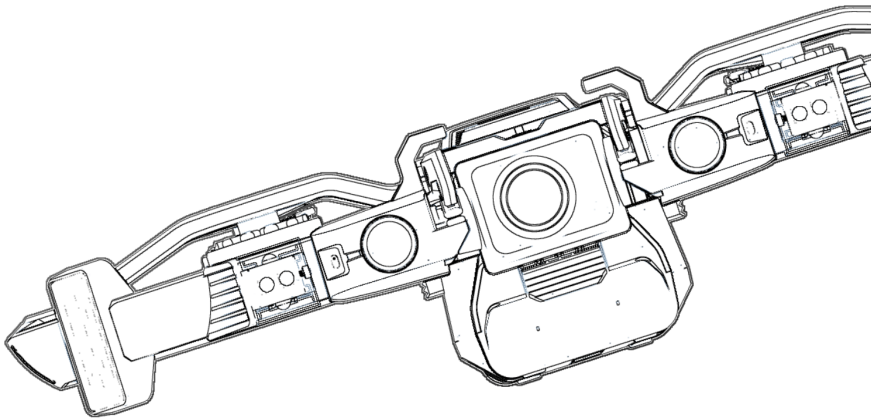
Skydio

Skydio R10

Quick Start Guide



Updated: May 2026

WARNING: *Please read all documentation provided with your Skydio R10, including but not limited to the R10 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.*

NOTE: *Skydio is not responsible for any loss, retention, or recovery of data resulting from the execution or non-execution of this Secure Data Erasure & Factory Reset procedure. The operator is solely responsible for ensuring that all required backups are completed and that each step of the checklist is properly performed and verified. Failure to follow the full procedure may result in residual data remaining on the aircraft, controller, or removable media. For more information, visit: skydio.com/manuals*

Revision History

Revision	Software Version and Description	Date
1	Early Access Program (EAP) Release	April 3, 2026
2	General Availability Release (GA)	April 27, 2026
2.1	Updated Sustainment Plan information	May 20, 2026

Table of Contents

Maintenance and General Care 37

Additional Required Documentation

CAUTION: *Failure to follow any instructions in this Skydio R10 Quick Start Guide or the full operator manual can void the limited warranty.*

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

This Quick Start Guide provides a high-level overview and does not replace the full Skydio R10 Operator Manual.

Review all documentation, including the Operator Manual and Safety and Operating Guide, before operating your system.

Skydio R10 Operator Manual

Skydio R10 Safety Guidelines

Skydio Safety & Operating Guide

Safety Guidelines

Skydio R10 and Controller Flight System WARNINGS

- Keep your fingers away from moving propellers at all times.
- Reflective surfaces greater than 10 in (25 cm) wide (e.g., still water, mirrored windows) and textureless surfaces (e.g., white walls) pose risk of interference with flight system visual navigation and increase the likelihood of entering Attitude Mode. Thin obstacles (thin branches, chain link fencing, wires, etc.) may also be difficult for the drone to detect. Pilots should exercise caution when flying the drone near reflective surfaces and near small or thin obstacles.
- Obstacle avoidance only applies to stationary objects. The drone should not be piloted in proximity to moving objects, including but not limited to other aerial vehicles, cars, and/or animals. The Pilot must yield to all crewed aircraft and perform a Safe State Maneuver if they encounter air traffic or moving obstacles that conflict with their flight path.
- Before flying over water, ensure your drone has a strong GPS signal. Launch and land over a dry surface.
- The Skydio Controller is IP54 rated.
- Clean all of the cameras before each flight so Skydio R10 can see clearly.
- Check your propeller blades for damage before each flight. Replace propellers if signs of damage or wear are present.
- Do not fly with any batteries with enclosures that are cracked, swollen, gouged, dented, or otherwise substantially physically deformed.
- Follow all civil aviation authority regulations, as well as all local, state, and federal laws.
- After prolonged use of NightSense, the LED pod may be hot to the touch and could present a serious burn risk. After landing, wait for the LED pod to cool down before handling
- After prolonged use of the LED pod during flight or while using Perch Mode, it may be hot to the touch and could present a serious burn risk. Do not touch the black heatsink next to the lenses. After landing, wait for your system to cool down before handling.
- Do not stare directly into NightSense at any distance range for any period of time as it may cause serious eye injuries.

- The use of the Speaker and Microphone on Skydio R10 for two-way communication and broadcast audio is subject to various international, federal, state, and local laws and regulations regarding privacy and consent. It is your responsibility to ensure compliance with all applicable laws and regulations when using this product to broadcast audio.
- Failure to comply with these laws and regulations may result in civil or criminal penalties, including fines or imprisonment. Skydio is not responsible for any misuse of this product or any legal consequences resulting from the improper use of the audio recording and broadcasting functions.

Welcome to Skydio R10

Skydio R10 is an autonomous aerial system designed for operation in **confined**, **complex**, and **GPS-denied environments**. Built for ease of operation, the system uses onboard autonomy and real-time perception to provide stable, predictable flight behavior in dynamic conditions.

The system uses visual-internal odometry (VIO) for GPS-optional navigation and adapts its launch and flight behavior based on the available space.

- Designed with a **compact, robust airframe** and **integrated propeller guards** to support operation in close proximity to obstacles
- Maintains **reliable connectivity** and **streams real-time video** for situational awareness

Skydio R10 **includes recovery and operational features** such as **Turtle Mode for self-righting**, **Perch Mode for landing while maintaining camera feed and control**, and integrated **two-way audio for communication between Pilot and personnel near the drone**.

Registering with the Federal Aviation Adminstration (FAA)

Skydio R10 is Remote ID (RID) compliant. With the battery removed, you will see a label signifying RID compliance on the bottom of the drone. United States federal law requires all drones operated under 14 CFR Part 107 to be registered.

1. **Create an account or log in** to FAA DroneZone
2. Navigate to **Manage Device Inventory** and **Add Device**
3. **Visibly display** your FAA registration number on your drone
4. **Carry your registration card with you** whenever you fly

Skydio Cloud Setup

NOTE: *For detailed Skydio Cloud setup instructions, read the full Skydio R10 Operator Manual. Skydio R10 and the Skydio Controller must be claimed in Skydio Cloud to receive software updates and fly with Connect 5G.*

An Organization Admin role is required to set up your Skydio Cloud organization.

Before flying, an Organization Admin will need to configure your Skydio Cloud account in order to manage your fleet or sync your media. This includes configuring organization settings, adding users, claiming your Skydio R10, controller, and attachments, and connecting to wireless networks.

Log in and configure settings

Step 1 - Log in

Visit *cloud.skydio.com* and enter your email address. Enter the verification code that is sent to your email address.

Step 2 - Select Settings > General

Upload a logo for your organization to replace the Skydio logo in the upper left corner (optional).

Data Capture (enabled by default) allows GPS and telemetry data to automatically upload to the cloud after each flight.

If Data Capture is toggled off, the flight path and other telemetry data will not display on the flight screen.

Step 3 - Configure organizational default flight settings

Navigate to Settings > Flight Settings > R10 and configure default settings that will be applied to all systems within the organization.

Add Users

***NOTE:** Only Organization Admin level accounts can add users. A member email address can only be associated with one organization at a time. Use the Login Methods tab to configure settings such as Single Sign-On (SSO).*

Step 1 - Select Settings

Step 2 - Select Users

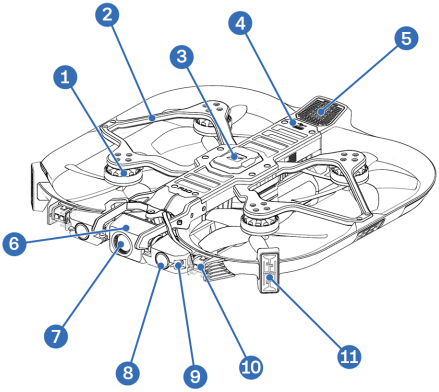
Step 3 - Add members

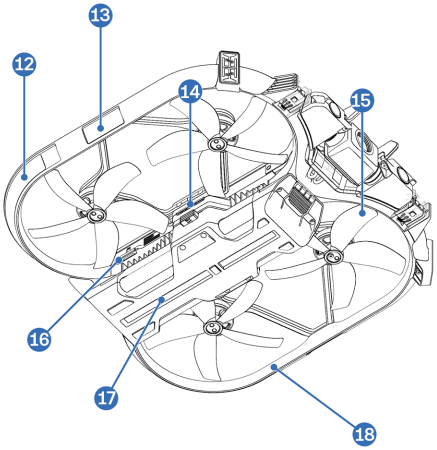
Select **Add Users** or import a CSV or text file. Add an email address for the user and assign a role.

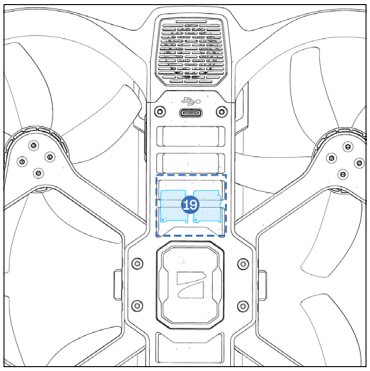
This is a crucial step to ensure Pilots in your organization can access Skydio Flight Deck on their Skydio Controller.

Skydio R10 Drone Hardware

1. Motor
2. Arm
3. GPS
4. USB-C Port
5. Speaker
6. 180° Pitch Gimbal
7. 4K Low Light Camera
8. Navigation/NightSense Camera
9. Microphone
10. NightSense
11. Vertical Skydio Connect SL Antenna
12. Cellular Antenna
13. Horizontal Skydio Connect SL Antenna
14. RGB Public Safety Lights
15. Propeller
16. SD Card Slot
17. Battery
18. Propeller Guards
19. 2x SIM Card Slots

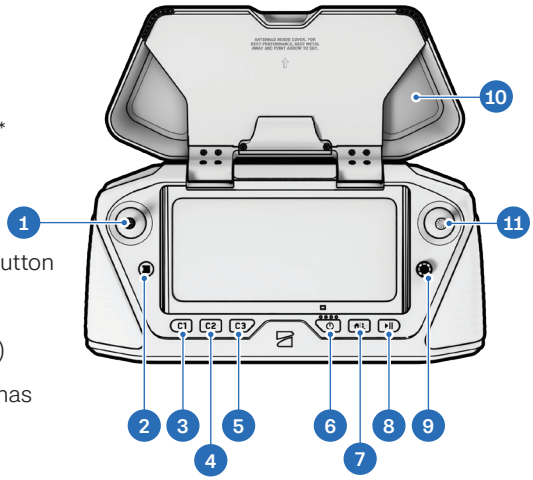




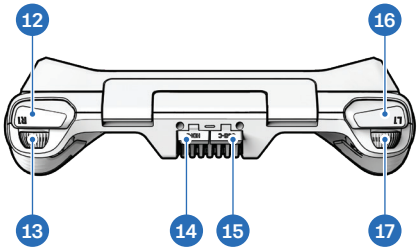


Skydio Controller Hardware

1. Left joystick
2. Menu/Back button
3. Confined Flight Mode*
4. Reset Sensor Package*
5. No default function*
6. Power button
7. Launch/Return/Land button
8. Pause button
9. Directional pad (D-pad)
10. Controller cover/antennas
11. Right joystick

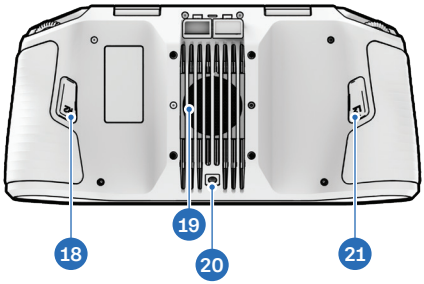


12. R1 button (Shutter)
13. Right wheel
14. HDMI port
15. USB-C charge port
16. L1 button (Boost)
17. Left wheel*

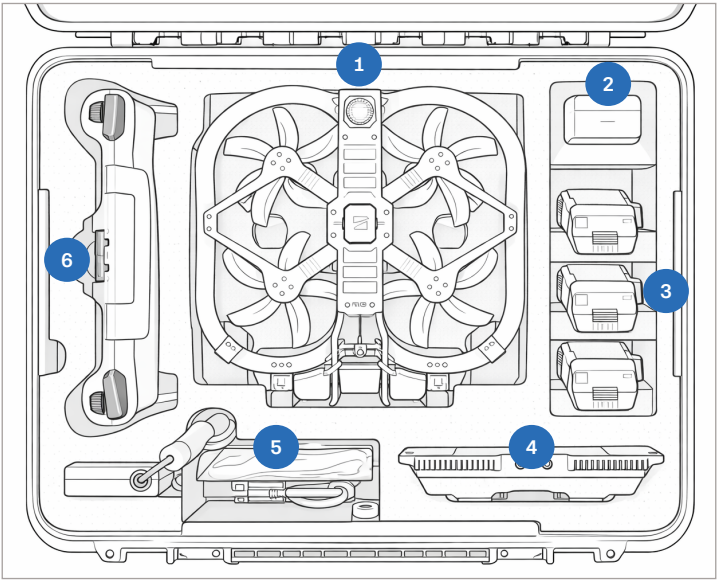


18. R2 button*
19. Cooling fan
20. Neck strap and tripod mount
21. L2 button*

**Customizable*



Skydio R10 Team Kit Layout and Components



1. Skydio R10 drones (2) stacked in center compartment with foam insert; spare propellers stored below
2. 65W USB-C Power Supply
3. Skydio R10 Batteries (4, one installed in R10)
4. Skydio R10 Dual Charger
5. 230W Power Supply, USB-C to USB-C Cable, Lens Wipe, T6 Driver
6. Skydio Controller

NOTE: *The Patrol Kit contains one drone and three batteries.*

Charging Skydio R10 Batteries

Skydio R10 batteries are shipped in a state of hibernation and will not power on R10 out of the box. Batteries will automatically exit this state once they begin charging for the first time.

Using the R10 Dual Charger

The Skydio R10 Dual Charger sequentially charges two batteries. The Dual Charger will prioritize fully charging the battery with the highest charge level.

The Dual Charger may be attached to a fixture with 4x fasteners.

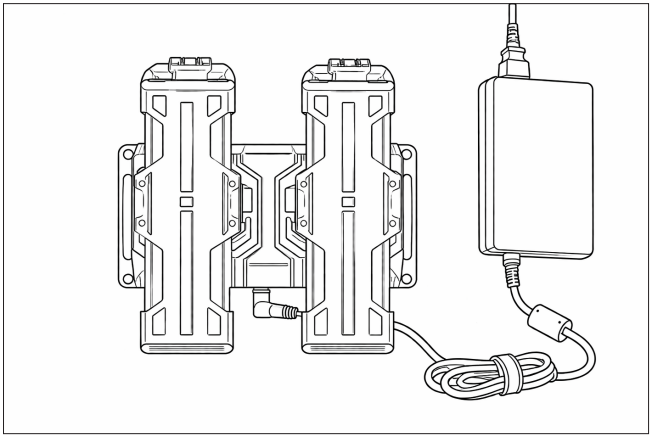
Step 1 - Insert batteries into the Dual Charger

Press firmly until two clicks are heard from the latches engaging.

Step 2 - Insert the 230W Power Supply and plug into a power source

Charging batteries via the Dual Charger will take roughly one hour.

LED Color and Behavior	Charge State
Breathing/pulsing blue	Actively charging
Solid blue	Waiting to charge
Solid green	Charge complete



Using Skydio R10

Step 1 - Insert the battery

Review the Maintenance section for detailed installation instructions.

Flip R10 upside down with the battery connector facing up. Align the battery to the R10 so that the alignment features match.

Press firmly until two clicks are heard from the latches engaging.

- Verify the battery is fully installed and secured by completing a push-pull-push test without squeezing the latches

Step 2 - Locate the USB-C charging port on the top of the drone

Step 3 - Insert the 65W USB-C Power Supply and plug into a power source

Charging batteries via the R10 will take under 2 hours.

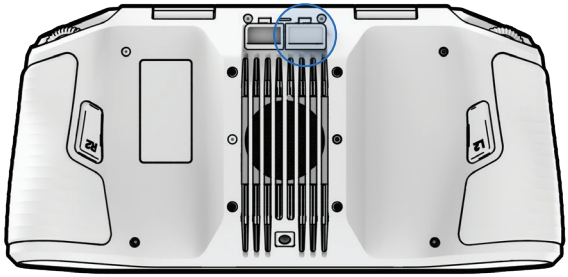
Charging the Skydio Controller

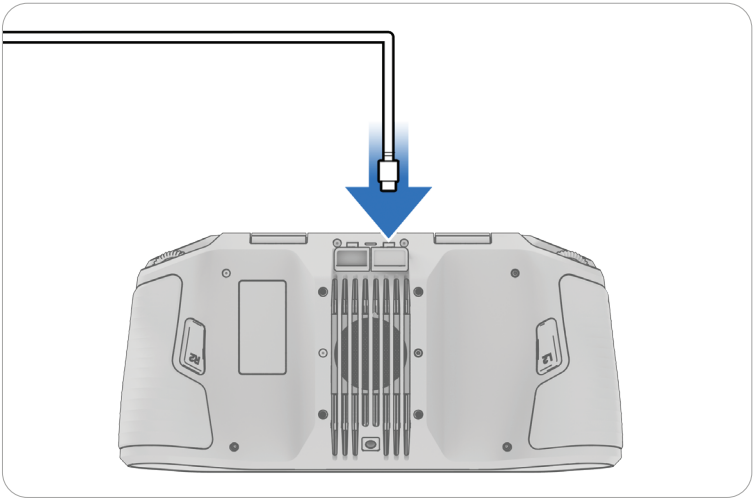
Step 1 - Locate the USB-C port on the back of the controller

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

Step 2 - Insert the USB-C Power Supply and plug into a power source

The lights on the front of the controller will turn on and indicate the level of charge.





Skydio R10 Setup

Step 1 - Ensure R10 batteries are fully charged

Step 2 - Ensure the Skydio Controller is fully charged

Step 3 - Remove Skydio R10 from the case

Step 4 - Attach charged battery to Skydio R10

Review the Maintenance section for detailed installation instructions.

Flip R10 upside down with the battery connector facing up. Align the battery to the R10 so that the alignment features match.

Press firmly until two clicks are heard from the latches engaging.

- Verify the battery is fully installed and secured by completing a push-pull-push test without squeezing the latches

Skydio Controller Setup

CAUTION: *To maintain operational security and prevent conflicts with controller functionality, never sign in to personal or third-party accounts (such as Google Drive, Gmail, OneDrive, or other cloud services) on the Skydio Controller. If you need to import maps or export logs, use the supported workflows provided by Skydio.*

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.*

Step 1 - Power on the Skydio 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.

While powered off, you can check the level of charge by pressing the Power button once.

Step 2 - Set up Skydio Flight Deck

Skydio Flight Deck is the dedicated flight software on your controller. Follow the on-screen prompts to begin setup.

- Connect to a WiFi network
- Provide the email address associated with your Skydio Cloud account and enter the activation code sent to your email
- If your Organization Admin has **configured Single Sign-On (SSO)** via Skydio Cloud, you have the ability to log in using your organization's Identity Provider (IdP)
- Enable **Shared Controller** to let multiple accounts sign in to the same controller (optional)
- Set a password for your controller (optional)

Step 3 - 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 R10 powers on.

Step 4 - 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 controller will automatically connect before future flights.

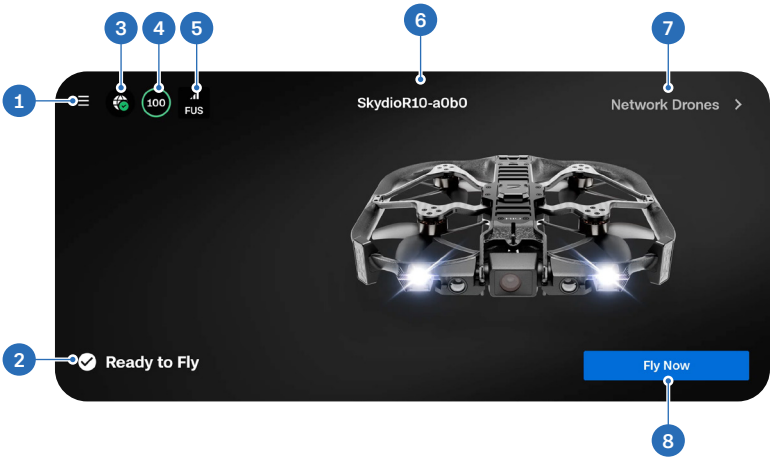
.

Propeller Behavior while Grounded

While grounded, the propellers on R10 will rotate at low, idle speeds. Although the rotation speed is significantly lower than inflight, contact with spinning propellers may cause minor injury. Keep hands, clothing, and objects clear of the propellers at all times.

Gate Screen

After powering on and connecting to your drone, the first screen you will see is the **Gate Screen**. This screen is the first step to starting your flight or configuring settings.



1. Global Settings
2. Flight Status
3. Controller Network Status
4. Drone Battery
5. Signal Strength (Connect Fusion, SL, or 5G)
6. Drone Name
7. Network Drones (displays active drones in your organization)
8. Fly Now (opens Flight Screen)

Launching

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

Obstacle avoidance is used to evaluate the surrounding environment prior to launching, but is not fully active at liftoff. Obstacle avoidance becomes active as the drone ascends. Exercise extreme care to avoid injury or damage. Do not touch spinning propellers.

Step 1 - Always conduct a Preflight Inspection before launching

Step 2 - Find a clear, safe area to launch, place your drone on a stable surface, and select Fly Now

Step 3 - Launch

When launching, the drone will ascend vertically and hover at a low altitude.

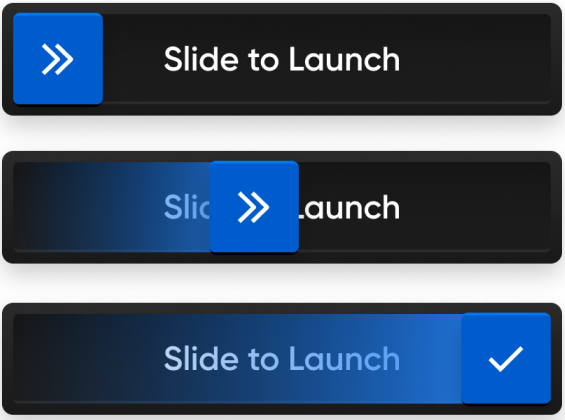
Skydio R10 automatically adjusts its launch height based on the available space. The maximum altitude is approximately 2 ft (0.6 m).

GPS is not required to launch or fly. When GPS is available, the drone's position is displayed on the map. If GPS is not available at launch, the map will update once GPS is acquired during flight.

There are two options for launching:

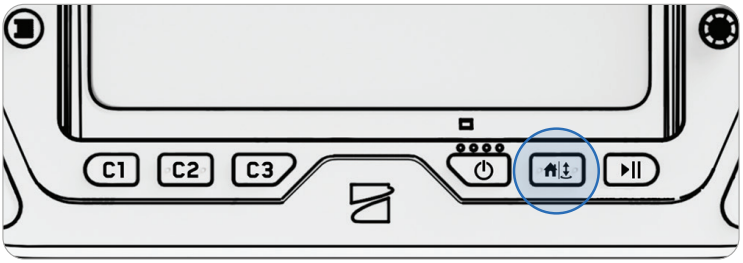
Option 1 - Drag the on-screen slider

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.



Hand Launching

WARNING: *Obstacle avoidance is used to evaluate the surrounding environment prior to launching, but is not fully active at liftoff. Obstacle avoidance becomes active as the drone ascends. Exercise extreme care to avoid injury or damage. Do not hand launch during windy days or extreme environmental conditions as serious injury and/or damage may occur. Do not touch spinning propellers.*

Launching and landing Skydio R10 from your hand is a quick and convenient way to start or end your flight, particularly if you are not in a clear, level area. For your safety, always use caution when hand launching. This maneuver is dangerous and should not be attempted in unstable environments.

Step 1 - Ensure you have clearance above and in front of you

Step 2 - Hold the drone away from you (sensor package facing away from your body)

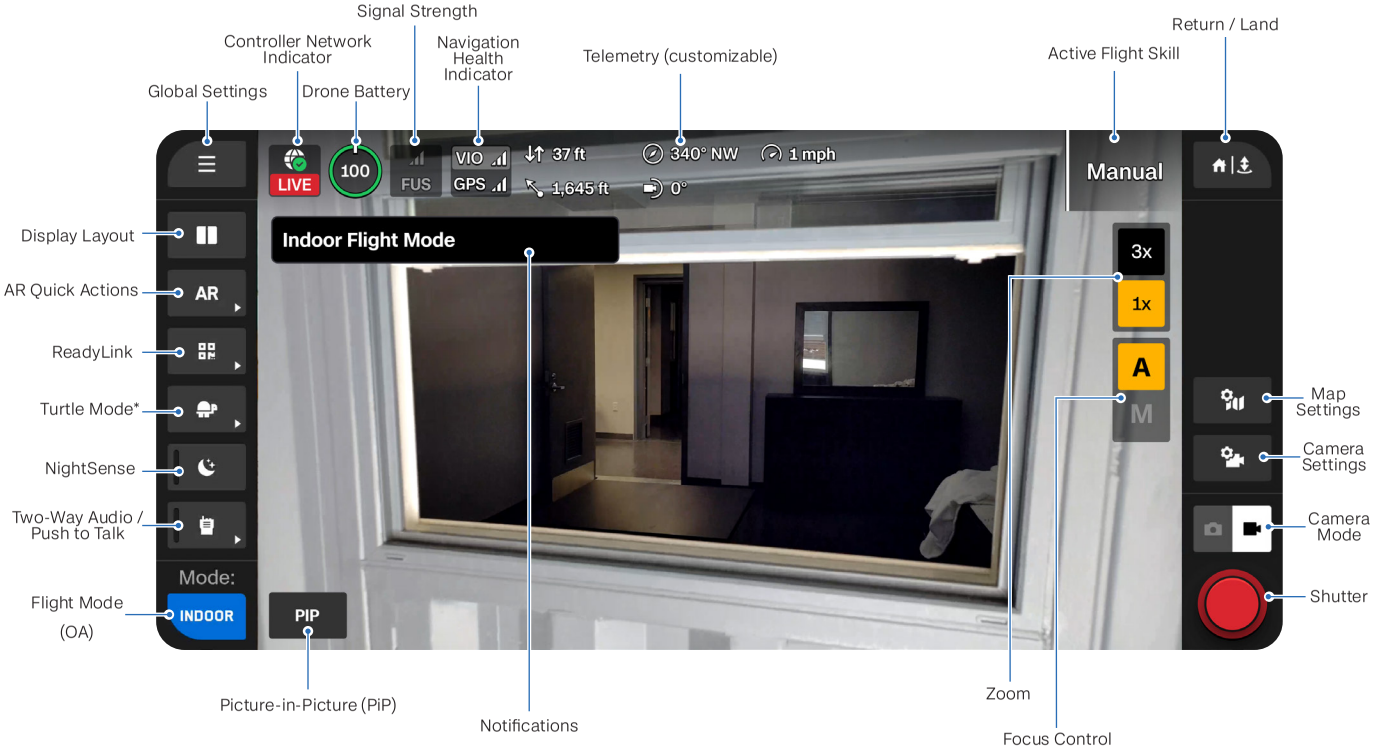
- Lightly grip the battery
- Keep the drone level, still, and at arm's length from your body
- Your fingers should be below the Skydio R10 chassis and away from the propellers at all times
- Ensure your hand is steady

Step 3 - Press the battery button four times to launch

Slowly relax your grip as Skydio R10 launches.

- Do not push or throw the drone up in the air
- Keep your hand still - the drone will slide off your palm and take flight on its own

Flight Screen

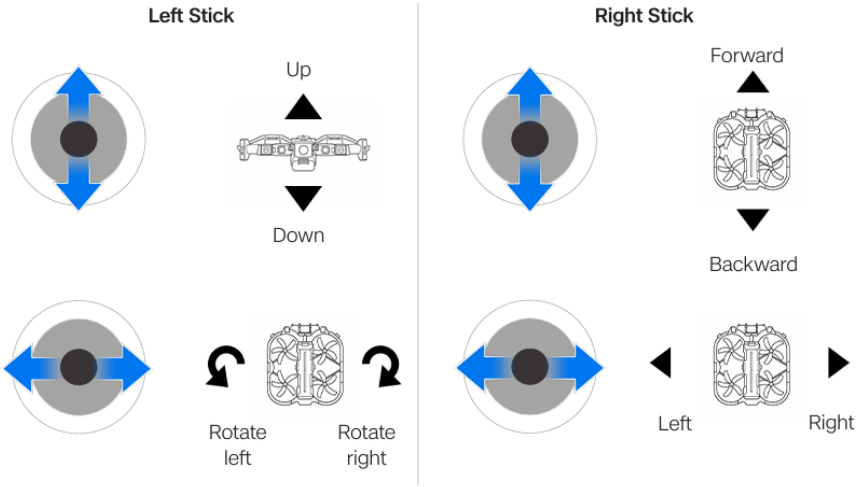


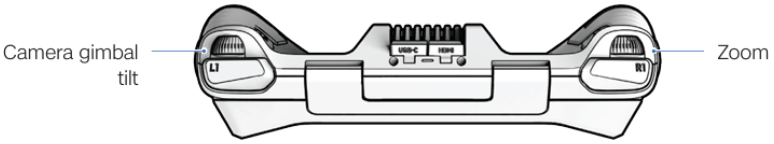
Only present while grounded

Control Mode

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.





Flight Modes (Obstacle Avoidance)

WARNING: *Obstacle avoidance is most reliable in the forward-facing (180°) field of view. The drone uses current and recently observed environment data to determine where it can safely fly. If sufficient obstacle data is not available in a given direction, the Skydio R10 will restrict movement rather than proceed unsafely. Obstacle avoidance is disabled when landing is initiated. Exercise extreme care to avoid injury or damage. Do not touch spinning propellers.*

CAUTION: *Disabled obstacle avoidance greatly increases the risk of collision and should only be used if you are an experienced pilot. Skydio recommends turning down controller throttle, roll, and pitch sensitivity to a lower setting and proceeding at a maximum speed of 2 mph (1 m/s).*

Obstacle Memory

Skydio R10 maintains a coarse obstacle map (~12 m × 12 m × 6 m) based on recently observed surroundings. This allows the drone to safely move in directions that are not currently within the camera's field of view, such as reversing along a previously observed path.

Obstacle data decays after approximately 30 seconds. If an area has not been observed within that time, it is no longer considered safe for autonomous movement.

Flight Modes

Use the Flight Mode button to adjust autonomous flight behaviors. When flying near obstacles, Skydio R10 follows the selected distance setting and automatically adjusts input sensitivities.

Choose between Outdoor, Indoor (default), and Confined:

Indoor (default) - Drone stays 8 in (20 cm) away from obstacles

- Top air speed: ~11 mph (5 m/s)

Outdoor - Drone stays 28 in (71 cm) away from obstacles

- Top air speed: ~27 mph (12 m/s)

Confined - Drone stays 2 in (5 cm) from obstacles. This mode can be used to navigate tight spaces, but increases the risk of collision. The drone will provide slight course corrections, but primarily relies on the Pilot to avoid collisions.

- Top air speed: ~7 mph (3 m/s)

Disabled (toggle off) - Skydio R10 will not avoid obstacles and there is a high risk of collision

- Top air speed: ~27 mph (12 m/s)

Variable Margins

Skydio R10 uses AI and visual navigation to dynamically, and temporarily, reduce obstacle avoidance margins when moving through narrow spaces. Margins will also dynamically expand if the drone detects environmental dangers, such as wind.

Enabled by default. Disable to turn off the dynamic margin behavior.

Stop at Structure

Perform finer, more controlled inspections on structures such as bridges or building facades.

When enabled, your drone will not deviate from its course when it is within 8 ft (2.5 m) of a structure.

The drone will reduce speed and maintain position, allowing for more precise maneuvering in the immediate vicinity of the structure.

- Adjust the maximum speed using the Speed Near Obstacles slider
- Maximum controller speed settings apply when no structure is present

Vehicle Behaviors

Turtle Mode

NOTE: *Read the Skydio R10 Operator Manual for greater details about this feature.*

Turtle Mode is a recovery function designed to restore the drone to an upright orientation when it is unable to launch due to excessive tilt.

When initiated by a Pilot, the system commands controlled propeller rotation to generate thrust sufficient enough to rotate the aircraft to a stable, upright position.

This mode is intended to restore the aircraft to an upright, level orientation so that normal launch procedures can resume.

Turtle Mode may be used when the drone:

- Has landed upside down
- Is resting on its side
- Is leaning against an obstacle
- Is upright but positioned too close to an obstacle to safely launch (e.g., against a wall)
- Is otherwise unable to launch due to excessive tilt

Activation and Pilot Interface

If the drone is powered on and determined to be significantly tilted, approximately 15° or greater from level, Skydio Flight Deck will automatically display the Turtle Mode menu. While grounded, Turtle Mode Quick Action button is always available on-screen.

The drone will not initiate recovery until a direction is selected by the Pilot. The interface displays four autonomous directional recovery options:

- Forward
- Backward
- Left
- Right

The system may indicate a recommended recovery direction by flashing the corresponding directional button. Recommendations are based on the system's orientation assessment. Once selected, the drone executes the recovery autonomously. The propeller motors disarm upon detecting a stable, upright position.

Depending on the detected orientation, the system may:

- Reverse selected propellers to flip the drone from an inverted position
- Drive propellers forward to displace the drone away from an obstacle

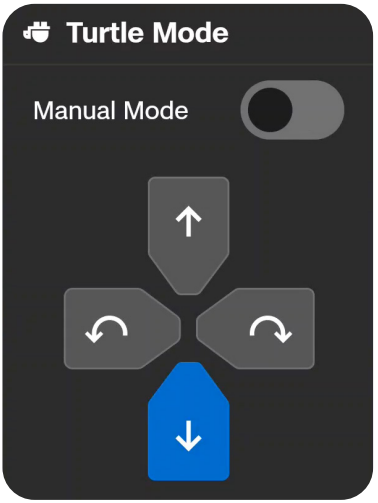
When displacement is required, the maneuver is executed as two discrete, pilot-initiated actions. The first input commands the drone to move away from the obstacle using forward propeller rotation, based on the Pilot's choice. Once repositioned, a second input is required to initiate the righting maneuver.

Motor direction and output are determined automatically based on real-time orientation sensing.

Turtle Mode Quick Action

Closed

Open



Manual Recovery Control

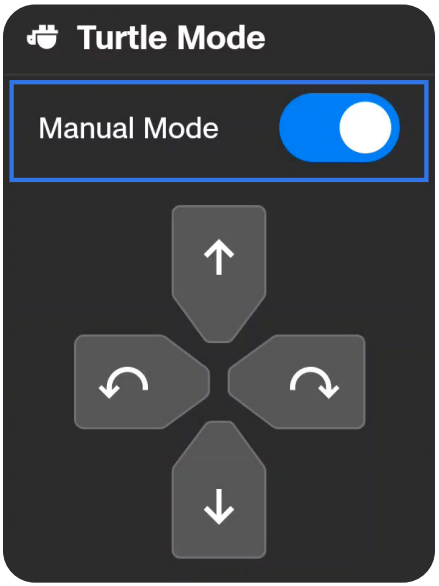
WARNING: *Manual Recovery mode allows direct motor control to free the drone from obstructed positions. Manual recovery increases the risk of propeller damage or unintended surface contact. Improper or aggressive inputs may result in propeller damage or additional impact with surrounding surfaces. The Pilot is responsible for ensuring controlled and deliberate inputs.*

Turtle Mode includes an optional Manual Recovery setting.

When enabled:

- The right joystick controls motor output
- The Pilot may apply controlled inputs to free the drone from confined or obstructed positions
- The Pilot maintains the ability to use the directional arrows

NOTE: *Manual Mode must be disabled before relaunching.*



Perch Mode

NOTE: *Read the Skydio R10 Operator Manual for greater details about this feature.*

Perch Mode allows the drone to remain powered on and connected after landing, enabling continued situational awareness and camera operation without ending the flight session.

With Perch Mode enabled, the Pilot can:

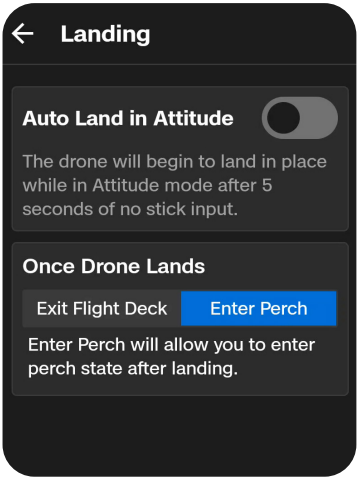
- View the live camera feed
- Broadcast/record two-way audio
- Capture photos and record video
- Turn NightSense lights on and off
- Control the gimbal and camera settings
- Relaunch the drone
- End the flight manually

The drone remains in Flight Deck until the Pilot either exits or relaunches.

Activation and Pilot Interface

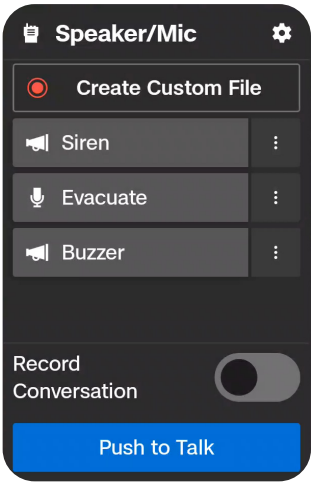
Perch Mode is controlled through the Landing settings via **Global Settings** > **Flight Controls** > **Landing**.

- **Enter Perch is enabled by default**, meaning you will enter Perch Mode upon landing.
- Select **Exit Flight Deck** to disable the default, meaning Flight Deck will close and the Gate Screen will open after landing.
- Landing settings can be changed while grounded or inflight, and selections persist across flights and power cycles.



Available Controls while Perched

Two-Way Audio



Two-Way Audio enables real-time communication between the controller and the area surrounding the drone while in Perch Mode.

This functionality is only available when the drone is grounded and perched. The onboard microphone does not transmit audio while the drone is in flight.

During two-way operation, the Pilot can continue using controls such as adjusting the gimbal and configuring camera settings.

Communication Behavior
Two-Way Audio is enabled manually from the controller. There is no listen-only mode. Two-way audio is either fully enabled (hear + respond) or limited to one-way broadcast only.

By default, the microphone on R10 is muted. Enabling the Record Conversation toggle activates the microphone on the drone. When enabled, audio from the environment is transmitted to the controller. Both audio from the drone and audio sent via Push to Talk is automatically recorded to the drone's SD card.

- Audio recording cannot be disabled while the microphone is active

The Pilot can transmit audio from the controller to the drone using the on-screen **Push to Talk** button.

To transmit audio:

- Press and hold the **Push to Talk** button to broadcast
- The blue button will display *"Broadcasting"* while the Pilot is actively talking
- Release the button to stop broadcasting and resume receiving audio
- Only one participant can speak at a time

Additionally, the Pilot can utilize the pre-recorded audio files (e.g., Siren, Evacuate, Buzzer).

Audio Recording and Storage

All Two-Way Audio activity is recorded to the SD card in the drone. This includes:

- Audio transmitted from the controller (Push to Talk broadcasts)
- Audio captured by the drone's microphone

Audio recordings are stored on the drone's SD card and do not currently sync to Skydio Cloud when using Media Sync.

Enabling Record Conversation activates the microphone on the drone. When enabled, all audio received and transmitted is recorded to the drone's SD card.

Record Conversation toggle behavior:

Record Conversation	Drone Microphone	Hear audio from the drone environment?	Audio recorded?
ON	Enabled	Yes	Yes
OFF	Disabled	No	No

Operational Considerations

- Two-Way Audio performance depends on connection quality. If video latency or signal strength degrades, audio performance may also be impacted.
- Telemetry indicators should be monitored to assess link quality
- The drone may generate background noise while perched (e.g., propellers spinning to cool the drone), which may affect audio clarity

Camera and Capture

While in Perch, the following functions remain available:

- Capture photos
- Start/stop video recording
- Adjusting camera settings using on-screen controls

Focus behavior:

- Defaults to AutoFocus (AF) upon landing
- Pilots can change focus mode at any time
- Once relaunched, focus resets to AF

Zoom options:

- Available via controller wheel (if configured through button mapping)
- Available via on-screen pinch/spread gestures
- Camera stream selection remains available via on-screen controls

NightSense

NightSense can be enabled or disabled using on-screen controls

Gimbal

While Perched, moving the **left gimbal wheel** allows the Pilot to change the gimbal pitch up to the available maximum limits of the gimbal.

Relaunching and Flight Completion after Perching

To end the flight without relaunching, select **Exit Flight Deck** to return to the Gate Screen and initiate postflight processes.

After using Perch, the Pilot can relaunch following the standard workflow:

Step 1 - Select the blue Prep for Flight button

Step 2 - Use one of the following options to initiate launch

- Option 1 - Drag the on-screen slider
- Option 2 - Press and hold the Launch/Land button on the controller

Skydio R10 automatically adjusts its launch height based on the available space. The maximum altitude is approximately 2 ft (0.6 m).

Upon relaunch the gimbal resets to centered pitch (horizon) and the drone can be relaunched in any available Flight Skill.

Step 3 - Return and land as normal

Returning and Landing

WARNING: *Obstacle avoidance is disabled as soon as landing is initiated. The drone will descend straight down and the lights will turn yellow to indicate that obstacle avoidance is OFF. Exercise extreme care to avoid injury or damage. Do not touch spinning propellers.*

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

You also have the option to press the Return/Land button on the controller.

Step 2 - Select 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 Controller

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

****Not supported with* ***Backtrack (default)*** *returns. Backtrack is only compatible with returning to the Launch Point.*

Hand Landing

WARNING: *Obstacle avoidance is disabled as soon as landing is initiated. The drone will descend straight down and the lights will turn yellow to indicate that obstacle avoidance is OFF. Do not attempt to grab or catch Skydio R10 without initiating a landing, the motors will continue to spin at full speed and may cause severe injury. Do not attempt to hand land until the lights turn yellow. Attempting to hand land while obstacle avoidance is active will cause it to attempt to avoid your hand and may result in Skydio impacting yourself or another nearby object.*

Do not hand land during windy days or extreme environmental conditions. While hand landing at night is supported, Skydio does not recommend it. Reduced visibility increases the risk of injury or damage. Exercise extreme caution and ensure clear visibility of the drone at all times.

Do not touch spinning propellers.

Landing Skydio R10 in your hand is a quick and convenient way to end your flight, particularly if you are not in a clear, level area. For your safety, always use caution when hand landing.

DO NOT ATTEMPT A HAND LANDING IF:

- There are high winds present.
- Skydio R10 is not stable in flight for any reason.
- Skydio R10 is performing an emergency landing after an accident or crash.
- You are in an area where you do not have stable footing.
- You are on a moving vehicle or boat.

Step 1 - Position Skydio R10 at approximately eye level and within arm's reach, with the drone facing away from you.

Extend your arm away from your body.

- The sensor package should face away from your body
- The back of the chassis and the battery are closest to you

Step 2 - Initiate landing

Obstacle avoidance is disabled when landing is initiated.

The drone will vertically descend down, and the lights on the drone turn yellow to indicate obstacle avoidance is disabled for the remainder of the landing.

Step 3 - Lightly grab the drone by the battery from underneath as it touches down on your open palm

Once the battery has made contact with your palm, keep your hand steady until the propellers completely stop spinning.

Updating the Skydio Controller

NOTE: *You must update the Skydio Controller first before updating Skydio R10. Check for available updates before flying.*

Skydio R10 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.

Step 1 - Power on the Skydio 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.

Step 2 - Open Global Settings and navigate to the Information menu

Step 3 - Select Controller Update under Settings

Step 4 - Select Check for Update

Step 5 - Select Update

Follow the on-screen prompts to update your controller.

Updating Skydio R10

Skydio will not force an update for your system, however, for optimal performance, we recommend that you keep your Skydio system up-to-date. If an update is available, you will see a red notification icon in the **Information** menu.

Step 1 - Power on Skydio R10

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

Step 2 - Power on the Skydio Controller

Step 3 - Open Global Settings and navigate to the Information menu

Step 4 - Select your Skydio R10 under Devices

Step 5 - Select Update

Follow the on-screen prompts to update your drone.

Select **Check for Updates** anytime to look for available updates.

Battery Maintenance

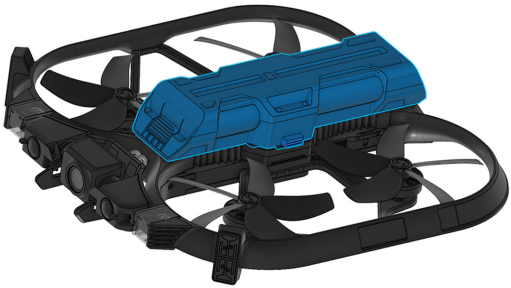
Replacing an R10 Battery

WARNING: *Before servicing the system, turn off the R10. Spinning propellers can cause serious injury.*

Preparation

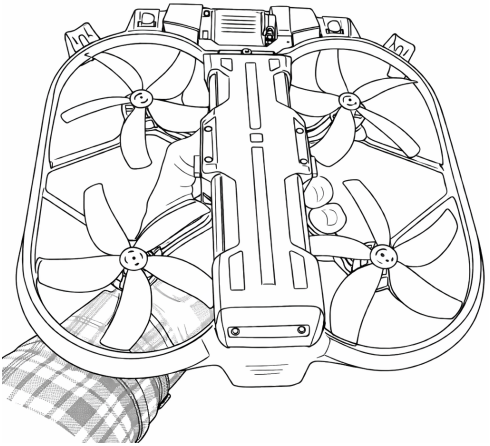
Step 1 - Power OFF Skydio R10

Step 2 - Flip the R10 upside down with the Battery facing up



Battery Removal

Step 1 - With R10 powered OFF, hold the drone as shown



Step 2 - Squeeze the 2x Battery release clips located on either side to disengage the Battery

Step 3 - Pull the Battery off of the R10

Battery Installation

Step 1 - Flip the R10 upside down with the Battery connector facing up

Step 2 - Align the Battery to the R10 so that the alignment features match

Step 3 - Lock the Battery into place

Press the Battery firmly into the R10. Ensure the 2x Battery release clips “click” into place.

Verify the Battery is fully installed and secured by completing a push-pull-push test without squeezing the Battery release clips.

If there is any Battery movement, remove and re-install until there is no movement.

Functional Verification

Verify Skydio R10 powers **ON**.

Replacing Skydio R10 Propellers

This procedure explains how to remove and replace R10 propellers.

Required Items

Parts

Qty	Name	Part Number/ SKU	Notes
2x	Propeller, Clockwise (CW), 5 Blade	TBD	Blue
2x	Propeller, Counter-Clockwise (CCW), 5 Blade	TBD	Grey

Fasteners and Consumables

Qty	Name	Part Number/ SKU	Torque (Nm)
8x	M2-0.4-08, Cap-3.8-1, T6, Patch, Steel, Black	N/A	N/A

Tools

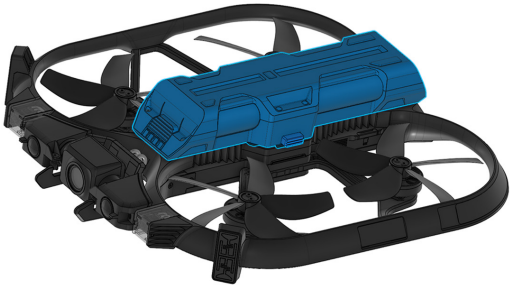
Name
T6

Preparation

WARNING: *Before servicing the system, turn off the R10. Spinning propellers can cause serious injury. Risk of serious injury from rotating propellers.Propeller blades are sharp and can cause severe injuries. Keep fingers, hands, and all body parts away from moving propellers at all times. Handle propellers with extreme caution and care.*

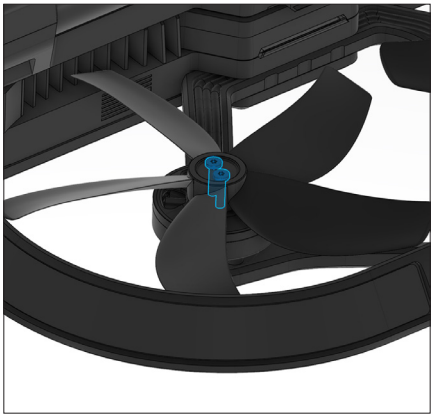
Step 1 - Power OFF Skydio R10

Step 2 - Flip the R10 upside down with the Battery facing up



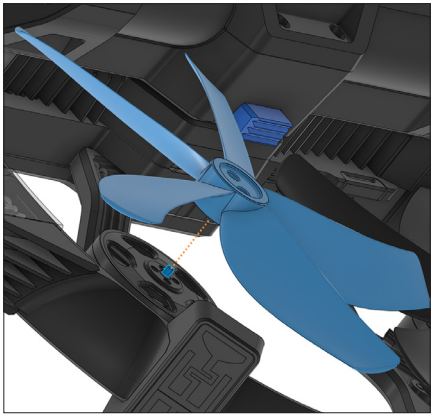
Propeller Removal

Step 1 - Remove 2x T6 Propeller fasteners with a T6 bit

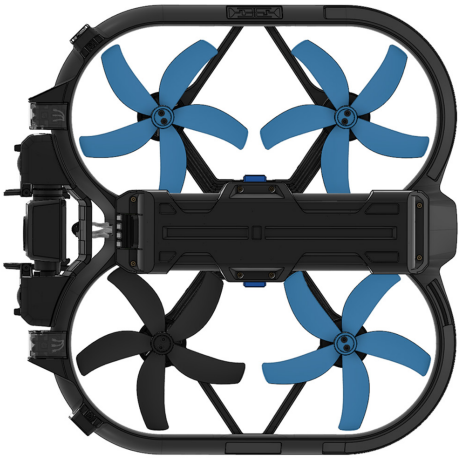


Step 2 - Remove 1x 5-Blade Propeller

Slide the Propeller off of the shaft on the Motor.



Step 3 - Repeat the above process for the remaining 3x Propellers



Propeller Installation

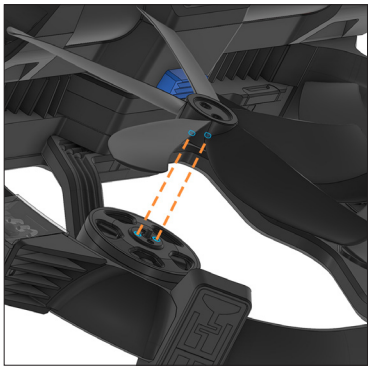
Step 1 - Set 1x 5-Blade Propeller to the Motor

Match the Propellers to the appropriate Motor by color and rotation direction.

> ***NOTE:*** *There are 2x CW Propellers (blue) and 2x CCW Propellers (gray).*

Verify the Propeller and Motor are free of excess dust and debris.

Align the 2x datums on the Propeller underside to 2x fastener holes on the motor.

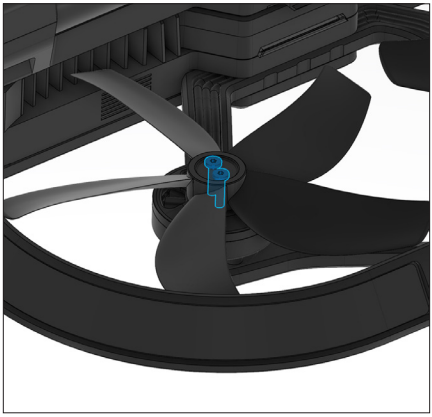


Slide the Propeller on to the Motor shaft.

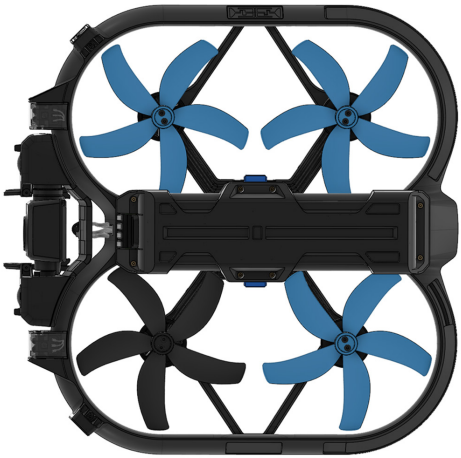
If necessary, rotate the Propeller to fully seat the 2x datums to 2x fastener holes.

Step 2 - Install 2x M2 Propeller fasteners with a T6 driver.

Ensure 2x fasteners are fully tightened and secured.



Step 3 - Repeat the above process for the remaining 3x Propellers



Functional Verification

Step 1 - Power ON Skydio X10

Step 2 - Wait ~1-2 minutes for the Propellers to automatically spin

Ensure the Propellers spin freely.

Step 3 - Update Propeller Hours in Skydio Cloud

1. Login to Skydio Cloud
2. Navigate to the **Drone Device Page**
3. In the **Overview tab**, find **Propeller Hours** and select **Mark Replaced**
4. Select the **Propeller Type**
5. Enter the date and time of the last replacement
6. Select **Update**

Once completed, Skydio Cloud will begin tracking the propeller flight hours.

How to Clean Skydio R10

This procedure explains how to remove and replace R10 propellers.

WARNING: *Water Ingress Hazard. Submerging the Drone or Batteries, or exposing them to running water, can cause component damage or sensor failure. Do not submerge the drone or batteries or place them under running water.*

Tools

Qty	Name	Notes
1x	Microfiber cloth	Standard Tool

It is recommended to wipe down the R10 drone after flights in environments with significant dust or debris.

Step 1 - Power OFF Skydio X10

Step 2 - Wipe down the R10 with a dry or water-damp microfiber cleaning cloth.

Ensure the following:

- Only use lens cleaner on Cameras.
- To remove any dust and debris in difficult to reach areas, use a compressed air canister.
- If needed, mild soap and water may be used to remove heavier dirt or debris.

Skydio R10 Sustainment Plan

NOTE: *The Skydio Care Plan is NOT applicable to the R10 Flight System.*

Sustainment coverage for Skydio R10 is provided through the R10 Plan.

If coverage under the R10 Sustainment Plan is purchased:

- Each kit includes one (1) covered repair or replacement for the duration of the plan
- Additional repairs or replacements are available at a discounted rate of $500 per event
- Additional repairs or replacements are unlimited and may be used throughout the plan term (up to three years)

Plans are sold on a per-kit, annual basis and are subject to applicable terms and conditions.

400-213616-000-A #A0632