



14+
for age



— F16 DRONE INSTRUCTION MANUAL —

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PREFACE:

Thank you for Purchasing the Contixo F16 RC Drone

The Contixo F16 Drone is a mini quadcopter that's purposely built for drone application developers to enable you to get your custom applications airborne quickly.

This development platform is intended to be modified by developers according to their professional judgment. Contixo F16 drone will be shipped with pre-configured default settings from the factory, and will have the option to be customized. There are no operational limitations to the kit. Developers are responsible for testing and ensuring the safety of their configuration, and establishing the operating limits of those configurations.

F16 Drone is designed and engineered by Contixo, Inc. in Southern California, USA. Made in China.

IMPORTANT:

Please read the instructions carefully before allowing children, teenagers, and adults to operate the drone. Adult supervision is advised.

SAFETY PRECAUTIONS:

Safety: F16 drone was designed and manufactured with safety in mind. Your safety also depends on proper training and thoughtful operation. Do not set up, operate, perform maintenance, or repair the drone without first reading and understanding this manual and the labels on the unit.

Owner Responsibility: In order to maintain your drone properly and to ensure operator safety, it is the responsibility of the drone owner to read and follow these instructions:

Follow all setup, operation, and maintenance instructions.

Read and follow all safety instructions. Keep them readily available for operators.

Make sure all operators are properly trained, know how to safely operate, and are properly supervised.

Do not operate the drone until you are certain that all parts are in place and operating correctly.

Carefully inspect the drone on a regular basis and perform all maintenance as required.

Service and maintain the drone only with approved replacement parts.

Keep all instructions with the product.

Only use this product if it can be used safely!

NOTE: This equipment has been tested and found to comply with the Federal Code of Regulation 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. If not installed and used in accordance with the instructions, the equipment may cause harmful interference to radio communications.

- However, there is no guarantee that interference will not occur in a particular installation. If your 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:
- Adjust or reposition the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into an outlet with a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WARNING: THIS PRODUCT SHOULD ONLY BE USED BY ADULTS AND TEENAGERS 14 YEARS AND OLDER. ADULT SUPERVISION REQUIRED FOR CHILDREN UNDER 14 YEARS OF AGE.

WARNING: CHARGING THE DRONE BATTERY MUST BE SUPERVISED AT ALL TIMES BY AN ADULT. UNPLUG THE BATTERY WHEN FULLY CHARGED. DO NOT OVER-CHARGE THE BATTERY.



NO FAA LICENSE NEEDED!

Flight Safety

Recommended for indoor use or flying below 16 feet (5m).



+



Fly in Open
Areas

Maintain Line
of Sight

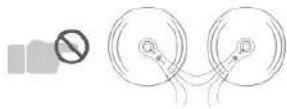


Avoid flying over or near obstacles, crowds, high voltage power lines, trees, airports or water.

DO NOT fly near strong electromagnetic sources such as power lines and base stations as it may affect the onboard compass.



DO NOT use the drone in adverse weather conditions such as rain, snow, fog and wind speeds.



Stay away from the rotating
propellers and motors.



No Fly Zone

What's in the Box

- 1 Drone
- 2 Batteries
- 4 Propeller Blades
- 4 Propeller Guards
- 4 Landing Gears
- 1 Instruction Manual
- 1 Warranty Card
- 1 USB Cable
- 1 Screwdriver
- 4 Screws



It's important to understand basic flight guidelines for the safety of both you and those around you. Don't forget to read the safety guidelines before flight.

Remote Control Functions





1. Power button:

- ON – Click Once, Red Light Comes flashing
- OFF – Click Once, Red Light Turns Off

2. Throttle Stick

3. Direction Stick

4. 1-Key Landing

5. 1-Key Take-off with Auto-Hover

6. Fine-tuning on the left

7. Fine-tuning on the right

8. Fine-tuning forward

9. Fine-tuning backward

10. Smartphone Clip

11. Short-press to 3D roll, long-press to emergency stop

12. Short-press to enter headless mode, long-press to 1-key Return-to-Home

13. Click to switch between three speed modes

Indicator Light

Flashing red: Remote control is searching for drone signal

Steady red: The remote control is successfully connected to the drone



Drone Diagram

1. HD Camera
2. Propeller
3. Propeller Motor
4. LED Indicator
5. Power Button
6. Optical Flow Camera



①. Drone Unfold

1. Unfold the front arm first.
2. Then unfold the back arm.

(Attention: The back arms need to be extended from the bottom up)



②. Drone Fold

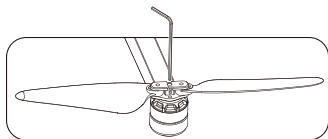
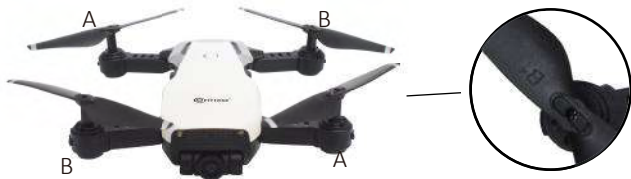
1. Fold the back arm first.
2. Then fold the front arm.

(Attention: The back arms need to be stowed from top to bottom)



1. Install the Propellers

Tip! Both the propellers and motors are marked with A, B (propeller A with motor A, propeller B with motor B).



2. Intelligent Flight Battery

- To power ON, long-press the button. To power OFF, long-press the button.
- When the battery is at low power, the power indicator will start flashing. At this time, return the drone immediately and charge the battery to avoid unnecessary power failures.

3. Charge the Battery

Unlock the battery and pull out from the drone.



Phone Charger Adapter:
5V/1A(Not included)

Charging Time:
About 80 minutes

4. Lithium Battery Charging Instructions

- Charging:** Insert the USB cable into the USB port of the charger and connect to the charging port of the battery to charge.
The indicator on the cable will turn to a solid red when charging. When fully charged, the indicator on the cable will come off.
- The drone can be charged by a travel or car charger.
- The drone battery takes about 60-80 minutes for a full charge. Flight time may vary from 11 to 13 minutes depending on how the drone is being used.

5. Installation

Install the landing gear to the corresponding interface.



Install the propeller guard on the arm and tighten the screws.



Connect the front and rear propeller guard on the same side together.



Install the Contixo F16 App

Search “Contixo F16” application in APP Store.

Search “Contixo F16” application in Google Play Store.

Required Operating Systems: IOS 8.0 or higher / Android 5.0 or higher.



Contixo F16



Flight

Step 1: Turn on the drone and put down on a level surface

Turn on the drone and the lights of the drone will start blinking. Place the drone on a level surface.



Step 2: Turn On the Remote Control & Pair with Drone

Click the power button of the remote control to power on the remote control. Then push the left joystick up then down. When the drone light stops blinking and changes to a steady light, pairing is successful.

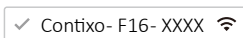
NOTE: You can connect to the drone WiFi signal at this time to view the current drone on the Contixo F16 app.



Throttle Joystick

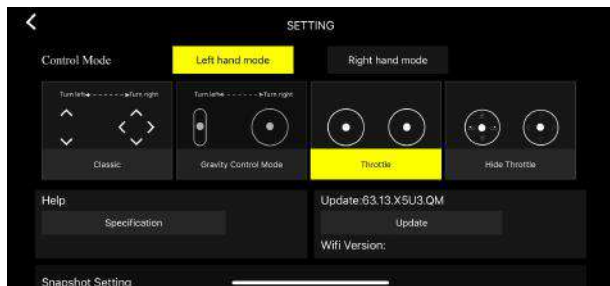
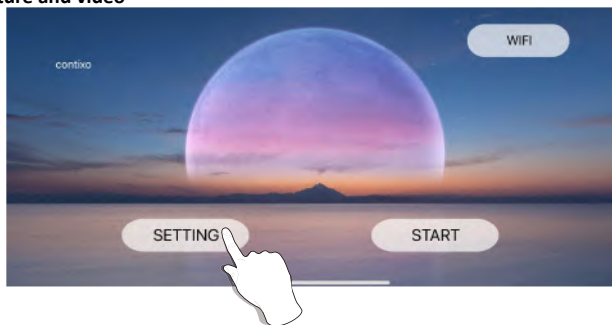
Step 3: Connect App

F16



- Connect your smartphone to the WiFi of the drone and check the drone's status on the "Contixo F16" app.
- Open the "Contixo F16" application on your smartphone to access the control interface.

Step 4: Click the setting button to select the control mode and the quality of picture and video

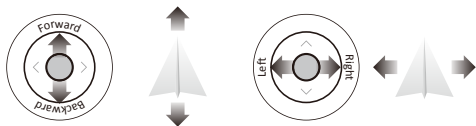


Left Hand Mode Operating Method

Throttle Joystick



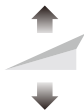
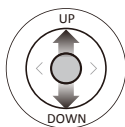
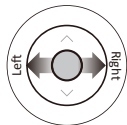
Direction Joystick



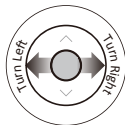
Right Hand Mode Operating Method



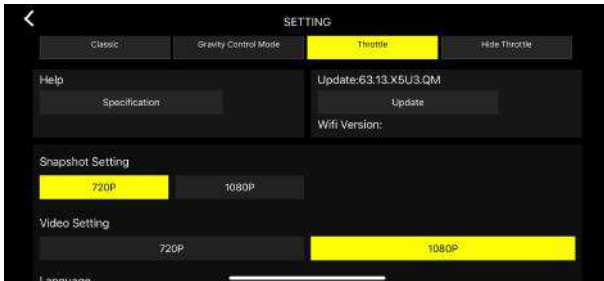
Throttle Joystick




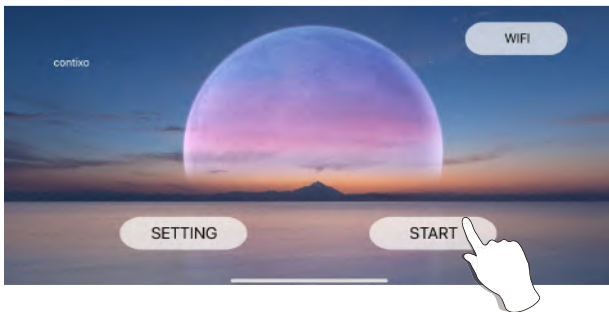
Direction Joystick



Then select the picture and video quality.



Click “” then click “START”.

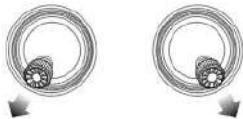


APP Introduction




- | | |
|-----------------------------------|------------------------------|
| 1. Gravity Control Mode | 11. Switch Speed |
| 2. Hand Gesture | 12. Take Photo |
| 3. Switch Front and Bottom Camera | 13. Take Video |
| 4. Follow Me Mode | 14. APP Control On/Off |
| 5. Palm Follow | 15. Exit |
| 6. VR Split Screen | 16. Calibrate Gyroscope |
| 7. Headless Mode | 17. Gallery |
| 8. Flight Path | 18. Entertainment Mode |
| 9. Flip Screen | 19. One Key Take-off/Landing |
| 10. Hide/Display Button | 20. Adjust Perspective |

Step 5: Reset to Factory Setting/Calibrate Gyroscope



- Push the joysticks into the 7 o'clock (left joystick) & 5 o'clock (right joystick) position.
- Lights will rapidly blink and change to a steady light.

Or click “” on the app when the drone is under APP control.

Take-off/Landing

Take-off

Press the 1-Key Take-off button or click “” on the app when the drone is under APP control.



Once the lights are all steady, you are ready to fly!

— Red (rear) and white (front) lights are all solid (no blinking).

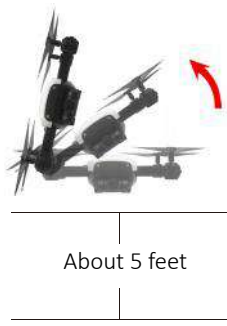
⚠ Rotating propellers can be dangerous. DO NOT start the motors when there are people nearby.


Landing


Press the 1-Key landing button or click “” on the app when the drone is under APP control.



3D Roll/Emergency Stop



3D Roll: Short press “” button and push the direction joystick left or right. The drone will roll in the air in the corresponding direction

Emergency Stop: Long press “” button and the drone will immediately shut off and stop flying. An air-borne unit will drop from the sky.


Warning: When using the emergency stop feature during flying operation, it may cause damage if the drone crashes or can injure people underneath the drone.

Return-to-Home (RTH)

The Return to Home (RTH) function brings the drone back to the Take Off Point.




Return-to-home Feature Description

When the drone is doing the Return to Home feature, it will fly straight back to the home (take-off) position according to the current drone altitude. Please make sure there is no objects (buildings or trees) in the area. It will then locate the home (take-off) position and then descend to the starting point.

Long press “” button for One-key Return To Home.

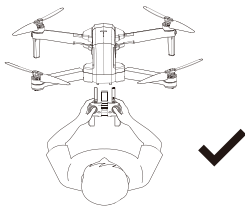


Headless Mode

1. The drone defaults to Normal Mode when the drone and remote control are matched successfully. Click “” button to enter into Headless mode. Click “” button again to exit Headless mode. Or click “” on the app when the drone is under APP control.



2. Normal Mode: Before takeoff, the white lights on the drone indicate the forward-facing direction.
3. Headless Mode: Before takeoff, the white lights on the drone indicate the forward-facing direction. When the drone rotates in flight, the flight direction is not changed.



The direction of control when the drone is paired.



Don't change your direction.



Don't change your direction.

While in Headless Mode, the forward direction is the direction the pilot faces when the pilot pairs the drone with the remote control. If the pilot pushes the direction joystick forward, the drone will fly forward. If the pilot pushes the direction joystick backward, the drone will fly towards him/her. If the pilot moves the right stick left or right, then the drone will also move left or right, relative to the pilot. It is very important that the pilot does not change positions or the direction he or she is facing because this will cause misdirection of the drone flight control.

Trim the Drone to Obtain More Balanced Flight

When the drone drifts to the right, press “◀” button and the drone can be corrected to the left.

When the drone drifts to the left, press “▶” button and the drone can be corrected to the right.

When the drone drifts to the front, press “▼” button and the drone can be corrected to the behind.

When the drone drifts to the behind, press “▲” button and the drone can be corrected to the front.

Camera Functions




Tap “📷” on the app to take a picture. The white light in front of the drone and the red light behind the drone will flash once, indicating the drone took a photo.

Tap “📹” on the app to take a video. The white light in front of the drone and the red light behind the drone will flash twice, indicating the drone starts recording.

Tap “📹” on the app again to save video.

Photos and videos will be saved in the phone. DO NOT take photos while recording video.

Follow Me Mode

Click “” then the camera will automatically recognize the person or human-shaped object in the lens. Tap on the object or person you want to track, and the drone will automatically follow the object or person you choose.

NOTE: If there are multiple people on the screen, you can choose one of them to track. If there is no target on the screen, the drone will enter “waiting mode”. When there is a tracking target on the screen, the system will automatically enter the tracking mode. (This mode can only be used in APP controlled mode.)




Selfie Mode



Take Photo




Take Video

Click “” (hand with two fingers) on the App. Hold up 2 fingers to take a picture. Wave your hand or hold up 3 fingers to begin recording video. There is a 3 second countdown before taking a video or picture.


NOTE: This function can only be used when there is adequate light. Lowlight or dimly lit areas may prevent the camera from detecting your hand gestures.

Flight Path

Successfully connect the drone WiFi with your smartphone,click “” on the App. Find the transparent box on the screen. Mark the path you plan to fly within the transparent box range on the map. (This mode can only be used in APP controlled mode.)




Palm Follow

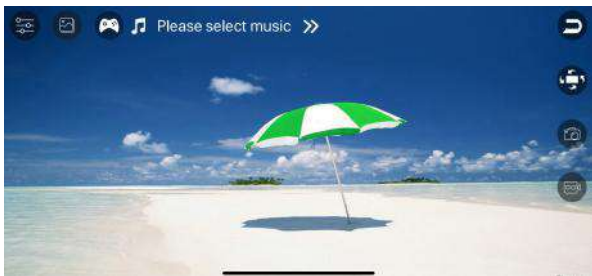
Successfully connect the drone WiFi with your smartphone,click “” on the App and put your palm in front of the lens. The drone will automatically recognize the position of your palm and follow the movement. (This mode can only be used in APP controlled mode.)




Entertainment Mode

Click “” to enter entertainment mode.

You can choose photo effects and composite short videos.



Gravity Control Mode

Click “” to enter gravity control mode. (This mode can only be used in APP controlled mode.) You can control the flying direction of the drone according to the tilt angle of the phone.

Tilt the phone forward, the drone flies forward.

Tilt the phone backwards, the drone flies backwards.

Tilt the phone to the left and the drone flies to the left.

Tilt the phone to the right and the drone flies to the right.



Gallery

Open the App, click (gallery) to access your picture and video files


Figure 1. Click “” button.



Figure 2. Long press the content in the gallery and the control buttons will appear.

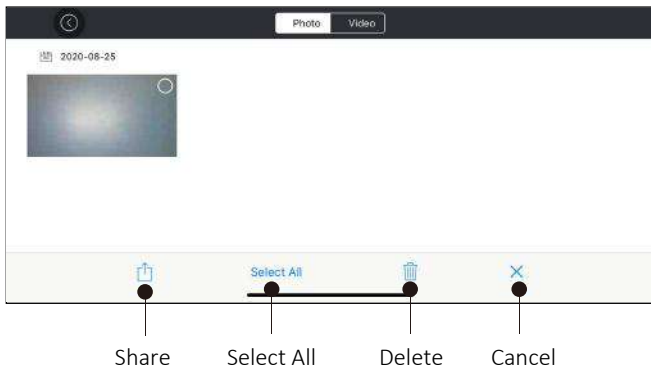



Figure 3. Share



1. Open the App, click (gallery) to access your picture and video files (Pic 1.)
2. Long press the content in the gallery and the control buttons will appear and choose the photos you want to share.
3. Click “” to choose the platforms to share to (Pic 3).

Specifications

Drone Model: F16

Drone Weight: 100g/3.5 oz

Battery Type: Lipo Lithium-Ion Battery

Flight Time: About 11-13minutes

Max Charging Time: About 80 minutes

Capacity: 1000 mAh

Voltage: 3.7V

Recommend Control Height: 5M (16 feet)

Max RC Control Range: 50M (160 feet) (Unobstructed)

WIFI Camera Range: 25M (80 feet) (Unobstructed, depending on conditions and your mobile device)

Wind resistance level: Level 1 (Flight use during windy conditions is NOT recommended)

Auto-Hovering: Enabled

Remote Control Operating Frequency: 2.4 GHz

Remote Control Battery: 3*AA

Remote Control Operating Voltage: 3.7V

Camera Lens: FOV 45°

Still Photography Mode: Single shot

Photo Format: JPEG

Video Format: MP4

Operating Temperature Range: 32°to 104°F (0°to 40°C)

Mobile App: "Contixo F16" in App Store & Google Play Store

Live View Working Frequency: 2.4 GHz ISM

CAMERA		STORAGE		RESOLUTION	FRAME PER SECOND
F16	1080P	Phone	Photo	1920X1080P	15 fps
			Video	1920X1080P	
	720P	Phone	Photo	1280X720P	15 fps
			Video	1280X720P	

The resolution can be switched in the APP settings.

Trouble Shooting

Problem	Cause	Solution
Drone does not respond to user controls.	<ol style="list-style-type: none">1. Remote is not synced to the drone.2. Insufficient battery power.	<ol style="list-style-type: none">1. Refer to page 11-14 (Flight).2. Recharge the battery.
The blades spin, but the drone cannot take off.	<ol style="list-style-type: none">1. Insufficient battery power.2. The blades distorted.3. The blades Side A and Side B are reversed.	<ol style="list-style-type: none">1. Recharge the battery.2. Replace the blades.
The drone shakes heavily.	The blades distorted.	Replace the blades.
Drone does not stabilize during flight with fine tuning.	<ol style="list-style-type: none">1. The blades distorted.2. Defective motor.	<ol style="list-style-type: none">1. Replace the blades.2. Replace the motor.
Drone cannot takeoff after accident.	Four-axis acceleration sensor loses balance.	Recalibrate compass.

Technical Support

Have questions?

E-mail: support@contixo.com

Mon-Fri 9:00 am- 4:00 pm PST



CONTACT INFORMATION

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