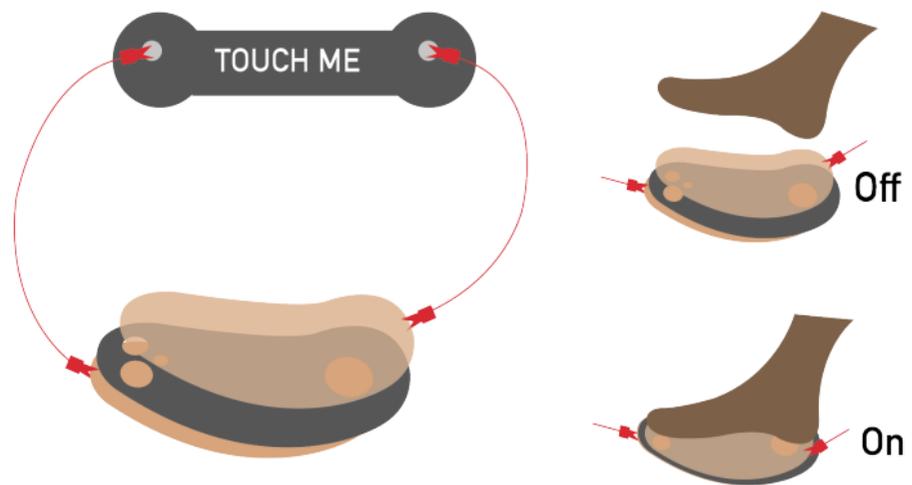


How it works?



As the area of touch and intensity changes, the sound changes too.

shemakes



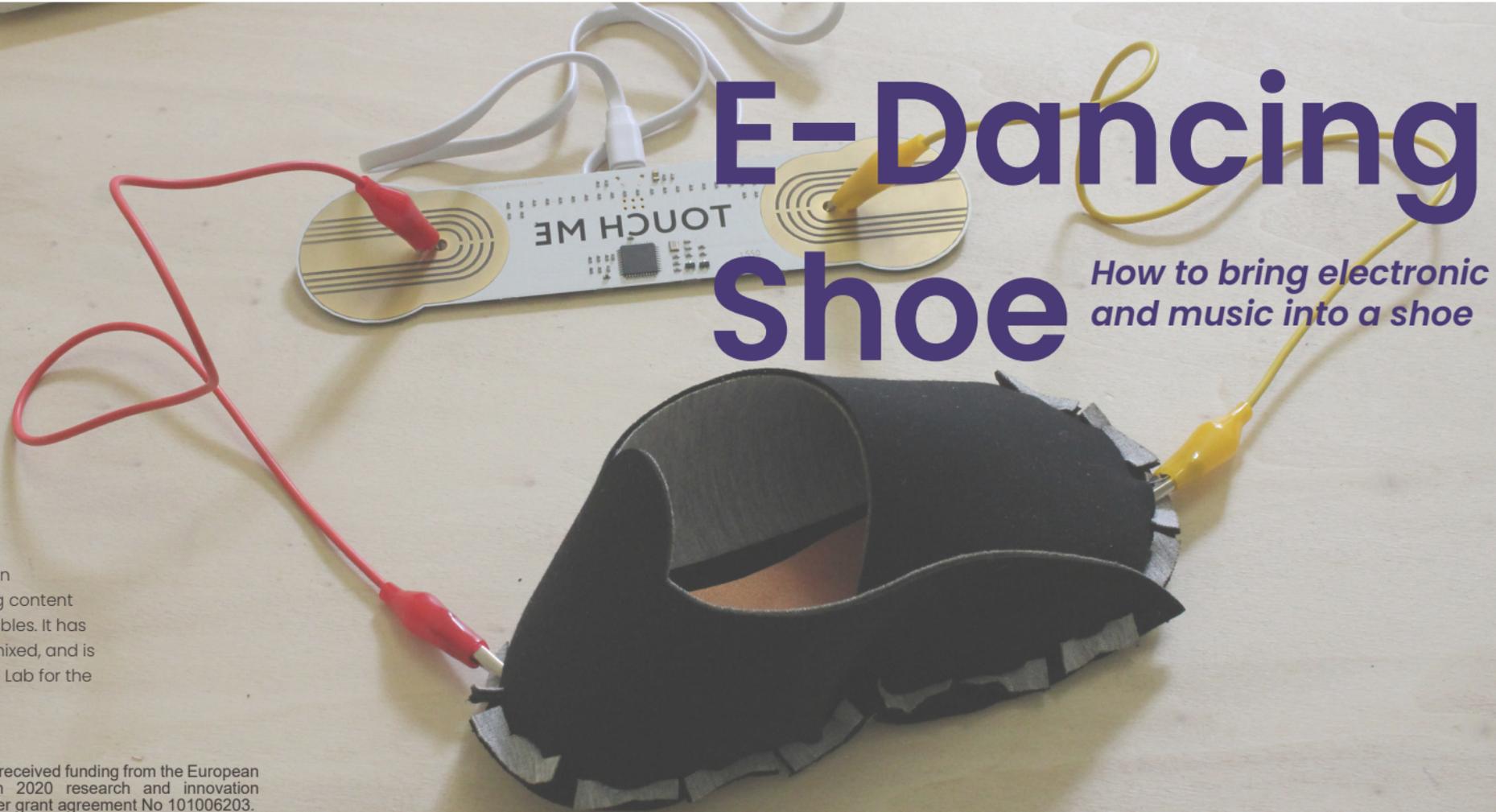
This manual is based on Fabricademy's learning content of e-textiles and wearables. It has been adapted and remixed, and is developed by Le Textile Lab for the SHEMAKES project.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006203.

E-Dancing Shoe

How to bring electronic and music into a shoe



Materials & Tools



Materials

- ▶ Neoprene textile
- ▶ Conductive fabric
- ▶ Board Playtronica Touch me
- ▶ Paper
- ▶ Tape

Tools

- ▶ Electric wires
- ▶ Multimeter
- ▶ Pen
- ▶ Scissors
- ▶ Lasercut

E-Dancing Shoe

Step by step instructions

Process overview

- ▶ Step 1: Make the sole
- ▶ Step 2: Prototype the shoe with paper
- ▶ Step 3: Vectorize & lasercut the shoe pattern
- ▶ Step 4: Assemble the shoe
- ▶ Step 5: Plug the board
- ▶ Danse !



Step 1: Make the sole

- ▶ Draw the shape of the feet onto paper and cut it with scissors.
- ▶ Test the material's conductivity with the multimeter
- ▶ With the help of the paper pattern sole, cut 2 soles with conductive textile and one with neoprene.
- ▶ Cut some holes in the neoprene one.

Step 2: Prototype the shoe with paper

- ▶ Draw the shape of the dancing shoe.
- ▶ Prototype first with paper and scissors.
- ▶ Don't forget the notches ! How to attach the shoe



Step 3: Vectorize & lasercut the shoe pattern

- ▶ Take a picture of the shoe. With the help of a facilitator, vectorize the drawing with a vector software.
- ▶ Laser cut the shoe with the help of a facilitator or cut it with scissors.

Step 4: Assemble the shoe

- ▶ Insert the notches to assemble the shoe
- ▶ Create a sandwich with the neoprene sole in between the two conductive soles.
- ▶ Insert the soles into the shoe.



Step 5: Plug the board

- ▶ Plug the first wire on the top conductive sole and connect it with one side of Playtronica.
- ▶ Plug the second wire on the bottom conductive sole and connect it with the other side of the Playtronica.
- ▶ It's ready !