

Building instruction for Benedini Oilsmoke II

**Building this smoker needs mechanical and solder skills!
A bench drill is highly recommended!**

Construction steps:

1. Cut the drilling jig out of the last page of this manual and tape it on **top** of the blue box (lid).

If the **LARGE** smoker housing is used, the jig can be placed in the center of the lid. This leaves space for **vertical** smoke exit on the left **and** right side of the housing.

2. Mark ALL wholes through the paper by a needle.

3. Drill all holes you need. **Watch the labeled diameters**

NEVER use a normal spiral drill for the large smoke outlet holes !!!

→ **High danger of getting injured during drilling**

Use a “**hole cutter**” as shown in the picture on the right →

Always use a **parallel vice** during drilling.

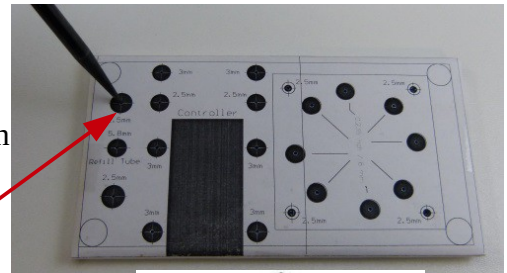
Never hold the housing by **hand** during drilling.

4. Mount solder lugs by the M3 x 6mm screws + nuts.

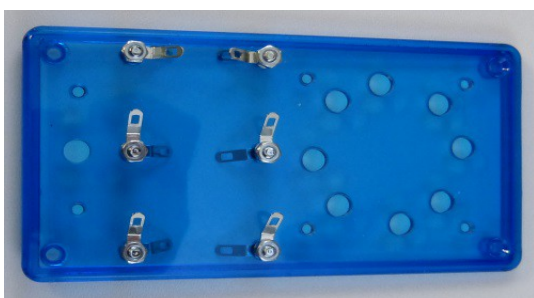
Watch the lug orientation inside and outside the box !!! (see last page for **24V** operation)

Tighten the screws carefully but do not overturn!

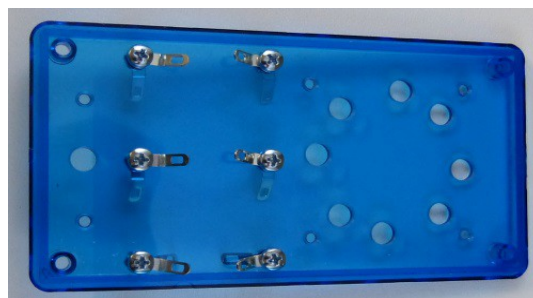
They feed the heating current into the box.



Hole cutter



Outside view of solder lugs (top)
(**12V operation** is shown here)



Inside view of solder lugs

5. Install the fan by 2.9 x 19mm self tapping screws

6. Install the smoke controller by double faced adhesive as shown below (tape not included)

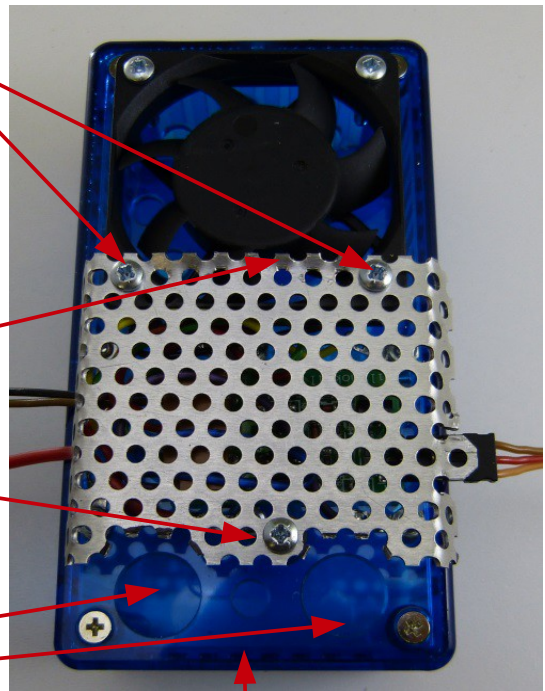
7. Solder all wires as shown at the end of this manual according to the desired **operation voltage** !!!

9. Install cover by using two of the fan screws.
Make ABSOLUTELY sure the cover does NOT touch any electric contacts below !!!

10. Bend the edge covering the fan slightly to top.
This ensures a **free running** fan.
!!! No guarantee on damaged fans !!!

The third cover screw is supported by a 10mm plastic sleeve between box and cover.

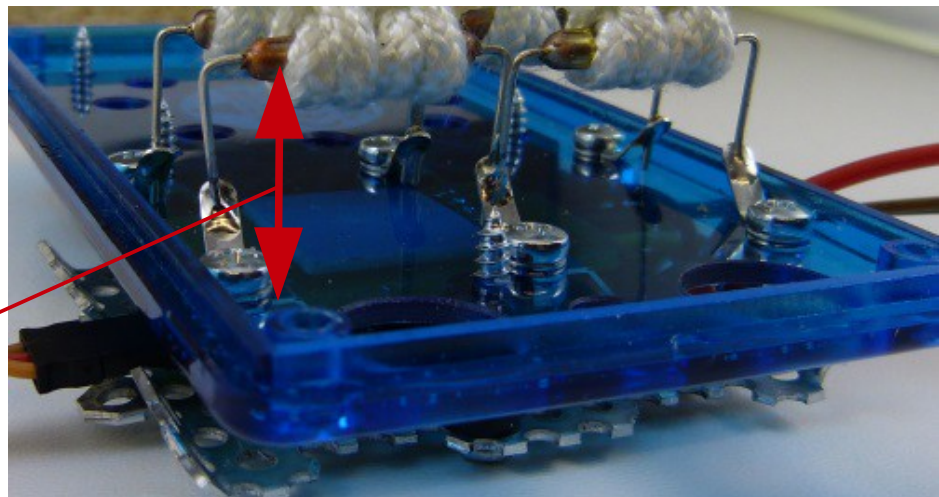
2 vertical smoke exit are shown on this picture.
Cover needs to be cut out in this configuration.



Insert refilling tube here

11. Solder heating elements to the solder lugs inside the box.
2x two heaters in series, as shown on the right.

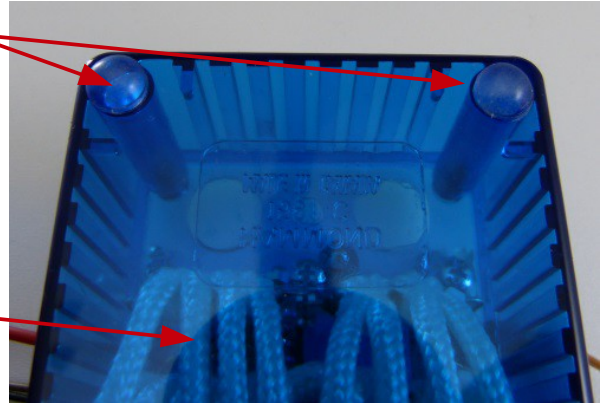
Distance to the lid must be **15mm !!!**



12. Install the lid on the box by bending the wicks **CAREFULLY** to the side of the **FAN**.
!!! Check if all wicks touch the bottom of the box !!!

13. Tape two rubber feet on the **EXIT** side of the housing.
The exit side should be raised slightly to keep the smoke oil more in the opposite edge.

14. Check if the bended wicks look like this
(view through the bottom)



15. Insert the filling tube.

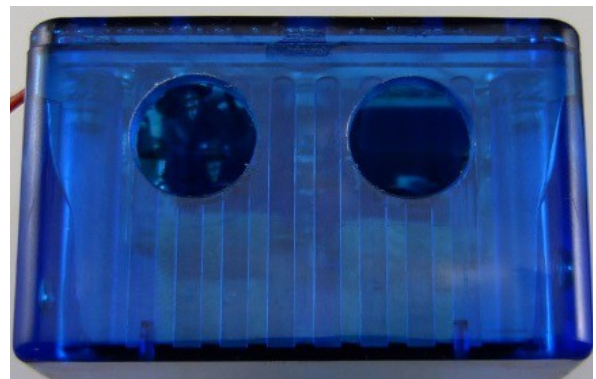
Make sure it last about **5mm until bottom**

End of filling tube

2x Elevation feet on filling tube side **ONLY**



Housing with **2x horizontal smoke exit**.
In this case do NOT drill exit holes into the lid!
(front face view)
Drilling jig see last page.



Hints:

1. If any drilled hole is **not** used, close it simply by inserting a screw.
2. **Horizontal** smoke exit:
Drill holes as **high** as possible!
Otherwise the max. filling volume of smoke oil is reduced! Oil may flow into the exit tubes.
3. Install tubes continuously rising to the exhaust. This allows condensed smoke flowing back into the container.
4. See **operation manual** for installation and operating advice for the smoker !!!

It is recommended downloading this manual from www.benedini.de for having coloured pictures.

Technical changes reserved

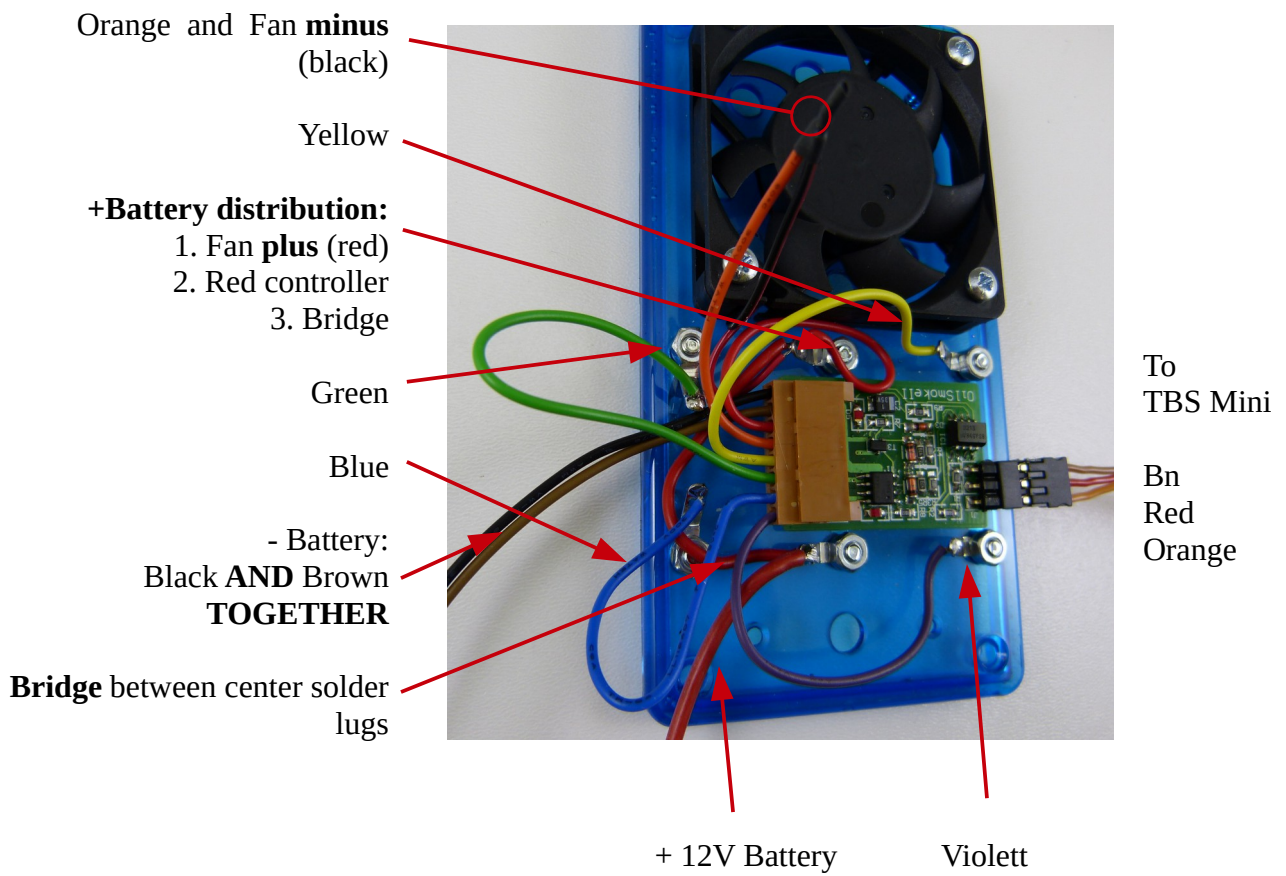
Not suitable for kids under 14 years



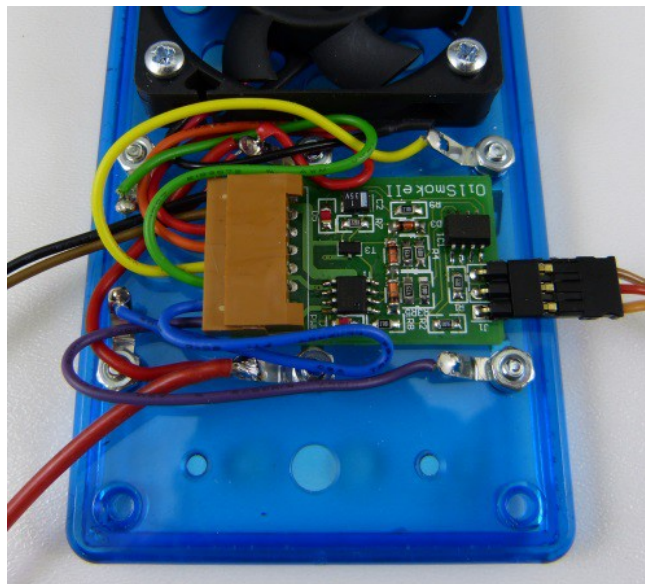
Benedini Modellbauelektronik
Müllergasse 15, 52159 Roetgen
Web: www.benedini.de
Mail: Thomas@Benedini.de



12V wiring

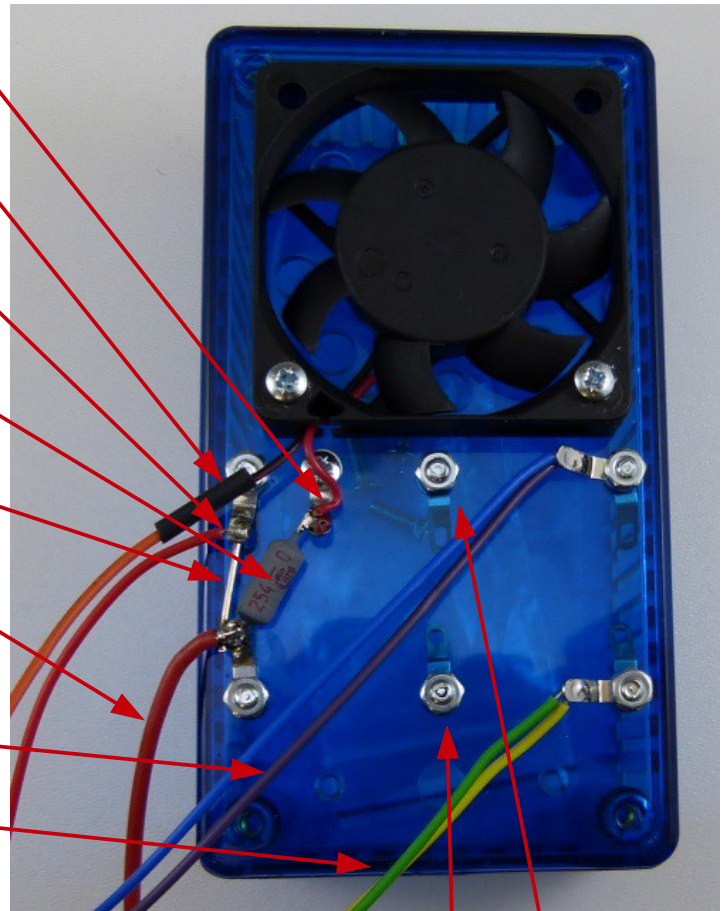


Arranged cables after soldering



24V Wiring

- Plus Fan to resistor solder lug
- Controller Orange to Minus Fan
- Controller Red
- Fan Resistor
- Bridge between left solder lugs
- + 24V Battery
- Controller Blue AND Violet
- Controller Green AND Yellow
- Controller Black AND Brown to Minus Battery (not shown on this picture)



!!! Nothing connected here but **under voltage** !!!

24V solder lug installation

Left: Outside view of lid
Right: Inside view of lid

Self tapping screw

