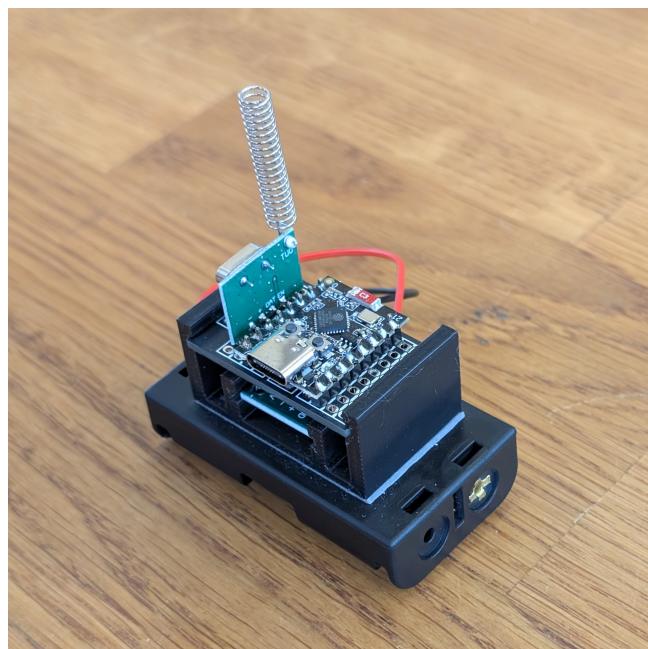


# Draussenfuchs Transmitter



Quantity	Description
1	ESP32-C3 Super Mini
1	3D Printed Bracket
1	ISM-Transmitter Qiachip WL102-341
1	5 V 600 mA Step-Up-Module
1	2 AA-Battery Holder
1	Draussenfuchs PCB
1	433MHz Antenna
1	Double sided Tape (Not included)

Difficulty: ●●○○○ Build-Time: 10 – 30 Minutes

Manual v2.0 CC BY-SA 4.0 Binary Kitchen e.V.  
Building Kit v1.0 MIT License [Harm, DK4HAA, draussenfuchs.de]

## 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.

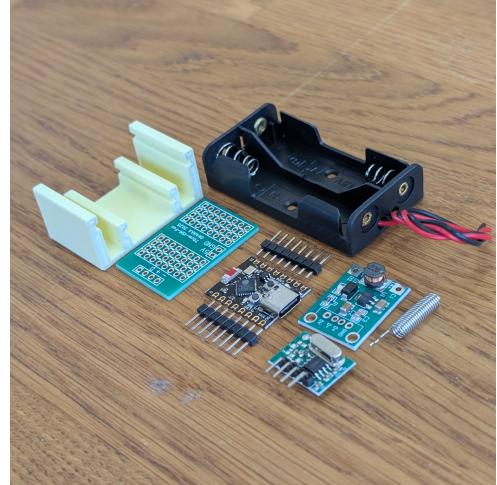
blinkyparts GmbH  
Egerstr. 9  
93057 Regensburg  
GERMANY  
[blinkyparts.com](http://blinkyparts.com)



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### Step 1

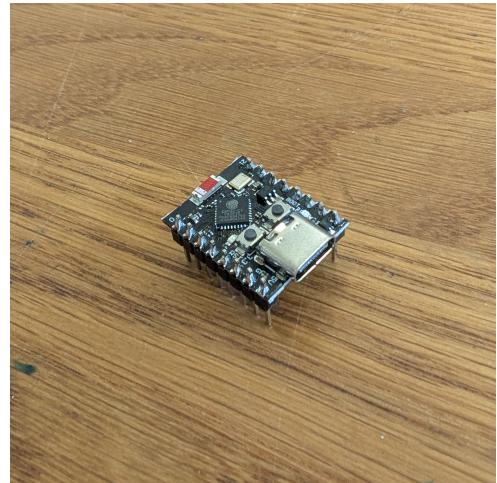
- a) Check whether all the parts are there.



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### Step 2

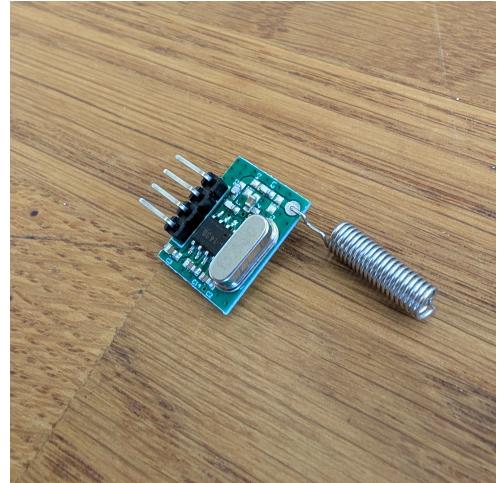
- a) First solder the two pin headers into the ESP, so that the long side of the pin headers is facing down
- b) you can use the outdoor fox board as an aid, so that the pin headers sit straight
- c) plug the pin headers into the outdoor fox board and then plug the ESP on top
- d) this will keep the pin headers in place and you can solder them to the ESP.



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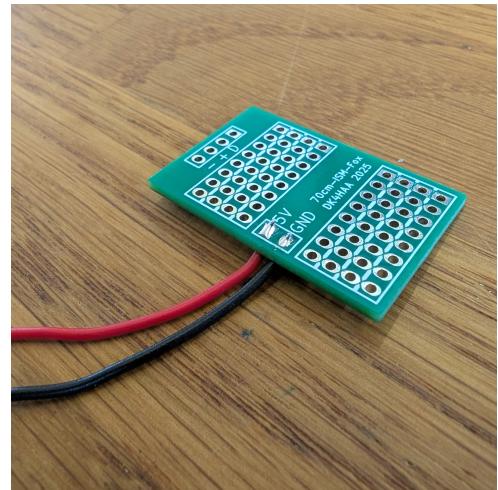
### Step 3

- a) Next, solder the antenna into the hole provided in the radio module
- b) There is already some tin in the hole, add a little more and insert the antenna through the hole, while the tin is still liquid
- c) Make sure that the antenna is at right angles to the circuit board.



#### Step 4

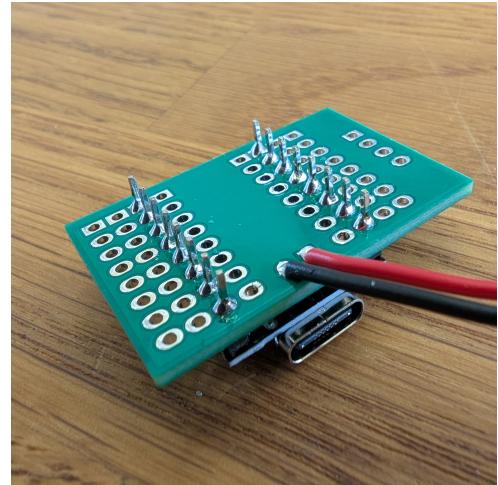
- a) Then you can cut off two pieces about 3-4 cm long from the red and black cable of the battery holder
- b) solder the red cable into the hole labeled 5V on the outdoor fox board
- c) solder the black cable into the hole labeled GND.



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#### Step 5

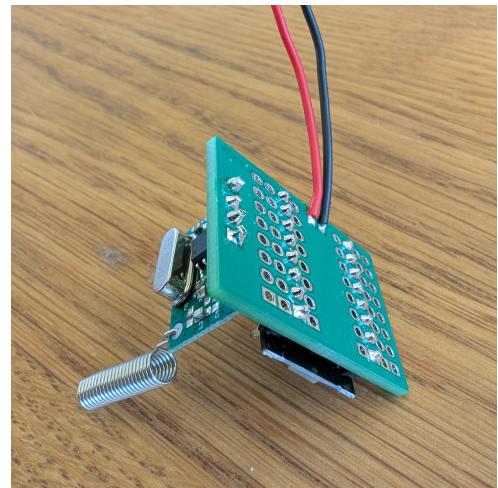
- a) Now you can insert the ESP into the third row of the circuit board
- b) once this is done, you can solder it in place from below
- c) then you have to cut off the protruding legs
- d) do not use electronics side cutters for this, but a slightly more stable one.



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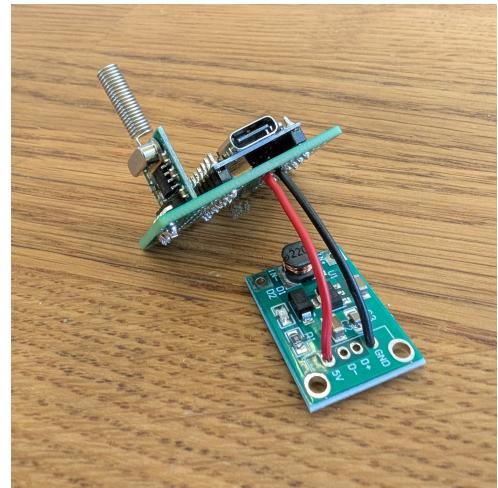
#### Step 6

- a) Next, insert the radio module with the four connections into the outdoor fox board, so that the side with the components faces away from the ESP
- b) now you can solder it on from below
- c) make sure that the boards are at right angles to each other.



### Step 7

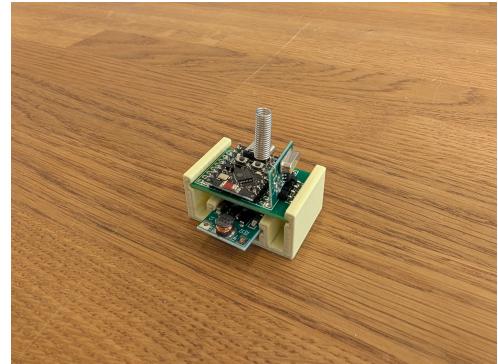
- a) Next, we solder the two cables from the outdoor fox board to the step-up module
- b) the red cable goes into the hole labeled 5V, the black one into the one labeled GND
- c) pay attention to the orientation of the cables - they should lie flat over the components of the voltage converter.



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### Step 8

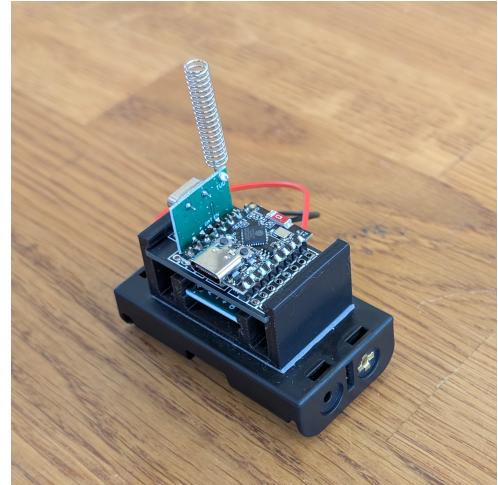
- a) Now slide all the circuit boards into the 3D-printed holder
- b) finally, solder the two cables of the battery holder to the step-up module
- c) the black one goes into the hole labeled GND, the red one into the one labeled 5V.



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### Step 9

- a) If you wish, you can attach the 3D-printed holder to the battery holder with double-sided adhesive tape (or superglue)
- b) however, this is not absolutely necessary.



## Step 10

- a) If you don't already have a flashed ESP, you need to flash it now
- b) scan the QR code or open this link in your browser:  
<https://wiki.blinkyparts.com/de/Bausaetze/Draussenfuchs>

