

DBL60 Battery Replacement

Generally, the following operations can be done (gently) without removing the sensor from its original position on tree trunk.

Open the Device

With the proper Phillips screwdriver, unscrew all six screws securing the white plastic lid. Please pay attention to these items/parts:

- ❑ Desiccant bag - remove and set aside.
- ❑ Li-ion battery LS14250 CN
- ❑ Sealing o-ring in the groove of the sensor body (52 x 2.5 mm)



Loosen Screws & Remove Battery

Loosen the battery terminal plug screws and gently remove the old battery. Ensure you recycle the old battery and don't confuse it with a new battery. The positive terminal is red.



Discharge Remaining Power

It is very important to discharge any remaining energy in the capacitors. This will also reset the battery life counter.

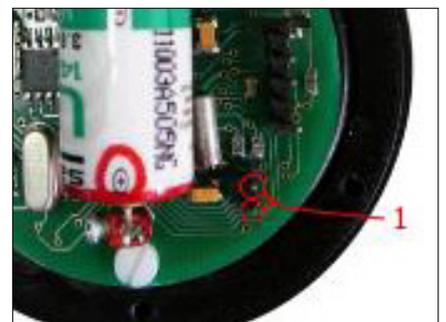
Place a metal tool (screwdriver, knife, piece of wire) to connect the battery terminals (the soldered parts, not screws) for a few seconds (better done twice) to thoroughly short circuit it.



Insert the New Battery

Insert new battery (watch for polarity!) and screw down the terminal screws. Correct battery position is shown on the image. (The positive terminal is red. And the positive battery terminal must be placed closer to measuring pins 1).

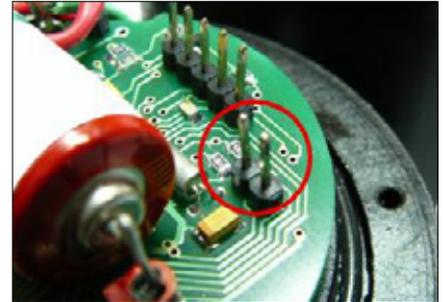
Activate the system with a magnet. The LED must light up and turn off after around 15 seconds. *If not, the electronics is broken and it has to be replaced.*



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Note for Technicians

After the battery replacement, the idle power consumption measurement should be performed. For this purpose, the voltage between two pins marked with the red circle should be measured. During the measurement the LED has to be off! The voltage should be less than 20 μ V. If there is no sensitive multimeter available, check whether the value is below 0.1 mV at least.



Replace O-Ring

If you have spare parts, replace the o-ring in groove with a new one (52 x 2.5 mm).



Replace Desiccant Bag

Note that the desiccant bag takes water from the air very fast! Remove the new desiccant bag from the package, put it on the printed board beside the battery and immediately replace the cover.



Replace Cover, Metal ring and Screws.

Put the metal ring over the lid and place the lid back on the sensor.

If there is a label showing the IrDA access point on the lid, make sure to turn the lid such a way that the center of the label "IrDA access point and magnetic activation area" is located above the red LED on the PC board.

Screw down six new M3x12 mm screws with a moderate momentum. It is a good idea to tighten the screws according to the sequence in the picture.

