IMPORTANT concern when storing or not using DJI batteries over a longer period. 8 Facts you have to know !

DJI's batteries, as all Li-Po and Li-Ion batteries, have to be handled in a special way when they are stored or not in use for a longer period.

- 1. The life and performance of a Li-Po battery is critically affected by the way the battery is maintained.
- 2. Storing this battery fully charged accelerates the aging of the battery i.e. resulting in increasing less capacity / shorter flight-time etc.
- 3. The best storing conditions for this battery are when every cell has been charged / discharged to and then kept at around 3,8 Volt.
- 4. When not in use the battery discharges continuously a very very little bit. (faster at storing temperatures over 25dgr C slower when stored at 10-20dgr C and at dry places). Though it is only a small % pr. day, it might sum up over a period of several weeks or months. This may cause over-discharging and when just one cell reaches down to 2,6 Volt or less it is damaged for ever and irreversibly.
- 5. An even better way to keep and maintain a battery's capacity and life time is to let it do "gymnastics", i.e. to be charged and discharged regularly.
- 6. The App DJI Go4 and PILOT provide the option to activate a Battery maintenance program for the intelligent computer in the Battery to discharge and balance all cells to 3,8V. But it cannot prevent the Voltage falling lower.
- 7. The customer has to remember to ACTIVATE this Battery Maintenance option before storing the battery for a longer period if the battery has more than 50% - and then from time to time check and be sure the Voltage of the cells never reach below 2,7 (better 3,0) Volt. i.e. if there is only 1 LED light (=25%) recharge the battery to 50% again (until 2 LEDs light).

If there is no LED light <u>and</u> the battery is swollen, it is too late and the battery is dead.

8. DJI's Newer batteries (f. ex. Mavic 2 and later) have an enhanced Intelligent Battery Protection Mechanism, which independent from the App automatically discharges and balances the battery when not in use for 10+ days.

Also it will completely shut down the battery to Hibernation Mode if it reaches <10% capacity. (=no LEDs) NB: That means if no LEDs light after pushing the ON-button, and the battery is not swollen, the battery might be ok but just being in Hibernation Mode, it has to be woken to life by charging it for min. 1 hour.

Please read and be aware of DJI battery guidelines here (*)

https://store.dji.com/guides/properly-maintain-drone/ https://store.dji.com/guides/battery-care-important-think/

HOW to CHECK?

A DJI battery can be considered working fine if there is at least 1 green led (=25%) when pushing the ON button.

No LED light means the Intelligent Battery Protection Mechanism can have put it into Hibernation mode and the battery has to be charged to 'waken it up' again. Connect the battery to its charger for at least 1 hour to find out. If still no LED lights after charging one hour, means the Battery is dead and has to be replaced.

Be aware that DJI is giving DOA or 1 year warranty replacement for batteries to end-users but only DOA or 6 months warranty to dealers. How to send a defect battery to DJI for replacement, please follow the tutorials.

(*) NB: this instructions and disclaimers come with every DJI product using batteries and with every battery from DJI. And the customer himself is responsible for following those guidelines. The use of the battery can be logged by DJI.

Best regards Fritz Feichtinger CTO Drones – Service – Repair - Consulting BOSTON Distribution A/S Tlf.: +45 48 10 48 74 Mail: ff@boston.dk

Mavic 2 Battery Safety Mechanisms

As typically found on DJI batteries, the Mavic 2 Intelligent Flight Battery is packed with safety features. These feature help to maximize the battery life and prevent damage to the battery and drone.

The following features are included:

- Auto Discharge The battery will automatically discharge to less than 60% if left for more than ten days. The process of discharge usually takes three to four days. This prevents swelling of the battery.
- Temperature Detection The battery will only charge in temperature between 5°C and 40°
- Balanced Charging During charging, the battery cell voltage is automatically balanced.
- **Overcharge & Overcurrent Protection** For additional safety during charging, the battery will automatically stop charging when it reaches 100% or if an excessive current is detected.
- Short Circuit Protection The power supply will automatically cut out if a short circuit is detected.
- **Hibernation Mode** The battery will automatically switch off if the battery is inactive for 20 minutes. If the battery level is less than 10%, the battery will enter its Hibernation Mode to prevent lasting damage to the battery. The battery needs to be charged to get out of the mode.
- Battery Cell Damage Protection A warning message will be shown in the DJI GO 4 app if any damage to a battery cell is detected.

Information about the battery can be found on the DJI GO 4 app. This includes the voltage, capacity and current.

Warning messages will also be shown on the app if encountered as well as on the LED indicators as shown below. The LED indicators are numbered as follows:



MAVIC 2 BATTERY LED INDICATORS

Mavic 2 Battery LED Indicators

- LED2 blinks twice per second Over-current detected.
- LED2 blinks three times per second Short circuit detected.
- LED3 blinks twice per second Overcharge detected.
- LED3 blinks three times per second Charger over-voltage detected.
- LED4 blinks twice per seconds Charging temperature is too low.
- LED4 blinks three times per second Charging temperature is too high.
- No LED when pushing the On-button Hibernation mode or defect Charge to find out.