



MADE IN EUROPE



## „Willi" the Ghost Soldering Kit

### Preparation:

Carefully release wooden parts from the board and set out all parts.

### You will also need:

Soldering iron, solder, tweezers, wire strippers

**Recommendation for children and teenagers:** Assembly and soldering should be supervised by an adult.



QR Codes:

### Anleitung (DT)



[https://www.sol-expert-group.de/76332\\_Anleitung\\_Gespenst%20Willi-DT\(4\).pdf](https://www.sol-expert-group.de/76332_Anleitung_Gespenst%20Willi-DT(4).pdf)

### Manual (EN)



[https://www.sol-expert-group.de/76332\\_Anleitung\\_Gespenst%20Willi-EN\(2\).pdf](https://www.sol-expert-group.de/76332_Anleitung_Gespenst%20Willi-EN(2).pdf)

### Instructions (FR)



[https://www.sol-expert-group.de/76332\\_Anleitung\\_Gespenst%20Willi-FR\(2\).pdf](https://www.sol-expert-group.de/76332_Anleitung_Gespenst%20Willi-FR(2).pdf)

### Instructies (NL)



[https://www.sol-expert-group.de/76332\\_Anleitung\\_Gespenst%20Willi-NL\(2\).pdf](https://www.sol-expert-group.de/76332_Anleitung_Gespenst%20Willi-NL(2).pdf)

### Safety notes:

- Keep this manual for future reference! It contains important information.
- When the battery is drained, always replace it with a new battery with the same rating.
- The soldering iron, solder and the parts being soldered become very hot. Be very careful!
- Always use a mat when soldering! This prevents parts from slipping.
- We recommend using a soldering iron holder to set the soldering iron down safely during use.
- This kit is intended for battery operation only.



**ATTENTION:** Never connect the kit to 230 V mains voltage! Acute danger to life!



### Soldering kit "Willi the Ghoulish Ghost"

**Generally:** This soldering kit is intended to introduce to the basics of soldering. It is excellent for instructor-led courses at schools and workshops. Willi the Ghost can also be used at holiday programmes, school camps and other events related to soldering.

Dimension ghost "Willi": 105 x 82 x 28 mm (H x W x D).

### Functionality

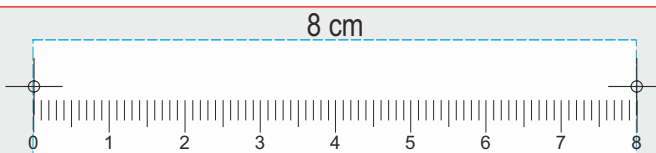
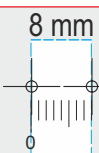
The completed kit can be used as a night light. The battery can be replaced with a battery of the same type.

### Environmental notes:

**Generally:** Please return the electronics to a certified provider at the end of their useful life. These will then ensure the parts are disposed of in compliance with directives. This is good for the environment and an important part of actively protecting the environment.

### Battery ordinance:

You have purchased a battery-powered product. The battery has a limited life and must therefore be replaced regularly. Do not dispose of used batteries in the household waste. Consumers are required by law to return batteries to a suitable collection point. Used batteries contain valuable raw materials which are recyclable. You can also send your used batteries to us: SOL-EXPERT group, Mehlisstrasse 19, 88225 Baidnt.



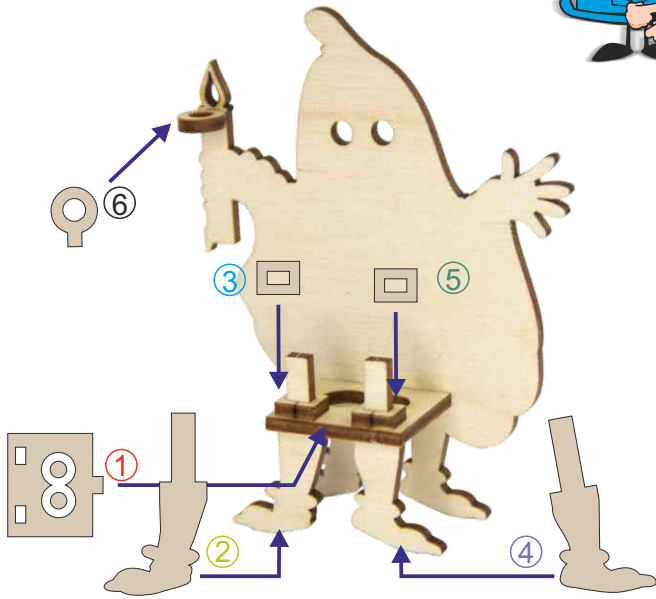
Cable and LED template for step **B** and **H**.

And now the:

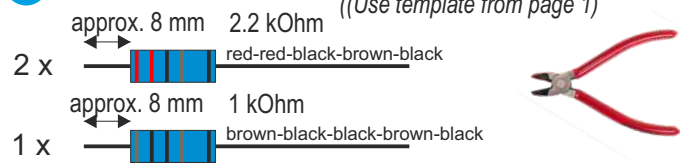
# ASSEMBLY INSTRUCTIONS



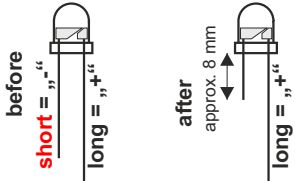
**A** Assemble the ghost: 1 - 2 - 3 - 4 - 5 - 6



**B** Trim one end of the resistors with wire cutters:



Trim the **SHORT** post of the LEDs with side cutters:



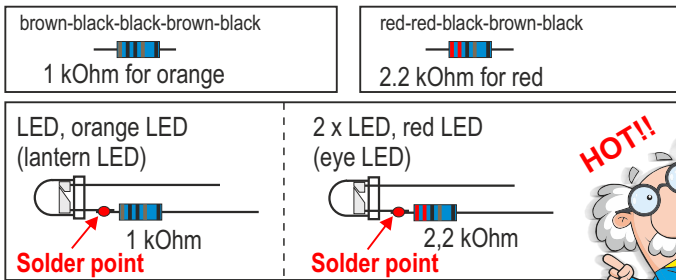
**NOTE:**  
The post of the orange LED is red! Do not reverse.

**C** Solder LEDs and resistors together.

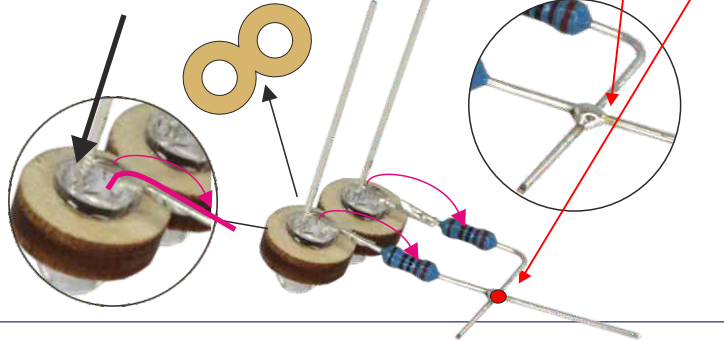
(pre-tin the individual wires)

**ATTENTION!** Pay attention to the correct resistance!

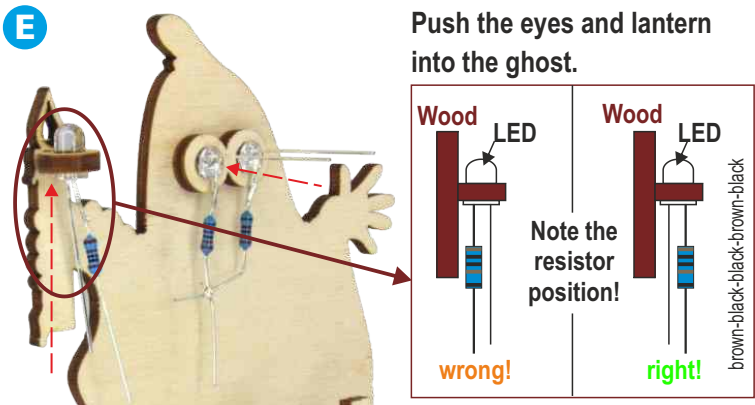
The ring colours indicate the resistance.



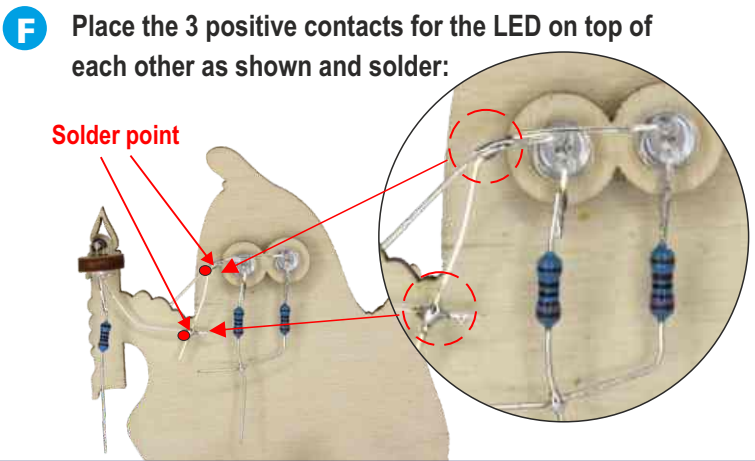
**D** Push the eye LEDs into the wooden piece as shown, bend the feet with resistors and then solder.



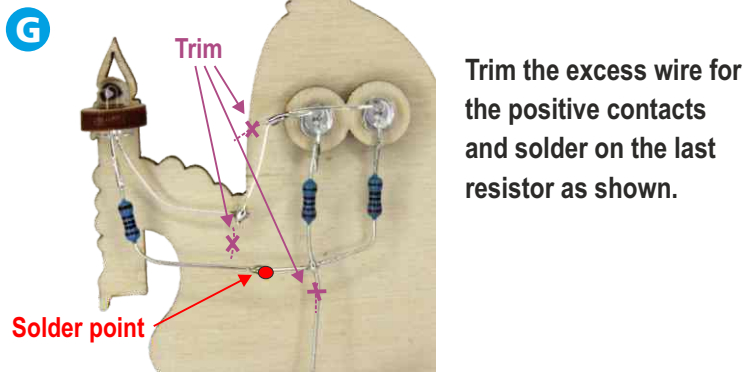
**E**



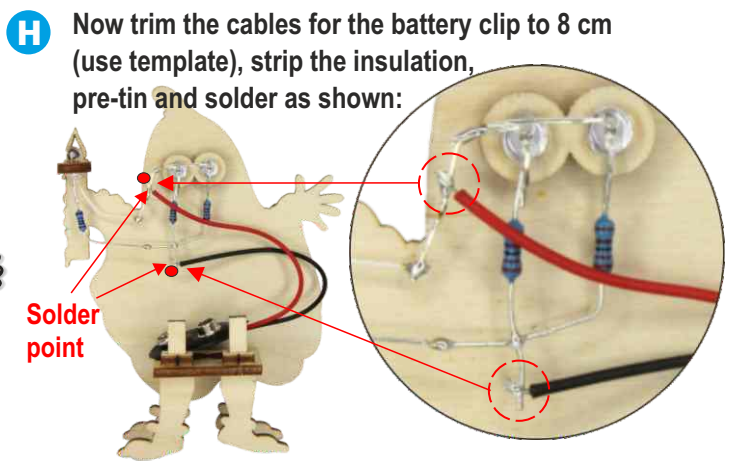
**F**



**G**



**H**



**I**

