



C4 ASSEMBLY INSTRUCTIONS



Designed and manufactured in Australia by The Loudspeaker Kit (ABN 39 118 869 962)
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Congratulations on the purchase of your new loudspeaker kit. After following these simple instructions, you'll enjoy high performance loudspeakers in no time!

Tools required:

- Philips head screwdriver
- PVA woodworking glue
- Damp cloth
- Sand paper (approx 180 grit)

Step 1 – Preparation

Lay the contents of the box out and check you have everything you need to complete the kit (see parts list on back page). Find a suitable work surface and make sure it won't be ruined if you spill some glue. If covering the work surface, avoid using newspaper as newsprint may rub off onto your kit.



Before commencing construction, first do a dry fit of the panels to ensure you understand the assembly process. The parts should fit together snugly without the use of excessive force. Be careful when pulling the box apart to ensure you don't damage the edges of the panels.

Avoid the temptation to commence without first reading through the instructions. It's best to be prepared for upcoming steps.

Lightly sand any areas where there are little burs, which are a result of the CNC machining process. Light sanding ensures the panels fit together well.

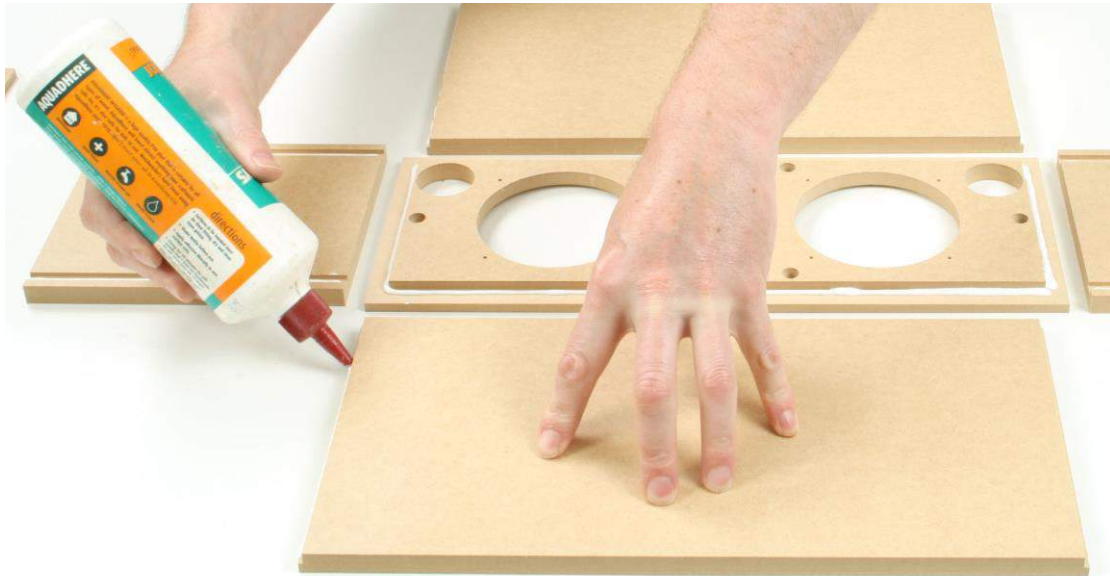
Step 2 - Base and Side Panels

The front and rear panels have circular cut outs for drivers, port and terminals.



Lay out the side panels as shown. Apply glue to the trench around the perimeter of the front baffle. Apply glue also to the trench of the side panels as shown below.





Apply glue to the edge of the top and bottom panels as shown above. Now assemble the side and top panels, aligning the rail on the edge of the top with the trench in the side panel, as shown below.



Repeat this with the other two panels.

The smaller side panel goes on last.



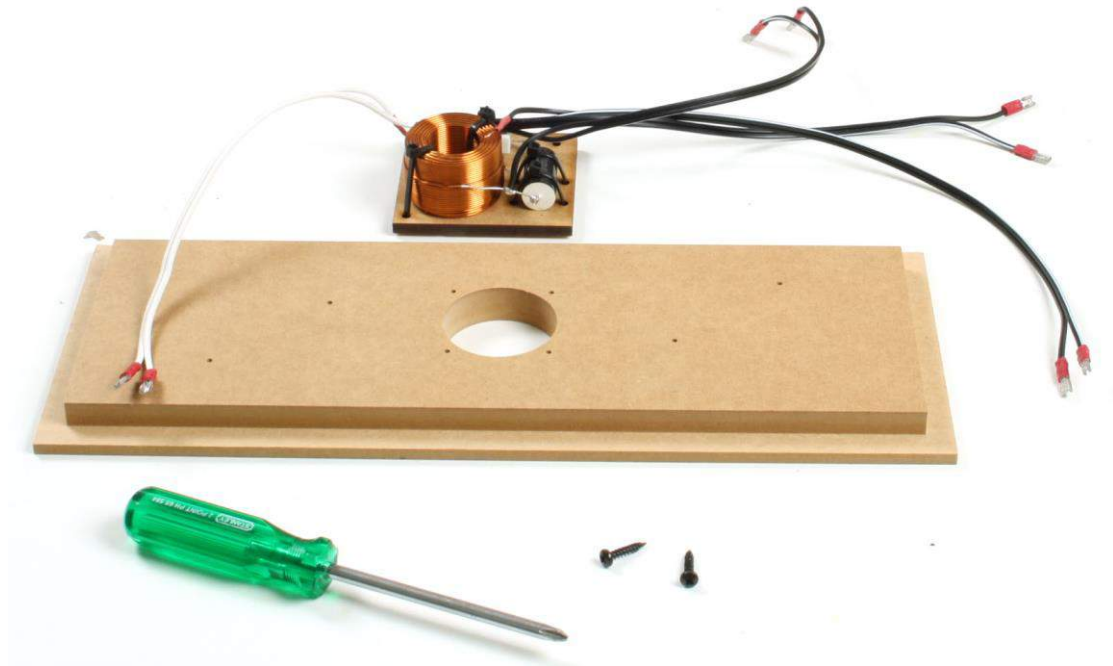
Before proceeding, check that:

- there is adequate glue visible along each join
- the panels align correctly

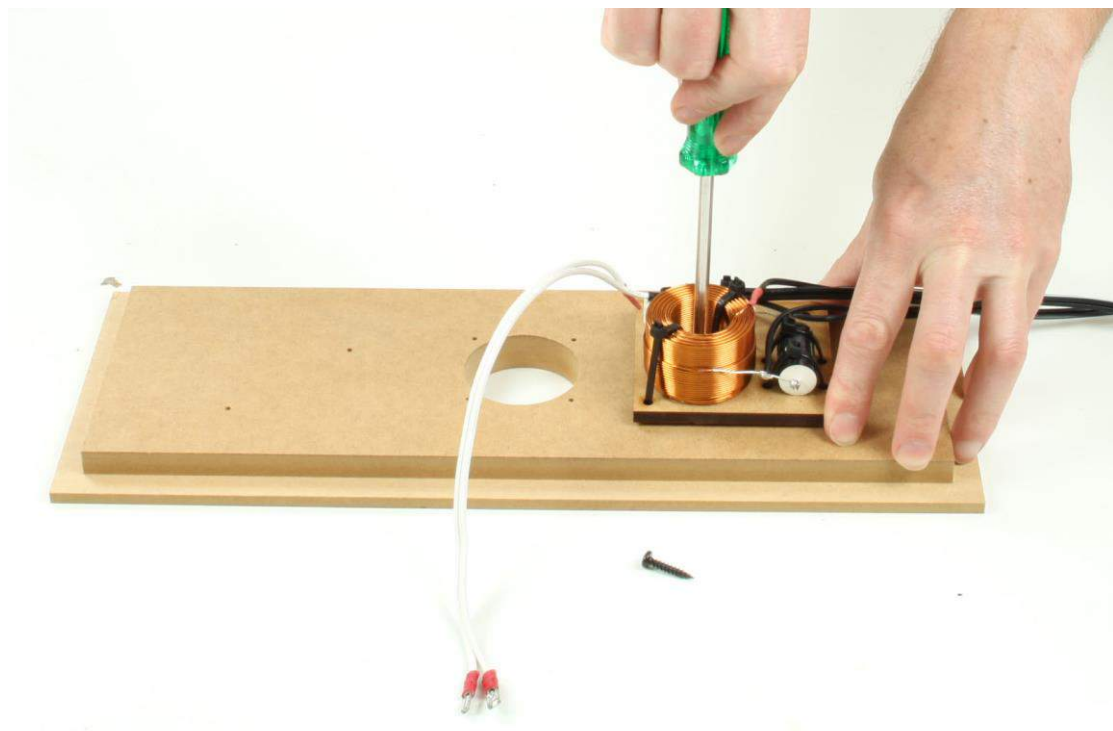
Wipe off any excess glue with a damp rag.



Step 3 — Fix crossover on back panel



Screw on the crossover board to the rear panel. It can be done after assembling the box but it's easier to do it now.



Two sets of pilot holes are provided – it doesn't matter which you choose. The orientation is also not important.

Apply glue to the trench around the perimeter of the back panel.



Avoid the temptation to use more glue than you see here – you will simply waste glue and spend more time cleaning up.

Press the back panel into place ensuring that each corner aligns. Wipe off excess glue.

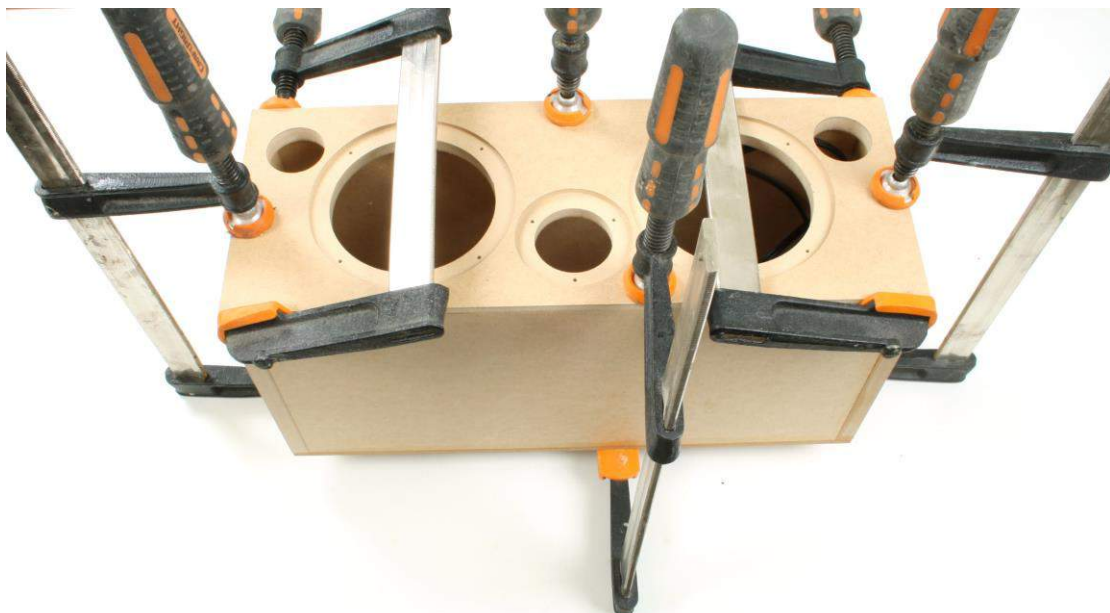


Step 4 — Clamping

One of the benefits of this kit is that neither clamping nor biscuit joints are required, making assembly simpler. However, one may optionally choose to use clamping. Clamping offer the benefit of slightly improved alignment of panels and potentially better joints. This is more important when using a painted finish. Otherwise, if using any kind of veneer, a brick or other weight may be used.

We recommend leaving the box clamped or weighted with a brick overnight. Refer to the instructions of the glue you are using.

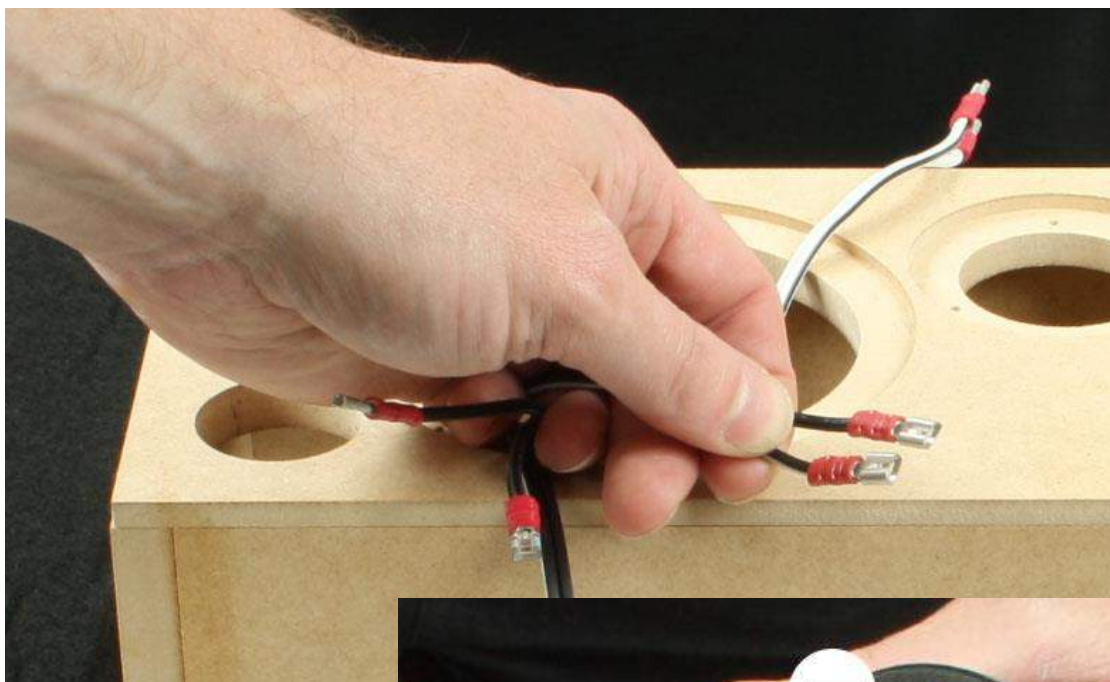
Brick on top:



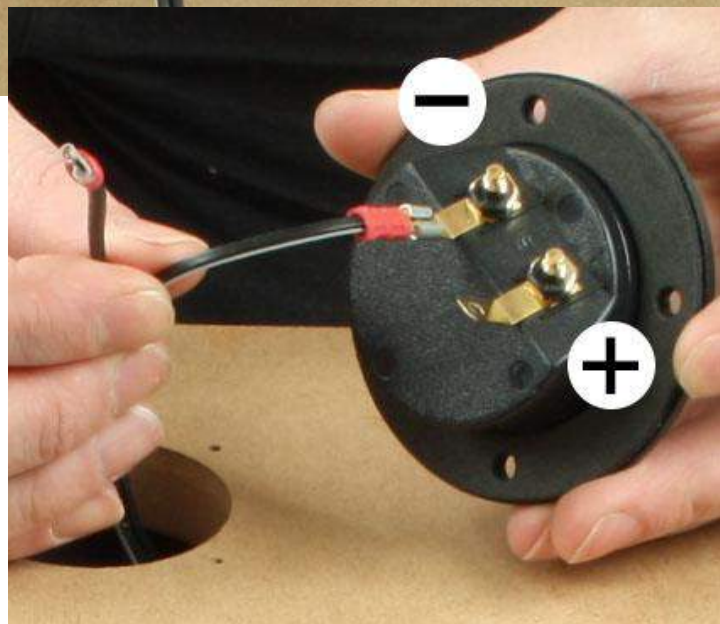
Before clamping, make sure each edge is carefully aligned - a little care here will ensure the best result. Once you have clamped the box, ensure you wipe off any excess glue that has been squeezed out. Once the glue has dried remove the clamps. To obtain a smooth finish, lightly sand the edges of the panels with a fine grade sandpaper, about 180 grit works best. If you plan to paint or varnish the box a little extra effort now to remove all traces of glue and rough edges will be well worth it.

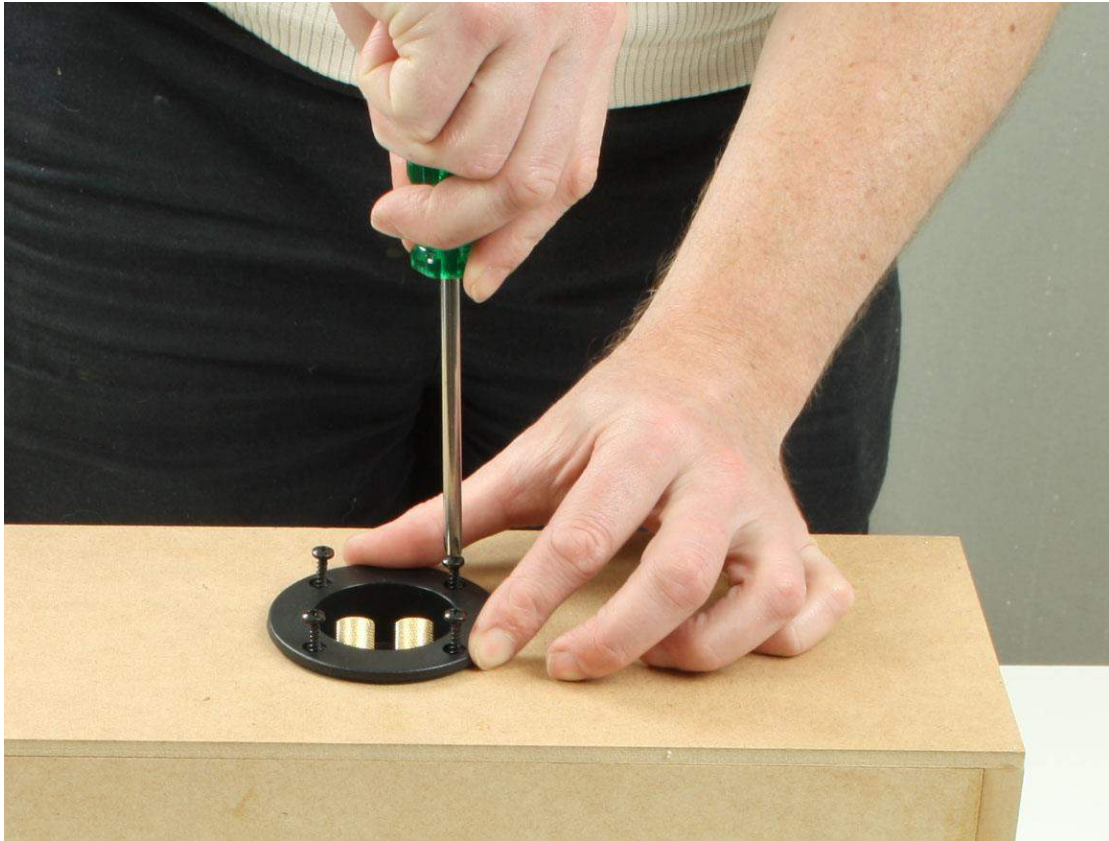
Step 5 – Install terminals

Identify the pair of wires to be connected to the input terminals.

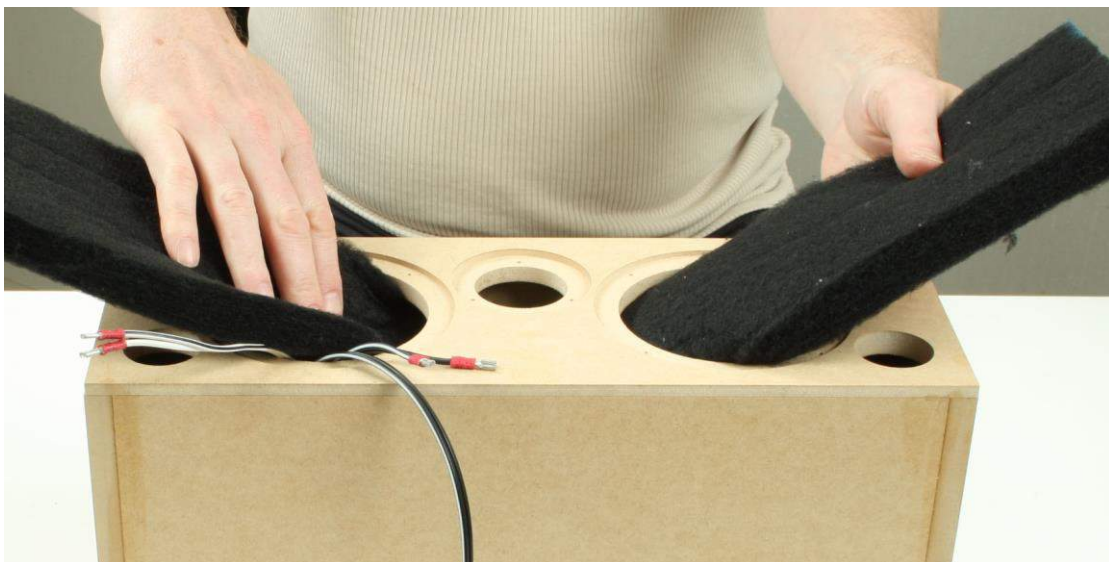


The cables are black and unlike all the others, the spades are both the same size. The negative cable has a white stripe. Feed both through the input terminal hole in the rear of the box.

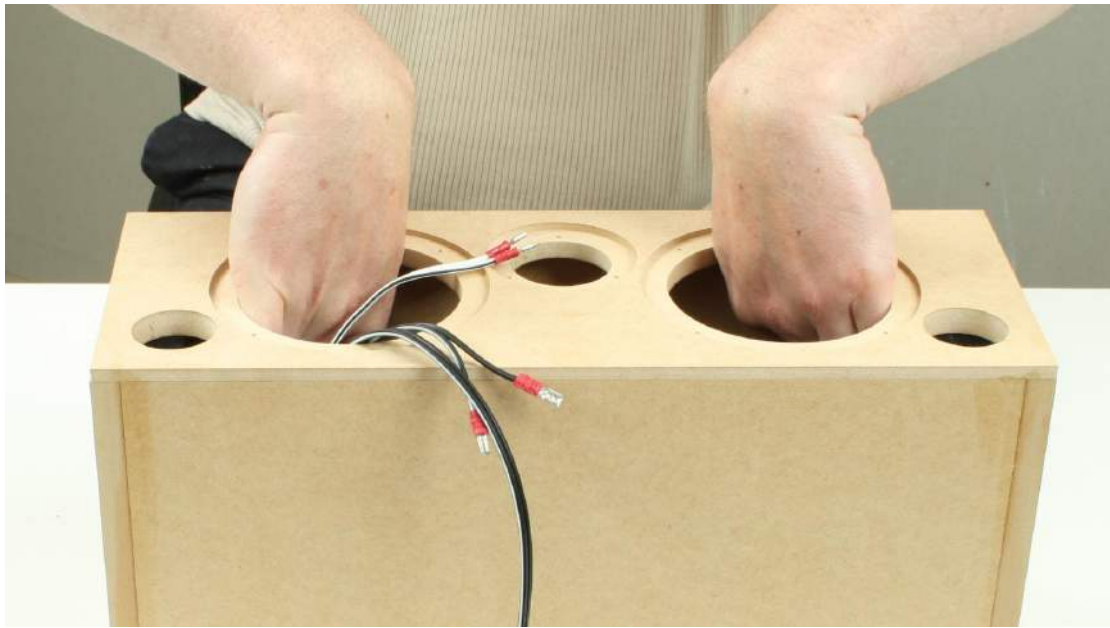




Now place the box so that the front baffle is facing up again. Insert the black acoustic lining material.



Insert so that the lines the back and side walls.



Above: Damping is being pressed into place.

Step 6 – install the ports

Now press the ports into place. The fit is quite firm so there is no need to glue them in place.



Step 7 – install the tweeter

The tweeter terminals are easy to find as they are the only pair of white cables. The spade connectors are different sizes to ensure that the tweeter polarity is correct.



Connect the pair of white cables to the tweeter terminals.



If you find they are too tight, avoid undue force that could damage the tweeter terminals. Instead, use a small flat head screw driver to gently prize open the spade connector. This is shown over the page.

The spade connectors should be firm when the cables are pushed onto the driver terminals, but not to the extent that damage is likely.



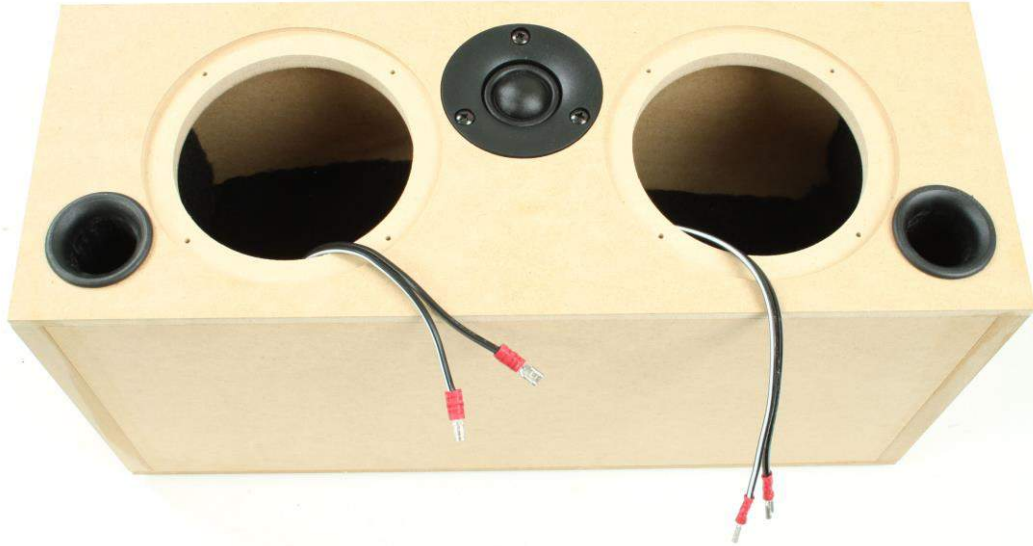
Above: here we are carefully prizing open the spade connector.

Use care when installing screws. We recommend screwing by hand rather than using a powered driver of any kind. These devices can cause over-tightening or the tool can slip off and puncture a driver with the tip. The safest method is with a Phillips head screwdriver with one hand bracing the screwdriver.



Step 8 – install the woofers

The cables that remain are for the woofers. Pull the longer cable out the hole that is furthest from the crossover board. Both woofers share the same crossover network, so it doesn't matter which cable goes to which woofer, except that one pair of cables is longer.



Push spade terminals onto each woofer. The cable with the white stripe and smaller spade goes onto the negative driver terminal.



Lower the woofer gently into the hole and angle the driver so that the terminals are clear of the cut out on the way down.



Fix the woofers into place. Note how the screw driver is braced with the other hand.



Wire up the speaker to your amplifier and you're ready to rock!



Parts List:

- 2 x 4½" Woofers
- 1 x 22mm Tweeters
- 1 x Crossover Networks
- 1 x Round input Terminal
- 6 x Panels of CNC machined MDF featuring our unique panel locking system
- 17 x Screws
- 2 x 25mm Tuning Ports
- 1 x Piece of Acoustic Lining

SPECIFICATIONS:

Woofer Size:	4½"
Woofer Cone:	Paper
Tweeter:	Soft dome
Frequency	Response: 65Hz (-3dB) to 20Khz, +/- 2dB
Recommended Amplifier:	50-100W RMS
Crossover:	1st order @ 2.7Khz
Sensitivity:	86 dB
Power Handling:	50W RMS, 100W peak
Impedance:	Nominal 8 ohm (minimum 6.6 ohm)
Dimensions:	235mm high x 145mm wide x 167mm deep.