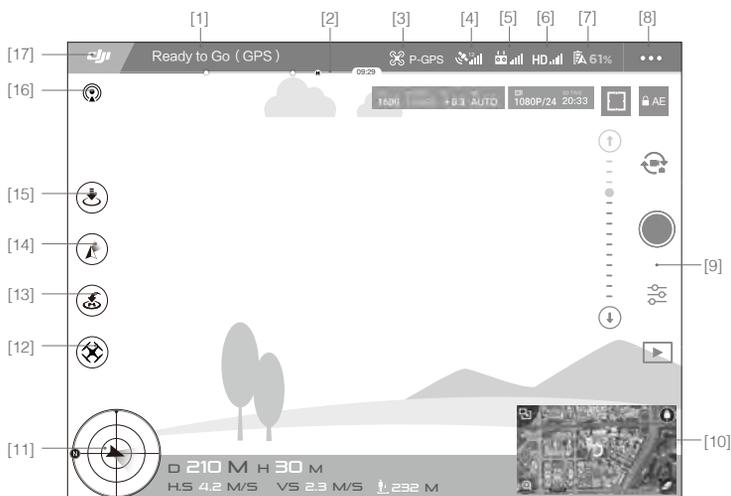# DJI GO App

Use the DJI GO app to configure your aircraft. If using a gimbal or camera, you can also control the gimbal or camera in the app. The Library, Skypixel, and Me sections in the app allow you to share your content with friends.

Equipment

On the Equipment page, you can enter Camera View, visit the Academy or view your flight records.

Camera View

[1] System Status

Ready to Go (GPS) : Indicates the current aircraft system status and GPS signal strength.

[2] Battery Level Indicator

⎯◦⎯◦⎯◦ : Describes the battery level of the aircraft according to its immediate status. The colored zones represent the various stages of battery level. When the battery level drops to a certain stage, the system will prompt the user to take the appropriate action.

[3] Flight Mode

� : The text next to this icon indicates the current flight mode.
Tap this icon to configure the Main Controller Settings, to change the flight limits and set the gain values.

[4] GPS Signal Strength

📶 : Shows the current GPS signal strength. White bars indicate adequate GPS strength.

[5] Remote Controller Signal

📶 : Shows the signal strength of the remote controller.

[6] HD Video Link Signal Strength

HD📶 : Shows the signal strength of the HD video downlink between the aircraft and the remote controller.

[7] Battery Level

📋61% : Shows the current battery level.
Tap this icon to view the battery information menu where you can set the battery warning thresholds and view the battery log.

[8] General Settings

••• : Tap this icon to view General Settings where you can set the flight parameters, and enable the Flight Route display.

[9] Camera Operation Bar

This bar will be displayed when using a Zenmuse X3, X5 series or XT gimbal and camera.

Photo / Video Button
⟳ : Tap to switch between photo and video recording modes.

Shoot / Record Button
◉ / ◉ : Tap to start shooting photos or recording video.

Camera Settings
⚙ : Tap this icon to set the ISO, Shutter Speed and Exposure Value of the camera.

Playback
▶ : Tap this icon to play back photos and videos after they are captured.

[10] Mini Map

Displays the flight path of the current flight. Tap the Mini Map to switch between Camera View and Map View.

[11] Flight Telemetry

Flight Attitude and Radar Function:

The aircraft's flight attitude is indicated by the target-like icon.

(1) The red arrow shows which direction the aircraft is facing.

(2) The ratio of the grey area to the blue area indicates the aircraft's pitch.

(3) The horizontal level of the grey area indicates the aircraft's roll angle.

Flight Parameters:

Altitude: Vertical distance from the Home Point.

Distance: Horizontal distance from the Home Point.

Vertical Speed: Movement speed across a vertical distance.

Horizontal Speed: Movement speed across a horizontal distance.

Aircraft Distance:

The horizontal distance between the aircraft and the operator.

[12] Intelligent Flight Mode

⬦ : This icon displays the Intelligent Flight Mode settings when the aircraft has entered F-mode. Tap to select one of the Intelligent Flight Modes. Refer to Intelligent Flight Modes (p. 47) for details.

[13] Return-to-Home (RTH)

🛇 : Initiate RTH home procedure. Tap to have the aircraft return to the latest Home Point.

[14] Gimbal Operation Mode

This icon will be displayed when using a DJI gimbal (or camera). Tap to select a mode or re-align the gimbal.

	Follow Mode	The gimbal's orientation is aligned with the aircraft's nose. One user alone can control the pitch motion of the gimbal, but a second operator is required to control the yaw motion using a second remote controller.
	FPV Mode	The gimbal will lock to the movement of the aircraft to provide a First-Person-View flying experience.
	Free Mode	The gimbal's motion is independent of the aircraft's orientation. One user alone can control the pitch motion of the gimbal, but a second user is required to control the yaw motion using a second remote controller.
	Re-alignment	Re-align the yaw angle of the gimbal with that of the aircraft. The pitch angle remains unchanged during the re-alignment.

[15] Auto Takeoff / Landing

⮝ / ⮟ : Tap to initiate auto takeoff or landing.

[16] Livestream

⊚ : This icon indicates the current video feed is being broadcast live on YouTube. Ensure that mobile data service is available on your mobile device.

[17] Back

dji : Tap this icon to return to the main menu.

Editor

An intelligent video editor is built into the DJI GO app. After recording several video clips and downloading them to your mobile device, go to Editor on the home screen. You can then select a template and a specified number of clips which are automatically combined to create a short film that can be shared immediately.

Skypixel

Find out about our latest events, featured products and trending Skypixel uploads in the this page.

Me

If you already have a DJI account, you will be able to participate in forum discussions, earn Credits in the DJI Store, and share your artwork with the community.

Flight

Once pre-flight preparation is complete, it is recommended to use the flight simulator to learn how to fly safely. Ensure that all flights are carried out in an open area.

Flight Environment

1. Do not use the aircraft in adverse weather conditions including rain, snow, fog, and wind speeds exceeding 8 m/s.
2. Only fly in open areas. Tall buildings and steel structures may affect the accuracy of the compass and the GPS signal.
3. Avoid flying near obstacles, crowds, high voltage power lines, trees and bodies of water.
4. Avoid flying in areas with high levels of electromagnetism, including mobile phone base stations and radio transmission towers.
5. Aircraft and battery performance is subject to environmental factors such as air density and temperature. Be very careful when flying over 8,202 feet (2,500 meters) above sea level as the battery and aircraft performance may be reduced.
6. The Matrice 600 Pro cannot operate in P-mode within the Earth's polar regions.

Flight Limits and No Fly Zones

Flight limits on height and distance can be set.

Unmanned aerial vehicle (UAV) operators should abide by the regulations from self-regulatory organizations such as the ICAO (International Civil Aviation Organization), the FAA and their local aviation authorities. For safety reasons, flight limits are enabled by default to help users use this product safely and legally.

When operating in P-mode, the height limit, distance limit and No Fly Zones work together to monitor flight. In A-mode, only the height limit prevents the aircraft from going above 50 meters*.

* The value is set to 120 if the aircraft has ever received a strong GPS signal (i.e. at least three bars are displayed after the GPS icon) when powered on.

Maximum Height and Radius Limits

Users can change the maximum height and radius limits in the DJI GO app. Once complete, your Matrice 600 Pro will fly in a restricted cylinder that is determined by these settings. The tables below show the details of these limits.

Maximum Flight Altitude

Max Radius

Home Point

Height of aircraft when turned on
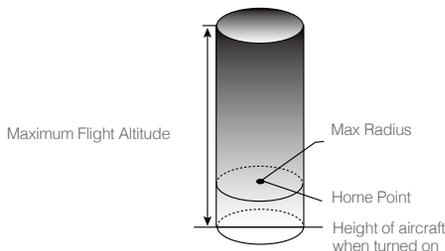
Safe to Fly (GPS) 🔆 ······ Blinking Green Slowly		
	Flight Limits	DJI GO App
Max Height	Flight altitude must be below the preset height.	Warning: Height limit reached.
Max Radius	Flight distance must be within the max radius.	Warning: Distance limit reached.

| Safe to Fly (No GPS) 🔆 ······ Blinking Yellow Slowly		
	Flight Limits	DJI GO App
Max Height	If the Max Flight Altitude set in the DJI GO app is ≤ 50m*, the flight altitude will not exceed the preset value. If the Flight Altitude set in the DJI GO app is > 50m*, the flight altitude will not exceed 50m*.	Warning: Height limit reached.
Max Radius	No limit.	

* The value is set to 120 if the aircraft has ever received a strong GPS signal (i.e. at least three white bars are displayed after the GPS icon) when powered on.

⚠ • If you fly out of bounds, you can still control the Matrice 600 Pro, but cannot fly it further.
  • If the Matrice 600 Pro loses GPS signal and flies out of the max radius but regains GPS signal afterwards, it will fly back within range automatically.

No Fly Zones

All No Fly Zones are listed on the DJI official website at http://flysafe.dji.com/no-fly. No Fly Zones are divided into Airports and Restricted Areas. Airports include major airports and flying fields where manned aircraft operates at low altitudes. Restricted Areas include borders between countries or sensitive sites. The details of the No Fly Zones are explained below:

Airports (requires GPS):
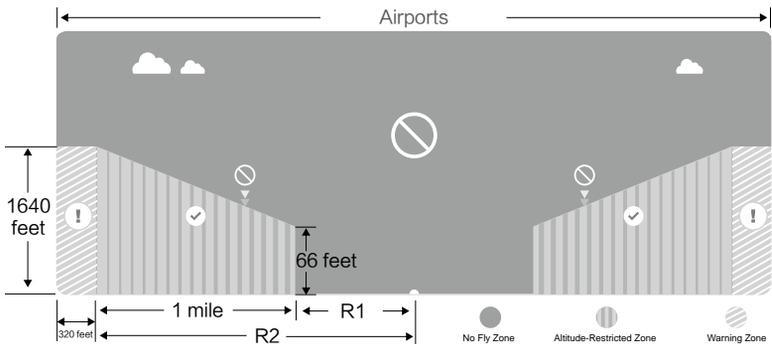
1. Airport No Fly Zones are comprised of a no fly zone and an altitude-restricted zone. Each type of zone encompasses a radius of a certain size.

2. R1 miles around the airport (depending on its shape and size) encompasses the no fly zone, inside of which takeoff and flight are prohibited.

3. From R1 to R1+1 miles around the airport, the flight altitude is limited at a 15 degree incline, starting at 66 feet (20 meters) from the edge of airport and radiating outwards. The flight altitude is limited to 1640 feet (500 meters) at R1+1 miles.

4. When the aircraft is within 320 feet (100 meters) of a no fly zone, a warning message will appear in the DJI GO app.

Restricted Areas (requires GPS):
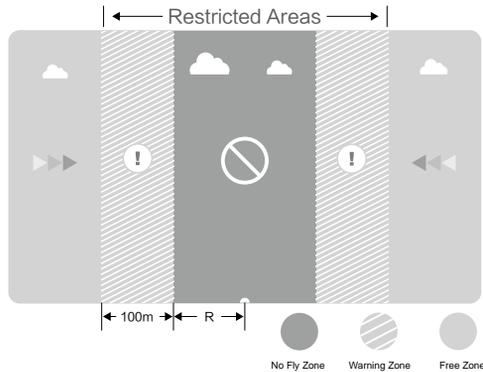
1. Restricted Areas do not have an altitude-restricted zone.

2. R miles around the Restricted Area (depending on the regulation) is a no fly zone, inside of which takeoff and flight are prohibited.

3. A Warning Zone is set on the perimeter of the Restricted Area. When the aircraft is within 0.062 miles (100 m) of the no fly zone (inside the Warning Zone), a warning message will appear in the DJI GO app.

Safe to Fly (GPS) ⚙ ······ Blinking Green Slowly			
Zone	Restrictions	DJI GO App Warning	Aircraft Status Indicator
No Fly Zone ⬤	Motors will not start.	Warning: You are in a no fly zone. Takeoff prohibited.	☼Ⓡ ······ Blinking Red
	If the aircraft loses GPS signal and enters the restricted area but regains GPS signal afterwards, the aircraft will enter Semi-Automatic Descent and land itself.	Warning: You are in a no fly zone. Automatic landing has begun. (If the aircraft is within R1)	
Altitude-Restricted Zone ⬤	If the aircraft loses GPS signal and enters the restricted area but regains GPS signal afterwards, it will descend to a safe altitude and hover 15 feet below the safe altitude.	Warning: You are in a restricted zone. Descending to a safe altitude. (If the aircraft is within R2 but outside R1) Warning: You are in a restricted zone. Max flight height restricted between 20 and 500 m. Fly Cautiously.	
Warning Zone ⬤	No flight restrictions.	Warning: You are approaching a Restricted Area. Fly cautiously.	
Free Zone ⬤	No flight restrictions.	None.	None.

📖 Semi-Automatic Descent: All stick commands are available except the throttle stick command during the descent and landing process. Motors will stop automatically after landing.

⚠ • When flying in No Fly Zones, the Aircraft Status Indicator will blink red slowly and continue for 5 seconds, then switch to indicate the current flying status and continue for 7 seconds, at which point it will switch back to blinking red slowly.
　• For safety reasons, please do NOT fly close to airports, highways, railway stations, railway lines, city centers or other busy areas. Try to ensure the aircraft is visible at all times.

Pre-Flight Checklist

Before each flight, make sure:
1. All firmware is up-to-date.
2. The remote controller, Intelligent Flight Batteries and your mobile device are fully charged.
3. Frame arms and propellers are unfolded.
4. All the GPS-Compass Pro are unfolded and the arrows on the GPS-Compass Pro point toward the front of the aircraft.

5. All cables are connected correctly and firmly.
6. The DJI GO app is connected to the aircraft.
7. Motors start properly and are functioning as normal.

Flight Status Indicators

ESC LEDs

Aircraft Status Indicator
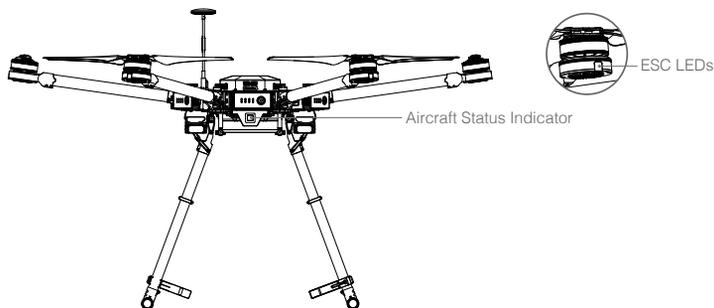
ESC LEDs

There is an ESC LED on each frame arm of the Matrice 600 Pro to show the orientation of the aircraft after motors started. The ESC LEDs located on frame arms M1 and M2 are red. The ESC LEDs located on frame arms M3 to M6 are green. All the ESC LEDs will be solid yellow when motors are rotating at full throttle.

Aircraft Status Indicator

The Aircraft Status Indicator shows the system status of the flight controller. Refer to the table below for more information about the Aircraft Status Indicator:

Normal	
ⓇⒼⓎ ····· Blinking Red, Green and Yellow Alternatively	Power on and self-check
Ⓨ×4 Blinking Yellow Four Times	Aircraft warming up
Ⓖ ····· Blinking Green Slowly	P-GPS
Ⓨ ····· Blinking Yellow Slowly	P-ATTI or ATTI mode
Ⓨ ····· Blinking Yellow (Alternates with other flight mode and D-RTK patterns)	Intelligent Flight Mode
Ⓑ ····· Blinking Blue (Alternates with flight mode patterns)	Using D-RTK GNSS
Ⓑ ····· Blinking Blue Rapidly for 1.5 seconds	Switching devices (IMU or GPS modules) for the modular redundancy system

| Warning	
☼Y☼ ······ Blinking Yellow Rapidly	Remote controller signal lost
☼R☼ ······ Blinking Red Slowly	Low battery warning
☼R☼ ······ Blinking Red Rapidly	Critically low battery warning
☼R☼ ······ Blinking Red Rapidly for 0.6 second when performing CSC	Large IMU bias or IMU initialization
☼R☼ —— Solid Red	Critical error, contact DJI Support
☼R☼ ☼Y☼ ······ Blinking Red and Yellow Alternatively	Compass calibration required

Calibrating the Compass

Be sure to calibrate the compass before your first flight, or else the aircraft cannot work properly. After that, calibrate the compass when the DJI GO app or the Aircraft Status Indicator prompts you to do so.

> ⊘ • DO NOT calibrate your compass where there is a chance of strong magnetic interference, such as magnetite quarries, parking structures, and underground steel reinforcements.
> • DO NOT carry ferromagnetic objects such as cellular phones with you during calibration.

Calibration Procedures

Choose an open space to carry out the following procedures.

1. Tap the System Status bar in the app and select Calibrate, then follow the on-screen instructions to calibrate the aircraft step-by-step.
2. Hold the aircraft horizontally, and rotate it 360 degrees along the central axis. The Aircraft Status Indicator will emit a solid green light.
3. Hold the aircraft vertically with its nose pointing downwards, and rotate it 360 degrees around its central axis.
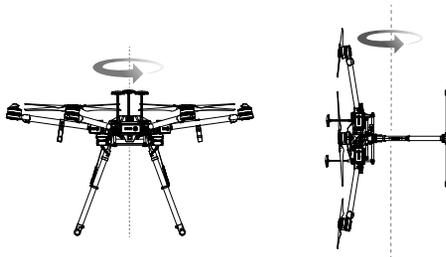
4. Recalibrate the compass if the Aircraft Status Indicator blinks red.

> ☼ • Calibrate the compass after you launch the DJI GO app if you are prompted to do so.
> • After successful calibration, the compass may become abnormal and the DJI GO app will prompt you to recalibrate the compass when you place the aircraft on the ground. Move the aircraft to another location.
> • The DJI GO app will prompt you to resolve the compass issue if the compass is affected by strong interference after calibration is complete. Follow the prompted instructions to resolve the compass issue.

When to Recalibrate

1. The compass data is abnormal, and the Aircraft Status Indicator is blinking red and yellow alternatively.
2. Flying in a new location, or a location that is different from your last flight.
3. The mechanical structure of the Matrice 600 Pro is changed, i.e. the mounting position of the GPS module is changed.
4. Severe drifting occurs in flight, i.e. the Matrice 600 Pro has difficulty flying in a straight line.

Auto Takeoff and Auto Landing

Auto Takeoff

Use Auto Takeoff to take off your aircraft automatically if the Aircraft Status Indicator is blinking green. Follow the steps below to use Auto Takeoff:
1. Launch the DJI GO app and enter the Camera View.
2. Ensure that the aircraft is in P-mode.
3. Go through the pre-flight checklist.
4. Tap 🛫 and slide Confirm to take off.
5. The aircraft will take off and hover 1.2 meters above the ground, and then raise the landing gear automatically.

Auto Landing

Use Auto Landing to land your aircraft automatically if the Aircraft Status Indicator is blinking green. Follow the steps below to use Auto Landing:
1. Ensure that the aircraft is in P-mode.
2. Check that the landing area is clear before tapping 🛬 to land the aircraft.
3. The aircraft will lower the landing gear and begin to land automatically.

☼ The landing gear will automatically raise when the aircraft reaches an altitude of 1.2 m for the first time, and will automatically lower when the aircraft begins to land automatically. Users can turn this feature ON/OFF in the DJI GO app.

Starting and Stopping the Motors

Starting the Motors

A Combination Stick Command (CSC) is used to start/stop the motors. Push both sticks to the bottom inner or outer corners to start the motors. Once the motors have started spinning, release both sticks simultaneously.
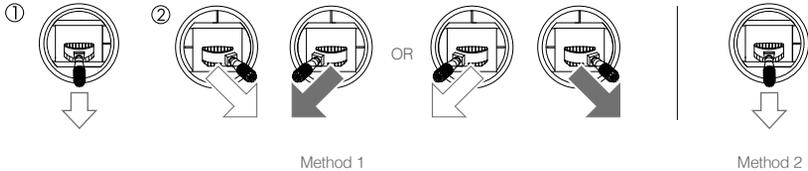

OR
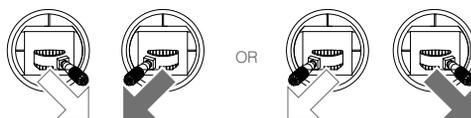
### Stopping the Motors

There are two methods to stop the motors.

Method 1: When the Matrice 600 Pro has landed, push the throttle stick down, then perform the CSC command to stop the motors. Release both sticks once the motors have stopped.

Method 2: When the aircraft has landed, push the throttle down and hold. The motors will stop after 3 seconds.

Method 1   Method 2

Stopping the Motors Mid-flight

Push the left stick to the bottom inside corner and press the RTH button at the same time. Only stop the motors mid-flight in emergency situations when doing so can reduce the risk of damage or injury.
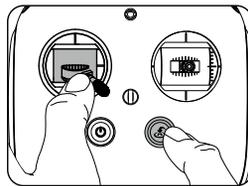
Flight Test

Takeoff / Landing Procedures

1. Place the aircraft on an open, flat area on the ground with the rear of the aircraft facing you.
2. Power on the remote controller and your mobile device, and then one of the Intelligent Flight Batteries.
3. Launch the DJI GO app and enter Camera View.
4. Wait until the Aircraft Status Indicator blinks green. This means the Home Point is recorded and it is safe to fly. If it blinks yellow, the Home Point has not been recorded and you should not take off.
5. Push the throttle stick up slowly to take off or use Auto Takeoff.
6. To land, hover over a level surface, toggle the landing gear control switch to lower the landing gear, and then gently pull down on the throttle stick to descend slowly.
7. After landing, execute the CSC command or push the throttle stick down for 3 seconds until the motors come to a stop.
8. Turn off one of the Intelligent Flight Batteries and then the remote controller.

⚠️ • When the Aircraft Status Indicator blinks yellow rapidly during flight, the aircraft has entered the Failsafe mode.
   • The Aircraft Status Indicator will blink red slowly for a Low Battery Level warning, and blink red rapidly for a Critically Low Battery Level warning during flight.

Appendix

Specifications

Aircraft	
Structure	
Diagonal Wheelbase	1133 mm
Dimensions	1668 mm × 1518 mm × 727 mm with propellers, frame arms and GPS mount unfolded (including landing gear)
	437 mm × 402 mm × 553 mm with propellers, frame arms and GPS mount folded (excluding landing gear)
Package Dimensions	520 mm × 480 mm × 640 mm (L × W × H)
Intelligent Flight Battery Quantity	6
Weight (with six TB47S batteries)	9.5 kg
Weight (with six TB48S batteries)	10 kg
Max Takeoff Weight	15.5 kg
Performance	
Hovering Accuracy (P-mode with GPS)	Vertical: ±0.5 m, Horizontal: ±1.5 m
Max Angular Velocity	Pitch: 300°/s, Yaw: 150°/s
Max Pitch Angle	25°
Max Speed of Ascent	5 m/s
Max Speed of Descent	3 m/s
Max Wind Resistance	8 m/s
Max Service Ceiling Above Sea Level	2500 m
Max Speed	40 mph / 65 kph (no wind)
Hovering Time* (with six TB47S batteries)	No payload: 32 min, 6 kg payload: 16 min
Hovering Time* (with six TB48S batteries)	No payload: 38 min, 5.5 kg payload: 18 min
Propulsion System	
Motor Model	DJI 6010
Propeller Model	DJI 2170R
Flight Control System	
Model	A3 Pro
Other	
Supported DJI Gimbals	Ronin-MX; Zenmuse Z30, Zenmuse X5/X5R, Zenmuse X3, Zenmuse XT; Zenmuse Z15 Series HD Gimbal: Z15-A7, Z15-BMPCC, Z15-5D III, Z15-GH4
Retractable Landing Gear	Standard
Operating Temperature	14° to 104° F (-10° to 40° C)

* The hovering time is based on flying at 10m above sea level in a no-wind environment and landing with 10% battery level.

Remote Controller	
Operating Frequency	920.6 MHz to 928 MHz (Japan) 5.725 GHz to 5.825 GHz 2.400 GHz to 2.483 GHz
Max Transmitting Distance (unobstructed, free of interference)	FCC: 5 km CE: 3.5 km
EIRP	10 dBm @ 900 M 13 dBm @ 5.8 G 20 dBm @ 2.4 G
Video Output Port	HDMI, SDI, USB
Dual Users Capability	Master-and-Slave control
Mobile Device Holder	Supports smartphones and tablets
Output Power	9 W
Operating Temperature	14° to 104° F (-10° to 40° C)
Storage Temperature	Less than 3 months: -4° to 113° F (-20° to 45° C) More than 3 months: 72° to 82° F (22° to 28° C)
Charging Temperature	41° to 104° F (5° to 40° C)
Battery	6000 mAh LiPo 2S
Max Tablet Width	170 mm
Charger	
Model	MC6S600
Voltage Output	26.1 V
Rated Power	600 W
Single Battery Port Output Power	100 W
Battery (Standard)	
Model	TB47S
Capacity	4500 mAh
Voltage	22.2 V
Type	LiPo 6S
Energy	99.9 Wh
Net Weight	595 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Storage Temperature	Less than 3 months: -4° to 113° F (-20° to 45° C) More than 3 months: 72° to 82° F (22° to 28° C)
Charging Temperature	41° to 104° F (5° to 40° C)
Max Charging Power	180 W

Battery (Optional)	
Model	TB48S
Capacity	5700 mAh
Voltage	22.8 V
Type	LiPo 6S
Energy	129.96 Wh
Net Weight	680 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Storage Temperature	Less than 3 months: -4° to 113° F (-20° to 45° C) More than 3 months: 72° to 82° F (22° to 28° C)
Charging Temperature	41° to 104° F (5° to 40° C)
Max Charging Power	180 W

Intelligent Flight Modes

Intelligent Flight Modes allow users to lock the orientation of the aircraft in different fashions or to pre-plan flight paths. Intelligent Flight Modes only work in F-mode, and users must toggle the flight mode switch to F-mode to activate Intelligent Flight Modes.

Point of Interest (POI)	Record a point of interest (POI). The aircraft's nose always points towards the POI.
Waypoints	Record a flight path, and the aircraft will fly along the same path repeatedly while you control the orientation. The flight path can be saved and re-used in the future.
Course Lock (CL)	Lock the current nose direction as the aircraft's forward direction. The aircraft will move in the locked direction regardless of its orientation (yaw angle).
Home Lock (HL)	Record a Home Point, and push the Pitch stick up/down to control the distance of the aircraft from the Home Point.

Prerequisites of Intelligent Flight Modes
Use them under the following conditions:

Intelligent Flight Modes	GPS Enabled	GPS	Flight Distance Limits
POI	Yes	📶	Aircraft ←5m~500m→ POI
Waypoints	Yes	📶	Aircraft ←< 500m→ Waypoint Waypoint ←>5m→ Waypoint Whole path length<5000m
CL	No	None	None
HL	Yes	📶	Aircraft ←≥5m→ Home Point

Enabling Intelligent Flight Modes
Go to the DJI GO app > Camera View > ⌘ > Multiple Flight Modes. On the remote controller, toggle the Flight Mode Switch to F-mode. Tap ✷ in the DJI GO app to use Intelligent Flight Modes by following the steps in the app.

Upgrading the Firmware

Upgrading the Aircraft and Lightbridge 2 Air System Firmware

Connect the aircraft to the DJI Assistant 2 to upgrade the aircraft's and Lightbridge 2 Air System's firmware. Refer to DJI Assistant 2 (p. 30) for details.

Upgrading the Remote Controller Firmware

The System Status bar in Camera View of the DJI GO app will flash several times if a firmware upgrade is available. Follow these steps to upgrade the firmware via the DJI GO app.

1. Go to the DJI GO app > Camera View > System Status bar > Overall Status. Tap Download Firmware to download and upgrade the firmware.
2. A progress bar in the DJI GO app will indicate the upgrade status. The Status LED on the remote controller will be solid blue while the upgrade is in progress and it will turn solid green when the upgrade is successful. The LED will turn solid red if the upgrade fails. Restart the remote controller and try again.

⚠ • DO NOT perform the firmware upgrade while the aircraft is flying in the air. Only carry out the firmware upgrade when the aircraft is on the ground.
  • Both the Lightbridge 2 Air System and the remote controller firmware must be up-to-date, or else they will not link.
  • Check in the DJI GO app that you have the latest firmware installed before each flight.
  • The firmware upgrade requires an internet connection. Connect your mobile device to a Wi-Fi network whenever possible.
  • DO NOT power off the remote controller during the upgrade.
  • The remote controller may become unlinked from the aircraft after the firmware upgrade. Relink the remote controller and aircraft if necessary.

Upgrading the Zenmuse Z30, X3, X5 Series and XT Firmware

If you are using a Zenmuse Z30, X3, X5 series or XT gimbal and camera, mount the gimbal and camera to the aircraft and follow the steps below to upgrade its firmware via a Micro SD card.

⚠ • Be sure to unplug the gimbal attitude cable before camera firmware update, or else firmware update will fail. Ensure that the aircraft is powered off before unplugging the cable.
  • **Ensure that there is only one version of update file in the Micro SD card, or else there will be an update error.**

Step 1- Check the Battery Level and Micro SD Card Storage
a. Ensure that the Intelligent Flight Batteries have at least 50% power level. Power on one of the batteries and ensure that other batteries are triggered automatically. If not, find solutions in the DJI GO app.
b. Ensure that there is at least 100MB of free space on the Micro SD card.

Step 2- Prepare the Firmware Update Package
a. Download the firmware update package from the Matrice 600 Pro page on the DJI website. (http://www.dji.com/matrice600-pro/info#downloads)
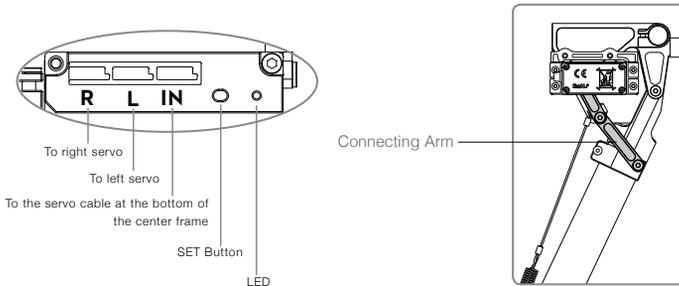
b. Insert the Micro SD card into your PC. Extract all the downloaded files into the root directory of the Micro SD card. While the Matrice 600 Pro is powered off, remove the Micro SD card from your PC and insert it into the Micro SD card slot on the gimbal.

Step 3- Upgrade the Firmware

a. Ensure the remote controller is powered off and then power on one of the Intelligent Flight Batteries. The firmware upgrade will begin automatically once all the Intelligent Flight Batteries are triggered.

b. It will take approximately 25 minutes to complete the firmware upgrade. The gimbal will repeat a beeping pattern of four fast beeps to indicate that the upgrade is in progress, and emit one slow beep followed by two fast beeps to indicate that the upgrade has been completed successfully.

c. Check the upgrade status by opening the .txt file that is automatically generated after the upgrade. You should see the text "result: successful" in the .txt file if the upgrade is successful. Otherwise, try upgrading the firmware again if you see the text "result: failed" in the text file or the gimbal sounds a long beeping sound.

Retractable Landing Gear

Recalibrating Servo Travel

To right servo
To left servo
To the servo cable at the bottom of the center frame
SET Button
LED

Connecting Arm

Keep your hands away from all moving parts to avoid injuries.

Instructions:

1. Be sure to remove the two springs on the landing gear, or else calibration may fail.
2. Ensure that the "R", "L" and "IN" connections are correct.
3. Keep the whole aircraft off of the ground during calibration, as landing gear will move.
4. Use a pin to press and hold the SET button while powering on one of the Intelligent Flight Batteries, releasing the button when the battery powers on. The remaining batteries will power on automatically (if the remaining batteries do not automatically power on, connect your mobile device to the remote controller and follow the on-screen tips in the DJI GO app). The LED will blink yellow quickly. Press the SET button again. Auto calibration will begin and the LED will blink yellow slowly. DO NOT obstruct any moving parts during auto calibration.
5. During calibration, the left landing gear leg will raise and lower, followed by the right landing gear leg.
6. After calibration, both the left and right landing gear legs will be lowered and the LED will display a solid green light. This indicates that the landing gear is working properly.
7. Connect both springs to the legs and the center frame.

⚠️ • If the LED is solid yellow after calibration, a problem has occurred. Ensure that the servos are mounted correctly and then try again.
• Avoid obstructions during calibration. If the landing gear was obstructed, recalibration will be required, per the above steps.
• If the "R" and "L" servo cables are reversed, travel will not be measured correctly. Fix the connections and recalibrate the landing gear using the above steps.
• Landing gear servo travel has been pre-calibrated. Mechanical adjustment of the servo travel is not recommended.

LED Description

Ⓖ — Solid Green	System normal
Ⓖ ····· Blinking Green Rapidly	Calibration required
Ⓖ ······ Blinking Green Slowly	Recalibration required
Ⓨ — Solid Yellow	Calibration failed
Ⓨ ····· Blinking Yellow Rapidly	Enter calibration mode
Ⓨ ······ Blinking Yellow Slowly	System calibrating
Ⓡ — Solid Red	Servo stalled
Ⓡ ····· Blinking Red Rapidly	Unsafe startup alert
Ⓡ ······ Blinking Red Slowly	Input signal abnormal

Specifications

|			
Operating Voltage	6S LiPo	Input Signal	PWM (High-Pulse Width 800 - 2200us)
Operating Current	Max 1 A @ 6S LiPo	Output Signal	PWM (Mid Position is 1520us) in 90 Hz
Operating Temperature	-20° to 70° C	Output Voltage	6 V
Total Weight	742 g	Servo Travel	150° (Min 120°)

Reserved Mounting Position Dimensions

A mounting position for your own devices is reserved at the bottom of the center frame.

1. Remove the twelve M3×6.5 screws at the bottom of the center frame first, and then remove the expansion mounting kit.

M3×6.5 Screws

Expansion Mounting Kit
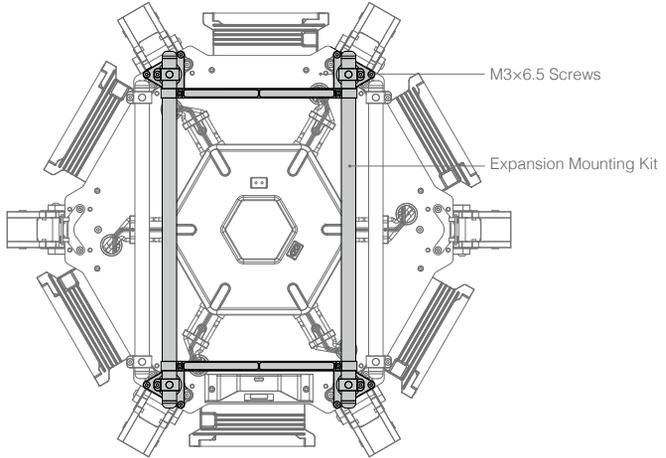
2. The dimensions of the reserved mounting position is shown as follows (unit: mm).

149.1

258.3

3×M3
Thread depth 4 mm

Φ38

120°
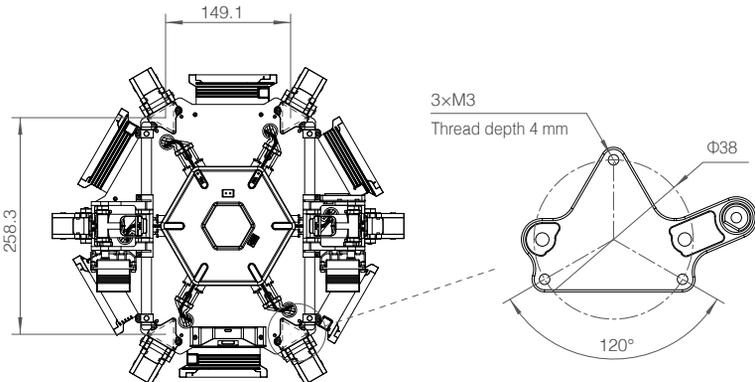
A3 Pro Flight Control System Overview
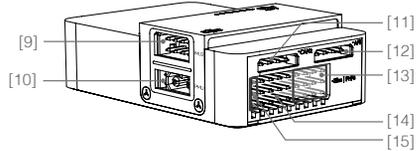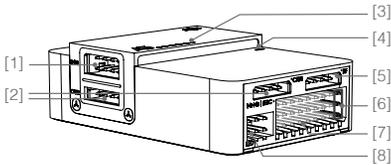
Flight Controller

[1] IMU1

Communicates with the IMU Pro module. Connected before delivery.

[2] CAN1

Dedicated DJI CAN-Bus port. Communicates with the GPS-Compass Pro module or other DJI devices (e.g. Real Time Kinematic (RTK) GPS system, gimbals).

[3] Orientation Arrow

Points to the front of the aircraft.

[4] Status Indicator

Indicates the status of the flight controller and triple modular redundancy system.

[5] RF Port

Communicates with the DJI Lightbridge 2 Air System. Connected to the Lightbridge 2 Air System upon delivery.

[6] iESC Port

Communicates with the DJI Smart ESC. Connected to the DJI Smart ESC upon delivery.

[7] M1-M8 Pins

Connects to the corresponding ESC PWM port for each motor. M1-M6 have been connected to the ESCs and M7 has been connected to the ground upon delivery. M8 is reserved.

[8] LED Port

Communicates with the LED module. Connected to the Aircraft Status Indicator upon delivery.

[9] IMU2 Port

Communicates with the IMU Pro module. Connected before delivery.

[10] PMU Port

Derives power from the PMU. Connected to the PMU upon delivery.

[11] CAN2

Communicates with an SDK device.

[12] API Port

Communicates with an SDK device.

[13] F5-F8 Pins

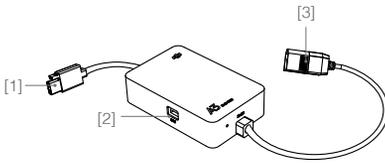Multifunction PWM I / O ports.

[14] F1-F4 Pins

Multifunction PWM output ports. The fan control cable (1-pin) has been connected to the F1 pin and the landing gear servo cable has been connected to the F2 pin upon delivery.

[15] S-Bus Port

The fan power cable (2-pin) has been connected to the S-Bus port upon delivery.

PMU Module

[1] **Power Port (9V 3A)**

Provides power to the flight controller. Connected before delivery.
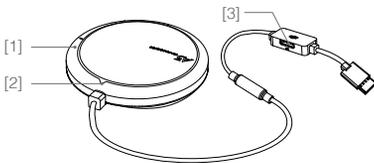
[2] **iBAT**

Communicates with the DJI Intelligent Flight Battery. Connected to the battery management system before delivery.

[3] **3S-12S**

Draws power from the DJI Intelligent Flight Battery or other LiPo battery. Connected to the battery management system before delivery.

GPS-Compass Pro Module

[1] **Status Indicator**

Indicates the status of the GPS-Compass Pro module and the triple modular redundancy system.

[2] **Orientation Arrow**

The GPS-Compass Pro module should be mounted with the arrow pointing toward the aircraft nose.

[3] **Extended CAN1 Port**

Dedicated DJI CAN-Bus port for connection to other DJI systems (e.g. Real Time Kinematic (RTK) GPS system).

IMU Pro Module
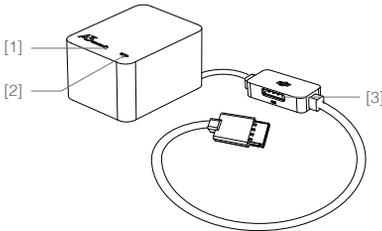
[1] **Orientation Arrow**

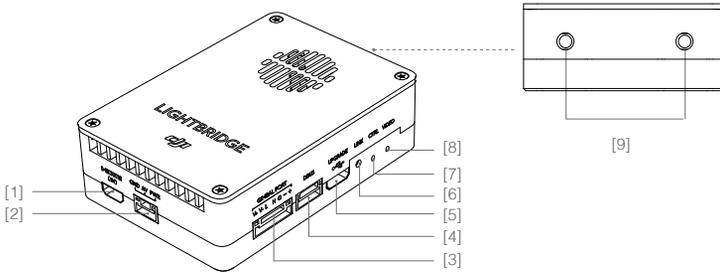Arrow indicated direction of the IMU Pro module.

[2] **Status Indicator**

Indicates the status of the IMU Pro module and the triple modular redundancy system.

[3] **CAN1 GPS Port**

Communicates with the GPS-Compass Pro module. Connected to the GPS-Compass Pro before delivery.

Lightbridge 2 Air System Overview

[1] **HDMI IN**

Supports up to 1080p60 input resolution. This port has been connected to an HDMI cable and the other end of the cable is an HDMI-D connector.

[2] **AV IN**

Receives AV input from the camera.

[3] **Gimbal Port**

Connects to a DJI gimbal or camera.

[4] **DBUS Port**

Sends the remote controller signal to the flight controller. Connected to the RF port on the flight controller upon delivery.

[5] **Upgrade Port**

Connected to the USB Hub built into the center frame upon delivery.

[6] **Link Button**

Used to link the Air System with the remote controller.

[7] **Control Indicator**

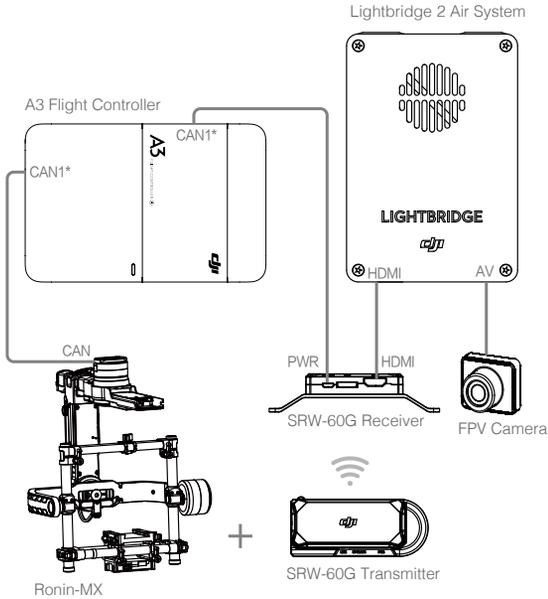Indicates the status of the Air System and remote controller.

[8] **Video Indicator**

Indicates the video transmission status.

[9] **Antenna Port**

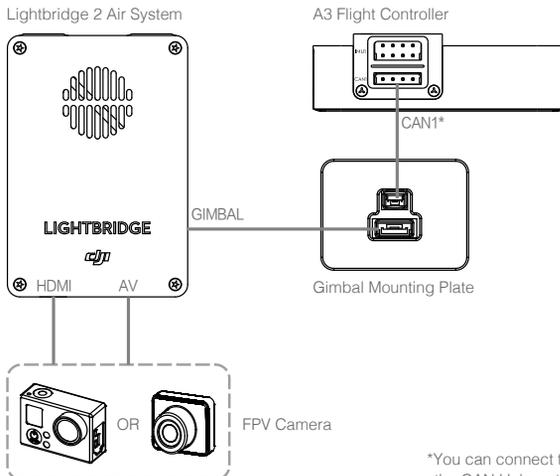This port has been connected to an antenna extension cable upon delivery.

DJI Gimbal Connection Illustrator

Ronin-MX

Lightbridge 2 Air System

A3 Flight Controller

CAN1*

A3

CAN1*

LIGHTBRIDGE

HDMI   AV

CAN

PWR   HDMI

SRW-60G Receiver   FPV Camera
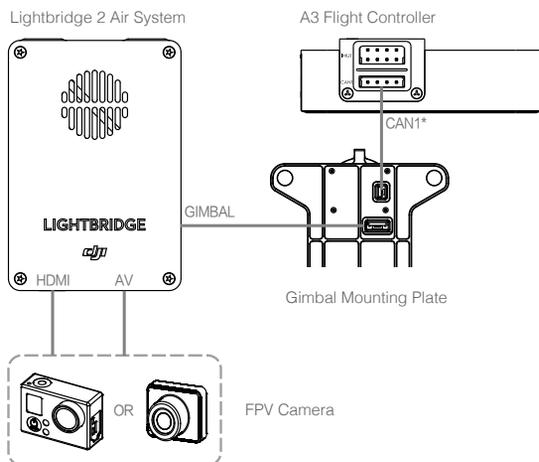
+

SRW-60G Transmitter

Ronin-MX

When using the Ronin-MX, set the App Output Mode in the DJI GO app to display the image on your mobile device from the camera used with the Ronin-MX. Launch the DJI GO app > Camera View > **HD** > Disable EXT Port, adjust the Bandwidth Allocation to ensure that the "HDMI" percentage is more than 0%, and then set the App Output Mode to HDMI.
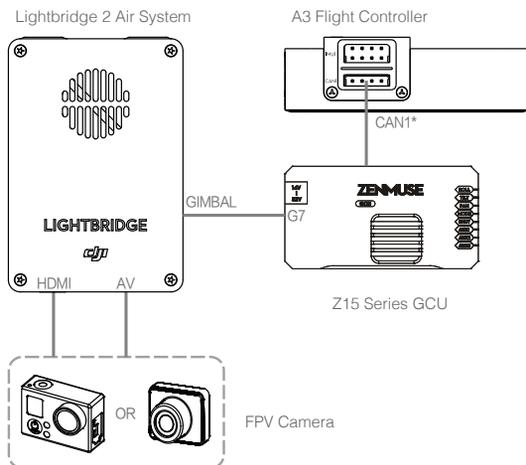
Zenmuse Z30

Lightbridge 2 Air System   A3 Flight Controller

CAN1*

LIGHTBRIDGE

GIMBAL

HDMI   AV

Gimbal Mounting Plate

OR   FPV Camera

*You can connect the CAN cable to the CAN Hub on the GPS cable.

Zenmuse X3, X5 Series and XT

Lightbridge 2 Air System · A3 Flight Controller

CAN1*

GIMBAL

Gimbal Mounting Plate

HDMI   AV

OR   FPV Camera

Zenmuse Z15 Series HD Gimbal

Lightbridge 2 Air System · A3 Flight Controller

CAN1*

GIMBAL

G7

Z15 Series GCU

HDMI   AV

OR   FPV Camera

*You can connect the CAN cable to
the CAN Hub on the GPS cable.

When using the Zenmuse Z30, X3, X5 Series, XT or Z15 series HD gimbal, set the App Output Mode in the DJI GO app to display the image on your mobile device from the camera used with your gimbal. Launch the DJI GO app > Camera View > **HD ⏸** > Enable EXT Port, adjust the Bandwidth Allocation to ensure that the "EXT" percentage is more than 0%, and then set the App Output Mode to EXT.

DJI Zenmuse X3 Gimbal and Camera

Camera

Camera Profile

The X3 gimbal and camera can record up to 4K 4096×2160p video at 24 fps, and capture 12-megapixel images. It features a 1/2.3" Sony EXMOR CMOS image sensor. Preview of the camera's POV in the DJI GO app before shooting images and video. Have extra options to shoot stills in burst mode or self-timer mode, and export video in either MOV or MP4 format.

Camera Micro SD Card Slot

To store your photos and videos, plug in the Micro SD card into the Micro SD card slot on the gimbal before powering on the Matrice 600 Pro. The camera supports a single Micro SD card of up to 64GB. A UHS-1 type Micro SD card is recommended because of its fast read and write capability, allowing you to store high-resolution video files.

⊘   DO NOT remove the Micro SD card from the gimbal when it is powered on.
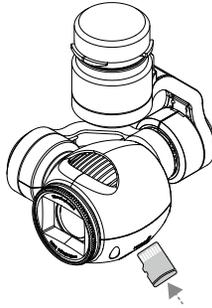
Camera Data Port

Power on the Matrice 600 Pro and then connect a USB cable to the Camera Data Port to download photos or videos from the camera to your PC.

⚠   Power on the aircraft before downloading the files.

Camera Operation

Use the Shutter and Record button on the remote controller to shoot images or the videos through the DJI GO app. For more information on how to use these buttons, refer to .
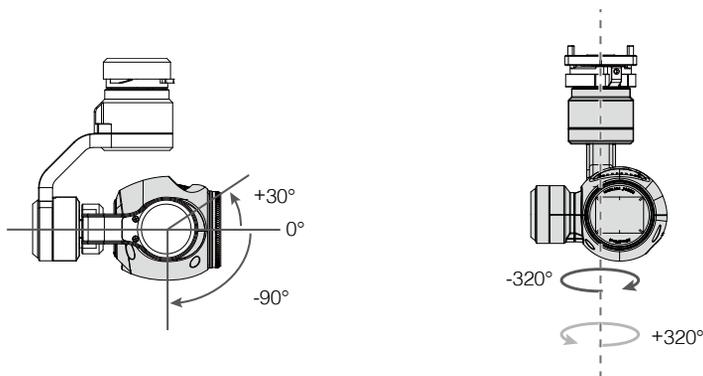
ND Filter

Attach an ND filter to the front of the camera to reduce over exposure and the 'jello' effect.

Gimbal

Gimbal Profile

The 3-axis gimbal provides a steady platform for the camera, allowing you to capture stable video and images. The gimbal can tilt the camera up to 120 degrees and rotate 320 degrees.


Under the default settings, turn the gimbal dial on the remote controller to tilt the camera. Note that you cannot simultaneously tilt and pan the camera in the Single Remote Controller mode. Enable the Master-and-Slave mode in the DJI GO app and set a second remote controller to Slave if you wish to tilt and pan the camera together.

Gimbal Dial Settings

Follow the instructions below to use the gimbal dial to tilt/pan the camera:
1. Power on the aircraft and the remote controller.
2. Go to the DJI GO app > Camera View > > Remote Controller Settings.
3. Set the customizable button C1 or C2 as the Gimbal Pitch/Yaw.
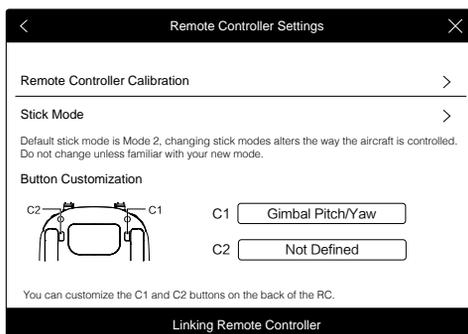
Press the C1 or C2 button to switch between pitch mode and yaw mode. Use the gimbal dial to control the tilt/pan motion of the camera.

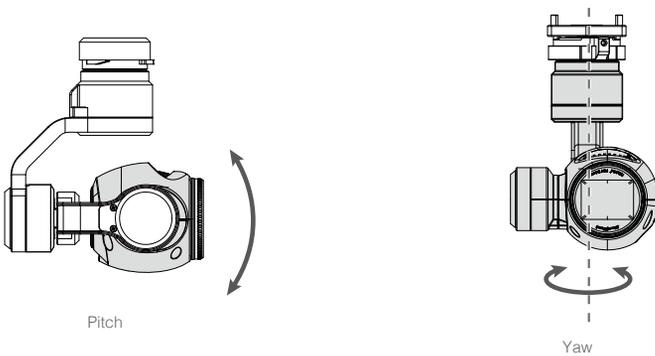### Using the DJI GO App to Control the Gimbal

Follow the steps below to use the DJI GO app to control the gimbal's pitch/yaw motion:
1. Go to the DJI GO app > Camera View.
2. Tap and hold on the screen until a blue circle appears.
3. Move your finger to control the gimbal's pitch/yaw motion.
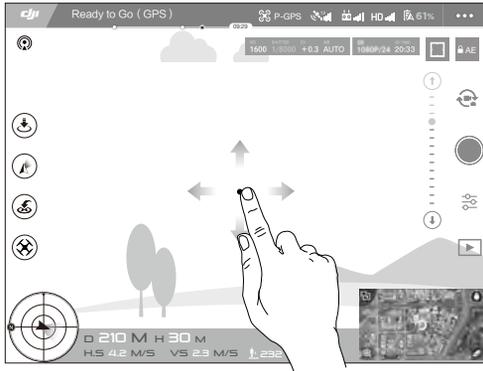
Gimbal Operation Modes

Switch between the three operation modes in Camera View in the DJI GO app. Note that your mobile device must be connected to the remote controller for changes to take effect. Refer to the table below for details:

Pitch

Yaw

📖	🔺 Follow Mode	The gimbal's orientation is aligned with the aircraft's nose. One user alone can control the pitch motion of the gimbal, but a second operator is required to control the yaw motion using a second remote controller.
	🔻 FPV Mode	The gimbal will lock to the movement of the aircraft to provide a First-Person-View flying experience.
	✈ Free Mode	The gimbal's motion is independent of the aircraft's orientation. One user alone can control the pitch motion of the gimbal, but a second user is required to control the yaw motion using a second remote controller.
	⬇ Re-alignment	Re-align the yaw angle of the gimbal with that of the aircraft. The pitch angle remains unchanged during the re-alignment.
⚠	• A gimbal motor error may occur if the gimbal is placed on an uneven ground because of impact with ground objects. Be sure to take off from a flat, open ground to protect the gimbal from impact. • Flying in heavy fog or inside clouds may make the gimbal wet, leading to a temporary failure. The gimbal will recover when it dries out.	

Specifications

Gimbal	
Model	Zenmuse X3
Power Output (Camera Attached)	Static: 9 W; In Motion: 11 W
Operating Current	Static: 750 mA; In Motion: 900 mA
Angular Vibration	±0.03°
Mounting	Detachable
Controllable Range	Pitch: -90° to +30°; Yaw: ±320°
Mechanical Range	Pitch: -125° to +45°; Yaw: ±330°
Controllable Speed	Pitch: 120°/s; Yaw: 180°/s
Camera	
Name	X3
Model	FC350
Total Pixels	12.76 M
Effective Pixels	12.4 M
Max Image Size	4000 x 3000
ISO	100-3200 (Video); 100-1600 (Photo)
Shutter	8 to 1/8000 s
FOV (Field Of View)	94°

CMOS	Sony EXMOR 1/2.3"
Lens	20 mm (35 mm format equivalent), f/2.8, focus at ∞ 9 elements in 9 groups Anti-distortion
Still Photography Modes	Single shot Burst mode: 3/5/7 frames Auto Exposure Bracketing (AEB): 3/5 frames at ±0.7EV Timed shot
Video Recording Modes	UHD (4K): 4096x2160p 24/25, 3840x2160p 24/25/30 FHD: 1920x1080p 24/25/30/48/50/60 HD: 1280x720p 24/25/30/48/50/60
Video Storage Bitrate	60 Mbps
Supported File Formats	FAT32/exFAT Image: JPEG, DNG Video: MP4/MOV (MPEG-4 AVC/H.264)
Supported SD Cards	Micro SD Max capacity: 64 GB; Class 10 or UHS-1 rating required
Operating Temperature	-10° to 40 °C