

version 01

batmonitoring.org

How to build a waterproof box for your AudioMoth

Material list:

- Electric box Famatel 75x75 mm, IP55 model
- Rubber foam ADH 15 mm
- Expanded polyethylene foam 3 mm
- Waterproof acoustic membrane 2.0, 0.9 mm
www.akustikstoff.com
- Drill
- Superglue
- Silicone + glue gun
- Two small silica gel bags
- Cutter



ATTENTION!

1. If you do not have the acoustic membrane, you can use plastic film (what you use in the kitchen), attached with scotch tape, but remember that it will be less waterproof and less long-lasting.
2. Rubber and polyethylene foam can also be replaced by other materials with the same size and similar texture.

version 01

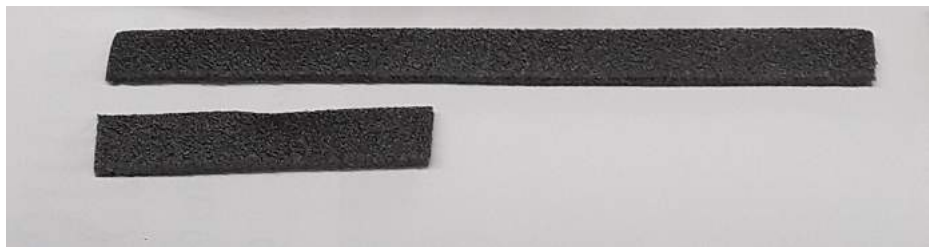
batmonitoring.org

How to build a waterproof box for your AudioMoth

1. Cut the rubber foam in two 15x15x40 mm long pieces and two 15x15x15 mm cubes.



2. Cut the polyethylene foam in three pieces: one of 5x3x150 mm, one of 5x3x40 mm and one of 2x3x300 mm.



3. Stick the two long pieces of rubber foam with superglue at the bottom of the box.
4. Stick the two cubes of rubber foam with superglue as in the figure (one at each side).



5. Stick the long piece of polyethylene foam with superglue as in the figure.
6. Introduce **two** small silica gel bags at the bottom of the box.

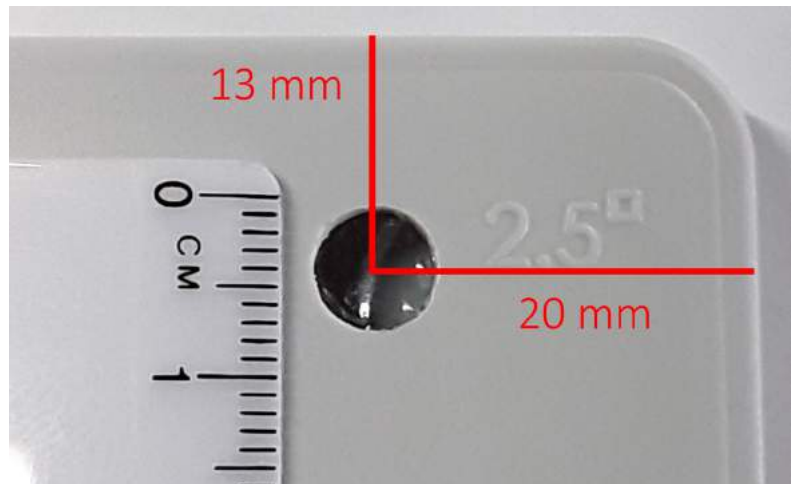


version 01

batmonitoring.org

How to build a waterproof box for your AudioMoth

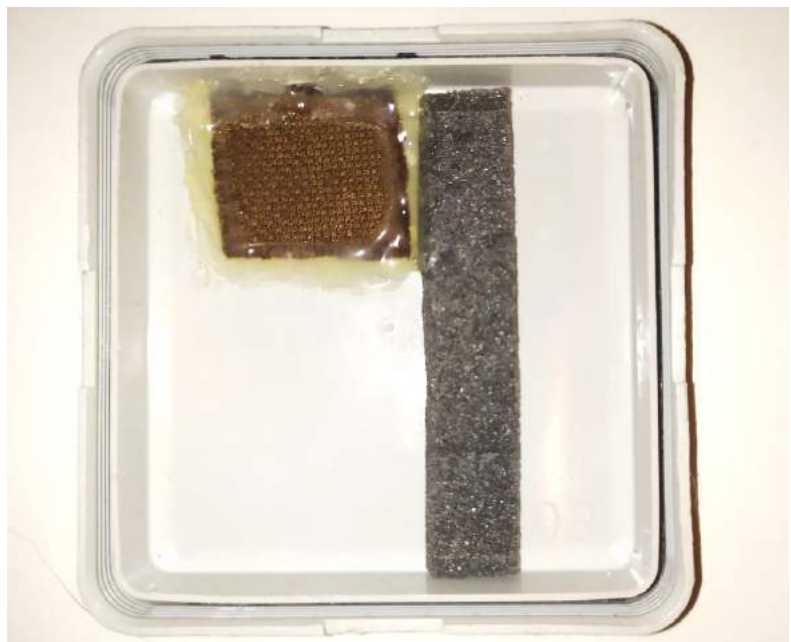
7. Make an 8 mm diameter hole on the cover with the drill, at 13 and 20 mm from the edge.



8. Stick the short piece of polyethylene foam in the cover interior with superglue.
9. Insert the thin piece of polyethylene foam along the cover joint.



10. Cut a piece of acoustic membrane (20x20 mm) and stick it on the cover interior covering the hole. Use abundant superglue around the hole.
11. Fill with a thin layer of silicone all the membrane edge to avoid water filtering.



version 01

batmonitoring.org

How to build a waterproof box for your AudioMoth

Used foams:

Left: rubber foam; right: polyethylene foam



If you can not get all the materials, you can always be imaginative and reuse other boxes.

