

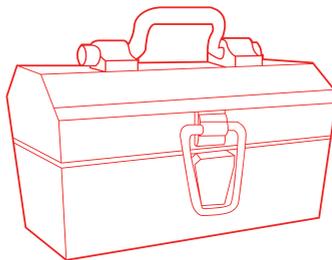
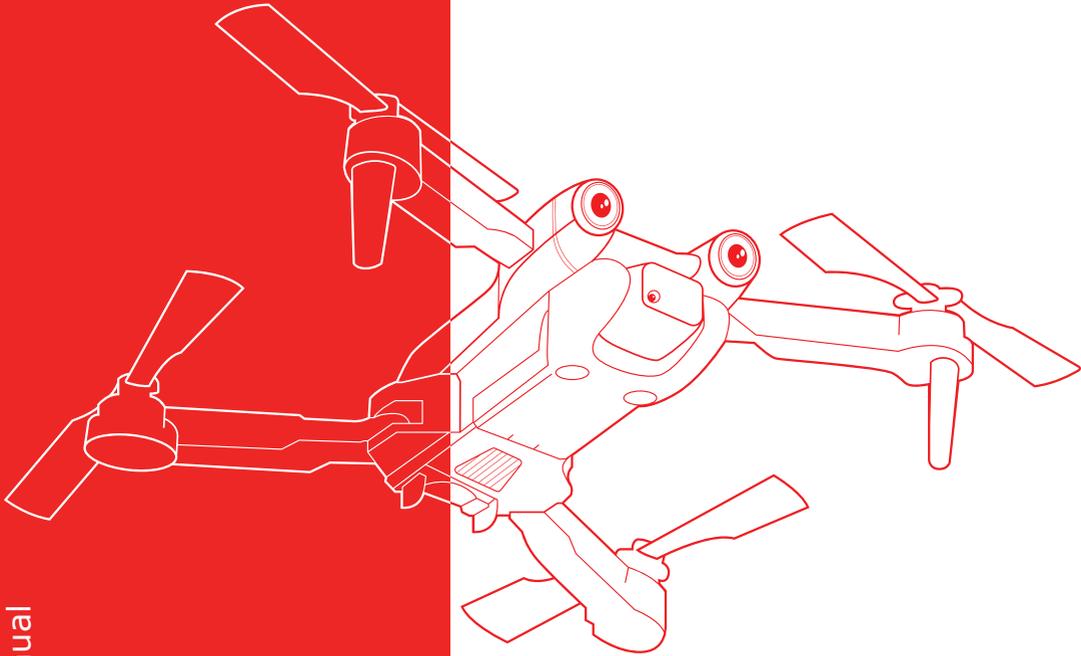
6+

285-31423 ALLY

Instruction Manual

# ALLY

**HD CAMERA DRONE**



LiteHawk ALLY Instruction Manual

<https://www.litehawkshop.ca>

Visit our website for extra batteries, parts and components!

LiteHawk ALLY Precautions - The LiteHawk ALLY is not intended for children under the age of 6 unless closely supervised by an adult. Improper use may cause serious injury. Please read Li-Po Battery section before use. Do not fly in areas close to high voltage lines or crowds. Do not fly when windy. Do not fly in rain, snow or if there is lightning and/or thunder. Do not touch ANY moving parts while the model is powered.



**WARNING: CHOKING HAZARD** - Small parts. Not For Children under 3 years



**CAUTION:** Do not touch the running model! Adult supervision is required!



**CAUTION:** Never insert any sharp objects, pins or screws into the model as this may puncture the internal battery!

**SAFETY PRECAUTIONS**

- Keep hands, hair and loose clothing away from moving parts when the model is powered ON.
- Turn off controller and ALLY when not in use.
- Remove batteries from controller when not in use.
- Parental guidance is recommended for the flight.
- Keep your ALLY in your sight so that you can supervise it at all times.
- New alkaline batteries are recommended for use in controller to obtain maximum performance.
- Your charger is tailor made for the Li-Po battery used in your LiteHawk ALLY. Do not use it to charge any battery other than that in the LiteHawk ALLY.

**BATTERY SAFETY INFORMATION**

- Requires 3 x 1.5V AA batteries (not included)
- Batteries are small objects.
- Replacement of batteries must be done by adults.
- Follow the polarity (+/-) diagram.
- Promptly remove dead batteries from the toy.
- Dispose of used batteries properly.
- Keep batteries dry.
- Remove batteries for prolonged storage.
- DO NOT incinerate used batteries
- DO NOT dispose of batteries in fire, as batteries may explode or leak.
- DO NOT mix old and new batteries or different types of batteries (i.e. alkaline/standard)
- Always replace the whole set of batteries at one time.
- DO NOT short-circuit the supply terminals

**CARE AND MAINTENANCE - Controller**

- Always remove batteries from the controller when it is not being used for a long period of time.
- Keep the toy away from direct heat or extreme cold.
- Do not expose the toy's interior to water or moisture. This can damage the electronic assemblies.

**Your LiteHawk ALLY is equipped with a Li-Po battery.**

Special Li-Po Battery Instructions:

- Never charge battery unattended.
- Charge battery in isolated area. Keep away from flammable materials.
- Do not expose to direct sunlight. There is a risk of the batteries exploding, overheating or igniting.
- Do not disassemble, modify, heat or short circuit the batteries. Do not place them in fires or leave them in hot places.
- Only charge the batteries with the specified battery charger.
- Only use the batteries in the device specified by LiteHawk.
- In the unlikely event of leakage or explosion use sand or a chemical fire extinguisher for the battery.
- Batteries must be recycled or disposed of properly.
- Keep battery dry.
- Turn power switch on drone to OFF when not in use.
- Do not charge if battery or connector are wet.

**Before charging the LiteHawk ALLY please read the following!**

- DO NOT leave the battery unattended during charging.
- DO NOT leave the battery plugged into the charger any longer than 2 hours. If the charging light does not go out in this time, the charger or battery could be faulty - unplug immediately!
- DO NOT drain the battery to the point at which you can no longer lift off. Stop using the ALLY when you begin to lose significant power.
- DO NOT recharge the battery until it is cool to the touch! 10 - 15 minutes is sufficient.
- DO NOT store battery for longer than 24 hours without recharging to at least 65% capacity.
- Do not charge if battery or connector are wet.
- Do not store your ALLY while the charging cable is plugged in.

**Do Not Fully Discharge the battery! Stop and recharge when your ALLY begins to lose power! Failing to do so will result in irreparable damage to the battery! During flight the LED lights will start to blink, this indicates the battery is running low.**



# Welcome to the World of LiteHawk!

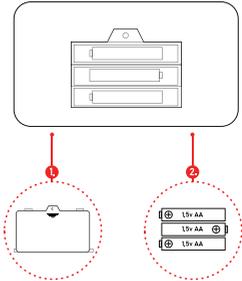
Welcome aboard, this is your new LiteHawk ALLY! Before we get ready for your first aerial adventure, let's cover the basics together!

Attempting to fly your LiteHawk ALLY without completely reading the manual may cause injury to yourself and people in the vicinity, as well as damage to the RC model. Please read the Instruction Manual thoroughly before taking your first flight.

## LiteHawk ALLY - Controller Set Up

Battery Installation:

1. Open the Battery Cover.
2. If used batteries are present, remove these batteries from the unit by pulling up on one end of each battery.
3. Install new batteries as shown in the battery compartment (+/-).
4. Replace battery door securely.
5. Check your local laws and regulations for correct recycling and/or battery disposal.
6. Never expose the transmitter or batteries to moisture.

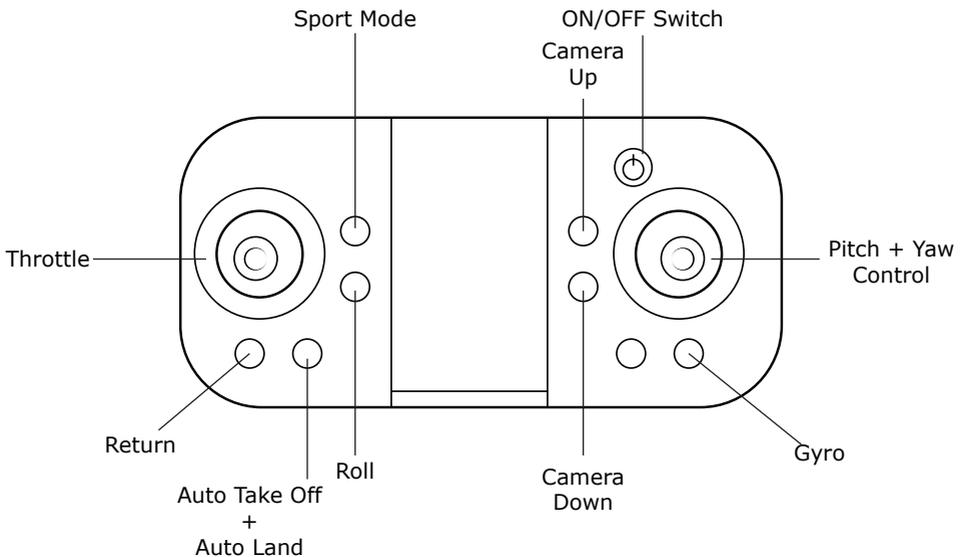


## LiteHawk ALLY - 2.4 Ghz

Your LiteHawk comes with a 2.4 Ghz radio system, which allows you to play without the fear of ever losing control! Race or play with countless other pilots. The range of your model is approximately 100ft which, due to its small size, is in excess of normal vision. The farther the model goes away from you the smaller it will become and the harder it will be to determine the model's direction. We suggest you stay at a distance between 5ft-25ft, this keeps your ALLY within a safe operational distance.

## LiteHawk ALLY - Controller Functions

\*Familiarize yourself with the Remote and the Drone - everything should be turned off.\*



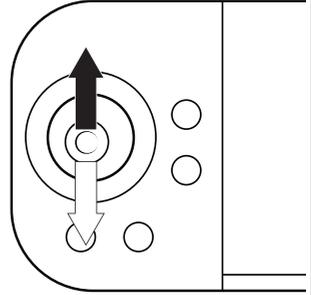
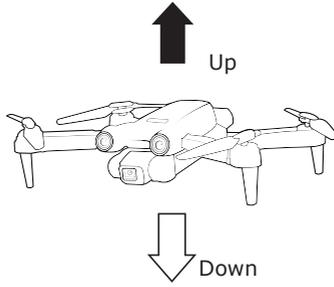
# LITEHAWK®

[www.litehawk.ca](http://www.litehawk.ca)

**Throttle control:**

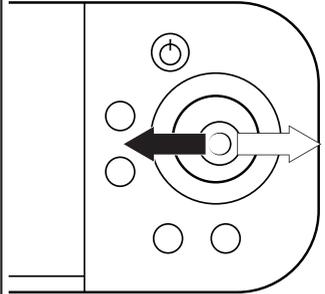
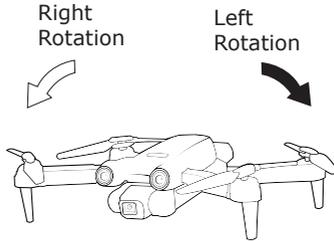
Moving the stick up increases power and will result in more lift. Lowering the throttle stick or decreasing power will result in less lift.

**TIP:** This is the same stick you will use to "sync" your drone



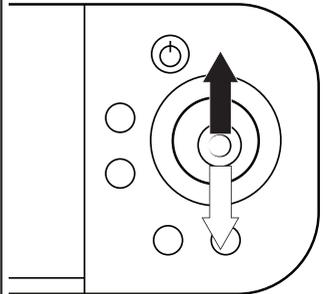
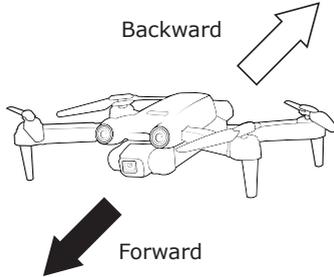
**Yaw control:**

Moving the stick to the left will rotate the drone left or counter-clockwise. Moving the stick to the right will rotate the drone right or clockwise.



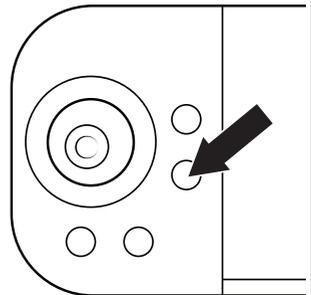
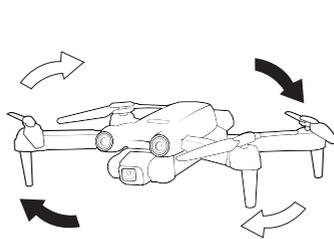
**Pitch Control:**

Moving the right stick up will make the drone go forward. Moving the right stick down will make the drone go backwards.



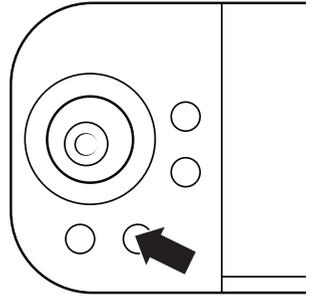
**Roll:**

Push the Roll button once to make the Ally perform an automatic mid-air roll!

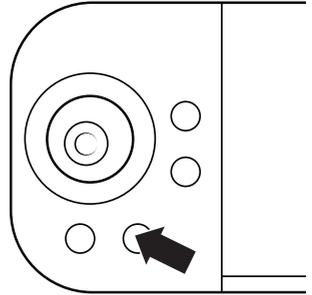


**Your LiteHawk drone is equipped with a barometric sensor which allows for Altitude hold capability. The drone will maintain your desired height while flying.**

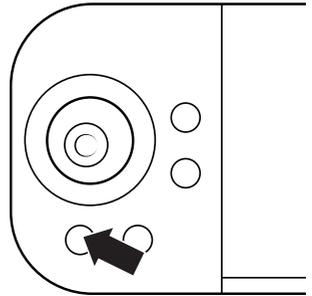
**AUTO TAKE OFF:** Press the Auto Take off button to launch your drone.

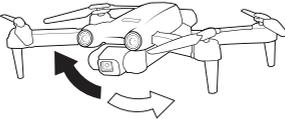
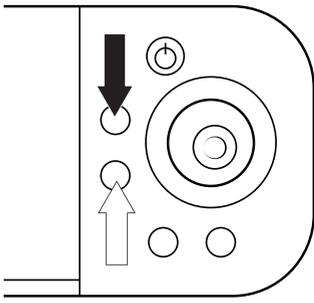
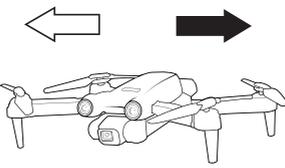
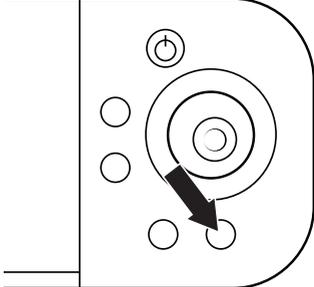
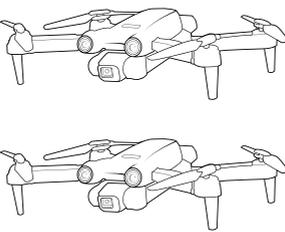
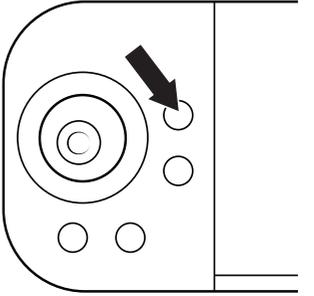


**AUTO LAND:** Press the Auto land button and the drone will land itself. You will hear a beep.



**Auto Return:** Press this button to return your drone to the controller and the automatic take-off location.



<p><b>Camera Up &amp; Down:</b>          Pushing the top button rotates the video camera up towards the drone. Pushing the bottom button rotates the camera down and away from the drone .</p>		
<p><b>Gyro Adjustment:</b>          The Ally has a built in gyro stabilization mechanism. Pressing this button with re-calibrate your gyro if your drone is starting to drift or wander when flying stationary.</p>		
<p><b>Standard &amp; Sport Modes:</b>          Press once and you will hear one beep - you are in Standard Mode (response rates are at 75%). Controls are much more responsive and the input of throttle, pitch, and yaw are greatly increased.</p>		

## How to charge the ALLY:

Your LiteHawk ALLY comes with a LiPo battery which is inside the model. The rechargeable Li-Po battery provides the power to propel your model at high speeds. You should expect 10-15 min run time. However you do need to make sure to properly maintain your Li-Po Battery.

- Li-Po batteries don't like to be run down too low. If the voltage is dropped dramatically they will be damaged and will not recharge! Once the model starts to slow, drive your model to a safe place, walk over and turn it off.  
- It is recommend to charge the battery after your run and to always store the battery with a charge. Never discharge or dead short a Li-Po battery!

Always have your model turned off when not in use. Make sure the switch is turned OFF.

1. Find a clean flat surface, avoiding areas where small parts can be lost. Turn the drone upside down to locate the battery.
2. Push down the safety release button, and slide out to remove the battery. Charge the battery with only the provided USB cable. Charging should take around 120 minutes.
3. Re-install the battery on the bottom of the drone.

Tip: If storing for more than 24 hours it is best to store with a fully charged battery. Failure to do so can damage the battery pack and shorten its useful life.

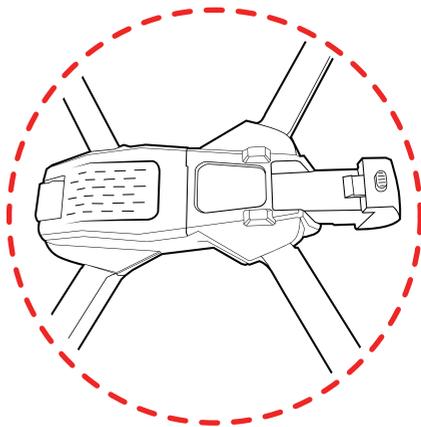
### During charging:

- It is normal for the battery to get warm during the charging process. Do not charge the battery on a surface that is flammable or can be damaged by heat.
- Do not leave the battery and charger unattended while charging.
- After charging, unplug charger from model.
- Do not store the model plugged into the charger.

### How To Sync

- 1/ Make sure the model is turned Off and locate a flat level surface.
- 2/ Turn the ALLY On. Place the ALLY on the flat surface, you must do this within five seconds of turning the power switch ON.
- 3/ Turn on the power for the controller.
- 4/ Move the left control stick (this is also the throttle stick) all the way up, then all the way down. You will hear a beep. The model is now bound.

The ALLY **MUST** be on a flat surface in order to digitally self level itself, otherwise the model will not sync to the controller.



## LiteHawk ALLY - First Flight

If you've never flown then the first thing you need to learn is throttle control. Slowly and carefully ramp up the throttle until the model starts to lift off, then as soon as the model leaves the ground, ease off the throttle gently and let it settle back down. If the hardware is working correctly the model should remain fairly level, and shouldn't drift too far. Repeat this process, lift off gently and then land again, until you have a good feel for how much throttle is required to keep the model in the air. Try keeping it in the air a little longer - don't worry about pitch or yaw and - all we care about right now is that the model stays at a steady height. Don't go more than a meter off the ground. If the model drifts too far, ease off the throttle and land it.

When heading out to fly, it's important to always be aware of your surroundings.

Do not fly in the following places: Near crowds or high voltage, near any obstacles, wind speeds over C (3mph), thunder, rain or snow or between high buildings.

- Ensure nothing prevents the smooth running of the moving parts.
- Do not dismantle or tamper with this R/C product or its transmitter. The manufacturer and distributor will accept no responsibility, expressed or implied, for accidents or injuries caused as a result of dis-assembly, modification and/or usage against the instructions for this product.
- Ensure that all batteries are correctly installed and that the Li-Po battery is fully charged and in good condition.
- Do not touch ANY moving parts during operation.

## LiteHawk ALLY - Post Flight

- When you have finished using your LiteHawk ALLY you should first turn off the toy, then switch OFF the transmitter.
- *If you do not plan on using the drone for more than 24 hours, it is recommended that you recharge the battery fully before putting it away.*
- Remember to allow the battery to cool 10-15 minutes before recharging.

## LiteHawk Guarantee

All LiteHawk products have been tested and designed to perform as claimed out of the box. If you have an issue with a product or part of a product please contact us directly. We cover claims towards manufacturing defects. We know that there is nothing worse than having a question or needing a replacement part and having nowhere to go. LiteHawk is not responsible for covering the costs of replacement parts or repair on products that have been damaged due to product use.

## LiteHawk Parts & Tech

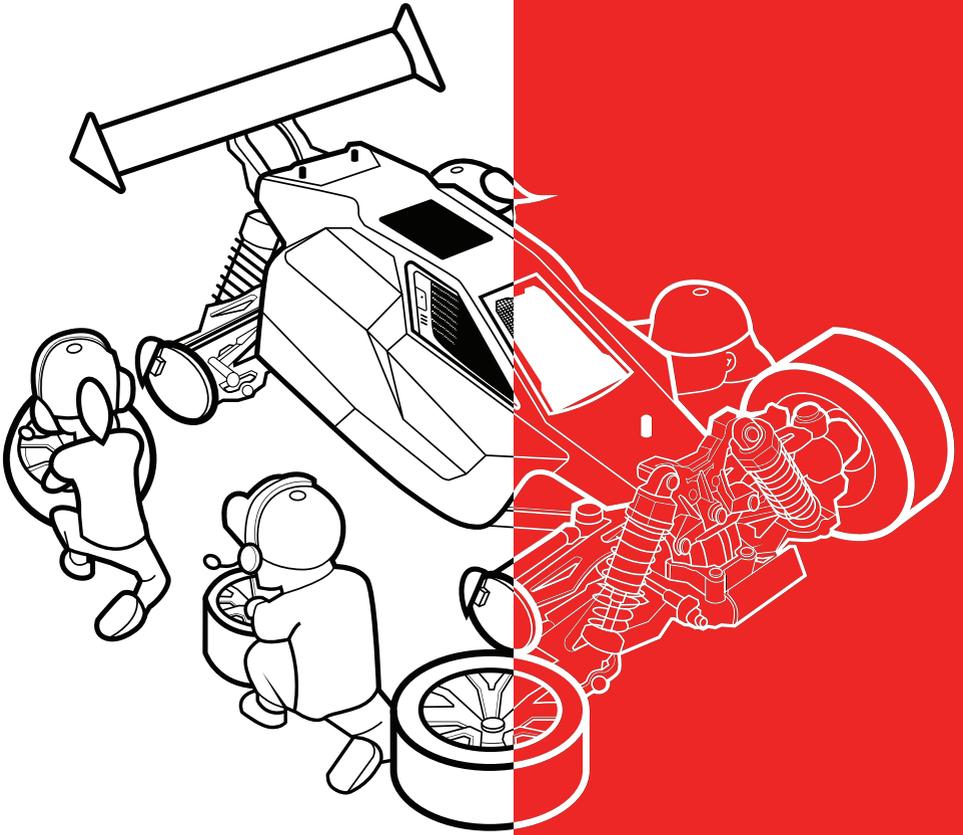
There's nothing worse than buying a new toy, having a question, or needing a replacement part, and then being left out in the cold. No worries! We pride ourselves on the very best customer service!

We have all the parts you'll ever need to keep your new LiteHawk in tip top shape! Like we always say, "accidents happen, even to the best of us"...with that in mind [www.litehawk.ca](http://www.litehawk.ca) is available 24 hours a day, 7 days a week!

We ship your parts Same Day! Except weekends of course - that's when we are out playing too!

# LITEHAWK®

[www.litehawk.ca](http://www.litehawk.ca)



 **YouTube**

