

**VILLAGE OF WINDSOR
VILLAGE BOARD RESOLUTION 2020-37**

**AUTHORIZATION TO PURCHASE A DRONE AND APPROVAL OF A DRONE USE
POLICY**

WHEREAS, the Village staff recommends purchase of a drone for use in capturing photographs and video for Planning, Zoning & Development, Public Safety, Public Works and Public Outreach; and

WHEREAS, the Director of Public Works is familiar with the use of drones and has researched the purchase thereof; and

WHEREAS, the Director of Public Works recommends the purchase of a DJI Mavic Air 2 Fly More Combo, as shown in Exhibit A attached hereto; and

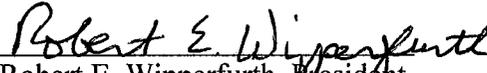
WHEREAS, the use of drones in the Village should be regulated to protect the privacy and safety of the residents and a Drone Policy has been drafted to reflect such uses as shown in Exhibit B attached hereto; and

NOW THEREFORE, BE IT RESOLVED, by the Village Board of the Village of Windsor that the Public Works Director is authorized and directed to purchase a DJI Mavic Air 2 Fly More Combo attached hereto as Exhibit A.

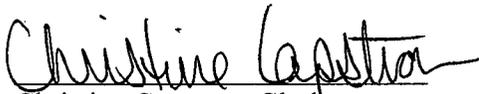
BE IT FURTHER RESOLVED, by the Village Board of the Village of Windsor that the Drone Policy attached hereto as Exhibit B is hereby adopted.

The above and foregoing Resolution was duly adopted at a regular meeting of the Village Board of the Village of Windsor on May 21, 2020, by a vote of 5 in favor and 0 opposed.

VILLAGE OF WINDSOR


Robert E. Wipperfurth, President

Attested by:


Christine Capstran, Clerk

NEW DJI Mavic Air 2 Fly More Combo - Drone Quadcopter UAV with 48MP Camera 4K Video 1/2" CMOS Sensor 3-Axis Gimbal 34min Flight Time ActiveTrack 3.0, Grey

by DJI

☆☆☆☆☆ 7 ratings | 28 answered questions

#1 New Release in Hobby RC Quadcopters & Multirotors

Price: \$988.00 & FREE Shipping. Details

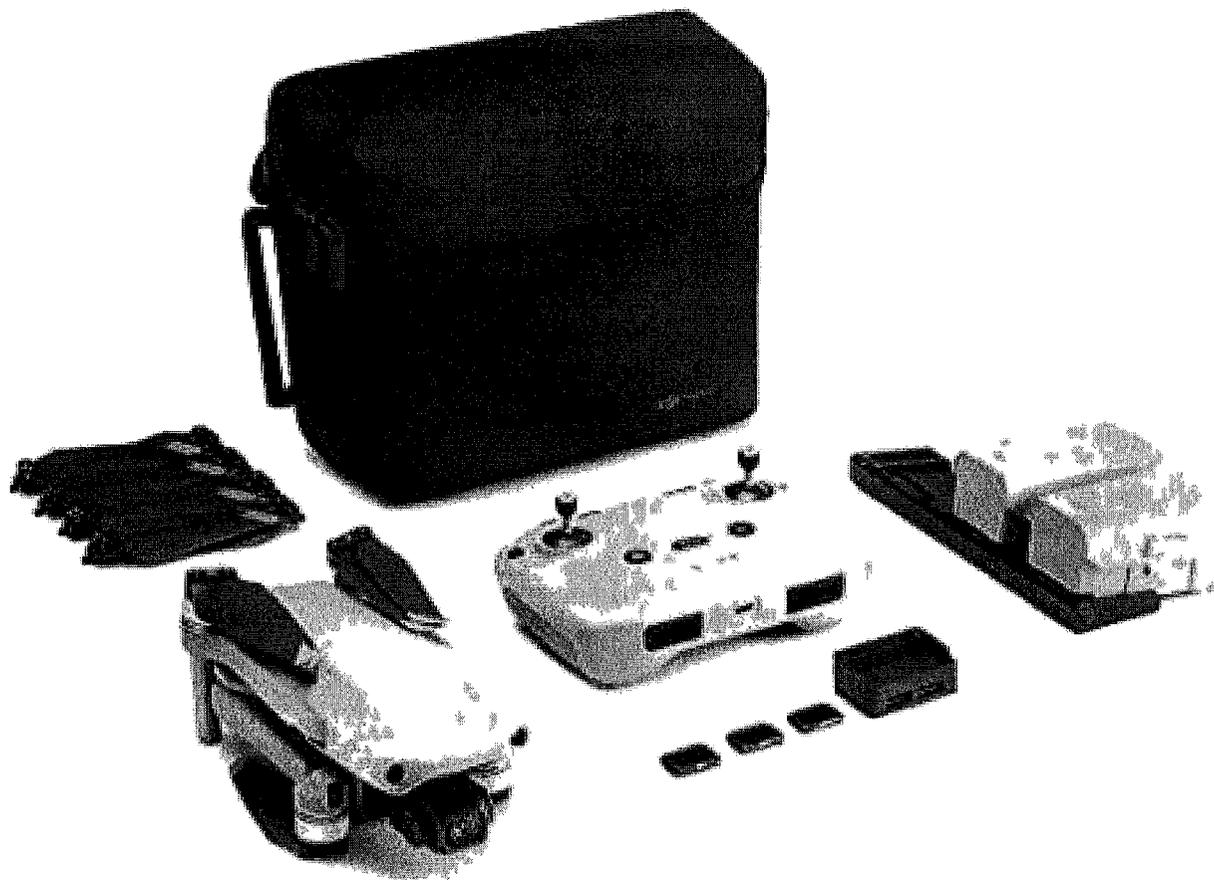
Get \$10 off instantly: Pay \$978.00 upon approval for the Amazon Prime Store Card

Size: Mavic Air 2 Fly More Combo

Mavic Air 2
\$799.00

Mavic Air 2 Fly More Combo
\$988.00

- **Up Your Game:** The Mavic Air 2 camera drone takes power and portability to the next level. It combines a powerful camera with intelligent shooting modes for stunning results. Push your imagination to its limits because aerial photography has never been this easy.
- **Next-Level Content:** Capture impressive 48MP photos with a 1/2-inch CMOS sensor while the 3-axis gimbal provides 4K/60fps video. The secret to incredible HDR video is a high-performance Quad Bayer image sensor. OcuSync 2.0 has a video transmission distance of up to 6.2mi / 10 km and can also deliver 1080p FHD resolution livestream directly from the drone's camera.
- **Improved Flight:** An impressive flight time of up to 34 minutes allows you to pull off epic, fast-paced shots. Obstacle sensing in three directions makes it extra convenient for beginners and improves safety for your Mavic Air 2.
- **Intelligent Tracking:** Mavic Air 2 features intuitive shooting functions that make aerial photography easier than ever. Spotlight 2.0 keeps the camera locked on a subject while you fly freely. ActiveTrack 3.0 keeps subjects centered. POI 3.0 tracks moving subjects like people and vehicles.
- **App Compatibility:** The DJI Fly app requires iOS v10.0, Android v6.0, or above. Compatible devices include: iPhone (11 Pro Max, 11 Pro, 11, XS Max, XS, XR, X, 8 Plus, 8, 7 Plus, 7, 6s Plus, 6s, 6 Plus, 6), iPad Pro (9.7"), iPad Air 2 (9.7"), iPad mini 4 (8"), iPad Pro (10.5"), iPad Pro 2018 11", iPad Pro 12.9", Samsung Galaxy (S20, S10+, S10, S9+, S9, S8+, S8, S7 edge, S7, S6, Note10+, Note9, Note8), Huawei (P30 Pro, P30, P20, P10, Mate 30 Pro, Mate 20 Pro, Mate 10, nova 5, nova 4, nova 3e, nova 2, Honor 8X, 10, 9, 20 Pro, Magic 2, Mi 8, MIX 2S, MIX 2, Redmi Note 5, Oppo Find X, R15, Vivo NEX, X27, X21, X20A, OnePlus 7, 6T, 5, Pixel 3 XL, 2 XL, 2, LG V20, LG G6, Sony Xpeial 1.
- **What You Get:** Mavic Air 2 Aircraft, Remote Controller, 3x Intelligent Flight Battery, 6x Low-Noise Propellers (Pair), RC Cables (USB Type-C, Lightning, Standard Micro-USB), Control Stick, Gimbal Protector, Battery Charger, Battery Charging Hub, Battery to Power Bank Adapter, Shoulder Bag, ND Filters Set (ND16/64/256), Manuals, AC Power Cable, Type-C Cable.



Mavic Air 2 FAQ: Everything You Need to Know

By DJI 2020-04-27



Read on to discover everything you need to know about the new Mavic Air 2 drone. From intelligent features like ActiveTrack 3.0 and FocusTrack to camera features like Quad Bayer technology and 48MP images, we've got all your Mavic Air 2 questions covered here!

Mavic Air 2 is here, empowering creativity in content creators around the world. Compared to its predecessor, Mavic Air 2 features an upgraded transmission system, flight time, camera performance, and more! Let's get straight into the details.

What is the difference between Mavic Air and Mavic Air 2?

Mavic Air 2 features an upgraded camera performance, transmission system, flight time, and a more streamlined flying experience with the DJI Fly app. Mavic Air 2 offers 48MP photos, 4K/60fps video, SmartPhoto, HDR functionality, FocusTrack, OcuSync 2.0, and up to 34 minutes of flight time.

What app do I need for Mavic Air 2?

Mavic Air 2 can only be used with the DJI Fly app. In addition to offering a streamlined user-experience, DJI Fly contains flight tutorials so you can learn how to fly safely.

Can I use the Mavic 2 remote controller for Mavic Air 2?

No. Mavic Air 2 can only be operated with the Mavic Air 2 remote controller.

Can I use the DJI Smart Controller with Mavic Air 2?

Yes. Mavic Air 2 will be compatible with the DJI Smart Controller through a future firmware update.

How do I mount Mavic Air 2 propellers on the motors correctly?

Attach the propellers with the white markings to the motors with white markings and attach those without markings together. Make sure all propellers are properly attached before you attempt to take off.

Can I use DJI Goggles or DJI Goggles RE with the Mavic Air 2?

No.

Is Mavic Air 2 waterproof?

No.

How do I put ND filters on to Mavic Air 2?

Carefully hold the camera to prevent damage, and slowly rotate the filter to attach or detach it. Make sure the ND filters are mounted securely to avoid accidental detachment during flight.

Camera



What photo and video quality does Mavic Air 2 have?

Photos can be taken in 12 MP, 48 MP, and in RAW format. Mavic Air 2 supports 4K/60fps video, HDR functionality, and 8x slow motion at 1080p 240 fps.

What is Quad Bayer filter technology?

Mavic Air 2 features a Quad Bayer filter, which controls the use of different exposures to produce an image with a higher dynamic range. The Quad Bayer filter also contributes to stunning high-resolution images.

What flat color profiles are available for Mavic Air 2?

Mavic Air 2 offers D-Cinelike as a flat color profile, which offers great detail recovery in highlights as well as the ability to adjust tones.

What are the advantages of the H.265 video codec?

HEVC (H.265) has a higher video coding efficiency than H.264, retaining more information using less storage space.

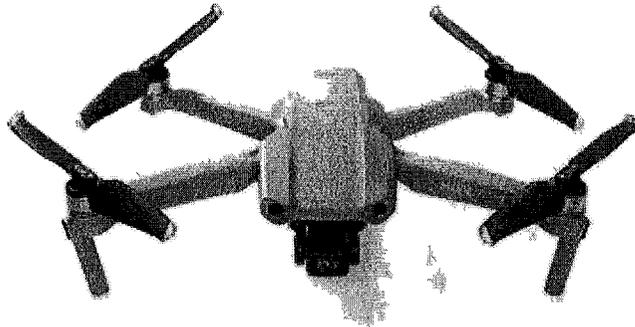
Can I control the camera settings manually?

Mavic Air 2 has manual camera settings, giving you the ultimate freedom to compose your shots.

What is SmartPhoto?

SmartPhoto integrates HDR, HyperLight, and scene recognition for a perfectly optimized shot. HDR uses advanced algorithms to optimize the dynamic range of your image, HyperLight removes noise from low-light scenes, and scene recognition optimizes camera shooting parameters based on the recognition of the sunset, sky, grass, snow, and trees.

Intelligent Features



Does Mavic Air 2 support 8K video?

8K resolution can only be used in Free and Waypoint Hyperlapse modes.

What is FocusTrack mode?

FocusTrack is made up of three intelligent tracking modes, ActiveTrack 3.0, Point of Interest (POI) 3.0, and Spotlight 2.0. ActiveTrack 3.0 is our best tracking technology to date, implementing both obstacle avoidance and object recognition. POI 3.0 can also track objects like cars, boats, and other moving vehicles. Spotlight 2.0 keeps your subject locked in the center of the frame. All three of these intelligent tracking modes are combined to offer an improved aerial photography experience.

What intelligent flight modes does Mavic Air 2 support?

Mavic Air 2 supports QuickShots, Hyperlapse, and FocusTrack. QuickShots are stunning automated flight sequences that be created with a single tap. Hyperlapse is a creative feature that lets you showcase time and movement in a single shot. FocusTrack is a suite of intelligent tracking modes that make cinematic shots easy to create

Are there any video settings where APAS 3.0 or FocusTrack are unavailable?

APAS 3.0 and FocusTrack are not available while recording in 4K at 60, 50 and 48 fps and 1080p at 120 and 240 fps.

Safety & Obstacle Sensing



Does Mavic Air 2 feature an auxiliary LED light?

Yes. Mavic Air 2 has an auxiliary light for improved vision and safety during flying.

Does Mavic Air 2 feature omnidirectional obstacle sensing?

No. Mavic Air 2 provides forward, backward, and downward obstacle sensing.

What is the difference between APAS 2.0 and APAS 3.0?

APAS 3.0 offers the best obstacle avoidance currently on any DJI drone. The system generates a real-time map of its surroundings, producing an exceptionally safe flight performance.

What is the difference between ActiveTrack 2.0 and ActiveTrack 3.0?

ActiveTrack 3.0 is DJI's best tracking technology to date, which features improved obstacle avoidance and object recognition. You can also re-identify your subject after they've been lost in a high-speed scene, using algorithms to predict their position.

Remote Controller & Transmission



How has OcuSync 2.0 been improved?

The new generation OcuSync 2.0 supports dual frequency bands at 2.4 GHz and 5.8 GHz. It also features stronger interference resistance due to automatic frequency switching, smoother image transmission with H.265 encoding, and a transmission feed up to 10 km (when unobstructed, free of interference, and FCC-compliant).

Does the Mavic Air 2 remote controller support HDMI?

No

How can I improve Mavic Air 2's signal reception?

The smartphone clamp of the remote controller houses the antennas. Make sure that the antennas are pointed toward the aircraft. If you need more information, check out the user manual. Additionally, please ensure you are not wearing any transmitting wearables, and that Wi-Fi and Bluetooth are turned off on your phone.

What are the advantages of the new Mavic Air 2 remote controller?

The new remote controller has an extended battery life of up to 240 minutes, a more comfortable grip, an improved antenna design, and an optimized profile so you can see your drone better when flying.



DRONE POLICY

Date Originated: 05/21/20

Date of Modifications:

The Village of Windsor is dedicated to embracing technologies that help improve its services while protecting the privacy and safety of its residents. The use of drones in the public interest is expected to benefit residents and visitors to the Village through the more efficient use of Village resources.

1. DEFINITIONS:

- a. Drone: an unmanned aircraft flown by a pilot via a ground control system, or autonomously through use of an on-board computer, communication links or any other additional equipment. A drone can also be referred to as an Unmanned Aerial System (UAS) or Unmanned Aerial Vehicle (UAV).

2. PURPOSE:

The Drone Policy (the “Policy”) is intended to guide all departments, including boards, commissions, committees and employees, with pre-approved operating procedures. The Policy also applies to consultants, vendors, and volunteers working on behalf of the Village.

3. STATEMENT:

All departments must abide by the policy, in addition to, all federal, state, county, and local laws and regulations. Any modifications to the Policy shall be approved by the Village Administrator.

The Policy must be reviewed by all departments with access to drone data that may contain Personal Identifiable Information. The operation of a drone inconsistent with the Policy, by any department individual, may be subject to discipline by the Village.

4. USE CASES:

The authorized use of drones is limited to the following Department use cases:

Department	Authorized Use
Planning, Zoning & Development	<ul style="list-style-type: none"> • Construction Management: inspection of project sites for contract compliance • Inspections & Violations: assessment and survey of properties and assets • Marketing & Public Outreach: capture video and photographs • Surveying & Mapping: digital elevation models, land use maps, 3D models, contours
Public Safety	<ul style="list-style-type: none"> • Disaster Respond & Recovery: assessment and district survey • Emergency Response: fire, search and rescue reconnaissance • Training: assessment and evaluation of emergency response operations
Public Works	<ul style="list-style-type: none"> • Construction Management: inspection of project sites for contract compliance • Disaster Response & Recovery: assessment and district survey • Environmental Monitoring & Documentation: flora, fauna, wildlife, streams, etc. • Inspections & Violations: assessment and survey of properties and assets • Surveying & Mapping: digital elevation models, land use maps, 3D models, contours
Public Outreach	<ul style="list-style-type: none"> • Marketing: capture video and photographs, events, projects, etc

Any other use as authorized by the Village Administrator, or designee.

To the extent feasible, Village owned drones shall be used. The use of privately owned or contracted drones shall be permitted only with the prior authorization of the Village Administrator, or designee.

5. REQUIREMENTS:

- a. All drones must be registered with the Federal Aviation Administration .
- b. All privately owned or operated drones must be properly insured and proof of insurance shall be provided to the Village Treasurer.
- c. All drones must be operated in compliance with this Policy; in addition to, all federal, state, county, and local laws and regulations. This includes the reporting of drone accidents. All drone accidents shall promptly be reported to the Village Administrator, or designee.
- d. All authorized uses of a drone by a department must be pre-approved by the Village Administrator.
- e. No drone shall be used with the intent to photograph, record, or otherwise observe another individual in a place or location where the individual has a reasonable expectation of privacy. The Village attorney shall be consulted prior to drone operation in any matters in which there is uncertainty.
- f. No drone shall be used to gather evidence or other information in a criminal investigation from or at a place or location where an individual has a reasonable expectation of privacy without first obtaining a search warrant under s. 968.12, except as otherwise permitted by state statute.
- g. No drone shall be operated:
 - a. Immediately over people;
 - b. Beyond line of sight;
 - c. In hours of darkness;
 - d. Above 400 feet in altitude; or
 - e. In controlled airspace pursuant to FAA regulations.