USER GUIDE

kogan.com

HORIZON 4K DRONE

KAHRZNDRN2A

SAFETY & WARNINGS

Ensure to read all instructions and warnings in this user guide prior to first use. Retain this user guide for future reference.

WARNING: This drone may need to be registered. Check with your local authority on the rules for registration.

- Do not attempt to touch the drone whilst it is operating under any circumstances.
- This drone is not a toy and can be dangerous when used incorrectly. Follow all instructions while operating. Disassembling or modifying the drone arbitrarily, operating improperly, or being unfamiliar with this product may lead to an accident and possible injuries.
- This drone is intended for use by persons aged 14 years or older. It is recommended that people between 14–18 years operate the drone under adult supervision.
- Ensure the drone is operated in a safe environment.
- It is recommended that you seek the assistance of an experienced drone pilot before attempting to fly the drone for the first time. Asking a local expert is the best way to properly assemble, set up, and fly your drone for the first time. It requires a certain degree of skill to operate and is subject to normal wear and tear.
- Do not fly this drone higher than 120 metres above ground level.
- Do not fly multiple drones simultaneously. Only one drone can be flown at any given time.
- Do not allow the drone to fly out of visible range.
- Ensure the drone is flown at least 30 metres away from any people.
- Do not fly the drone over populated areas (for example, beaches, parks, and event venues).
- Do not fly drones within 5.5km of airports. Many locations are considered no-fly zones and you must ensure that you fly in areas that align with local laws and ordinances.
- Do not record or photograph people without consent.
- Drones are prone to accidents and failures when piloted incorrectly. Operators are responsible for their actions as well as any damage or injury caused by pilot error and radio interference.
- This drone is suitable for indoor and outdoor use. Always fly in a place clear of obstacles and do not fly the drone in a way that would cause hazards to nearby people and property.
- Do not operate the drone in unsafe conditions and keep clear of heat sources, wires, or electric power sources.

- Do not fly the drone over areas affecting public safety or where there are emergency operations taking place.
- This drone contains electrical components. Always keep this drone away from water and other liquids. Exposure to water or moisture in any form can cause this drone to malfunction resulting in a crash.
- To avoid a potential fire hazard, do not short, reverse the polarity, or puncture batteries. Battery charging must be done under supervision and in a location out of reach of children.
- Remove the batteries if they will not be used on the drone for an extended period. Always dispose of old batteries according to the laws of local environmental authorities.
- Li-Polymer batteries pose higher operational risks compared to other battery types; thus it is imperative to follow its usage instructions.
- Avoid contact between the battery and metallic objects.
- If there is an increase in battery temperature after operation, cease use immediately and allow it to cool down. Continuous use of this battery may cause it to expand, deform, explode, or result in potential fire hazards.
- Do not place heavy objects directly onto the drone or any of its components.
- Images used in this user guide are for reference only.

Battery warnings

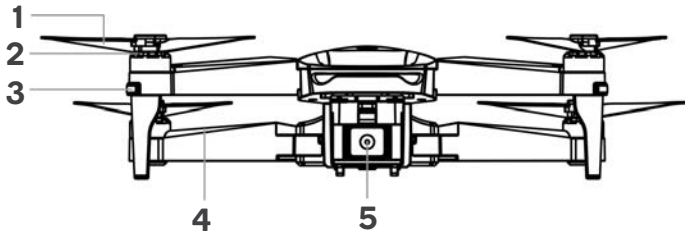
- There is a certain risk when using a lithium battery. It may cause fire, bodily injuries, or property loss. Users must be aware of the risks and take full of responsibility if using the battery improperly.
- If battery leakage occurs, avoid contact with your eyes or skin. If there is contact, wash your eyes with water and seek medical care immediately.
- Remove the plug immediately if there is any peculiar smell, noise, or smog.
- Do not put the battery into a fire or place it near other heat sources.
- Do not use other cables to charge the lithium battery to avoid the danger of explosions.
- Do not charge a diluted or outworn battery.
- Do not overcharge the battery. Unplug the charger once fully charged.
- Do not charge the battery next to inflammables (for example, carpet, timber floors, wood furniture, or on the surface of electro-conductive objects).
- Always keep an eye on the battery when charging.
- Do not charge the battery if it has not had sufficient time to cool after use.
- Do not short-circuit the positive and negative terminals of the battery. Do not put the battery together with small metal parts.
- The ambient temperature when charging is between 0–40°C.
- Do not dispose of the battery as rubbish. Familiarise yourself with the local disposal laws and follow them accordingly.

COMPONENTS LIST

- Drone
- Remote control
- Battery
- Spare propeller (x4)
- Screwdriver
- USB to 3-pin cable
- User guide

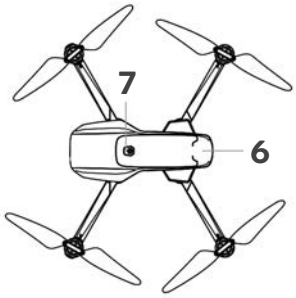
OVERVIEW

Drone – Front view



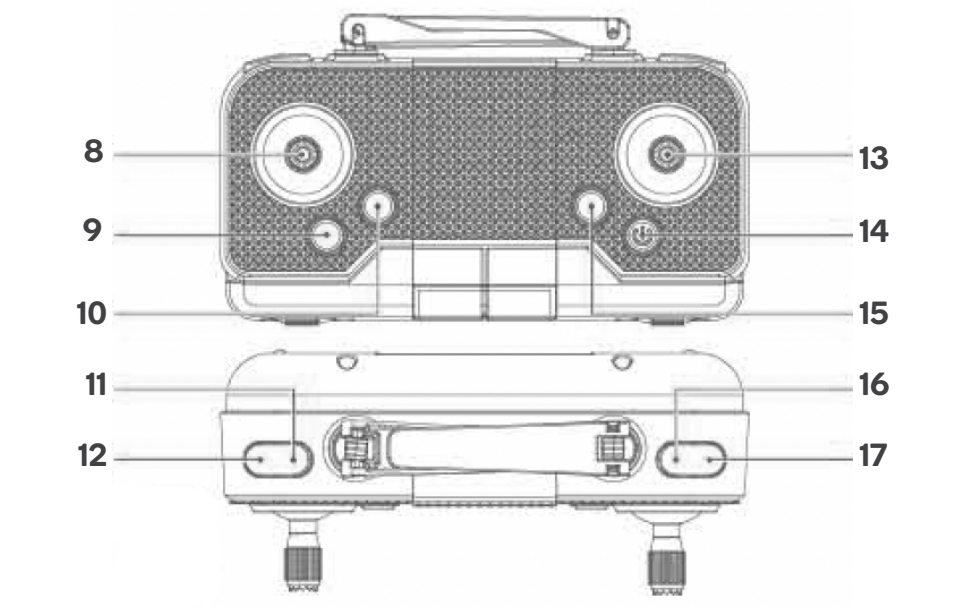
1 Propeller
2 Motor
3 Indicator light
4 Arm
5 Camera

Drone – Top view



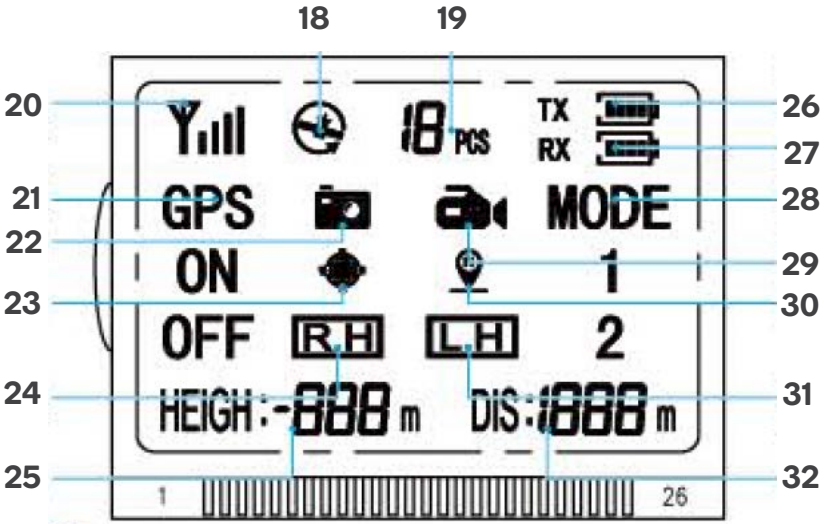
6 Battery
7 Power button

Remote control – Front view



8	Rise/Lower/Rotate left/Rotate right	**13**	Forward/Backward/bank left/bank right
9	One-key return (short press) Headless mode (long press)	**14**	Power switch
10	Geomagnetic calibration (short press) GPS mode On/Off (long press)	**15**	One-key unlock/One-key take-off/landing (short press) Emergency stop (long press)
11	Capture photo (short press) Record video (long press)	**16**	Camera fine tuning down
12	Speed switch	**17**	Camera fine tuning up

Remote control – display



18	GPS satellites icon	**26**	Remote battery indicator
19	GPS satellites number	**27**	Drone battery indicator
20	Remote control signal	**28**	Left hand/Right hand mode
21	GPS mode	**29**	Record video
22	Capture photo	**30**	Home mode
23	Headless mode	**31**	Low speed
24	High speed	**32**	Distance value
25	Height value		

CSJ GPS app interface

33	Home	**40**	Settings
34	Flying record	**41**	Battery level
35	One-key take off/landing	**42**	Capture phone/record video
36	One-key return	**43**	Shutter
37	Additional features	**44**	Gallery
38	Compass	**45**	Wi-Fi signal
39	Flight status	**46**	GPS signal

App interface with movement controls

47	VR stereoscopic mode	**55**	Waypoint flying
48	Lens flip	**56**	Smart follow
49	Gesture mode	**57**	Unlock
50	Surrounding flying	**58**	Rocker controller
51	High/low speed	**59**	Add music
52	Find drone	**60**	Pan/Tilt/Zoom adjustment
53	Lens filter	**61**	Zoom
54	Distance information	**62**	Record sound

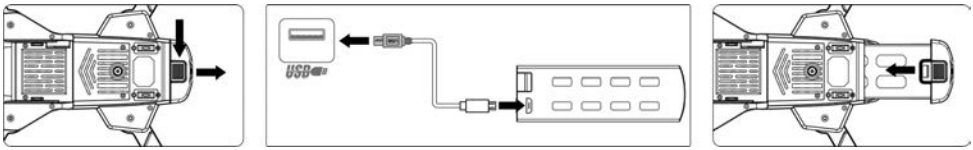
BEFORE USE

Charging the battery of the drone

1. Press on the battery at the back of the drone, then pull the battery out.
2. Connect one end of the USB to 3-pin connector cable into the 3-pin connector on the bottom of the drone. Connect the other end of the cable to a USB power adapter (not included).
3. Plug the power adapter into a wall socket and turn it on to start charging. The table below reflects the battery percentage and corresponding lights on the battery. A full charge takes approximately four hours.

Lights	Battery percentage
Red light is illuminated, and blue light is flashing	<30%
Red and blue lights are illuminated; white light is flashing	30–80%
Red, blue, and white lights are illuminated; green light is flashing	80–99%
All four lights illuminated	100%

4. After being fully charged, unplug the battery from the adapter and reinsert the battery into the compartment at the back of the drone. There is a lip on the battery, so ensure to firmly insert the battery and you hear a click to confirm it is secure.



Notes:

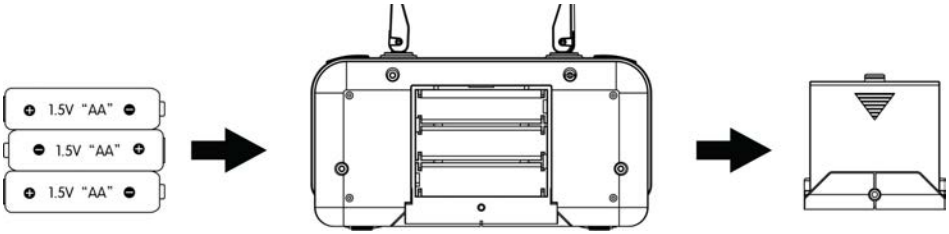
- Ensure that the adapter's voltage and plug meet local standards.
- If the adapter is overheating when charging, the drone has been charged excessively. This may cause damage and charging must be ceased immediately.
- When flying, the indicator lights will be slowly flashing if the drone is running on low battery and will emit a beep. The drone must be landed and charged immediately.
- After flying and landing, allow the battery to cool for 30 minutes before attempting to remove the battery to charge.

Remote control

The remote control needs x3 AA batteries (not supplied) to operate.

1) Open the battery cover.

2) Noting the polarity markings (+/–), insert x3 AA batteries into the remote control. Reattach the battery cover.



Notes:

- Do not mix old and new batteries together.
- Do not mix different types of batteries.

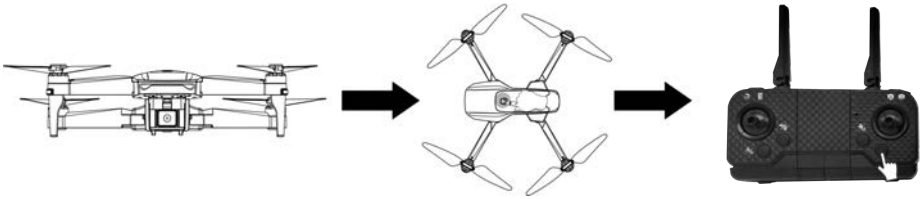
PAIRING WITH THE REMOTE CONTROL

1. Drone pairing

Place the drone on a flat surface. Press the power button on the drone, followed by pressing the power button on the remote control.

The remote will beeps and the drone indicator will begin flashing.

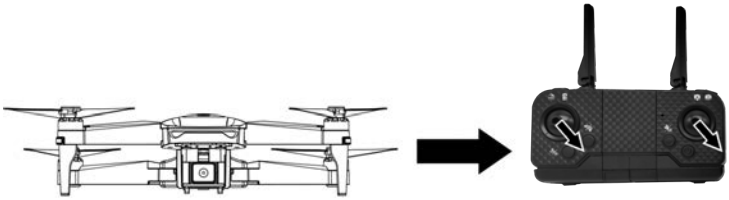
Once the indicator has turned the drone has paired to the remote control.



2. Gyro calibration

After drone pairing, the gyroscope must be calibrated. Ensure the drone remains on a flat surface.

Move and hold the left and right joysticks on the remote control for 3 seconds in the positions indicated, then the remote control will make a beep sound. The indicator lights will then flash quickly for 3 seconds to confirm calibration success.



Note:
When taking off, if it leans towards to one side, it can also be corrected by recalibrating the gyroscope.

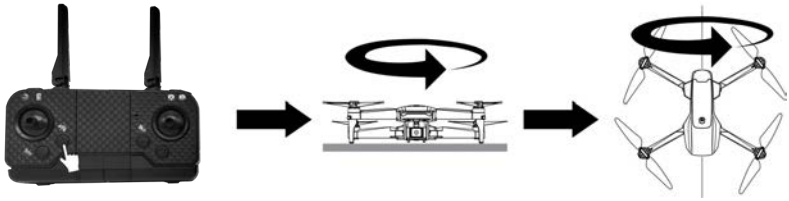
3. Geomagnetic calibration

Next, the drone will need to be horizontally and vertically calibrated.

Press and hold the geomagnetic calibration button for 3 seconds, The remote control will make a beep sound and the indicator lights will turn off.

Slightly lift and rotate the drone in a horizontal direction 360° on the ground or until you hear a beep. The front indicator light will illuminate, confirming horizontal calibration is successful.

Pick up and hold the drone upright. Whilst holding the drone upright, spin around until you hear 2 beeps. The back indicator light will illuminate, confirming vertical calibration is successful.



4. GPS calibration

After gyro and geomagnetic calibration, the indicator lights will be flashing quickly.

Place the drone on a flat surface and when the indicator lights solidly illuminate and the remote control emits a beep, GPS calibration is complete.

Notes:

- If flying indoors, the GPS must be turned off. Long press the GPS button to turn off the GPS switch. The indicator lights will then turn off.
- If flying outdoors, keep the GPS turned on.

PAIRING WITH THE APP

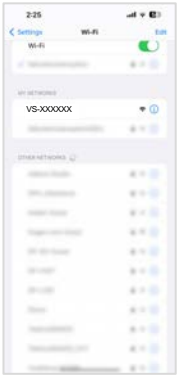
App installation

Apart from the remote control, the drone can also be controlled by using the 'VS GPS PRO' app.

1. Scan the below QR code to download the 'VS GPS PRO' app according to your phone's operating system.

iOS **Android**

2. Place the drone on a flat surface. Press the power button on the drone. On your phone, go to the Wi-Fi settings and select the Wi-Fi network, 'VS-XXXXXX'.



3. Return to the 'VS GPS PRO' app and the camera's live image should show on the display.

OPERATION

Unlocking

Before the drone is flown, it needs to be unlocked. This is a protection measure to prevent the drone from flying without warning.

1. Place the drone on a flat surface.
2. Push the left and right joysticks diagonally downwards on the remote control or press the unlock button. Alternatively, if using the app, touch the unlock icon.
3. After unlocking, the propellers will start spinning. Wait for 15-20 seconds whilst the propellers are spinning before taking off. On the app, a 'ready to fly' prompt will appear on the bottom left corner of the display.

Take-off and landing

After unlocking, press the take-off button and the drone will start flying at a height of two metres.

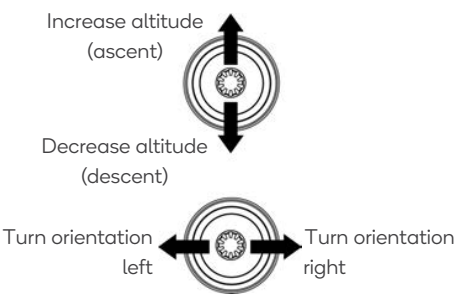
Press the land button and the drone will slowly descend to the ground and land.

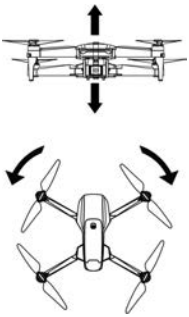
If using the app: Tap on the take-off icon for the drone to start flying, and the land icon to have the drone land back on the ground.

Flight controls

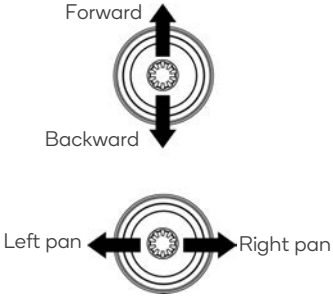
- Use the left joystick to control the flight altitude and to turn the drone's orientation left and right
- Use the right joystick to control the forward, backward, left, and right-pan movements
- If the left joystick is released, the drone will hover at the given height

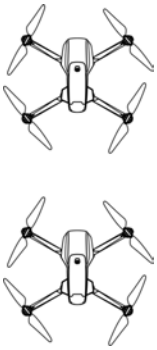
Left joystick





Right joystick





If using the app: Tap on the show/hide movement controls icon.

Use the altitude, orientation, flying forwards/backwards/left/right controls to direct the drone.

Notes:

- The drone must only be flown during the day in suitable weather conditions. Do not fly the drone through cloud or fog.
- When the drone is flying within one metre from the ground, it will have reduced drag which may lead to the drone being unstable. The lower the drone flies, the more unstable it will become.

Changing the speed

This drone features low-speed, and high-speed modes. By default, the drone flies under low-speed mode.

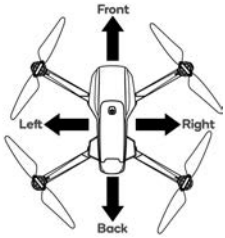
- To change to high-speed mode, push the speed switch button on the remote control. The display will show “R.H” and the drone will enter high-speed mode.
- To return to low-speed mode, push the speed switch button on the remote control. The display will show “L.H” and the drone will enter low-speed mode.

Headless mode

By default, the flight controls of the drone are based on the position of the nose of the drone at any given time. For beginners, this may make the drone difficult to control if the drone changes its orientation.

Activating headless mode allows easier control of the drone as it will move according to the joystick controls regardless of where the nose is facing. To activate headless mode:

1. Ensure the drone is aligned straight on a flat surface to allow the gyroscope to detect the direction of the nose to fly straight.
2. Long press the headless mode button. To exit headless mode, long press the headless mode button again.



Return

The return function allows the drone to land at its original start point.

When flying, short press the return button on the remote control. If you wish to cancel whilst it is flying back, short press the return button again.

If using the app: Tap on the return icon. If you wish to cancel whilst it is flying back, tap on the return icon again.

Waypoint flying mode

This mode allows users to set different points on a map for the drone to fly to when outdoors. All points must be within 100 metres of the drone's current position.

Using the app:

1. Tap on the waypoint flying icon. A map will appear with the drone's current location.
2. Tap on the location on the map of where you wish the drone to fly to. If you wish the drone to fly to multiple locations, continue tapping on the various locations. The map will create a path linking all waypoints. If you wish to delete certain waypoints, tap 'Delete single'. If you wish to delete all waypoints, tap 'Delete all'.

3. After setting the desired waypoint/s, tap 'GO'.
4. Swipe right on the slider that appears, and the drone will then save the waypoints and begin flying according to the waypoint/s.

Note:
The orientation of the drone can be controlled whilst flying to waypoints.

Setting a flying zone

Users can set a radius between 5–100 metres from the current point that permits the drone to fly within the selected radius. The drone will not fly outside of this flying zone.

Using the app:

1. Tap the flying zone icon and enter the radius in the pop-up window.
2. Tap 'OK', and then the flying zone has been successfully set.

> **Note:**
> When the drone is on low battery, users will be unable to set a fly zone.

Device tracking mode

This mode allows the drone to follow the connected mobile device. When the device moves its position, the drone will follow the location of the device.

Using the app, tap the device tracking icon to activate this mode.

Tap the device tracking icon again to deactivate this mode.

> **Note:**
> If you receive a phone call on the device, or if the drone is on low battery, the drone will automatically exit device tracking mode.

Taking photos and recording videos

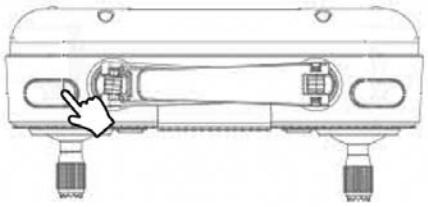
To take photos, press the capture button on the remote control.

If using the remote control: Short press the capture button.

To record videos, press and hold the capture button for 3 seconds. Press and hold the capture button for 3 seconds again to end the recording.

If using the app: Tap on the video icon to start recording. The recording indicator will start flashing on the connected device's display and the recording will begin. Tap the video icon again to end the recording.

All photos and videos can be viewed in the gallery.



> **Note:**
> If using the remote control buttons, the app must still be turned on.

Viewing the current location of the drone and connected device

Tap on the find drone icon in the app. A map will then appear showing the current location of the drone.

Alternatively tap on the compass icon on the bottom left corner of the app. A map will then appear showing the current location of the drone.

Gesture control

Gesture control allows users hands-free operation to take photos and record videos.

Tap the gesture photo/video icon on the app, then press and hold the slider to the right to activate the mode.

To take a photo, make a V sign with your right hand towards the camera. Your connected device's display will show a three-second countdown before it takes a photo.

To record a video, face your palm towards the camera and the drone will start a video recording after a three-second countdown. Face your palm towards the camera again to stop recording.

All photos and videos can be viewed in the gallery.

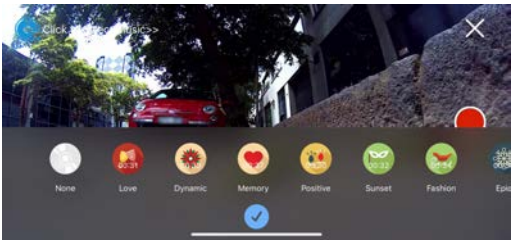
Notes:

- When doing gestures, place the gesture at the centre of the image.
- Recognition of gestures may decrease under low light conditions, when facing direct sunlight, when there is a weak Wi-Fi connection, or other signal interference.

Adding music

This drone features preloaded music files that can be layered over video recordings.

1. Tap the add music icon in the app, then tap the upper left corner of the app.
2. Browse and select a music track. The selected track will be highlighted at the bottom of the screen.
3. Once selected, tap the tick icon. Tap the red circle to start recording. After the recording has finished, two videos will be saved to the gallery (one with, and one without the selected music).



CLEANING & CARE

Once cooled, wipe the drone with a dry cloth to clean any dust or debris.

Propeller replacement

If the propellers are damaged or otherwise need replacing, follow the steps below:

1. Use the screwdriver to remove the screws that are attached to the current propellers. Remove the propellers.
2. Noting the 'A1' and 'B1' lettering on the spare propellers, insert the spare propellers onto the matching 'A' and 'B' motors.
3. Use the screwdriver to tighten the screws onto the propellers to secure them into place.

Storage

When not in use, the battery needs to be taken out of the drone. To extend the life of the battery, ensure it has at least 80% charge before storing.

Place the drone and battery in a cool, dry area, away from sunlight.

TROUBLESHOOTING

Problem	Possible cause/s	Solution/s
The drone does not respond to the remote control or app and the indicator lights are flashing.	• GPS calibration has failed • The drone is on low battery	• Ensure the drone is outdoors, and retry calibrating the GPS • Charge the drone's battery
When using the app after calibration, it shows there an issue with the compass.	The compass has not been calibrated correctly.	Turn off then restart the drone. Restart the calibration process.
The propellers are spinning but the drone is not taking off.	• The drone is on low battery • The propellers are deformed	• Charge the drone's battery • Replace the propellers • Wait for 15–20 seconds or for the 'ready to fly' prompt on the app
The drone is shaking unstably.	The propellers are deformed.	Replace the propellers.
The drone does not fly smoothly.	• The propellers are deformed • The motor has failed	• Replace the propellers • Contact **help.Kogan.com** for assistance
After crashing, the drone was restarted but it is flying uncontrollably.	The triaxial acceleration sensor has lost its balance due to the crash.	• Place the drone on a flat surface for 5–10 seconds. • Perform gyro calibration
After crashing, the drone will not turn on.	Battery dislodged	Remove and re-insert the battery.

Need more information?

We hope that this user guide has given you
the assistance needed for a simple set-up.

For the most up-to-date guide for your product,
as well as any additional assistance you may require,
head online to **help.kogan.com**

kogan.com