



OWNER'S MANUAL
QUADFIGHTER AIR COMBAT RC QUADCOPTER

Only for Ages 14+

Product has small parts that may pose a choking hazard. Rechargeable Lithium Polymer (LiPo) Batteries are dangerous and may explode if mistreated, overheated, or improperly recharged. If a LiPo battery swells or expands, stop using immediately. Always operate craft within line of sight. If craft is out-of-sight, immediately shut down power to craft.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation.

CE1588



Welcome to the world of QFO™.

Each QuadFighter™ product includes the patented "Tilt-To-Fly" MIMIX™ controller and a QF-1™ quadcopter with an IR "laser" for real multi-player battle action.



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Minneapolis, Minnesota, USA

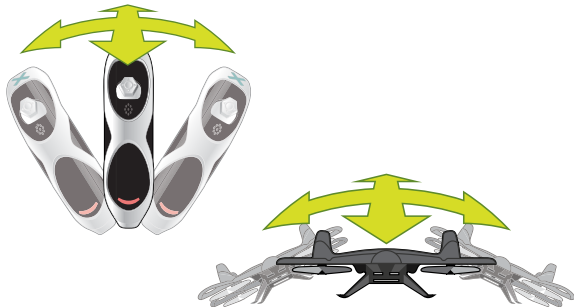
Protected by U.S. Patent No. 7,931,239.
Other U.S. and International Patents Pending.

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* Battle gaming requires two or more QuadFighters.

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Never fly the QF-1 near your or anyone else's face.
Keep flight path and surrounding free of spectators and pets, they may be harmed or may damage the craft.
Keep craft away from face and hair at all times.
Keep fingers away from moving rotors.
Beware – motors may get hot.
Do not fly if QF-1 or Mimix are damaged.
Do not leave QF-1 or Mimix exposed to excessive heat.
Do not clean QF-1 or Mimix with solvents.
Do not drop in, spray with, or submerge in water.
Do not attempt to retrieve QF-1 from dangerous places, such as a roof or tree, without taking safety precautions
Recommended for indoor use in rooms without breakable objects or fans.
Not advisable for outdoor use in inclement weather or in winds over 10 mph.

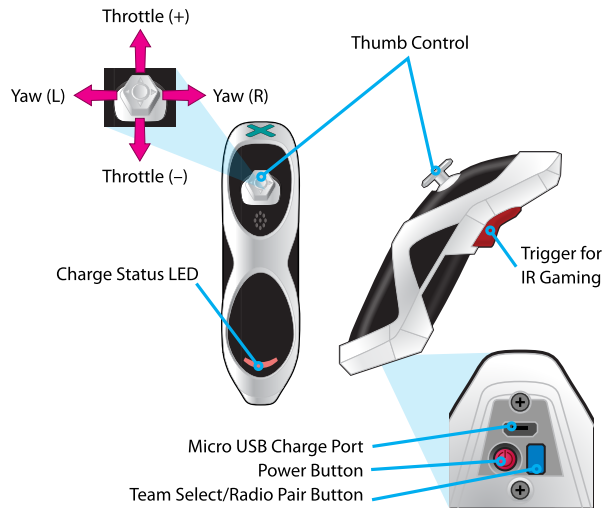
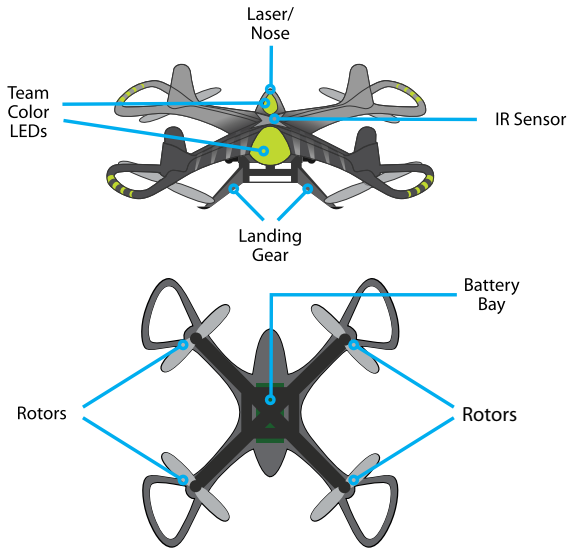


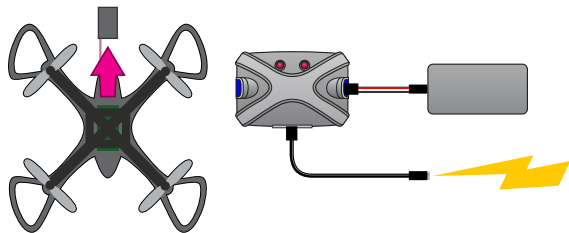
Congratulations on your purchase of the QuadFighter. We designed the Mimix controller from the ground up to provide an intuitive and exciting flying experience just for you. Tilt the Mimix controller forward, back, left, or right and the QF-1 craft responds just like you think it should. You feel engaged and in control. And, with multiple QF-1 craft that each have their own IR "lasers", we have opened up a whole new realm of gaming that you and your friends can enjoy.



QF-1 QUADCOPTOR

MIMIX CONTROLLER





Power Charging – QF-1

To charge the QF-1, remove the battery and plug it into the battery charger that came with the QuadFighter. The battery charger can charge up to two batteries at a time. Next, plug the charger into a USB outlet using a micro-USB cable. The charger has a red LED that will illuminate for each battery that needs charging.

Once the battery is fully charged the red LED will turn off.

Fully charging the QF-1 battery takes up to 45 minutes.

The LED on the QF-1 blinks and a sound plays when the QF-1 battery needs to be recharged or replaced.



Power Charging – Mimix

To charge the Mimix, simply plug the controller into a USB port using a micro-USB cable. A red LED on the Mimix will illuminate while charging and turn off once the battery inside the Mimix is fully charged.

The rechargeable batteries in both the Mimix and the QF-1 are shipped with a half charge. Fully charge the batteries to ensure an optimal first flight experience.

Fully charging the Mimix takes up to 45 minutes.

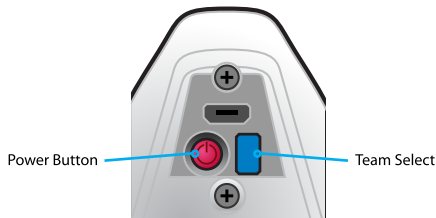
The red LED on the Mimix blinks and a sound plays when it needs to be recharged.

Syncing

Your Mimix and QF-1 are already paired with one another. Should you wish to pair your QF-1 with a different Mimix, see the syncing steps in the FAQs.

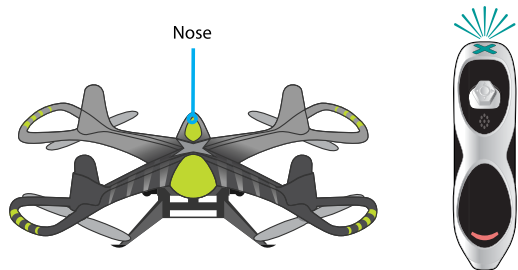
Pre-Flight Check

Ensure that the Mimix is powered off and the thumb control is all the way back towards you and down. Insert the charged battery into the QF-1 and plug the battery into the matching connector. The LED on the QF-1 will cycle through the 8-team colors indicating no radio connection to the Mimix has been established.



Powering up

Turn on the Mimix by pressing the round red power button. The QF-1 LED will stop changing colors and the Mimix LED will match the color of the QF-1 to indicate that radio connection is established. Press the blue team button on the Mimix anytime and both the QF-1 and Mimix will both change colors (and teams). Once the LEDs on the QF-1 and Mimix are both at the same team color, the Mimix LED will also pulse to indicate if the Mimix is level. This indicates all systems are go!



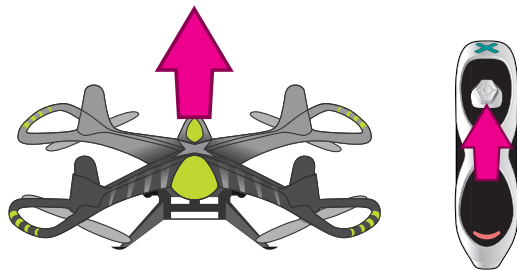
Pre-Launch Positioning

Place the QF-1 on a level surface in front of you with the nose (front) pointing away from you.

Point the Mimix so that it is facing the same direction as the nose of the QF-1.

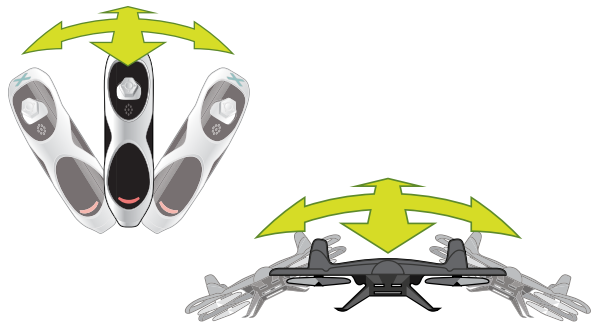
Level the Mimix controller in your hand until the pulsing "X" LED on the Mimix slows and turns solid. A solid, steady "X" indicates that the controller is level.

You are now ready for takeoff!



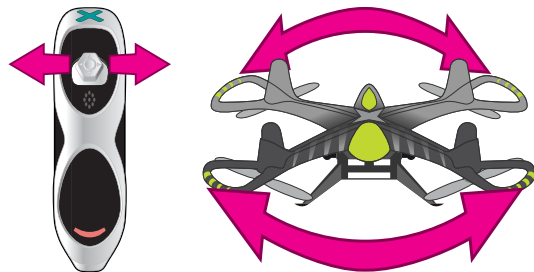
Tilt-to-Fly and Throttle Control

Quickly push the thumb control on the top of the Mimix 3/4 of the way up and away from you to get the QF-1 to takeoff. Note that when launching off a solid surface you will need to "punch" the thumb control in order to overcome the ground effect that tends to make the QF-1 unstable near the floor.



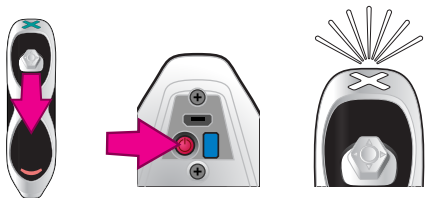
Tilt-to-Fly and Throttle Control

Control the direction of the QF-1 by tilting the Mimix in the direction you want the QF-1 to move. Remember that the movements are relative to the positioning of the nose (front) of the QF-1! Control the height of the QF-1 by slight up and down movements of the thumb control.



Rotation Control (Yaw) and Landing

In addition to tilt-to-fly controls, you also have “yaw” control that allows you to rotate the QF-1 left or right. To operate yaw control, gently bump the thumb control on the Mimix left or right to adjust the yaw. To land the QF-1, hover over a flat area and gently reduce the throttle to land.



Powering Down

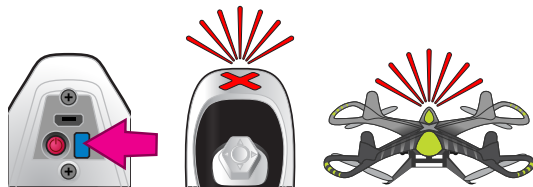
Always remember to completely power down the thumb control whenever the QF-1 lands or crashes in order to completely stop the rotors!

To power off the Mimix, press and hold the power button until the "X" LED on the nose of the Mimix turns white.

Then release the power button.

To power off the QF-1, unplug and remove the battery.

Be sure to pinch the battery connector to release it from the QF-1. Pulling on the battery wire when it is not released can damage the battery or the QF-1.



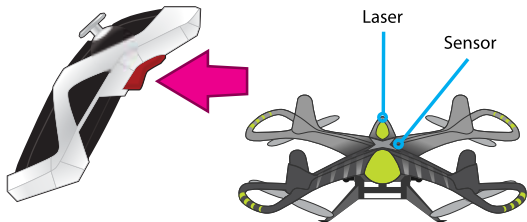
Choosing Teams/Colors

You can battle it out in the sky with two or more QF-1s.

The only limit to the number that can play at the same time is the amount of available space. All those QF-1s can be on one of 8 different teams and it is easy to switch teams!

To assign different QuadFighters to different teams, each player uses the blue team button located on the bottom of their Mimix.

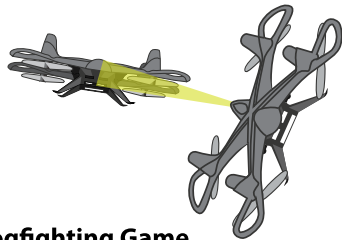
The player presses the blue team button to cycle through the eight (8) available team colors until the Mimix and QF-1 displays the desired team color for that player's QuadFighter.



Firing Your IR "Laser"

Fire your infrared (IR) "laser" at your opponents by pressing the trigger on the Mimix.

The IR "laser" shoots out a harmless invisible cone of energy much like your TV remote control. The cone of "laser" energy shoots out from the nose (front) of the QF-1. The IR sensor on your opponent is on the top of the canopy of the QF-1. So, try to aim the nose of your QF-1 at the top "X" on the canopy of your opponent's QF-1.



Aerial Dogfighting Game

You can only shoot a QF-1 on a different team.

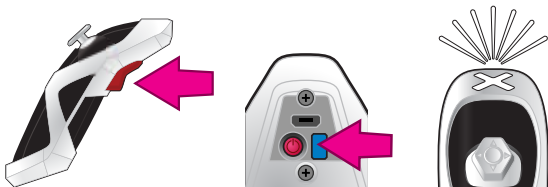
After one hit from an opponent's IR laser, your QF-1 will wobble slightly and your Mimix will sound the hit.

After two hits, your QF-1 will be "damaged" and your Mimix will sound the hit. Your QF-1 will lose some control.

After three hits, your QF-1 will lose power and be forced to land, and your Mimix will sound you have been downed.

If your craft is downed, simply pull the thumb control all the way down towards you and then you will be able to jump back into the fight.

Place the QF-1 on a level surface with the nose (front) facing away from you.



Normal vs. Expert Mode

Your QuadFighter comes preset in “normal” mode. “Normal” mode limits you to gentle tilts and banks, it also limits the throttle to enable more controllable takeoffs.

“Expert” mode removes most of these limits and you will find the QF-1 will become very fast and responsive. Be careful as the crashes can be spectacular.

To switch modes, simply pull and hold the trigger back until you hear a beep. Then press the team select button. The Mimix will let you know what mode you are in by sight and sound. The mode will stay the same even after you power down.

Start learning to fly in Normal mode, practice taking off, hovering in one spot and landing. When you have mastered that, then practice flying a square pattern while you hold a constant height. Then, try combining motions to fly triangular patterns.

As you practice you will notice that you don't have to think a lot, you can feel how it should move. Remember that all the Mimix motions are relative to the nose on the QF-1. When the Mimix is pointing away from you tilt left and the QF-1 will go left. The same for going right. But if the nose of the QF-1 is pointing toward you, tilting the Mimix left actually makes the QF-1 move to it's left, your right.

With the QF-1's unique design you don't have to worry about hitting the ceiling; in fact maneuvering your QF-1 to hover on the ceiling can be an effective strategy during battles.

When you first start learning, stick with gentle and small movements of the Mimix and the thumb control to ensure a smooth flight. As you become a master and switch to "Expert" mode, you will find aggressive moves can be very fun and challenging!

For more tips you can visit qfolabs.com to watch instructional videos.

How do I pair my QF-1 craft with a different Mimix controller?

Unplug the battery for the QF-1. Power on the Mimix. Hold down the blue button on the bottom of the Mimix until the LED is flashing white. Plug in the battery for the QF-1 you would like paired with the Mimix. The LED on the QF-1 will turn a solid team color and Mimix will match that color and begin pulsing. This indicates pairing was successful.

How do I change the canopy on my QF-1?

The canopy simply snaps on and off for easy replacement. Pull outward on each arm to gently lift the canopy off its catch. It is easiest if you can pull all four arms of the canopy at the same time. Spare canopies, batteries and rotors are available at your retailer or online at QFOLabs.com.

How do I replace the rotors on my QF-1?

While they may look the same, there are two kinds of rotors on the QF-1. One rotates clockwise and the other rotates counter clockwise. Look for the "X" and the "O" on the end of the rotor shaft and on the underside of the arm on the QF-1. Always match the "X" or the "O" on the arm with the "X" or the "O" on the rotor. After you have the correct rotor simply pull the old rotor off and carefully push on a new rotor being careful not to bend the motor shaft or push too hard to damage the motor.

How long will the batteries last?

When new and fully charged, the QF-1 replaceable battery will last 6-8 minutes depending on how aggressively you fly. The Mimix internal battery will last 2-3 hours before it needs to be recharged. They each take up to 45 minutes to recharge. Consider buying additional QF-1 replaceable batteries so you can always have one charged and ready for action.

When do I need to recharge the battery?

When the replaceable battery is getting low you will see the QF-1 flashing quickly and hear a warning tone from the Mimix. When the Mimix internal battery is getting low you will hear a different warning tone from the Mimix.

What is the range of the radio?

The range depends on many things, but you can count on a range of 100 feet in a direct line of sight between the Mimix and the QF-1. You may experience more or less range depending on the conditions in your flight zone. If the QF-1 experiences a loss of radio communications it will slowly flash your team color and begin to power down.

How do I know I'm shooting and scoring?

Your Mimix will flash white and you will hear a shooting sound when you pull the trigger. When you hit an opponent, their QF-1 and Mimix will flash your team color and they will hear an explosion.

QFO Labs® warrants this product against defects in materials and/or workmanship as of the date of purchase by the original purchaser if reported within 30 days of the date of purchase ("Warranty Period"). If a defect is found upon opening the package, but before actually operating the product and a valid claim is received within the Warranty Period, at its option, QFO Labs will either 1) repair the defect at no charge, using new or refurbished replacement parts, or 2) replace the product with a new product that is at least functionally equivalent to the original product, or 3) provide a store credit in the amount of the purchase price of the original product. A replacement product or part, including a user-installable part installed in accordance with instructions provided by QFO Labs, assumes the remaining warranty of the original product. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes property of QFO Labs. When a store credit is given, the original product must be returned to QFO Labs and becomes QFO Labs' property.

Obtaining Service:

To obtain warranty service, contact QFO Labs at support@QFOLabs.com. Please describe the product that needs service and the nature of the problem. A purchase receipt is required. All repairs and replacements must be authorized in advance. Service options, parts availability and response times will vary. You are responsible for delivery and the cost of return of the product or parts to the authorized service center, per our instructions.

Limits and Exclusions:

Coverage under this Limited Warranty is limited to the United States of America, including the District of Columbia and the U.S. Territories of Guam, Puerto Rico, and the U.S. Virgin Islands. This Limited Warranty applies only to products manufactured for QFO Labs that can be identified by the "QFO Labs" trademark, trade name, or logo affixed to them or their packaging. Brookstone, as the retail distributor and in so far as permitted by law, provides these products "as is" and without warranty.

Limits and Exclusions (continued):

This warranty does not apply to: a) damage caused by failure to follow instructions relating to product's use or the installation of components; b) damage caused by accident, abuse, misuse, fire, floods, earthquake or other external causes; c) damage caused by service performed by anyone who is not a representative of Brookstone or QFO Labs; d) accessories used in conjunction with a covered product; e) a product or part that has been modified to alter functionality or capability; f) items intended to be periodically replaced by the purchaser during the normal life of the product including, without limitation, batteries or LEDs; g) any product sold "as is" including, without limitation, floor demonstration models and refurbished items; or h) a product that is used commercially or for a commercial purpose.

NEITHER BROOKSTONE NOR QFO LABS SHALL BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. TO THE EXTENT PERMITTED BY APPLICABLE LAW, BROOKSTONE AND QFO LABS DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS.

Some states disallow the exclusion or limitation of incidental or consequential damages or how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

FCC Compliance

This equipment complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Modifications not authorized by the manufacturer may void the user's authority to operate this device.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

IC Compliance

This device complies with Industry Canada License exempt RSS standard(s). Operation is subject to the following two conditions: This device may not cause interference, and this device must accept any interference, including interference that may cause undesired operation of the device.

Le manuel d'utilisation des appareils radio exempts de licence doit contenir l'énoncé qui suit, ou l'équivalent, à un endroit bien en vue et/ou sur les appareils : Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radio Frequency (RF) Exposure Information

The radiated output power of the QuadFighter or Mimix controller are below the Industry Canada (IC) radio frequency exposure limits. These devices should be used in such a manner that the potential for human contact during normal operation is minimized.



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