

3. UAV POWER MANAGEMENT

Difficulty Level: Easy

Completion Period: 1 course hour

Objectives

This module aims to equip high school students with the essential skills to effectively manage UAV power systems through practical exercises and theoretical understanding. By the end of the module, students will be able to proficiently perform the powering on and charging procedures for drones. The objectives include grasping the fundamentals of UAV power components, identifying proper battery usage and connections, safely powering on the drone, and conducting battery charging with attention to safety guidelines.

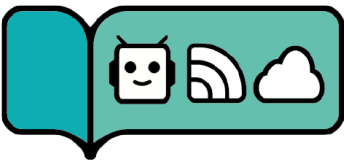
Achievements

The skills that our students will gain are:

- Understanding the fundamentals of UAV power components and their roles in drone operation.
- Identifying appropriate battery types and connections for specific UAV models.
- Safely and correctly powering on the drone, considering sequence and safety protocols.
- Adhering to safety guidelines and best practices during battery charging and handling.

Required material

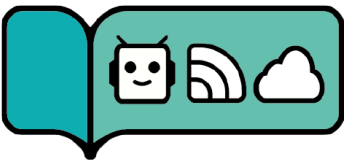
- Drone Mavic Pro
 - DJI Mavic Pro Remote Controller
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Implementation – UAV Power management

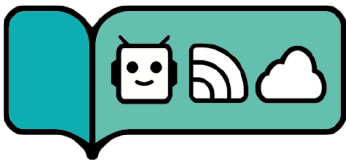
1. Remove the storage cover and unfold the arms one by one.





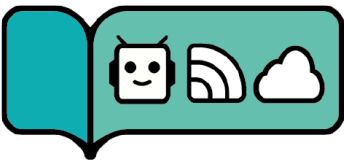
2. Charge the aircraft until the battery indicator lights up, signaling that the battery has been activated.





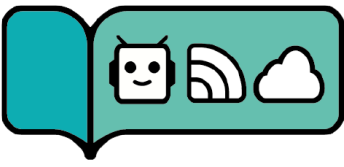
3. If three batteries are activated at the same time using the charging hub, activation and charging of the second battery will not begin until the first battery is activated and fully charged.





4. If the battery power level is at approximately 50% or lower, it is recommended to charge it up to 75% or higher first in order to provide enough power for activation and firmware update.





5. Press and hold the aircraft power button for approximately two seconds to power on.

