



ONTIXO[®]

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Instruction Manual

Please read this instruction manual prior to first flight. Please keep this manual for future use.

F18 GPS DRONE

www.contixo.com



Battery warnings and usage

The Battery Charger included with the drone has been designed to safely charge the Li-Po battery

CAUTION: All instructions and warnings must be followed exactly. Mishandling of LI-Po batteries can result in a fire, personal injury, and/or property damage.

- 1. By handling, charging or using the included Li-Po battery you assume all risks associated with lithium batteries.
- 2. If at any time the battery begins to balloon or swell, discontinue use immediately. Never charge or discharge a battery that is ballooning or swelling, this can result in fire.
- 3. Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40-120° F. Do not store battery or model in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.
- 5. Never use a Ni-CD or Ni—MH charger. Failure to charge the battery with a compatible charger may cause fire resulting in personal injury and/ or property damage.
- 6. Never exceed the recommended charge rate.
- 7. Never cover warning labels with hook and loop strips.

WARNING: Only use the charger supplied by our company. Do not use a 12V power supply or property damage and injury could occur. When a Li—Po battery is discharged below 3.7 V, the battery may be damaged and may no longer accept a charge. Please land the drone immediately and recharge the drone battery.

Safety First

Always bear proper operation and safe flight guidelines in mind

Please take a careful look at the manuals before flights for important information regarding product functions and operation tips. It is important to learn how to use the product to achieve a safe flight. Stay informed of local laws and regulations regarding flying this product and always abide by the law. Keep away from any non-flight zones and always respect other people's privacy.

Safe flying

Please make sure you are in good mental shape before every flight. Never fly under the influence of drugs or alcohol as this will increase the chances accidents, injury, or damage. Always keep the remote controller at least 8 inches away from your body when flying the drone.

Keep a safe distance from a flying drone

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

Keep away from heat sources

This drone is made of metal, fiber, plastic, electronic components, and other materials. Please keep it away from heat sources to avoid any deformation. This drone is subject to damage caused by prolonged sun exposure at high temperatures.

Environmental protection requirements

To protect our blue planet please recycle the drone as per local laws and regulations dictate.

Introduction

Thank you for choosing Contixo Products, a trusted manufacturer of high quality drones. To make operation of this drone easy and enjoyable, please carefully read through the user manual before operating this unit. Please do not throw away this manual as it contains vital information for future adjustments or maintenance reference.

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What's in the Box

Products/ spare parts included in the box

- 1 Drone
- 1 Charger
- 1 Drone Battery
- 4 Propeller Blades
- 1 Propeller Changing Tool
- 1 Remote Control

Technical Parameters of the Drone

- Diagonal: 12.2 inches
- Overall Height: 2.95 inches
- Drone Weight(included battery): approximately 1 lb.
- Brushless Motors: 1806 KV1800
- Battery: 7.4 V 2100 mAh Li-polymer
- Charging Time: about 5 hours
- Maximum Flying Time: approximately 18 minutes

Drone Diagram



• 1 Screwdriver

1 Quick Start

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• 1 Warranty Card

1 Mobile Phone Clip

Installation Guide

1 Instruction Manual

Drone Battery Charging

How to charge the drone battery:

1. Insert the charger plug to the power outlet, the charger indicator light will turn green.

2. Connect the triple-line plug of the battery with the charger cable.

3. The charger indicator light will stay solid red while charging and turn solid green once the battery is completely charged. Full charge time takes about 5 hours.



Attention:

- Adult supervision is required when charging the batteries.
- Only batteries of the same type as recommended are to be used.
- Exhausted batteries are to be removed from the drone.
- The supply terminals are not to be short-circuited.

• The charging line to be used with the product should be regularly examined for potential hazards, such as damage to the cable, cord, or plug.

• If battery or charger is damaged, discontinue use immediately and call us at 909-666-8655 for replacement parts.

Product Assembly

Mobile Phone Clip

Locate the F18 mobile phone clip and attach it to the antenna of your remote. Simply slide the phone holder into place until you hear a "click" indicating the clip is secured.

Please note that the WIFI connectivity from the drone to your mobile device can be affected by multiple factors. If you are experiencing WIFI connectivity issues we recommend you reposition your drone while flying or fly your drone in another location.



Product Assembly continued

Propeller Installation/ Removal

How To Install Propeller A:

Put the propeller with marking 'A' into the clockwise rotating motor shaft (the side marked 'A' should face upwards). Next, put the soft pad into the center bore of the propeller. Then, choose the propeller screw with the dot and put it onto the motor shaft; tighten the screw by turning counterclockwise.

How To Install Propeller B:

Put the propeller with marking 'B' into the clockwise rotating motor shaft (the side marked B should face upwards). Next, put soft pad into the center bore of the propeller. Then, choose the propeller screw with no dot and put it onto the motor shaft; tighten the screw by turning clockwise. **How To Remove The Propellers:**

Hold the drone brushless motor in place and unscrew the propeller nut either clockwise or counter-clockwise. (Refer to the Diagram below)

Attention: Please follow the diagram below step by step. Keep in mind that the propellers are distinguishable by A & B markings and the propeller screws are distinguishable by a dot indentation. Please pay attention to prevent stripping the screws



Product Assembly continued

• IMPORTANT: Propellers must be properly installed on corresponding motors to avoid drone malfunction.

Use caution when installing the propellers, they are a little sharp.
Please use Contixo propellers for this drone; Extra propellers can be ordered through Contixo, call 909-666-8566 to order spare parts.

Drone Battery Installation

How to install the battery

Exerting mild pressure, slide battery into battery compartment. Listen for a clicking sound indicating battery is firmly installed. Locate the lock located on the bottom of the drone and turn it 90 degrees to the "LOCK" position.



Drone Battery Installation continued

Attention: Failure to properly secure the battery before flight engagement may result in battery dislodgment and drone malfunction.

How to remove the battery

Turn the lock located on the bottom of the drone 90 degrees to the "UNLOCK" position. Next, using your thumb and index finger press down on the battery and pull the battery backward to remove it from the drone.





Attention: Please keep your fingers and your drone dry and clean to avoid dropping the battery.

Remote Controller

Below is a diagram of the remote control. Get comfortable with the control remote prior to flight to prevent accidents!

[8] One key takeoff/ landing

[11] Return-to-Home(RTH)

[9] Unlock Button

[10] Photo/Video

- [1] Left stick
- [2] GPS mode Switch
- [3] Power indicator
- [4] Power switch
- [5] Right stick
- [6] Headless mode Switch
- [7] LCD Display





Remote Controller continued



Remote Controller Battery Installation

Unscrew counter clockwise to open the battery compartment cover, install 4x AA batteries into the battery compartment according to the given polarity, screw clockwise to close the battery compartment.



- Insert 4 x AA batteries as indicated.
- Do not mix old and new batteries.

• Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickelcadmium) batteries.

• If using rechargeable batteries, remove prior to charging. Children should handle rechargeable batteries under adult supervision only.

- Exhausted batteries are to be removed from the remote.
- The supply terminals are not to be short-circuited.

Remote Control Signal Connection

The drone must be turned off for this to work.

All you need to do is **Simultaneously** press the red button on top of the remote and turn on the remote controller. The remote will send out 2 beeping sounds and the indicator light will keep flashing indicating that the remote controller is now ready to pair.

At this point, prior to pairing to the drone, you are able to select the control mode which best suits you, please see pg. 11 - 13 for throttle control options.



Attention:

- Any interruption during pairing process will disrupt pairing
- You must not turn on the drone prior to this step otherwise you will not be able to connect the drone and the remote successfully.
- This is the only time you can change between Remote Control Throttle modes, if you wish to change modes after pairing you must turn off the drone and the remote and repeat this process again.

Control Mode Selection

The throttle control mode is set **to mode 2 by default.** Left hand and right hand throttle are available control modes for users who prefer non-standard controls. There are 4 control modes.

Attention: To change between control modes, please make sure that your drone is under signal connection status (the indicator light will keep flashing). If not, the control mode can not be changed.

How To Change Between Control Modes

Long-press the return home button for 3 seconds to choose the desired throttle control mode. The remote will beep when you change from one control mode to the next. The mode number is shown on the LCD screen.





 Remote Control Throttle Mode

Control Mode Selection continued





Control Mode Selection continued





How to Pair the Remote to the Drone

After mode selection is complete, begin the pairing process. With the remote controller still in signal connection status, **power on your drone**. After a beep sound the connection signal icon is shown on the LCD screen. It means that the drone has successfully linked to the remote controller.

Pairing will need to be done every time you want to fly the drone

Remote Control Status Indicator Lights

No.	Status	Meaning
1	Indicator lights flash quickly.	The remote controller is under signal connection status.
2	Indicator lights flash slowly with steady beepbeep sound and the battery icon """"""""""""""""""""""""""""""""""""	The remote controller battery is low.
3	Battery icon " $regimestical formatting on LCD display is as shown, with steady beepbeepbeep sound.$	Battery is running out " \prod_{RX} "; the drone will return when the altitude is over 100m or the distance is over 300m.
4	Battery icon " 🚉" on LCD display is as shown, with steady long beep sound.	The Battery is low " \sum_{RR} "; the drone will return when the altitude is over 15m or the distance is over 15m, or land immediately.
5	Signal icon on LCD display is less than two bars or not displaying, with steady beepbeepbeep sound.	 The distance between the drone and remote controller is so long that the signal is weak. The battery is removed nearly after the drone connects to the remote controller.

Drone Initialization Detection

After signal connection has been successful, the drone enters into initialization detection procedure. The front and rear lights on the drone will flash red, light green, and green alternately. Make sure that the drone is set on a flat and level surface for the initialization detection. The drone initialization detection takes about 8 seconds. The initialization detection is done once the front and the rear lights glow light green and flash alternately. Now the drone will enter compass calibration mode.

Attention: Make sure that the drone is set on a flat and level surface for the initialization detection procedure to be successful.

Drone Compass Calibration

Two steps of compass calibration:

Step 1 Horizontal Calibration

When the drone's front and rear lights flash light green alternatively, **hold the drone upright** and rotate it 360 degrees along the horizontal axis for about 3 circles. The drone's front and rear lights will change from flashing light green alternatively to flashing dark green alternatively when complete.

Drone compass calibration should be done for every flight. That is to say, if changing new battery or the battery is reinstalled, compass calibration should be done again. Compass calibration must be performed after successful drone initialization detection.



Step 2 Vertical calibration

Hold the drone with its camera facing down, and rotate it 360 degrees along its horizontal axis for about 3 circles until the front light and rear light of the drone change from flashing to solid. The front lights will be solid red and the rear lights will be solid green. The compass calibration is successful when the lights are no longer flashing and you are now ready for lift off!



Attention:

• To fly at GPS mode, choose a open and wide space for the flight, and make sure that the satellite number is more than 7.

• DO NOT calibrate drone compass in an area with a strong magnetic field, such as: A parking place or construction area with underground reinforcement.

Gyroscope Calibration

Once drone is calibrated, set drone on a flat surface; push down both of the control sticks to the lower left corner and release (indicated as below photo). Once the front and rear lights are both green and flashing rapidly, it means that gyroscope is under calibration status. When the lights turn solid, calibration is successful.



• The gyroscope calibration has been done in factory by default. Gyroscope calibration is not required to be performed unless the drone can not exit the drone initialization detection procedure while the drone initialization detection is finished.

• Please make sure to set the drone on a level horizontal surface when performing calibration, failure to do this will affect the flight performance.

Unlock the drone:

Short-press the red button. The motors will begin to rotate and the drone will be ready for liftoff.



Lock the drone:

Pull down the throttle stick to the bottom position, long-press the red button for 3 seconds, the motors will stop immediately. The remote will beep indicating that the drone is now locked.



Flight Operation (Mode 2)



One Key Takeoff/ Landing

After the drone is unlocked, short-press the take off button (as indicated below), the drone will automatically takeoff and hover at a 5 ft. altitude.
 When the drone is flying, short-press the landing button (indicated as below), the drone will automatically land on the ground.



Flight Modes

Manual Controls:

Slide the GPS button to the off position. The drone's GPS function is now turned off and the drone will be operated manually. You will see the GPS Icon disappear from the LCD display.



The drone can not fly with precise positioning and hovering without GPS. We recommend you only try this if you are a experienced pilot.

GPS Mode

GPS mode enables precise positioning and prevents drone loss. Simply move the GPS switch to the on position before operating the drone to use all of the GPS features such as **Return to Home and Low Voltage Return To Home. You must wait approximately 1-2 minutes until you achieve a GPS signal of at least 7.**



Headless Mode

Headless Mode will cause the flight controller to "remember" which direction is "forward" when the drone is ready to fly, and use that direction as "forward", "backward", "left", or "right" regardless of the current orientation of the drone.

To enable headless mode move the headless mode switch to the on position before the drone takes off. Next, you're required to position the drone in such a way that it's front end faces away from you and the drone's back end is facing you. You can give up worrying about orientation altogether with headless mode enabled and it is a great way for novice pilots to get used to flying a drone.



Flight Modes Continued

The Return-to-Home(RTH) procedure brings the drone back to the last recorded Home Point. There are 3 types of RTH procedures: smart RTH, failsafe RTH and low battery RTH.

The following section describes the home point and GPS signal in detail.

	GPS	Description
Home Point	٢ ا	The Home Point is the location from where the drone takes off. A strong signal of at least 7 must be present prior to take off in order for the drone to remember the home point.

Smart RTH

If a strong GPS signal is available (more than 7 satellites on the LCD screen) and the home point is recorded at takeoff, press the return home button. The drone will fly back to the home point. You can use the remote controller to guide the drone around obstacles during the smart RTH procedure. You can press the RTH button again to exit RTH procedure and regain the control of the drone.



Please not that the drone does not have sensors allowing it to avoid obstacles. The drone must always be flown in a wide open area and must be manually controlled to avoid obstacles. Use caution when using the return home function and make sure the drone does not end up on a rooftop, a tree, or any other obstacle that may be in the way during return and descent.

Flight Modes Continued

Failsafe Return

Failsafe RTH will be triggered if the remote controller signal is lost for more than 6 seconds, the GPS control system will guide the drone automatically to the last recorded Home Point. Regain control of the drone by press the RTH button if the remote controller signal is recovered.

• During the Failsafe Return procedure, the drone can not avoid obstacles.

• The drone cannot Return-to-Home if the GPS signal is weak (satellites number is less than 7).

• If there is no GPS signal and remote controller signal lost for more than 6 seconds, the drone will not Return-to-Home but descend slowly until land to the ground and lock the drone.

Low Voltage RTH

The drone will perform a Low Voltage Return To Home function when the battery is low. If the battery icon on the LCD screen shows " $\frac{1}{160}$, ", the rear lights flash red slowly, and you hear a steady Beep, Beep sound this is a notification that your drone's battery is low and it is time to bring it home. If the drone's altitude is over 300 ft. or the drones distance is 900 ft. away the drone will automatically fly back to the original Home Point.

If the battery icon on the LCD screen shows " \prod_{RX} ", and you hear a steady Beep, Beep sound this is a notification that your drone's battery is very low and it is time to bring it home. If the drone's altitude is over 45 ft. or the drones distance is over 45 ft. away the drone will automatically fly back to the original Home Point.

If the drone flying altitude is less than 45 ft. or the flying distance is less than 45 ft., the drone will automatically land to the ground.

Attention: When drone is in low voltage RTH status you can not regain control of the drone by pressing the RTH button.

Capturing Photos and Videos

Photo:

To capture breath taking photos simply short-press the photo/video button. The LCD screen camera icon will flash once and the remote will beep once notifying you that the image has been captured.

Video:

To capture breath taking videos simply long-press the photo/ video button. The remote will beep twice and the LCD video icon will flash during recording. To stop recording simply long press the photo/ video button, the remote will beep twice and the video icon will disappear from the LCD screen.



Attention: It is not possible to capture photo or video when the drone does not have a SD card inserted or the SD card malfunctions. You can always capture photo and video by using the Contixo F18 app interface.

Low Voltage Warning

Keep an eye out for the Low Voltage Warning, the drone and the remote will notify you when you are running low on battery. The drones front indicator lights will remain solidly lit while the rear indicator lights will flash slowly when the battery is beginning to run out.

The drones front indicator lights will remain solidly lit while the rear indicator lights will flash rapidly when the battery is near depletion. At this point we recommend bringing the drone in for a safe landing.





Photo 1

Photo 2

Signal Strength Indicator

Signal strength icon shows the strength of the received signal. The more, the better. If the signal is weak or irregular do not fly the drone in the same area.



- DO NOT attempt to fly over populated areas in case you lose connection.
- During the Failsafe Return procedure, the drone can not avoid obstacles.
- The drone cannot Return-to-Home if the GPS signal is weak (satellite number is less than 7).
- If there is no GPS signal and the remote controller signal is lost for more than 6 seconds, the drone will not Return-to-Home but instead descend slowly until it lands on the ground and locks itself.

Pre-Flight Preparation

Before you take off, make sure that:

- 1. The drone and the remote controller are completely charged.
- 2. The propellers are installed correctly.
- 3. The motors work normally after unlocking.

Flight Preparation

- 1. Link the remote controller with the drone.
- 2. Perform the drone initialization detection.
- 3. Perform the drone compass calibration.
- 4. Unlock the drone.
- 5. Slowly push the throttle stick upward and the drone will take off.
- 6. After you are done with your flight you must slowly pull the throttle stick to bottom position to safely land the drone. Once it has landed the drone will automatically lock itself.
- 7. Take out the battery from battery compartment of the drone and store or recharge it for your next flight.

Mobile Device Application

The **Contixo F18** mobile APP is essential to operate your F18 Drone. Please make sure that you have downloaded the "**Contixo F18**" APP to your mobile device before you fly your drone.

Where to download "Contixo F18" APP:

For Android users, please go to Play Store, search "**Contixo F18**" and download.

For Apple (iOS) users, please go to Apple store, search "**Contixo F18**" and download.





How to link the " Contixo F18" App to the camera:

Turn on the drone, then enter the phone settings option. Turn on WIFI, find "Contixo F18_XXXX" on the list and connect your device to that WIFI signal.

Make sure that the mobile device and the drone have successfully connected. Next, exit settings and tap open the "Contixo F18" App on your mobile device; click 'START' to enter the APP interface. You will see a live feed from the drone camera and you will be ready to use your app to record videos, take photos, view your gallery, and enter the VR Headset FPV viewer (VR headset not included).





GPS FPV Drone



Attention: Please make sure that your mobile device supports 5G WIFI before linking to the Contixo F8 App.

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3D VR viewer: Press this icon to enter the 3D VR viewer, you will need a VR headset for this feature to work. Icon will turn red when activated.

Photo capture: Press this icon to capture a photo. Icon will turn red when capturing a image.

Video capture: Press this icon to capture a video. Icon will turn red while capturing a video and will be saved to your device. И

Gallery: Press this icon to enter the gallery. Icon will turn red when you enter the gallery.

Rotate View: Press this icon to rotate the orientation of the camera feed if it is upside down. Icon will turn red while activated. 180°

Hide Buttons: Press this icon to hide the icons on the app. Icon will turn red while activated.

Return button: Press this icon to return to the previous menu. Icon will turn red when pressed.

Mobile Device Application continued

Gallery Viewer

You can view all of your captured files via the App interface. Simply press the Gallery icon to enter the gallery interface.





Video SD card viewer: Press this icon to access the video files recorded on the SD card inserted into your drone.



Photo SD card viewer: Press this icon to access the photo files recorded on the SD card inserted into your drone.



Video Internal viewer: Press this icon to access the video files recorded internally on your device.

INTERNAL



Photo Internal viewer: Press this icon to access the photo files recorded internally on your device.

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Troubleshooting

No.	Status	Meaning
1	Front and rear lights flash green light rapidly	Signal between drone and transmitter has been interrupted
2	Front and rear lights flash red, light green and solid green alternately	Drone initializing and pairing
3	Front light glows solid red , rear light glows solid light green	No GPS signal, drone is in manual mode
4	Front light glows solid red , rear light glows solid green	Good GPS signal, drone is preparing for GPS mode
5	Front and rear lights flash green rapidly	Gyroscope is calibrating
6	The indicator lights on the front and rear flash light green alternately	Drone's horizontal compass is calibrating
7	Front and rear lights flash green alternately	Drone's vertical compass is calibrating
8	Front light glows solid red , rear light flashes red slowly	(25%) battery life remaining
9	Front light glows solid red, rear light flashes red rapidly	15% battery life remaining
10	Front and rear lights flash once then stop for 1.5 seconds	Gyroscope malfunction
11	Front and rear lights flash twice then stop for 1.5 seconds	Barometer malfunction
12	Front and rear lights flash three times then stop for 1.5 seconds	Compass malfunction
13	Front and rear lights flash four times then stop for 1.5 seconds	GPS module malfunction

Troubleshooting continued

N	lo.	Status	Meaning
1	L4	The front and rear lights of the drone flash <mark>green</mark> rapidly	Remote controller and drone not successfully paired
1	15	The front and rear lights of the drone flash red, light green and green alternately and do not change	 Check to see if the drone is in pairing mode Re-calibrate the gyroscope
1	16	The front and rear lights of the drone flash green alternately	 Take the compass horizontal calibration steps The compass of the drone is broken, it needs to be replaced
1	17	The front and rear green indicator lights of the drone flash alternately	 Take the vertical compass calibration steps The compass of the drone is broken, it is need to be replaced
1	L 8	The drone's GPS fails	The GPS signal is weak, please fly in another wide open place
1	19	The return point of the drone is far away from the take-off point	 The GPS signal is weak, please fly it in another wide open place The drone can not receive satellite signal while taking off, fly the drone again when it receives signal from at least seven satellites
2	20	The drone fails to unlock	 The battery of the drone is low, please replace the battery The drone is in initialization status, please re-calibrate the gyroscope