

# Transmitter Mini

Battery replacement

*EMS Brno, September 2020*

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# Notice:

Generally, the following operation can be done (gently) even without removing the transmitter from its original position on the supporting pin.

# Related tools and accessories:



Desiccant bag



Battery  
SAFT LS 17500



Short circuiting stick



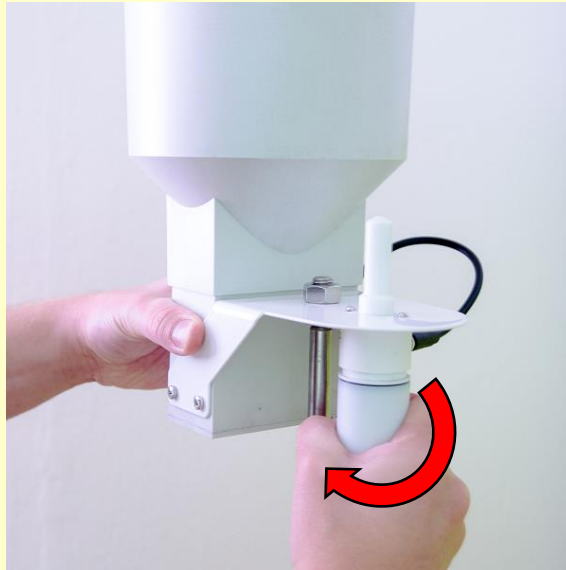
Screwdriver PH 1  
- for radiation shielding tube  
(if any)



Screwdriver TX 8  
- for removal from the holder  
(if needed)

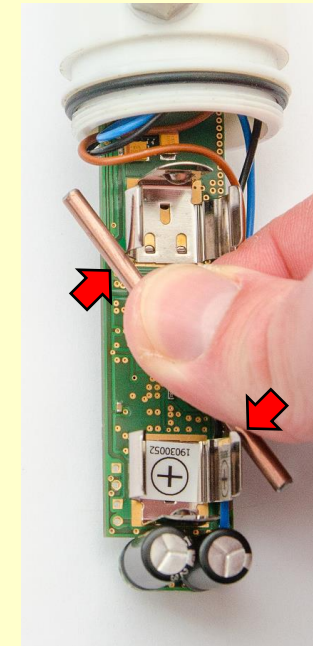
# Opening of enclosure with the electronics

- Remove the radiation shielding tube (if any) by loosening side screws.
- Screw out the plastic case. Use non-slip material (piece of rubber, rubber gloves) for better grip.
- If the worst case, disassembly the transmitter from supporting pin in order to grip the case around.
- Carefully take off the plastic case.

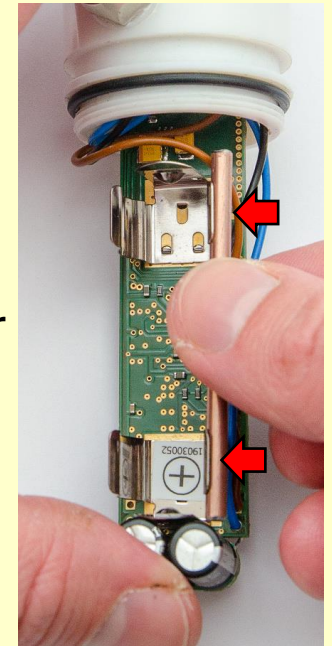


# Battery removal

- Gently pull out the inner PCB with the battery (down by about 2 cm) so the desiccant bag can be removed.
- Remove the battery and desiccant bag.
- Short circuit thoroughly (better twice) the battery terminals with a short circuiting stick (or other metal tool - tweezers, screwdriver, knife, piece of wire).



or



# Battery inserting

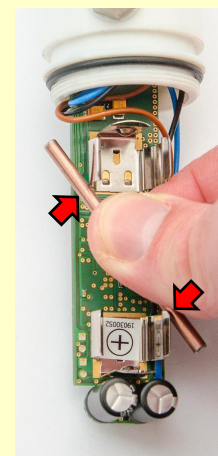
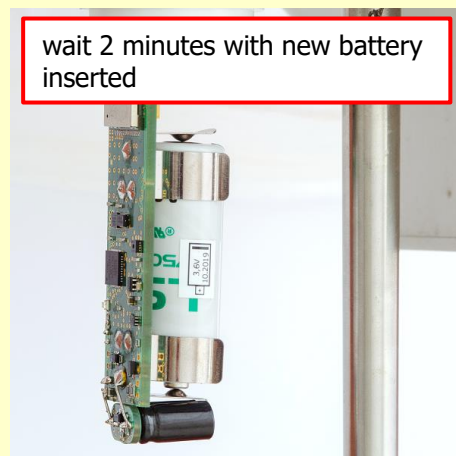
- Insert new battery back to terminals. Consider polarity!
- It is a good idea to put a replacement time stamp on the battery.
- Check the light signalization on the opposite side of PCB – see next pages.



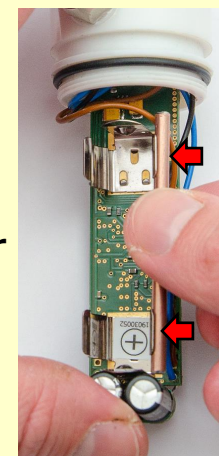
# Error indication

Devices that have been stored without power for an extended period of time (removed or dead battery) usually need to be formatted. This need is indicated by a single blink 8 seconds after the battery is inserted. If this situation occurs, follow the procedure below, otherwise go directly to next pages.

- Wait 2 minutes (with new battery inserted)
- Remove battery and short circuit battery terminals
- Insert the battery back again



or





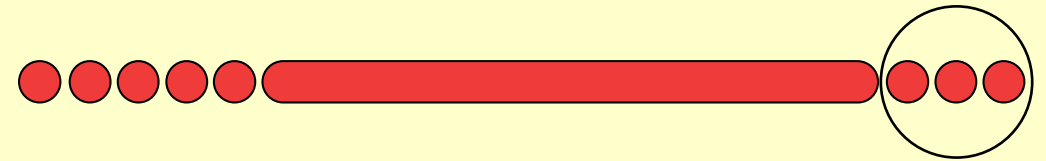
# Synchronization check

During the first communication with the web server after the battery replacement the sensor must receive and set the actual time.

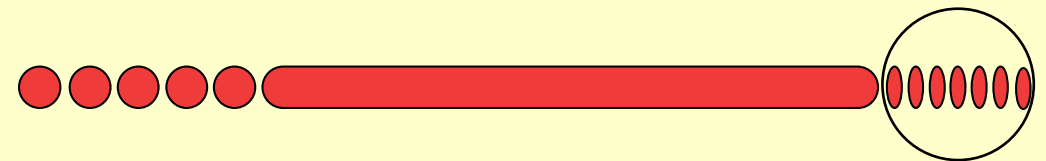
This process is indicated by LED flashing after the insertion of new battery:

- Successful synchronization is indicated by 3 flashes after a long (about 30 seconds) lighting of LED.
- Unsuccessful situation is indicated by erratic flashing of the LED on the end of indication. It indicates the low network signal - and the time refresh will be done automatically later.

Successful:



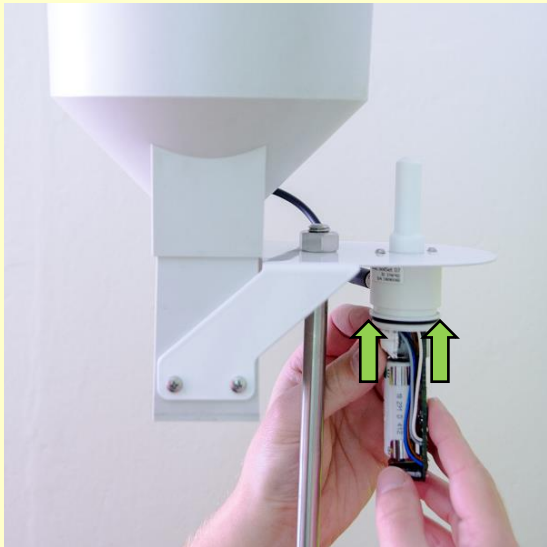
Unsuccessful:





# Putting back together

- Insert new desiccant bag and pull the PCB back to the transmitter head.
- Set the plastic case back over the electronics.
- Screw it up gently, only by hand. Be careful not to screw “over the thread”.
- Insert the radiation shielding tube (if any) and fix it by screwing side screws.
- It is good idea to contact the manufacturer to check the success of operation.



**Good luck!**