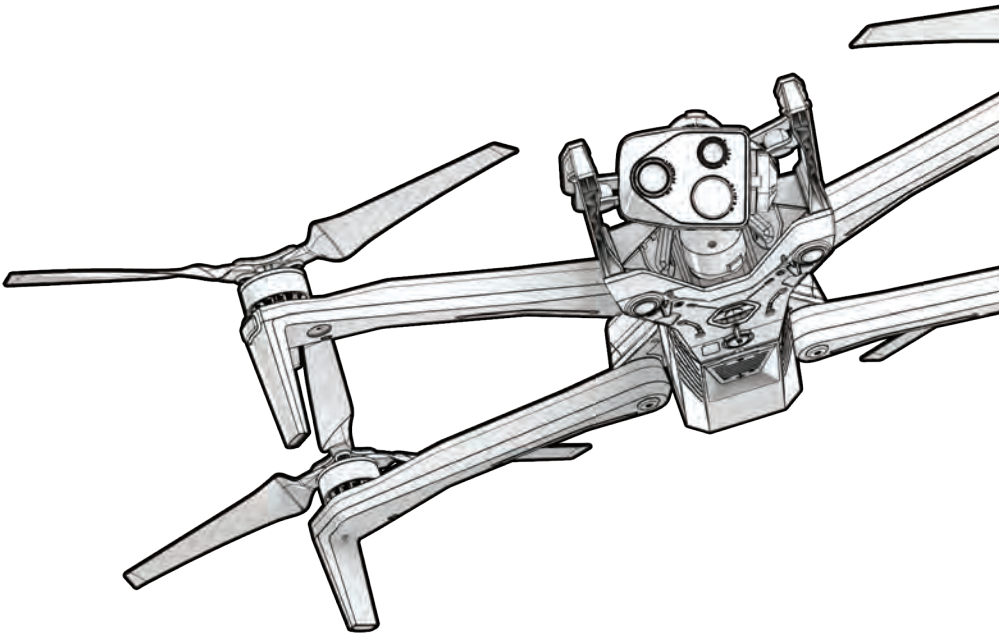
Skydio

Skydio X10

Quick Start Guide



WARNING: *Please read all documentation provided with your Skydio drone, including but not limited to the Safety and Operating Guide found here:* www.skydio.com/safety

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Additional Resources

For the latest information about Skydio and our products, visit www.skydio.com

Scan the following QR codes to view more information about flying with Skydio X10.

Getting Started with Skydio X10

Flying with Skydio X10

Skydio X10 Maintenance

Skydio X10 Safety and Operating Guide

Skydio Support

For legal, warranty, and intellectual property information, visit: www.skydio.com/legal

CAUTION: *Failure to follow any instructions in this Skydio X10 Quick Start Guide or the full operator manual can void the limited warranty.*

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Safety Guidelines

WARNING: *To avoid injury or damage to your Skydio X10, read the warnings and safety information in the Skydio Safety and Operating Guide.*

Keep your fingers away from moving propellers at all times.

Use caution around reflective surfaces (still water, mirrors, etc.) and small obstacles (thin branches, utility lines, chain link fencing, etc.)

Skydio X10 Obstacle avoidance is off during GPS Flight mode and can be impaired when in low light and poor visibility. Fly with extreme caution under these conditions.

Skydio X10 does not avoid moving objects (e.g., vehicles).

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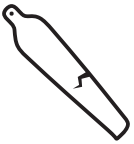
Clean all of the cameras so Skydio X10 can see clearly.



Check your propeller blades for damage before flying.

Before flying over water, ensure your drone has a strong GPS signal. Launch and land over a dry surface.

Follow all civil aviation authority regulations, as well as all local, state, and federal laws.

Skydio X10 is IP55 rated and able to fly in light to moderate rain in GPS Flight mode, with obstacle avoidance disabled. The Skydio X10 Controller is IP54 rated.

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Skydio X10 Overview

Welcome to your Skydio X10, the perfect interlock between precisely engineered hardware and intelligent software. With abundant computing power and modular design, Skydio X10 is ready to fulfill the mission needs of today and tomorrow.

- Skydio X10 is equipped with **the world's most advanced autonomy engine**, enabling it to fly autonomously and learn in-flight to gain insights and recognize objects
- **Powerful sensor packages** enable pilots to capture precise image quality as well as zoom imaging detailed enough for the most demanding missions
- The Skydio X10 **modular design** allows for attachments, enabling it to swiftly adapt to changing mission requirements

Scan for more information about the various software bundles available for purchase.

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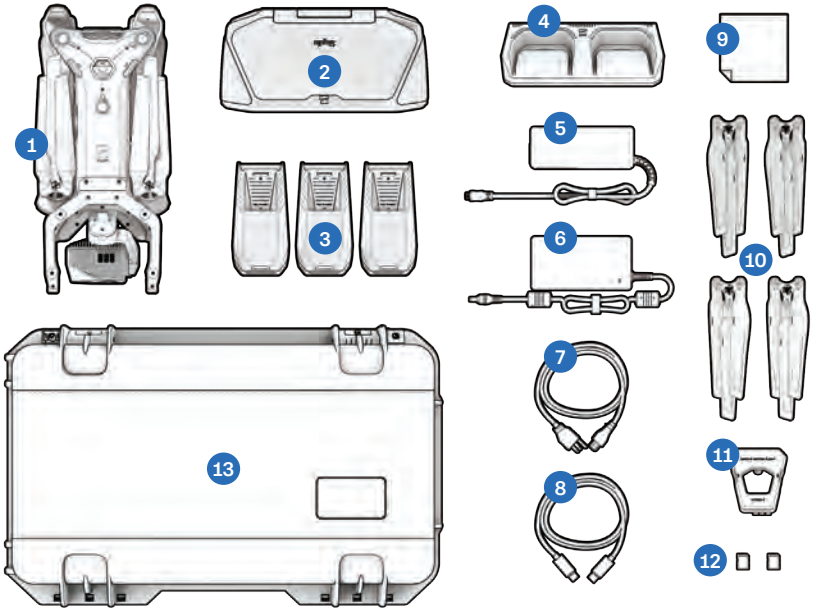
Skydio X10 Starter Kit



1. Skydio X10 and sensor package
2. Skydio X10 Controller with chosen Skydio Connect option
3. Batteries (3)
4. Skydio X10 Dual Charger
5. 100 W USB-C power supply
6. 230 W fast power supply
7. Power cable
8. USB-C to USB-C pairing cable
9. Microfiber cleaning cloth
10. Spare propellers (includes 2x CW, 2x CCW)
11. Sensor package lock
12. 256 GB microSD cards, pre-installed (2)
13. Starter Case (hard shell)

Scan the QR Code for more information about the kits available for Skydio X10.

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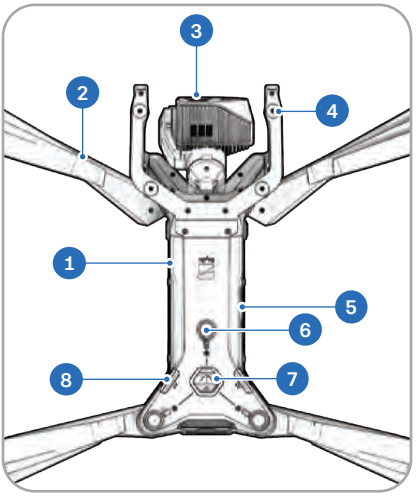
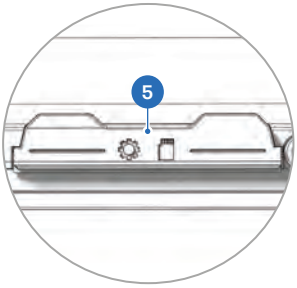
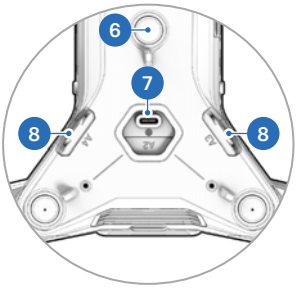
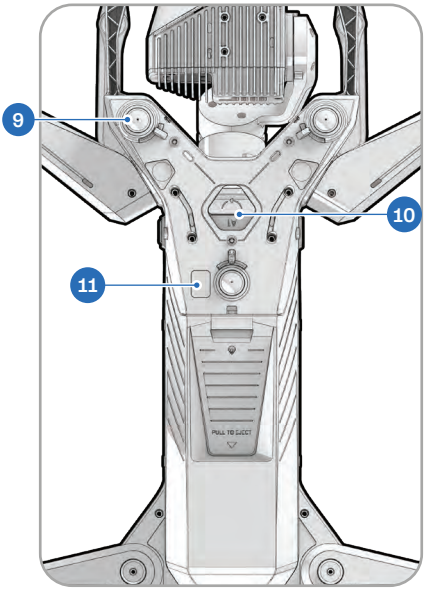
Skydio X10 Hardware

1. Chassis
2. Arm (4)
3. Sensor package
4. Sensor package frame
5. Log/Media card slots (2)
6. Top navigation cameras (3)
7. Top attachment bay (A2)
8. Side attachment bay (A3, A4)
9. Bottom navigation cameras (3)
10. Bottom attachment bay (A1)
11. Time of flight sensor









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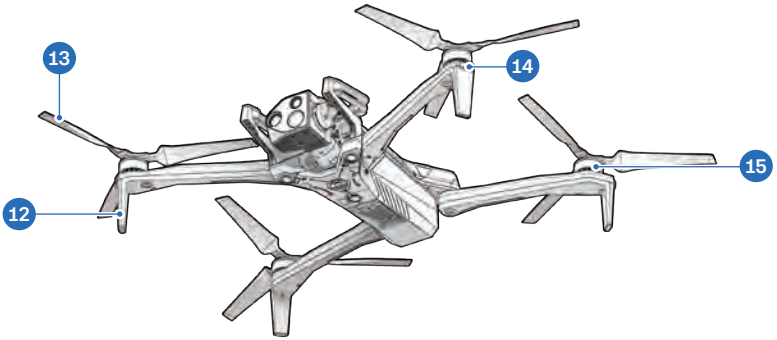

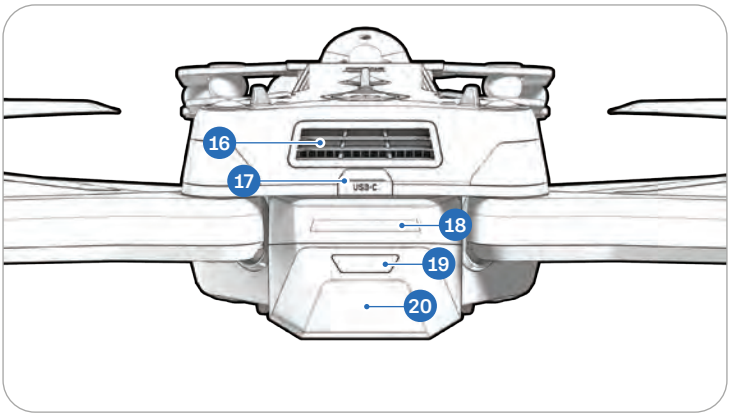

12. Landing foot/antenna
13. Propeller blades
14. RGB/strobe lights
15. Propeller motor
16. Cooling fan/outlet
17. USB-C charge port
18. Battery lights
19. Power button
20. Battery

Scan the QR Code for more information about the sensor packages available for purchase.

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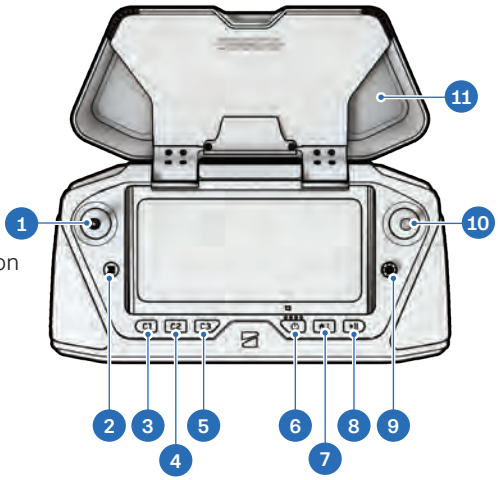
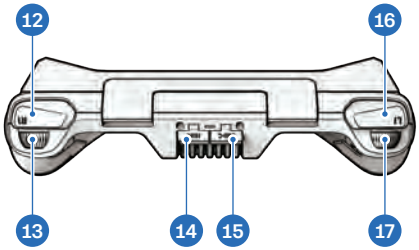
Skydio X10 Controller Hardware

1. Left joystick
2. Menu/Back button
3. C1 button*
4. C2 button*
5. C3 button*
6. Power button
7. Launch/Return/Land button
8. Pause button
9. Directional pad (D-pad)
10. Right joystick
11. Controller cover/antennas

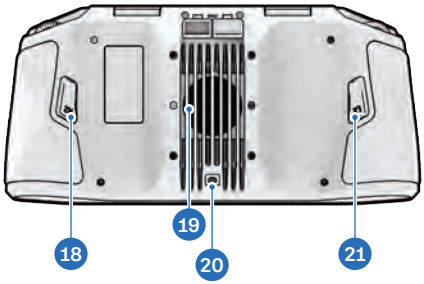


12. R1 button (Shutter)
13. Right wheel
14. HDMI port
15. USB-C charge port
16. L1 button (Boost)
17. Left wheel*



18. R2 button*
19. Cooling fan
20. Neck strap and tripod mount
21. L2 button*

**Customizable*



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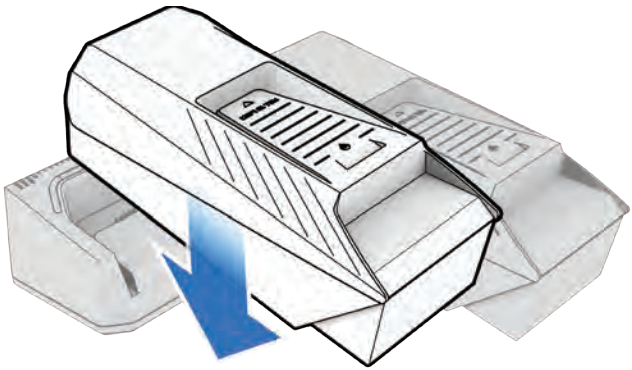
Using the Skydio X10 Dual Charger

Scan the QR Code for more information about charging and battery maintenance.

The Skydio X10 Dual Charger sequentially charges two batteries. The Dual Charger will prioritize fully charging the battery with the highest charge level. If both batteries are depleted, it will prioritize whichever battery is inserted first.

Step 1 - Place batteries into the X10 Dual Charger

Gently push down to ensure the batteries are properly seated.



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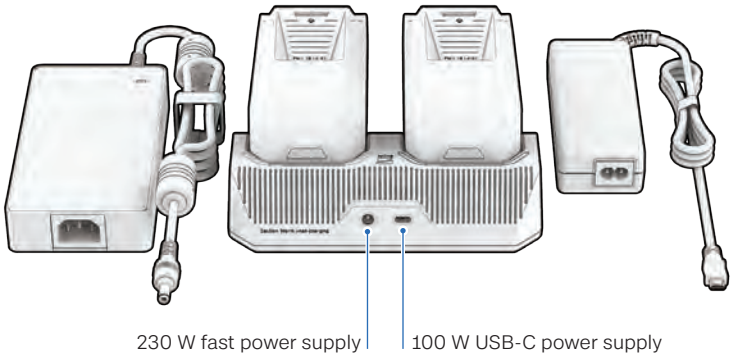
Step 2 - Insert the power supply

Two charging ports are located on the back of the Skydio X10 Dual Charger. You may use either the 100 W USB-C power supply or the 230 W fast power supply.

Plug into a power source.

- It will take about 1 hour to fully charge a depleted battery using the 230 W fast power supply
- Batteries are shipped with approximately 30% charge
- The lights on the X10 Dual Charger will gently pulse blue while charging
- Charging is complete when the lights are solid blue



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Using Skydio X10

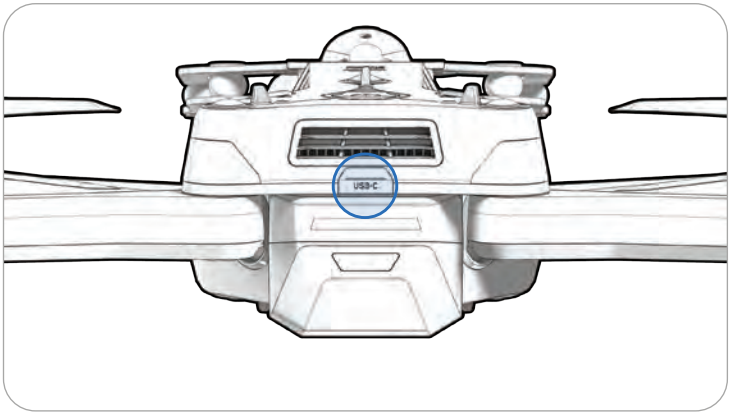
Step 1 - Insert battery

Align the battery with the rails and slide toward the sensor package until the magnets engage.

- Ensure the battery and rails are free of debris and interference
- Ensure the battery is completely seated before flying

Step 2 - Locate the charging USB-C port

The charging port is located on the back of the drone above the battery.



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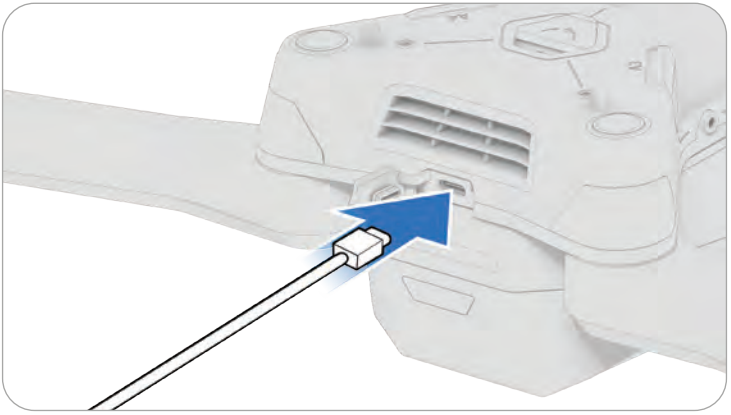
Step 2 - Insert the 100 W power supply

Plug into a power source.

- It will take about 2 hours to fully charge a depleted battery using the 100 W power supply
- Batteries are shipped with approximately 30% charge



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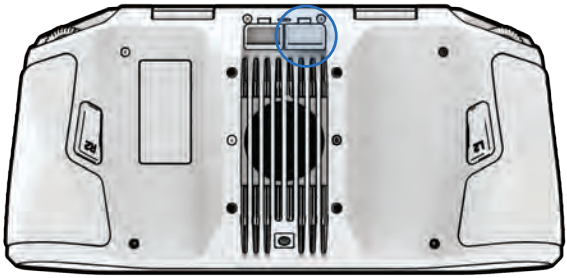
Charging the Skydio X10 Controller

Step 1 - Locate the USB-C port

The charging port is located on the back of the controller.

- The right port is used to charge
- The left port is used for HDMI output



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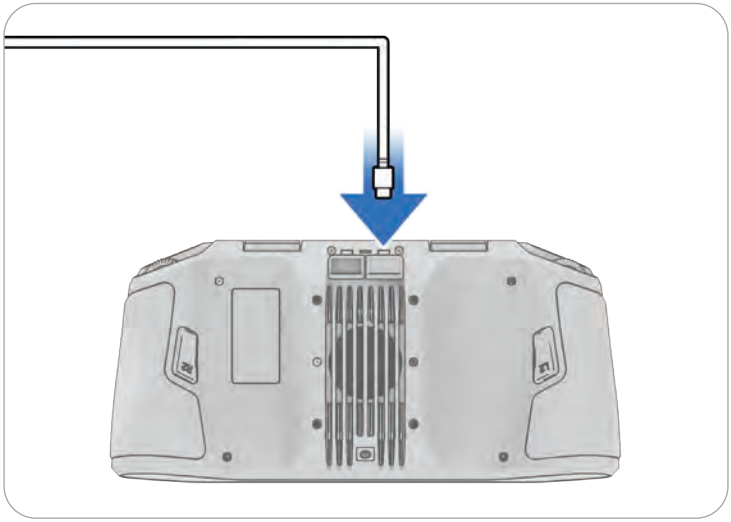
Step 2 - Insert the 100 W power supply

Connect your Skydio X10 Controller to the 100 W power supply. Plug into a power source. The lights on the front of the controller will turn on and indicate the level of charge.



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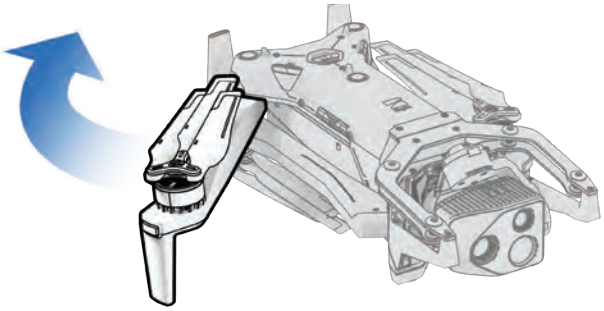
Skydio X10 Setup

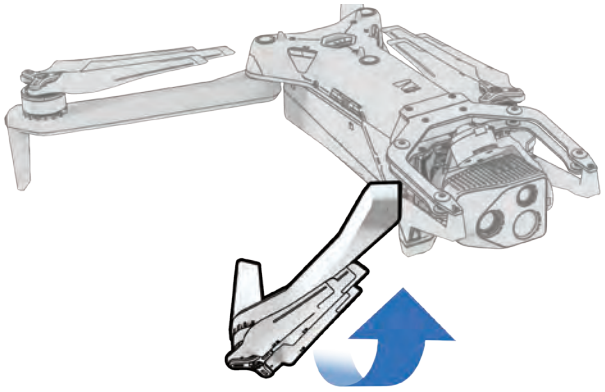
Step 1 - Unfold the rear arms

Hold the drone with the sensor package facing away from you. Pull **laterally** away from the chassis. Gently continue until you meet resistance.



Step 2 - Unfold the front arms

Push **down** and **forward**. Gently continue until you meet resistance.



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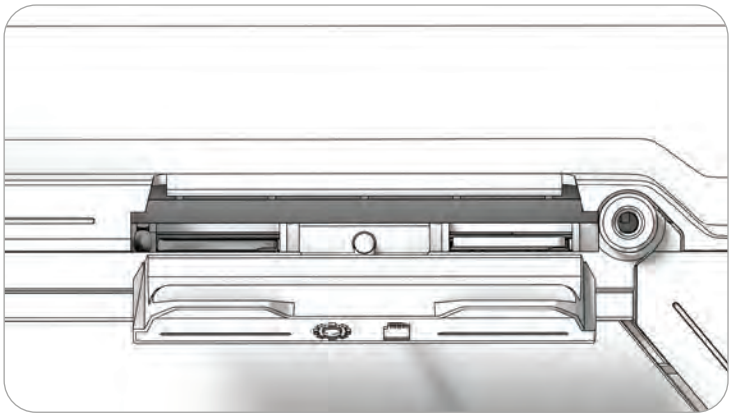
Step 3 - Verify and format microSD cards (pre-installed)

Ensure you have two UHS Speed Class 3 (or faster) microSD cards inserted in the slots on the side of the drone.

- Minimum 128 GB
- Format your cards before flying using **Manage Data** within the **Info** menu (**Global Settings** > **Info** > **Devices** > **Manage Data**)



Logs card
Supports software updates, scan data and records flight logs

Media card
Stores all media captured during flight

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Step 4 - Insert battery

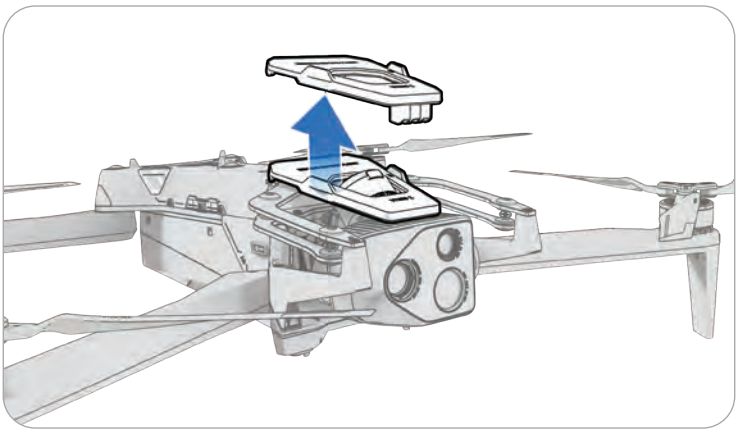
Align the battery with the rails and slide toward the sensor package until the magnets engage.

- Ensure the battery and rails are free of debris and interference
- Ensure the battery is completely seated before flying

Step 5 - Remove the sensor package lock

Gently pull to remove from the top of your drone.

- Save this piece to reattach when storing or transporting



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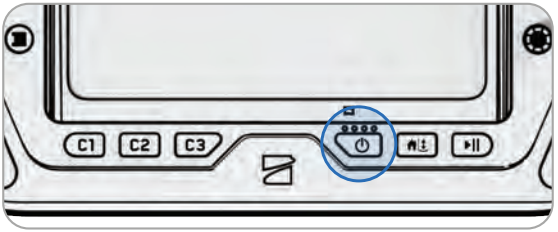
Skydio X10 Controller Setup

Scan the QR Code for more information about the Skydio X10 SL/5G Controller and the Skydio X10 MH Controller.

Step 1 - Power on the Skydio X10 Controller

Open the controller lid and hold the Power button for three seconds. The lights on the front of the controller will turn on and indicate the level of charge.



Step 2 - Set up Skydio Flight Deck

Skydio Flight Deck is the dedicated flight software on your controller.

Skydio X10

1. Connect to a WiFi network and follow the on-screen prompts
2. Provide an email address and enter the activation code that is sent to your email
3. Set a password for your controller (optional)

Skydio X10D

1. Set a password for your controller

CAUTION: *The password cannot be recovered or reset. Ensure that your password is entered correctly and is written down and stored in a safe location. If the password is lost, the controller will need to be replaced.*

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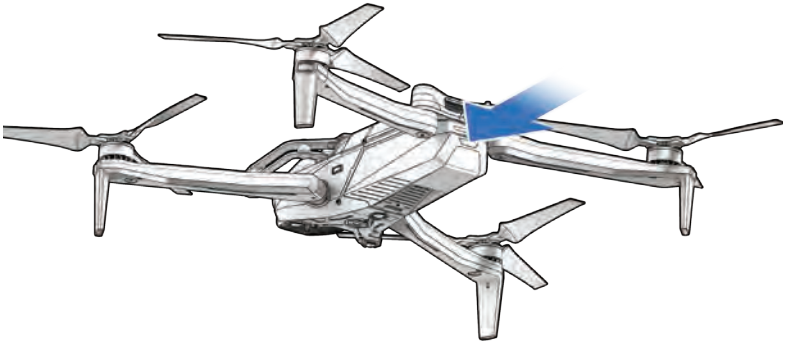
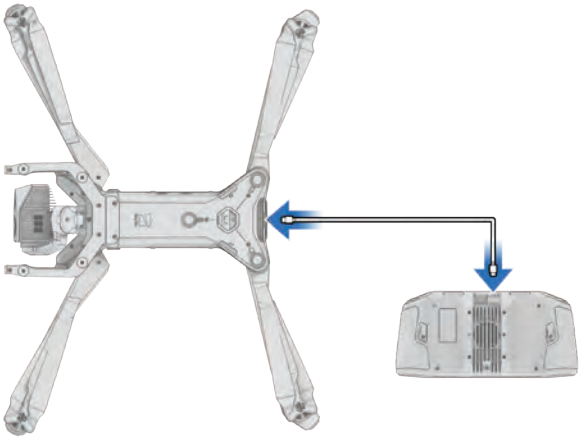
Step 3 - Power on Skydio X10

Press and hold the Power button on the battery for three seconds.



Step 4 - Pair the drone and controller

Use the USB-C pairing cable to connect your devices. Wait as pairing completes. The name of your drone will appear on the screen when pairing is successful.



Scan the QR Code for instructions on how to set up your Skydio Cloud account.

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Preflight Inspection

WARNING: *Carefully inspect your drone and environment before launching to ensure a safe flight.*

- **Inspect the chassis** to ensure it is free of damage.
- **Inspect motor arms** and verify they are fully extended and free of damage.
- **Inspect the battery** and confirm it is securely seated prior to launching. Skydio X10 uses magnets to seat the battery which may attract metallic debris. Ensure the connector pins are free of debris or damage.
- **Clean the camera lenses and time of flight sensor** with a clean microfiber cloth. Cameras should be dust and smudge-free before flight.
- **Fan out the propellers and inspect** to verify they are firmly attached and properly seated in the motors. Propellers should be free of cracks or damage. Do NOT fly with damaged propellers.
- **Verify motor hubs** are free of damage or debris.
- **Inspect the sensor package** before powering on and ensure it moves freely and is not damaged.
- **Check your surroundings** before launching to ensure a safe environment for flight.
- **Point the controller cover/antennas toward the drone** for maximum wireless performance.
- **Verify batteries are fully charged** before flying.
- **Check for drone and controller updates** before flying.

Scan the QR Code for software update instructions.

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Flight Screen

1. Global Settings
2. Display Layout
3. AR Quick Actions
4. Obstacle Avoidance Quick Actions
5. Attachments Quick Actions*
6. Drone Battery
7. Signal Strength
8. Telemetry (customizable)
9. Autonomy Status
10. Return/Land
11. Flight Skills
12. Map Settings
13. Thermal Settings
14. Camera Settings
15. Camera Mode
16. Shutter
17. Notifications
18. Zoom
19. Focus Control
20. Picture-in-Picture (PiP)
21. View Selector

**Only appears when you are currently using an attachment. Attachments coming soon.*

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Flight Controls

Moving the joysticks allows you to adjust the roll, pitch, yaw and throttle of the drone.

Roll - Controls left and right movement

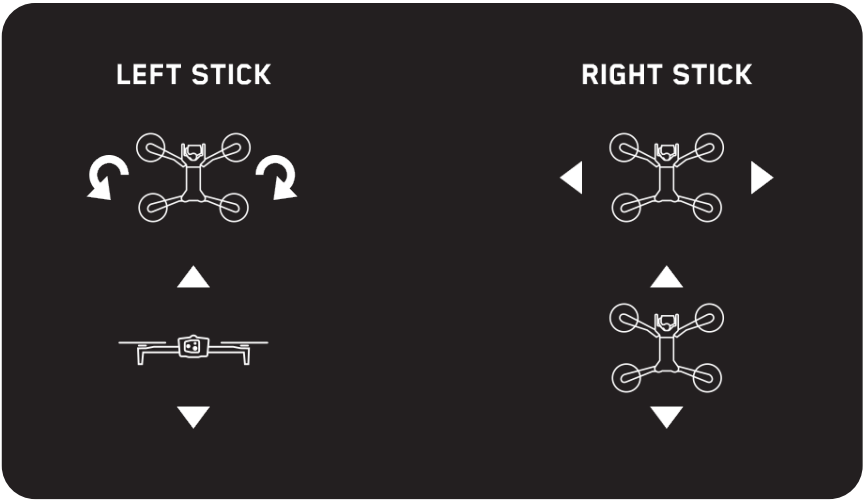
Pitch - Controls forward and backward movement

Yaw - Changes rotation around the vertical axis

Throttle - Controls upward and downward movement (altitude)

There are three different modes by which you can control your drone. By default, the controls are set to **Mode 2**:

- Left stick controls throttle and yaw
- Right stick controls pitch and roll



Mode 2 controls

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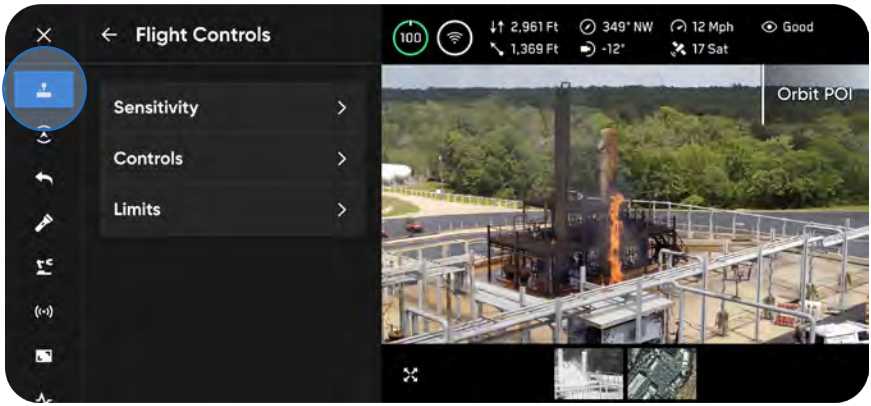
Changing the Control Mode

Step 1 - Select Flight Controls in the Global Settings menu



Step 2 - Select Controls

Step 3 - Select your Control Mode

Choose between **Mode 1**, **Mode 2** (default) and **Mode 3**.

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Launching

WARNING: *Before your first flight, read and follow all of the safety guidelines in the Skydio Safety and Operating Guide and make sure to set your Return and Lost Connection Behaviors (Global Settings > Return).*

Scan the QR Code for more information about Return and Lost Connection Behaviors.

Step 1 - Find a clear, safe area to launch

Find a clear, safe area to launch and place your drone on a stable surface. Leave about 10 ft (3 m) clearance in all directions.

Select **Fly Now**.

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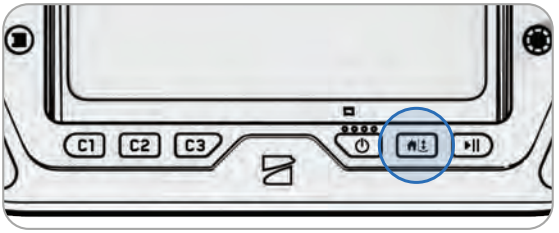
Step 2 - Launch

Your drone may rotate during the launch sequence to better understand the environment.

Option 1 - Drag the on-screen slider
The drone will initiate launching when you lift your finger away from the screen.

Option 2 - Press and hold the Launch/Land button on the controller
The drone will initiate launching when you see the on-screen check mark.



WARNING: *Obstacle avoidance is disabled when the drone is below 10 ft (3 m) during landing. Exercise extreme care to avoid injury or damage. Do not touch spinning propellers.*

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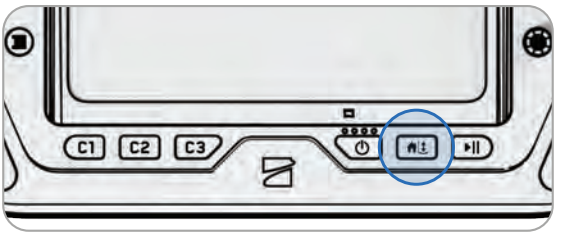
Returning and Landing

Scan the QR Code for more information about Return and Lost Connection Behaviors.

Step 1 - Select the Return/Land button in the top right of your screen or on the controller



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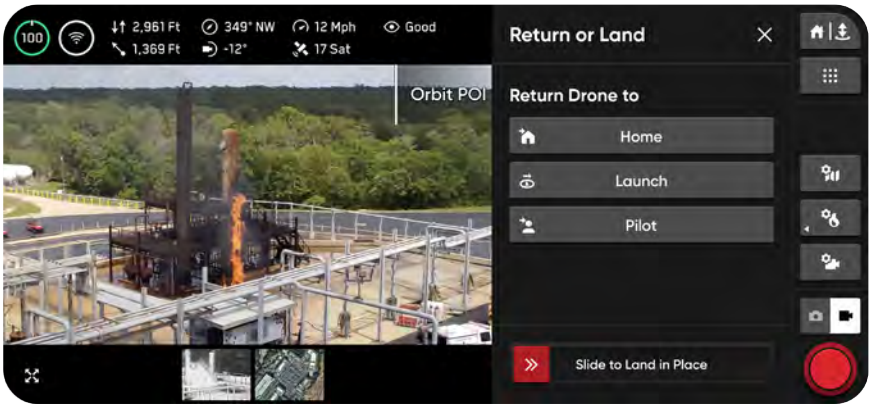
Step 2 - Choose your return location or land in place

Home
Returns to a Home Point previously set on the map (GPS required)

Launch
Returns to the Launch Point

Pilot
Returns to the location of the Skydio X10 Controller



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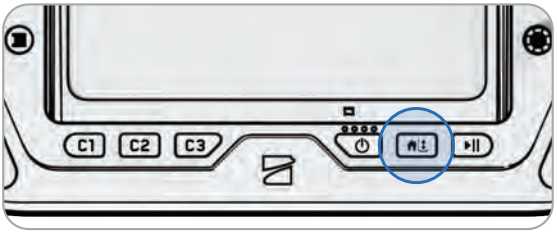
You have three options when landing in place:

Option 1 - Select and drag the on-screen slider
Landing begins when you lift your finger away from the screen.

Option 2 - Press and hold the Return/Land button on the controller
Landing begins when you see the on-screen check mark.



Option 3 - Press and hold the Return/Land button on-screen
Landing begins when you see the on-screen check mark.

WARNING: *Obstacle avoidance is disabled when the drone is below 10 ft (3 m) during landing. Exercise extreme care to avoid injury or damage. Do not touch spinning propellers.*

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Contingency Behaviors

WARNING: *While flying, always monitor Skydio Flight Deck for in-app alerts relating to battery levels, signal quality, and other inflight notifications.*

Scan the QR Code for more information about Contingency Behaviors.

Low Battery

Skydio X10 will assess the altitude and distance from the Launch or Home Point and alert you when it is time to return and land. It is recommended you initiate a return or land at this time, however, you can choose to keep flying.

Before flying, configure return settings, such as an automatic return on low battery, in the Return menu (**Global Settings** > **Return**).

You will receive a series of notifications and actions to ensure ample time for a safe landing.

- Skydio X10 will then notify you when it has two minutes of flight time left based on its current altitude, and the battery indicator will begin a two-minute countdown. You may choose to continue flying, however, it is strongly recommended that you fly to a safe location and land.
- When the two-minute countdown is complete, Skydio will initiate an automatic landing that you will be unable to cancel. You will maintain the ability to nudge the drone in roll, pitch, and yaw to avoid any obstacles.

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Lost Connection

WARNING: *Before flying, ensure you have set your Lost Connection Return Behaviors. This is a critical step that ensures your drone returns safely and lands in an accessible location.*

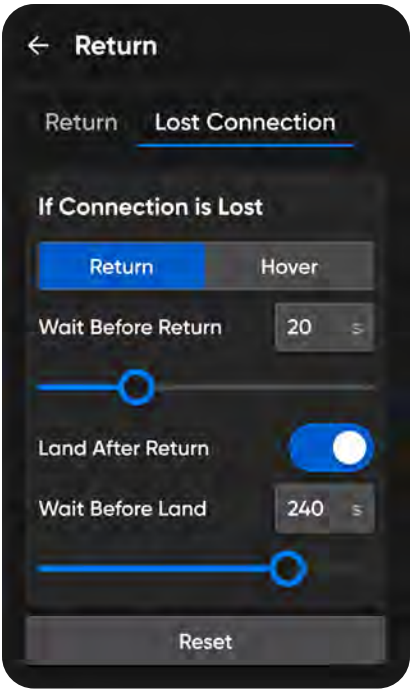
If connection is lost, Skydio X10 will default to the **Lost Connection** settings. Select between **Return** and **Hover** upon lost connection.

Return

Wait Before Return - set the amount of time you want Skydio X10 to wait before it initiates a return flight, allowing time to reconnect

Land After Return - when enabled, your drone will return, hover for a specified amount of time, then land.

Wait Before Land - the amount of time between 0 to 300 seconds (default is 240 seconds) that you want your drone to wait above the landing location before landing. This setting is only enabled when Land After Return is toggled on.



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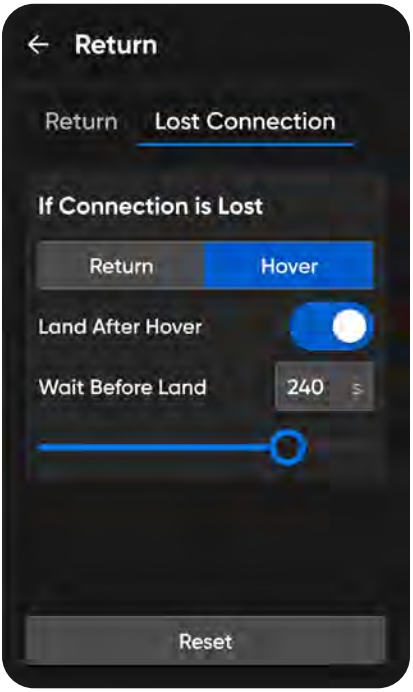
Hover

Land After Hover - when enabled, Skydio X10 will hover for a specified amount of time, then use visual navigation to find a safe area to land.

Wait Before Land - the amount of time between 0 to 300 seconds (default is 240 seconds) that you want your drone to wait before landing. This setting is only enabled when Land After Hover is toggled on.



Skydio X10 will continue hovering as it tries to regain connection. If it fails to reconnect and reaches low battery:

- If you have an automatic return set, your drone will return to either the Launch Point or Home Point (if set)
- If you do not have an automatic return set, your drone will use visual navigation to find a safe area to land
- If you are flying in GPS Flight, your drone will be unable to use visual navigation and will descend vertically and land

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Lost GPS

If Skydio X10 loses GPS signal, the drone will continue flying using the vision system. Actions that require GPS will be disabled.

If visual navigation is also unavailable, the drone will initiate an emergency landing, with optional pilot-assistance available if the controller is connected.

EXAMPLE: *If Skydio X10 loses GPS signal while flying in GPS Flight mode (e.g., flying at night without NightSense) it will initiate a pilot-assisted emergency landing.*

CAUTION: *GPS Flight Mode does not support obstacle avoidance.*

If you would like to fly at night with obstacle avoidance enabled, scan the QR Code to read more about NightSense.

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Emergency Landing

If Skydio X10 enters an unexpected state from which it cannot recover, it will automatically initiate an emergency landing (with optional pilot-assistance available if the controller is connected). An alert notification will display in Flight Deck if the controller is connected.

- Skydio X10 will use navigation cameras and GPS to descend vertically
- If these are not available, the drone will quickly descend using only the barometer which may result in lateral drift

If the unexpected state has been resolved, Skydio X10 will stop the emergency landing and you will regain control.

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