TRAIL 1080

Complete User Guide

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CONTENTS

Please read this section carefully before using your Kaiser Baas Trail 1080 1080 Drone.

By operating this product, you hereby agree to these disclaimers and you have read and understood the warnings and conditions fully.

This product is not suitable for people under the age of 14. Always observe the safe flying instructions within this User Guide, as well as the guidelines and regulations of your local aviation authorities.

Above all, maintain a safe distance from people and property when operating your Trail 1080 1080 Drone – a safe distance of 10m is recommended.

Kaiser Baas accepts no liability for damage(s) or injuries incurred directly or indirectly from the use of this product, including but not limited to the following conditions:

- Failure to follow the full instructions and cautions in the User Guide, pertaining to correct assembly and safe operation.
- Damage(s) or injuries caused by erratic operation or poor piloting decisions.
- Damage(s) or injuries caused by mechanical failures as a result of neglect, including the erosion and aging of product components.
- Damage(s) or injuries caused by the Drone being flown in the following conditions:
- Unfavourable lighting; where the Pilot's ability to see the Drone clearly is diminished.
- Inclement weather; moderate to high winds, rain, snow or hail.
- Flying near electrical hazards, such as power lines or towers.
- Flying in or near fire, floods, tsunamis, ice, avalanche, landslide, earthquake, etc.
- Damage(s) or injuries incurred due to users under the influence of drugs or alcohol, suffering dizziness, fatigue, nausea and any other condition; physical or mental that could impair the Pilot's ability to fly responsibly and within the boundaries of the law.

- Damage(s) or injuries caused by malfunctions or "hacks", refits or the replacement of original components with non-Kaiser Baas provided accessories and/or parts.
- Damage(s) or injuries caused by the misuse or incorrect operation of the battery, protection circuits, Remote Control Transmitter or Battery Charger.
- Damage(s) or injuries caused by flying the Drone in abnormal conditions and allowing external substances to come into contact with the Drone e.g. water, oil, soil, sand or any other material that could enter the Drone and its internal compartments, including the battery.
- Damage(s) or injuries caused by flying in areas such as those with: magnetic interference, radio interference, government regulated no-fly zones or airports.
- Any other losses that are not covered by the scope of Kaiser Baas liability.
- Kaiser Baas reserves the right to make changes to this User Guide if required. Please check the Kaiser Baas website for the most up to date version of this guide: www.kaiserbaas.com/support.

The information within this manual is subject to change without notice.

Operating Guidelines

Even though the Trail 1080 Drone may look small and light, there are important safety considerations to bear in mind when operating this device. Always observe the following guidelines:

Do not fly the Drone within 10m of people anywhere. Consider your personal liability when you choose to operate your Drone.

Do not attempt to handle or catch the Drone while it is in operation.

Do not attempt to handle the Drone while the rotor blades are still spinning.

Do not allow others to approach the Drone while it is in operation and the rotor blades are in motion.

Always make sure that you have completely “disarmed” the Drone before handling.

Always maintain visual line-of-sight (vlos) with the Drone. Always fly between official sunrise and official sunset, local time.

Never engage in careless or reckless manoeuvres. Consider the impact reckless behaviour might have on other Drone enthusiasts and future pilots. Never operate your Drone when intoxicated or when you are incapacitated in any other way. Always follow your local aviation authority’s guidelines.

Battery Guide

It is imperative that only a Kaiser Baas Trail 1080 Drone battery is used inside the Trail 1080 Drone. Do not use any third-party or unknown accessories or batteries. Always ensure your Drone battery is charged before flight.

Battery Safety Warnings

Do not disassemble the battery. Do not short-circuit the battery.

Do not ever poke or puncture the battery with any blunt or sharp instrument.

DO NOT ever poke or puncture the battery with any blunt or sharp implement [WARNING] There is a high risk of it igniting!

Do not ever leave the battery near an open flame or heat source.

Do not immerse the battery in water. Do not charge the battery in direct sunlight.

Never leave a charging battery unattended.

Only remove the battery from its supplied charger when the charging cycle is complete.

Do not reverse charge or over-charge the battery.

Always charge the battery in a designated space, away from people and animals.

If the battery becomes bloated or appears to be inflated discard the battery immediately.

Instructions to discard a bloated battery: Place the bloated battery in a bucket filled with salt water (200 grams salt to 1-litre water) and leave the battery in the solution for three days. You may now dispose of the battery through your local recycling centre. Never use your battery after conducting the discard process.

If the battery has a high surface temperature, leave it to cool before you try to re-charge it.

Always ensure the battery is free from all damage and deformation before use.

If you see any sign of smoke coming from the Drone or battery area - stop operating immediately

– when safe, disconnect and remove the Drone battery.

Do not use the battery with unspecified equipment.

Do not touch a leaking battery directly. Never let battery contents touch your skin or clothing. If contact occurs, seek medical advice immediately.

Do not throw or cause any trauma to the battery.

Do not put the battery in a microwave or high pressure container.

Do not charge the battery if the ambient temperature is below 0°c or above 45°c.

Always use the supplied charger and observe charging requirements.

Always store the battery in a safe and cool place and never store the battery fully charged.

Pre-Flight Checklist

- Do a complete check of your surroundings; look for hazards above, in front and behind you.
- Be especially aware of things like power lines and nearby people and animals. If these hazards exist, do not deploy your Drone and consider a new take-off location.
- Do not fly in inclement weather or moderate to high winds.
- Do not fly in populated areas as unforeseen flight hazards may occur.
- Remember you are the pilot. Safety is your responsibility.
- Do not fly near airports/controlled airspace. Ensure that you are at least 5.5Kms from any airfield and you are adhering to any regulations and laws laid out by your local aviation authority.
- Remember checking your distance to these areas is your responsibility
- Never fly your Drone near large crowds or above unwilling spectators.
- Make sure that you have the full permission of people within flying range of your Trail 1080 Drone and do not fly your Drone where people have not given permission or have requested that you not fly.
- Ensure the Drone is orientated in the desired direction.

It is the responsibility of the Pilot to properly research and familiarise themselves with the regulations surrounding the flying of their UAV. This list serves as a guide only:

- Australia: casa.gov.au
- New Zealand: caa.govt.nz
- UK: caa.co.uk/home
- Ireland: iaa.ie
- Scotland: transportstyrelsen.se/en/aviation
- France: ecologique-solidaire.gouv.fr

The Trail Drone makes the perfect travel companion for capturing all your adventures in HD. The GPS and Intelligent Flight Modes make flying easier than ever before.

If you are new to flying Drones, you can expect to be up and flying in a short time. Of course, you need to familiarize yourself with the safety, operating and controls of the Trail Drone first! Give yourself time to become accustomed to the feel of the Drone and effect of the controls.

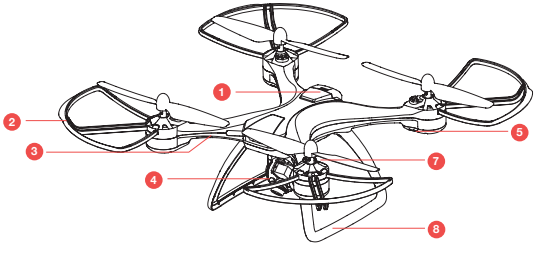
The Trail Drone can be used with its camera or Remote Control Transmitter in the following configurations.

Drone and Remote Control Transmitter (No FPV)

Drone, FPV App and Remote Control Transmitter

Key Features

- 1080P Video
- Waypoint Modes
- Orbit mode
- Follow-me mode
- Live FPV/VR
- Auto Hover
- Headless Mode
- Auto Take-off/Landing
- 1 Key Return home
- Low battery return
- WiFi



1. Power ON / OFF

HOLD FOR 3 SECONDS

2. Rotor Blade Guards

PROTECT ROTOR BLADES

3. Rotor Blades

STABILISE THE Drone

4. 1080P Camera Module

VIDEO & PHOTO CAPTURE

5. Indication Lights

BLINK RED / GREEN

6. Battery

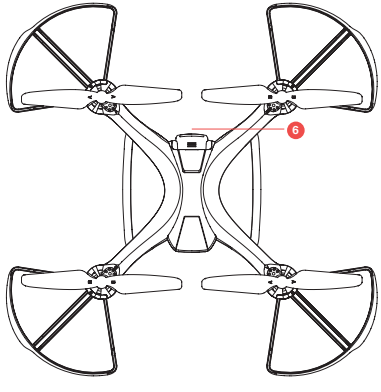
PRESS & PULL TO OPEN

7. MicroSD Card

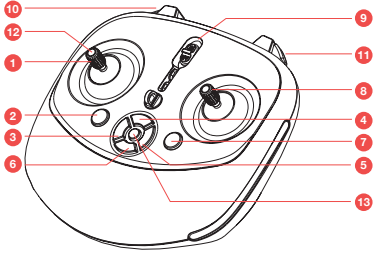
VIDEO & PHOTO STORAGE

8. Landing Feet

ALLOW FOR SOFT LANDING



CONTROLLER DIAGRAM



1. Throttle Control
INCREASE / DECREASE THRUST

2. Take Off & Landing
BEGIN / END FLIGHT

3. Orbit Mode
CIRCLE POINT OF INTEREST

4. Camera Tilt
ADJUST CAMERA ANGLE UP

5. Follow Me Mode
FOLLOW YOUR MOVEMENT

6. Camera Tilt
ADJUST CAMERA ANGLE DOWN

7. Photo / Video
SHORT PRESS / LONG PRESS

8. Directional Control
FLIGHT MANOUVERING

9. Power
ON / OFF

10. Speed
CHANGE LEVELS

11. Return Home
RETURN TO POINT OF ORIGIN

12. Headless Mode
PRESS TO ACTIVATE

13. Waypoint Mode
SET FLIGHT PATH

BATTERY CHARGING

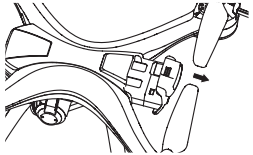
To charge the Drone Battery

1. Remove the battery from the Drone by sliding it out of the Drone battery compartment.
2. Connect the USB wall charger (not included) to the Micro USB charging port on the battery using the supplied charging cable.
3. The Battery features three LED indicator lights that will flash during charging and become solid when charging is complete.
4. A full charge cycle will take approximately 2-3 hours by 1A charger adapter as the battery capacity is 1500mAh.

Low Battery

The Trail 1080 drone is also able to return to its home point when the battery level is low when the drone is on the GPS mode. In the normal mode, the Drone LED Lights will flash when the drone is in Low Power Mode. When the LEDs are flashing you should bring the Drone to a complete stop.

1



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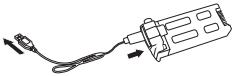
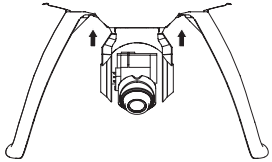


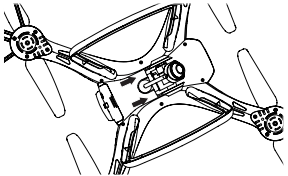
Camera Installation

Before you fly the drone, make sure the camera is properly attached to the bottom of the drone.

To attach the camera;

1. Plug wires into the right sockets
2. Place the camera facing forward
3. Slide the camera through the groove until it clicks in.





Rotor Blades Assembly

It is important that only Kaiser Baas Trail 1080 Drone Rotor Blades are fitted to this drone. Your Drone will come ready to fly with Rotor Blades attached.

Disassembly

Use the provided screwdriver to untighten the screw in an anti-clockwise direction.

Remove the Rotor Blade by pulling up and off the motor axis bar.

Insert the Rotor Blade onto the motor axis bar. Only install the Rotor Blades to the corresponding clockwise/anti-clockwise motor. A letter is marked on each blade to indicate which motor it should go on. Incorrect installation will cause severe instability. Refer to the diagram.

Use the provided screwdriver to tighten the screws in a clockwise direction.

Assembly

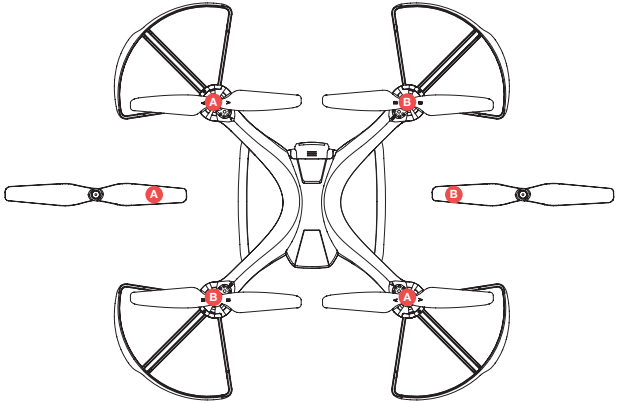
Insert the Rotor Blade onto the motor axis bar. Only install the Rotor Blades to the corresponding clockwise/anti-clockwise motor. A letter is marked on each blade to indicate which motor it should go on. Incorrect installation will cause severe instability. Refer to the diagram. Use the provided screwdriver to tighten the screws in a clockwise direction.

Rotor guard installation

It is highly recommended to install the Rotor Blade Guards before using the Drone toensure safety.

[WARNING] Never use Rotor Blades with any signs of damage or wear and tear. This includes chips, scratches and cracks. Damaged Rotor Blades can cause the Drone to fail in- flight and may result in damage to persons or property.

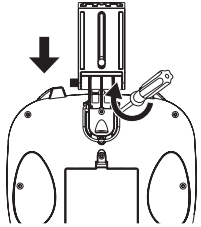
[WARNING] Never touch the Drone or the Rotor Blades when the motors are spinning.



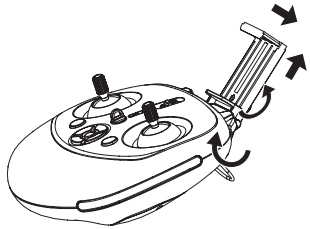
Smartphone Holder

Before you start flight operation, Smartphone holder must be mounted to the remote controller.

Slide the holder into the groove at the back of the remote control until it clicks in.



Place the smartphone into the holder and tighten the screw at the back of the holder.

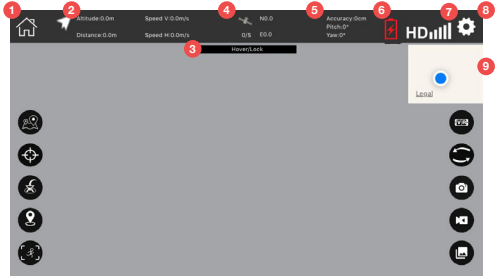


Install the KB Trail 1080 App

Download and install the KB Trail 1080 App on your Smartphone.

The Trail 1080 App features Wi-Fi and can record video, take photos and adjust the drone parameters.

Note: Some of the App features are only using from the controller.



1. Home
RETURN TO HOME SCREEN

2. GPS Co-ordinates
ALTITUDE / DISTANCE

3. Hover / Lock
Drone STATUS

4. Satellite
NUMBER OF SATELLITE CONNECTIONS

5. Flight Details
ROLL / PITCH / YAW

6. Battery
BATTERY STATUS

7. Wifi Signal
STRENGTH OF SIGNAL

8. Settings
CUSTOMIZE Drone SETTINGS

9. Map
SHOWS Drone POSITION

10. Waypoint Mode

SET FLIGHT PATH

11. Gyro Calibration

MAINTAIN STABILITY

12. Return to Home

RETURN TO POINT OF ORIGIN

13. Orbit Mode

CIRCLE POINT OF INTEREST

14. Follow Me Mode

FOLLOW YOUR MOVEMENT

15. VR Mode

FIRST PERSON VIEW

16. Camera Flip

SWAP THE CAMERA

17. Photo

PHOTO CAPTURE MODE

18. Video

RECORD

19. Gallery

PREVIEW YOUR MEDIA

To operate your Drone, you must first pair to your Remote Control Transmitter followed by smartphone before every flight. Ensure your Drone and Remote Control Transmitter are fully charged and follow these steps in order:

Trail 1080 drone must be flown outdoors. Before pairing, take your drone outside and place it on a leveled surface.

Remote Control

1. Turn on your Drone by holding the power button (number) for 3 seconds.
2. The Drone lights will flash indicating it is ready to pair to a Remote Control Transmitter.
3. Turn on the Remote Control Transmitter.
4. Using the Left Throttle/Yaw Stick move it to the maximum UP position and bring it to the DOWN position, you will hear two beeps.

The Drone is now paired to the Remote Control Transmitter.

Smartphone

Mount the Smartphone to the Remote Control Transmitter using the Smarthone holder.

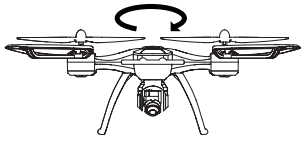
1. Once the drone is paired with the Remote Control Transmiter, open your smartphone and go into the WiFi settings, turn the WiFi on if it is off.
2. Select KB Trail 1080 from the Wi-Fi list
3. Once connected, launch the KB Trail 1080 App on your phone.
4. Click the Ready to Fly tab and then Start Flight.

It is important that you calibrate the gyroscope and compass every time before flying.

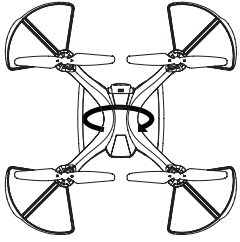
When you see the Calibration prompt on the app screen, select Yes to complete the calibration.

Drone will enter into calibration mode. Follow the calibration process as appear on the app screen. You will see the rear LEDs flashing quickly during the process.

1. Hold the Drone straight and horizontally rotate 360° in clockwise direction for 3 times continuously.



2. Then hold the Drone vertically with the camera facing up and rotate 360° in clockwise direction for 3 times. Place it on a level surface again, LED lights will flash slowly.



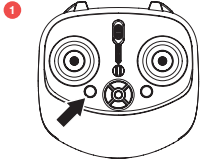
3. Tap on the Gyro Calibration Icon (11) on the App to complete the Gyroscope Calibration.

Wait until the LED light at the bottom right corner is sold. This indicates that the drone receives the GPS signal. Your drone is now ready to fly!

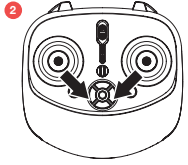
Take off with GPS mode

Once you complete Pairing & Calibration, wait until the LED light at the bottom right corner is sold. This indicates that the drone receives the GPS signal.

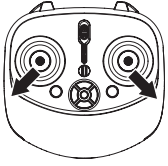
1. Press the Take-Off/Landing button once.



2. Alternatively you can arm the drone by pushing the left joystick to bottom right corner and right joystick to bottom left corner. The Rotor Blades will start to spin indicating it is ready to fly.



You can stop the rotor by pulling the left joystick to bottom left corner and right joystick to bottom right corner.



The Trail1080 Drone features Auto-Hover, releasing the Throttle/Yaw stick will keep the Drone at the same altitude. Pushing the Throttle/Yaw Left Stick UP or DOWN will ascend or descend the Drone.

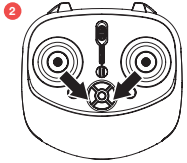
When operating the Drone, it is important for new Pilots to ensure that the Drone's heading is facing away from you. The Remote Control Remote Control Transmitter has two control sticks, left stick (Throttle/Yaw) and right stick (Pitch/Roll).

Take off without GPS mode

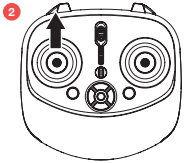
After the Pairing & Calibration process, if the drone still doesn't receive GPS signal, you will notice the rear right LED light flashing slowly.

In this instance, you can fly the drone on normal mode. Features such as Intelligent Flight modes, One Key Return, Low Battery Return will not be available when the drone is on non GPS mode.

1. Arm the Drone by simultaneously pulling the left joystick to bottom right corner and right joystick to bottom left corner. The Rotor Blades will start to spin indicating it is ready to fly.



2. To take off, increase the thrust by pushing the Left Stick to UP position.

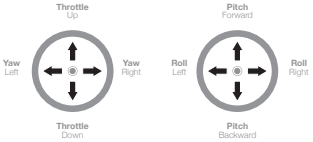


Left Stick

This controls the Drone's Throttle (Up/Down) and Yaw (Left/Right).

Right Stick

This controls the Drone's Pitch (Forwards/Backwards) and Roll (Left/Right) movement.



To Land

Whilst the Drone is in flight press the Take-Off/ Landing button. The Drone will then descend to the same altitude/level from which you armed it. Alternatively, you can reduce the thrust and land by bringing the Left stick to down position.

Shutdown Rotor

You can stop the rotor by pulling the left joystick to bottom left corner and right joystick to bottom right corner.

[WARNING] Do not operate the Drone in severe weather conditions. This includes wind speeds exceeding 5m/s. snow, rain and fog.

Do not operate when the GPS signal is weak, in case the positioning function is interfered and thus impacts the flight safety.

Speed Modes

There are 3 Speed modes on the Trail Drone. They can be cycled through on the Remote Control Transmitter by pressing the Speed Mode Button. Each mode is indicated by an increasing series of beeps.

Mode 1-Beginner Mode

This is the default operating mode that the Trail Drone initializes in. Please ensure that you use this mode in a large open space with no obstacles. The sensitivity is very low and is suitable for beginner pilots. It is less responsive and more forgiving.

Mode 2-Intermediate Mode

To enable this mode, press the Speed Mode Button ONCE. The Remote Control Transmitter will beep twice indicating you are in Intermediate Mode. This mode is more responsive and flies faster.

Mode 3-Pro Mode

To enable this mode, press the Speed Mode Button TWICE. The Remote Control Transmitter will beep three times indicating you are in Pro Mode. This is the most responsive and fastest mode the Drone can operate in.

This is only recommended for pilots with experience flying the Drone. Headless Mode allows you to control the Drone relative to its direction from the take-off location. This means you can fly the Drone without worrying which direction it is facing. Before you use Headless Mode, ensure the Drone's Direction/Heading is facing away from the pilot/operator.

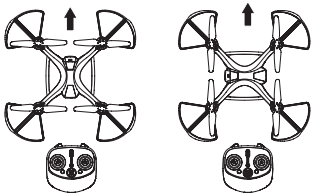
Headless Mode

Headless Mode allows you to control the Drone relative to its direction from the take-off location. This means you can fly the drone without worrying which direction it is facing. Before you use Headless Mode, ensure the Drone's Direction/Heading is facing away from the pilot/ operator.

To enable Headless Mode, simply push the Left Stick (Throttle/Yaw) down vertically on the Remote Control Transmitter as indicated in the diagram until you hear the click noise. You will hear a short beep and the red light will be lit on the remote control transmitter.

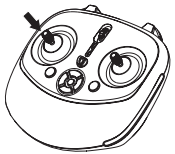
To avoid confusion, you should ensure the controls are correct from take-off. Headless Mode can be turned on while in flight.

You should arm the Drone while you are standing behind it, so that you and Drone are both facing in the same direction. Failure to do this will result in incorrect control.



Normal Mode Headless Mode

To disable the Headless mode, push the left stick down vertically until you hear the click.

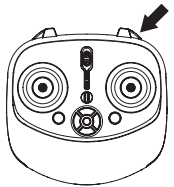


Return Home Mode

Return home function brings the drone back to the last recorded point of origin. Return mode will only work when the Trail drone has the GPS signal reception.

The Trail drone is also able to return to its home point when the battery level is low when the drone is on GPS mode or the Remote Control is powered off.

Press return button on the Remote Control Transmitter as indicated in the diagram. You will hear a beep and the drone light will start returning to home point.



Waypoint Mode

Define an exact flying route on the map and altitude by using Waypoints. To activate Waypoint flight mode:

1. Pair your smartphone with the Drone and launch the KB Trail 1080 app.
2. Wait for the Drone to receive GPS signal and sufficient number of satellites.
3. Once the Drone has the GPS reception, Hover/Lock (number) will turn to Point/lock on the app screen.
4. You can now tap on the Waypoint Icon (10) on the app.

5. Select Waypoint mode, choose the pen icon from the right and set the flight path.
6. You can either drop the points one by one using this pen (Fig.1) or draw the flight path with a series of points using this pen (Fig.2).
7. Now set the altitude of flight by taping on each point and you are all set to go;
8. Take off the drone using the remote controller
9. Once the Drone is airborne, tap on the mode activate icon (Fig 3) to begin the waypoint flight mode and press the waypoint button on the Remote controller. (10)

Exit the Waypoint mode by pressing the Waypoint button on the Remote controller. You can take over the control manually anytime during the flight using the remote control.

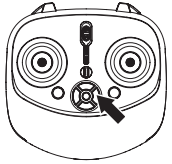
Follow Me Mode

In this mode Drone can automatically follow the person holding the controller.

To use the Follow-Me Mode the Drone must have GPS signal reception, it should have a minimum altitude of 5m and a maximum altitude of 50m. For better videos an altitude between 10 - 30m is recommended.

To activate Follow me flight mode

1. Pair your smartphone with the Drone and launch the KB Trail 1080 app.
2. Take off the drone and hover it in the air with the sufficient altitude (5m-50m).
3. You can now press the Follow me button (14) on the Remote controller.



It is recommended to fly and hold the Drone a few meters away from you before you activate the follow-me mode.

The Drone will start following the person holding the controller.

Exit the Follow me mode by pressing the Follow-me mode button on the remote control

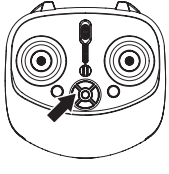
You can take over the control manually anytime during the flight using the remote control.

Orbit Mode

In this mode, Drone will orbit around the point where the mode is being activated at. Drone must have GPS reception to activate this mode.

To activate orbit mode

1. Take off the Drone and hover it in the air with the sufficient altitude (5m-50m) and distance.
2. Press the Orbit mode button on the remote control.



The Drone will now start orbiting around the point.

Exit the Orbit mode by pressing the Orbit mode button on the remote control. You can take over the control manually anytime during the flight using the remote control.

[WARNING] Before you activate any intelligent flight modes, make sure the area you fly in is clear from obstacles, crowds, trees, high voltage power lines and bodies of water.

The Drone LED light at the bottom right corner flashes, why?

No GPS signal detected. Move your Drone to a plane area and wait for GPS reception.

The Drone's Rotor Blades spin but the Drone does not take-off?

Insufficient Battery Power. If the Drone LEDs are flashing and the Drone Rotor blades are spinning without any lift, recharge the Drone battery. The Rotor Blades are distorted. Replace them with only official Kaiser Baas replacement blades.

Why is the Drone is shaking and not stable in flight?

Please check to ensure the Rotor Blades are not damaged. Check that all the motors are spinning.

The Drone is out of control and is difficult to fly. How can I make it easier?

Prior to every flight we recommend you calibrate the Drone. Refer to the calibration section.

Dimension	35*35*6.5CM
Weight	215g
Camera Resolution	1080P
Flight time	10-12 minutes
Range	150m (Remote Control) 30m (Smartphone)
Battery Drone	3.7V 1500mAh Li-po battery
Battery RC	4x AA batteries.
File Storage	Micro SD card / Smartphone
Intelligent Flight mode	Yes

Support

Having trouble with your Drone?

Don't worry, our friendly support team can help. Please visit us at:
www.kaiserbaas.com/support

Or send us an email at:
helpdesk@kaiserbaas.com

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