MightyWatt case assembly instructions

For board revisions: 2.0 and higher
Guide revision: B (2016-03-04)

Assembly

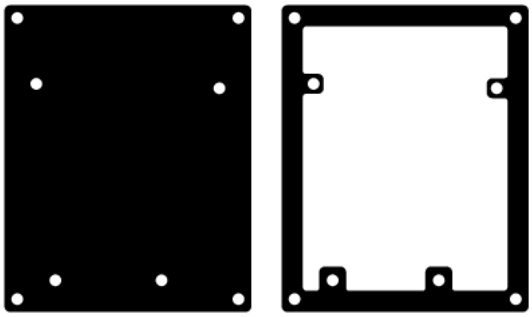

Figure 1: Bottom layer (left) and spacer layer (right).

1) Remove protective plastic film from both sides of each acrylic layer.
2) Take the bottom solid layer and put the spacer layer on top of it (Figure 1). Put Arduino Uno R3 on top of the spacer layer and fasten it to both layers using three M3×10 screws. One of the fixing places cannot be used because Arduino board does not have enough space for the screw head.
3) Put MightyWatt on the Arduino, it is easier to attach it now than it will be when the case is assembled.
4) Take the four M3×40 screws, put them upside down (heads facing the bench) into the four corner holes. This will keep the layers properly aligned. The screws will be eventually turned heads up.
5) Start stacking layers (Figure 2): First, the five layers with cutout for USB. Then the two layers with solid outlines and finally, the three layers with cutout for terminal.
6) Carefully take out one of the screws, turn it heads up and put it back into its hole. Fasten with nut. Repeat with the three other screws.
7) Put the four rubber bumpers on the bottom layer, preferably close to corners for best stability.
8) Enjoy!

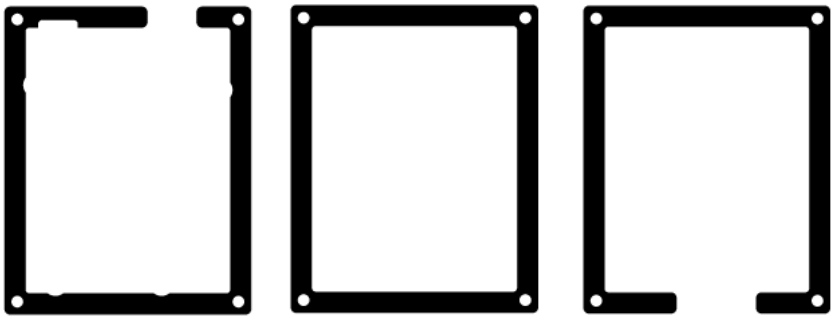

Figure 2: USB cutout layer (left), solid outline layer (centre) and terminal cutout layer (right).

Material info

Layers: Laser cut 3mm transparent poly(methyl methacrylate).

Screws: Nylon 66, Phillips head, metric thread (ISO 7045), M3×10; A2 stainless steel, Phillips head, metric thread (ISO 7045), M3×40.

Nuts: Nylon 66, metric thread (ISO 7045), hexagonal M3; A2 stainless steel, metric thread (ISO 7045), hexagonal M3.

Bumpers: Clear polyurethane, 60–70 Shore (Durometer A). Rubber adhesive.