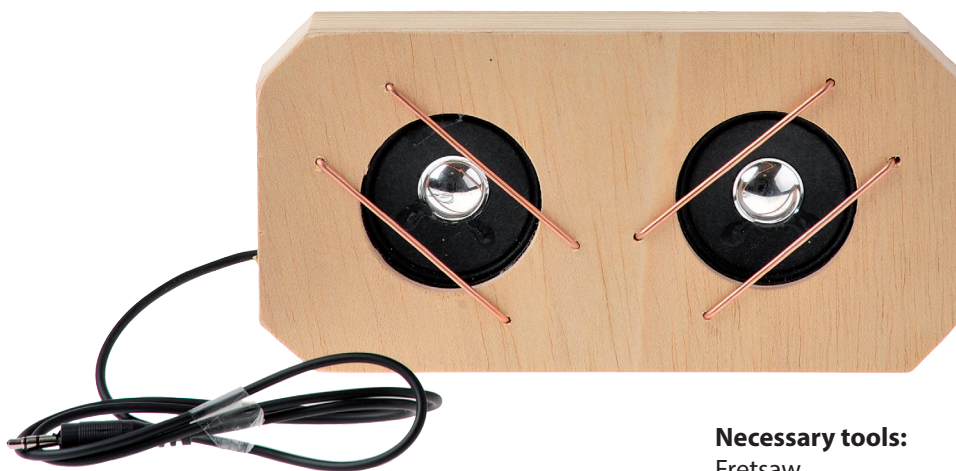


OPITEC

122.739 MP3-Player -Stereo loudspeaker



Please Note

The OPITEC range of projects is not intended as play toys for young children. They are teaching aids for young people learning the skills of Craft, Design and Technology. These projects should only be undertaken and tested with the guidance of a fully qualified adult. The finished projects are not suitable to give to children under 3 years old. Some parts can be swallowed. Danger of suffocation!

Necessary tools:

Fretsaw
All purpose glue
File, sandpaper
Drills 3mm & 5mm diameter
Screwdriver slot and cross
Pliers
Metal cutters or hacksaw
Soldering iron etc
Wood glue
Machine vice
Metal shears

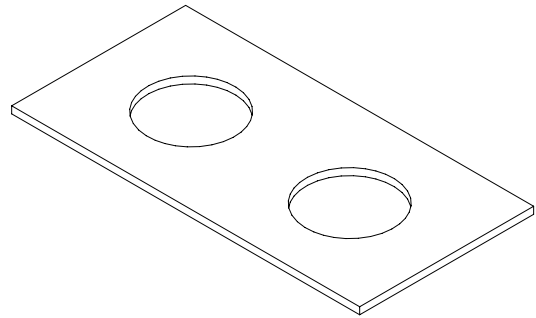
PARTS LIST			
			Description
Plywood	1	200x200x4	Base + Lid
Wood strip	3	200x20x20	Side walls
Loudspeaker	2	ø 57	Loudspeaker
Dowel	1	100x20	Holder
Welding rod	2	200x 2	Speaker protection
Connection cable	1	500	Connection
Connection plug 3,5mm stereo	1	1000	Connection
Self tapping screws	20	2,9x10	Fixing

INSTRUCTIONS

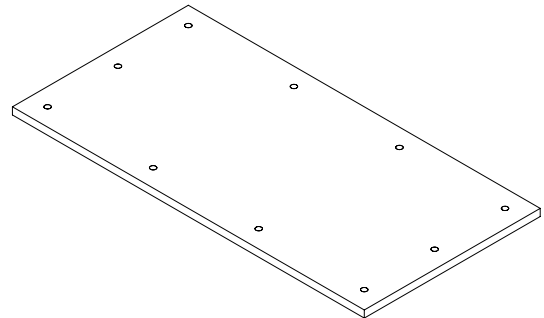
General:

These instructions show you how to house the speakers. There is an opportunity to use the materials and develop your own design.

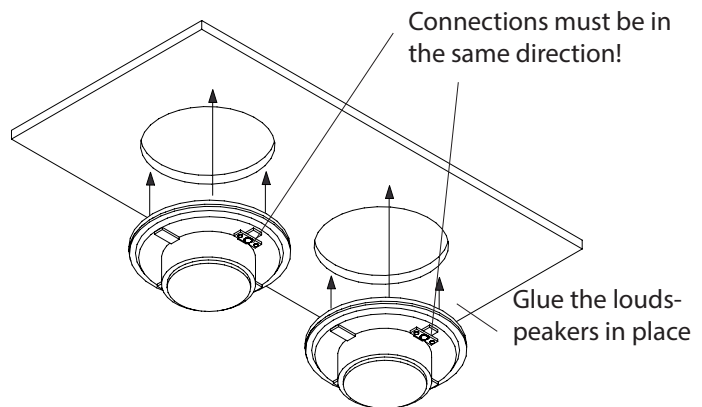
1. Mark and saw out the shape according to plan (Side 5) (Use Acrylic, metal or wood) Saw out the 50mm dia holes for the loudspeakers with a fretsaw and sand to finish.



2. Mark and saw out the base from the plywood (or acrylic, or metal sheet according to plan (Seite 4) . Mark out and drill the 3mm holes, sand to finish.



3. Fit the two loud speakers with a glue gun or an all purpose glue - left and right to the underside of the lid. Note : ensure that the speaker connections lay in the same direction .



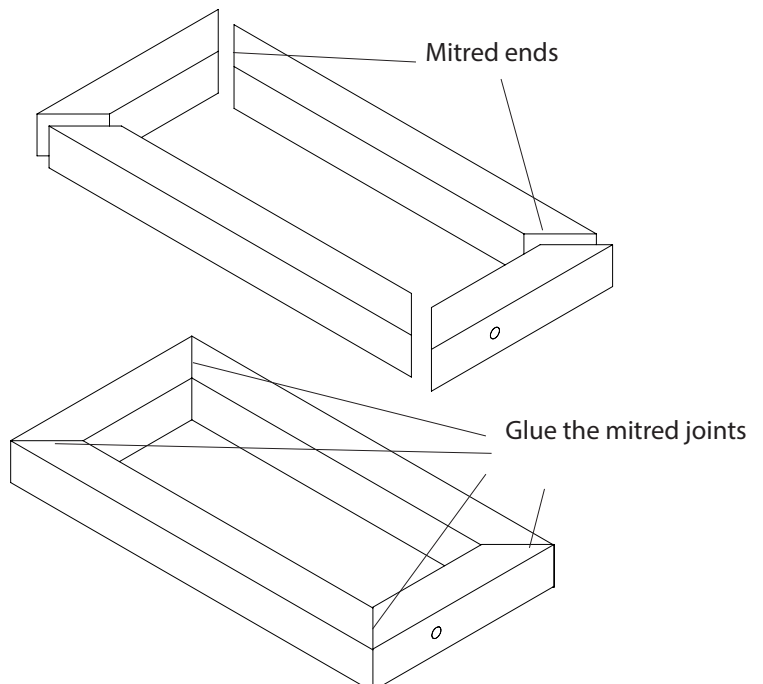
General:

The frame can be butt jointed or mitred . Sizes see Side 4 . The mitred version is shown

4. Saw the sides (200x 20 x 20mm) of the frame from one of the 3 wood strips (Side 4).

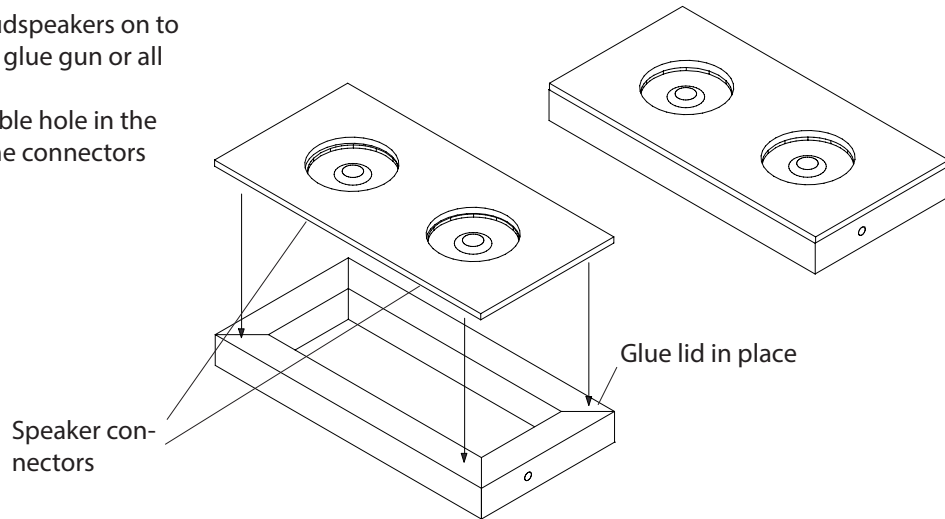
Drill a 5mm hole in one of the shorter sides (100 x 20 x 20) for the MP3 connector cable

Glue the sides of the frame together



INSTRUCTIONS

5. Glue the top, with loudspeakers on to the frame using a hot glue gun or all and all purpose glue. Make sure that the cable hole in the frame lines up with the connectors on the speaker.



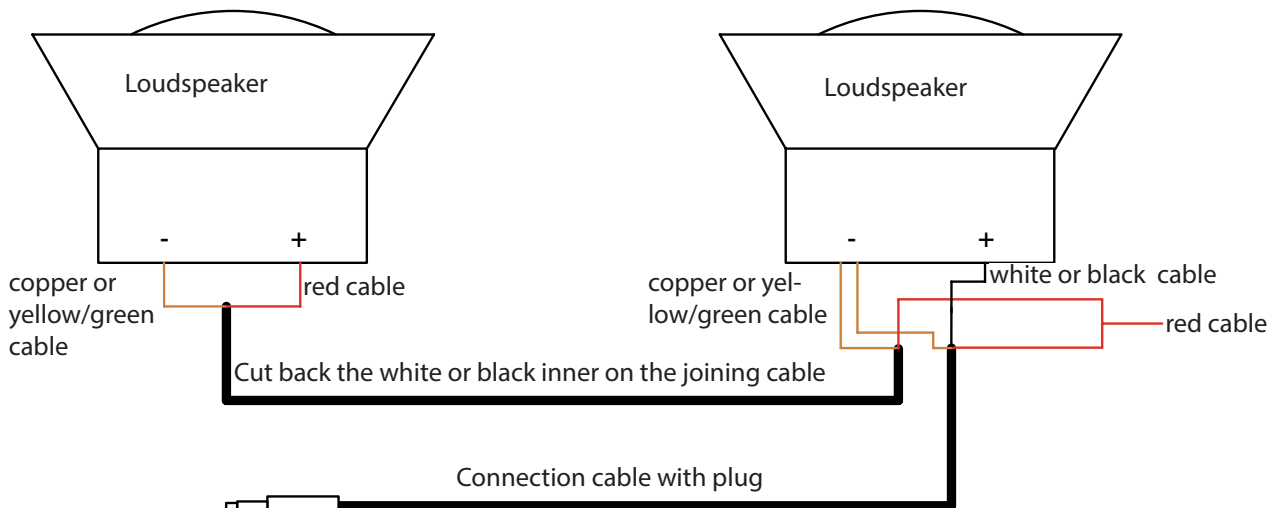
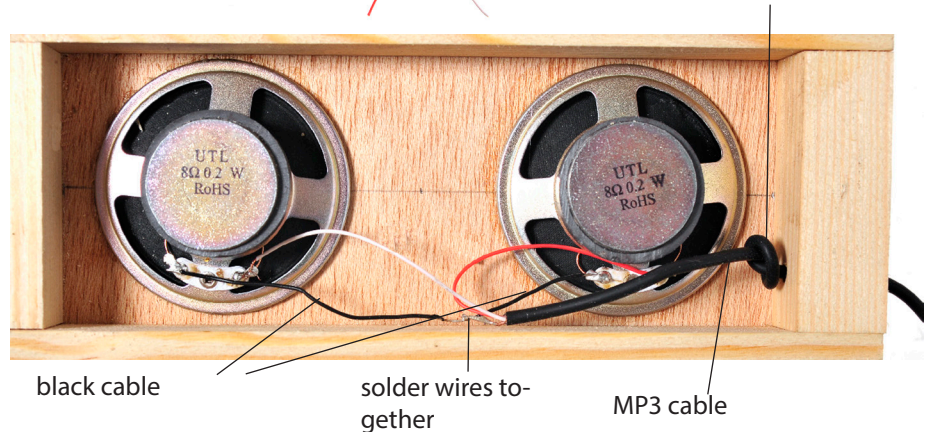
6. Remove plastic covering from ca. 80-100mm from the MP3 connector cable. (see photo, on right)



7. Thread the cable ends through the hole in the frame. The white cable is soldered to the right connector (+) on the Left hand speaker. The red cable is soldered to the right connector (+) on the left hand speaker.

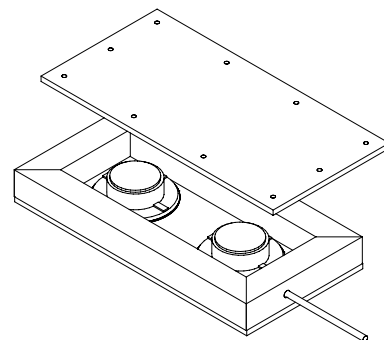
Tie a knot before soldering the cable!

From the other cable cut 2 ca 50mm long pieces. Remove about 5mm insulation from the ends. Solder one of each length to the left connector (-) on each loud speaker. Adjust the cables to length and twist the free ends together, solder and insulate with tape.

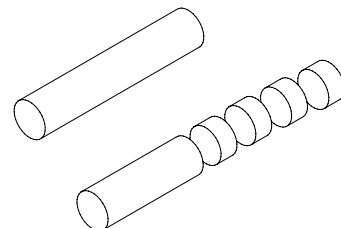


INSTRUCTIONS

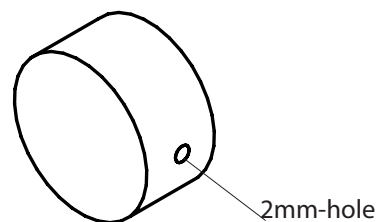
8. Lay the back in place and screw it in position on the frame. Sand to finish



9. From the dowel cut 4 pieces 10mm wide. Sand the sawn faces.

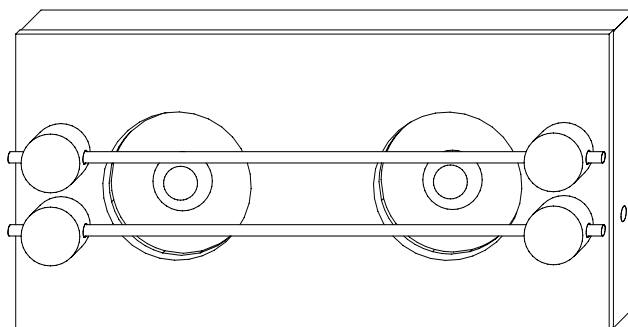


10. Place the discs in a machine vice and drill the 2mm hole as shown.

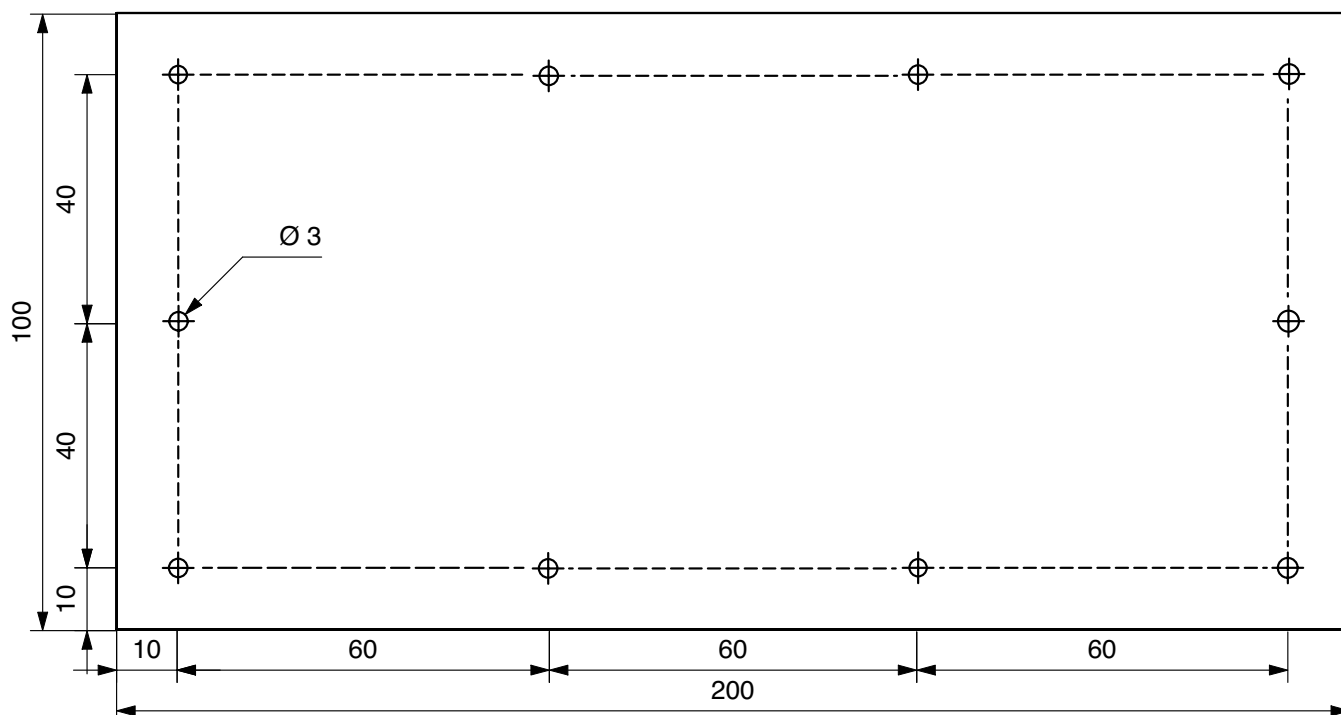


11. Glue the discs in place as shown with the welding rods in place.

Finished!

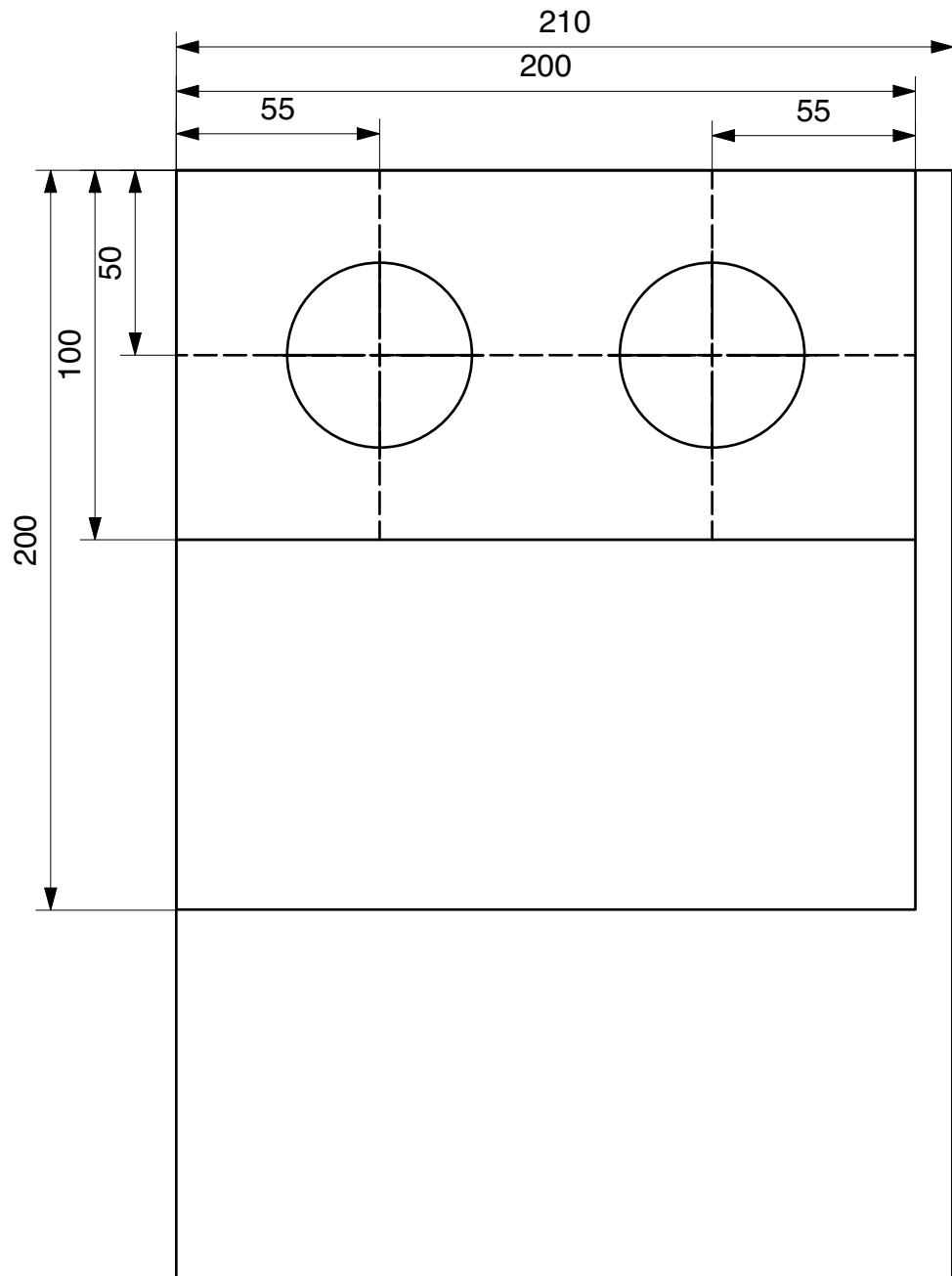


Apply finish
to and base etc



INSTRUCTIONS

**Bemaßung
Deckel u. Bodenplatte
M 1:2**



**Bemaßung
Seitenteile
M1:2**

