SKEYE

Nano Drone FPV

USER GUIDE

TRNDlabs

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TRNDlabs products are design focused electronics engineered to combine ultimate performance and aesthetics.

Learn how to fly!

TRNDlabs Drone Academy is a video platform where you can get your drone up and running in minutes!

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DRONE ACADEMY

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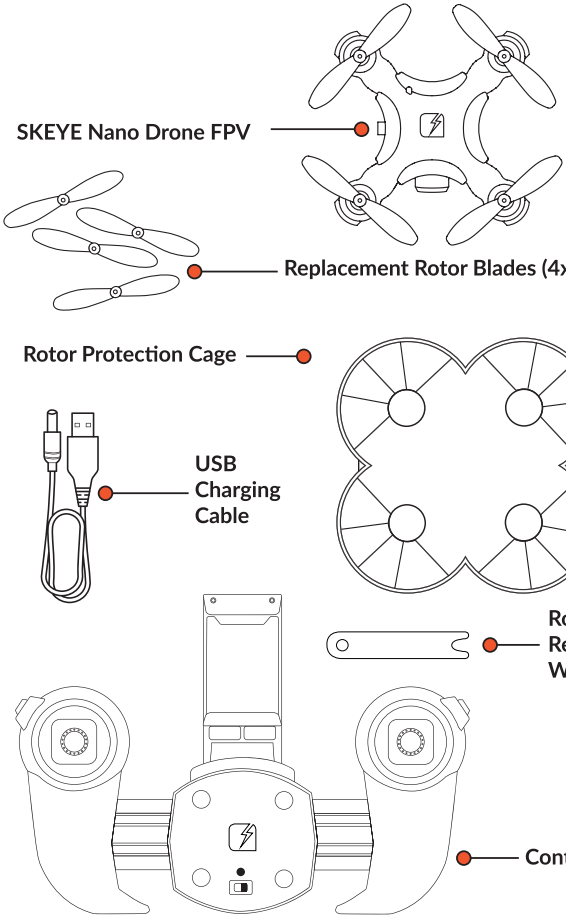
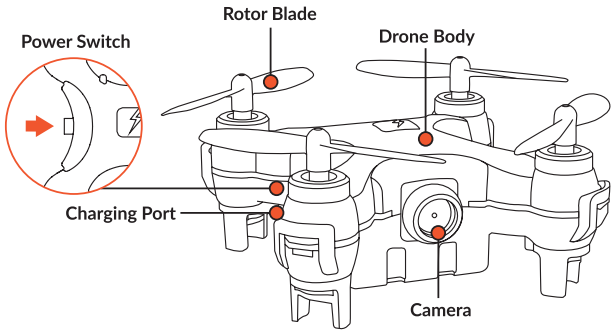
Parts Identification

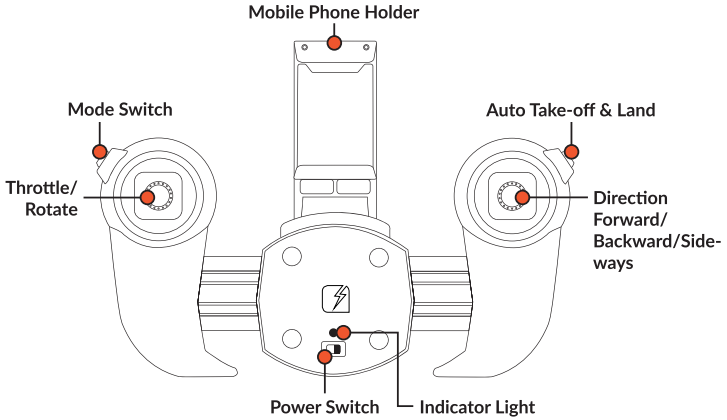


Functions

Drone Functions

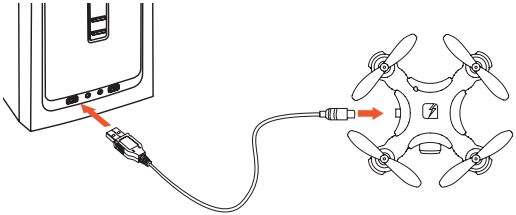


Controller Functions



Setup

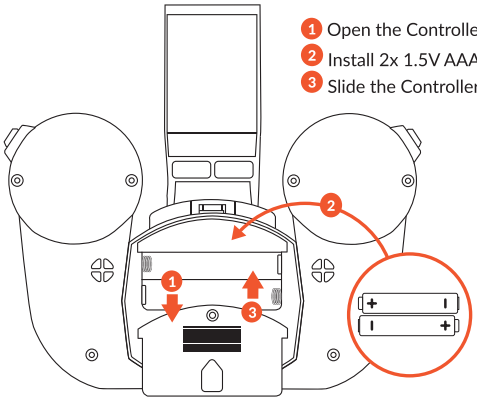
Charging SKEYE Nano Drone FPV



Connect the USB Charging Cable to a USB port and the drone. The LED on the USB Charging Cable lights red indicating that the battery of the drone is charging. When the battery is fully charged, the LED on the USB Charging Cable turns off. It takes about 30 minutes to recharge a discharged battery.

WARNING Make sure you only charge the rechargeable battery with the supplied USB Charging Cable. If you try to charge the rechargeable battery with a different battery charger, this might cause serious damage.

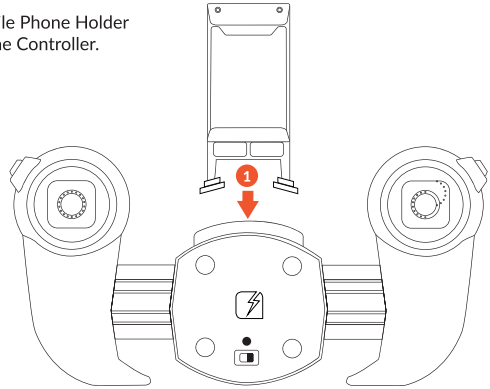
Controller Battery Installation



1. Open the Controller battery cover.
2. Install 2x 1.5V AAA batteries.
3. Slide the Controller battery cover back.

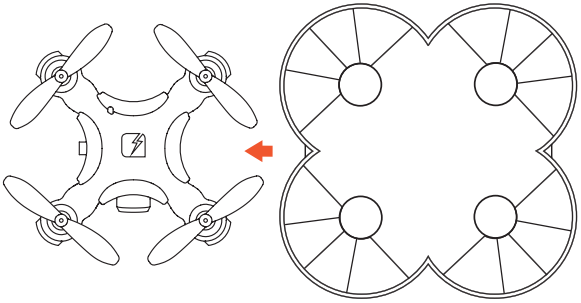
Mobile Phone Holder Installation

1 Slide the Mobile Phone Holder onto the top of the Controller.



Rotor Protection Cage Installation

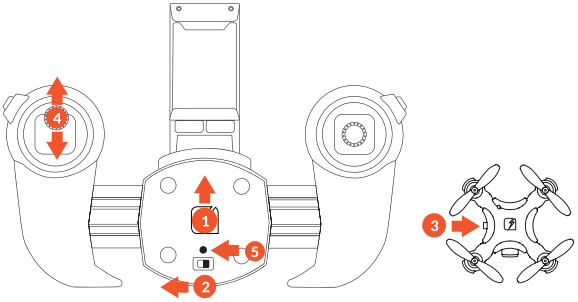
Gently slide the Rotor Protection Cage onto the landing feet of the drone.



Pairing

Place the drone on a flat and level surface.

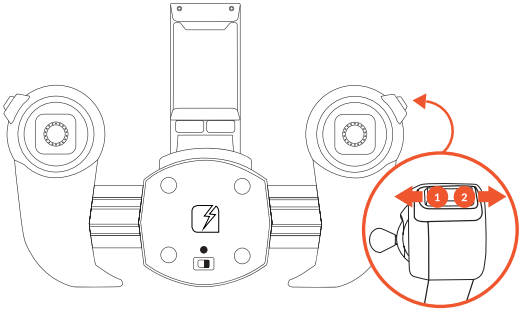
1. Open the Controller cover
2. Slide the Power Switch to turn on the Controller. The Indicator Light on the Controller starts flashing slowly.
3. Slide the Power Switch of the drone. The LED lights of the drone start flashing.



4. Push the Throttle/Rotate stick to the full up position, then to the full down position. The Controller Indicator Light and the LED lights of the drone turn solid after a few seconds.
5. When the Indicator Light on the Controller and the LEDs on the drone are all solid (not blinking) the drone is ready to fly.

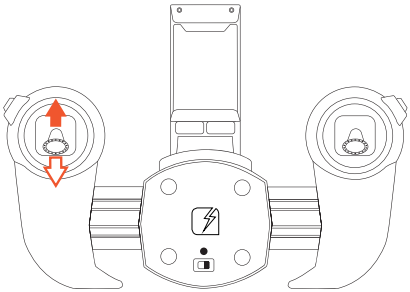
Auto Take-off & Land

1. Pushing the Auto Take-off button will cause the rotors of the drone to spin. The drone takes off and will hover at approximately 1.5 meter.
2. Pushing the Auto Land button will make the drone land.



Throttle Control

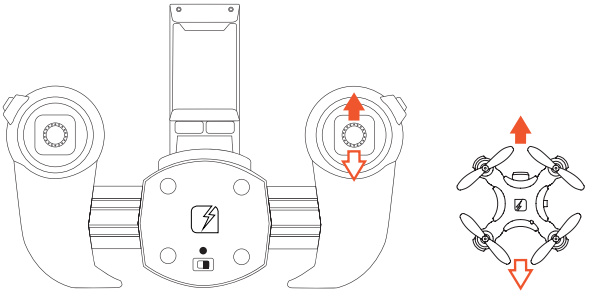
To fly higher, push the Throttle/Rotate stick cautiously forward. To fly lower, push the Throttle/Rotate stick cautiously backward.



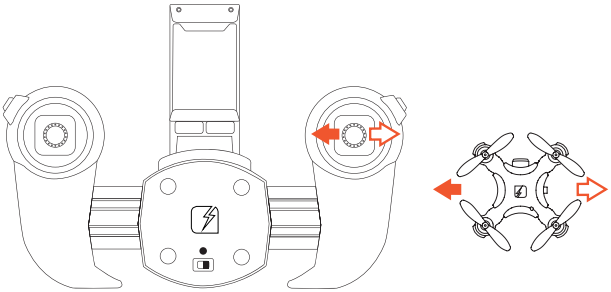
Flight Controls

Direction Control

To fly the drone forward or backward, push the Direction stick cautiously forward or backward.

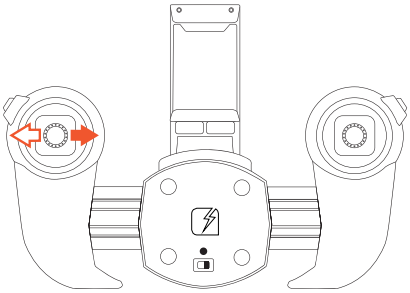


To fly the drone to the left or the right, push the Direction stick cautiously to the left or the right.



Rotation Control

To make the drone circle to the left or the right, push the Throttle/Rotate stick cautiously to the left or right.



Setup App

App Installation

The App is suitable for mobile phones with iOS or Android. The App can be downloaded from the App Store or Google Play.

Scan the QR code to download the App: SKEYE

Download on the App Store

For mobile phones with iOS, search SKEYE in the App Store.

GET IT ON Google Play

For mobile phones with Android, search SKEYE in Google Play.

Connecting

1. Refer to chapter “Pairing” (page 10)
2. Enter the settings of your mobile phone and turn on the WiFi.
3. Select “SKEYE” in the list of networks.
4. Go back and select the SKEYE App.
5. Tap on the FLY icon to enter the Live Video interface.

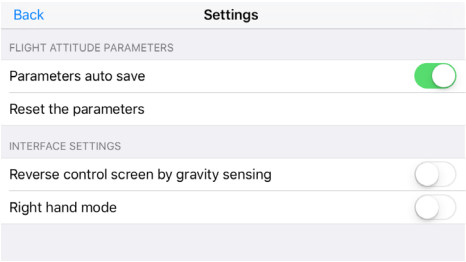
App Functions

1. Back to Home
2. Take a Photo
3. Take a Video
4. View Photos/Videos
5. Sensitivity Control
6. Back to Home
7. Controls ON/OFF
8. Reverse Screen
9. Gravity Mode
10. VR Mode
11. 360° Flip
12. Auto Take-off
13. Auto Land

App Settings

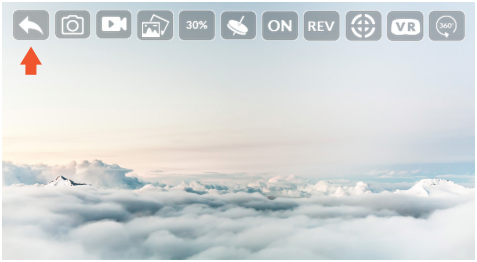
Tap on the ⚙ icon to enter Settings.

In Settings, the trim settings can be saved or reset, control screen can be reversed by gravity sensing and the Mode can be switched.



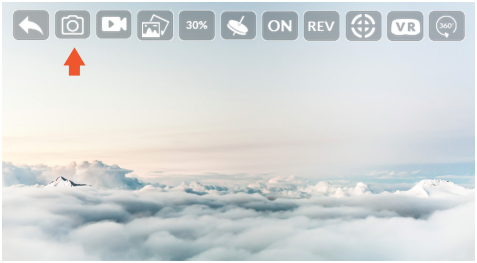
Back to Home

Tap the gallery icon to view photos and videos.



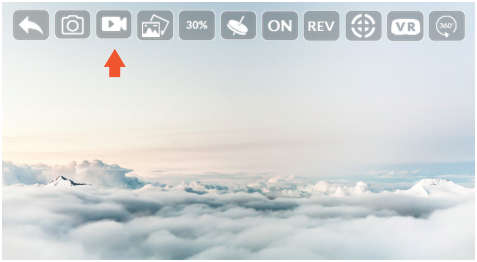
Taking a Photo

Tap the photo icon to take a photo.



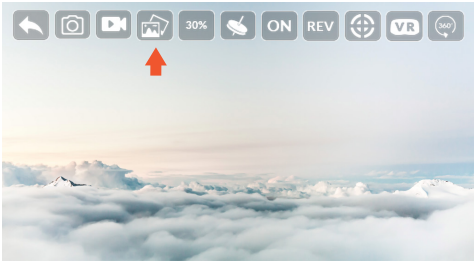
Recording a Video

Tap the video icon to record a video. Tap the icon again to stop recording.



Playing Back Videos/Viewing Photos

Tap the folder icon to view photos and videos.



Piloting with App

Auto Take-off & Land

1. Tapping the Auto Take-off button will cause the rotors of the drone to spin. The drone takes off and will hover at a height of approximately 1.5 meter.
2. Tapping the Auto Land button will make the drone land.

Flight Controls

Throttle Control

To fly higher, slide the Throttle/Rotate stick cautiously forward. To fly lower, slide the Throttle/Rotate stick cautiously backward.

Direction Control

To fly the drone forward or backward, slide the Direction stick cautiously forward or backward.

To fly the drone to the left or the right, slide the Direction stick cautiously to the left or the right.

Rotation Control

To make the drone circle to the left or the right, slide the Throttle/Rotate stick cautiously to the left or right.

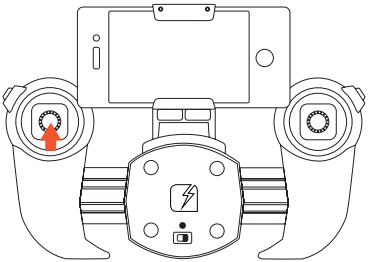
Sensitivity Control

The drone has three sensitivity settings: Low, Medium and High. A higher sensitivity makes the drone faster and more responsive.

Controller Sensitivity Control

Press the Throttle/Rotate stick to change the sensitivity:

1. When the Controller emits 1 tone = Low sensitivity mode.
2. When the Controller emits 2 tones = Medium sensitivity mode.
3. When the Controller emits 3 tones = High sensitivity mode.



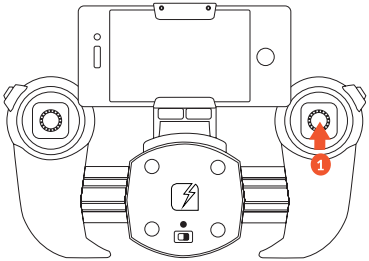
App Sensitivity Control

Tap the percentage icon to change the sensitivity:

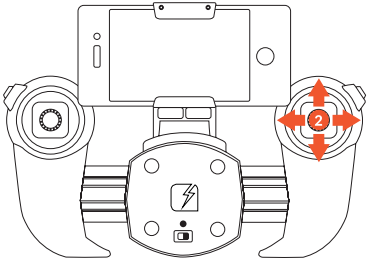
1. 30% = Low sensitivity mode.
2. 60% = Medium sensitivity mode.
3. 100% = High sensitivity mode.

Advanced Flight: Performing 360° Flips

1 Press the Direction stick to enter flip mode. The Controller will start to beep.



2 Push the Direction stick forward, backward, right or left to perform flips. The drone carries out the flip in the respective direction.

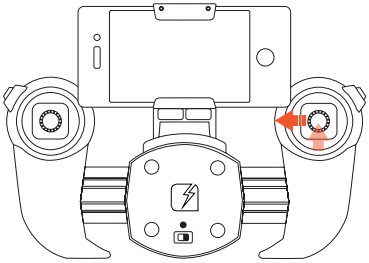


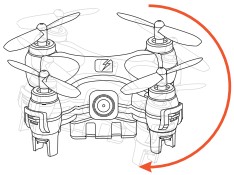
WARNING

Do not attempt these stunts until you are able to fly confidently. Choose an area that will provide a soft landing (carpet or grass) and maintain an altitude of at least 10 feet/3 meter to allow room to recover control as you practice flipping the drone.

Left Side 360° Flip

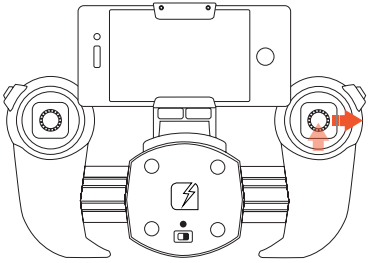
Press the Direction stick and push it to the left.

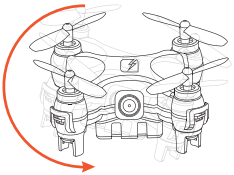




Right Side 360° Flip

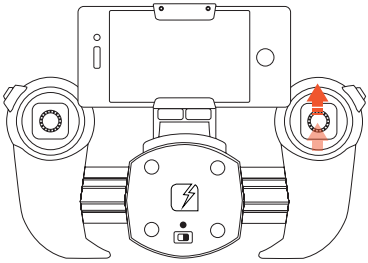
Press the Direction stick and push it to the right.

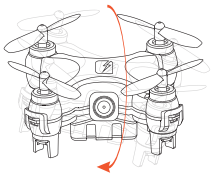




Forward 360° Flip

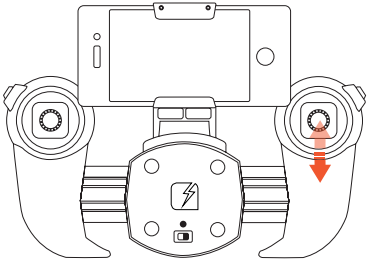
Press the Direction stick and push it forward.

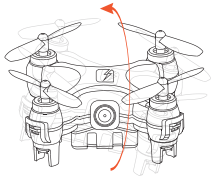




Backward 360° Flip

Press the Direction stick and push it backward.





Switching Mode 1/2

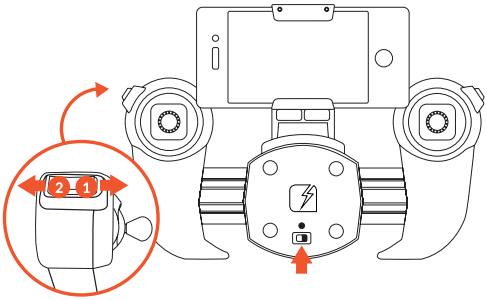
When using the Controller with default settings (Mode 2), the Controller functions are set as described in chapter “Functions – Controller Functions” (page 7).

When using the App with default settings (Mode 2), the App functions are set as described in chapter “Setup App – App Functions” (page 15).

Controller

Switching the Mode Switch button reverses the function between the Throttle/Rotate stick and Direction stick.

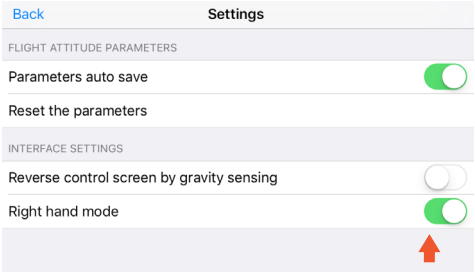
When the Controller is switched off, press and hold the Mode Switch button and turn on the Controller. Holding the upper part of the Mode Switch button will enable Mode 1, holding the lower part of the button will enable Mode 2 (default).



App

In Settings, tapping the “Right hand mode” reverses the function between the Throttle/Rotate stick and Direction stick.

By default, the “Right hand mode” is off. Activating it will enable Mode 1.



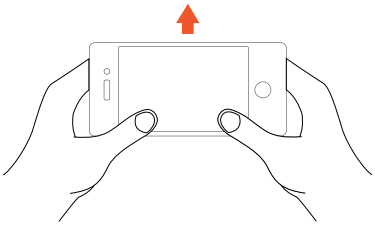
App Gravity Sensor

When using the App with default settings, the Direction of the drone is controlled by the Direction stick.

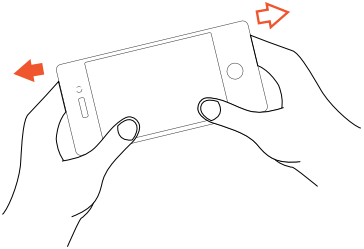
Tap the “Gravity Sensor” icon to control the Direction using the gravity sensor of your mobile phone.

Direction Control

To fly the drone forward or backward, tilt the phone cautiously forward or backward.



To fly the drone to the left or the right, tilt the phone cautiously to the left or the right.



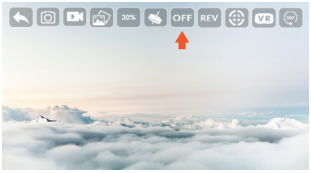
Reverse Screen

Tap the Reverse Screen icon to rotate the screen of the App 180°.

App Control On/Off

When entering the App, by default the drone is controlled by the mobile phone. Tapping the App Control On/Off icon switches controlling function between the mobile phone and the Controller.

When tapping, the icon changes to “Off” and hides the App controlling interface.



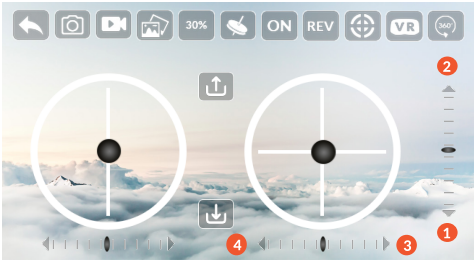
Direction Trim

When hovering, if the drone flies forward or backward without moving the Direction stick, proceed as follows:

1 If the drone moves on its own forward, tap the Backward Trim arrow in steps.
2 If the drone moves on its own backward, tap the Forward Trim arrow in steps.

When hovering, if the drone flies to the left or right without moving the Direction stick, proceed as follows:

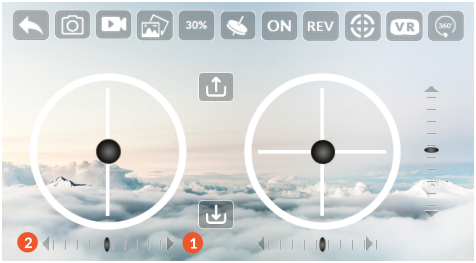
3 If the drone moves on its own sideways to the left, tap the Right Trim arrow in steps.
4 If the drone moves on its own sideways to the right, tap the Left Trim arrow in steps.



Rotation Trim

When hovering, if the drone rotates to the left or right without you moving the Throttle/Rotate stick, proceed as follows:

1. If the drone rotates on its own to the left, tap the right Rotate Trim arrow in steps.
2. If the drone rotates on its own to the right, tap the left Rotate Trim arrow in steps.



Calibration

The drone needs to be calibrated if it flies unstable.

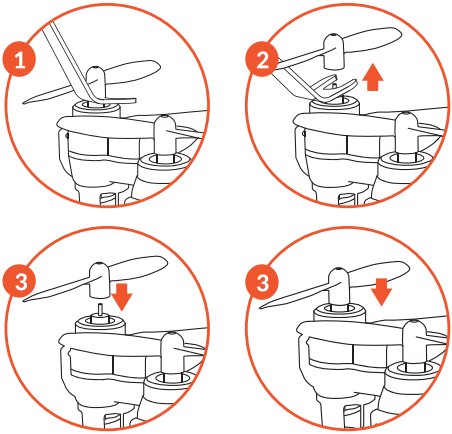
Place the drone on a flat surface and follow the connecting instructions as described in “Setup App - Connecting” (page 15)

Tap the Calibration icon. The LED lights on the drone will flash for five seconds and turn solid after calibration is completed.

Replacing Rotor Blades

To replace a rotor blade, follow the steps below:

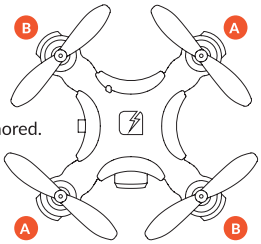
1. Put the Rotor Replacement Wrench between the motor and rotor blade.
2. Gently press the Wrench to remove the rotor blades.
3. Press the new rotor blade onto the motor axis.



Each rotor blade is marked with a “B” or “A”, followed by a number at the underside. Be sure to note the marking and the tilt angle of the rotor blades.

Front left: marking “B”
Front right: marking “A”
Rear left: marking “A”
Rear right: marking “B”

The number following the “B” or “A” can be ignored.



FAQ

Problem: Controller does not work.

Cause: The batteries have been incorrectly inserted.
Solution: Check if the batteries have been correctly inserted.

Cause: The batteries do not have enough power.
Solution: Insert new batteries.

Problem: The drone cannot be controlled with the controller.

Cause: The controller is possibly not correctly paired with the drone.
Solution: Carry out the pairing procedure as described in “Pairing” (page 10).

Problem: The Drone does not lift.

Cause: The battery power is not sufficient.
Solution: Charge the battery as described in “Charging SKEYE Nano Drone FPV” (page 8).

Problem: During flight, the Drone loses speed and height without any obvious reason.

Cause: The battery is too weak.
Solution: Charge the battery as described in “Charging SKEYE Nano Drone FPV” (page 8).

Problem: The drone only flies in a circle or flips over before taking off.

Cause: Rotor blades incorrectly mounted or damaged.
Solution: Fit rotor blades/ replace rotor blades as described in “Replacing Rotor Blades” (page 32).

Safety Precautions

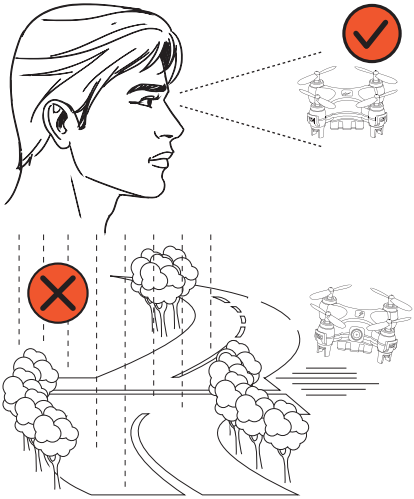
Carefully follow the instructions below. Make sure you fly the drone safe, and you mind the warnings. The drone is not intended for use by children under fourteen years old, unless directly supervised by a competent adult at all the time.

Always ensure the safety of yourself, others and the drone. The drone has rotating blades that move at high speed and might cause damage or danger. Pilots are responsible for any actions that result in damage or injury due to improper operation of the drone.

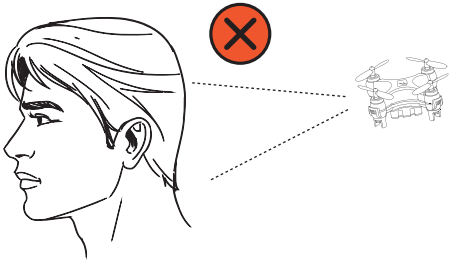
Make sure you use the drone in an accurate environment. Choose an adequate flying space without obstacles.

Keep your hands, face, hair or loose clothes away from the rotating blades. Hair getting into the rotor might cause serious damage of the drone.

Never loose sight of the drone. If the drone flies out of the field of your view, immediately stop operating it.



Do not fly near buildings. Do not fly over stations, rail lines or highways. Do not fly near trees, or crowd of people. Do not fly in rain, snow, fog, storm, wind or in unclear weather conditions at night.



Do not approach or film people without their consent. Be careful to privacy.

Avoid ceiling fans, hanging light fixtures, heating or air conditioning.

Additional Safety Precautions

- This drone has small parts that may pose a choking hazard. Keep all small parts and electrical devices out of the reach of children and animals. Pets can become excited by radio-controlled drones.
- The drone is controlled by radio, therefore it is subject to radio interference from many sources that are beyond your control. Radio interference can cause momentary losses of radio control. Always allow a safety margin in all directions around the drone in order to prevent collisions.
- The controller and the charger are specially designed to charge this model. Never use other charging equipments.
- Regularly examine the drone and controller for any damage to the plugs, enclosure, rotor blades, battery covers and other parts. In the event of any damage, neither the drone nor the controller should be used.
- When cleaning the drone or controller, use a damp cloth and wipe gently. Avoid using chemicals, it can damage the plastic components.

Battery Safety Instructions

- For the best performance, only use fresh 1.5V Alkaline “AAA” batteries in the controller.
- Never operate the drone with low controller batteries
- The drone automatically switches off if the rotors are unable to rotate. Switch the power to restart the drone.
- When not in use, store the drone in the original packaging with the batteries removed from the controller.
- Always recharge the battery after use in order to prevent it becomes deep discharged. Make sure to allow a pause of about 20 minutes between finishing the flight and recharging the battery.
- Even if the drone is not in regular use, recharge the battery occasionally suggested at least once in every 2-3 months.
- When transporting or temporarily storing the rechargeable battery, the temperature should be between 5-50 C. Do not store the battery or the drone in a car and do not expose it to direct sunlight. In case the battery is overheated it can be damaged or catch fire.
- Do not submerge the drone or the controller in water. This will damage the electronic components and could pose a severe risk to the built in battery.

FCC Compliance Information (USA only)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. Changes or modi cations not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

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If you have any questions about this document, please contact TRNDlabs by sending a message to hello@trndlabs.com.

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