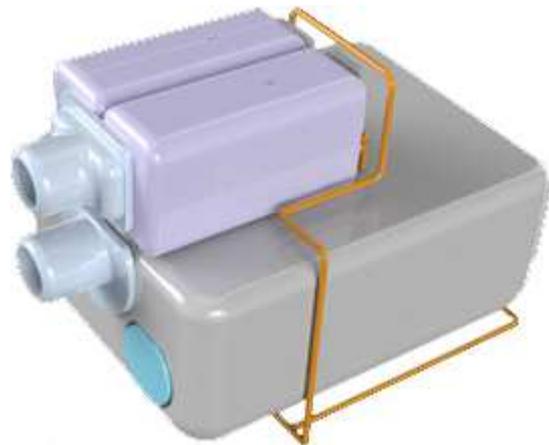
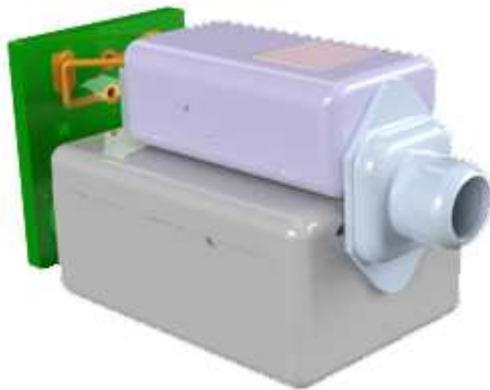


Build your own in-ear monitoring!

as 2, 3 or 4-way-system.

[Download as PDF ?](#)

We will show you step by step how it works and deliver the material from our webshop.



Tools:

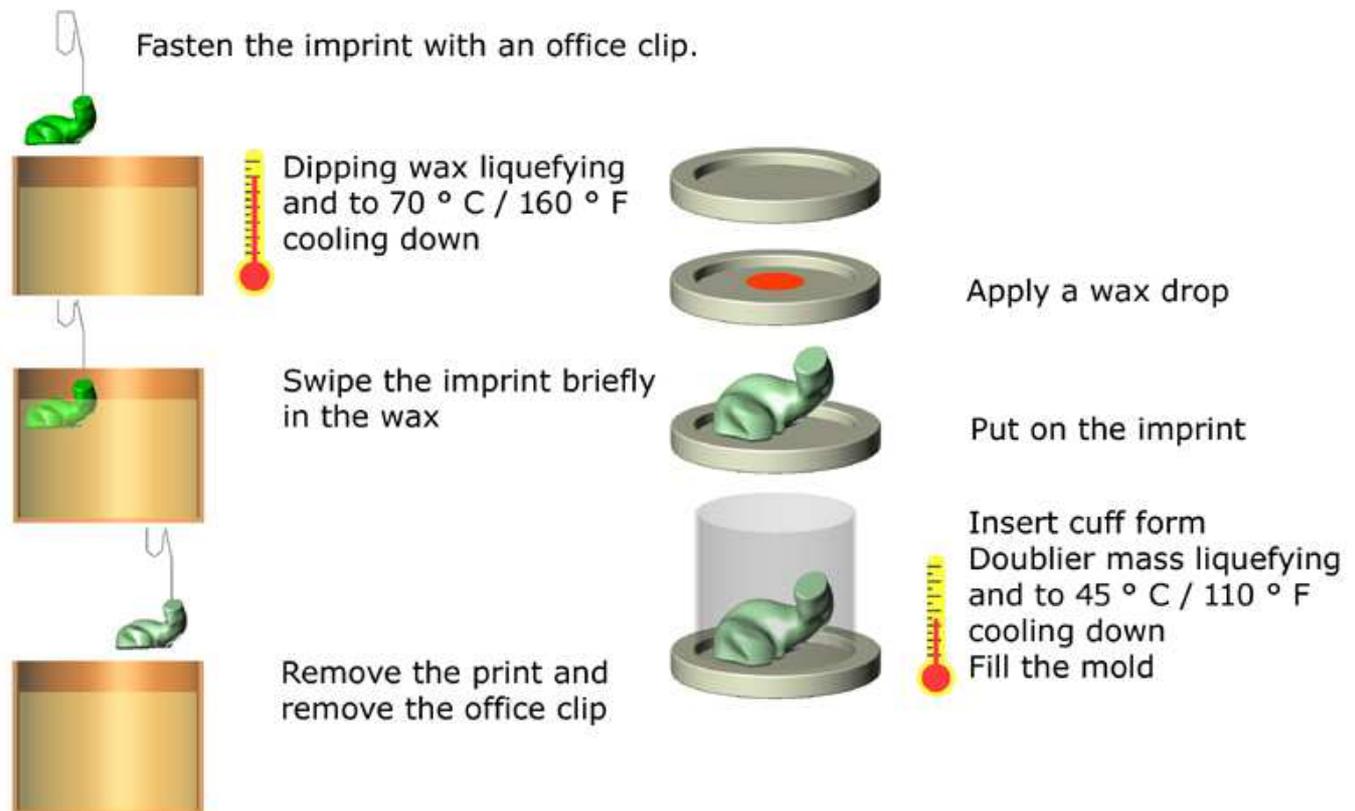
soldering iron
solder
cutting knife
side cutter
secondary glue

Building earmolds

The negative form

Material list:

Paraffin dipping wax
Cuff form
Doublier mass



Shell construction

Material list

Light-curing acrylic

Fill the negative mold with light-curing acrylic.

Place the cover of the cuff form turned around over the filling side, no UV light may penetrate

Put the negative form under UV light and turn it

A wall thickness of approx. 1.5 mm should be achieved

Excess material should be poured out and irradiated again with UV light

The material can be reused

Clean surfaces with alcohol.

Interior finish

Material list

2-3 or 4-way-system

MMCX socket

Damper (optional)

Kit acoustic tubest

Insert MMCX connector

Insert the hole for the MMCX socket

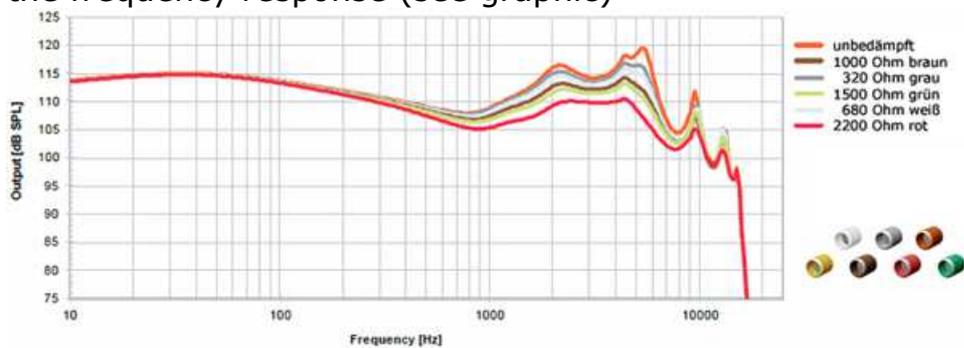
Insert the MMCX socket. The adhesive surfaces are marked red in the following drawing

Important: The connection cables are connected to the MMCX sockets. Please place the earmolds first in the ear and then draw the hole.



Insert damper (optional)

Damper or even acoustic resistors prevent peaks and smooth the frequency response (see graphic)



320, 680, 1000, 1500 Ohm reduzieren akustische Peaks
3300 und 4700 Ohm dienen als Tiefpass

Preparation of the acoustic tubes (Kit acoustic tubes)

Damper (optional) with a 3-way system into the switch or with a 2-way system into a ca.5mm-long tube with \varnothing 3mm

Glue the \varnothing 2mm tubes to the switch (glue red markings with glue and insert approx. 1mm).

Cut off the tubes to approx. 80mm length

For the 2-way system, the length of the driver-side tubes should not exceed 4 mm. The total length of the tubes should also be approx. 80mm.

Without a damper, only the \varnothing 2mm tube is necessary for the 2-way system; the 3-way system only has to be glued..



Gluing to the drivers

Glue drivers with the acoustic tubes. The contact points are shown in red.

Thin adhesive must be applied to the driver. The transition from the drivers to the acoustic tubes must be tight.



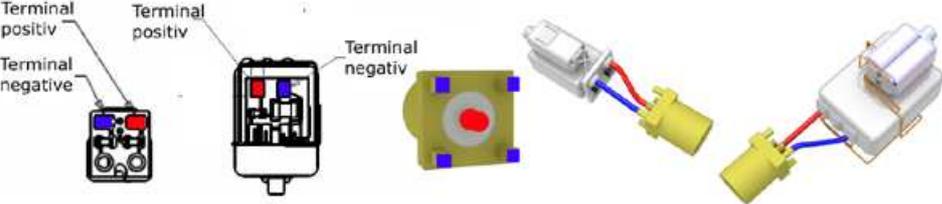
Insert into the earmold

Insert the drivers with the glued tubes into the earmolds
Tubing slightly sloping off, so they get better through the hole.



Soldering drivers and MMCX sockets

For better clarity the cables are drawn in two colors.

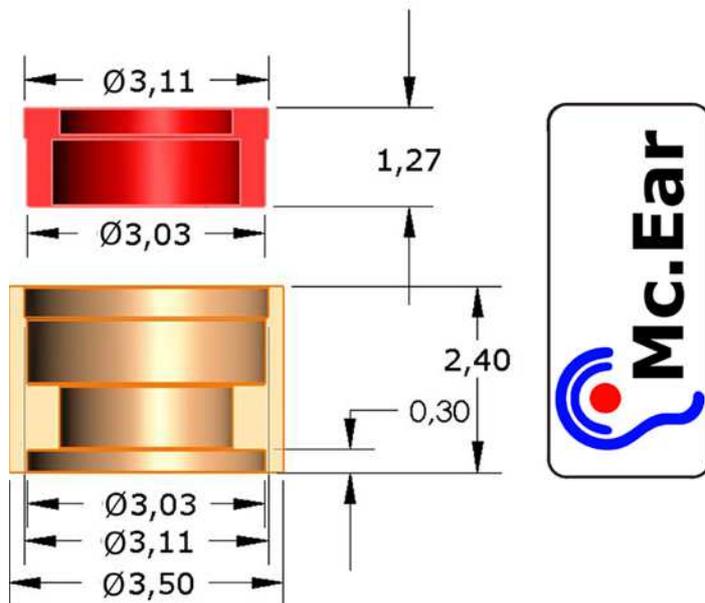
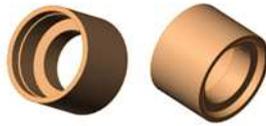


Insert the cerumen filters and filter sockets

Material list:

Cerumen filters

Filter sockets



1. Slide the acoustic tube about 2-3mm out of the earmold
2. Glue the filter socket.
3. Pull the tube and glue it with the earmold.
4. Put in the cerumen protection inserts.....ready ;-)

Test and fix the drivers

Check the almost finished inears for function.

Fix the drivers with a small dot second adhesive in the earmold

Caution, the acoustic tubes must never be kinked

Potting or with a faceplate

Material list:

Light-curing acrylic or

Faceplate

Form a hollow mold to fix the earmolds. The edge must be horizontal in all directions.

Apply light-curing acrylic to the earmolds.

Or:

Gluing a faceplate

Excess material abrade



Finishing

Material list:

Light-curing varnish

Earmolds can be easily smoothed with small files and very fine-grained sandpaper, but the surface remains dull.

Clean surfaces with alcohol.

By application of light-curing lacquer, a glossy, almost scratch-resistant surface, free of residual monomers, is achieved