

Robson Ranch Drone Club

Drone 101

Introduction to Flying a Drone

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September 28, 2026

What is a Drone?

A drone is an **Unmanned Aircraft System (UAS)**.



Where do I get one and how much do they cost?

Best Buy - Amazon - B&H Photo - Costco - Sam's

A few entry level options:

DJI Neo



[Visit the DJI Store](#)

DJI Neo Fly More Combo, Mini Drone With 4K UHD Camera for Adults

135g Self-Flying Drone That Follows You, Palm Takeoff, Subject Tracking, QuickShots, With RC-N3 and 3 Batteries

4.6 ★★★★★ (3,164) | [Search this page](#)

Amazon's Choice

500+ bought in past month

-15% \$295⁰⁰ [Price history](#)

List Price: ~~\$349.00~~

Or \$73⁷⁵ /2 weeks (x4). [Select from 2 plans](#)

Thank you for being a Prime member. Get \$150 off: Pay \$145.00 \$295.00 upon approval for Prime Visa.

✓prime Overnight

FREE Returns ▼

May be available at a lower price from [other sellers](#), potentially without free Prime shipping.

Where do I get one and how much do they cost?

A few entry level options:

DJI Mini 4K



The image displays the DJI Mini 4K Fly More Combo. At the top is the drone itself, a compact white and grey model with four propellers. Below the drone are the accessories included in the kit: a black carrying case, a remote controller with a smartphone mounted on top showing a live feed, three spare batteries, and a charging dock.

[Visit the DJI Store](#)

DJI Mini 4K Fly More Combo, Drone with 4K UHD Camera for Adults, Under 249 g, 3-Axis Gimbal Stabilization, 10km Video Transmission, Auto Return, 3 Batteries for 93-Min Max Flight Time, QuickShots

4.5 ★★★★★ (1,467) | [Search this page](#)

Overall Pick

1K+ bought in past month

\$449⁰⁰ [Price history](#)

Or **\$112²⁵** /2 weeks (x4). Select from 2 plans

Thank you for being a Prime member. Get \$150 off: Pay **\$299.00** ~~\$449.00~~ upon approval for Prime Visa.

 **FREE Returns** ▼

May be available at a lower price from [other sellers](#), potentially without free Prime shipping.

Where do I get one and how much do they cost?

A few entry level options:

DJI Mini 5 Pro







Visit the [DJI Store](#)

DJI Mini 5 Pro Fly More Combo With DJI RC 2, 1-Inch CMOS

4K Drone for Beginners With Omnidirectional Obstacle Sensing, ActiveTrack 360°, 225° Gimbal Rotation, 3 Batteries

4.5      (799) | [Search this page](#)

Overall Pick

\$1,099⁰⁰ [Price history](#)

Or \$50³⁴ /mo (36 mo). [Select from 2 plans](#)

Thank you for being a Prime member. Get \$150 off: Pay \$949.00 ~~\$1,099.00~~ upon approval for Prime Visa.

 **prime** Overnight

FREE Returns 

May be available at a lower price from [other sellers](#), potentially without free Prime shipping.

Style: **DJI Mini 5 Pro Fly More Combo (DJI RC 2)**

DJI Mini 5 Pro Fly Mo...	DJI Mini 5 Pro	DJI Mini 5 Pro Fly Mo...	DJI Mini 5 Pro Fly Mo...
\$1,099.00 FREE Delivery Overnight 7 AM - 11 AM	\$759.00 FREE Delivery Overnight 7 AM - 11 AM	\$1,159.00 FREE Delivery Tomorrow	\$959.00 FREE Delivery Overnight 4 AM - 8 AM

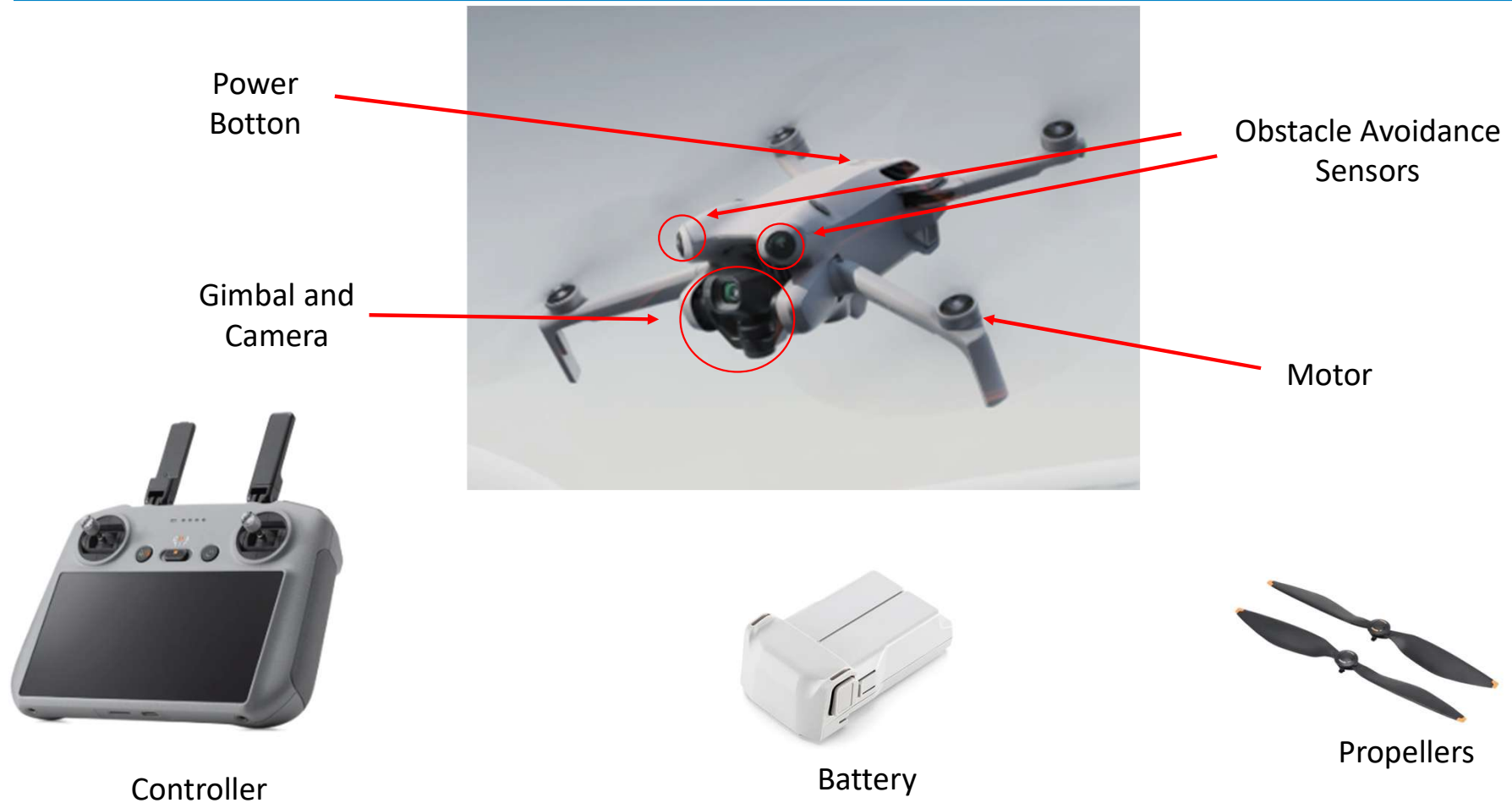
Brand DJI

Video Capture 4K

The Controller



Key Components of a Drone



Basic Controls

LEFT STICK

Throttle & Yaw

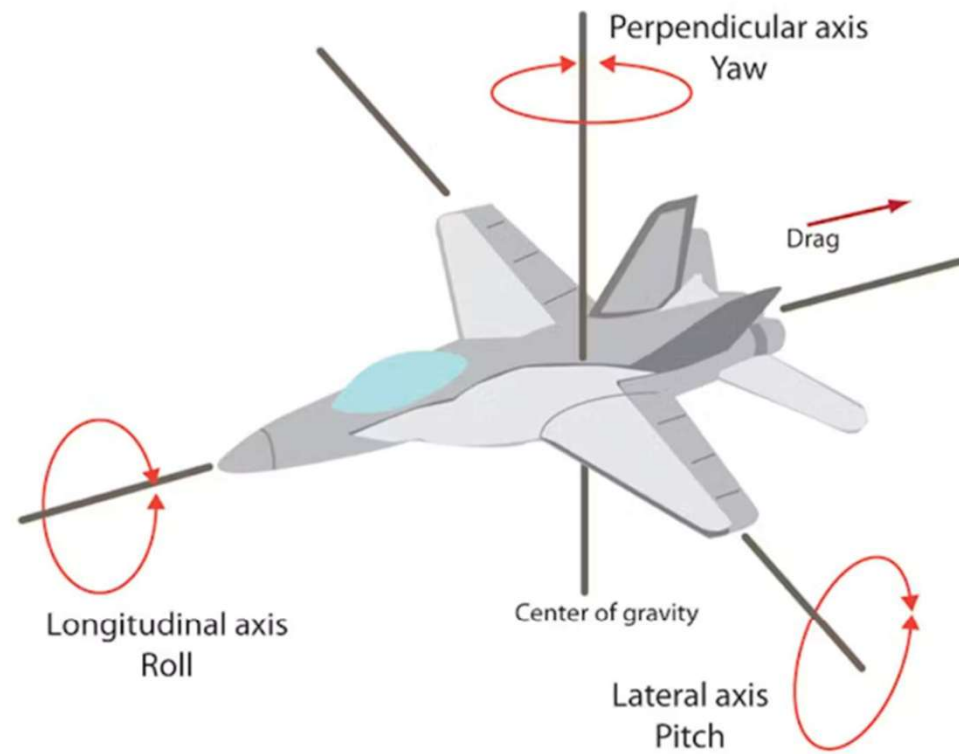
Up	Increase altitude (climb)
Down	Decrease altitude (descend)
Left	Yaw left (rotate counterclockwise)
Right	Yaw right (rotate clockwise)

RIGHT STICK

Pitch & Roll

Up	Pitch forward (fly away)
Down	Pitch back (fly toward you)
Left	Roll left (strafe left)
Right	Roll right (strafe right)

Roll, Pitch, and Yaw



Flight Modes



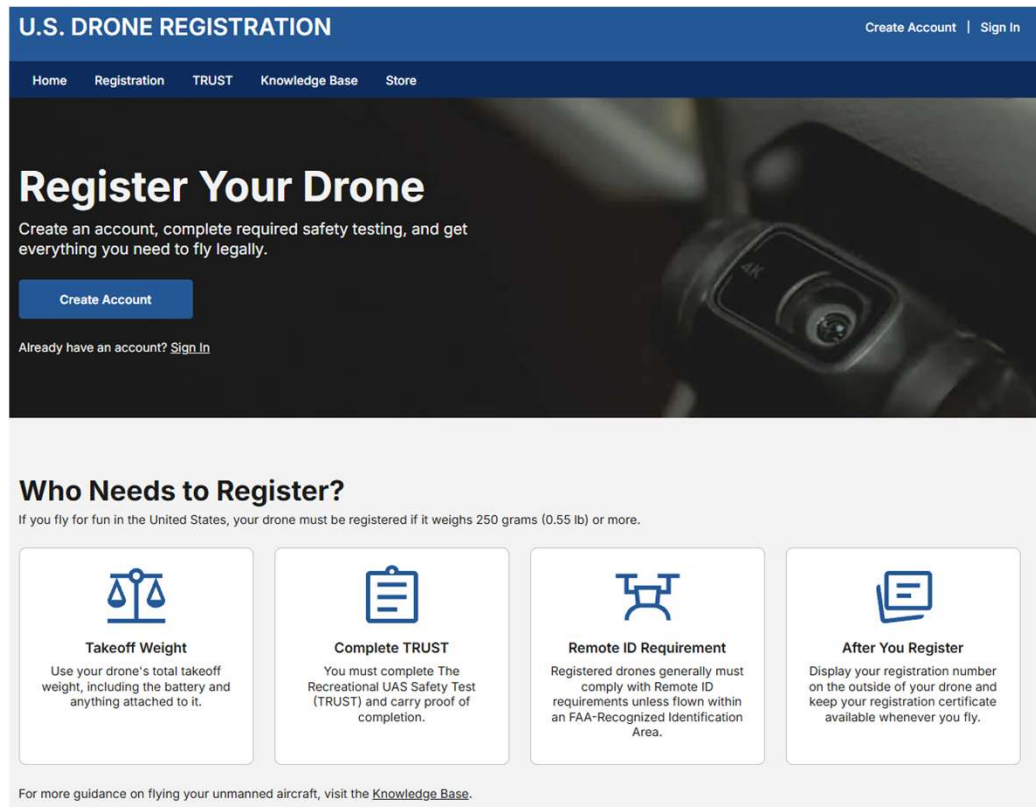
Cine Mode (C): Limits the drone's maximum flight speed and slows down its rotation. This mode is ideal for capturing smooth, cinematic, and stable video footage.

Normal Mode (N): The default operating mode. It utilizes all available satellite systems (GNSS) alongside the drone's omnidirectional vision and infrared sensing systems. This enables full automatic obstacle detection, tracking features, and stable hovering

Sport Mode (S): Maximum speed and agility settings. The drone becomes much more responsive to control stick inputs. **Note:** Omnidirectional obstacle sensing is completely disabled in Sport mode.

Safety, Regulations, and Rules (USA)

- **Register and Certification - droneregistration.com**
 - Register ALL drones over 250 grams.
 - Pass the TRUST test.



The screenshot displays the homepage of the U.S. Drone Registration website. The header features the site's name and navigation links. The main section is titled 'Register Your Drone' and includes a 'Create Account' button. Below this, a section titled 'Who Needs to Register?' provides a checklist of requirements for drone registration, each accompanied by an icon and a brief explanation.

U.S. DRONE REGISTRATION [Create Account](#) | [Sign In](#)

[Home](#) [Registration](#) [TRUST](#) [Knowledge Base](#) [Store](#)

Register Your Drone

Create an account, complete required safety testing, and get everything you need to fly legally.

[Create Account](#)

Already have an account? [Sign In](#)

Who Needs to Register?

If you fly for fun in the United States, your drone must be registered if it weighs 250 grams (0.55 lb) or more.

 Takeoff Weight Use your drone's total takeoff weight, including the battery and anything attached to it.	 Complete TRUST You must complete The Recreational UAS Safety Test (TRUST) and carry proof of completion.	 Remote ID Requirement Registered drones generally must comply with Remote ID requirements unless flown within an FAA-Recognized Identification Area.	 After You Register Display your registration number on the outside of your drone and keep your registration certificate available whenever you fly.
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For more guidance on flying your unmanned aircraft, visit the [Knowledge Base](#).

Safety, Regulations, and Rules (USA)

cont...

-
- **Know the rules**
 - Stay under 400 feet AGL (Above Ground Level).
 - Always maintain VLOS (Visual Line of Sight). You must see your drone at all times!
 - Never fly over people.
 - Never fly over moving vehicles.
 - Avoid
 - Airports
 - National Parks
 - Stadiums
 - Emergency response
 - Military bases
 - Prisons
 - Private property

Safety, Regulations, and Rules (USA)

cont...

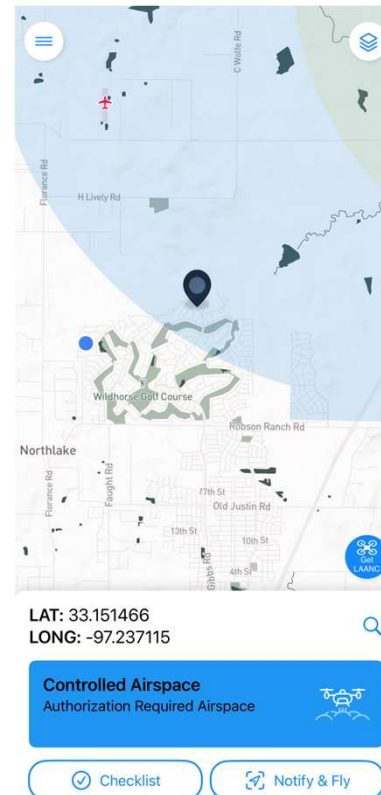
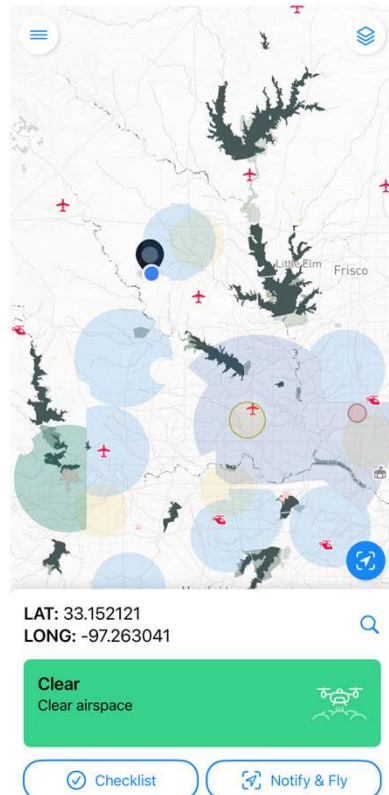
- Know your airspace regulations
 - Install the “UAV Forecast” app on your phone.



Safety, Regulations, and Rules (USA)

cont...

- **Know your airspace regulations**
 - Install the “Air Aware” app on your phone.



Pre-Flight Checklist

1

Airspace & weather

- Check NOTAMs and restricted zones
- Wind under 15–20 mph for beginners
- No rain or dense fog

2

Aircraft inspection

- Props secure and undamaged
- Battery fully charged & seated
- Compass & IMU calibrated

3

Control link

- Transmitter battery charged
- Strong signal / correct frequency
- Failsafe set to Return-to-Home

4

Environment

- Clear takeoff & landing zone
- No people or vehicles nearby
- Visual line-of-sight maintained

Common beginner mistakes to avoid

DON'T

- X – Flying in strong wind**
- X – Skipping calibration**
- X – Ignoring battery warnings**
- X – Losing orientation**
- X – Flying too high**
- X – No failsafe configured**

DO

- ✓ – Start in calm conditions (<10 mph)**
- ✓ – Calibrate when prompted**
- ✓ – Land with 20-30% remaining battery**
- ✓ – Maintain VLOS**
- ✓ – Master low, slow, and close first**
- ✓ – Set Return-to-Home & low-battery RTH**

Practical tips for your first flight

1 – Start in a large open field – no obstacles, no people, and plenty of space

2 – Practice orientation –

Increase altitude to around 10 feet and hover.

Then low and slow movements away from you.

Fly in Cine mode.

3 – Fly short sessions – 10 to 15 minutes, keep focus.

4 – Watch your instruments. Battery status, signal strength, and altitude.

Additional Resources

- Robson Ranch Drone Club!
- Internet

Recreational Flying Made Easy.



Know the rules and develop a strong foundation so you can be a safer recreational flyer.

- 2 hours of free content
- An understanding of the regulations you need to follow to stay legal and safe
- Access to an FAA Certified Flight Instructor and FAATeam DronePro to answer any questions
- A plan of action to safely conduct your first drone flight

Start this class >

\$0 - Free Course

www.pilotinstitute.com/course/recreational-flying-made-easy/

Questions?

Meet on October 26 at 5:30 for some supervised drone flying time?