

Charging, storage and operation of batteries

DJI Air 2S smart batteries are equipped with various functions and systems that simplify operation. The automatic discharge function helps to avoid damage to the battery from long-term storage when fully charged. The battery charge will automatically decrease from 100% to 96% after a day of downtime, and up to 60% if the batteries are not used for more than 5 days. Batteries may become slightly warm during the discharging process, this is normal. The battery cells are balanced during the charging process. The battery pack is equipped with protection functions against short circuit, overcharging and damage to one of the cells.

Recommendations for battery operation

1. The day before the flights, charge up to 100% of all batteries that are planned to be used.
2. It is forbidden to use batteries charged more than 5 days ago, switched to self-discharge mode, storage. In this case, a battery with, for example, 60% of the initial charge will not be able to perform a full flight and provide the necessary power. The flight can be interrupted by automatically lowering the drone to avoid an avalanche-like voltage drop and an accident.
3. The battery charging temperature is from +5 ° C to +40 ° C. The optimal charging temperature is from +22 ° C to +28 ° C. If the battery is overheated or overcooled (for example, immediately after a flight in hot weather, or after lying in the cold), charging will not begin until the battery temperature returns to normal.
4. If the battery is not in use, it turns off after 20 minutes.
5. The optimal flight characteristics of the battery are achieved at temperatures from 5 to 40 ° C.
6. The battery capacity and its voltage characteristics decrease in cold weather at temperatures below 5 ° C. It is strongly recommended to warm up the battery before flight to a temperature of at least 20 ° C to ensure normal flight characteristics.
7. DJ Air 2S batteries are not equipped with an automatic heating option, but the temperature of the batteries is maintained. The battery heats up during flight by generating its own heat when discharged and by the drone's electronics. during flight.
8. To warm up the drone's battery in field conditions, it is recommended to take off and hover on the drone for 1-2 minutes at a low altitude above the ground and then follow the routes.
9. To store the battery for a long time, it is recommended to charge all batteries to 100% and leave them at room temperature for several weeks. After 2 weeks, the battery charge level will decrease from 100% to 60%, thus the batteries will switch to storage mode. If the battery

is stored for more than 2 months, it is recommended to repeat this procedure once every 2 months.

10. Try to operate the battery from 100% to 10% charge. Terminate the flight in a timely manner and leave enough power for the return home.
11. If the battery charge level drops below 5%, then after the power is turned off, the battery goes into "Hibernation" mode for maximum energy conservation, which it will be in before connecting to charging. The battery will not respond to pressing the power button.
12. The battery should only be charged using the supplied charger connected directly to one battery, or using a Hub that allows you to charge up to 3 DJI Air 2S batteries in series. The standard JET Air 2S power supply has an additional 1 USB connector and allows you to charge 1 remote control and 1 battery in parallel or up to 3 batteries in series when using the Hub.
13. The battery capacity decreases over time. The age of the battery is determined by the number of charge/discharge cycles. On average, DJI batteries will operate for at least 150 cycles if the operating and storage conditions are met.
14. Strong wind, altitude difference, low temperature, high flight speed of the drone, as well as the use of batteries with more than 100 charge/discharge cycles, reduce the flight time on one battery.



DJI Air 2S BATTERY

Precautions when working with the battery

1. It is strictly forbidden to damage the battery case, to expose it to any mechanical influences not provided for by normal operating conditions. Any mechanical damage to the battery may

- cause the battery to fail or reduce its performance.
2. It is strictly forbidden to expose the battery to moisture, dust, dirt, fire, acids, alkalis and other aggressive media.
 3. In case of deformation, swelling, or any mechanical damage to the housing or contact terminals, it is necessary to immediately stop using this battery and dispose of it.
 4. It is strictly forbidden to heat the battery to a temperature above 69 ° C.
 5. It is not recommended to cool the battery below -10° C or expose the battery to sudden temperature changes.
 6. DJI batteries are non-repairable. It is strictly forbidden to disassemble DJI batteries yourself.
 7. If the sealed Li-Po cells are damaged, the battery will become hot, emit acrid smoke and flames may appear when exposed to air. If the battery is damaged indoors, immediately take it outside, ventilate the room and evacuate people. The burning temperature of lithium can reach 900 C, so use protective equipment when carrying the battery outside to ensure safety.

Tips and Warnings.

1. Do not trust automation and always control the remaining battery charge yourself.
2. Do not plan missions with the drone flying more than 1 km away from the takeoff point when you start operation.
3. A strong tailwind can become a serious obstacle when returning the drone to the take-off point.
4. Always maintain radio contact with the remote control by pointing the antenna surfaces towards the drone. If you lose signal, change the remote control direction or the antennas angle.
5. Plan routes for the DJI Air 2S that last:- no more than 20 minutes in flat terrain (up to 20 m drop) in favorable weather;- no more than 17 minutes in hilly terrain (up to 250 m drop) in favorable weather;- no more than 14 minutes in hilly terrain (up to 500 m drop) in favorable weather;
6. Fly more to better understand the drone's capabilities in specific conditions.
7. Use ONLY 98-100% charged batteries for flying!
8. If you disconnect the charging battery from the mains at a charging level of 90-99%, you will not be able to charge it to 100% when you turn it on again. First, you will have to reduce the charge to 89%. It is allowed to turn on DJI Air 2S indoors and wait 10-30 minutes or perform a short flight in manual mode with hovering at low altitude for 1-3 minutes.
9. Number all batteries with stickers for uniform operation and convenience.

Revision #2

Created 2 December 2024 09:11:42 by Tatiana

Updated 9 December 2024 08:48:35 by Tatiana