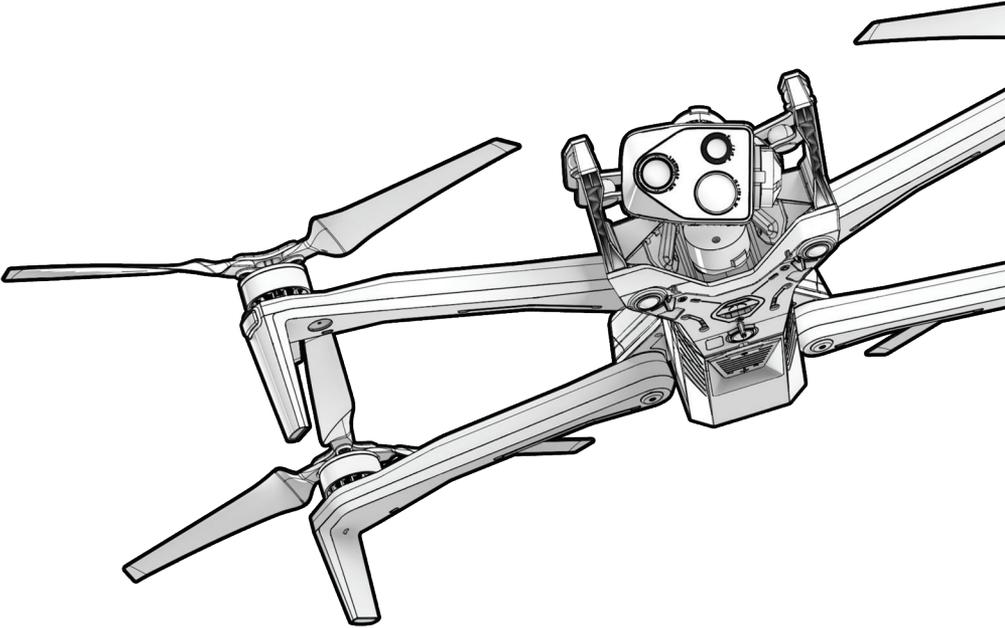




Skydio X10

Quick Start Guide



Updated: February 6, 2024



WARNING: Please read all documentation provided with your Skydio X10, including but not limited to the X10 Safety Guidelines in the Safety and Operating Guide: www.skydio.com/safety. Failure to follow any instructions or recommendations in our documentation may void the Skydio 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 (e.g., still water or mirrors) and small obstacles (e.g., thin branches, utility lines, or chain link fencing)



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

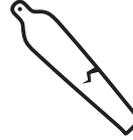


Skydio X10 does not avoid moving objects (e.g., vehicles).

Flying Safely



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 precipitation in GPS Only flight mode, with obstacle avoidance disabled. The Skydio X10 Controller is IP54 rated.

Skydio X10 Overview

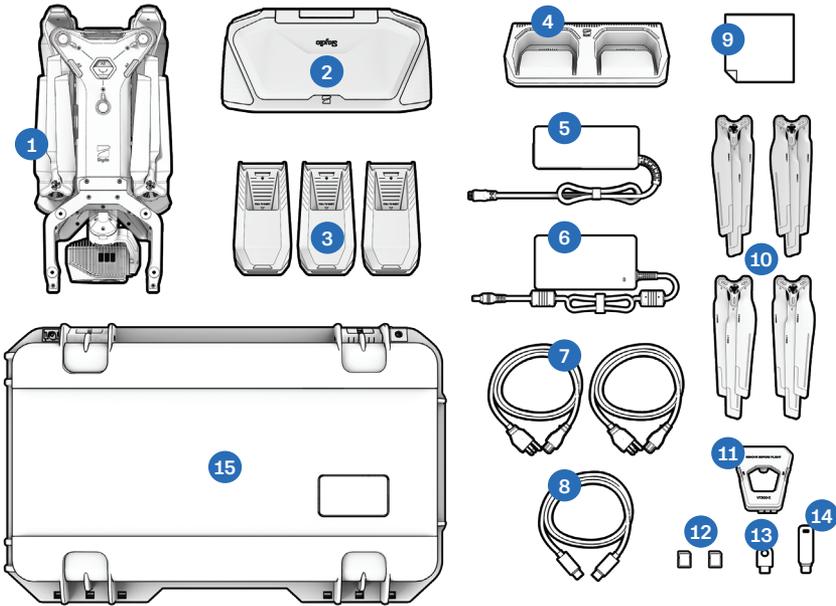
Welcome to your Skydio X10, the perfect interlock between precisely engineered hardware and intelligent software. With abundant computing power and modular design, Skydio X10 is ready to fulfill the mission needs of today and tomorrow.

- 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 the QR Code for more information about the various software bundles available for purchase.

Skydio X10 Starter Kit



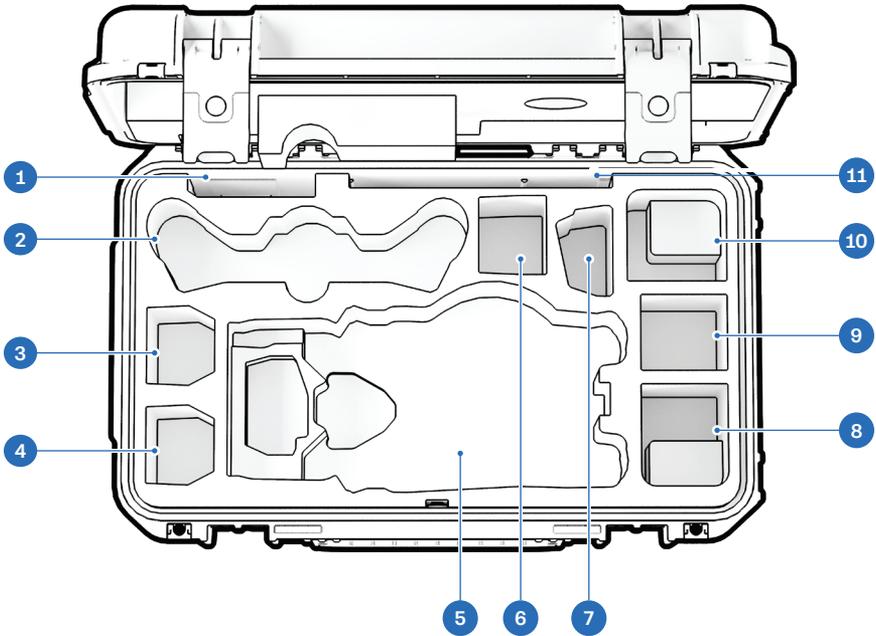
- 1. Skydio X10 and sensor package
- 2. Skydio X10 Controller with chosen Skydio Connect option
- 3. Batteries (3)
- 4. Skydio X10 Dual Charger
- 5. 100 W USB-C power supply
- 6. 230 W fast power supply
- 7. Power cables (2)
- 8. USB-C to USB-C pairing cable
- 9. Microfiber cleaning cloth
- 10. Spare propeller sets (4)
- 11. Sensor package lock
- 12. 256 GB microSD cards, pre-installed (2)
- 13. Encryption key (X10D only)
- 14. Flash drive for software updates (X10D only)
- 15. Starter Case (hard shell)



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

Skydio X10 Starter Case Layout

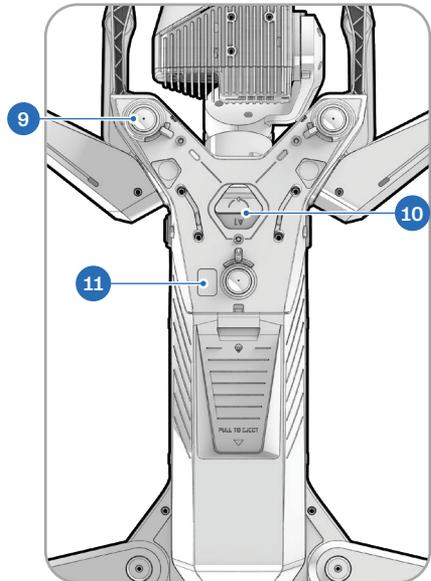
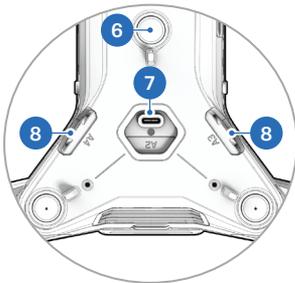
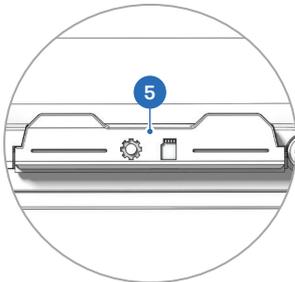
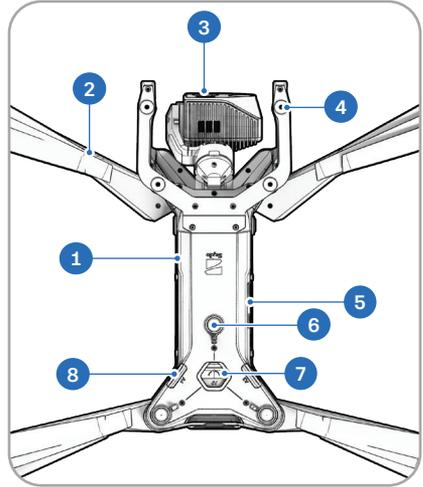
Your Skydio X10 Starter Case comes pre-packaged with all components in your Starter Kit. Many slots are designed for specific items, however some slots are flexible.



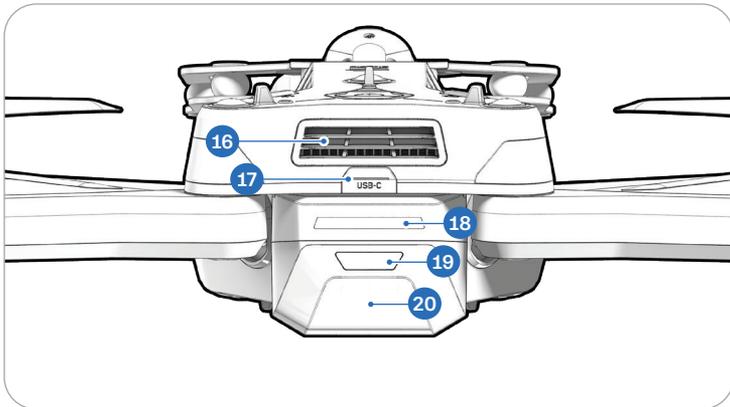
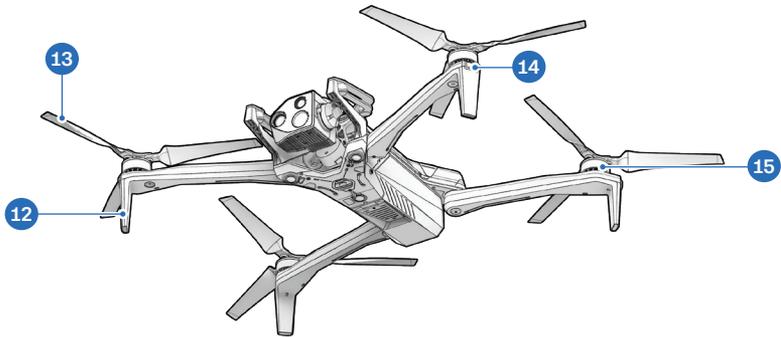
- | | | | |
|----|--|-----|--|
| 1. | Propellers | 8. | Flex space: 100W Power Supply or Attachment |
| 2. | X10 Controller | 9. | Flex space: Attachment or 100W Power Supply only (battery not recommended) |
| 3. | X10 Battery | 10. | Flex Space: 230W Power Supply or Attachment |
| 4. | X10 Battery | 11. | Quick Start Guide and other documents |
| 5. | Skydio X10 Drone | | |
| 6. | Flex space: X10 Battery or 100W Power Supply | | |
| 7. | X10 Dual Charger | | |

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



Overview



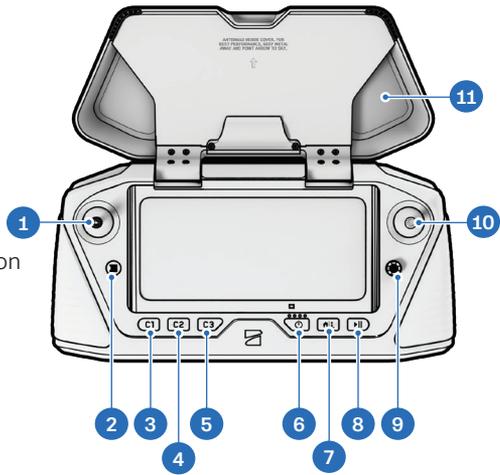
- | | |
|--------------------------|-----------------------|
| 12. Landing foot/antenna | 17. USB-C charge port |
| 13. Propeller blades | 18. Battery lights |
| 14. RGB/strobe lights | 19. Power button |
| 15. Propeller motor | 20. Battery |
| 16. Cooling fan/outlet | |



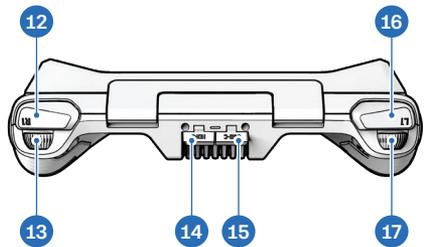
Scan the QR Code for more information about the sensor packages available for purchase.

Skydio X10 Controller Hardware

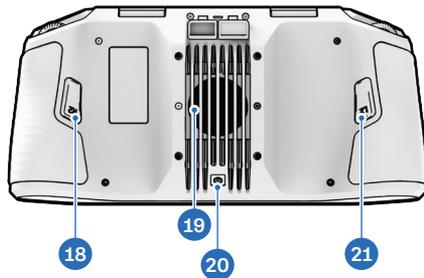
1. Left joystick
2. Menu/Back button
3. C1 button¹
4. C2 button¹
5. C3 button¹
6. Power button
7. Launch/Return/Land button
8. Pause button
9. Directional pad (D-pad)
10. Right joystick
11. Controller cover/antennas



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



18. R2 button¹
19. Cooling fan
20. Neck strap² and tripod mount
21. L2 button¹



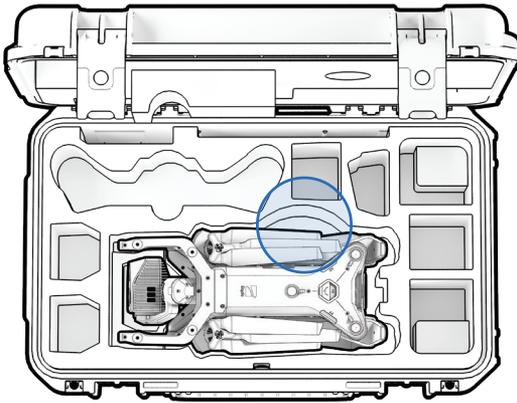
¹Customizable

²Neck strap sold separately

Unboxing Skydio X10

Step 1 - Remove Skydio X10 from the case

Open your Starter Case. Reach down into the designated hand cutout (highlighted in the image below), grip Skydio X10 underneath by the chassis, and lift it upward to remove. Do not lift X10 by the sensor package, arms, or rear.

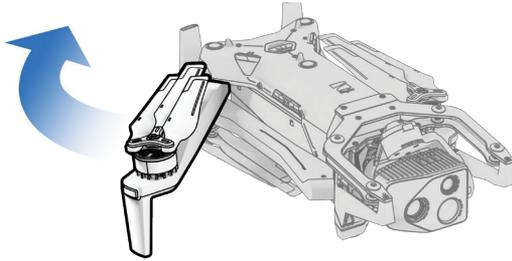


Scan the QR Code to watch a video demonstrating how to remove Skydio X10 from its case.

Preflight

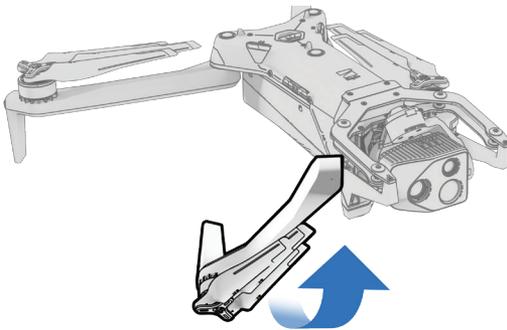
Step 2 - Unfold the rear arms

Hold the drone with the sensor package facing away from you. Pull **laterally** away from the chassis until you feel the arm seat into place.



Step 3 - Unfold the front arms

Push **down** and **forward**. Gently continue until you feel the arm seat into place.



Charging Skydio X10 Batteries



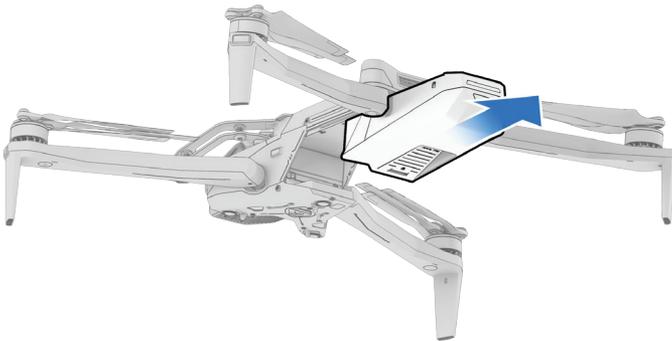
Scan the QR Code for more information about charging and battery maintenance.

Skydio X10 batteries are shipped in a state of hibernation and will not power on your drone out of the box. Your batteries will automatically exit this state once they begin charging for the first time.

Step 1 - Remove battery from drone

Skydio X10 batteries are held in place using a magnetic connection.

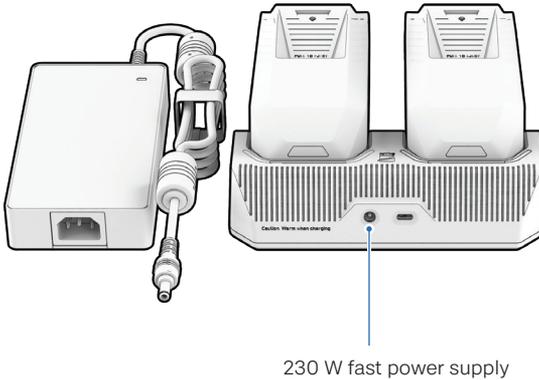
1. Firmly grip the drone chassis with one hand
2. Grip the battery with your other hand, placing your palm over the power button and wrapping your thumb under the battery
3. Using your fingers as leverage, press against the drone until the magnets disengage and slide the battery away from the sensor package



Preflight

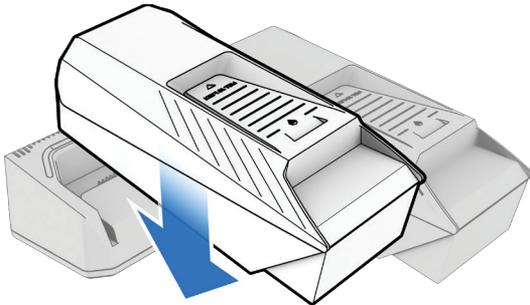
Step 2 - Connect the X10 Dual Charger to power

Connect the 230 Watt fast power supply to the X10 Dual Charger, then plug it into a power source.



Step 3 - Place batteries into the X10 Dual Charger

Gently push down to ensure the batteries are properly seated. Charging will begin once the battery is connected.



Preflight

- The lights on the X10 Dual Charger will pulse blue while the corresponding battery is charging.
- Charging is complete when the lights are solid green.
- 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.

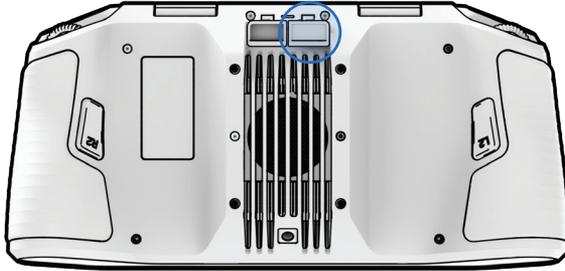
Battery Charge State	Light Behavior on X10 Dual Charger
Actively charging	Pulsing blue
Waiting to charge	Solid blue
Charging complete	Solid green

Power Supply	Charge Time
230 W	About 1 hour to charge a depleted battery
100 W	About 1 hour 45 minutes to charge a depleted battery

Charging the Skydio X10 Controller

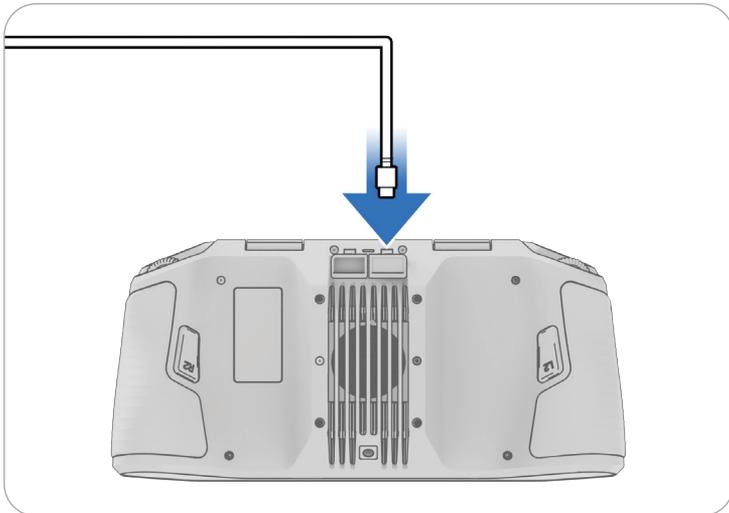
Step 1 - Locate the USB-C charge port

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



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.



Setting Up and Pairing Your Devices

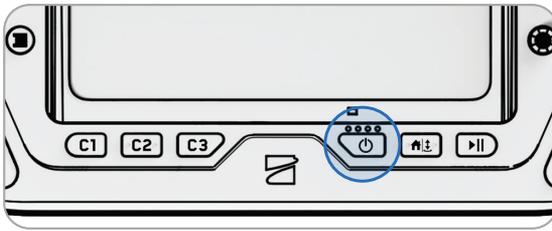


NOTE: Before flying, you'll need to **set up your Skydio Cloud account**, add users, and claim devices in order to access Skydio Flight Deck and receive software updates. Scan the QR Code for setup instructions. This does not apply to Skydio X10D.



Step 1 - Power on the Skydio X10 Controller

Open the controller lid and hold the Power button for five seconds. The lights on the front of the controller will turn on and indicate the level of charge—continue holding the power button for the full 5 seconds until the controller powers on.



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. Enter the email address that is associated with your Skydio Cloud account
3. Enter the activation code that is sent to your email
4. Set a password for your controller (optional)

Skydio X10D

1. Set a password for your controller



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

Preflight

Step 4 - Insert the X10 battery

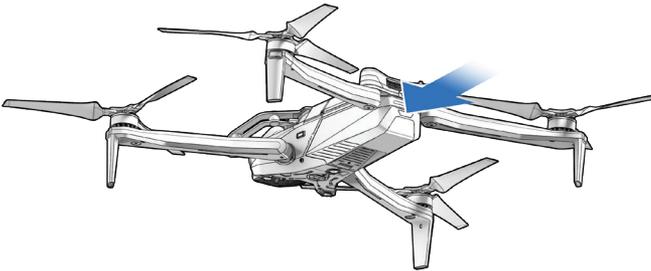
Align the battery with the rails and slide toward the sensor package until the magnets engage.

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



Step 5 - Power on Skydio X10

Press and hold the Power button on the battery for three seconds. The lights on the drone arms will turn blue as X10 powers on.

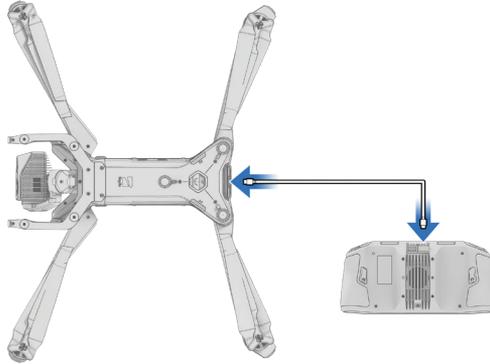


Preflight

Step 6 - Pair the drone and controller

Use the USB-C pairing cable to connect your devices. Wait as pairing completes.

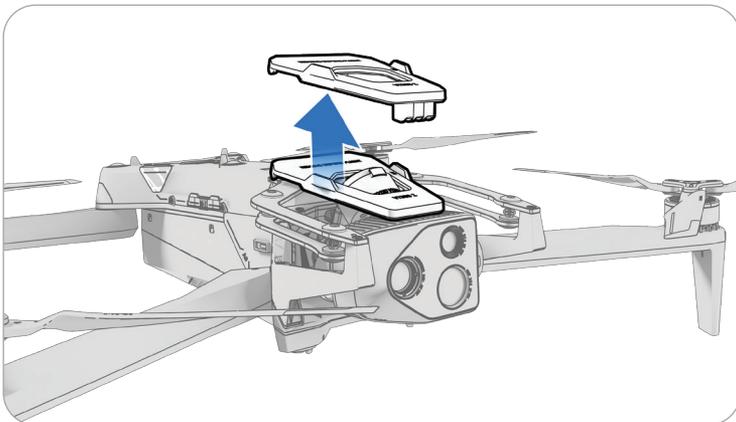
- The lights on the drone will turn solid blue and the name of your drone will appear on the screen when pairing is successful.
- Once paired, the drone and the controller will automatically connect before future flights.



Step 7 - Remove the sensor package lock

Gently pull to remove from the top of your drone.

- Save this piece to reattach when storing or transporting



Updating Your Devices

For optimal performance, we recommend that you keep your Skydio system up-to-date. Skydio will notify you when an update is available for your Skydio X10 and X10 Controller.



Scan the QR Code for software update instructions.

Skydio X10

If a software update is available, and your X10 Controller is connected to the internet, you will see the option to update your system in the Global Settings > Information menu. The entire update process is completed wirelessly.

Skydio X10D

If a software update is available, Skydio will provide the update file through a secure download option. You will then use the provided USB-C flash drive in your Starter Kit to transfer the update to your X10 Controller and drone.

Encrypting Your Media (X10D Only)

Before you can use the encryption feature on your X10D, you need to first provision the drone using the encryption key included in your Starter Kit.



Scan the QR Code for instructions on how to enable encryption on Skydio X10D.

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 drone 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 and spin freely. Propellers should be free of cracks or damage. Do NOT fly with damaged propellers.
- **Inspect the sensor package** before powering on and ensure it moves freely and is not damaged, and **remove the Sensor Package Lock** before flying.
- **Ensure all USB-C and microSD card seals are secured** over the ports.
- **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.

Launching



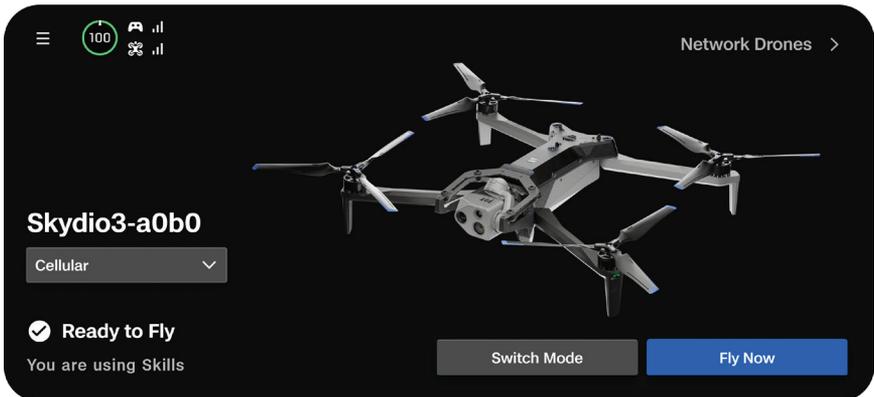
NOTE: Before your first flight, make sure to set your Return and Lost Connection Behaviors (Global Settings > Return). Scan the QR Code for more information about Return and Lost Connection Behaviors.



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**.



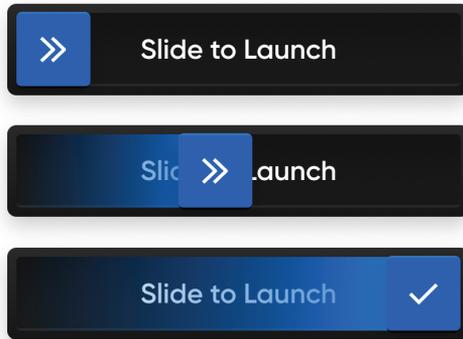
Flight

Step 2 - Launch

Your drone will rotate 360 degrees during launch to calibrate its Inertial Measurement Unit (IMU) and navigation system.

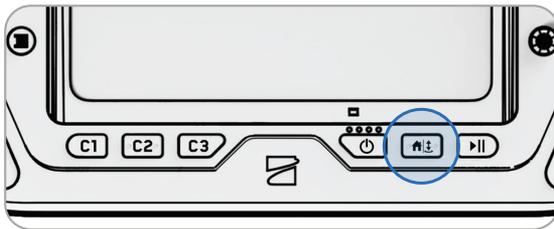
Option 1 - Drag the on-screen slider

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 launch. Exercise extreme care to avoid injury or damage. Do not touch spinning propellers.

Flight Screen

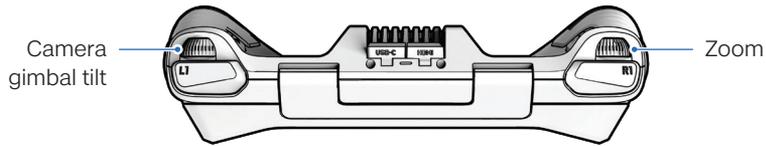
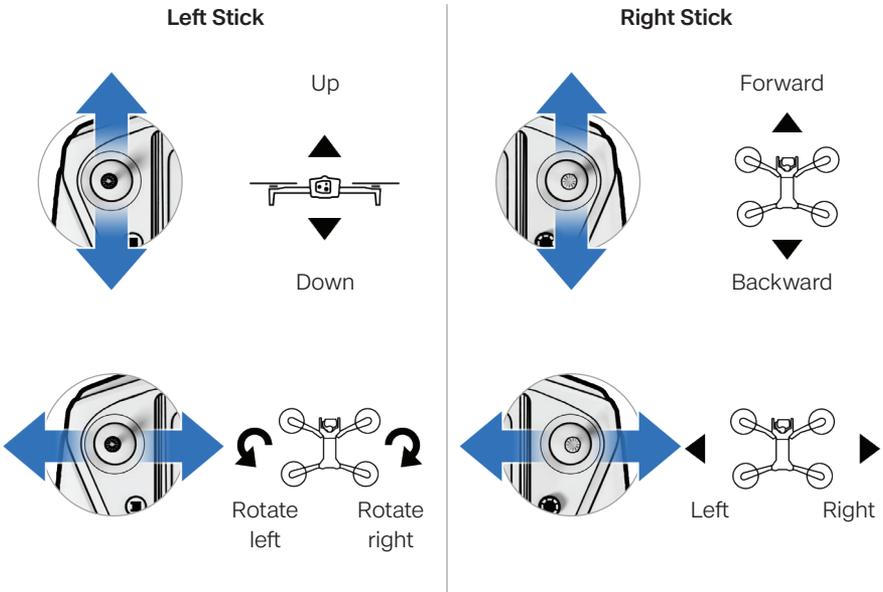


- | | |
|-------------------------------------|------------------------------|
| 1. Global Settings | 12. Map Settings |
| 2. Display Layout | 13. Thermal Settings |
| 3. AR Quick Actions | 14. Camera Settings |
| 4. Obstacle Avoidance Quick Actions | 15. Camera Mode |
| 5. Attachments Quick Actions*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

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

Flight Controls

By default, flight controls are set to Mode 2. In Mode 2, the left joystick controls the elevation and horizontal rotation of the drone, and the right joystick controls the forward, backward, and lateral movements of the drone.

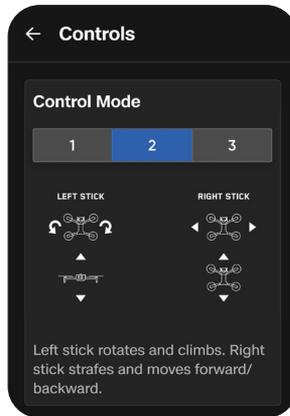
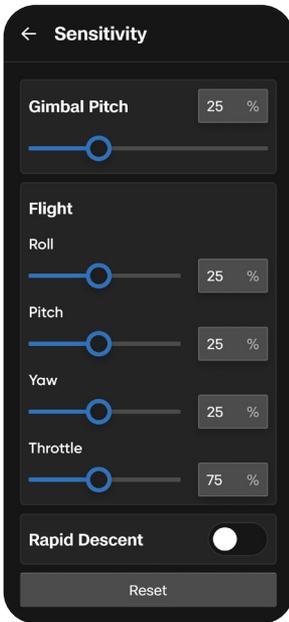
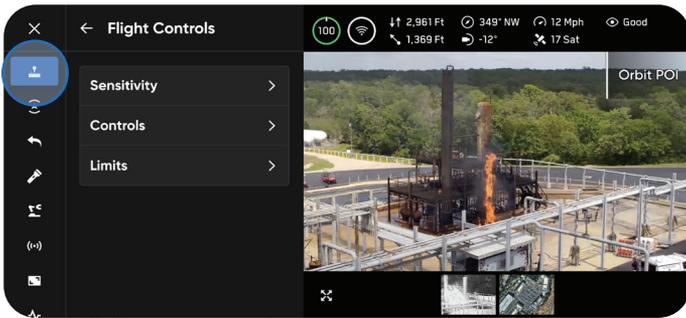


Sensitivity and Controls



NOTE: Increase pitch sensitivity to increase the maximum speed of the drone.

Select **Flight Controls** in the **Global Settings** menu to configure your control sensitivity and change control mode.

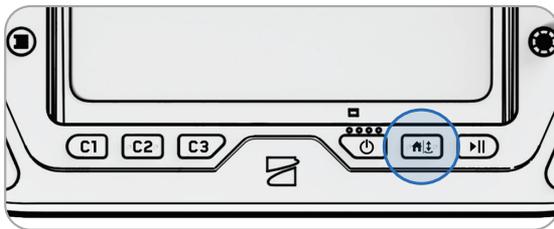
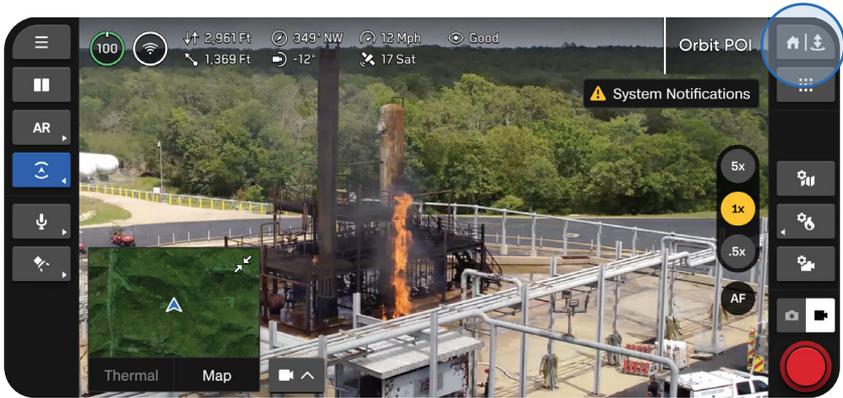


Returning



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



Flight

Step 2 - Choose your return location or land in place



Home

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



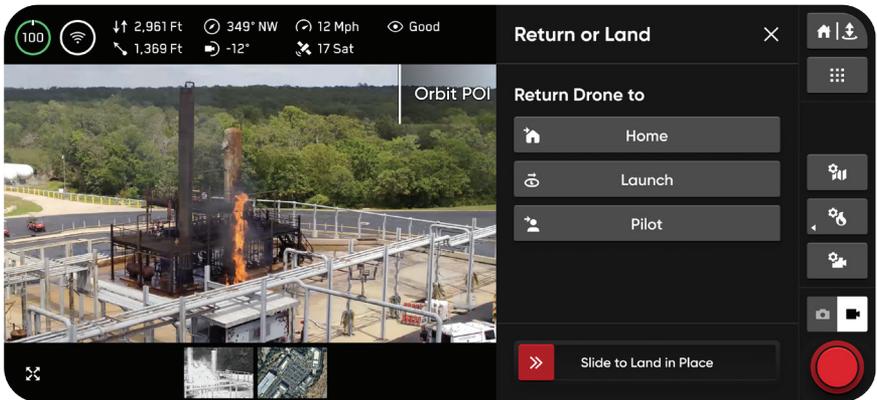
Launch

Returns to the Launch Point



Pilot

Returns to the location of the Skydio X10 Controller



By default, Skydio will ascend 65 ft (20 m) above its current altitude and return at 22 mph (26 km/h).



NOTE: You can change this default return behavior in the **Global Settings** menu under **Return**. Scan the QR code on the previous page for more information.

Landing

You have three options when landing in place:

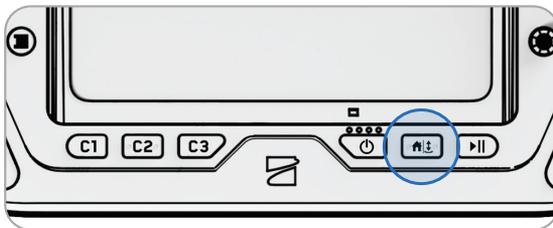
Option 1 - Select and drag the on-screen slider

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.

Contingency Behaviors



NOTE: 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's time to return and land. It's **strongly recommended you initiate a return or land at this time.**

1. If you continue flying, Skydio X10 will 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.**
2. If you ignore the countdown and continue flying, 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.



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

Lost Connection

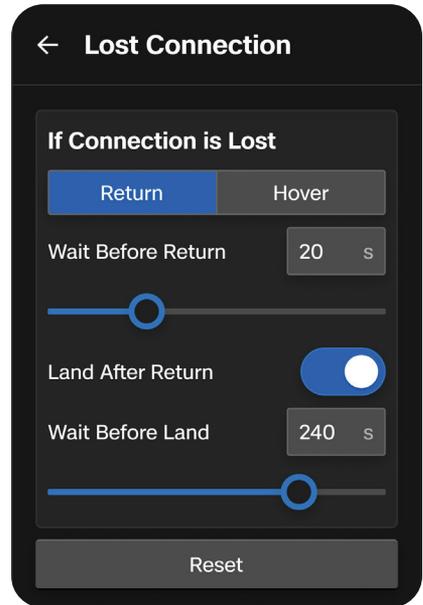
If connection is lost, Skydio X10 will default to the **Lost Connection** settings. Select between **Return** (default) and **Hover** upon lost connection.

Return (default)

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.

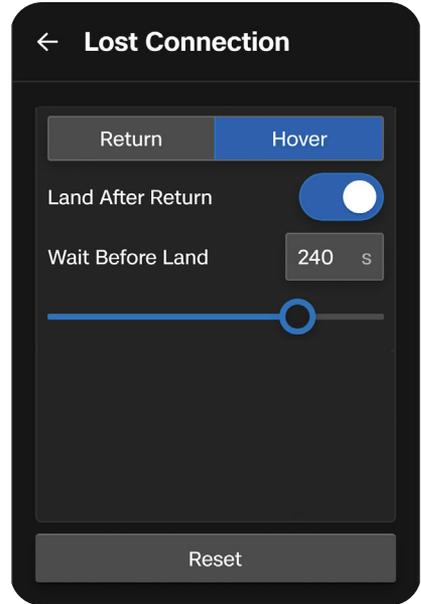
Wait Before Land - the amount of time between 0 to 300 seconds (default is 240 seconds) that you want your drone to wait above the landing location before landing. This setting is only enabled when Land After Return is toggled on.



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

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 (e.g., high elevation missions), 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 Only flight mode (e.g., flying at night without NightSense) it will initiate a pilot-assisted emergency landing.*



CAUTION: *GPS Only 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.*



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.

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



Skydio Legal

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

