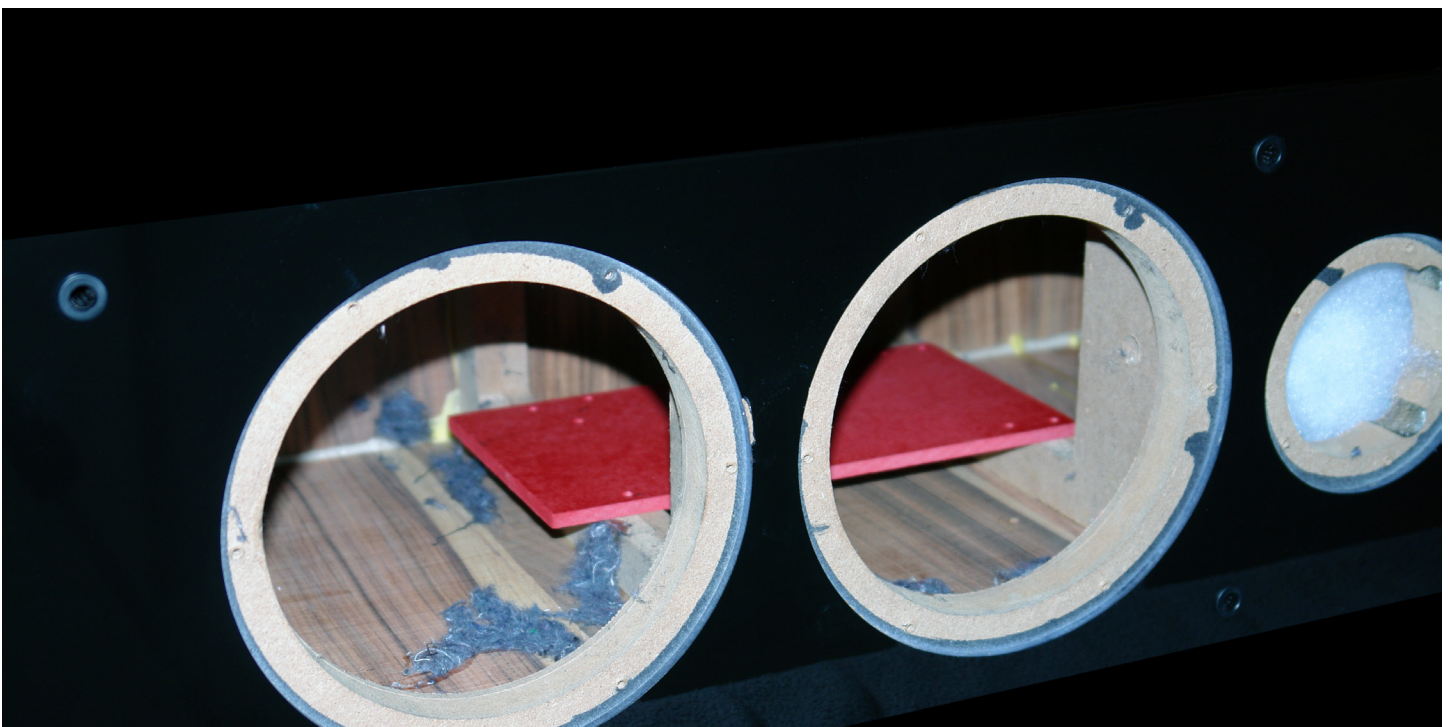
Pull all the excess wiring out and make a rather unfashionable necklace with it. Go ahead. We'll wait.

Done? OK, if you are replacing the binding posts, remove them now by unscrewing the nut inside the cabinet with the pliers while holding the post from the outside.

If you are not removing the binding posts, leave them as-is with the long wires still attached.

5. Use your knife to bore out the hole leading from the main cabinet chamber to the tweeter chamber. You don't need to enlarge it; just remove the existing adhesive (likely hot glue).

(!) If you are installing our Cabinet Upgrade Kit, **STOP** and refer to that install guide now.



6. The new network will be placed differently than stock.

As shown in the photo below, this unpopulated crossover network board is sitting vertically over two braces. You should locate it near the back of the cabinet but without touching the rear wall bracing. Approximately one inch from the back is fine.

There are two holes at the very corners of the board on one end and two holes up and inch or so from the other end. These are your mounting points.

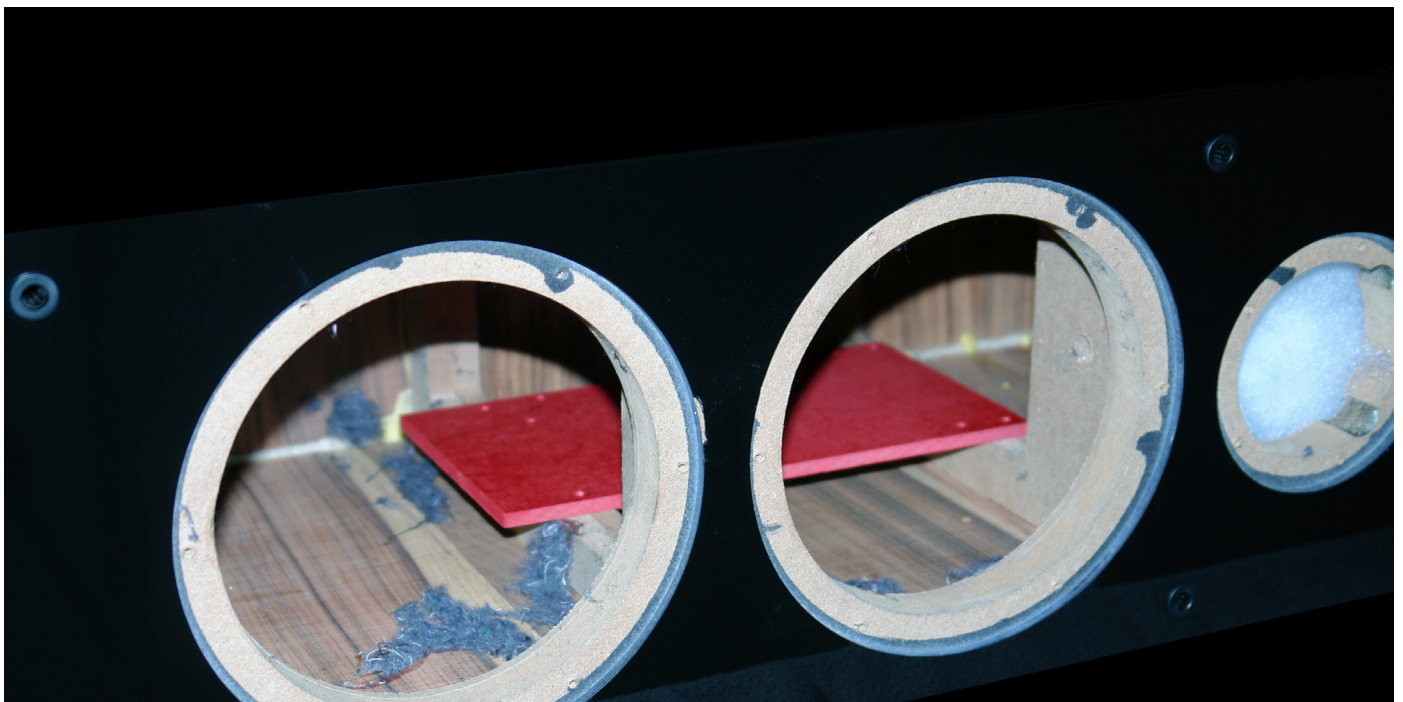
Place the network with the two corner holes at the top and the other end will secure to the brace below (between the two woofers).

Be sure a black stand off is under each mounting hole of the network. You can super glue, hot glue, Liquid Nails[®], or any other good adhesive to make placement easier.

Note that most adhesives won't hold strongly to the material the stand offs are made from so be careful when placing the network.

Secure the whole thing with the SPAX screws supplied. No pilot hole is required.

If you can't reach one of the screw holes, that is OK - just ensure the network is secure and that a stand off is under each hole so the board cannot touch the bracing.



7. Your new networks arrive with the wires for each driver plus binding posts bundled for less confusion (there are lots of wires!). We recommend leaving the wires bundled until after you have secured the network.

When you do cut the nylon tie holding the bundle, be careful when straightening the wires. Hold the wire at the connection point at the board and straighten with your other hand. This ensures no undue pressure is placed on the connection.

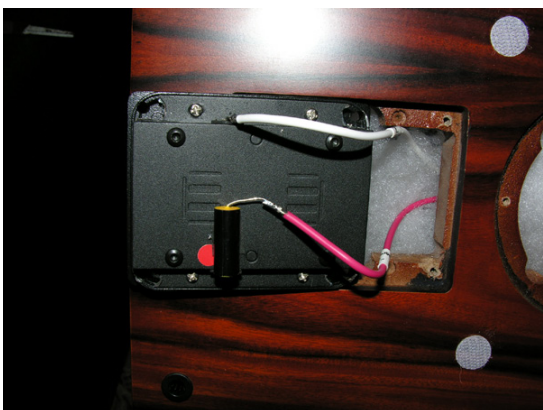
Now we are ready to route the wires. Pay close attention to the labels on the wires! Do not expect the colors to correspond with standard electrical polarity coloring.

If you are replacing the binding posts, cut the tie from the WIN+, WIN-, TIN+, and TIN- bundle and run those wires out the holes in the back where the stock posts used to be. TIN+ goes through the top left hole as looking from the front of the speaker. TIN- goes through the top right hole. The WIN+ goes through the bottom left hole and WIN- goes through the bottom right hole.

If you are NOT replacing the binding posts, step #9 will have instructions for you. Continue on with #8 first however.

8. Remove the tie from and run the Super T+, Super T-, Vifa T+, and Vifa T- wires from the network through the small hole between the main and tweeter enclosures. Solder these wires and reinstall the two tweeters. Positive is always the larger tab or the tab with a red dot along side.

NOTE! Remove the (small black cylinder) capacitor from the super tweeter's positive tab before soldering the new wires.



Screw in the tweeters.

9. **If you are replacing the binding posts**, refer to that guide now. When complete, go on to step #10.

If you are NOT replacing the binding posts, you have two options:

1) Remove and desolder the wires from the stock binding posts. Solder the new wires to the binding posts and let them cool for at least 5 minutes. Tug on the wires to ensure a good bond. A soldering iron of at least 40watts is needed to properly bond the wire to the post.

Insert one post into the cabinet and slide the nut you placed on the wire earlier up to binding post.

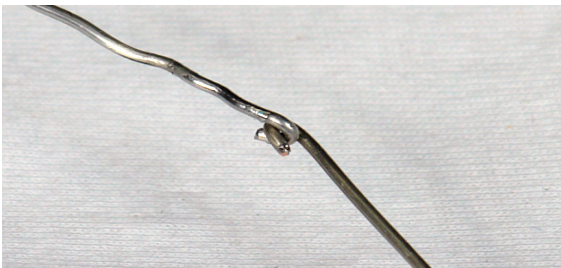
If you have thread lock, place some on the threads closest to the cabinet wall and screw down the nut with your hand until snug.

Using your pliers, tighten the nut on the inside while holding the post on the outside. Repeat for the other three posts.

OR

2) Strip the ends of the wires running from the stock binding posts. Run a piece of heat shrink over one of the wires. Splice in each wire with the corresponding wire from the network. Finish off with the heat gun.

(!) TIP: Make a small hook on the end of each wire using a pair of needle nose pliers and join. This makes for a much easier solder and its conductivity is superior to most other splicing methods.



10. Finally, wire up the woofers. Same method as the other drivers. You'll have wires labeled Top W+ and Top W-; those wires go to the woofer closest to the tweeters.

Finish off the lower woofer with the Bottom W+ and Bottom W- wires.

11. If you did not purchase the Cabinet Upgrade kit, reinstall any filling/dampening you removed from the cabinet.

12. Hook up the speaker to ensure everything has been wired correctly. If anything sounds 'off' to you, give us a call or send an email.

13. Your new network will take at least 50 hours to break in. Depending on the bypass capacitors ordered, the break in period can be as long as 500 hours(!).

14. When you first play the new speakers, they will likely initially sound only so-so. You might experience graininess and a closed sounding presentation. Not to worry! With break in, the speaker will come alive... It will open up to a huge soundstage without a hint of grain. Transparency and resolution will increase dramatically.

You will experience a sense of ease and cleanliness in the playback that you never thought possible.

Congratulations - You are now the proud owner of a pair of loudspeakers that can go head to head with some very expensive and well-performing competition.

Welcome to Audio Nirvana by Skiing Ninja...

