A WRITTEN GUIDE TO UPCYCLING A

Beovox S35

INTRODUCTION

This is a guide on how to upcycle a Beovox S35 loudspeaker using a BeoCreate 4-Channel amplifier and a Raspberry Pi.

The upcycling process will take roughly two hours and we advise you to prepare for the project by having all the required items at hand.

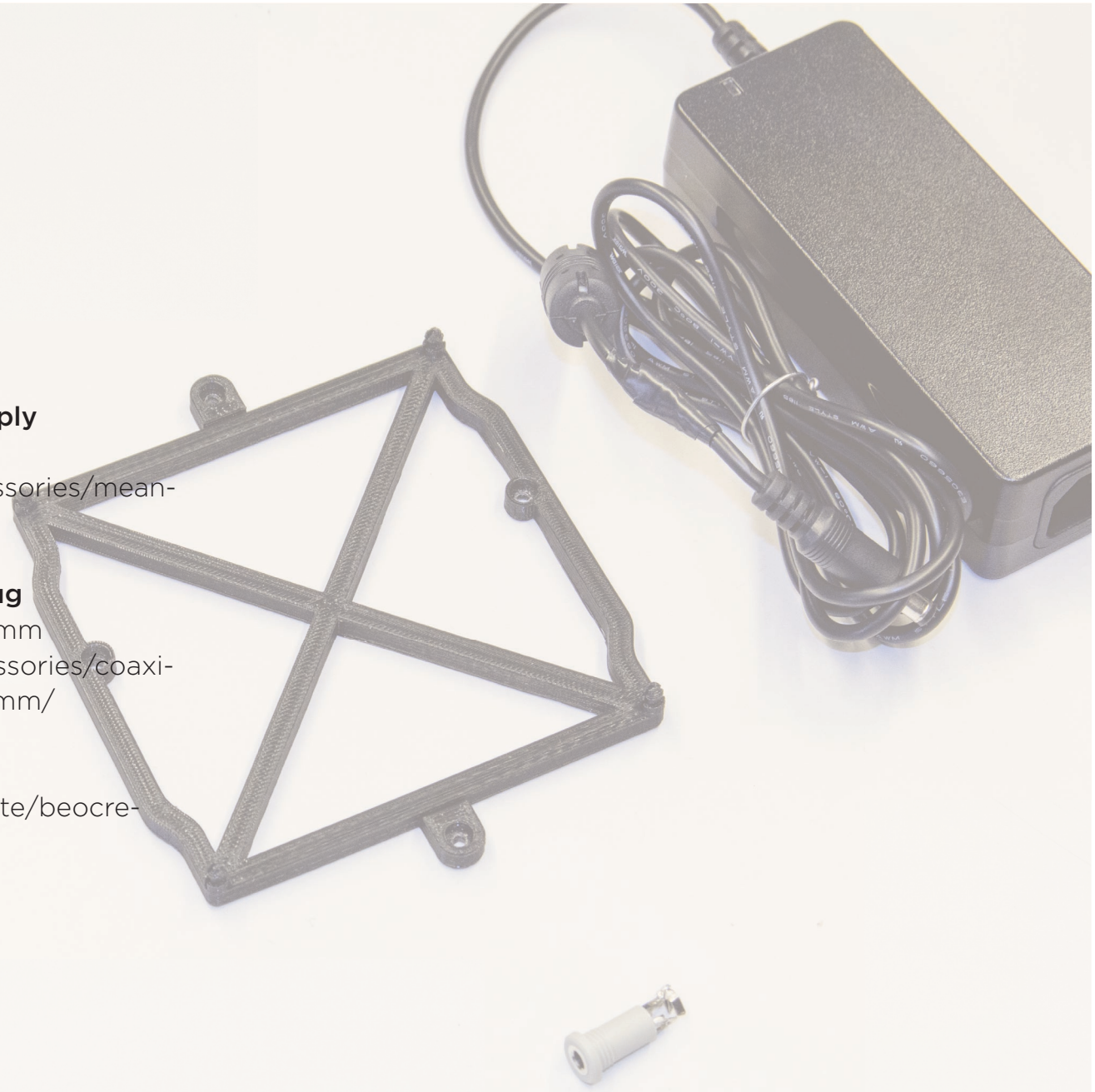
PARTS	TOOLS
· Beovox S35	· Soldering iron
· BeoCreate 4-Channel Amplifier	· Screwdrivers
· Raspberry Pi 3	· Glue gun
· MicroSD card (at least 4GB)	· Wirecutters
· Power plug & supply (page 3)	· Wirestripper
· 3D printed parts (page 3)	· Dremel tool
· Hot glue or epoxy glue	
· Two insulated wires for the power connector (10cm)	

EXTRAS

Recommended power supply
18-24V, about 90W
https://www.hifiberry.com/shop/accessories/mean-well-gs60a18-p1j/

Recommended power plug
mouting hole diameter: Ø8mm
https://www.hifiberry.com/shop/accessories/coaxial-power-connector-5-5x2-1mm/

Files for 3D printing
https://www.hifiberry.com/beocreate/beocreate-doc/



TAKING APART THE S35

STEP ONE

From the front of the speaker, remove the fabric covers.

Unscrew the brackets holding the woofer.

Remove the dampening material.

Cut all the wires connected to the cross-over.

Unscrew the old crossover and remove it.
Save the screws for the step three.

CREATING A NEW POWER CONNECTION

STEP TWO

Remove the original plastic speaker connector using a dremel tool. Make sure to leave enough space to press fit the 3D printed holder.

Screw the power plug into the 3D printed holder.

Strip the insulated wires you reserved for the power connector, so that approximately 1cm of wire is exposed.

Solder wires to each positive and negative terminal.

Apply glue to the 3D printed holder.
Make sure to cover all the inner walls with a sufficient amount of glue.

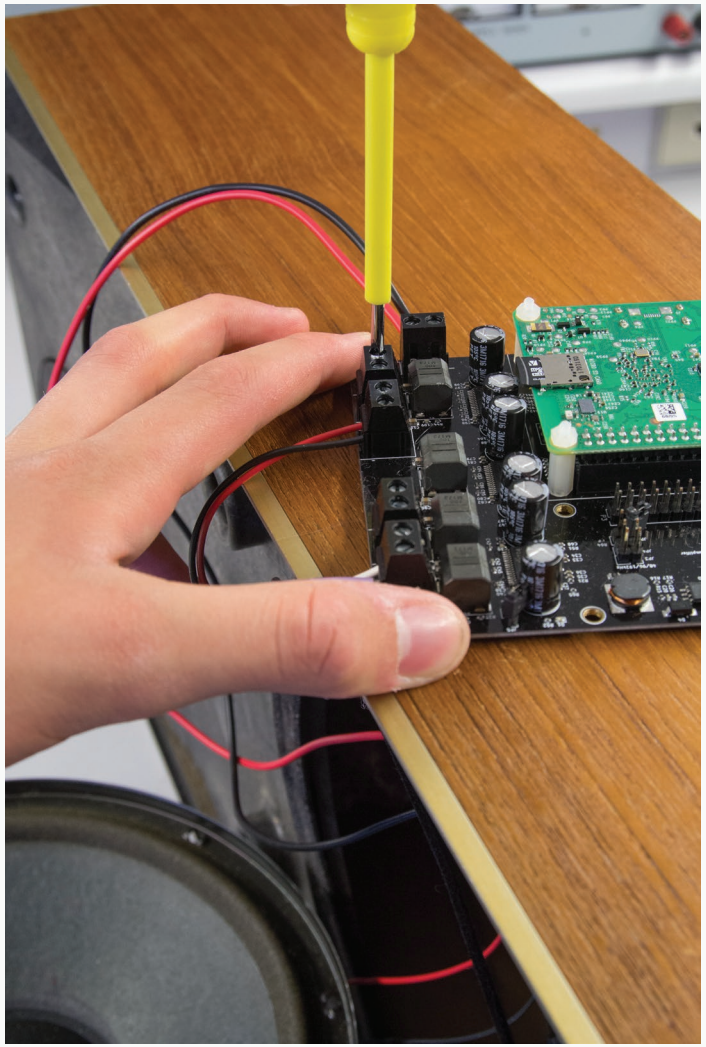
Attach it to the hole on the back plate.

ASSEMBLE THE PARTS

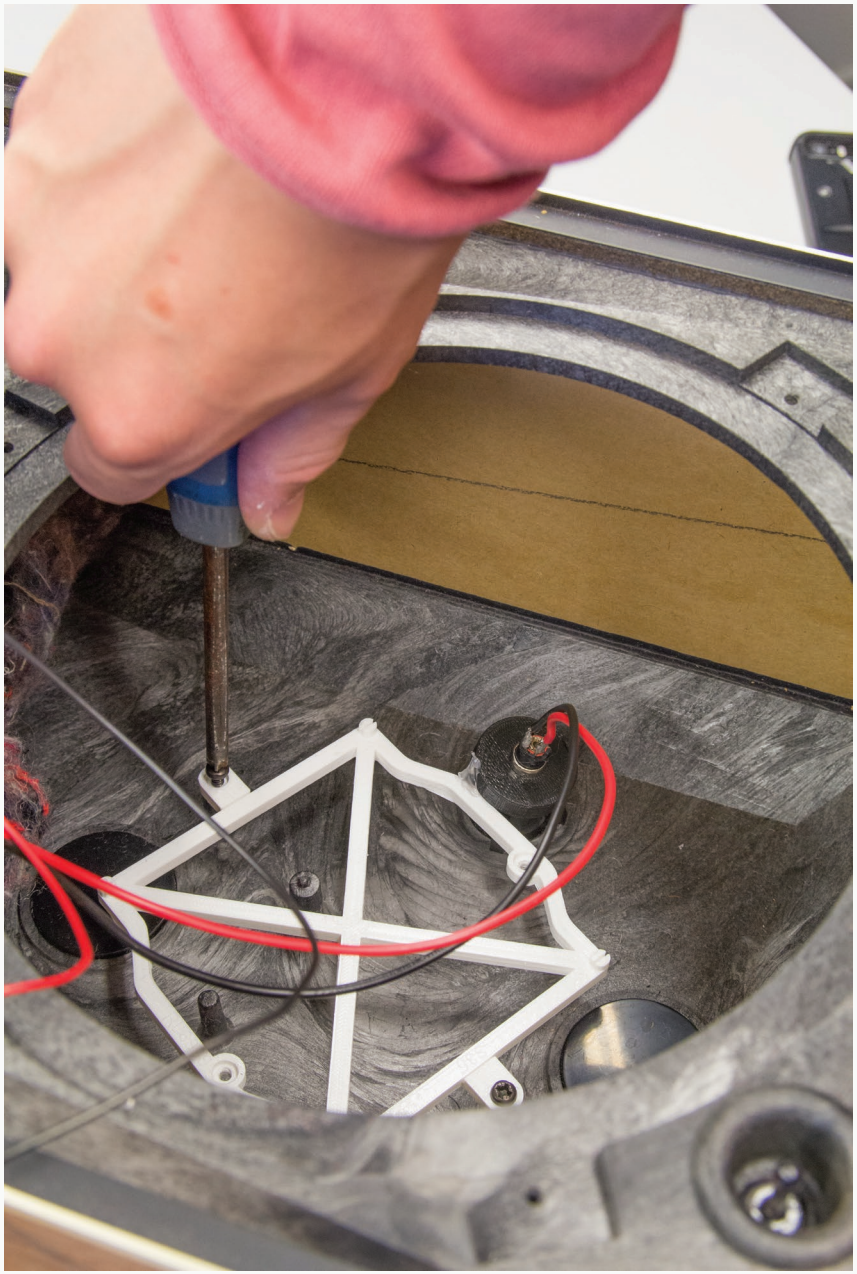
STEP THREE

Place the Raspberry Pi upon the BeoCreate 4-Channel Amplifier. The supplied spacers will not fix the Pi to the board, but just prevent it from flexing and touching any components on it.

Strip the wires coming from the drivers, so that again approximately 1 cm of wire is exposed.

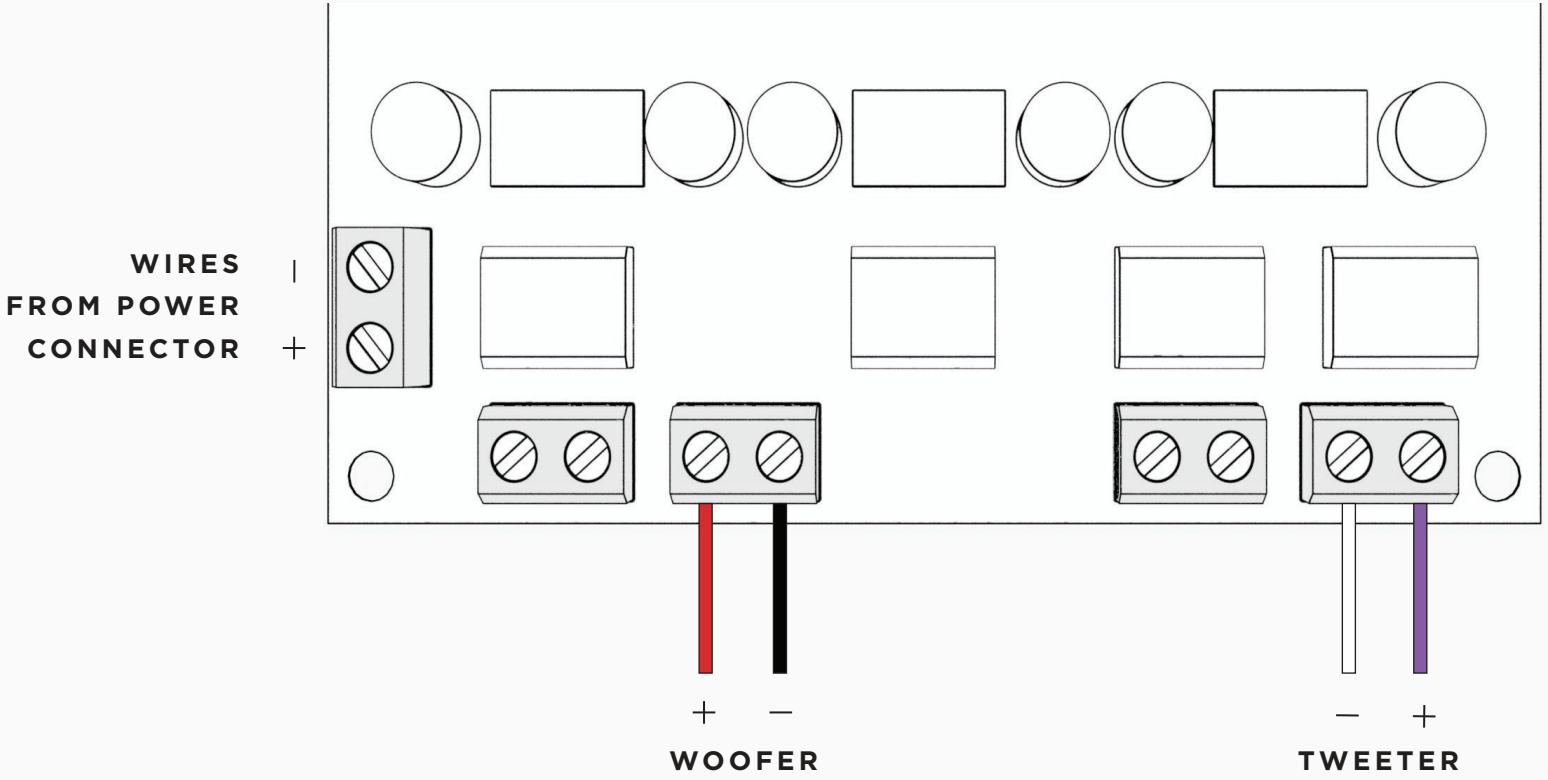


Connect the power and drivers to the Amplifier. A detailed diagram is shown on the next page.



Using the existing mounting posts and screws, attach the 3D printed frame to the inside of the speaker.

AMPLIFIER OUTPUTS

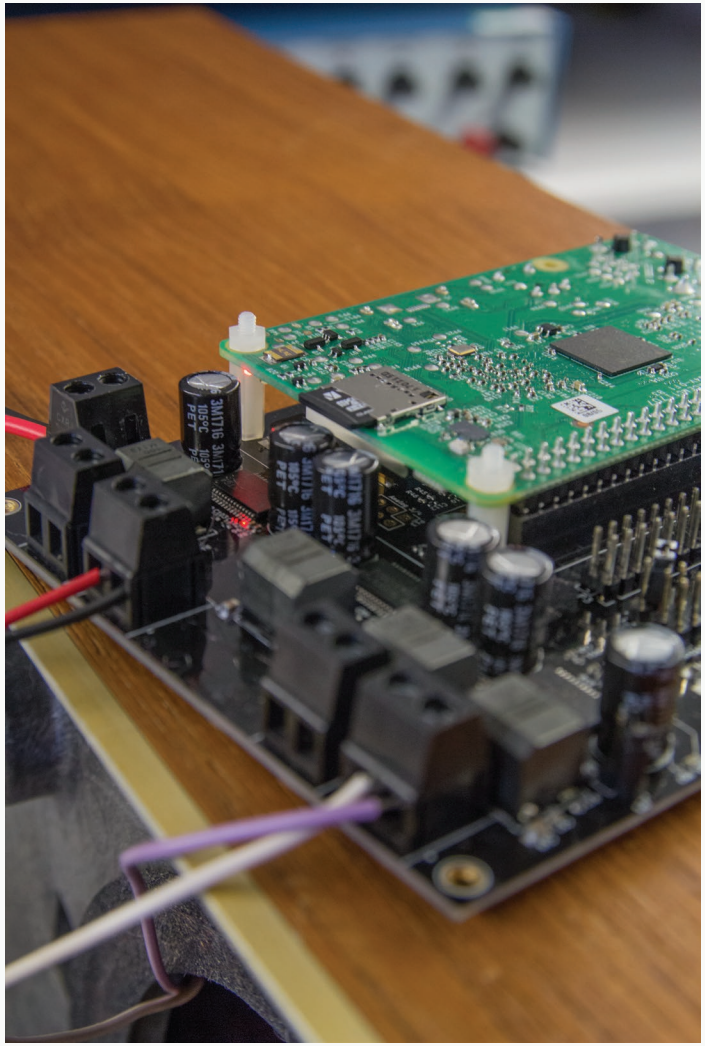


CLOSING UP

STEP FOUR

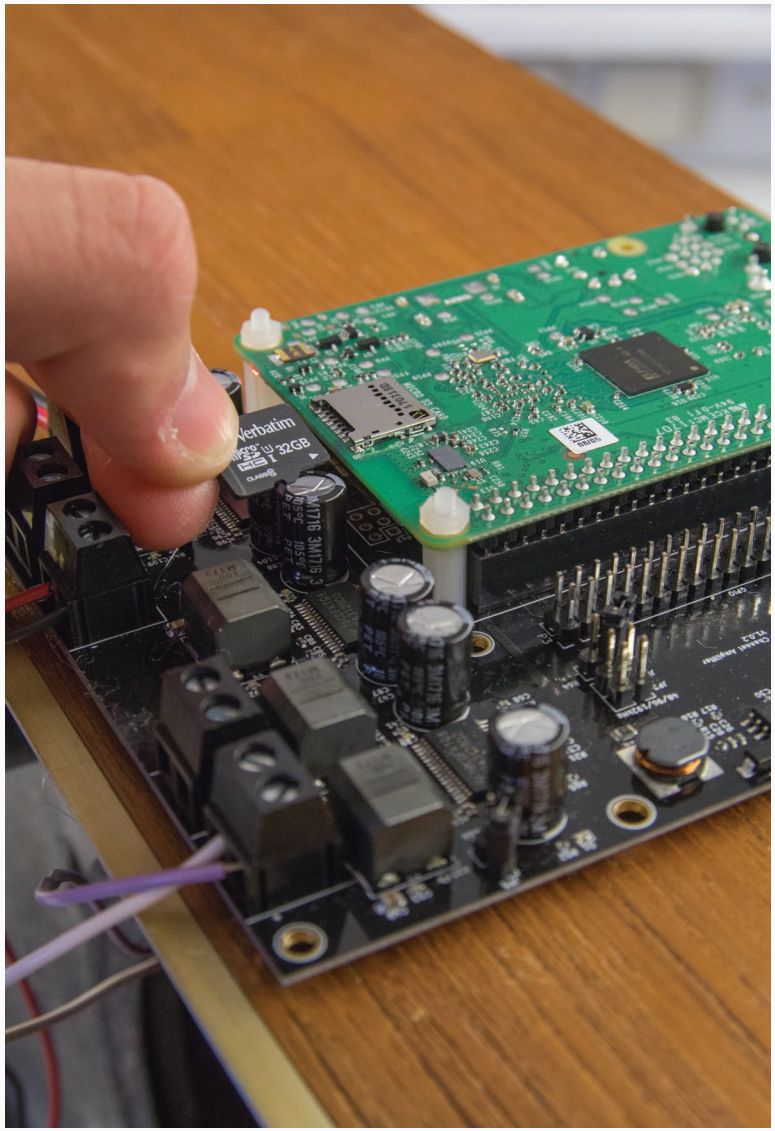
Connect the power supply

Plug the power supply into a wall socket.



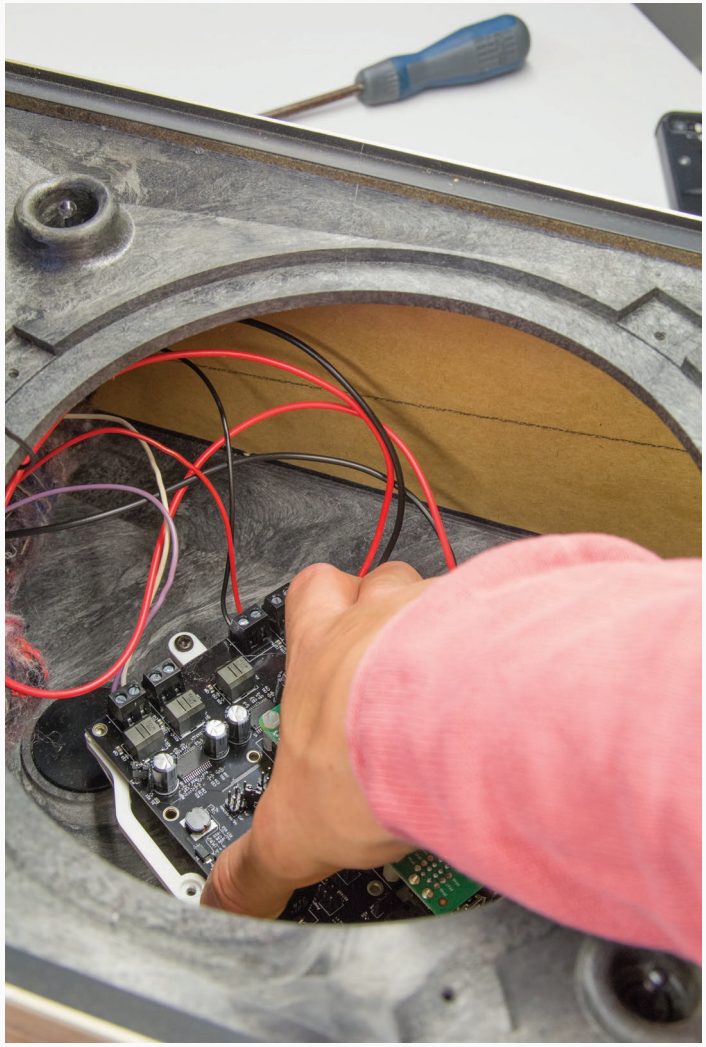
Make sure a red light turns on on the Raspberry Pi. If it does not turn on, you have switched the polarety of the power supply.

Unplug the power supply from the wall-socket to further proceed with the up-cycling.



Insert the SD card with the BeoCreate software installed on it, and proceed to set up the amplifier.

https://www.hifiberry.com/beocreate/beocreate-doc/beocreate-first-steps/



Press fit the amplifier into the 3D printed frame previously attached to the speaker.

Place the dampening material inside the speaker.

Re-mount the woofer with the respective brackets.

Attach the the fabric cover again.

ENJOY

Your speaker is now physically upcycled.

You can find the further software feachers here:
https://www.hifiberry.com/beocreate/beocreate-doc/beocreate-software-documentation/