XTZ BERYLLIUM
CONVERSION

Congratulations on your beryllium kit purchase! You got a couple of joyful hours ahead of you, The conversion demands patience and sleight of hand, however in return you will get what we think is one of the best possible Performance/Price speaker in the world, and you have made it yourself!

INCLUDING:

SEAS T29B001	1 pcs.
Crossover	1 pcs.

Cabinet Optimization

1

Dismantling the speaker
Unscrew and remove the woofer, tweeter, speaker terminals. Remove all the damping material and remove the old filter.

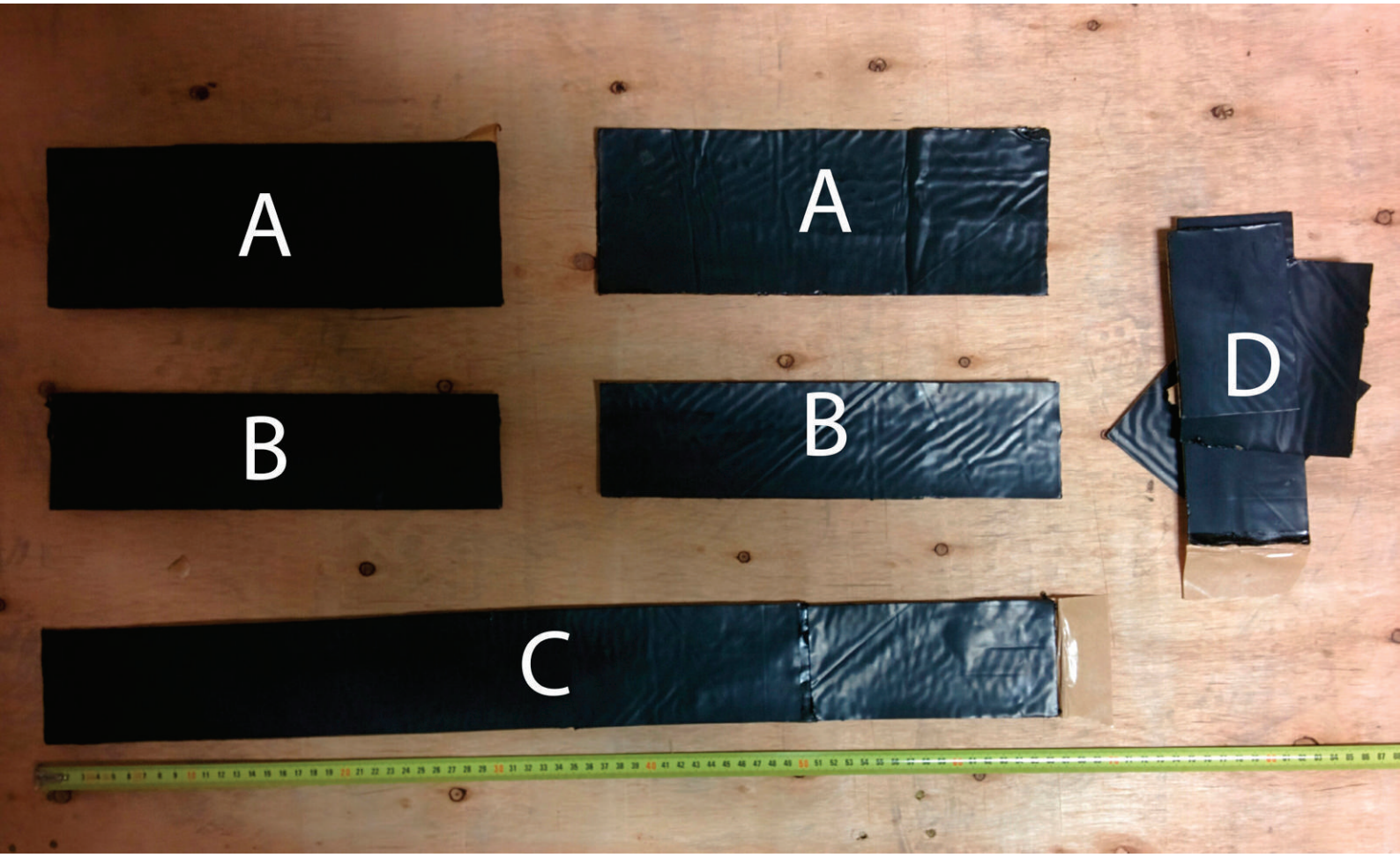
! Be Careful and keep everything nice and tidy, you will need every part later. The picture below shows a dismantled 99.26

②

Creating the dampening pads

Start with cutting strips of the damping material. We used Mataki "Elastomer"(500 mm width)roll (You can use various range of products like this). Size and number of strips are specified down below (99.26-Matte black, -Matte white & -Walnut only). Each pad should be at least 3 layers(~5mm) thick. Keep the protective paper on the first layer. On the remaining layers remove the protective paper and build up the pads, layer by layer.
(Bitumen pads used for car industry or alike will also work)

The pictures below is an example for 1pc.
XTZ 99.26-Matte black, -Matte White & -Walnut



The picture above shows the finished pieces.

A — Cut 4pcs. 85x500mm (if your roll is 500mm wide)
Cut and paste to get 2pcs. (3 layers thick) 85x290mm strips

B — Cut 4pcs. 60x500mm (if your roll is 500mm wide)
Cut and paste to get 2pcs. (3 layers thick) 60x290mm strips

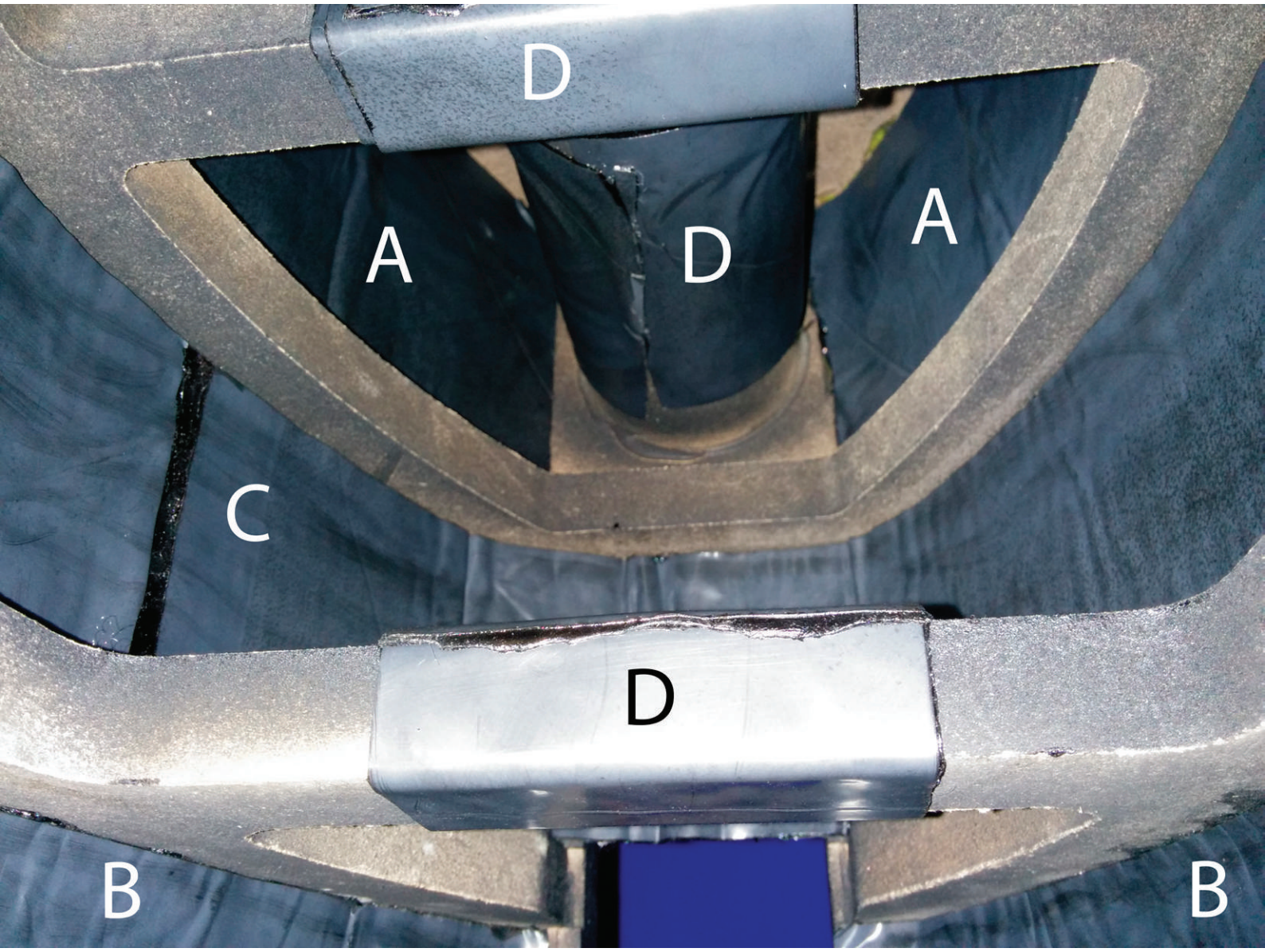
C — Cut 4pcs. 60x500mm (if your roll is 500mm wide)
Cut and paste to get 1pc. (3 layers thick) 60x660mm strip

D — **Leftover** pieces (used later and attached to bass port and bracings)

3

Installing the dampening pads

When you have ensured the fitting of the pads inside the cabinet, next step is to install them. Remove the protective layer and start with pressing them in place. Be careful to not smudge any of the sticky pads onto the cabinet. The picture below shows how the different pieces are placed inside the 99.26. The leftover pieces are placed on the bass port and the bracings to further dampen vibrations and oscillation.

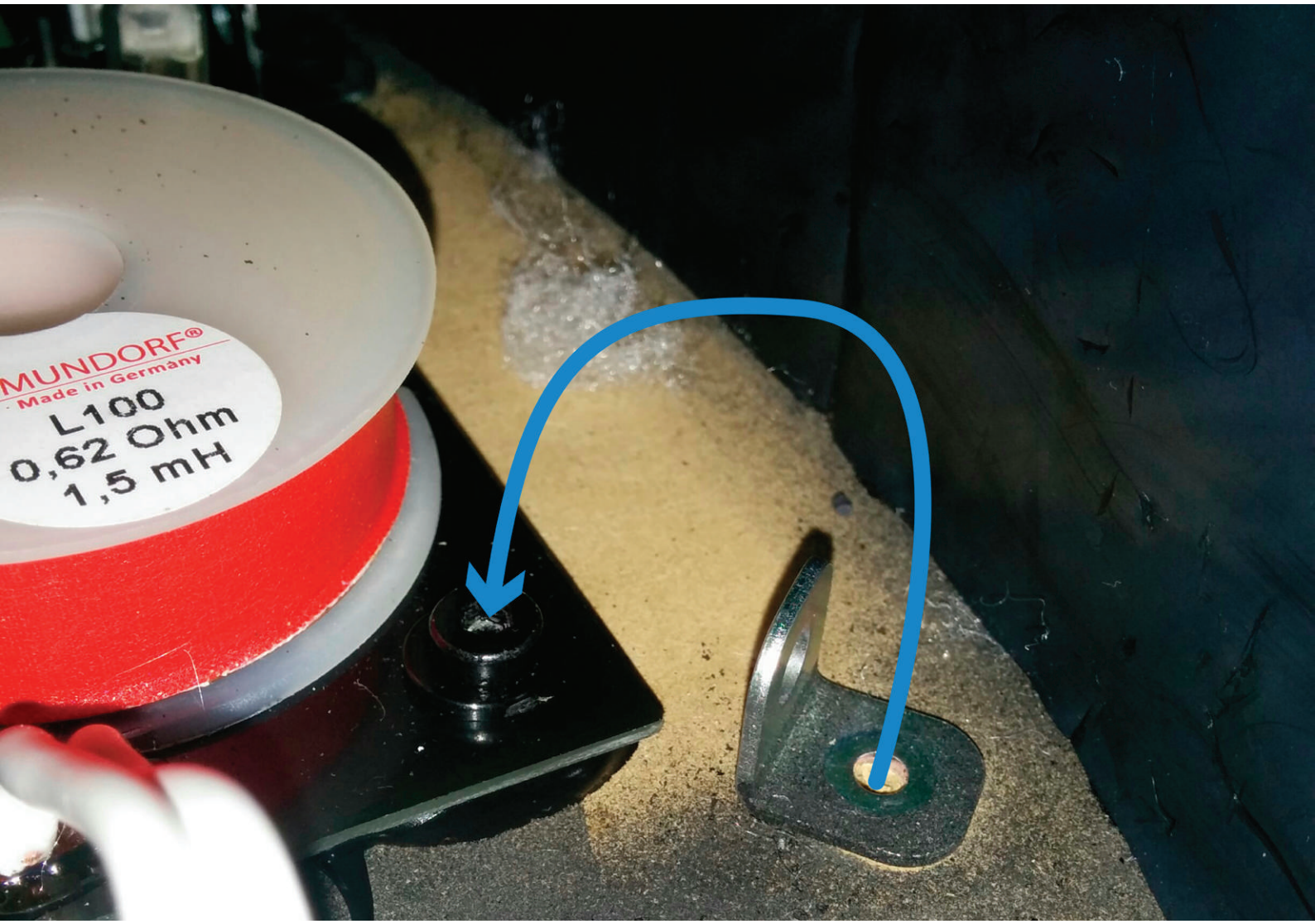


Installing The New Crossover

4

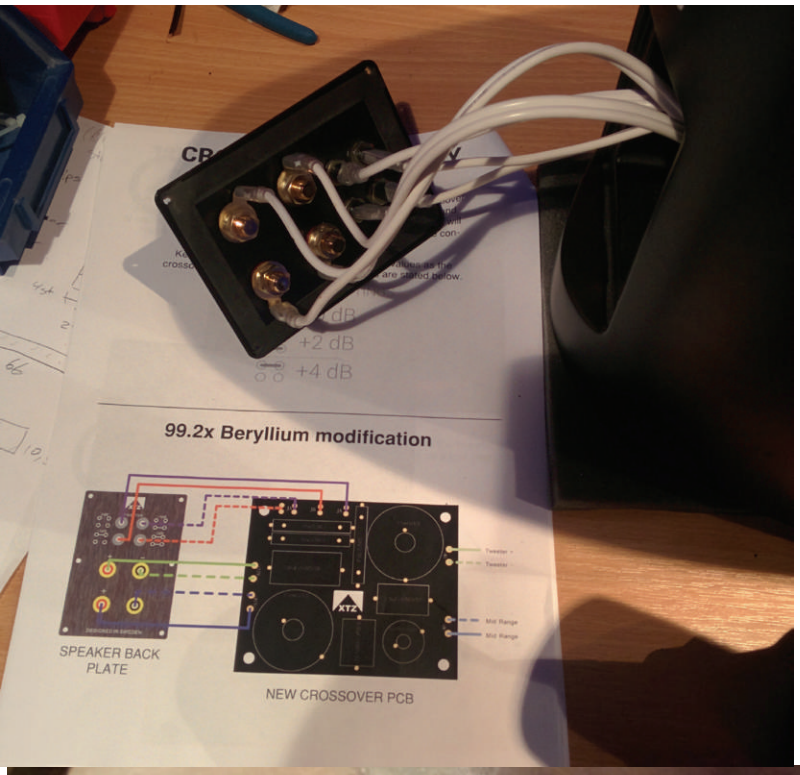
Crossover installation
Before you put back the old damping material, next step is to install the new crossover. With the old crossover removed, the new can take its place. Remove and use the former crossover screws for attaching the new crossover, we did use silicone in all four corners and then screwed the crossover in place.
Press down and pull the wires towards you to make sure the installation will go smooth when the sticky silicone is later applied. Then apply the silicone/glue in all four corners and insert the crossover carefully in place.
Press hard while twisting the screwdriver slowly when placing the screws.

Important is to install the new crossover quite far back to not be in the way of the woofer magnet.



Mounted Crossover

The finished mounted crossover looks like this, you can decide if you want to screw the crossover in place with 4 or 2 screws. If you use 2 screws we recommend to place them diagonally. Remember to place the crossover so that the woofer will fit and mount it a bit further back than the former screw holes.



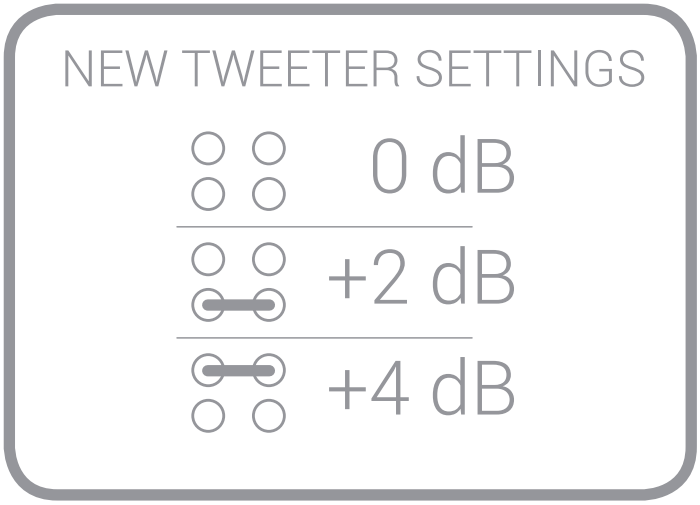
Existing padding
When the new crossover is mounted it is time to install the former dampening material. Keep in mind that the wires should stick out of the holes and it is easier to connect the back panel before the dampening material is installed.

How to connect the wires is shown in the next chapter:
"Connecting The Dots"

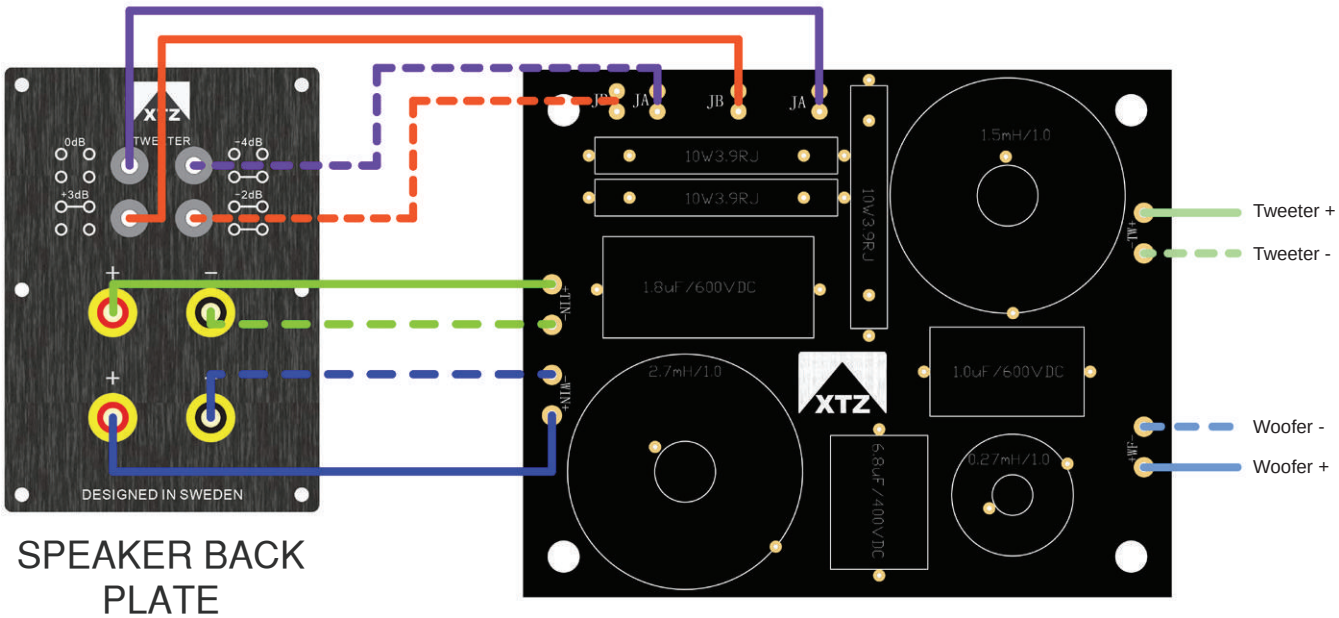
5 CONNECTING THE DOTS

When the crossover is in place it is time to connect the crossover with the speaker drivers and the back panel with jumpers and speaker terminals. The illustrations below and on next page will show how the 99.2x and 99.36 speaker models should be connected.

Keep in mind that there are new tweeter +/- dB values as the crossover has been changed. The new values are stated below.



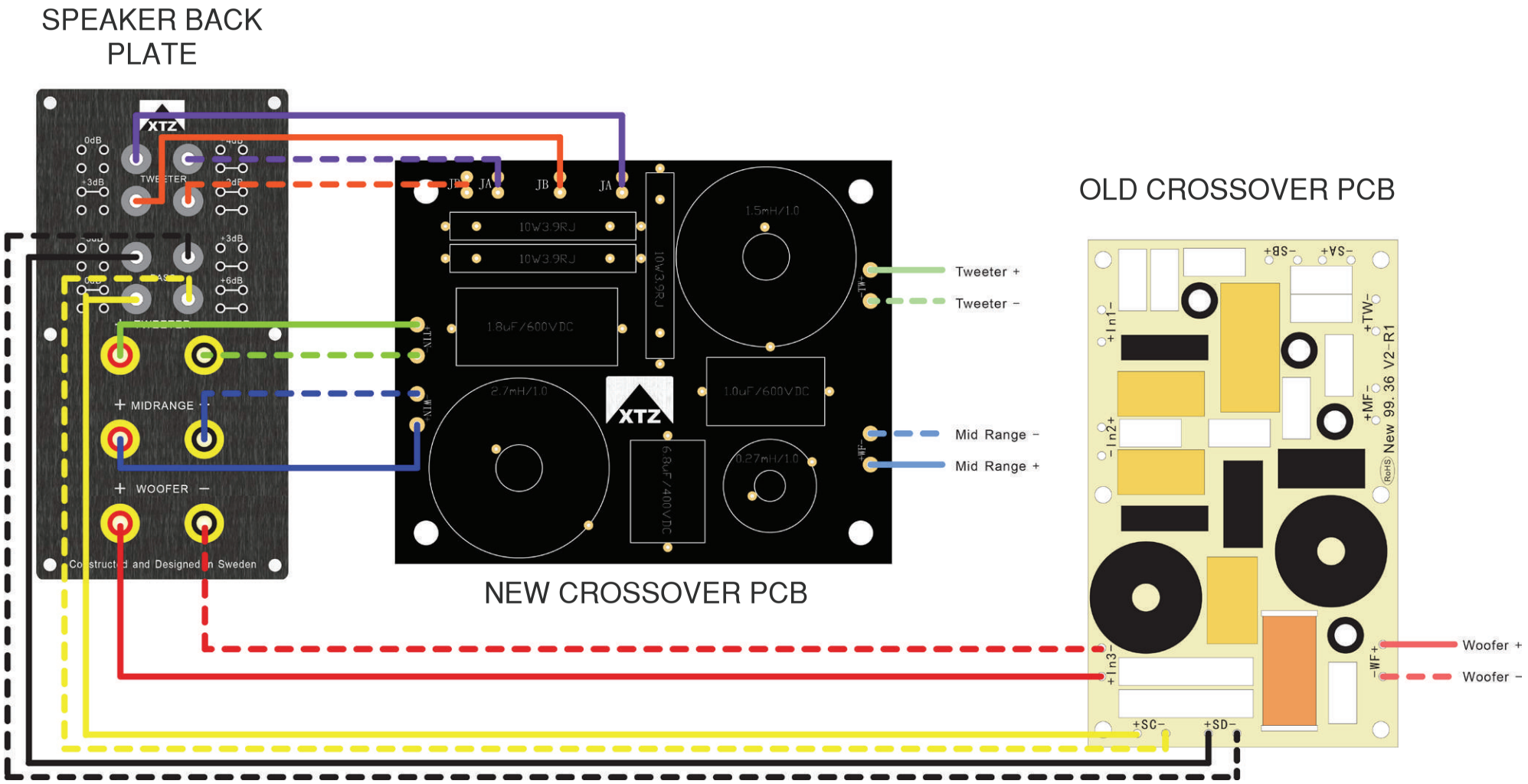
99.2x Beryllium modification



SPEAKER BACK PLATE

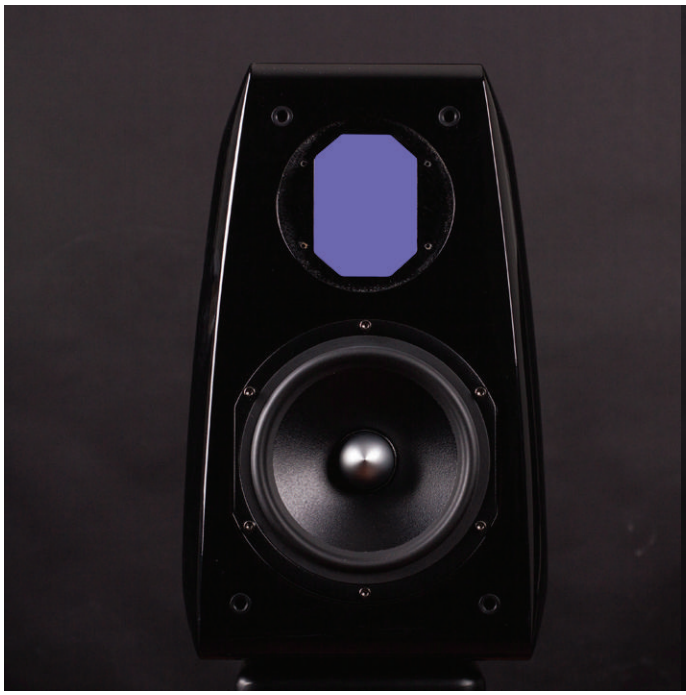
NEW CROSSOVER PCB

99.36 Beryllium modification



TWEETER ASSEMBLY

The beryllium tweeter has the same faceplate dimensions and therefore fits perfectly in the old tweeters mounting hole.
There are two different mounting holes for the 99-series.



This type of hole will need some carving in the inner hole to fit the new driver. However it will not be a visual matter when you are done. Preferably using a sharp knife to carve in the MDF.

The speaker with the ability to turn the tweeter do not need any caving of the inner hole.

1. When the old tweeter is removed it is possible to place the Beryllium tweeter, be sure that the holes are in a straight line horizontally or vertically, then use a pencil to mark where the holes should be.

2. Use an awl or something other sharp tool to make a guide for the later drilling, this increases the precision which is needed due to small margins.

3. Use a 2 mm drill, and be sure the drill is orthogonal to the baffle when drilling. To make a tight seal around the new tweeter ensure the old holes does not have any material poking out, Use a countersink or larger drill to remove peaks. As long as the surface is flat/smooth behind the new tweeter, the seal is airtight enough.

4. Now connect the tweeter and screw it in with your newly created holes.

Congratulations you are done!

When using sharp tools & power tools, take things slow and be careful.

Very last step
Connect the Tweeter and woofer as shown in chapter 5 "connecting the dots" and screw them in place.

CONGRATULATIONS YOU ARE DONE!