



DRAGONFLY



# User Manual

Item No. 4031 | Ages 8+

**Thank you** for purchasing the FlyTech Dragonfly from Wowwee!

## Introduction

The world's first radio-controlled flying insect. FlyTech™ Dragonfly is a fun RC flyer that's easy or challenging depending upon the skill level setting you choose - beginner or expert. An ultra-light, dual-wing design and "high-flex," crash-resistant structure make the dragonfly safe to fly anywhere, even in small indoor spaces. The FlyTech Dragonfly is an easy-to-fly aeronautical marvel that looks and sounds like a genetic hybrid of the real thing.

Designed primarily for amazing indoor flight, you can also use FlyTech Dragonfly outdoors. Its wings flap like a real dragonfly and it has a long flight duration on a single recharge.

Take a few moments to look through this user manual to get your FlyTech Dragonfly up and soaring!

**Note:** When using the FlyTech Dragonfly, adult supervision is required, especially when changing the batteries, or replacing the wings and/or propeller.

## Package contents

This package contains:

1 x FlyTech Dragonfly

1 x Pair of spare wings

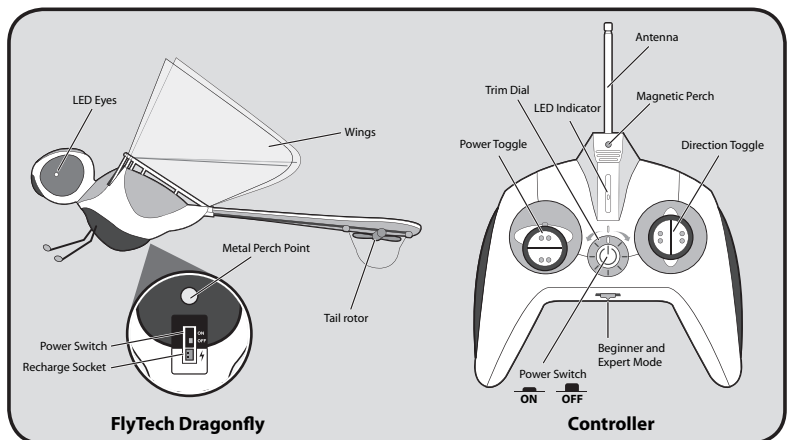
1 x Controller

1 x Spare propeller

1 x Detachable antenna

1 x Tail ribbon

## Quick overview

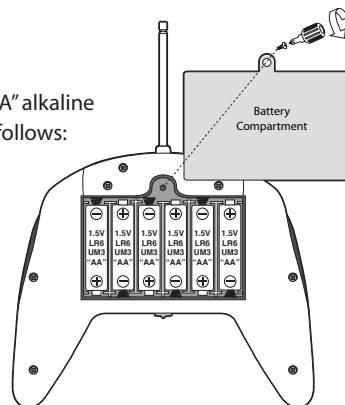


## Batteries

The FlyTech Dragonfly controller requires 6 x "AA" alkaline batteries (not included). Install the batteries as follows:

### Attention: Important Battery Information

- Use only fresh batteries of the required size and recommended type
- Do not mix old and new batteries, different types of batteries [standard (Carbon-Zinc), Alkaline or rechargeable] or rechargeable batteries of different capacities
- Rechargeable batteries are only to be charged under adult supervision
- Please respect the correct polarity, (+) and (-)
- Do not try to recharge non-rechargeable batteries
- Do not throw batteries into the fire
- Replace all batteries of the same type/brand at the same time
- The supply terminals are not to be short-circuited
- Remove exhausted batteries from the toy
- Batteries should be replaced by adults
- Remove batteries if the toy is not going to be played with for some time
- The packaging should be kept since it contains important information
- Rechargeable batteries are to be removed from the controller before being charged



1. Open the battery compartment on the controller using a Phillips screwdriver (not included) to remove the screw on the battery compartment door.
2. Insert the batteries according to the diagram. Ensure that the positive and negative polarities match the illustrations inside the battery compartment.
3. Replace the battery compartment door and replace the screw using the screwdriver. Do not overtighten.

## Antenna

You will need to attach the antenna to the controller before you can begin using the dragonfly. To do so:

- *Screw the antenna clockwise into the top of the controller (as illustrated in the diagram) until it stops turning. Do not overtighten.*



For optimal performance, fully extend the antenna on the controller before flying the dragonfly.

### FCC Note:

The unique antenna provided has been authorized for use with this equipment. Installation of any other antenna is not authorised under FCC regulations. The manufacturer is not responsible for any radio or TV interference caused by unauthorised modification of the product.

### SAFETY PRECAUTIONS!

- Never fly or follow the dragonfly into the streets
- Keep the dragonfly away from faces and eyes
- Do not launch at people or animals
- Use the controller charger included in this package
- Keep fingers away from the dragonfly's moving joints when the power is on
- Make sure people around you are aware you are playing with the FlyTech Dragonfly
- Do not fly near walls or ceilings
- Do not fly the dragonfly near overhead cables, trees, buildings or any other obstructions
- Do not play outdoor during thunderstorms or adverse weather conditions
- Always turn your dragonfly and controller OFF when not in use

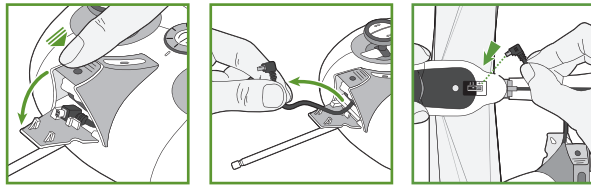
## Charging FlyTech Dragonfly

Before flying the FlyTech Dragonfly for the first time (or if you have depleted a charge on the dragonfly), you will need to recharge it. A typical charge takes about 20 minutes and allows around 7 minutes of flying time.

**Note:** If the charge time begins to exceed 25 minutes, you should replace all the batteries in the controller with fresh batteries.

**To charge the dragonfly:**

1. On the controller, push down on the magnetic perch. The cord compartment door will open.
2. Pull the end of the cord from the compartment as shown.
3. Hold the dragonfly firmly by its body, and then insert the cord into the socket as shown. Pay close attention to the orientation of the socket and the connector on the cord.



**NOTE:** Make sure that the dragonfly is turned off before you recharge it.

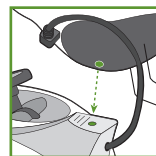
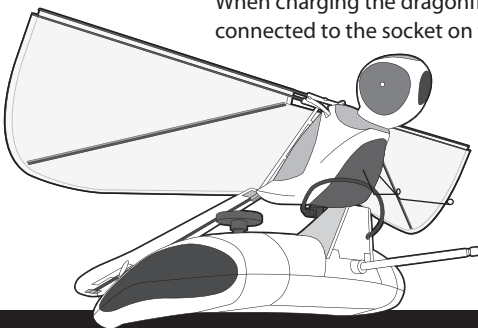
**IMPORTANT:** Do not force the cord into the socket – this can damage the socket. The exposed silver contact points on the side of the controller plug should line up with the cut-away side of the socket.



**NOTE:** The controller is equipped with a sleep feature. The LED indicator will turn off if the controller is idle for more than 1 minute. Therefore, when charging FlyTech Dragonfly, the LED indicator light might turn off, however, the controller will continue to charge the dragonfly. To turn the LED indicator light back on, press the power button on the controller until the LED indicator lights up again.

4. Press the power button on the controller to turn it on.  
If the connector on the cord is properly connected to the socket, the eyes on the dragonfly will pulse slowly to indicate that it is charging.

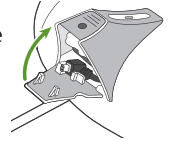
Note that the eyes will blink rapidly if there is no signal from the controller. When charging the dragonfly, make sure the cord from the controller is properly connected to the socket on the dragonfly.



**NOTE:** You can rest the dragonfly on the controller while it is charging by placing the metal perch point (on the dragonfly) on the magnetic perch (on the controller).

5. When the dragonfly is fully charged, its eyes will stop pulsing, and turn off.

6. Carefully unplug the charging cord from the dragonfly, place the cord back in the compartment of the controller and then close the compartment door. Now you are ready to fly!



**NOTE:** When the dragonfly's battery is running low, you will notice his eyes will begin to dim and the sound of the motor on the dragonfly will lower in tone and it will become less responsive.

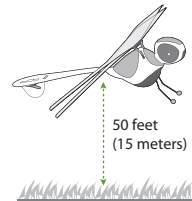
**IMPORTANT:** To prevent complete depletion of the FlyTech Dragonfly's battery when not in use, ALWAYS RECHARGE before storing. Severe depletion may result in permanent battery failure.

## Flying

When the dragonfly is fully charged and ready to fly, you can take your FlyTech Dragonfly to the skies!

## Location

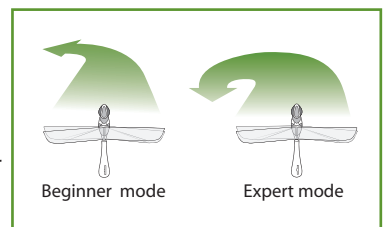
You can operate FlyTech Dragonfly both indoors and outdoors. The maximum recommended range for the controller is 50 feet (15 meters).



For optimal indoor flying performance, we recommend a minimum area of 16 feet x 16 feet (5 meters x 5 meters). For outdoor flying, try to avoid windy areas and keep the dragonfly away from rain or other harsh conditions.

## Flight modes

You can operate FlyTech Dragonfly in one of two modes: Beginner or Expert. To familiarize yourself with the controls, start with Beginner mode. Beginner mode allows for more gentle turns, and Expert mode allows for sharper and faster turns. Once you are comfortable with the controls, you can switch to Expert mode.



## To fly the dragonfly

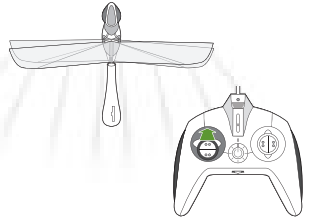
**NOTE:** Before you launch the dragonfly, make sure the rear rotor is not spinning (otherwise it might not fly in the desired direction). If the rotor is spinning, adjust the trim dial on the controller until it stops. The trim dial is the circular dial around the power button on the controller.

### To operate the FlyTech Dragonfly:

1. Turn the controller on by pressing the power switch. The LED indicator will blink.
2. Extend the antenna on the controller.
3. Turn the FlyTech Dragonfly on by setting the switch on the dragonfly to ON.  
**NOTE:** If the controller is off when you turn on the dragonfly, the dragonfly's eyes will blink.

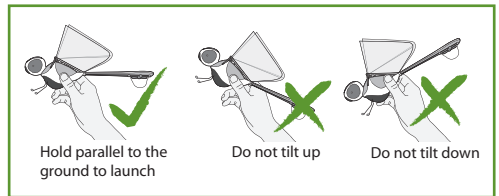
4. On the controller, push the left stick upwards to increase speed of the wing-flapping. The left stick (throttle) controls how high and fast your FlyTech Dragonfly will fly.

**NOTE:** Push the left stick once first to arm the dragonfly and again to start the wings flapping.



5. Launch FlyTech Dragonfly from your hand with a gentle horizontal motion. The dragonfly will flutter away from you.

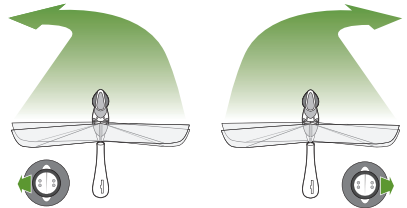
**NOTE:** Do not throw the dragonfly when launching.



6. On the controller, push the right stick (directional) to the left to turn left, or push the stick to the right to turn right.

Use smaller movements on the controller to make the dragonfly turn more gradually.

To make the dragonfly turn more quickly, push the stick further in the desired direction.

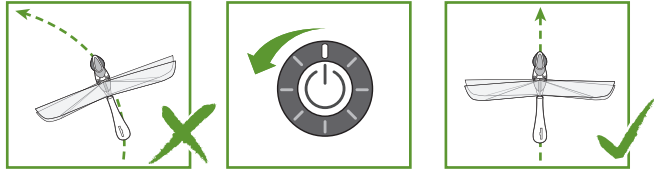


### Trimming

Use the trim dial to adjust the straight line flight of the dragonfly. If the dragonfly naturally steers to the right, slowly turn the trim dial in a clockwise direction to adjust the steer.



If the dragonfly steers to the left, slowly turn the trim dial in a counter-clockwise direction. Avoid using the right (directional) stick while adjusting the trim as your trim settings might be inaccurate.

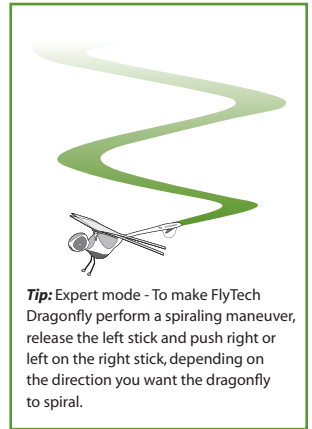


You can also use the trim dial to make the dragonfly fly in constant circles. Turn the trim dial clockwise to fly the dragonfly in a counter-clockwise circle; turn the trim dial counter-clockwise to fly the dragonfly in a clockwise circle.

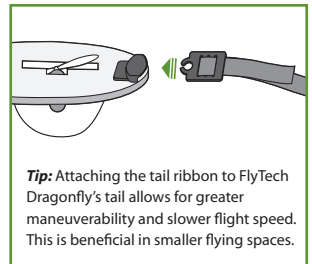
**NOTE:** Adjusting the trim can make the dragonfly's tail rotor spin even when not flying.

### Tips and tricks

- When launching the dragonfly, hold it level by the middle of the body and gently push it forward as you would with a paper airplane, while holding the left stick (throttle control) at about half-power. If it starts to fly upwards, release some of the power so that it stays level.
- Avoid making turns while the nose is pointed upwards, or the dragonfly will dive-bomb.
- The tail ribbon is ideal as a training aid, especially when in small spaces, and helps restrict flying speed.
- When flying the dragonfly outdoors, take note that the calmest times of the day are usually at dawn and at dusk. If it is a bit windy outdoors, avoid flying the dragonfly at wind speeds higher than 4 mph (6.5 km/h).
- With more practice and expertise, it will also be possible to make the dragonfly take off into the air from the ground. Place the dragonfly on a smooth and flat surface that is long enough to allow it room to take off (for example, a hallway).



**Tip:** Expert mode - To make FlyTech Dragonfly perform a spiraling maneuver, release the left stick and push right or left on the right stick, depending on the direction you want the dragonfly to spiral.



**Tip:** Attaching the tail ribbon to FlyTech Dragonfly's tail allows for greater maneuverability and slower flight speed. This is beneficial in smaller flying spaces.

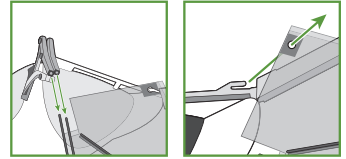
For more tips and tricks, visit [www.flytechonline.com](http://www.flytechonline.com)

## Replacing the wings

You can replace the original wings on your dragonfly if they become damaged or you want it to have a different look. A spare set of wings is included in the FlyTech Dragonfly package. To replace the wings, do the following:

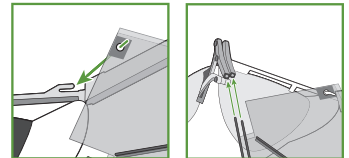
1. Make sure the controller and the dragonfly are turned off.

2. Remove the old pair of wings. There are two sets of wings on the dragonfly. Gently remove the first pair of wings by first pulling the wing rods out from the sockets. Then, pull the wings off the hook at the end of the body area.



Repeat for the second pair of wings. Be careful not to touch any broken edges.

3. Install the new pair as illustrated, by reversing the instructions for removing the damaged wings. Hook the rear part of the first pair of wings onto the hook at the end of the body, and then slide the wing rods into their sockets. Repeat for the second pair of wings.



**NOTE:** Test the dragonfly after installing the new wings. If the dragonfly cannot fly in a straight line, or experiences difficulty when airborne, try swapping the new left and right wings.

## Replacing the propeller

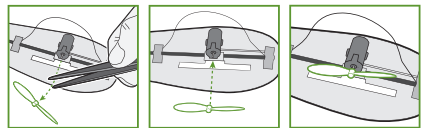
You can replace the original rotor propeller on your dragonfly if the original one becomes damaged. A spare propeller is included in the FlyTech Dragonfly package. To replace the damaged rotor propeller:

1. Make sure the controller and the dragonfly are turned off before removing the propeller.

2. Using a pair of pliers, grasp the damaged rotor propeller and pull it off the axle as indicated in the diagram.

3. Insert the new rotor propeller into the axle carefully, making sure it is secure. Be careful not to damage the motor.

4. Turn the propeller manually to make sure it does not snag on the tail of the dragonfly.





## FAQ

The following is a list of frequently asked questions regarding the FlyTech Dragonfly.

**Q:** My dragonfly won't fly straight when I am flying it indoors! ...

**A:** Your problem might be due to indoor sources of air currents keeping the dragonfly from flying straight. Try turning off fans and closing air conditioning vents. If there are open windows, try closing them to avoid creating drafts.

**Q:** My dragonfly won't fly straight when I am flying it outdoors! ...

**A:** You might be flying the dragonfly in conditions that are too windy... Try to find a location that is sheltered from the wind, such as between buildings or in a walled-off courtyard. For optimal operation, avoid flying the dragonfly in wind speeds higher than 4mph (6.5 km/h).

**Q:** The tail rotor propeller on my dragonfly keeps spinning, and I can't stop it! ...

**A:** You have probably turned the trim dial. The trim dial controls the rotor speed. Adjust the trim by slowly turning the trim dial on the controller until the rotor stops spinning.

**Q:** My dragonfly stops working when it gets farther away! ...

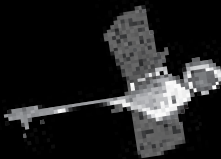
**A:** Your dragonfly is most likely out of range for the controller. The recommended range for controlling your dragonfly is 50 feet (15 meters) or less from the controller. To fully take advantage of the flight control, make sure the antenna on the controller is fully extended.

**Q:** My dragonfly won't stay up, even after charging! ...

**A:** The batteries in the controller might be getting weak, in which case, you will need to change the batteries. The batteries in the controller will usually last about ten flight-recharge cycles. You should always turn the controller and the dragonfly off when not in use.

If you have questions that are not answered in this manual, refer to:

[www.flytechonline.com](http://www.flytechonline.com)



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We recommend that you retain our  
address for future reference.  
Product and colors may vary.  
Packaging printed in China.  
This product is not suitable for children  
under 3 years because of small parts -  
choking hazard.

www.flytechonline.com

MADE IN CHINA.

4031US03TOP

# CE 0979

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, and (2) This device must accept any interference received, including interference that may cause undesired operation.

#### NOTE

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 and 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 experienced radio/TV technician for help

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**WARNING:** Inserting FlyTech Dragonfly's legs into an AC socket will result in an electric shock and can seriously damage your health. If the dragonfly becomes trapped in an electrical device, turn off the power before retrieving the toy.

Please keep these instructions as they contain important information.