

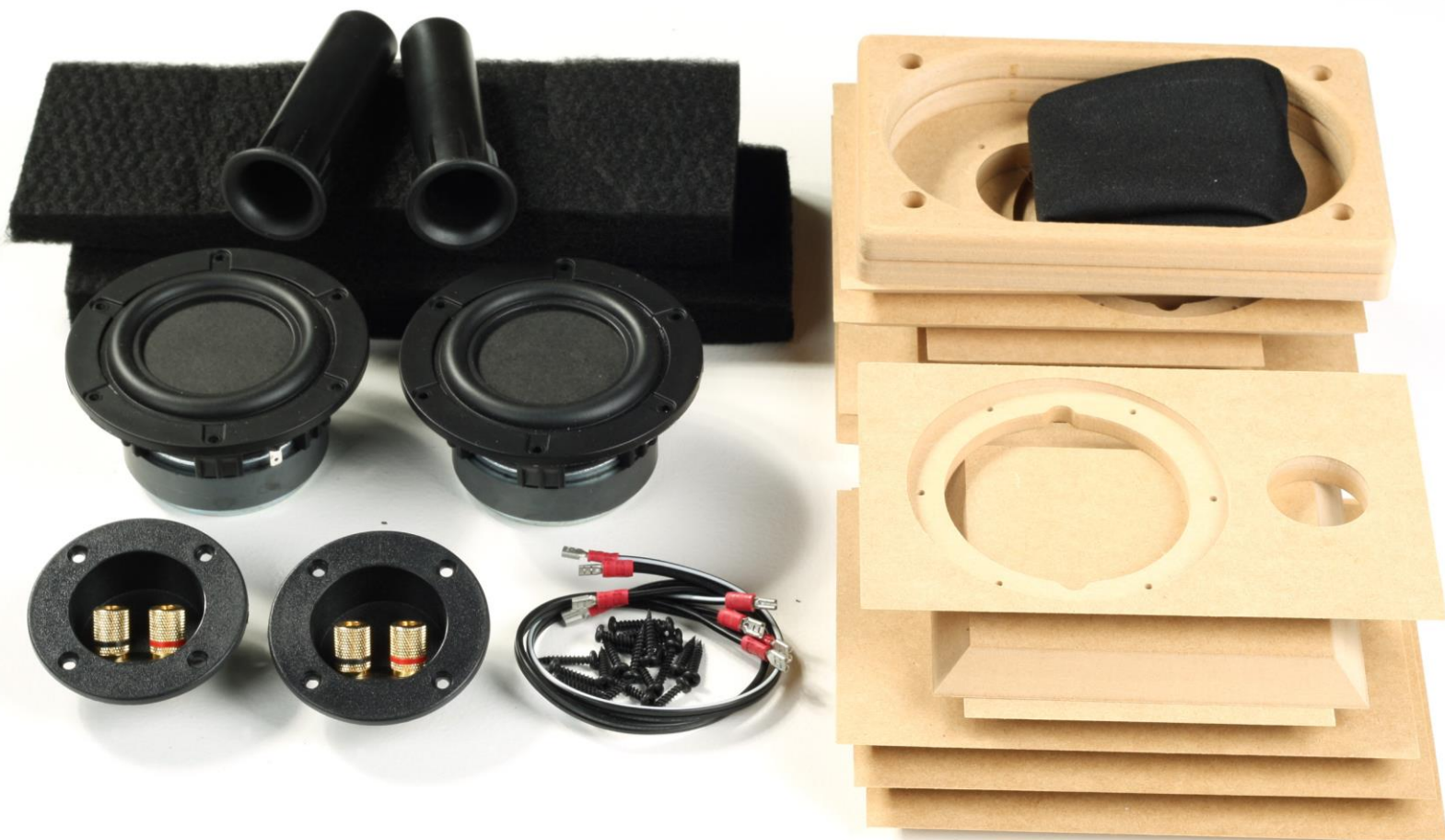


M3 Assembly Instructions



Designed and manufactured in Australia by The Loudspeaker Kit
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You will need:

- Philips head screwdriver
- Woodworking glue
- Damp cloth
- Good quality masking tape
- Ratchet tie down strap (optional)
- Brick or other weight (optional)

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. Baking paper is a good choice.

Easier assembly with miters

LSK kits now employ miter construction, which offers greater ease of assembly with much less sanding. Butt joints are eliminated, avoiding visible hairline cracks that often appear after painting. Miter construction puts the join right on the edge where it is less visible. Most constructors avoid using miters due to the difficulty in getting the angles correct. Our manufacturing process provides a level of accuracy that is very difficult to achieve in a home workshop.

Masking tape

We recommend avoiding cheap masking tape, which tends to break when applied under tension. If you aren't using the weight and ratchet strap, you are relying on the masking tape along to apply pressure to the join as the glue sets.

Lay out the rear, side, top and bottom panels as shown with miters facing the work surface. Align carefully and arrange so that all panels are touching at the edges, with no gaps.



Tape all four joints where the rear panel meets the side and top panels. It's a good idea to avoid covering the corners so that you can ensure all panels remain aligned during taping.



Lift the panels using the hole for the terminals, turning them over to the other side so the miters are exposed.



Apply a bead of wood working glue to the bottom of the miter joint.



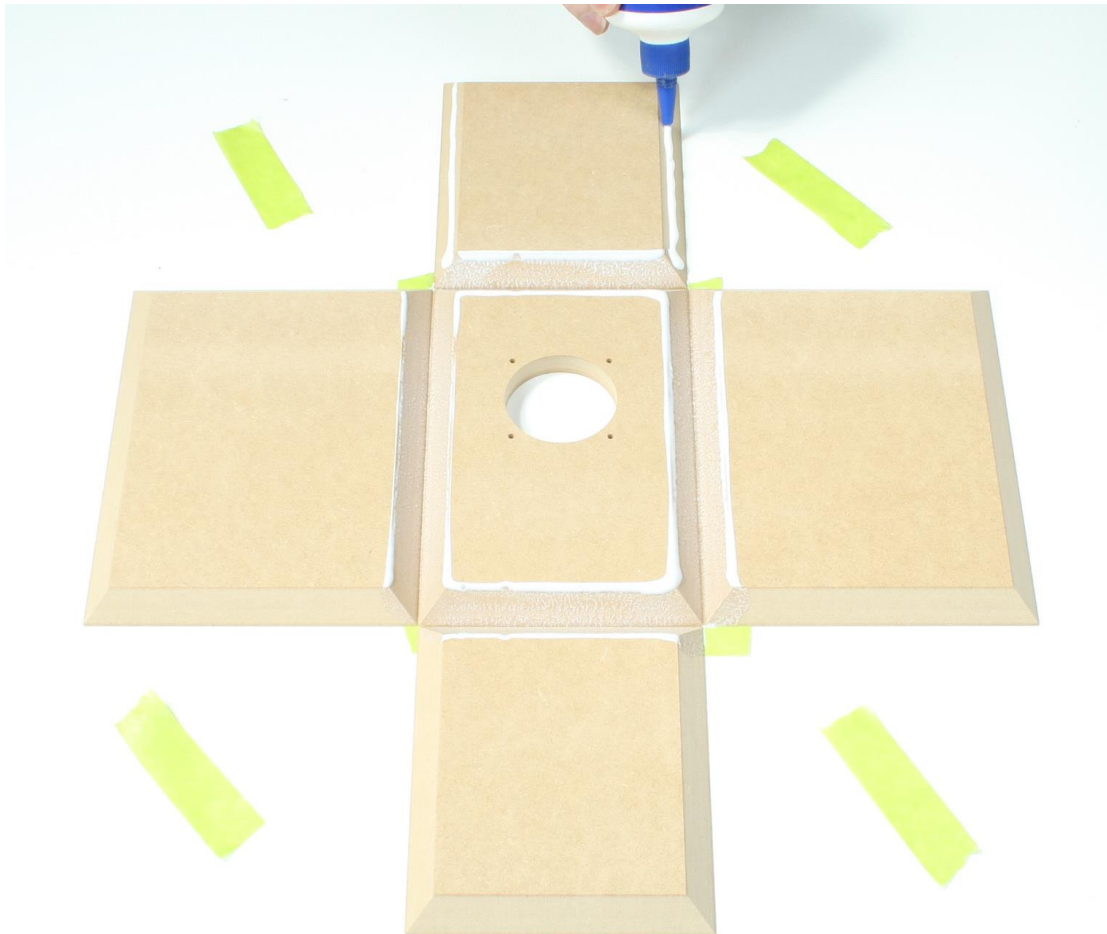
Apply a second bead. Since the glue will tend to run down towards the bottom, it's a good idea to apply the glue above half way up to ensure even coverage.



Confirm the amount of glue applied by folding up the first panel. The glue should cover the entire surface in contact. It's preferable to see the glue ooze beyond the join slightly. This provides visual feedback on whether the glue has set. Once set, PVA glue becomes transparent.



Apply a single larger bead of glue to the remaining sides on the top and bottom panels.



Lift up the panels and hold together with pressure, securing them in position with masking tape. Apply the masking tape with firm pressure so that the panels are held together with moderate pressure.



Wipe off any excess glue with a damp cloth.



Apply a thick glue bead around the internal surfaces of the miters. You may prefer a zig zag pattern with a thinner bead. It's a good idea to remove the panel and confirm even coverage.



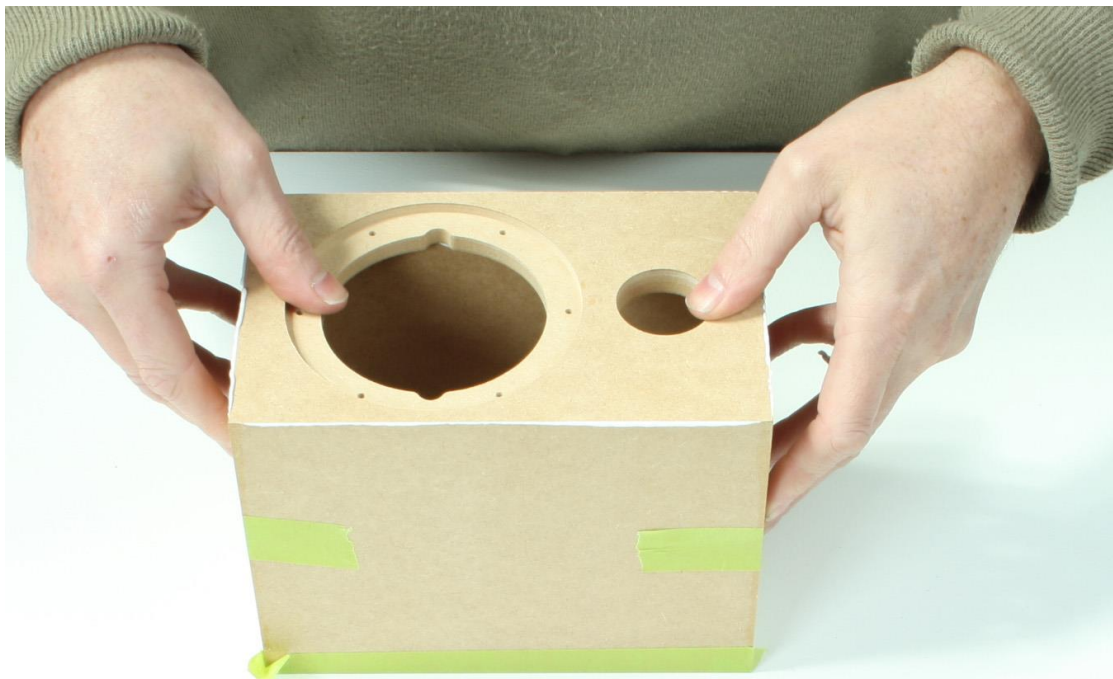
Note: the orientation of the front baffle is determined in the next step. Before gluing the baffle in place, please check the instructions carefully.



Baffle orientation

The orientation of the front baffle relative to the terminals on the back is important. The port and speaker terminals are both located towards the bottom of the enclosure.

Press the front baffle into place. The glue should ooze out around all joints.



Wipe off any excess glue at the joint. Then apply tape with tension to firmly hold the baffle in place. Tape should first be applied perpendicular to the join.

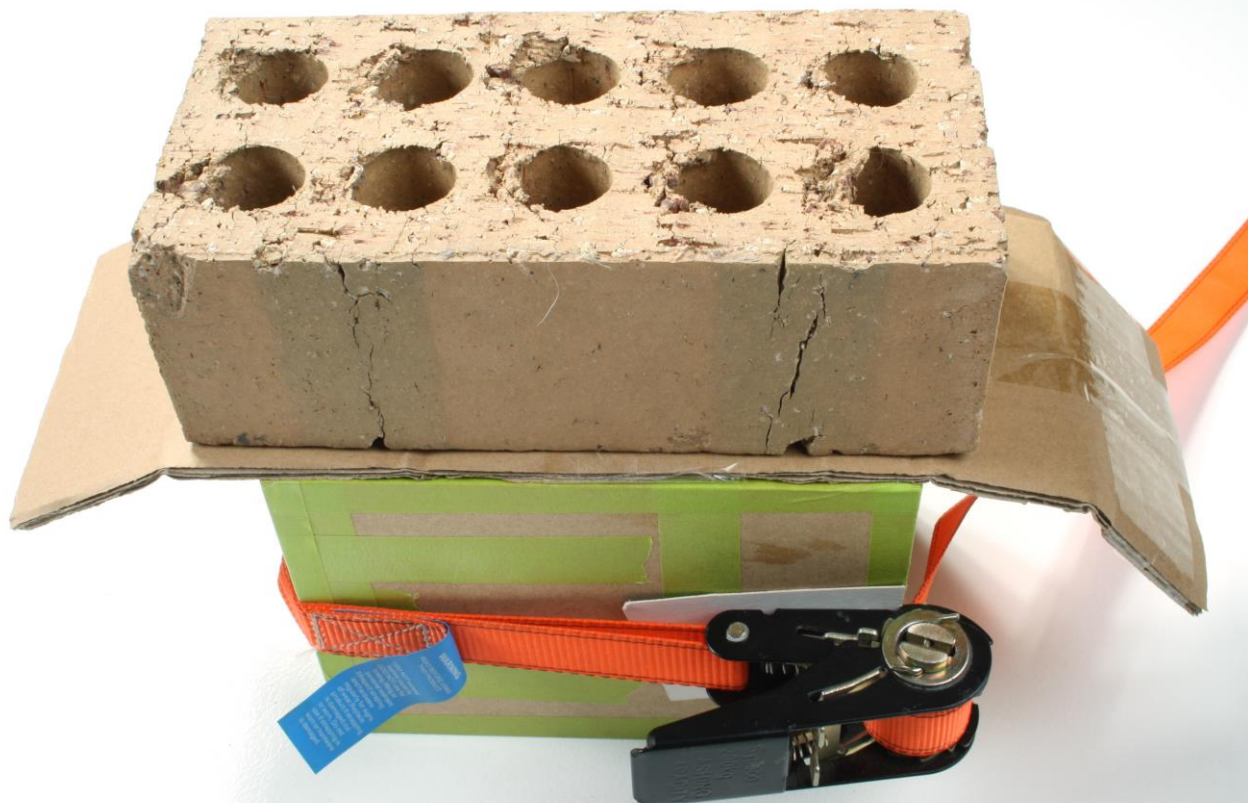


All joints should be covered. If pressure is applied when taping, no further clamping is required.

Clamping could be used but we advise caution since incorrect techniques can cause damage or force the panels apart.

An alternative option is to use a ratchet tie down to apply pressure to the top/bottom/sides. Care is required to avoid undue pressure and we recommend protecting the MDF with a cardboard strip where metal parts come into contact with the enclosure.

Here we've also used a brick to apply extra pressure on the top. Note also the use of cardboard as protection.





Drying time

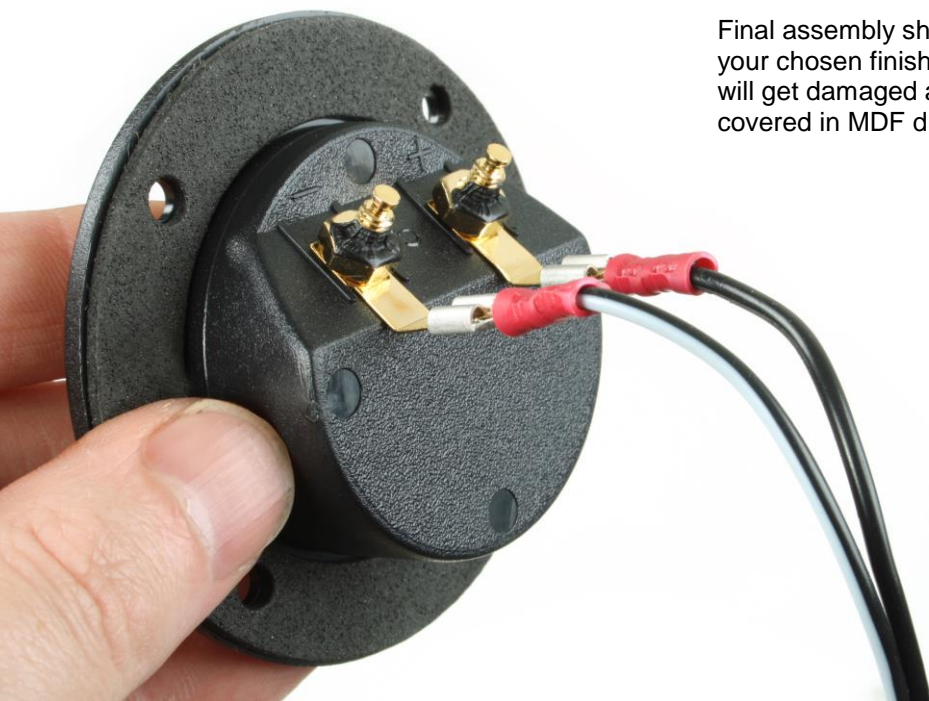
Typical wood glues can achieve moderate strength in as little as 30 minutes. If you are using PVA glue then a good indicator that it has set is the transparency. PVA becomes transparent once set. Ideally it's best to leave the enclosure clamped over night before moving on to assembly or finishing.

Grille assembly

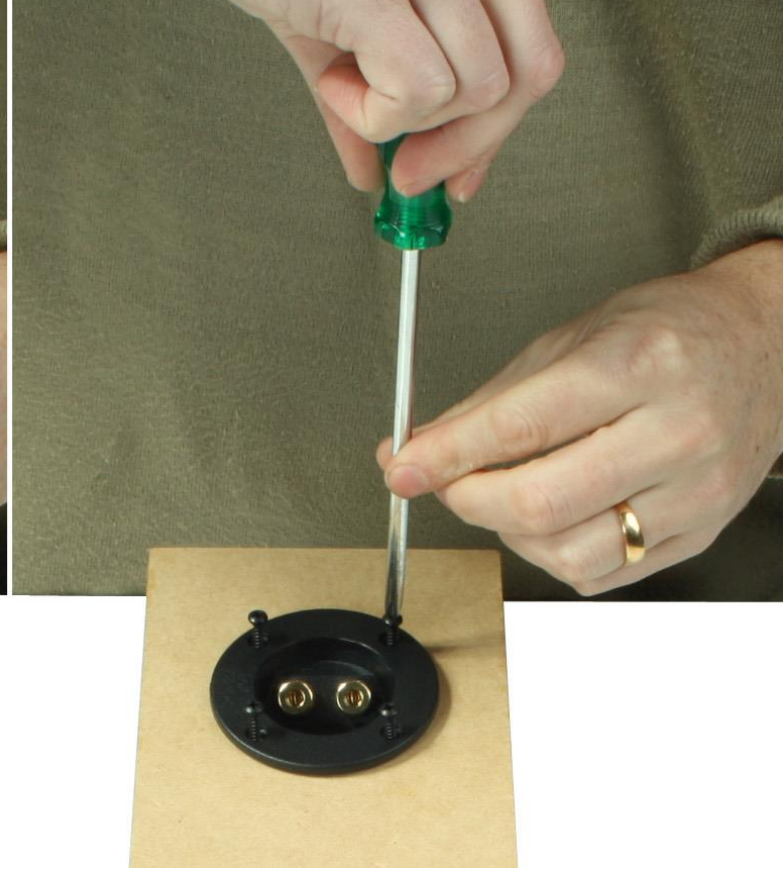
This kit uses a clever neo magnet attachment system that avoids the use of traditional grille clips. Neo magnets are recessed into the front baffle and grille frame. For full details on how to assemble the grill, please refer to our grille manual.

Sequence tip

Final assembly should be done after you have applied your chosen finish. Otherwise, drivers and terminals will get damaged and the internal lining will be covered in MDF dust.

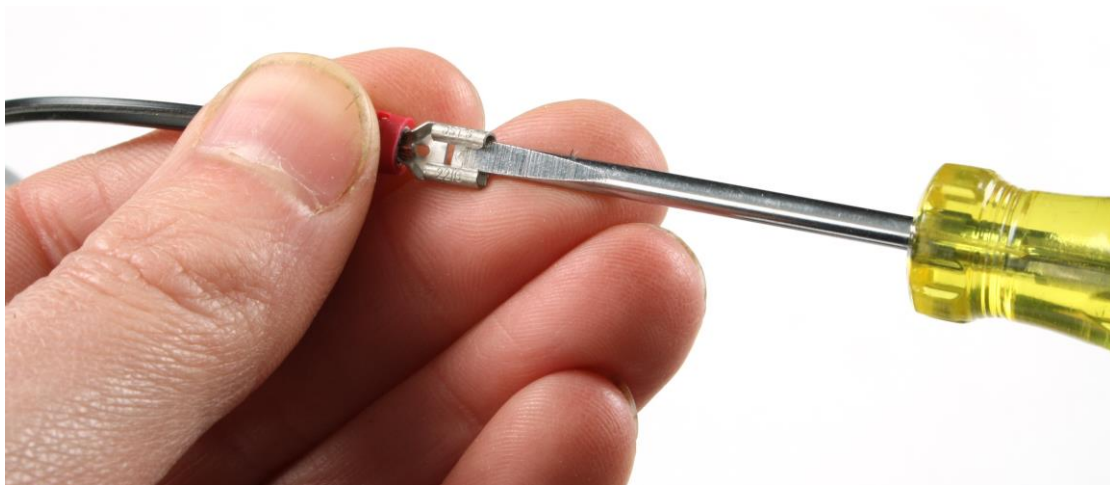


Note: The cable with the white strip goes to the negative terminal



Installing terminals

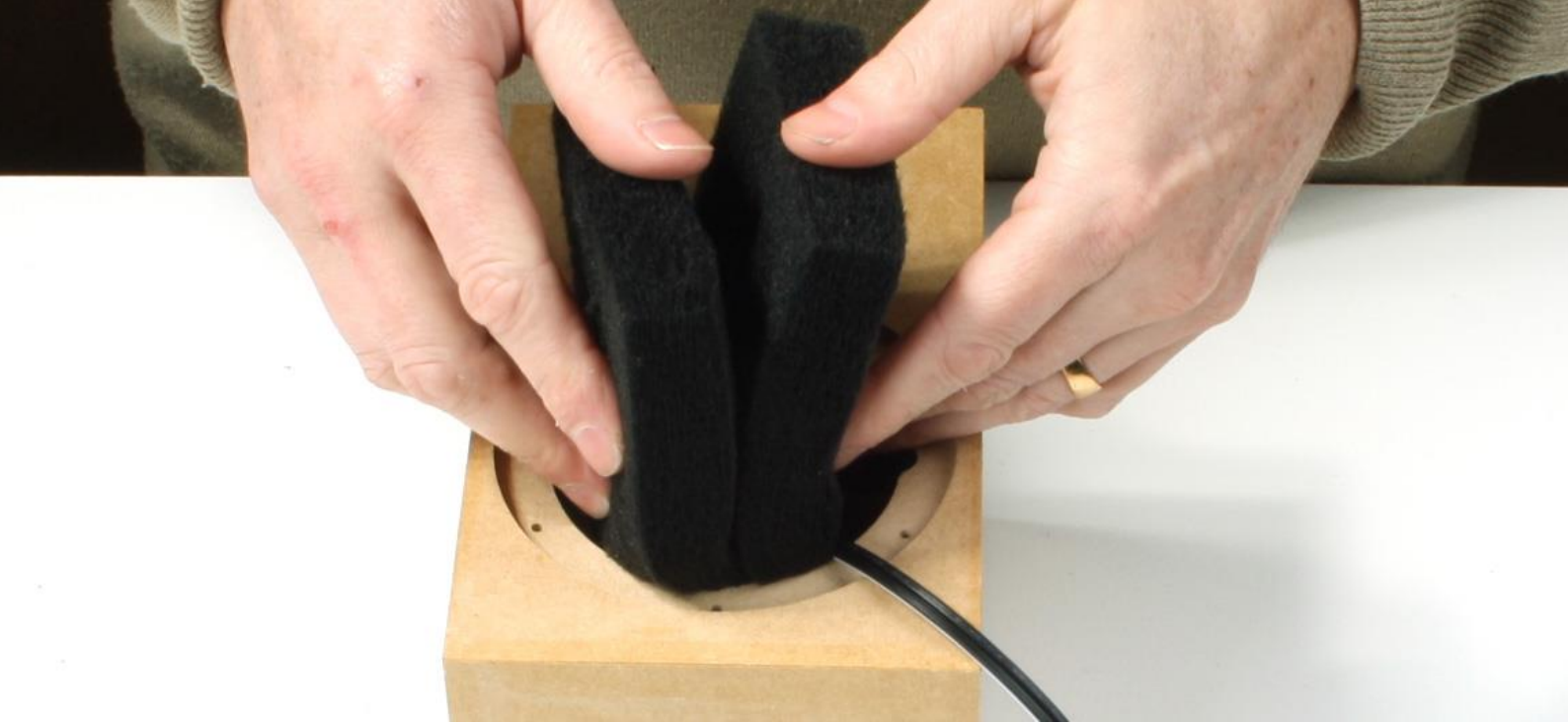
Push faston speaker connectors onto the speaker terminals. It's often necessary to open out the connector slightly with a flat head screwdriver, since the fit is quite tight.



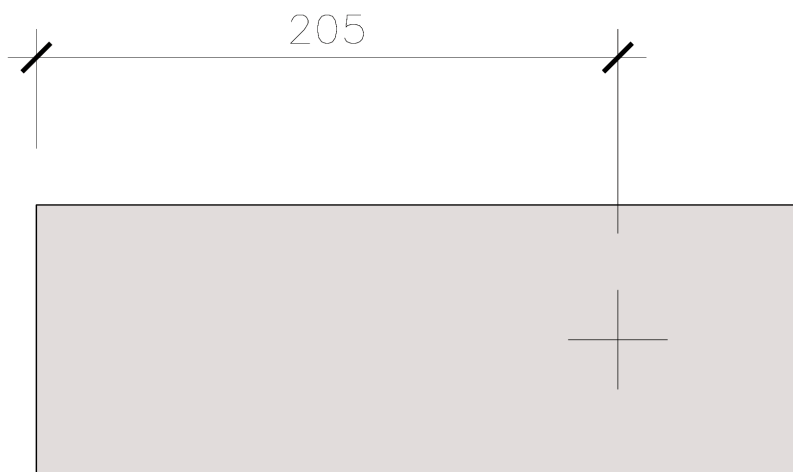
Screw in the terminals with the wire loom already attached.

Safe installation tip

We recommend using a Phillips head screwdriver, as some powered drivers are more likely to cause damage if the head slips off the screw head. Impact drivers should be avoided. If using a powered driver, it's best to use one which has a clutch, so that once the screws are adequately tightened, the driver will not over-tighten. This avoids stripping the MDF pre drilled holes or damage to the screw heads. If using a screwdriver, your left hand can hold the shaft to avoid slipping.



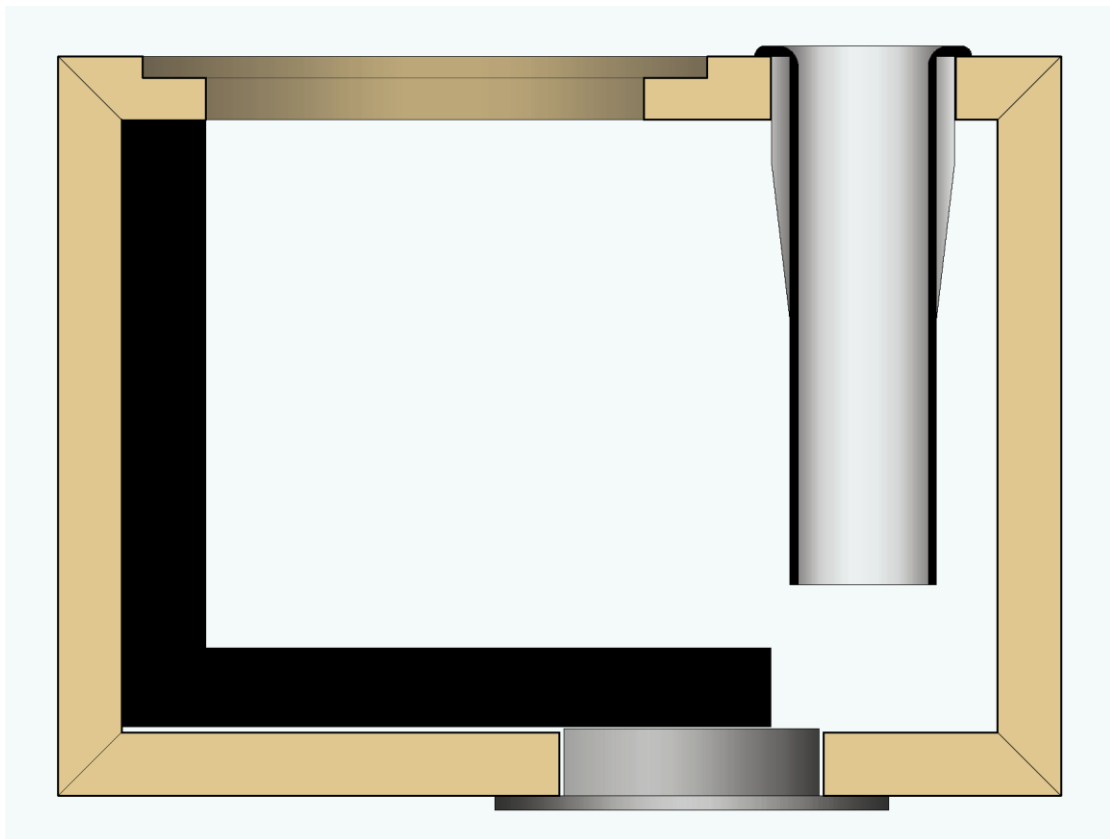
Before inserting the acoustic lining, cut an opening in the shape of a cross with a sharp blade. The cross should be centered 205mm from the top end.



Insert the lining, feeding the cable through the cross shaped cut out.



The lining covers the top and rear internal walls of the enclosure, as shown in the sectional drawing below. You may choose to secure the lining in place with contact adhesive or a hot melt glue gun.



Note: the clearance around the port is essential to retain the correct tuning.



It's now time to install the driver. Push the connectors onto the driver tabs. Correct polarity is important but this is made easy by using faston connectors that are sized to avoid mistakes. The larger negative terminal goes to positive and the smaller negative goes to the other. Avoid excessive force, which can damage terminals. If you find the fit is tight, you can use a small flat head screwdriver to open them out slightly.

Now lower the driver into the recess. Rotate the driver so that the terminals are aligned with the cutouts as shown below.





Screw the driver into place with a Phillips head screwdriver, securing the shaft with the other hand. Pushing the port into place completes the assembly. Your new kit is now ready to rock!



Parts List:

- 2 x 3" Full range drivers
- 2 x Round input Terminal
- 2 x Wire looms
- 14 x Panels of CNC machined MDF
- 20 x Screws
- 2 x 25mm Tuning Ports
- 2 x Pieces of Acoustic Lining

SPECIFICATIONS:

Woofer Size:	3"
Woofer Cone:	Paper
Frequency	Response: 68 Hz (-3dB) to 19 kHz, +/- 10.5dB
Recommended Amplifier:	10 - 30W RMS
Sensitivity (2.83V/1m):	79 dB
Power Handling:	20W RMS Continuous, 60W peak
Impedance:	Nominal 8 ohm (minimum 6.5 ohm)
Dimensions:	190mm high x 120mm wide x 155mm deep (including grille)