RAGE RC

STINGER BL

INSTRUCTION MANUAL



Specifications

Total width (motor shaft to motor shaft)**:**	7.00” (178mm)
Prop size:	4.75” (121mm)
Height:	2.25” (57mm)
Weight:	5.4oz. (153g)
Battery:	3.7V 1S 1200mAh LiPo battery
Motors:	1503/4200Kv BL Motors w/Integrated ESC’s (2CW and 2CCW)
Charger:	USB Charge cord w/Type C plug
Transmitter:	4-channel, 2.4GHz w/FPV LED screen

The Stinger BL is an affordable FPV drone, now featuring brushless motors for better performance and an LED screen on the transmitter for direct FPV viewing. So, now you no longer need to connect to another device to view your flights! The Stinger BL includes nearly all the convenient flight features included on previous Stinger drones like Altitude Hold, One-Touch Take-Off and Landing, 6-Axis Gyro Stabilization Control, high-visibility front LEDs, and Optical Flow. As a fun flying feature, this Stinger is even capable of 360° flips. And, for capturing images and videos, the new BL features a 1080p HD camera with a 1-axis control (up and down) from the transmitter.

The Stinger BL is an RTF (Ready-To-Fly) drone, so it arrives factory-assembled with everything needed to experience the fun of FPV flight. Inside the quality travel-type case you'll find a 2.4GHz 4-channel transmitter with memory card insert and an LED screen with glass cover, a powerful 1200mAh battery that provides up to 15 minutes of flight time for taking images and videos, and a USB charge cord for quick, convenient charging. Because the transmitter features an internal battery, you just need to charge it and the flight battery, and you'll be flying FPV around your yard or local park within minutes of opening the box. If you want to record those FPV images and video to your transmitter, just insert a memory card (not included) in your transmitter and you're all set.



⚠WARNING

In order to ensure the electromagnetic environment requirements for aeronautical radio navigation stations, it is forbidden to use various remote control and drones within 6.2 miles on both sides of the airport runway center line, 12.4 miles from both ends of the runway, on civil aviation's air routes or airlines. During the period of the management of radio operation orders by the relevant state departments, the various remote control and drones shall be stopped as required.

DISCLAIMER AND SAFETY INSTRUCTIONS

In order to make it easier and safer to use this product, please read all the contents of this manual carefully before using this product, make sure to save this manual for future reference.

DISCLAIMER

1. In order to protect the legitimate rights and interests of users, please carefully read the instructions, disclaimers and safety instructions provided with this product before use.
2. This product is not suitable for people under the age of 14. People under the age of 14 need to use it under the supervision and guidance of adults with model aircraft flight experience.
3. Once you start using the product, you are deemed to have read, understood, recognized and accepted all terms and contents of the product's instructions, disclaimers and safety instructions.
4. In the process of using this product, please be sure to strictly abide by and implement the requirements including but not limited to the instructions and safety instructions. For all personal injuries, accidents, property losses, legal disputes and all other adverse time resulting in conflict of interest caused by using behaviors or irresistible factors in violation of safety instructions, the user shall bear relevant responsibilities and losses, and the company will not bear any responsibilities.
5. The company will not be liable for any direct or indirect violation of laws and regulations caused by the use of the product.

SAFETY INSTRUCTIONS

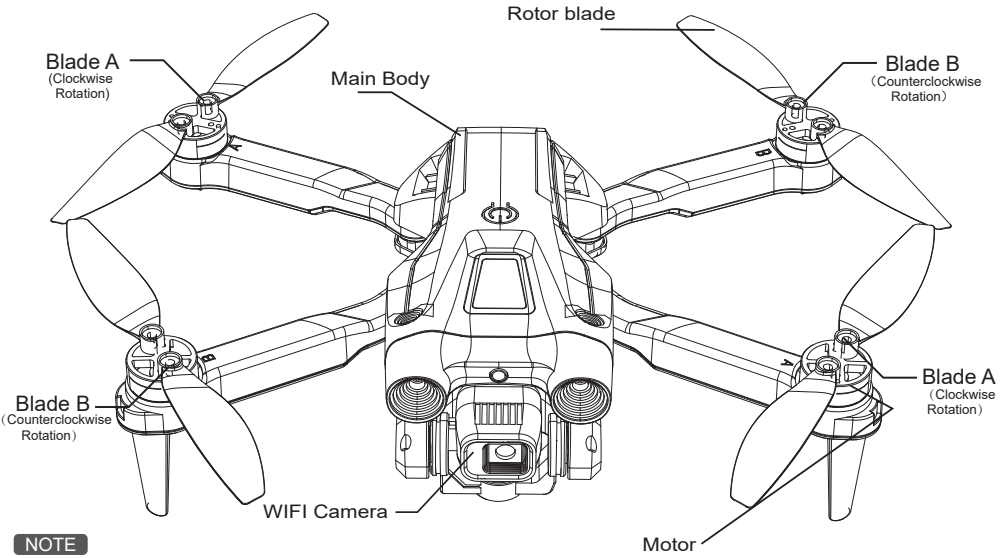
1. This product is not suitable for people under the age of 14 and other people without full civil capacity.
2. The product has high-speed rotating blades and includes certain dangers in operating. Do not approach or touch the product while it is working.
3. When using this product, please keep away from dangerous environments such as airports, railways, highways, high buildings, electric lines, etc.
4. When using this product, please keep away from high electromagnetic interference environments such as mobile base stations, high-power transmitting equipment, etc.
5. When using this product, please keep away from all types of manned aircraft.
6. Please do not use this product in rain, thunder, dust, fog, snow, strong wind, low temperature and other harsh environments.
7. This product is a non waterproof design, please do not operate this product near areas of water.
8. When operating this product, please always keep a safe distance of about 30ft between the aircraft and people or animals.
9. Always keep the aircraft flying within the operator's visual range. Do not attempt to fly when product is not visible behind buildings or walls.
10. Do not hover or fly over a crowd or near groups of people.
11. Do not operate this product near a place where children play.
12. Do not use this product to chase vehicles or affect the normal operation of vehicles.
13. Do not turn off the aircraft when the product is flying in the air without an emergency need.
14. This product can not be used when under the influence of alcohol, fatigue, medications, physical discomfort, etc.
15. Please check the product before each use, including but not limited to the integrity of parts, cracks and wear of the body and propeller. In case of any issues, please stop using and replace the necessary accessories immediately.
16. Do not attempt to block any moving parts in the operation of this product.
17. Do not modify this product or use it for non original design purposes.
18. Do not operate this product in a no fly zone according to laws and regulations.

19. Due to the variety of materials used in the aircraft, high temperature will damage the internal structure of the aircraft, and lead to unpredictable flight characteristics. Therefore, please keep the aircraft away from any heat source and avoid exposing to direct sunlight for a long period time.
20. Please follow the product instruction manual.
21. Please use original accessories for maintenance and replacement.
22. Please make sure that other operators understand and abide by the safety instructions.
23. Do not use expanded, leaking or damaged batteries.
24. Keep away from inflammables when charging the battery (such as blankets, solid wood furniture, wooden boards, etc.)
25. Please use the original charge cord. Do not use other brands or damaged charging cords.
26. Please keep a safe distance from the high-speed rotating blades to avoid the risk of injury.
27. Do not fly the aircraft close to the face or ears to avoid injury or hearing loss.
28. Aircraft should be used as far away from other electrical equipment and magnetic objects as possible to avoid interference.
29. Please do not short circuit or squeeze the battery to avoid damage to the battery or surrounding objects.
30. The motor can be hot after use. Please do not touch it to avoid burns.

CHARGING PRECAUTIONS

1. There are certain risks in using lithium batteries which may cause significant injury to people or damage to property. Please use it carefully as the user bears all relevant responsibilities.
2. If the battery leaks, avoid contact with skin and eyes. If it touches the skin, please wash it immediately with soap and clear water. In case of contact with eyes, wash immediately with plenty of water and see doctor immediately.
3. If the charger emits odor, noise or smoke, please unplug the power supply immediately.
4. Please use the original special charger for charging. Do not use damaged or other brand chargers.
5. Do not charge batteries that are swollen, leaking or damaged.
6. Do not overcharge the battery. Once the battery is fully charged, please turn off the charger.
7. Do not charge on a surface near inflammables (blankets, wood floor, solid wood furniture, etc.) or conductive objects. **Always keep the battery in view when charging.**
8. Do not charge the battery immediately after using the product, allow the battery to cool down for 10-15 minutes.
9. The charging temperature of the battery should be between 32°F to 105°F.
10. The device consists of electronic components and batteries. For electronic waste, please carry out according to local waste treatment requirements.

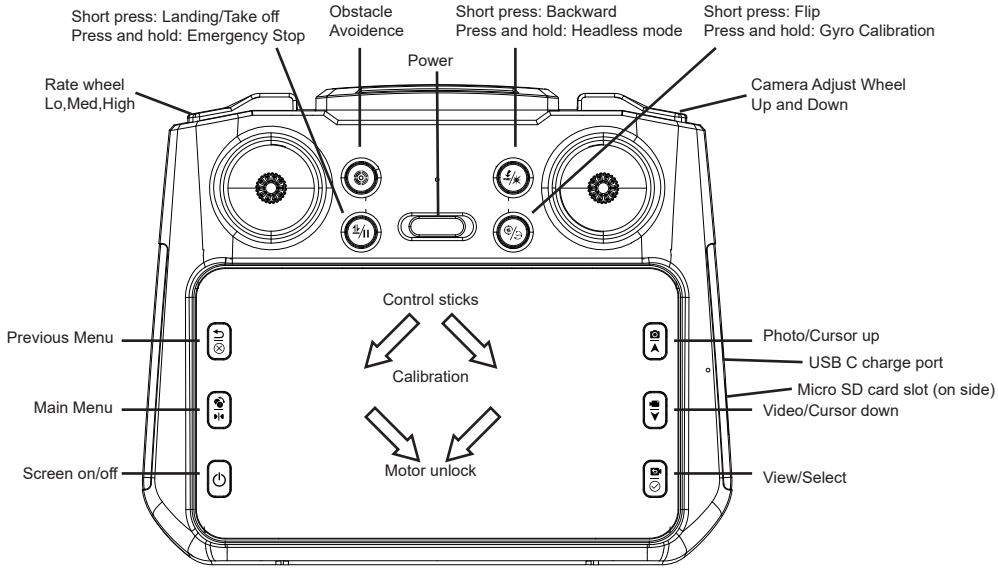
PRODUCT OVERVIEW



NOTE

When replacing the blades, ensure that the blades A / B installed on each shaft are consistent.

TRANSMITTER OVERVIEW



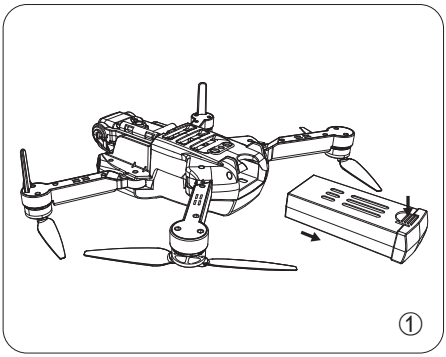
Important Notice! When the power supply of the transmitter is lower than 3.5V, you will hear a low power beeping sound. When this occurs, you must charge the transmitter before flying.

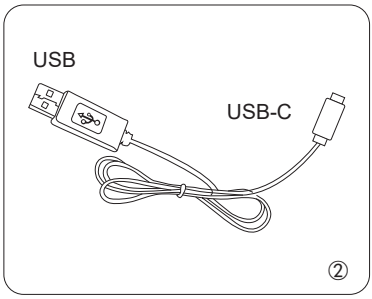
CHARGING AND BATTERY INSTALLATION

CHARGING

1. Press the tab on the battery and push it down while sliding the battery backward to remove cartridge from the aircraft.

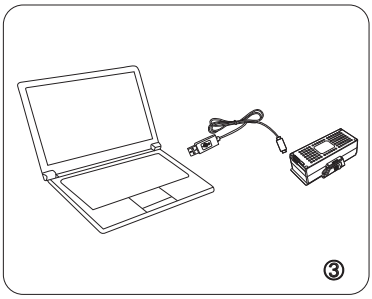
(figure 1)





2. Connect the original charge cord USB-C to the flight battery.

(figure 2)



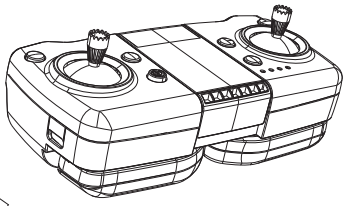
3. Plug the USB into a 5V USB power source.

(figure 3)

The red light will remain on while charging. When battery is fully charged the red light will go out. The charging time is about 180 minutes.
Note: Please use the factory charge cord. It is NOT recommended to use a damaged or other branded charger for charging.

TRANSMITTER CHARGING

The transmitter includes a built-in 3.7V lithium battery. To charge, connect the USB-C to the transmitter and the USB to a 5V power source. While charging, the red LED will be on. When charging is complete, the red LED will turn off.



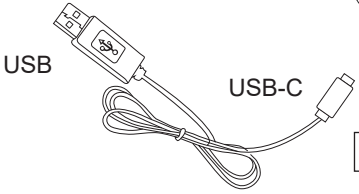
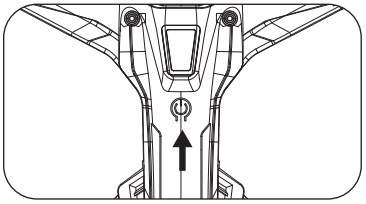
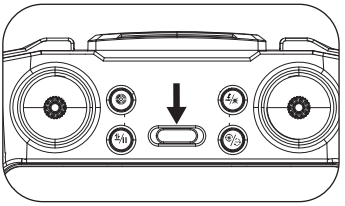


Illustration may differ from actual unit.

STEPS BEFORE TAKE-OFF

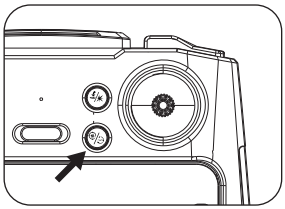


Install the battery in the aircraft, then press and hold the aircraft Power Button for more than 3 seconds. The aircraft will beep and the lights on the front and rear arms of the aircraft will flash slowly.



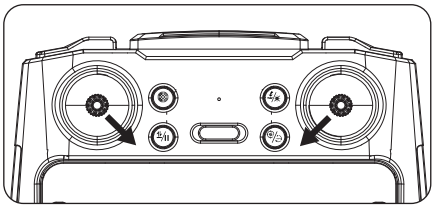
Slide the power switch on the transmitter. You will hear a beep and the power light will turn on. The lights of the aircraft will blink rapidly. When they remain solidly on, the binding process is complete.

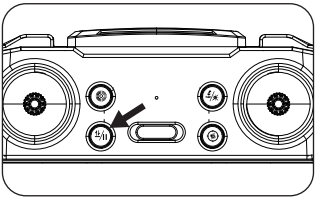
GYRO CALIBRATION



With the camera on the aircraft pointing away from the pilot, press and hold the Gyro Calibration button on the transmitter and you will hear a beep. The front and rear lights will flash. When the lights turn solid, the calibration is complete.

ONE BUTTON TAKE-OFF/LANDING





1. One Button Take-off
   After unlocking the motors (as shown on the left), short press the Take-Off/Landing button and the aircraft will automatically take off and rise to an altitude of approximately 4 feet.

   Do not hold this button in place as it will initiate an Emergency Stop and the motors will turn off in flight!

2. One Button Landing
   When you are ready for the aircraft to land, short press the Auto Take-Off/Land button again. The aircraft will begin to slowly descend in place. During the descent, the direction of flight can be controlled by the control sticks.

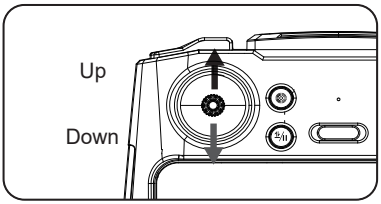
   Do not hold this button in place as it will initiate an Emergency Stop and the motors will turn off in flight!

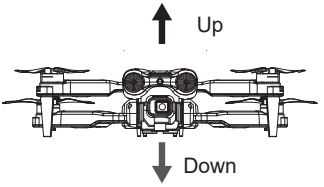
   When you are finished flying, make sure to press the button on the unit first to turn off the power. Once the power is off, slide the power switch on the transmitter to the left until the red LEDs go off.

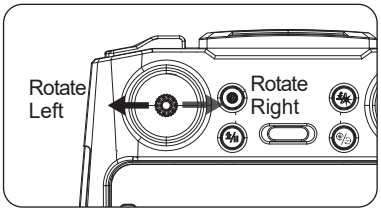
TRANSMITTER INSTRUCTIONS

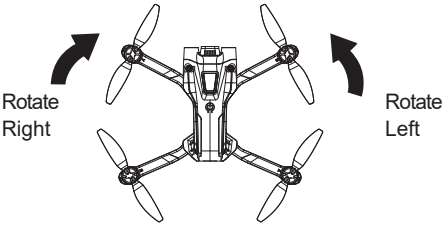
CONTROL DIRECTIONS

1. Left Control Stick (throttle) (The left stick controls the flight altitude and left and right rotation (yaw)

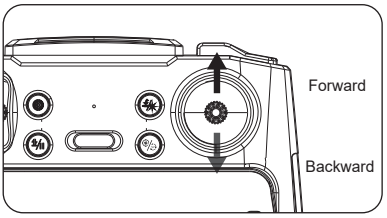


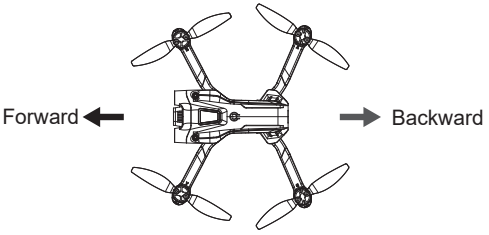


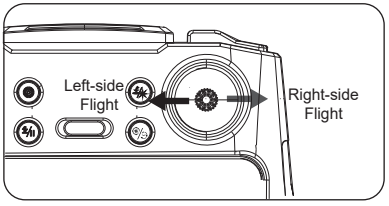


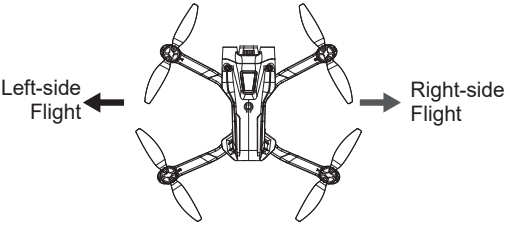


2. Right Control Stick (direction) (The right stick controls the forward/backward and left/right-side flight direction)

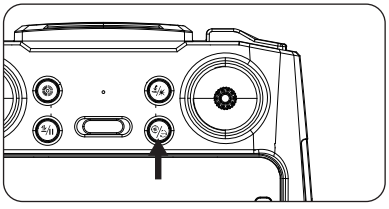








3. Flip Function (Short press the flip button and then move the right stick to the right or left for an automatic roll. Or, move the right stick up or down for an automatic forward or backward flip.



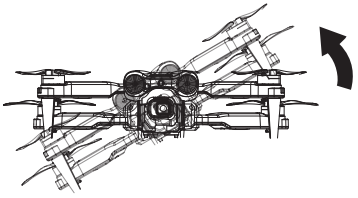
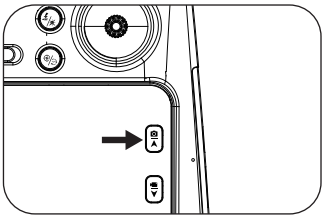
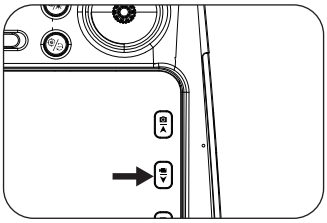


PHOTO AND VIDEO



Photo

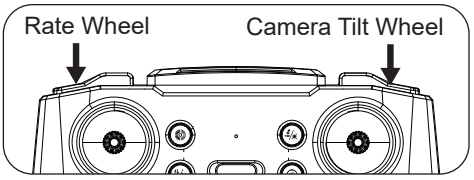
Short press the photo button on the transmitter screen. The photos will be stored on your installed memory card (not included).



Video

Short press the video button on the transmitter screen to begin recording video. Press the button again to stop the recording. The video will be stored on your installed memory card (not included).

RATES AND CAMERA TILT



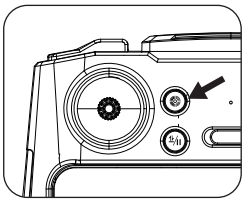
Rates

Rotate the rate wheel on the top left of the transmitter to change the flight speed. One beep is low, two beeps is medium, three beeps is high. When transmitter is turned on, the default setting is low rate.

Camera Tilt

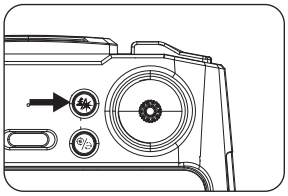
The tilt of the camera is controlled by the wheel on the right top of the transmitter. Rotate clockwise to tilt down and counter clockwise to tilt up.

OBSTACLE AVOIDANCE



Press the button to activate during flight. Once activated, the sensors on the front and both sides of the unit will sense when approaching a wall or large object that is in front or to the sides and react to push the model away from the obstacle and the pilot will also have limited control until the obstacles are further away. Due to the use of infrared technology this feature works best when flying indoors or in low light settings.

BACKWARD AND HEADLESS MODES



Backward

It is always recommended to calibrate and start your flights with the camera on the aircraft pointed away from the pilot. With that as your starting point, if you want to use this feature during flight, short press the Backward/Headless button on the transmitter and the aircraft will immediately begin to fly back in the direction from where it originated. It will fly in this direction regardless of the direction of the front of the aircraft at that point in the flight. Any movement of the control sticks will return control to the pilot.

Headless

As with the Backup feature, it is always recommended to calibrate and start your flights with the camera on the aircraft pointed away from the pilot. If you want to use the Headless feature during flight, press and hold the Back/Headless button on the transmitter and the aircraft will enter headless flight. Pulling the stick to the bottom will bring the aircraft toward the pilot regardless of the direction the aircraft is facing during flight. Moving the stick to the right will move the aircraft in that direction and moving the stick to the left will move the aircraft in that direction. Push the button a second time to return to normal control.

FLIGHT TRIMS

Trimming adjustment should not be necessary with the Stinger BL. If the unit is not flying smoothly or drifting during flight, land as quickly as possible and follow the steps for Calibration before the next flight. If calibration does not solve the issue, check all of the blades to make sure they haven't been damaged and replace, if necessary.

STORAGE CARD

A minimum 2GB Class 4 micro memory card is needed to record photos and videos. To format the card, use the format feature in the menu that is accessed from the transmitter.

PROP GUARDS

Prop guards are included with your Stinger BL. If you wish to use them simply attach them to the bottom of each arm under the motor. No tools are required, simply snap into position.

TROUBLE SHOOTING GUIDE

Problem	Cause	Solution
Transmitter has no power	1. Power is not on	Make sure transmitter is turned on
	2. Internal battery needs to be charged	Charge the internal LiPo battery (see page 6)
The aircraft is uncontrollable	1. The transmitter has accidentaly turned off	Make sure transmitter is turned on
	2. Strong winds are affecting the aircraft	Find a time to fly when it is not windy
	3. One of the blades may be damaged	Stop the flight and make sure all blades are in perfect condition
The aircraft will not climb in altitude	1. Not enough power to the aircraft	Increase throttle to make sure there is enough power
	2. Aircraft battery needs to be charged	Stop the flight and charge the battery
The aircraft descends too fast in landing	1. Decreasing throttle too quickly	Lower the throttle slowly for smooth landings or use the auto land feature

Parts List

Item Number	Description
RGR4600	Stinger BL FPV Drone
RGR4605	Complete Printed Body Set
RGR4606	Propeller Set (8) w/ Screws
RGR4607	Front Replacement Arm (A) w/Motor & ESC (CW)
RGR4608	Rear Replacement Arm (A) w/Motor & ESC (CW)
RGR4609	Front Replacement Arm (B) w/Motor & ESC (CCW)
RGR4610	Rear Replacement Arm (B) w/Motor & ESC (CCW)
RGR4611	2.4GHz Transmitter w/ LED Screen
RGR4612	2.4GHz Receiver
RGR4613	1S 3.7V 1200mAh Battery
RGR4614	USB Charge Cord (Type C plug)
RGR4615	1080p WiFi Camera w/ 1-axis Gimbal
RGR4616	Complete Screw Set

See your local hobby shop or place of purchase first. If unavailable, parts can be ordered directly on-line at www.ragerc.com, or call 1-866-724-3811 M-F 9:00am-5:00pm Mountain Time.

Warranty

Warranty Period: Rage R/C warrants that the Stinger BL ("Product") will be free from original factory defects in materials and workmanship upon purchase ("Warranty Period").
What is Not Covered - This warranty is not transferable and does not cover (a) cosmetic damage, (b) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (c) modification to any part of the Product, (d) attempted service by anyone other than a Rage R/C authorized service center, or (e) Product not purchased from an authorized Rage R/C dealer.
OTHER THAN THE EXPRESS WARRANTY ABOVE, RAGE R/C MAKES NO OTHER WARRANTY OR REPRESENTATION, AND THREFORE DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND SUITABILITY FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL MEET THE REQUIREMENTS OF THEIR INTENDED USE.
Purchaser's Remedy - Rage R/C's sole obligation and purchaser's sole and exclusive remedy shall be that Rage R/C will, at its option, either (a) service, or (b) replace, any Product determined by Rage R/C to be defective. Rage R/C reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Rage R/C. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.
Limitation of Liability - RAGE R/C SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF RAGE R/C HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Rage R/C exceed the individual price of the Product on which liability is asserted. As Rage R/C has no control over use, setup, final assembly, modification of misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the product, purchaser is advised to return the product immediately in new and unused condition to the place of purchase.
Law - These terms are governed by Utah law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Rage R/C reserves the right to change or modify this warranty at any time without notice.

STINGER BL

FUN IS ALL THE RAGE
RAGE RC

Rage R/C, an exclusive brand of:
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