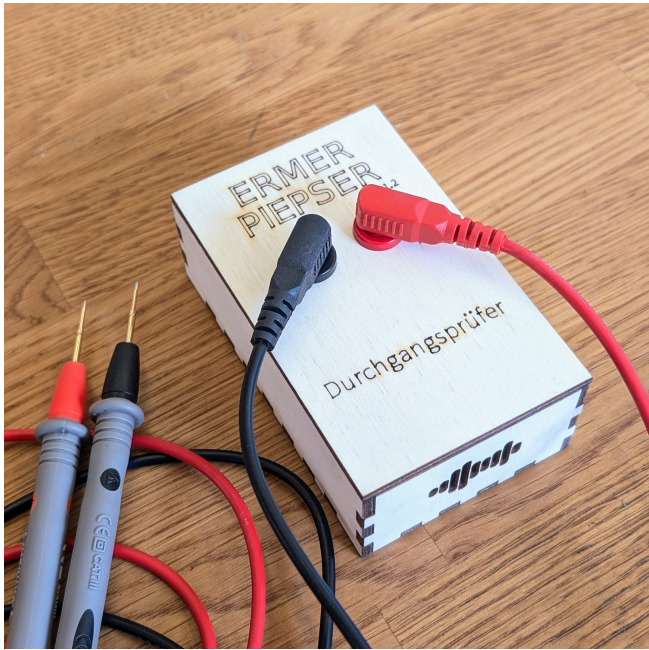


Ermer Beeper



Quantity	Name	Description	Signing/Colorcode
2	C1,C2	100 nF capacitor	104
1	R1	1 k Ω resistor	BR BK BK BR BR
2	R2,R3	5.6 k Ω resistor	GR BL BK BR BR
1	R4	56 Ω resistor	GR BL BK GO BR
2	Q1-Q2	3x1 Pinsocket	
1	LS1	8 Ω –100 Ω speaker	
2	J1,J2	4 mm binding posts	
1	BT1	2xAA battery holder	
2	AA batteries (not included)		
7	wooden box parts (optional)		
1	Measurement cable		
2	BC547C NPN transistor		
1	Cable (10 cm)		
1	PCB		

Difficulty: ●●○○○ Build-Time: 1–2 Hours

Manual v1.3 CC BY-SA 4.0 Binary Kitchen e.V.

Board v1.3 CC BY-NC-SA 4.0 blinkyparts.com

Farblegende: SI = silber; GO = gold; BK = schwarz; BR = braun; RE = rot; OR = orange; YE = gelb; GR = grün; BL = blau; VI = violett; GR = grau; WH = weiß

Safety Information

- ATTENTION: Not suitable for children under 3 years, choking hazard due to small parts that may be swallowed.
- We recommend: Supervision of the assembly and soldering process by an adult.
- Keep these operating instructions in a safe place for later use! It contains important information.
- If the battery is empty, replace it only with a new battery with the same values.
- When soldering, the soldering iron, the solder and also the components being soldered become very hot.
- Always wear safety glasses when soldering and assembling the kit.
- Always use a fire proof soldering pad when soldering! This prevents the components from slipping away.
- To keep the soldering iron safe during assembly, always use a suitable soldering stand.
- The kit is designed for battery operation only.
- CAUTION: Never connect the kit to 230 V mains voltage! There is an absolute danger to life!
- Please take the device to appropriately certified disposal companies at the end of its service life. This is good for the environment and ensures correct disposal.
- Subject to changes and errors.

Disposal

This appliance is labelled in accordance with the European Directive 2012/19/EU on waste electrical and electronic equipment (WEEE). The directive provides the legal framework for the take-back and recycling of waste equipment throughout the EU.

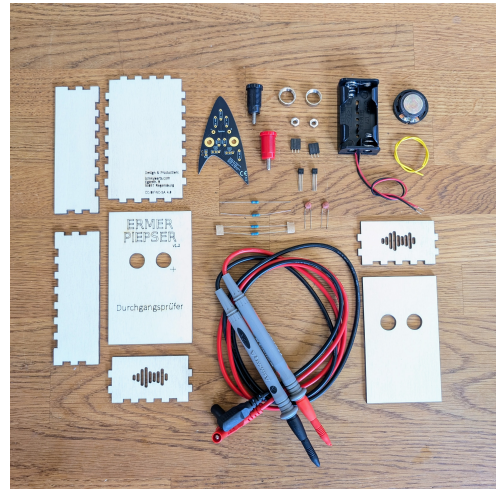
- **packaging:** The packaging is made of environmentally friendly materials and is therefore recyclable. Dispose of packaging materials that are no longer needed accordingly.
- **waste equipment:** Old appliances often still contain valuable materials. Therefore, hand in your old appliance to your retailer or a recycling centre for reuse. Please ask your retailer or your local authority for the current disposal routes.

blinkyparts.com
Egerstr. 9
93057 Regensburg
GERMANY



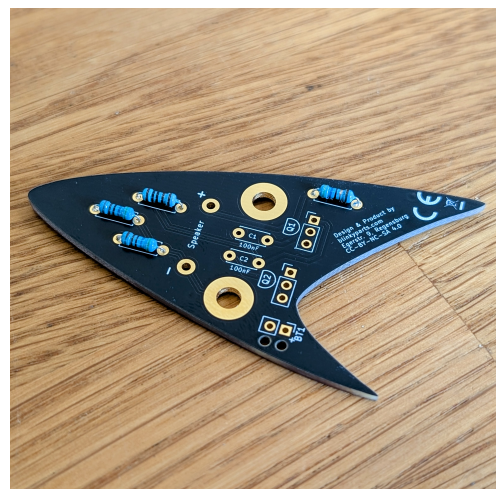
Step 1

- First, check your components. You'll find an overview on the first page.
- Tip: You can determine the resistance value using the printed color code
- The orientation of resistors and capacitors is not important
- Note: The orientation of transistors is important and is printed on the circuit board.
- First, sand down any solder smudges with fine-grit sandpaper.



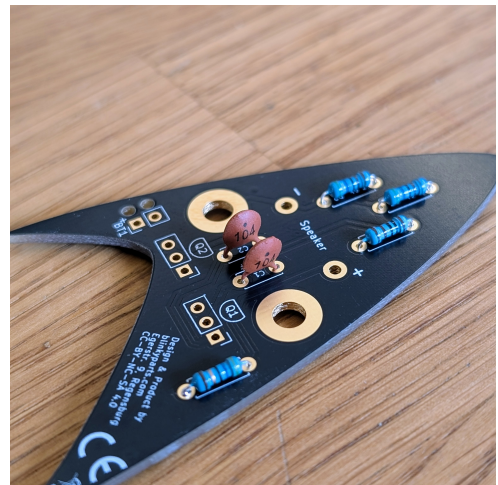
Step 2

- Solder all resistors in place.
- Make sure to use the correct value printed on the board. You'll find the color code on the first page.
- Resistors don't have a specific orientation.



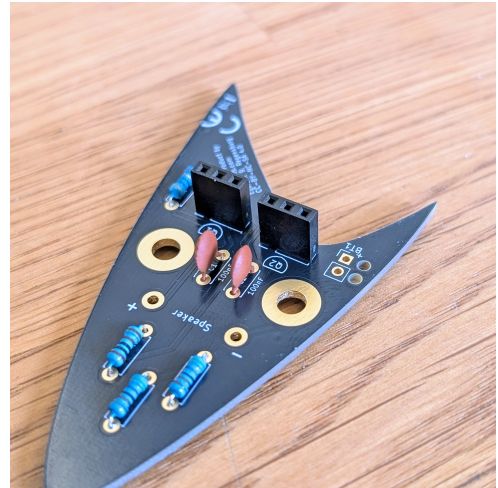
Step 3

- Solder on capacitors C1 and C2.
- These ceramic capacitors don't have a specific orientation.



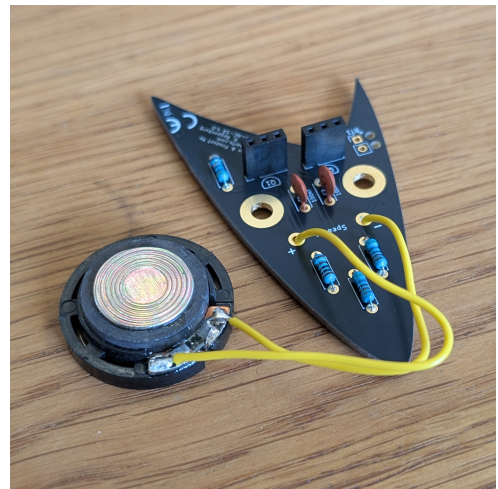
Step 4

- a) Solder the two pin headers Q1 and Q2 in place.
- b) Make sure they are standing relatively straight on the board. It helps to solder just one pin in place first. This way, you can correct the position with your finger by reheating the solder joint.



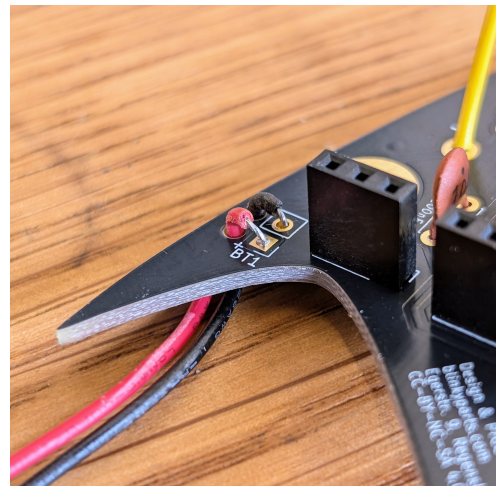
Step 5

- a) Take the wire and cut it in half.
- b) Strip about 5 mm of insulation from both ends of the two wires.
- c) Apply a small amount of solder to the stripped wires. This will make soldering easier later.
- d) Solder each wire to the copper pad on the speaker.
- e) Then solder the other end of each wire to the speaker position on the circuit board. It doesn't matter whether it's the front or back. It also doesn't matter which is positive and which is negative.



Step 6

- a) Thread the red and black wires from the battery holder through the holes next to the solder points.
- b) Now insert the wires into the solder pads. Note: red is positive, black is negative.
- c) Solder the wires in place.



Step 7

- a) Prepare the banana plugs and nuts. Note: The red and black plugs may have different threads. Test the nuts beforehand, they should screw on easily.
- b) There are two wooden pieces with large round holes in them. Glue them together so that the holes line up. The "Ermer Piepser" label should be visible when you flip the glued pieces over.
- c) Screw the banana jacks in place right away to center them over the holes.



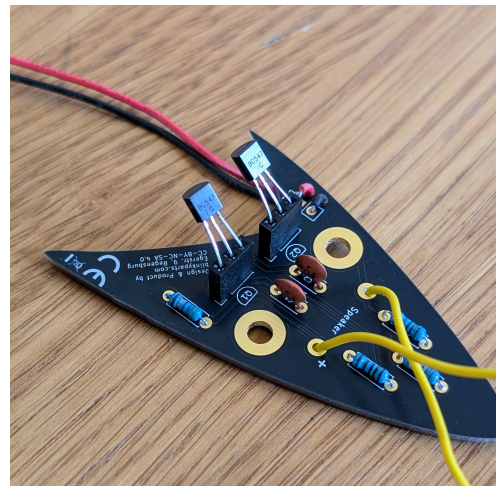
Step 8

- a) Assemble and glue the remaining parts together as shown in the photo.
- b) Tip: Use masking tape to hold the wooden parts in place until the glue dries.



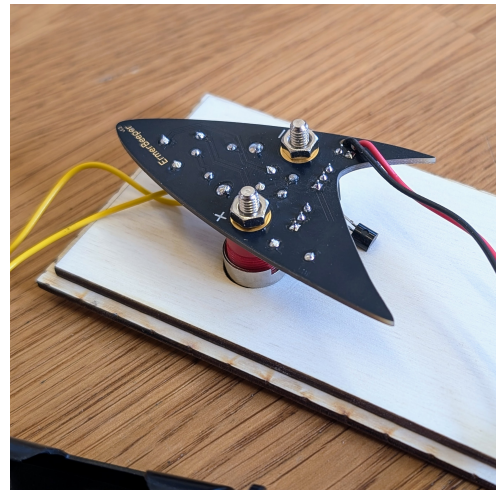
Step 9

- a) Insert the transistors into the pin headers. The markings on the transistors (BC547...) must face the two round gold holes on the circuit board.



Step 10

- a) Screw on the Ermer buzzer as shown.



Step 11

- a) Insert the batteries, insert the battery holder into the box, and insert the speaker as well. You may have to fiddle with it a bit, but everything fits inside the box.
- b) The box should close without too much pressure. Secure the box with a wide rubber band.
- c) Connect the test leads (red to positive).
- d) Done! Get started and test your first circuit!

