

PHOENIX 2.0

RC Drone



H870SPW
USER MANUAL



GPS
TRANSMISSION



APP
CONTROL



5G
WIFI



FOLLOW ME
MODE



ARTICULATING
WIDE ANGLE
VIEW



AUTO
HOVER



ONE KEY RETURN
/LOW BATTERY
RETURN



FLIGHT
RANGE



APP Download QR Code



FCC Compliance Statements

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.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For Drone:**FCC Radiation Exposure statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For Remote:**FCC Radiation Exposure statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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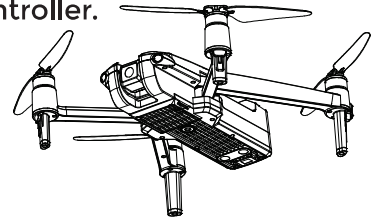
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PART 1: Product Profile

This section introduces functions and installation guidelines of the DRCLSX10-NOC and lists the components of the aircraft and Remote Controller.

IMPORTANT NOTE: FAA REGISTRATION

Owners of a drone that weighs more than 0.55 lbs. (250 g) and less than 55 lbs. (25 kg) must register their UAS online at the FAA website, <https://www.faa.gov/uas/registration>.



After receiving the certificate of registration, a unique FAA registration number will be provided and it must be marked on the Drone by any means, such as permanent marker, label, engraving, or other means, as long as the number is readily accessible and maintained in a condition that is readable and legible upon close visual inspection.

PLEASE READ THIS USER MANUAL

Thank you for purchasing the Phoenix 2.0 GPS FOLDABLE VIDEO DRONE, item DRCLSX10-NOC. The included Remote Controlled aircraft is designed specifically for Indoor flying. In order to get the best possible results, please read this user's manual carefully before using. In addition, be sure to keep this manual in a safe place for future reference.

Video Tutorials

It is recommended to watch the video tutorials in order to best prepare for your first flight. Scan the QR code to watch the videos:



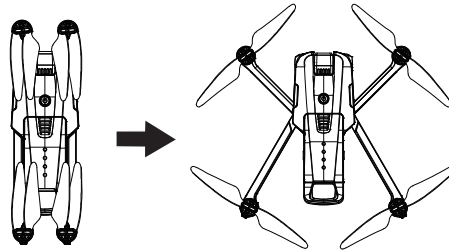
Please Read This User Manual

Thank you for purchasing the Phonenix 2.0, item DRCLSX10-NOC. The included Remote Controlled aircraft is designed specifically for outdoor flying. In order to get the best possible results, please read this manual carefully before using. In addition, be sure to keep this manual in a safe place for future reference.

Setting Up Your DRCLSX10-NOC

Unfold the Aircraft

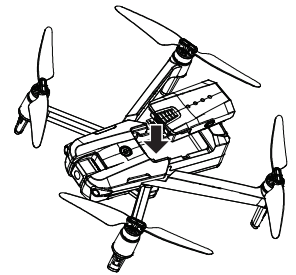
The aircraft is folded inside the package. Please unfold the aircraft before use.



Battery Installation

Drone Battery: Please make sure the battery is fully charged before installation. Insert the charged battery into the battery case at the back of the aircraft. Make sure that you hear a clicking sound which indicates that the battery has been inserted securely.

Please see 'Aircraft Battery' section for more details.

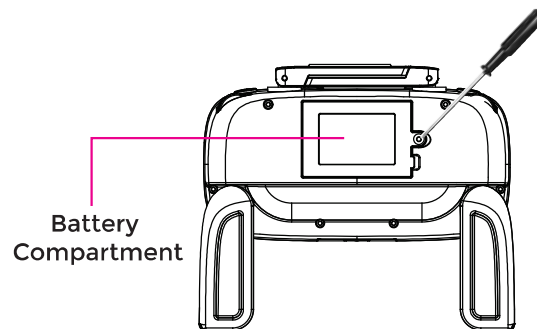


Attention: Failure to securely insert the battery can lead to your aircraft losing power mid flight and crashing.

Setting Up the Remote Controller

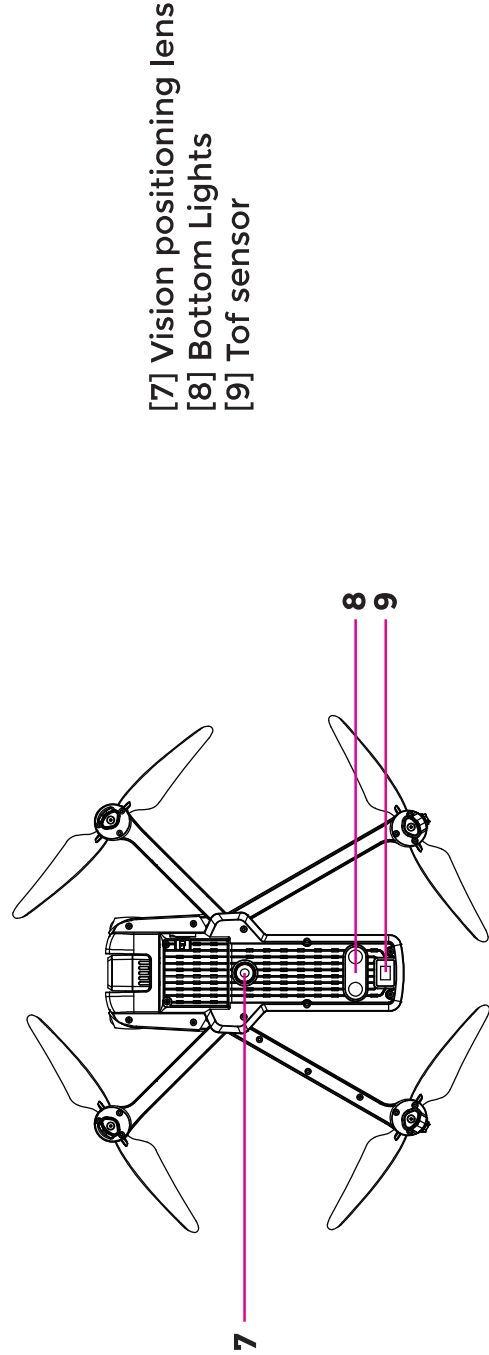
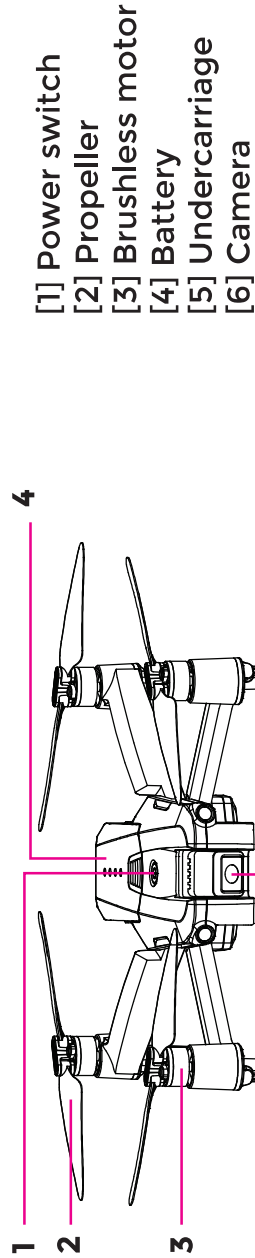
Inserting Batteries Into Your Remote Controller

1. Use a screwdriver to open up the battery compartment located on the rear of your remote controller.
2. Insert 3 AAA 1.5V batteries, making sure that the batteries are inserted with the correct polarity (+,-) as displayed in the battery compartment.
3. Once the batteries are inserted, place the battery compartment cover back on the battery compartment, and use a screwdriver to close it securely.

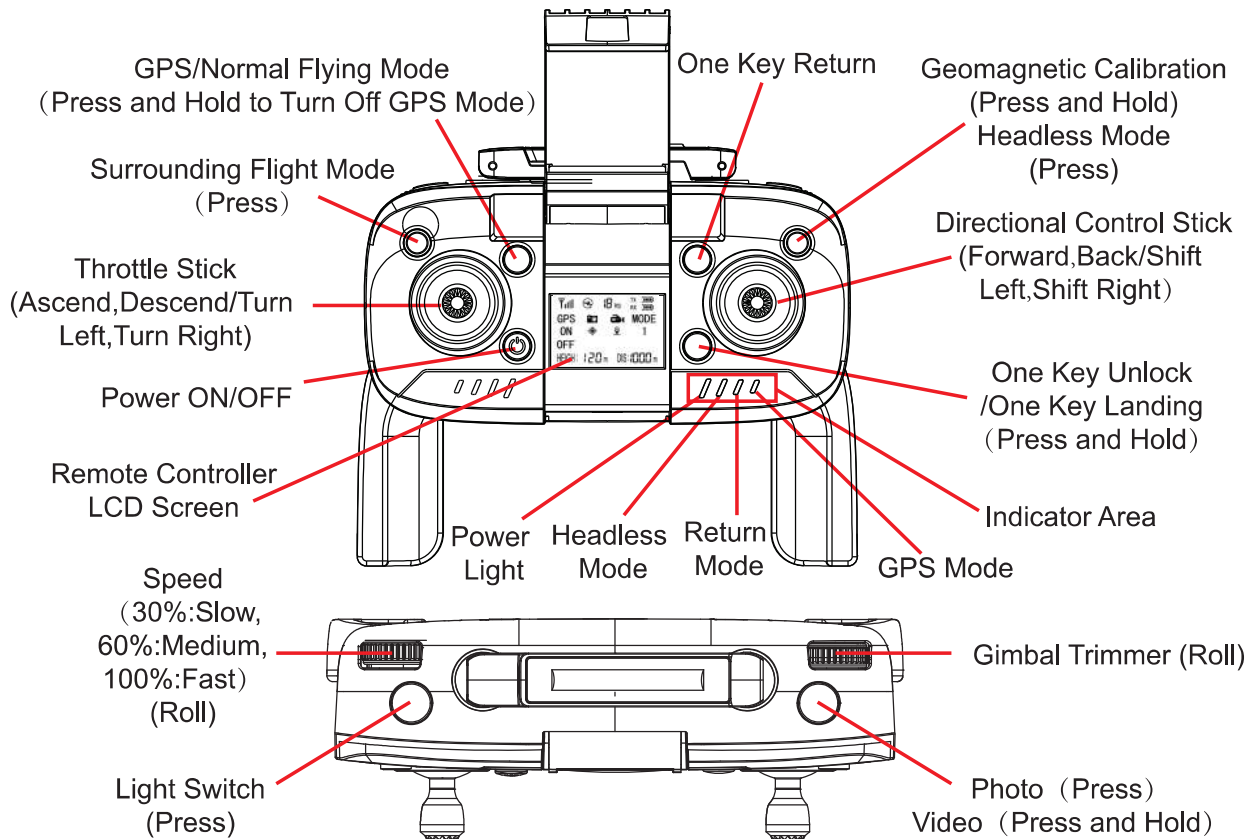


- Do not mix rechargeable and non-rechargeable batteries.
- Do not mix old and new batteries or different types of batteries.
- Remove exhausted batteries and dispose of them based on the rules of your local municipality.
- Remove the batteries from your Remote Controller if it will not be in use for an extended period of time.

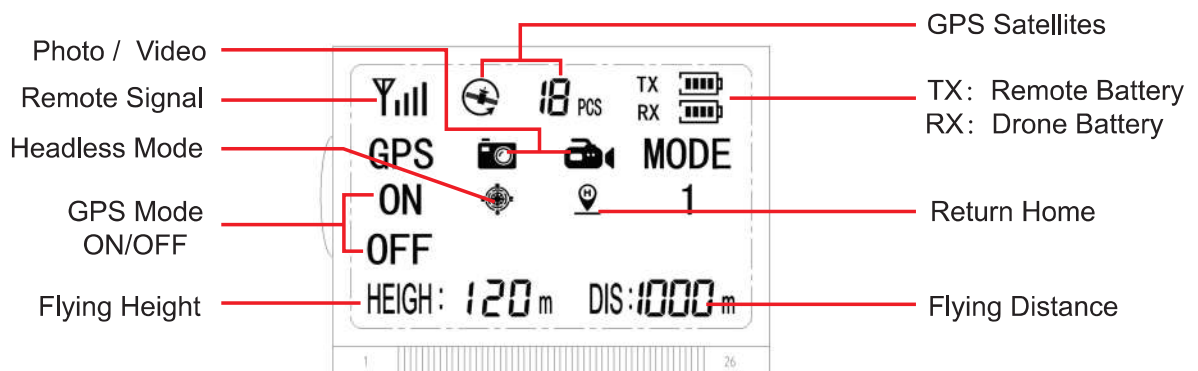
A Quick Look at Your Device



Remote Controller



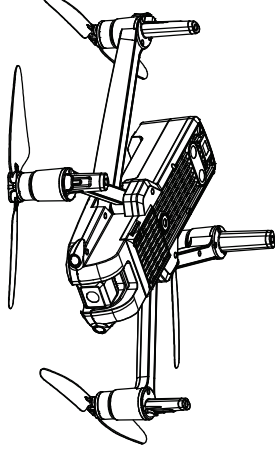
Remote Controller LCD Screen



When the aircraft is turned on, it automatically goes into GPS mode.

PART 2: Aircraft

This section introduces functions and features of the Phoenix 2.0.



Flight Modes

Your Phoenix 2.0 has 2 flight modes.

GPS Mode: When the aircraft is turned on, it automatically goes into GPS Mode.

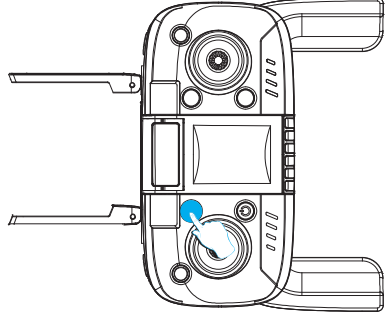
GPS Mode is suitable for **OUTDOOR** flying, the drone can be more stable when exposed to wind and it can automatically return back under GPS mode.

When in GPS Mode, the remote controller LCD shows "GPS ON" on the left side.(Pic 2)

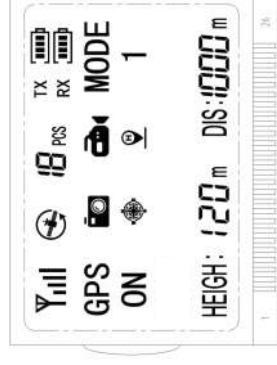
Normal Flying Mode: Press and hold the GPS/Normal Flying Mode button to switch to Normal Flying Mode.(Pic 1)

Normal Flying Mode is suitable for **INDOOR** flying, The drone can not automatically return back under this mode.

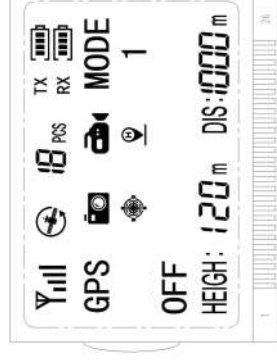
When in Normal Flying Mode, the remote controller LCD shows "GPS OFF" on the left side.(Pic 3)



Pic 1

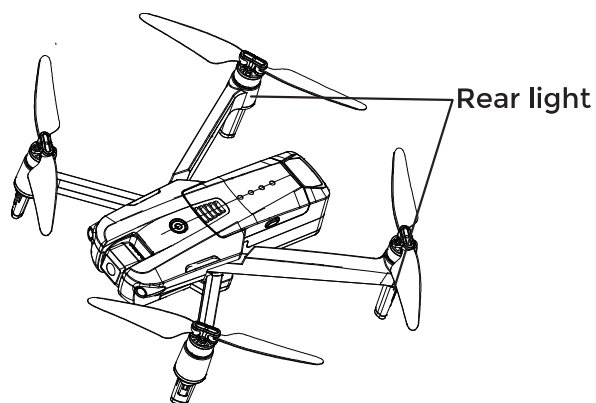


Pic 2



Pic 3

Aircraft Status Indicator



Aircraft Status Indicator

GPS MODE		
Before finding GPS Signal	FRONT LED	FLASHES BLUE
	REAR LED	FLASHES GREEN
After finding GPS signal	FRONT LED	BLUE
	REAR LED	SOLID GREEN

NORMAL MODE(NO GPS)	
FRONT LED	BLUE
REAR LED	FLASHES GREEN

Rear Light Status Under GPS Mode

No.	Indicator Status	Rear Light
1	Turn on Aircraft	Flashes Quickly Green
2	Aircraft and Remote Connection	Flashes Slowly Green
3	Start Compass Calibration	Flashes Red+Green
4	Finish Compass Calibration	Flashes Green
5	Search GPS Signal	Solid Green
6	Return To Home	Solid Red
7	Return to Home with Low Battery	Flashes Red
8	Headless Mode	Flashes Red+Green
9	Lose Connection	Flashes Slowly Red

Return to Home (RTH)

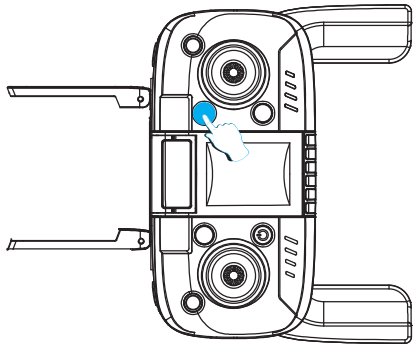
The Return-to-Home (RTH) function brings the aircraft back to the last recorded Home Point. There are 3 types of RTH: Smart RTH, Low Battery RTH and Failsafe RTH. This section describes these 3 scenarios in detail.

	GPS	Description
Home Point	 7/5	If a strong GPS signal (satellites over 7) was acquired before takeoff, the Home Point is the location from which the aircraft was launched. The aircraft's rear indicator lights will flash both red and green colors when the Home Point is recorded.

- ⚠ The aircraft cannot avoid obstacles when it is flying back with the RTH function initiated.
- The aircraft cannot return to the Home Point when the GPS signal is weak or unavailable.

Smart RTH

When the GPS signal is available (more than 7 satellites is presented), use the RTH button on the Remote Controller (Pic. 1) or tap the RTH button in the “VTI Phoenix 2.0” APP (Pic. 2) and then follow the on-screen instructions to initiate Smart RTH.



Pic. 1

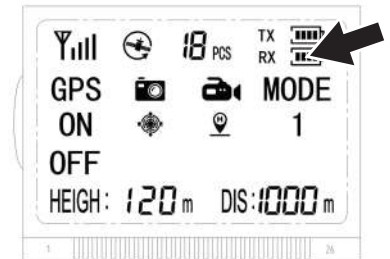


Pic. 2

Low Battery RTH

When the battery level of your aircraft is low, it automatically returns directly to the take-off point. During the state of low battery, the aircraft cannot be controlled beyond 20 meters. If the aircraft is returned to within 20 meters from the take-off point, it can be controlled. If it is beyond 20 meters, the aircraft then enters into the landing protection mode in which it performs as follows – because it will not be able to fly more than 20 meters and will not be able to automatically return, it will safely land immediately when the battery is totally depleted. When the drone is under Low Battery Status, the RX battery icon will start flashing.

Remote Controller LCD Screen

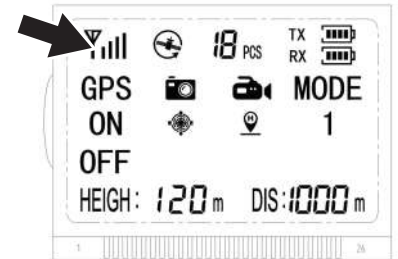


 **Note:** When the aircraft is in a state of low battery, the front blue lights are on, and the rear red light flashes.

Failsafe RTH

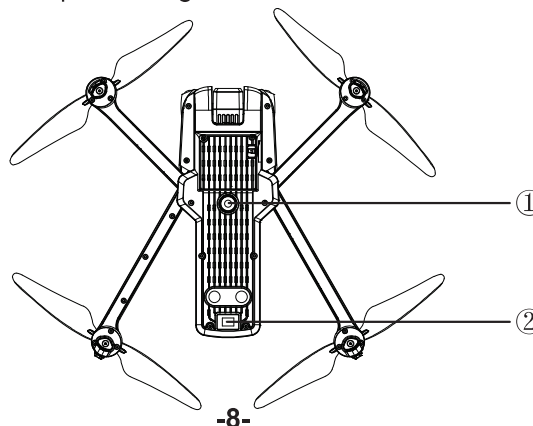
When the remote controller and drone are disconnected, the signal icon starts flashing on the remote controller (see photo to the right) and the remote controller emits a beeping sound. If this status continues for over 6 seconds, the Failsafe FTH is automatically activated, and the drone returns to the Home Point. Once the remote controller connects with the drone again, the signal icon stays solid, and the remote controller stops beeping. This indicates that the drone will stop returning Home and can be used to fly.

Remote Controller LCD Screen



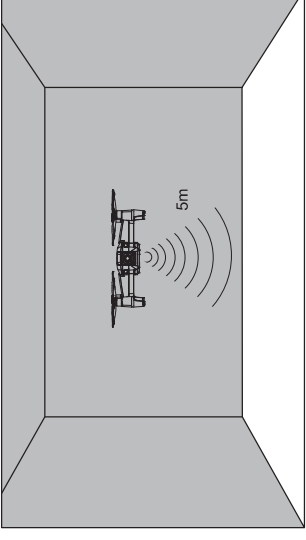
Vision System

Consisting of camera ① Tof sensor ② the Vision System is located at bottom of your aircraft. It is a positioning system that is composed by image and Tof sensors. Your aircraft acquires its location through using the camera sensor to detect the ground texture and visible features. Meanwhile, assisted by the Tof sensor, your aircraft could determine its altitude, better insuring fly safety and precise positioning.



Vision Positioning System function

The Vision Positioning System is typically used in indoor environments when the GPS is weak or unavailable. It works best when the aircraft altitude is less than 5 meters.



⚠ The precision of the visual positioning system is easily affected by features such as whether the ground reflects light, surface texture, ambient light, brightness and flight height, etc. When one of the conditions cannot be met, the aircraft will automatically switch to the altitude mode.

1. Flying fast at an altitude below 0.5m.
2. Flying over monochrome surfaces (like pure black, pure red, pure red and pure green).
3. Flying over strong light reflective surfaces or surfaces prone to reflection.
4. Flying over water or transparent object surfaces (Such as glass).
5. Flying over moving object surfaces (such as crowds, swaying jungles).
6. Flying over an area where light changes dramatically and rapidly.
7. Flying over surfaces that are extremely dark ($\text{lux} < 10$) or extremely bright ($\text{lux} > 10,000$).
8. When the wind speed is greater than level one during flight.
9. Flying over surfaces without clear textures.
10. Flying over surfaces with highly repeating textures (like a brick wall).
11. Flying speeds should be controlled and not to be too fast, When the aircraft is 1 meter above the ground, the flying speed should not be over 3m/s.

- Keep sensors clean at all times.
- The vision system is only effective when the aircraft is within an altitude range of 5 meters.
- Beyond the flight altitude, the aircraft will automatically switch to altitude mode without visual positioning.
- The vision system may not function properly when the aircraft is flying over water, low light ground and surfaces without clear patterns or textures.

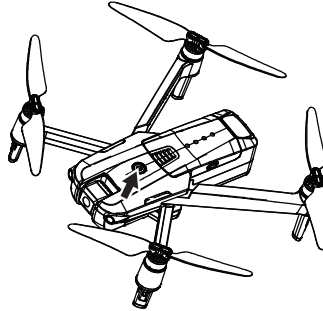
Aircraft Power Switch

Turn On the Aircraft

Once the battery is inserted securely, press and hold the power button for 3 seconds. The aircraft makes beeping sounds and the rear light flashes continuously.

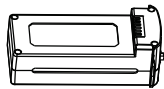
Turn off the Aircraft

Press the power button, the aircraft's light goes off and the aircraft will then power off.

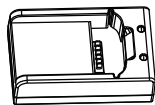


Aircraft Battery

- Made by high-energy battery cells
- Standard battery capacity is 7.6V 1950mAh (2 pcs)



Aircraft Battery



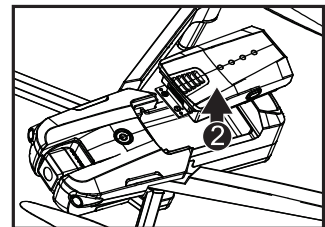
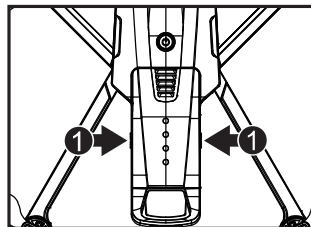
Battery Charging Base



USB cable

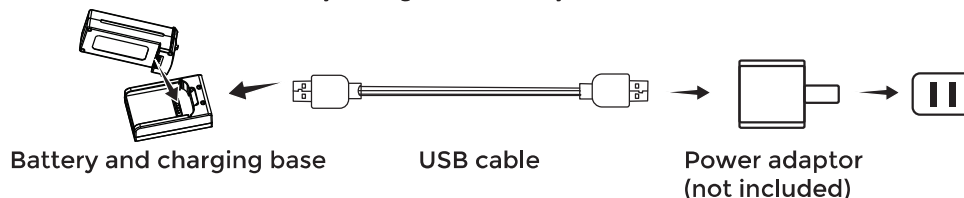
How to Remove the Battery

- First, press and hold the buttons on both sides of the battery.
- Then remove the battery upwards.



Charging the Aircraft Battery

- The aircraft's battery needs to be fully charged before every flight.
- Please use the included charging base and USB cable to charge the aircraft's battery.
- For best result, use a 5V, 2A charger to charge the battery.
- The green indicator (on charging base) is on while charging, it is off while fully charged.
- It takes approx 210-240 minutes to fully charge the battery.



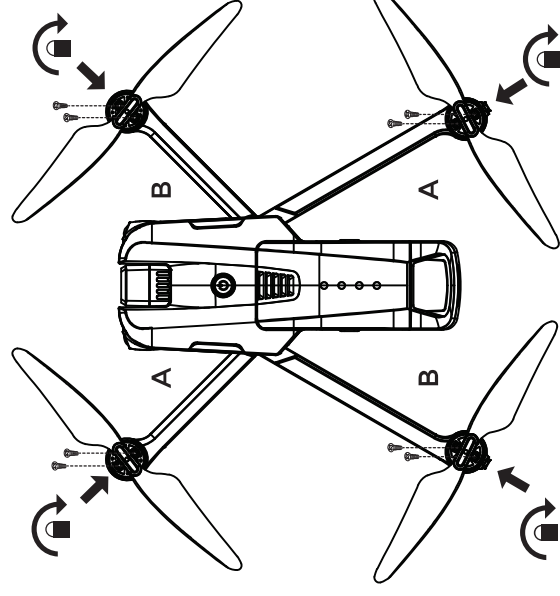


- Do not let children play with this aircraft without adult supervision.
- Insert batteries with correct polarity.
- Rechargeable batteries are to be removed from the aircraft before being charged.
- Rechargeable batteries are only to be charged under adult supervision.
- Exhausted batteries are to be removed from the aircraft.
- The supply terminals are not to be short-circuited.
- The charging line should regularly be examined for potential hazards, such as damage to the cable, cord, plug, enclosure or any other parts. In the event of such damage, the product must not be used until such damage has been properly removed.

Attaching and Detaching the Propellers

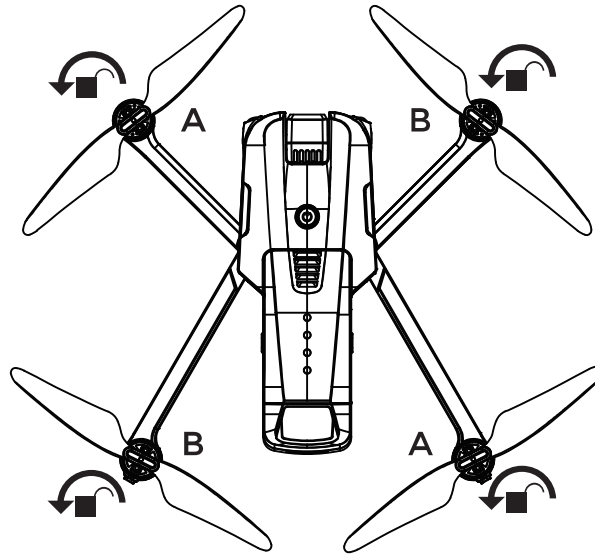
Attach the Propellers

Install propeller A and propeller B on the corresponding motor shaft and fix each propeller's screws tightly by rotating them in a clockwise direction. (A/B markings are on the bottom of each propeller.)



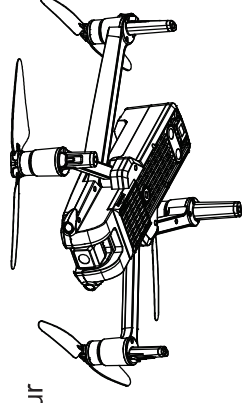
Detach the Propellers

Take out the screws by rotating them in counter-clockwise direction and then remove the propellers.



- Please make sure that the propellers are attached to the correct motors, because the aircraft will not fly normally if the wrong propellers have been attached.
- Be aware of the sharp edges of the propellers. Handle with care.
- Use only original default propellers. DO NOT mix propeller types.
- Stand clear of the motors and DO NOT touch the propellers when they are spinning.
- Check that the propellers and motors are installed correctly and are attached securely before every flight.
- Ensure that all propellers are in good condition before each flight. DO NOT use aged, chipped, or broken propellers.
- To avoid injury, STAND CLEAR of and DO NOT touch propellers or motors when they are spinning.
- ONLY use original default propellers for a better and safer flight experience.

PART 3: App Download & Installation



This section explains how to download the “VTI Phoenix 2.0” APP and connect your aircraft with your mobile device.

Downloading the “VTI Phoenix 2.0” Application

Download the “VTI Phoenix 2.0” APP

1. For Apple IOS users, please go to the Apple App Store, and search “**VTI Phoenix 2.0**” or scan the QR code below to download the software application.
2. For Android users, please go to the Google Play Store, and search “**VTI Phoenix 2.0**” or scan the QR code below to download the software application.



How to Link the App to the Aircraft's Camera

Power on the aircraft, then enter your phone's settings menu. Turn on WiFi, find “**Phoenix Drone *******” on the list and connect to it. When the WiFi “” symbol appears, it means WiFi has been successfully connected. Exit the phone's settings menu and tap the “VTI Phoenix 2.0” APP icon on your mobile device to open the APP. Select your aircraft model on the home page and tap “**GO**” to enter into the real-time image transmission interface.



Connect WIFI

Tap “VTI Phoenix 2.0” App

Click “**GO**”

Photo and Video Saving Feature

Video and Photos captured by your aircraft will be saved at the APP.

Photo & Video resolution

1.Save in phone(Compressed Pixel):

Photo: 4096*3072

Video: 2048*1088 30fps

2.Save in SD card(Original Pixel):

Photo: 4096*3072

Video: 2048*1088 30fps

1. If the camera does not have Micro SD card support, videos and photos will be saved at the APP.
2. If the camera has Micro SD support, videos and photos will be saved both on the memory card and APP.
3. Videos and photos saved in the memory card have no compression or resolution loss, while there is compression loss when saving photos and videos using the app.



Note: Please make sure that your mobile device supports 5G WIFI before linking "Phoenix Drone" to your device.

Micro SD Card Transferring Photos and Videos

Your aircraft has a built in 2K camera which can record 2048x1088 resolution video or 13MP resolution photos. To transfer recorded videos and photos to your computer, follow the steps below:



1. Insert a Micro SD memory card (not included) into your aircraft. Make sure that a Micro SD memory card is placed in the aircraft's memory card slot. For best results do not use a memory card over 64GB.
Supported SD Cards Capacity:
1G/2G/4G/8G/16G/32G/64G
Supported SD Cards Speed:C4/U1



2. After flying and recording photos or videos, remove the memory card from the camera and insert it into the Micro SD card reader, making sure it is inserted correctly.



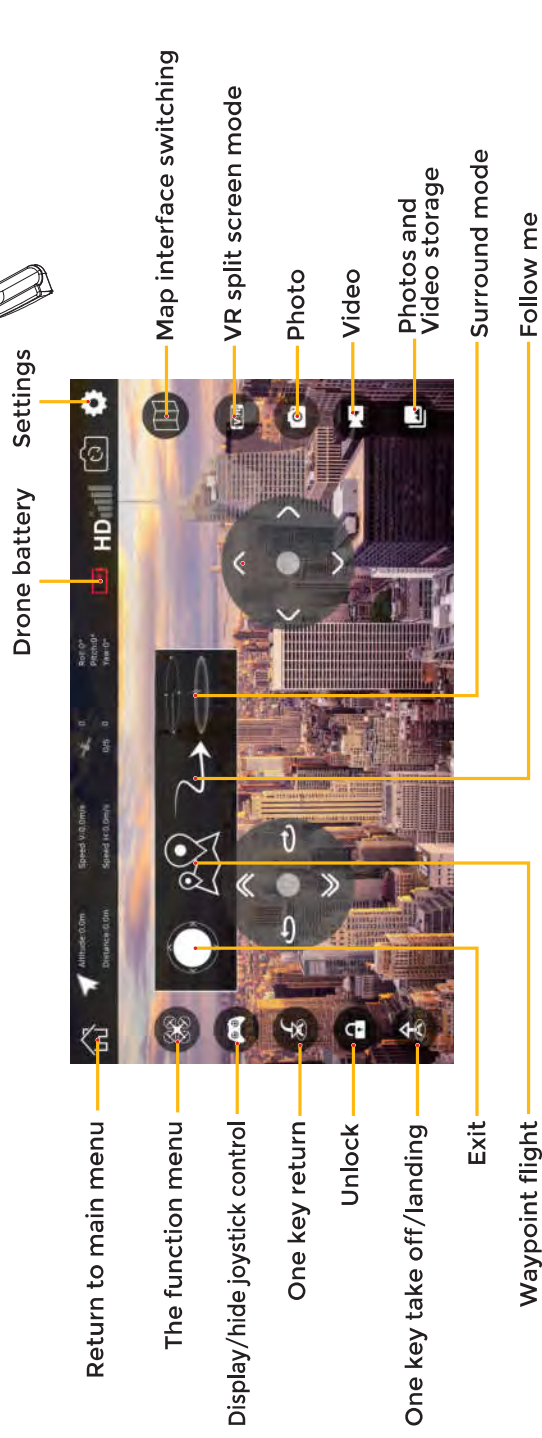
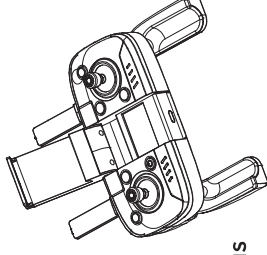
3. Insert the Micro SD card reader into an available USB port on your computer.
In WINDOWS PCs, you can double click on the MY COMPUTER icon (just Computer in WINDOWS Vista and later), and a new drive letter labeled REMOVABLE DISK will be accessible. By double clicking on this drive, you can access the content of your memory card.
If you are using a MAC OS, an extra drive will mount on your desktop when the card reader is connected to your computer and a memory card is inserted.



Real-time image quality and FPV (first person view) distance are dependant on your smart phone and flight environment.
To obtain the best live view, please choose a wide open area to fly in. As tested, the DRCLSX10-NOC could transmit 2K videos up to 800 meters (0.6 mile) in an environment with no interference.

PART 4: Remote Controller and APP

This section describes the features of the remote controller and VTI Phoenix 2.0 app.
It includes instructions on how to operate the DRCLSX10-NOC.

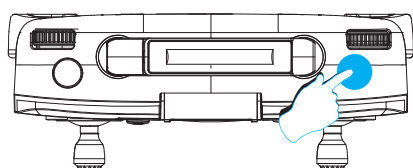


Remote Controller & APP Functions

Photo/Video

Photo: Tap the photo/video button on the remote controller and on the app to take a photo.

Video: Press and hold the photo/video button to take a video on the remote controller. Press and hold the photo/video button again to stop recording. Tap the video button on app to take video, and tap again to stop recording. All photos and videos will be saved to your phone.



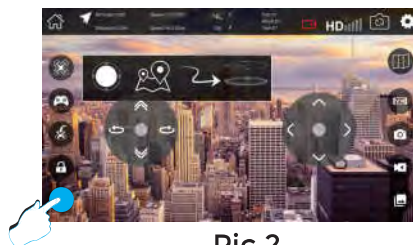
One Key Unlock/Landing

app operation:

- 1.Unlock the drone. (Pic 1)
- 2.Tap this button to take off and land. (Pic 2)



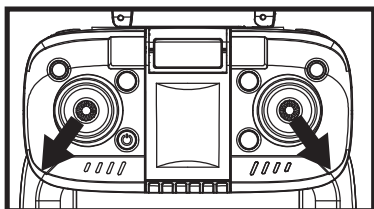
Pic 1



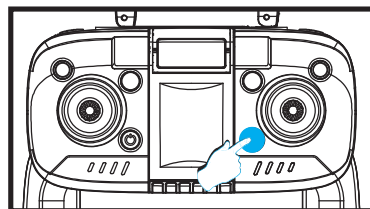
Pic 2

Remote Controller operation:

- 1.Unlock the drone. (Pic 3)
- 2.Press and Hold this button to take off and land. (Pic 4)



Pic 3



Pic 4

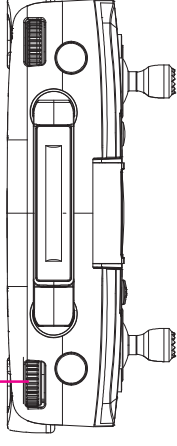
Remark: Before taking off, you always need to first unlock the drone.

Speed Adjustment

Your aircraft has three speed modes. To cycle through the speed modes, roll the right throttle down to change speeds. Each mode will be identifiable by a series of beeps. The default speed for the aircraft is low speed. Press the right throttle once to change the speed.

Low Speed Mode: One beep
Medium Speed Mode: Two beeps
High Speed Mode: Three Beeps

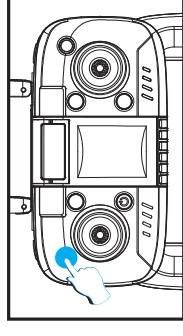
Speed
(30% : Slow, 60% : Medium, 100% : Fast)



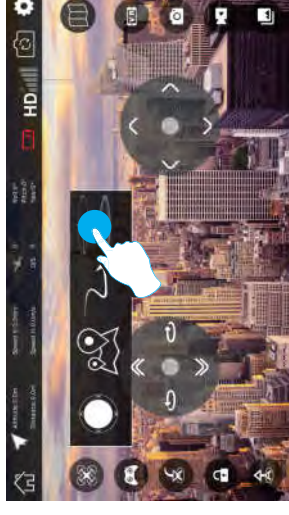
Point of Interest (Surrounding Flight Mode)

When activated, Point of Interest will make the aircraft circle around a desired point of interest.

To activate Point of Interest, aim the aircraft at the desired point of interest and then press the Surrounding Flight Mode button on the remote controller. The aircraft will emit a beep sound.

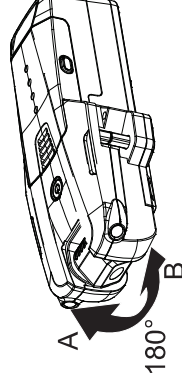
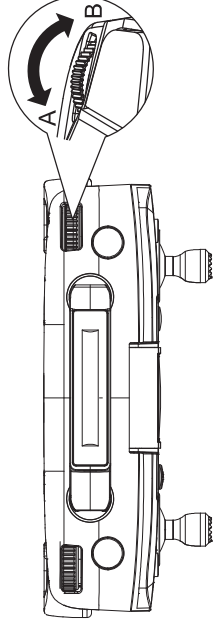


1. Push the right throttle stick to the right to make the aircraft circle the target clockwise while focusing on the target.
2. Move the right throttle stick forward and backwards to change the radius distance between the aircraft and the point of interest.
3. Continue moving the right throttle stick to the right to make the aircraft increase its flight speed. Move the right throttle stick to the left to make the aircraft decrease its flight speed. When in a lower speed by continuing to move the right throttle left, you will make the aircraft circle the target counter clockwise while focusing on the target.



Gimbal trimmer

The camera angle can be adjusted within a 180 degree range by operating the gimbal trimmer to obtain a better aerial experience. Roll the gimbal trimmer to the left (see point A in the graphic below) and the camera will tilt upwards. Roll the gimbal trimmer to the right (see point B in the graphic below) and the camera will tilt downwards.

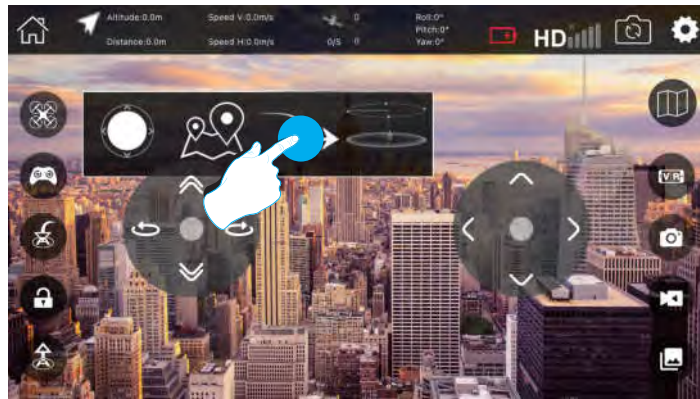


The camera can be rotated 180 degrees.

Follow Me

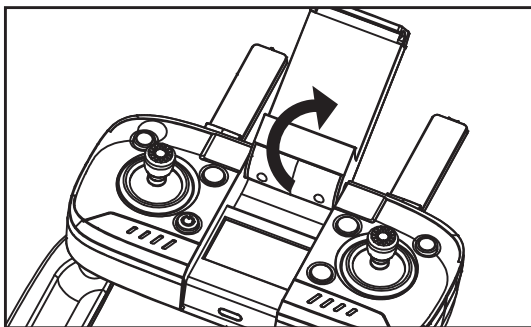
When activated, the Follow Me function will make the aircraft follow your smart phone's GPS location. To activate Follow Me, press and hold the Follow Me Mode button on app.

Note: It is important that the GPS and smart phone are correctly connected to the aircraft and that the horizontal distance between the aircraft and your smartphone is greater than 8 meters. The Follow Me function only starts after the map of your position has loaded completely.

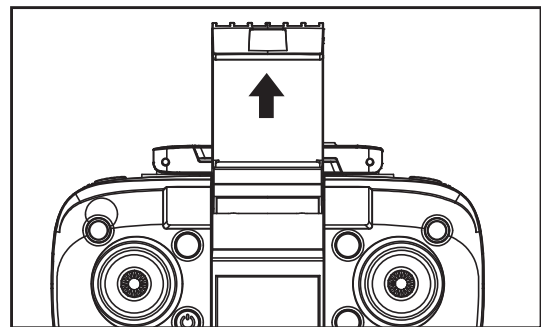


Installing the Mobile Phone Holder

1. Open the mobile phone holder (Pic. 1);
2. Adjust the mobile phone holder upward or downward according to the size of your mobile phone (Pic. 2).



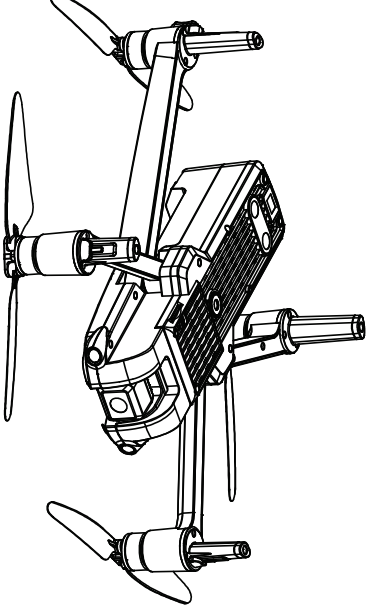
Pic. 1



Pic. 2

PART 5: Flight

This section reviews safe flight requirements and basic aircraft operations.



Environmental Requirements

1. Please don't fly in areas with extremely high temperatures, snow, strong wind ($\geq$ level 5), rain or fog.
2. Always choose a wide open area for every flight. Tall structures and large metal structures may affect the accuracy of the onboard compass and GPS system.
3. Never fly directly over people or animals.
4. To minimize interference, please do not fly the aircraft in locations near power lines, base stations, electrical substations and broadcasting towers.
5. Aircraft and battery performance is subject to environment factors like temperature. Be very careful when flying over 1000ft above sea level since the performance will be affected.
6. Your aircraft cannot use GPS within polar regions.

Flight Limits and GEO Zones

Abide by all laws and regulations when flying your aircraft. Flight limitations are applied by default to help users operate this product safely and legally. Flight limitations include altitude limits, distance limits and GEO Zones. Altitude limits, distance limits and GEO Zones function concurrently to manage flight safety when operating in GPS Mode.

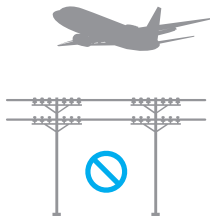
Pre-flight Checklist

Before flight, make sure that:

1. The aircraft, Remote Controller and mobile device are full charged.
2. The propellers are installed correctly.
3. The arms and propellers are properly unfolded.
4. The camera lens is clean.

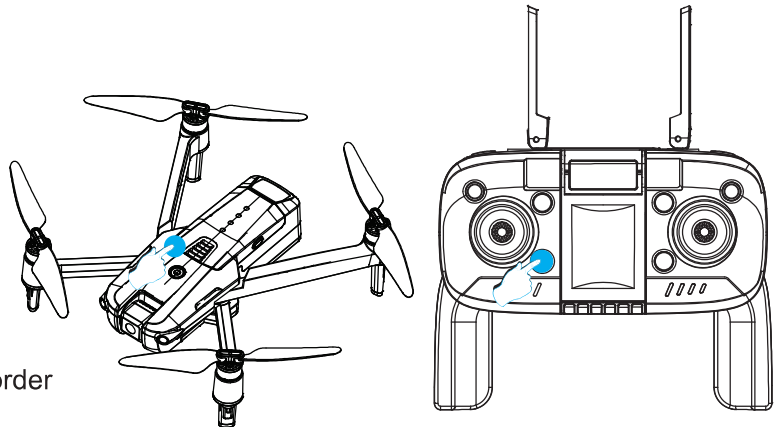
Calibrating Your Aircraft (Preparing for Flight)

Before preparing your aircraft for flight, first make sure that you have a suitable environment for flight. Avoid flying in rain or snow, or in windy conditions. Stay away from people, trees, power lines, tall buildings, airports and signal towers. Your aircraft is specifically designed for outdoor flying. Do not attempt to fly your aircraft or calibrate it indoors.



Powering On Your Aircraft and Remote Controller:

1. To power on your Remote Controller, press the Power ON/OFF button. You will hear a beep when it powers on. Unfold the two antennas.
2. To power on your aircraft, press and hold the Power button. The LED lights on the aircraft flash rapidly.
3. Once your aircraft and Remote Controller are powered on, follow the calibration steps below in order to prepare your aircraft for flight.



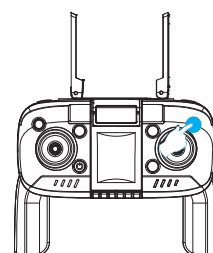
NOTE: Once you turn on your aircraft, it will go into GPS mode, and the drone and remote controller will be paired automatically.

Aircraft Compass Calibration

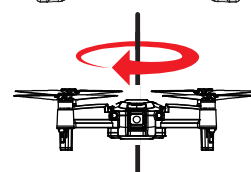
Note: When the environment is not suitable for flying, your aircraft quickly recovers a stable altitude and automatically returns to the take-off position after circling for a few seconds.

Your aircraft needs to go through the geomagnetic calibration process only when flying it for the first time from the new location. Thereafter, when flying from the same location, there is no need to go through the geomagnetic calibration process. Your aircraft can then fly under GPS mode.

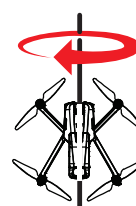
1. Press and hold the geomagnetic calibration button, until your remote controller emits a beep sound.(Pic 1)
2. Rotate your aircraft horizontally, spinning it in a clockwise direction continuously until the rear light flashes yellow, and your remote controller emits a beep sound.(Pic 2)
3. Turn the head downwards and rotate your aircraft vertically, spinning it continuously until the rear light flashes green, and your remote controller emits two beep sounds.(Pic 3)



Pic 1



Pic 2



Pic 3

When the above steps are completed, put the drone on the ground and wait for the drone's rear light to turn solid green (indicating the drone has obtained a good GPS signal to fly). Normally it will take around 90 seconds to wait for the solid green light.

Under GPS Mode, the drone can only take off when the rear light is solid green.



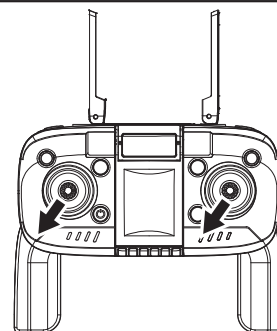
Attention: To fly in GPS Mode, please choose an open and wide open space for flight, making sure that the satellite amount is over 7. The satellites are shown on the remote controller LCD.



- Please do not calibrate the compass in strong magnetic areas, such as a magnetic field, a parking place or construction zones with underground reinforcement.
- Please do not carry magnetic materials with you (such as keys, cell phones, etc) when calibrating the compass.
- Please keep away from metal when calibrating the compass.

Gyroscope Calibration

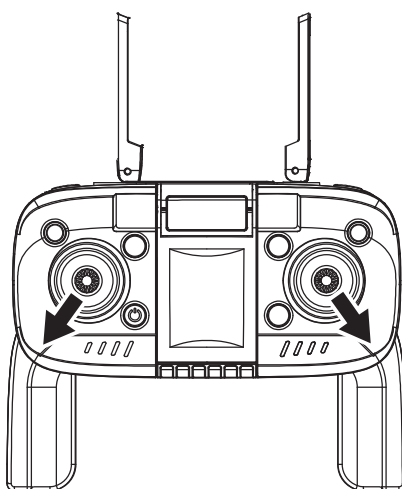
When the compass calibration is finished, place the aircraft on a flat surface and follow the actions in the illustrations-Pull the throttle stick and the directional stick all the way down and to the left simultaneously. Release them after about 10 seconds. You will notice that lights on your drone will flash as you are holding down the sticks, and will stop flashing and remain illuminated once the gyroscope is calibrated.



- The gyroscope comes pre-calibrated by default. The gyroscope does not need to be calibrated unless the aircraft is not initializing properly.
- Please make sure to place the aircraft on a horizontal surface when performing calibration. Failure to do this will affect the flight.

How to Lock and Unlock the Aircraft

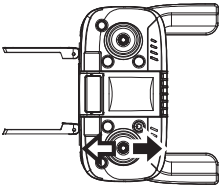
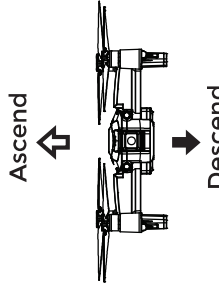
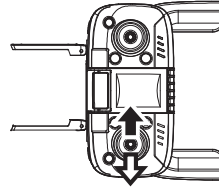
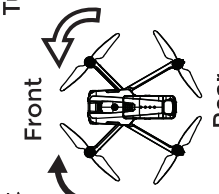
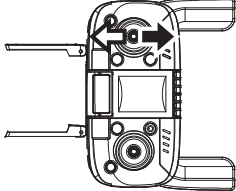
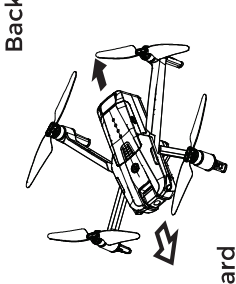
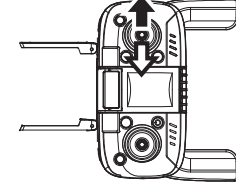
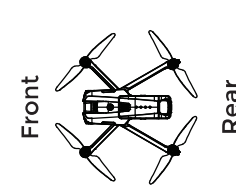
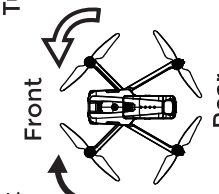
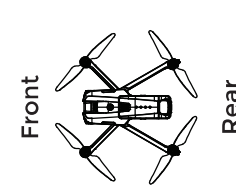
Move the left throttle all the way down and to the left. At the same time move the right throttle all the way down and to the right.



Note:

When the aircraft is locked, the rotors do not spin.
When the aircraft is unlocked, the rotors start spinning.

Operating the Aircraft

Remote Controller	Aircraft	Remote Controller	Aircraft
	 Ascend		 Descend
	 Forward		 Backward
			 Turn Left
			 Turn Right

Test Flight

Basic Flight Operation Steps

1. Place the aircraft in a wide open area so that you are directly facing the front of the aircraft.
2. Turn on the aircraft and Remote Controller.
3. Connect the Remote Controller with the aircraft and then proceed to the aircraft initialization steps.
4. Connect the DRCLSX10-NOC with your phone.
5. Unlock the aircraft after the gyroscope detection of the aircraft is complete.
6. Pull up the throttle stick and the aircraft takes off. Control the aircraft using the left and right sticks.
7. Pull down the throttle stick to land the aircraft.
8. Turn off the aircraft.
9. Remove the battery from the aircraft and then turn off the Remote Controller.

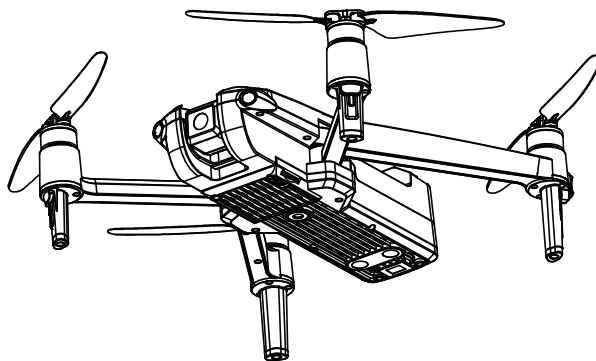
Video Suggestion and Tips

1. Do a pre-flight checklist.
2. Camera shooting angles can be adjusted by hand.
3. Fly in good weather with no wind.
4. Perform test flights to establish flight routes and to preview scenes.
5. Push the control stick gently to keep the aircraft movement smooth and stable.



Please keep proper operation and flight safety guidelines in mind for your own safety and others around you as well.

PART 6: Appendix



Product Specifications

Aircraft	DRCLSX10-NOC
Gross Weight (Battery and propellers included)	about 350g
Dimensions	Folded: 238*70*76mm (length*width*height) Unfolded: 334*338*76mm (length*width*height)
Diagonal	245mm
Max Ascent Speed	2m/s
Max Descent Speed	1m/s
Max Speed	28km/h
Flight Height Limitation	120m
Max Flight Time	20 minutes (no wind)
Max Wind Speed Resistance	≤Level4
Max Tilt Angle	35°
Max Angular Velocity	120°/s
Operating Temperature Range	0℃-45℃
GNSS	GPS
Hovering Accuracy Range	Indoor: Vertical±0.2m Horizontal ±0.8m Outdoor: Vertical±0.3m Horizontal ±1.5m

Gimbal	
Controllable Range	Tilt: -90° to 90°
Camera	
Image Sensor	1/3.2"CMOS; Effective Pixel:8.08M
Lens	FOV:approx.93° Aperture: f/2.3 Shooting Range:2m to co
ISO Range	Photo: 100-1600 (Auto) Video: 100-1600 (Auto)
Electronic Shutter Speed	Electronic Shutter:1/30s-1/150s
Still Image Size	4096X3072
Still Photography Modes	Single Shot
Video Resolution	2K:2048X1088
Color Mode	RGB Mode
Max Video Bitrate	Video 8Mbit/Transmission 2Mbit
Supported File System	FAT32
Photo Format	JPEG Format
Video Format	MP4, Compressed Format H.264
SD Cards	Support Class 4 Micro SD card up to 64G ≥ Class 4 Micro SD Cards
Operating Temperature	0℃-70℃
Remote Control	
Operating Frequency	2.440-2.471GHz
Max Transmission Distance	1.0km
Operating Temperature	0℃-45℃
Battery	3*AAA
Transmission Power (EIRP)	2.4GHz
Operating Current/Voltage	300mA@4.5V

Charger	
Input	DC 5V 2A
Charging Voltage	DC 3.8V 2A
Rated Power	8W
Aircraft Battery	
Capacity	1950mAh
Voltage	7.6V
Battery Type	LiPo
Energy	14.82Wh
Net Weight	about 83g
Charging Temperature Range	0℃-45℃
Charging Time	240 minutes (depends on the adaptor specification)
APP	
APP Name	VTI PHOENIX 2.0
Image Transmission System	WIFI5GHz
Real-time Image Transmission	720p@20fps
Latency	700-800ms
Required Operating System	iOS 11.0 or later Android 6.0 or later

PART 7: Important Statement

- This aircraft is not a toy. It should be assembled and operated properly. Pilots must operate this aircraft in a safe way. Improper operation may cause injury or property damage.
- This aircraft is suitable for pilots aged 14+ who have experience piloting an aircraft styled aircraft.
- The manufacturer of this product is not responsible for damages caused by misuse.
- Keep small accessories away from children and the infirm to avoid accidents.

Flight Safety Guidelines

Users should firmly uphold the principle of “safety comes first” when flying this aircraft. Never fly the aircraft near airports, above crowds or in zones storing dangerous goods and be mindful of the damage that can be caused by improper operation.

- Stay away from obstacles, crowds, power lines, trees or water.

Always choose a wide open area for every flight, well away from people and property. Never fly directly over people or animals. Don't fly in bad weather conditions, high temperature, snow, strong wind ($\geq$ level 5), rain or fog. Maintain a 7ft (2m) distance from the aircraft when taking off and landing.

- Keep the aircraft in a dry environment.

The aircraft is composed by sophisticated electronic components and mechanical parts. To avoid damage of the mechanical and electronic components, please keep the aircraft in a dry environment and use a clean, soft cloth to wipe the surface and keep it clean.

- Practice flying together with a skilled, experienced pilot.

Beginners are recommended to practice flying with a skilled pilot's guidance. Do not fly alone.

- Keep proper operation and safe flight guidelines in mind.

Please take a careful look at this manual before flying for important information regarding the product's functions and operating tips. Stay informed of and abide strictly by relevant local laws and regulations. Keep away from any non-flight zones and respect other people's privacy.

- Safe flying

Please make sure you are in good shape mentally before every flight. Fly the aircraft as per your flying experience. Never fly under influence of alcohol or drugs. Keep the Remote Controller at least 20 cm away from your body when flying the aircraft.

- Keep distance from a flying aircraft.

Never use your hands to touch a flying aircraft under any circumstance. Don't approach and touch a landed aircraft before its propellers are completely locked.

- Keep away from heat sources

This aircraft is made of metal, fiber, plastic, electronic components and other materials. Please keep it away from heat sources to avoid deformation or even damage caused by sun exposure and high temperature.

- Environmental protection requirements

To protect our lovely planet, please recycle this aircraft as per local laws and regulations.

FCC Compliance Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

VTI 1 YEAR WARRANTY

This warranty covers the original consumer purchaser only and is not transferable.

This warranty covers products that fail to function properly **UNDER NORMAL USAGE**, due to defects in material or workmanship. Your product will be repaired or replaced at no charge for parts or labor for a period of one year.

What Is Not Covered by Warranty

Damages or malfunctions not resulting from defects in material or workmanship and damages or malfunctions from other than normal use, including but limited to, repair by unauthorized parties, tampering, modification or accident.

To Obtain Warranty Service and Troubleshooting Information:

Call 1-800-592-9541 for 24/7 support.

Sakar International Inc
195 Carter Drive Edison, NJ, 08817, USA

To receive Warranty service along with the name and address of an authorized product service center, the original consumer purchaser must contact us for problem determination and service procedures. Proof of purchase in the form of a bill of sale or receipted invoice, evidencing that the product is within the applicable Warranty period(s), **MUST** be presented in order to obtain the requested service. It is your responsibility to properly package and send any defective products along with a dated copy of proof of purchase, a written explanation of the problem, and a valid return address to the authorized service center at your expense. Do not include any other items or accessories with the defective product. Any products received by the authorized service center that are not covered by warranty will be returned unrepared.

